AGE-FRIENDLY
TYNDALL AND GARSON

Ryan Litovitch, Lucy Ramirez, Krista Rogness, Shivani Sajwan and Ryan Segal
University of Manitoba Department of City Planning
December 2013

Tyndall Stone cladding - Faculty of Music Building - University of Manitoba

Table of Contents

Figure 1: Seniors participating in recreational activities in Columbus, Ohio

1 **Introduction**

> "An **age-friendly** community adapts its structures and services to be accessible to and inclusive of older people with varying needs and capacities"
>
> World Health Organization

> "An **age-friendly** city encourages active aging by optimizing opportunities for health, participation and security in order to enhance quality of life as people age"
>
> World Health Organization

Age-friendly design is good design for everyone!

Canada's population is aging and the number of adults over the age of 65 is rapidly increasing. According to Statistics Canada 2011 population estimates, 14.9% of the Canadian population is aged 65 and older. In Manitoba it is estimated that 14.2% of the total population is over the age of 65. In 2011, the first of the baby boomer generation reached the age of 65. It is anticipated that by 2041 adults aged 65 and older will make up nearly a quarter (24.5%) of the Canadian population (Kembhavi, 2012).

As people age, they are looking for opportunities to remain healthy and active, participate in social activities, feel respected and included, have fun, and most importantly, age in their current homes and communities. Planning and designing for age-friendly communities is essential in order to meet the needs and wants of the growing senior population.

This report is the outcome of a City Planning design studio at the University of Manitoba. It is a summary of observed characteristics and age-friendly design and planning proposals for the villages of Tyndall and Garson, Manitoba.

1.1 Age-Friendly Overview

The World Health Organization (WHO) examines age-friendly communities through eight topic areas (Figure 2). Planning for active aging in Tyndall and Garson should consider: housing, transportation, building and outdoor spaces, and social infrastructure. The villages are experiencing significant growth and development and there are many opportunities to use existing infrastructure and available land to add more services, amenities and housing options to enhance the communities, and make them more age-friendly.
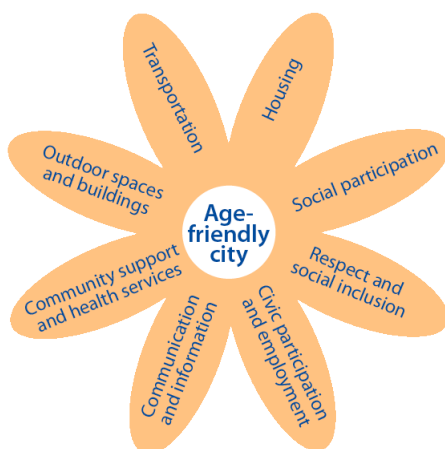
Figure 2: World Health Organization age-friendly criteria

DOCUMENTATION AND ANALYSIS
Class Visit
September 12, 2013

Independent Visits
September 21 and 27, 2013

OBSERVATION PRESENTATION
October 24, 2013

FEEDBACK

COMMUNITY VISION/PLAN/DESIGN
Propsals and Ideas
November 21, 2013

FEEDBACK

FINAL PRESENTATION
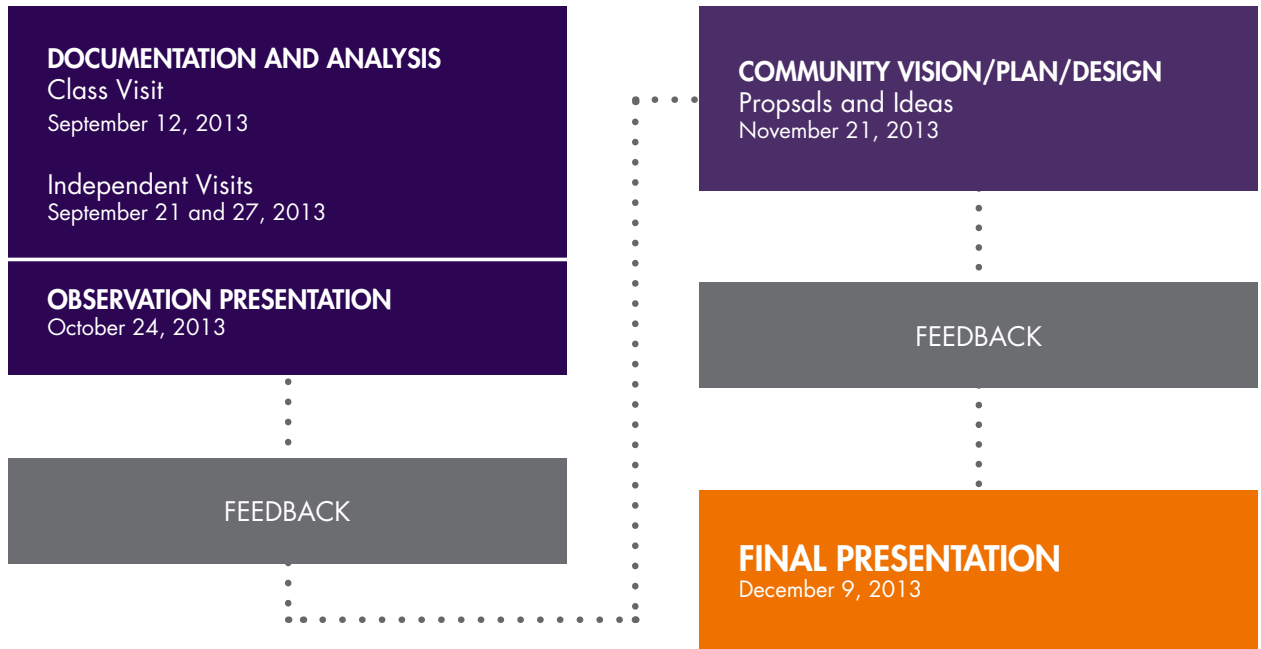December 9, 2013

Figure 3: Project timeline

Figure 4: Observation presentation, October 24, 2013

Figure 5: Idea presentation, November 21, 2013

Figure 6: Final presentation, December 9, 2013

2 **Project Overview**

2.1 Guiding Documents

Two documents were used to guide the observations made in this report. Both documents suggest expanding age-friendly communities through several categories: housing, transportation, outdoor spaces and buildings, social participation, respect and social inclusion, civic participation and employment, communication and information, community support and health services.

Global Age-Friendly Cities: A Guide
World Health Organization

For this document, older adults were interviewed in 33 cities around the world. This guide considers their input and provides a comprehensive check-list of criteria for the promotion of active aging.

Age-Friendly Rural and Remote Communities
Public Health Agency of Canada

Building on previous research, this guide observes age-friendly criteria from a rural perspective across Canada. Research conducted through interviews and focus groups led to an adapted set of criteria that considers the unique needs of residents outside of major city centres.

2.2 Project Timeline

This three-month project was divided into three phases (Figure 3): the group made formal and informal visits to the community in September 2013 to gather observations, and we then presented the findings to local officials in October 2013. The group used a facilitated exercise (Figure 4) to gather more information at this meeting. Based on these findings, we identified age-friendly strengths and areas that needed improvement, and established objectives and strategies. We then presented preliminary ideas and precedents from other communities in November 2013, and received feedback from local officials that helped determine which ideas they favoured and where to situate them (Figure 5). Using this information, the group chose five areas of focus, and formulated age-friendly design proposals. In early December 2013, the group made a final comprehensive presentation to community members of Tyndall and Garson (Figure 6). Feedback and next steps arising from this meeting are discussed in the Reflections and Next Steps in section 8 (p. 31).

2.3 Objectives

Based on observations, analysis and consultation with key stakeholders, four objectives were formulated to guide the proposed designs for Tyndall and Garson:
- **Concentrate growth**
- **Enhance the sense of place and identity**
- **Create better physical connections**
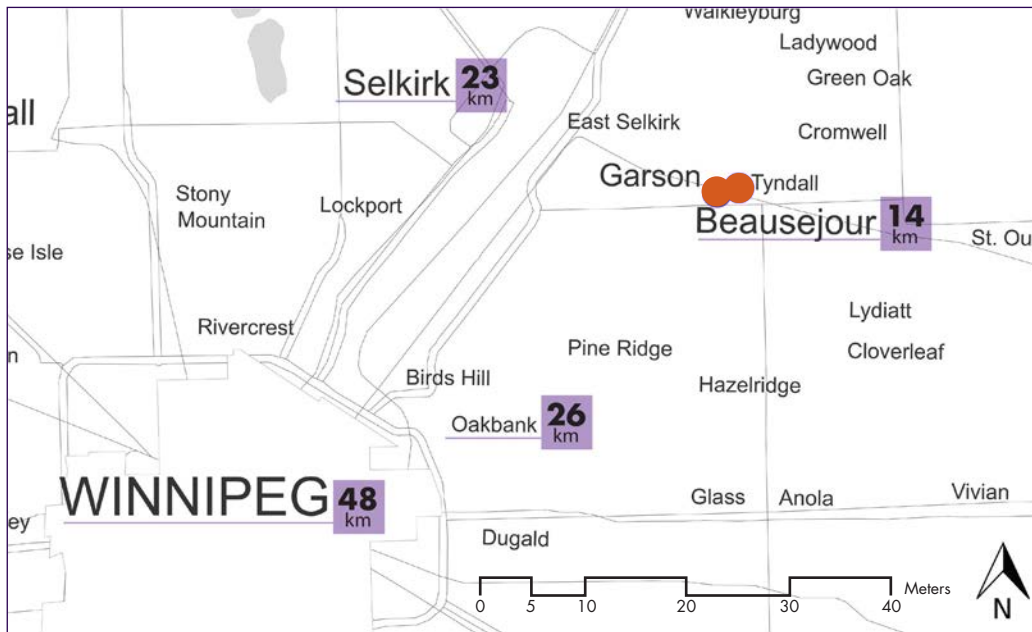- **Expand community programming, services and amenities**

3 Context

Figure 7: Geographic location and proximity to nearby centres

3.1 Location

The Local Urban District (LUD) of Tyndall and Garson is located in the Rural Municipality of Brokenhead, Manitoba on Highway 44 (Figure 7). The nearest municipality is the town of Beausejour, which is 14 kilometres east of the LUD. The close proximity of the villages to urban centres and small towns allows the communities to rely on other centres for services.

3.2 History

People were initially drawn to the Tyndall and Garson area because they could make a living; first as fur traders, then as railroad workers, and then as farmers and workers in the lime, wood and quarry industries. Tyndall was established as a settlement because it had a railway station (Warren & Warren, 1981, p. 109), while families settled in Garson in the vicinity of the quarries. Garson's economy relied on the quarries and construction industry. The nature of this industry meant the village experienced many booms and busts, and population flowing both into and out of the community. Gillis Quarry is still in operation and is in its fourth generation of family management. Today, Tyndall and Garson are commuter villages and have recently experienced a housing boom. The catalyst behind recent development is new water and wastewater infrastructure implemented in 2006. Prior to this infrastructure investment, each residence had its own well. In July 2000, both communities were put on boil water advisories after it was discovered that the upper groundwater aquifer was contaminated. The challenge of financing new water and wastewater improvements spurred the amalgamation of Tyndall and Garson into a single Local Urban District in 2003. Since this time, Tyndall and Garson have experienced significant growth that can be attributed to the infrastructure and possible affordable housing. Future growth and development is presently at a standstill as the LUD waits on the expansion of the lagoon system. This provides the community with time to reflect on their growth and development strategies.

3.3 Population Growth

Since 2006, the population has grown by 24.1%, primarily young families, building or buying homes in new residential developments.

This rapid growth has begun to change the social and physical character of the communities. As Tyndall and Garson continue to expand, strategies should be implemented in order to allow new populations of young families to age-in-place.

3.4 Demographics

2011 Statistics Canada Census data stated that the population of Tyndall is 830 and Garson is 483; a combined LUD population of 1,313*. In 2011, the Rural Municipality of Brokenhead population was 4,635, with Beausejour making up 3,126 or 67.4% of the RM population.

Figure 8 shows the population of the LUD by age category and gender. 2011 data suggests that Tyndall and Garson have a large population of young families: adults between the ages of 30-34 and children 0-19. The population between the ages of 20-24 is smaller, possibly indicating that many residents leave home to attend post-secondary school and other employment opportunities outside the community.

In 2011, 11.3% of the population in the LUD of Tyndall and Garson were aged 65 and older. In Manitoba 14.2% of the population was aged 65 and older.

This demographic information gives the overall impression that Tyndall and Garson have a predominately younger population. Planning must consider the needs of those over the age of 65 in the short-term, but long-term planning should begin to ensure that as individuals age, they have the resources and infrastructure to comfortably age within their community.
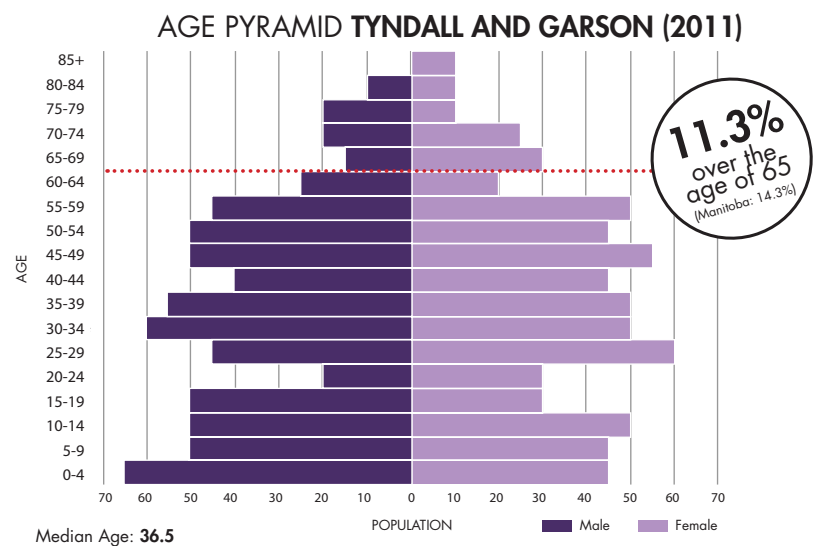

AGE PYRAMID TYNDALL AND GARSON (2011)

11.3% over the age of 65 (Manitoba: 14.3%)

Median Age: **36.5**

Figure 8: Age pyramid Tyndall and Garson - 2011 Census

*LUD committee members believe the 2011 census numbers underestimate the population in Tyndall and Garson by 24 percent. According to the committee, the villages combined population is closer to 1,600 residents. This number is derived from a door-to-door count in 2004, and housing starts from 2006 to 2013 multiplied by a factor of 3.5 (Dudeck, personal correspondence, 2013). In our analysis we will be utilizing the Canadian Census data, which provides more detailed information. We acknowledge that this data may not be entirely accurate; nonetheless, it is the best data available.

4 Observations

4.1 Land Use and Form

Figures 11 and 12 show the land uses and built spaces in Tyndall and Garson. The LUD is predominantly low density residential, with a very small amount of recreational and commercial use. In Tyndall, commercial buildings are clustered along Pierson Drive. In Garson, commercial development occurs primarily along Garson Drive. Commercial space within the LUD is minimal, and residential properties are not in close proximity to many amenities and services, and recreational areas. Tyndall and Garson are distinct communities separated by Highway 44 and approximately three kilometres apart. The Gillis School located in Tyndall is the only school in the LUD and serves as a connection between the two villages.

4.2 Development

There has been a significant increase in residential development in Tyndall and Garson. Since 2006, 186 new homes have been built (Figure 9). New growth has been concentrated along Pierson Drive and Ash Street in Tyndall, and on the southern edge of Garson.

Proposed residential development would extend the boundaries of Tyndall to the north, east, and west. In Garson, new residential lots are proposed west of Banas Drive and further south of the recent development.

As noted earlier future growth is presently at a standstill as the LUD waits on the expansion of a lagoon system.

NEW HOMES SINCE 2006
(Brokenhead River Planning District Housing Starts)

Year	Tyndall	Garson	Total
2006	13	5	**18**
2007	14	16	**30**
2008	18	10	**28**
2009	7	6	**13**
2010	11	12	**23**
2011	4	21	**25**
2012	14	16	**30**
2013	11	8	**19**
Total	92	94	**186**

Figure 9: Residential growth in Tyndall and Garson since 2006
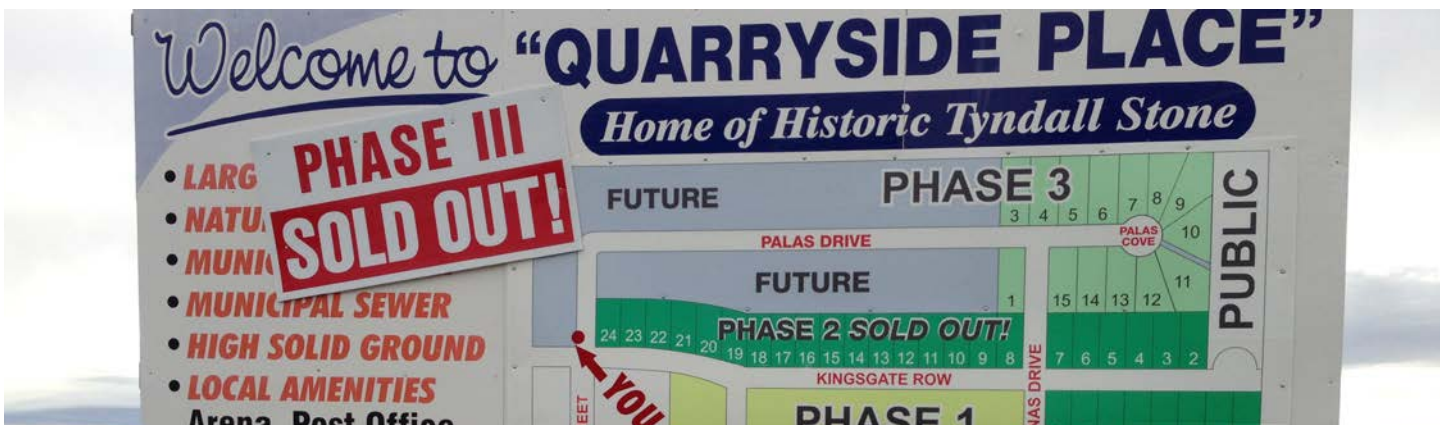
Figure 10: Sign advertising new residential development in Garson

Tyndall

Legend:
- Commercial
- Facilities-Community Centre
- Green Space
- Industrial
- Pond
- Residential (Established)
- Residential (Recent)
- Residential (Proposed)
- School
- Sport/Recreation

Ash Street

Pierson Drive

Meters
0 100 200 300 400 500

N

Figure 11: Land use and built form - Tyndall

Garson

Garson Drive

Banas Drive

Meters
0 100 200 300 400 500

N

Figure 12: Land use and built form - Garson

Figure 13: Example of existing development - Garson

Figure 14: Example of recent development - Tyndall

Figure 15: Example of recent development- Garson

Figure 16: Historic grain elevator - Tyndall

4.3 Housing

Generally, older houses in the LUD are smaller in size with large lots and yards (Figure 13). The housing stock is getting older and likely requires maintenance and upkeep that may be too costly for older residents. Yard work may also pose physical and financial burdens on an aging population. Newer residential development has occurred along the west and east edges of Tyndall (Figure 14) and the established areas are concentrated in the centre. In Garson, established residential housing consists of smaller homes situated on larger lots. Newer residential development consists of larger homes on slightly smaller lots. More recent development appears to be designed for younger families. Two-story units with stairs, stepped porches, large driveways and yards may pose physical barriers to an aging population (Figure 15). There is also an observed absence of rental and multi-family housing. Residents looking to downsize or live in more communal housing arrangement are currently unable to do so. Presently there is no designated seniors' housing. Tyndall Manor is an affordable Manitoba Housing option, but not specifically for seniors. Our observations lead us to believe that older adults are living in their own homes or with family, or leaving the communities for Beausejour and other nearby centres.

4.4 Roads and Walkways

Most streets are characterized by large setbacks, ditches, and narrow roads. Tree canopies are a great asset and provide shade and natural beauty along residential roads. Sidewalks are limited in both Tyndall and Garson, and often in need of repair. The current network of sidewalks does not connect new development to existing areas of Garson (Figure 17). It was observed that residents walk on the road or shoulder (if available), rather than the sidewalk. On narrow streets such as Banas Drive, pedestrians and vehicles cannot share the road safely. In Tyndall, some sidewalk infrastructure does exist on Pierson Drive but public green spaces and residential areas are not connected (Figure 18). In addition, there are limited road crossings, which pose a safety concern along busy roads such as Pierson Drive and Garson Drive. Although active transportation is not supported between Tyndall and Garson, their small size and scale encourages walking and cycling within each community. However improvements to infrastructure are needed to support this. Street lighting is also sparse and there are no benches along roads or sidewalks.

4.5 Outdoor Spaces and Landmarks

There are several public outdoor spaces in Tyndall and Garson. Many are used for recreational purposes and may provide opportunities for older adults to sit and people watch. Tyndall Centennial Park (Figure 21) is a notable large space with many opportunities for recreation, play, and gathering. In Garson, the main park along Thompson Avenue is in close proximity to its community centre, hockey rink, and Manitoba Housing complex. Furthermore, there is a need for additional green space in the south of Garson. Landmarks are great physical representations of history and community identity. The historic grain elevator (Figure 16), Ukrainian Orthodox Church, quarry, and Gillis School all function as landmarks that assist with wayfinding, and that contribute to each town's character and sense of place.
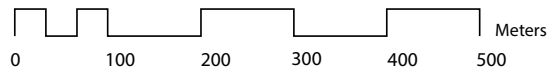
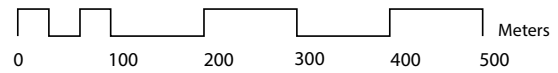**Figure 17:** Sidewalks (in pink) in Tyndall

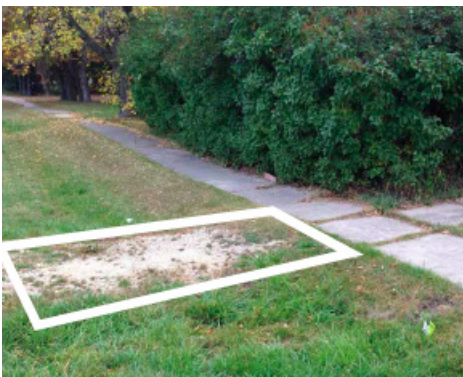**Figure 18:** Sidewalks (in pink) in Garson

Figure 19: Sidewalks are not in optimal condition - breaks and cracks are highlighted here

Figure 20: Park spaces are underutilized and could benefit from more shaded areas

4.6 Services and Amenities

Basic services in Tyndall and Garson include a small grocery store, gas station, bookkeeping, and automotive repair. There are a few amenities including Harvest Moon Cafe, Julie Kim's Restaurant, Tyndall Hotel Chinese Food Restaurant, Garson Hotel, and Tyndall Motor Hotel. Recreational facilities include Garson Arena, Garson Centennial Community Centre, Tyndall Curling Club, and Tyndall Village Community Centre. There appears to be room and demand for more commercial services in each town.

While Tyndall and Garson do have a few services and amenities, residents must travel outside the community for access to retail, major grocery, health care, beauty and wellness, fitness, financial services, libraries, and entertainment. Major services and amenities are located in larger nearby centres. Figure 21 notes the travel distance to hospitals and health care facilities. Larger grocery stores are also found in these centres.
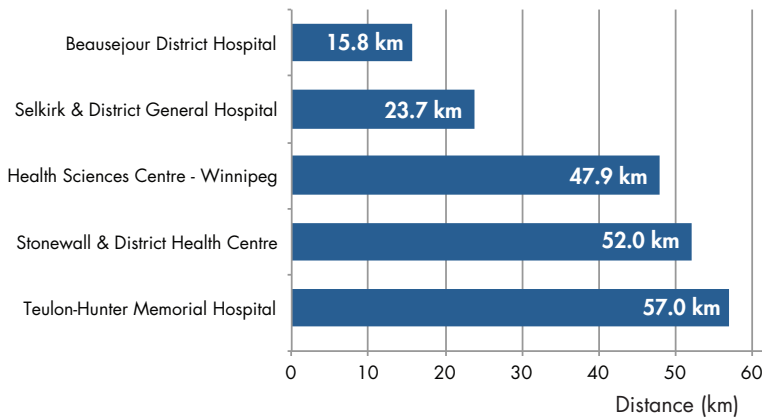
Figure 21: Distance to major health care

4.7 Transportation

Access to a vehicle is essential for getting to nearby locations, and often within Tyndall and Garson, especially in the winter. There are no public transportation options available in the communities. The Greyhound service was discontinued several years ago and Handivan service from Beausejour may not always be available. For older people who do not or cannot drive, transportation options are limited to rides from family, friends, volunteers, and the Beausejour Handivan.

Figure 22: Tyndall Village Community Centre - Tyndall

Figure 23: Roman Catholic church - Garson

Figure 24: Harvest Moon Cafe - Garson

Figure 25: Community message board - Tyndall

4.8 Social and Civic Participation

A sense of inclusion within the community is essential for active aging. Community events and recreational opportunities help prevent isolation and improve quality of life.

There are a number of available activities provided within Tyndall and Garson to sustain seniors in an active and busy lifestyle. Facilities are also in place for community participation. Tyndall Village Community Centre (Figure 22) and Garson Centennial Community Centre both host numerous programs and events including craft shows, ice cream socials, and community garage sales. Programming specifically for seniors includes the Seniors' Whist and Drums Alive Senior Beats. Tyndall Curling Club and Garson Arena host sporting events and classes that could further foster intergenerational connections and promote volunteerism. Religious institutions also function as communal spaces in the towns. The Sacred Heart of Jesus Roman Catholic Church (Figure 23) and Willowdale Fellowship Church are other locations where older adults may congregate.

Third spaces, or private spaces that feel as though they are community gathering places, include Harvest Moon Cafe (Figure 24) and the bars at Tyndall Motor Hotel and Garson Hotel. As there are no designated seniors' residences, or seniors centre within the LUD, there are no specified communal gathering spaces for older adults.

4.9 Communication and Information

Seniors and other community members are brought together through a variety of informative services. There is no newspaper or radio service specifically for Tyndall and Garson. *The Clipper Weekly*, published in Beausejour, and Beausejour 93.9 FM are the most accessible local news sources. Other written communication materials include the Rural Municipality of Brokenhead newsletter, *Selkirk Record,* and *Selkirk Journal*, which are available at Garson Grocery Store. Community message boards containing news and information postings are located at Garson Grocery, Julie Kim's Restaurant, Garson Centennial Community Centre, and mailbox area in Tyndall (Figure 25). Internet and cell phone service are also available in the LUD, and are likely a means of communication.

5 Analysis and Ideas

Four categories were used to analyze Tyndall and Garson: housing, buildings and outdoor spaces, transportation and social participation. Based on this analysis, numerous ideas and precedents from other communities that would enhance existing strengths and address areas of opportunity were researched. These ideas were narrowed down further in consultation with community representatives.

5.1 Housing

A variety of housing designs and options are needed to create age-friendly communities (WHO, 2007). Providing a variety of accessible and affordable housing types allow seniors to actively age-in-place, and remain in their community.

Strengths: Many single-family houses with large lots, provide room for infill development (Figure 26) and secondary suites. Manitoba Affordable Housing units are situated in each town, and appear to be accessible and within close proximity to nodes of activity. Currently there is a pause in development due to limited lagoon capacity, and this allows time to re-examine opportunities to implement age-friendly housing and design in future growth.

Areas for Improvement: There are minimal rental options available and a lack of age-friendly housing types. New development should consider proximities to town centres, services, and amenities.

Ideas: To address age-friendly housing needs, secondary suites (Figure 27), which are independent ground level rental units with a separate entrance, kitchen, bathroom, and living area, could be considered. Possible types include carriage (garage) houses and granny flats constructed on unused segments of existing lots. Additionally, introducing multi-family housing (Figures 28 and 29), which offers independent affordable living situations for people of all ages, and assisted-living housing could also be considered.

Figure 26: Example of infill pocket housing in Washington State

Figure 27: Visitable senior housing in Carman, MB

Figure 28: Multi-family senior's apartment found in Victoria, BC

Figure 29: Illustration of a secondary suite

5.2 Buildings and Outdoor Spaces

Public buildings and outdoor spaces have a major impact on the mobility, independence and quality of life of older adults. Public spaces should be inclusive and inviting to people of all ages. Buildings and open spaces should be in close proximity to each other, connecting basic amenities through streets and pathways. In an age-friendly community, outdoor areas and public buildings should seek to be pleasant, safe, and accessible to all.

Strengths: We found many vacant lots and spaces within Tyndall and Garson that may accommodate infill development. Furthermore, many trees in the established areas of both communities create a comfortable walkable environment. Existing multi-purpose buildings, such as the Gillis School and Tyndall Village Community Centre are able to accommodate a range of activities.

Areas for Improvement: Recent developments have been designed for vehicles instead of pedestrians. Limited spaces exist for people to informally gather, such as restaurants, bars, cafes, picnic areas, and patios. Trees have not been planted in new residential developments. Sidewalk infrastructure is limited, and existing walkways need repair. No seating exists along roads and walking paths and street lighting is sparse, reducing nighttime visibility and perceived safety. Landmarks, such as the grain elevator in Tyndall, should be celebrated and used as a public destination. There are currently very few places for children, and especially youth, to play outdoors. Surfaces around Garson Grocery and Garson Centennial Community Centre, in particular, are uneven and may pose as barriers to wheelchair users.

Ideas: Celebrating landmarks through social activities and lighting develops a greater sense of community identity. Constructing play centres, such as skate parks for youth (Figure 30), could create popular gathering places in the community that provide outdoor play opportunities. To enhance existing drainage infrastructure, bioswale systems (Figure 31) could improve water filtration and beautify roadways. Implementing grid street networks for new development could promote walkability and accessibility. Also, pedestrian-scaled street lighting (Figure 32) provides gentle illumination without excess glare. Better street design may be considered so all users may comfortably and safely share the road.

Figure 30: Example of community skateboard park

Figure 31: Engineered soils and vegetation to capture and treat rainwater

Figure 32: Example of pedestrian street lighting

Figure 33: Safe pathway for pedestrians and cyclists

5.3 Transportation

Transportation impacts seniors' autonomy and well-being. Getting around the community and to health, recreational, and social services is important. While accessible and affordable public transportation options are key to ensuring an active and healthy lifestyle for seniors, this option is not viable in Tyndall and Garson.

Strengths: Traffic was observed to be generally light within the communities. Seniors within Tyndall and Garson are serviced by the Beausejour Handivan. The Gillis School bus transports children between school and home. The small size of the communities allow for walkable connections within each village but not between them.

Areas for Improvement: No bus or public transit system currently exists in Tyndall or Garson. There is also no guarantee of Handivan availability. No designated cycling or walking lanes, trails, or paths exist in either town or between them. On the busier roads a narrow width may make it difficult for pedestrians, cyclists, and motorists to share the space.

Ideas: Many communities use formal volunteer driving programs (Figure 34). Bus shelters, for the Handivan (Figure 35) in key locations could also provide a safe place to wait for the school bus, serve as a place for community services, and be used in the future for a regional transportation service. In addition, the idea of path networks connecting towns and regions could encourage sustainable transportation and recreation (Figure 36). Dedicated Handivan service (Figure 37) in the LUD could also be implemented as a flexible and affordable mode of transportation for seniors with limited

Figure 34: Volunteer driver program in Winnipeg

Figure 35: Example of bus stop and shelter

Figure 36: Regional trails connect communities

Figure 37: Glenboro, MB Handivan

mobility.

5.4 Social Participation

Opportunities to participate in social activities are important as they contribute to the health and well-being of older adults. Buildings and programming that enable seniors to feel included, and which bring the community together, are important for the quality of life for all residents of Tyndall and Garson.

Strengths: Both towns have a strong history of industry, entrepreneurship, and sense of community. Tyndall and Garson both have small populations. Community facilities, such as Garson Centennial Centre and Tyndall Village Community Centre, are in good condition and could have increased age-friendly programming. Recreational and leisure activities, as well as LUD meetings are also promoted throughout the communities. Media such as the Beausejour radio station, and the *Clipper Weekly,* are active, and local bulletin boards are available for posting information.

Areas for Improvement: Community facilities are underused and could benefit from additional programming. There are minimal employment and volunteer opportunities in either community. Few informal gathering spaces, such as restaurants and bars, and outdoor gathering spaces, such as gardens and performance stages are available. There are no health, emergency, or social agency services, including long-term care facilities for senior citizens. There is no formal recognition of senior activities and achievements, as well as no formal intergenerational programs. Due to lack of programs and services, there may be a sense of social isolation. However, many older adults may be gathering informally in private residences.

Ideas: Implementation of outdoor exercise equipment in existing green spaces could promote physical activity and create a vibrant public space (Figure 38). Enhancing the Harvest Moon Cafe and Garson Grocery node through street and facade improvements may provide the social benefits of a comfortable public place. Creating a multi-purpose outdoor gathering spot through a bandstand (Figure 39) may enhance and foster activity in Tyndall Centennial Park. Starting community gardens, including those with raised flower beds for easy access (Figure 40), could bring community members of all ages together. In addition, introducing intergenerational programs at the Gillis School may allow old and young to interact more often (Figure 41).

Figure 38: Exercise equipment in use in London, UK

Figure 39: Multipurpose bandstand shelter structure

Figure 40: Community garden with raised flower bed

Figure 41: Reading buddy program in an elementary school

Garson Centre

West Garson

N

16

0 50 100   200   300   400
Meters

6 Design Proposals

6.1 Areas of Focus

For this project five main areas of focus were chosen: Tyndall South, Pierson Drive, Tyndall Centre, Garson Centre, and Garson West. Each of these areas have many opportunities for improvement that may enhance Tyndall and Garson as age-friendly communities. The ultimate goal is to strengthen both locations on their own and add walking and cycling infrastructure to connect Tyndall and Garson.

Tyndall Centre

Pierson Drive

Tyndall South

Figure 42: Areas of focus map

6.2 Trail Network

Recreational trails can promote active living and a healthier environment. Developing local recreational trails in Tyndall and Garson would provide an opportunity to connect both to a larger network, the Trans Canada Trail, and create a connection between the two villages in the LUD.

The Trans Canada Trail is a multi-use recreational trail network that stretches across the country, passing through every province and territory. The trail is 24,000 kilometers long, made up of nearly 500 individual trails, and connects over 1000 communities. The Red River North Trail, a section of the Trans Canada Trail, runs through Tyndall. This trail is 110 kilometers and stretches from the northern edge of Winnipeg to Grand Beach via Birds Hill, Lockport, Selkirk, and Tyndall. The trail comes into Tyndall along the north side of Highway 44. It continues parallel along Highway 44 before turning north on Oakes Street, east on Second Street, and then north on Pierson Drive.

The proposed design focuses on creating two new recreational trails:
The Garson Trail would connect the village of Garson to the Red River North Trail. It would also provide a link between Garson and Tyndall and promote awareness of the area's unique history. The proposed Garson Trail would run parallel to Garson Drive and past the Gillis Quarry, where Tyndall limestone is quarried.
The Tyndall Trail will run parallel to Devil's Creek, an important feature in the landscape. Running the trail along the creek will allow people to connect with the natural environment within their own community.

The trails should aim to be accessible and inclusive through proper surfacing. Accessible trails are firm and stable. Concrete and asphalts are typical choices in urban areas; however they may not be suitable or affordable in a rural context. Gravel makes a poor surface for accessibility and is not appropriate in places that frequently flood. Crusher fines, crushed rock or limestone screenings, may be a suitable alternative as the material compacts well and provides good drainage (American Trails, n.d.).

Trail markers are a great way to incorporate art in public space and their design and content can pay tribute to the area's history.
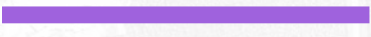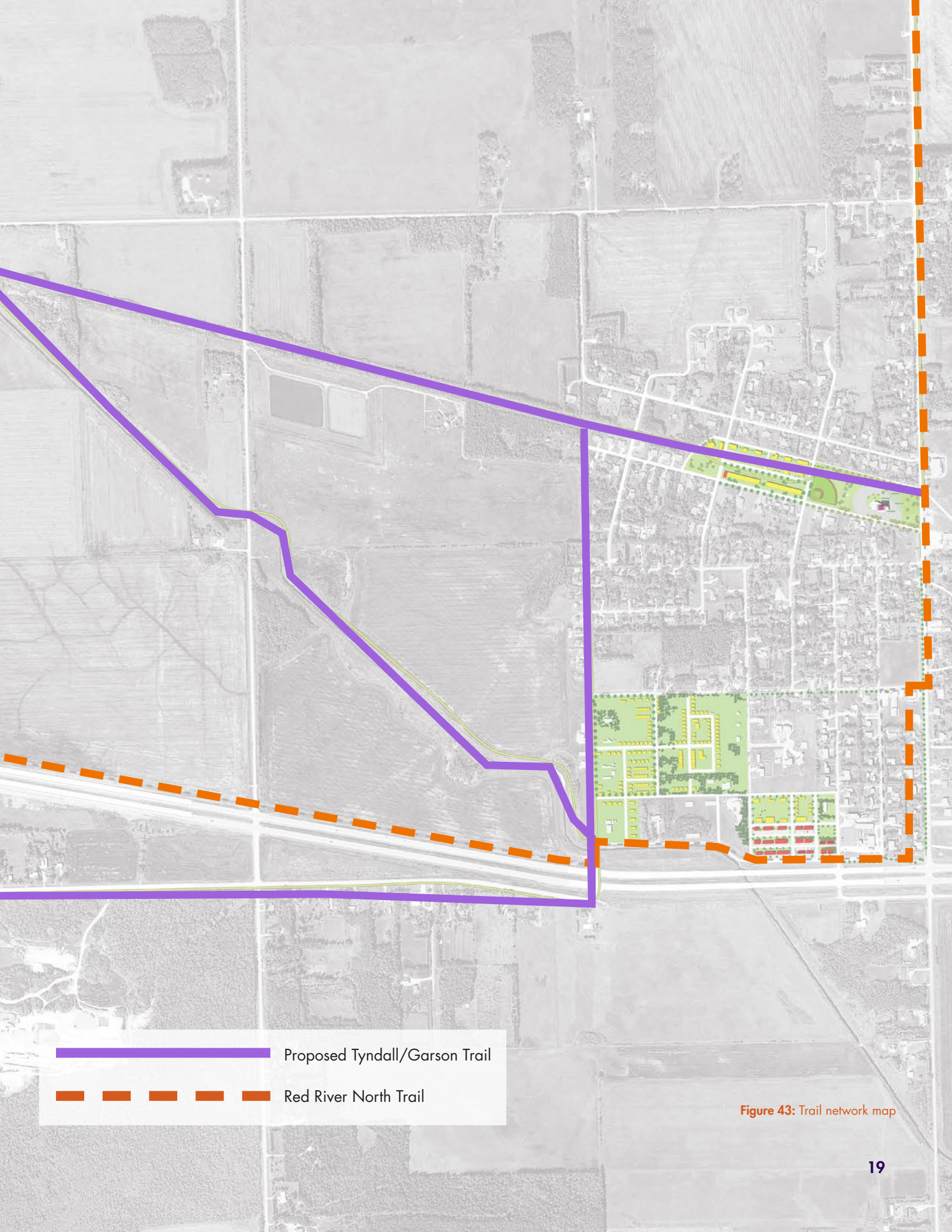
Proposed Tyndall/Garson Trail

Red River North Trail

Figure 43: Trail network map
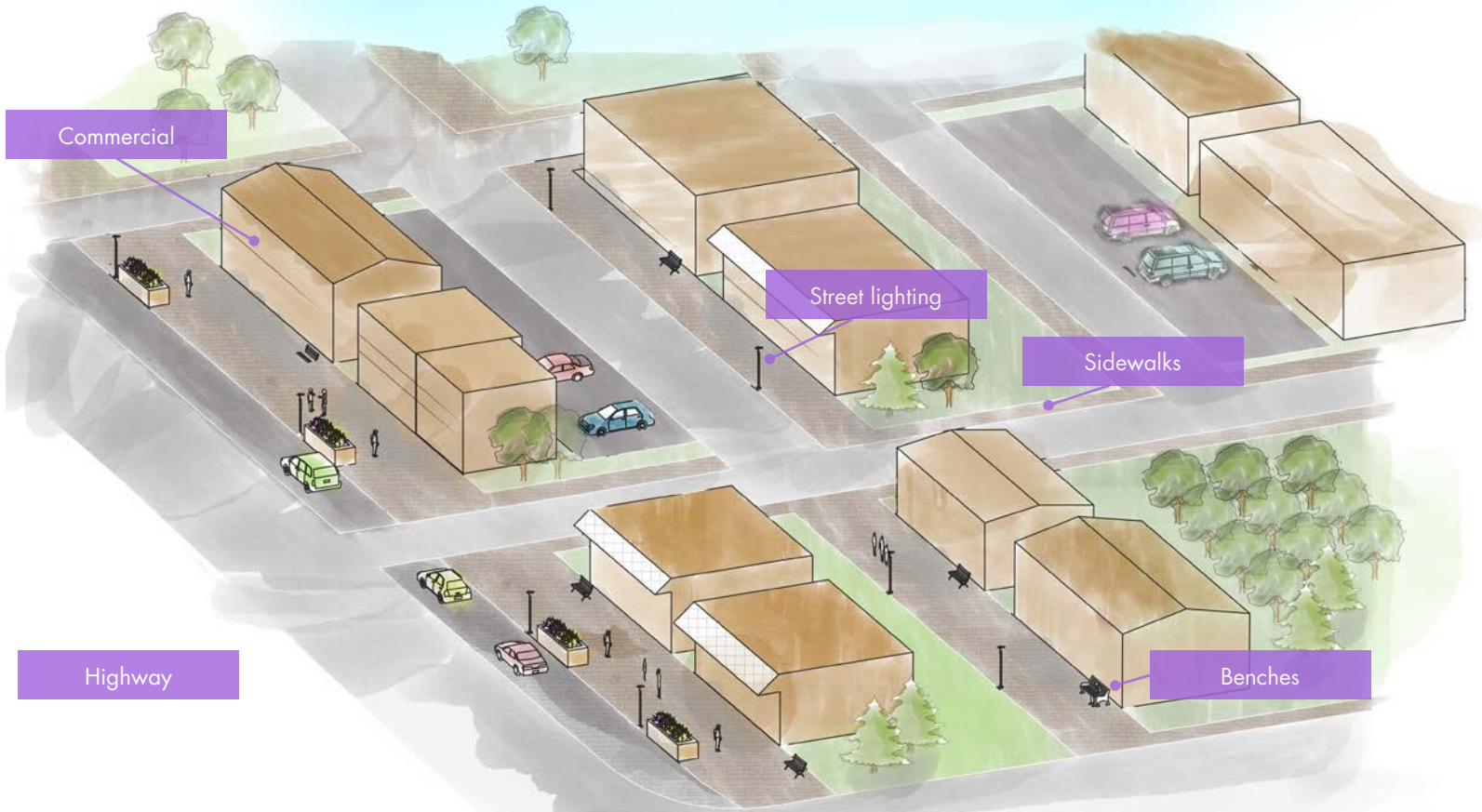
Figure 47: Tyndall South commercial storefronts along the highway, with residential behind

Figure 48: Plan overview for Tyndall South

6.3 Tyndall South

This proposal, to develop land at the southern edge of Tyndall (Figures 44 and 45), focuses on making the town more visible from the highway. The design proposal includes age-friendly elements such as improved roadways of consistent surfacing, street furniture, and lighting. Concentrating residential development within the existing town will encourage walkability. The proposal includes a commercial area, facing the highway, which could become a node of activity in Tyndall (Figure 47). Viable commercial amenities next to the highway could include: grocery store, bar, café, hair salon, or other essential services. Visibility from the highway may also help build an identity for Tyndall. The Red River North Trail passes through the proposed site, and the area adjacent to the highway could be designed to be pedestrian-friendly, but also easily accommodate motorists and cyclists through inclusive and safe design (Figure 46). Sidewalks in front of commercial buildings would be separated from the road with concrete planters and landscaping. Paved surfaces would be continuous and barrier-free between the road and the building entrances. Additionally, many places to sit, trees for shade and pedestrian-scaled street lighting, for safe evening and night-time use, would contribute to ensuring that the development is age-friendly. The design suggests designating land for both multi-family and single detached housing in order to ensure a population density within shorter walking distances to potential services (Figure 48). Further opportunities for infill housing are recommended northwest of the proposed commercial area. This design proposal also includes streets, roughly five metres wide and sidewalks at least two metres wide, that are scaled to the pedestrian.

Figure 44: Tyndall South area

Figure 45: Area proposed for infill mixed-use development

10.0 m	4.0 m	1.8 m	6.5 m
Roadway	Parallel parking	Planters as dividers	Sidewalk with continuous surfacing to building
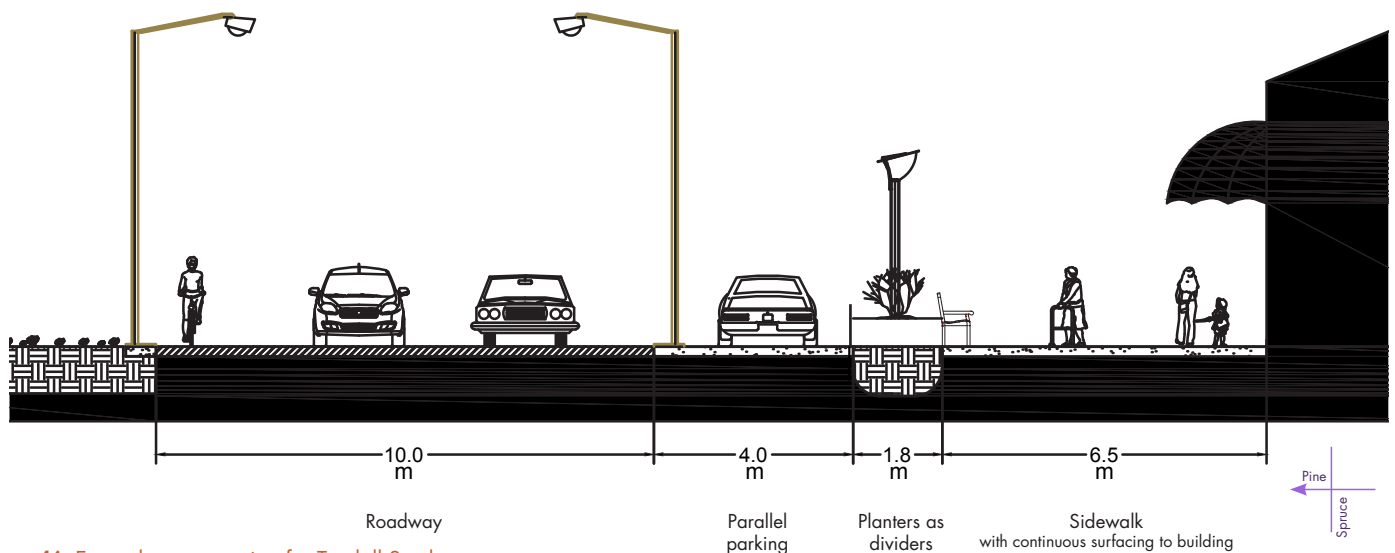
Figure 46: Example street section for Tyndall South
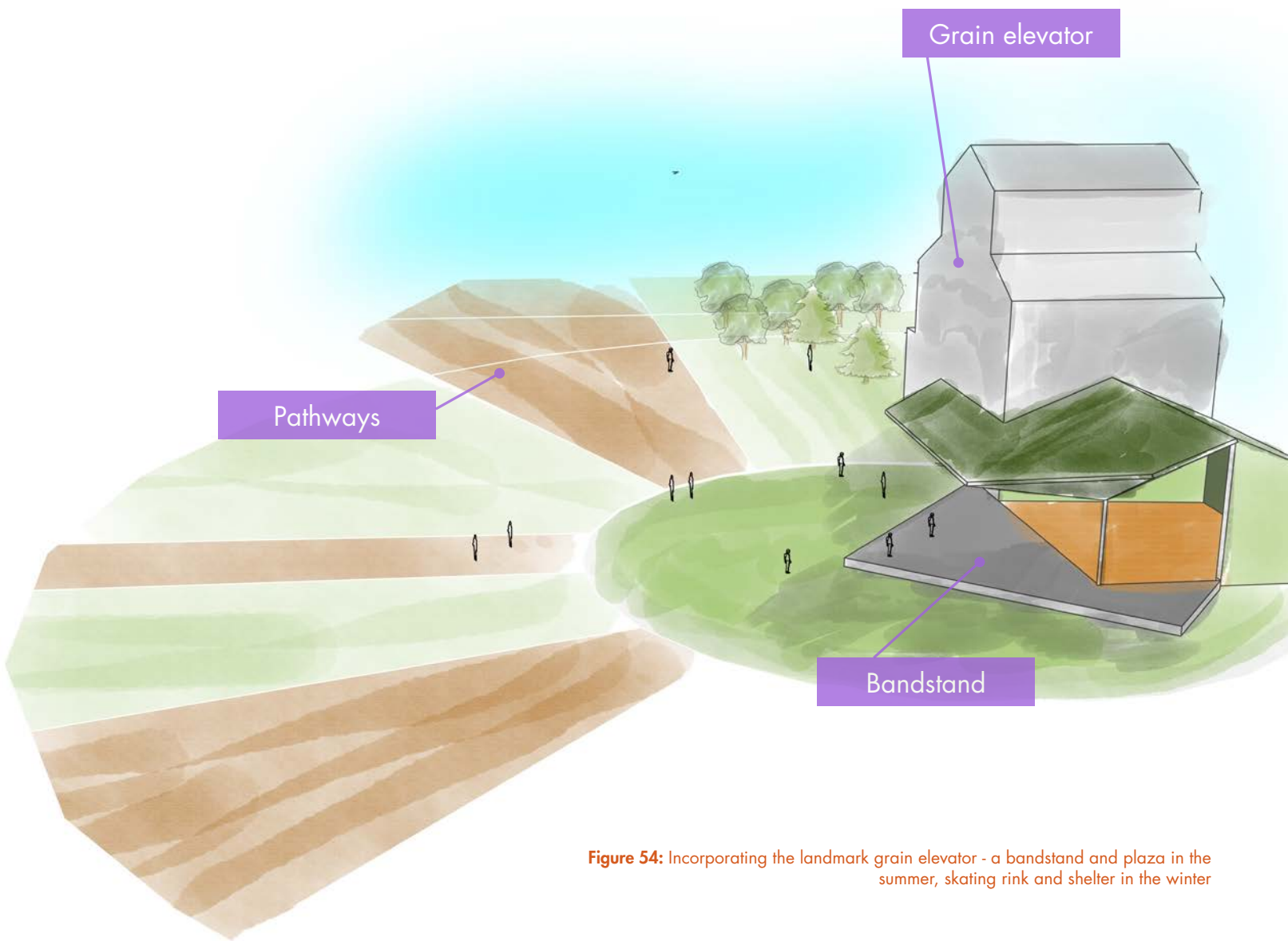
Figure 54: Incorporating the landmark grain elevator - a bandstand and plaza in the summer, skating rink and shelter in the winter

Figure 55: Plan overview for Tyndall Centre

Figure 49: Tyndall Centre area

6.4 Tyndall Centre

Tyndall Centennial Park (Figures 49 and 50) is a very large green space (approximately 3.8 hectares) that has potential to be partially developed for a multitude of uses. Incorporating residential development into the area would create a livable neighbourhood that is close to recreational amenities (Figure 55). The new residential zone would include multi-family housing, which provides choices for households wishing to downsize. The redeveloped park space pays tribute to the grain elevator and incorporates a multi-use outdoor bandstand structure (Figure 53) into the landmark (Figure 52). The new plaza space (Figure 56) could also be transformed into a skating rink in the winter months. It is important for older adults to have housing options that are close to communal gathering spaces such as the Tyndall Village Community Centre and park. Developing this central area in Tyndall, increases the proximity to public spaces and residential areas, enhancing desired connections.

Figure 50: Tyndall Centennial Park is a large open space that could be used to integrate residential and recreational uses together

Figure 52: Grain elevator could be celebrated with lighting and proposed skating rink

Figure 53: A multi-purpose bandstand could host numerous community events

Figure 51: Example of interesting public spaces with plazas and paths

Tyndall Centre

Sidewalk Connection to Church St.

Figure 57: The shoulders along Pierson Drive are currently used as a walking and cycling path

Second St.

Sidewalk Connection to Second St.

400 metre walking distance

Pierson Drive

Gillis School

Age-friendly street surfaces

Good surfacing is a key factor in the walkability of a street. Factors that affect the quality of the sidewalk surface include surface materials, changes in level and curb ramps, tactile surfaces, dimensions of gaps, grates and openings, and visual consistency.

According to the *National Guide to Sustainable Municipal Infrastructure*, walkway surfacing should be fairly slip resistant, firm, and stable to support walkers, wheelchairs, crutch tips, and motorized carts. Asphalt or smooth concrete surfaces are primarily the most practical materials to meet these requirements.

Meters

0   50   100   200   300

Figure 58: Reconfigured Pierson Drive walking path network

6.5 Pierson Drive

The main street in Tyndall is Pierson Drive. The Drive is shared by motor vehicles, pedestrians, and cyclists, though it has very little sidewalk infrastructure. The shoulders are narrow (approximately one-metre wide) and have an abrupt asphalt road edge (Figure 57). Improvements to the pedestrian environment along Pierson Drive would enhance the walkability of the community. As possible future development east of Pierson Drive may contribute to increased vehicle traffic, an investment in road and sidewalk infrastructure will increase the safety and comfort for pedestrians, cyclists, and drivers.

The proposal for Pierson Drive includes decreasing the width of the road, adding sidewalks, improving street lighting, and incorporating bioswales. Figure 56 illustrates a revamped roadway with curbed sidewalks on both the east and west side of a six metre wide street. The proposed bioswale buffer on the west side, planted with foliage and trees, provides drainage, directing rainwater from the road into the bioswale. Paved connections between the sidewalk and road could also incorporate seating. On the west side of the street, pedestrian-scaled LED lighting would illuminate the walkway without creating excess light for the nearby residences. The Pierson Drive reconfiguration would create a strong corridor through Tyndall and would complement other proposed sidewalk enhancements at both Second Street and Church Street (Figure 58), promoting a larger age-friendly walking network throughout the community.

2.0 m	1.4 m	2.6 m	4.0 m	0.2 m	6.0 m	0.2 m	2.4 m	1.4 m	2.0 m
Setback	Planters as dividers	Sidewalk	Bioswale		Curbed Roadway		Sidewalk	Planters as dividers	Setback
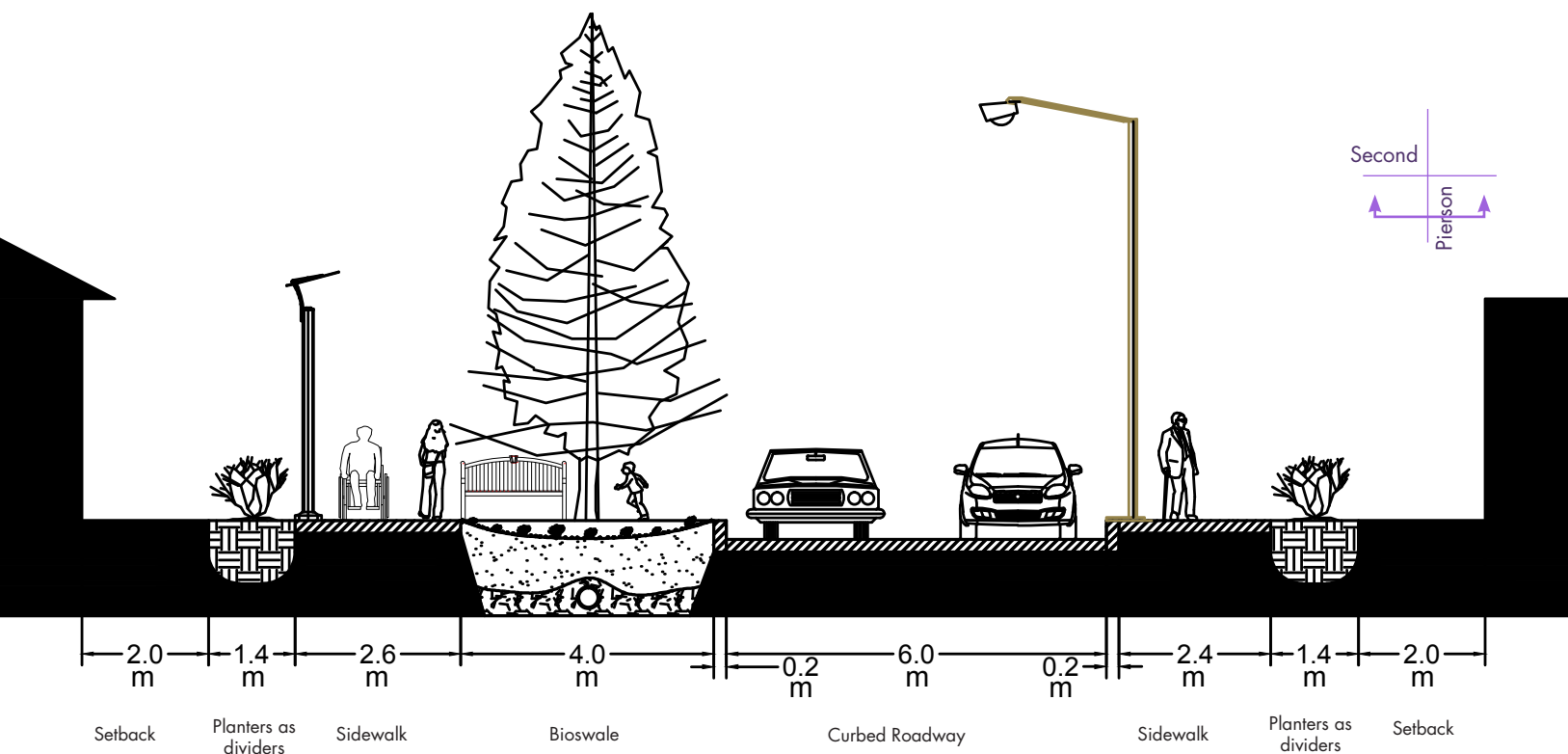
Figure 56: Example street section for Pierson Drive

Figure 61: Garson Centre area

Figure 62: Existing recreational space on Thompson Avenue can be enhanced with pedestrian friendly surfaces and age-friendly services, amenities, and residential development

Figure 63: Example Garson Drive street section

Setback	Sidewalk	Buffer	Bike Lane	Curbed Street	Bike Lane	Buffer	Sidewalk	Bus Stop	Patio
2.2 m	2.2 m	1.3 m	2.2 m	10.0 m	2.2 m	1.3 m	2.2 m	1.0 m	3.5 m

Seniors' Home

Commercial

Multi-Family

Skate Park

Infill

Commercial

Landmark

Figure 64: Plan overview for Garson Centre
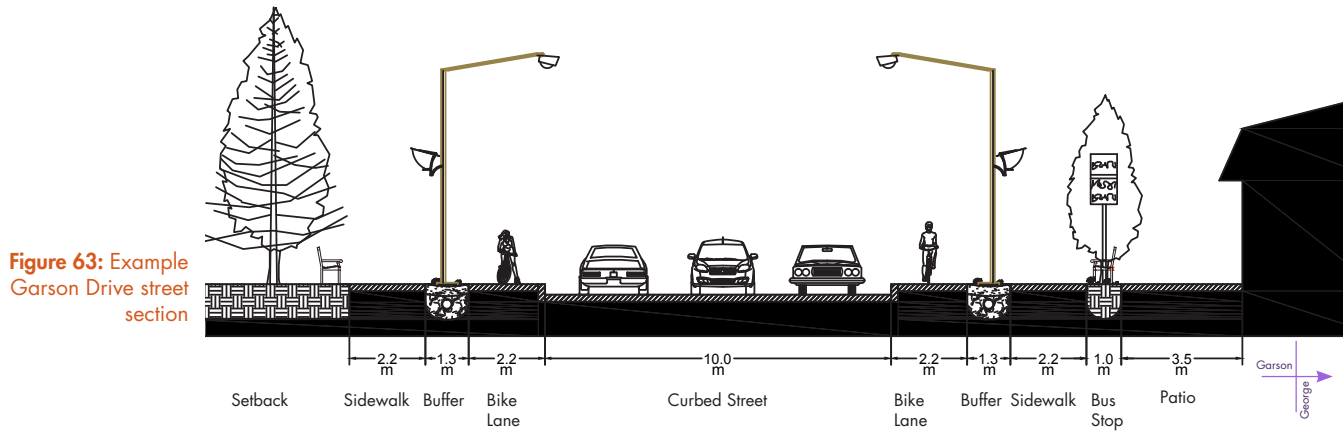
6.6 Garson Centre

This proposal redesigns the commercial heart of Garson, making it more pedestrian-friendly and increasing the use of public space (Figure 60). Located at the junction of Garson Drive and Thompson Avenue (Figures 61 and 62), the proposed Garson Centre (Figure 64) would build on the existing hub of activity and the proximity to residential and recreational activities. On Garson Drive (Figure 63), curbs and bike lanes are added to streets. New sidewalks include appropriate surfacing, street lighting, and street furniture. In addition to the street infrastructure improvements, the proposed design creates opportunities for mixed-use development, such as new commercial services and housing, including designated seniors' pocket housing. The proposed design would also improve the existing recreational green space on Thompson Avenue through new street surfacing, the incorporation of a skate park, and the removal of some areas of fencing. Improvements to the open space around existing commercial spaces, such as Garson Grocery and Harvest Moon Cafe, will provide social spaces for residents to gather. Aesthetic enhancements such as patio surfaces, awnings and new signage will enhance the existing node of activity for the community (Figure 59).

Figure 59: Proposed aesthetic enhancements to Garson Grocery

Figure 60: Housing in close proximity to recreational and commercial development
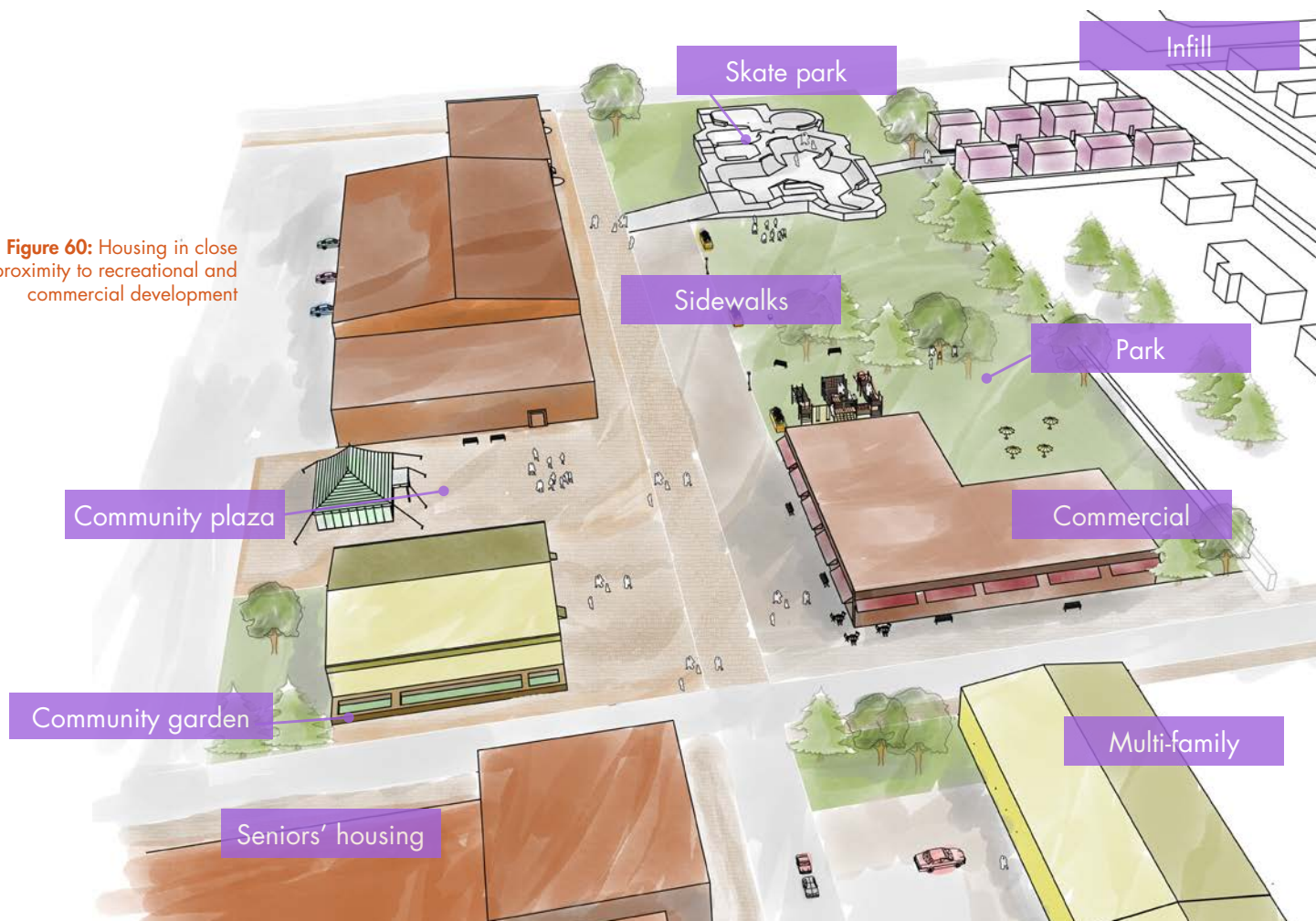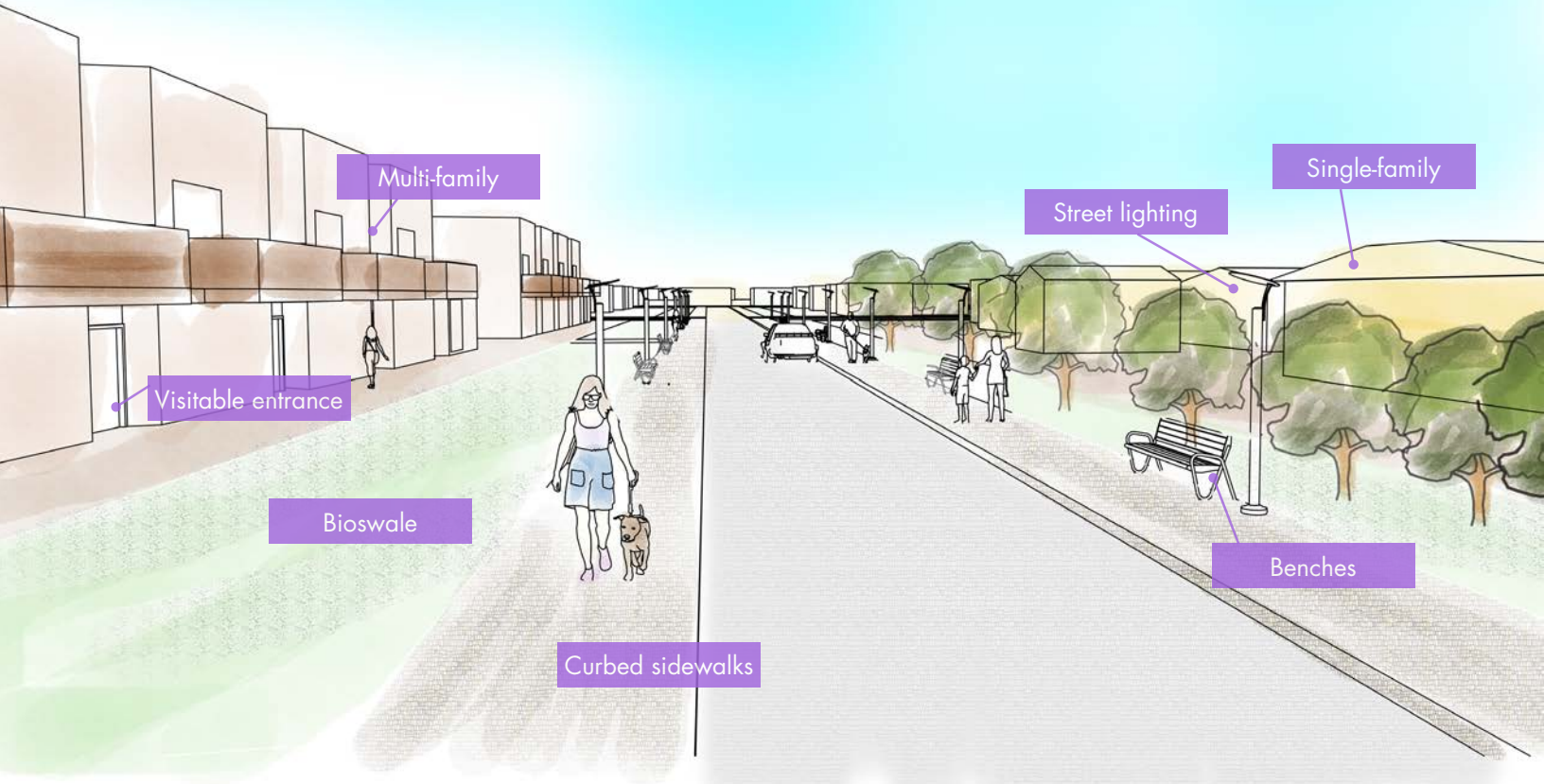
Figure 68: Visitable, multi-family housing, curbed sidewalks and benches are age-friendly ideas for West Garson

| 4.0 m | 4.0 m | 3.0 m | 6.0 m | 3.0 m | 4.0 m | 12.5 m |
| Residential | Bioswale | Sidewalk | Curbed Street | Sidewalk | Bioswale | Residential |
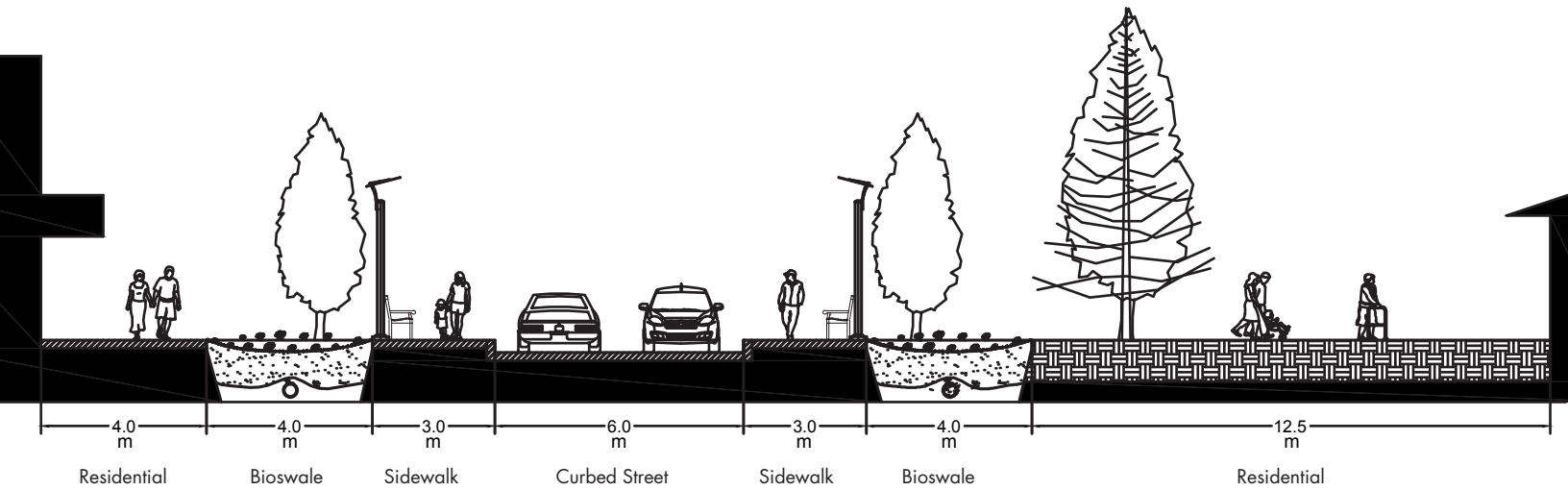
Figure 69: Example West Garson street section

Figure 65: West Garson area

6.7 West Garson

Existing open space on the western edge of Garson provides an opportunity for infill development. The proposed design includes single-detached homes together with row housing, granny flats, and possible multi-family development (Figures 67 and 68). The central green open space could be a new park and recreational area. Using this area for new residential development helps manage Garson's growth within the existing boundaries, rather than developing further away from the centre of activity on Garson Drive.

Figure 66: Example of unique, character multi-unit housing in Whitehorse, Yukon, that could be used in West Garson
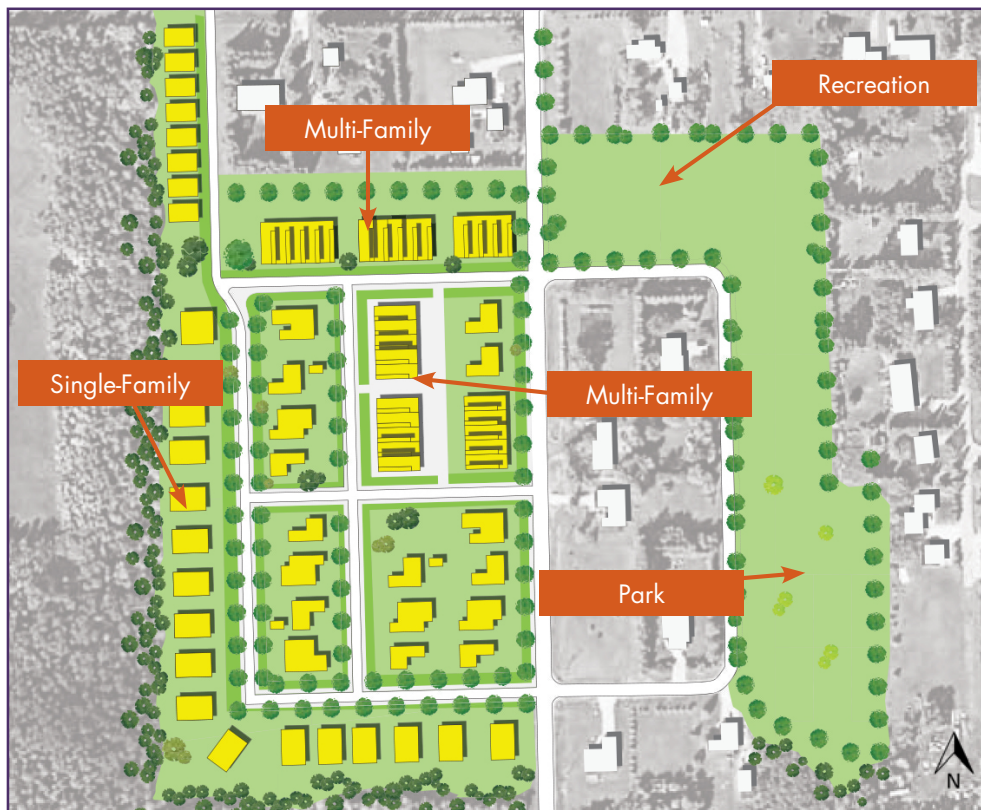
Figure 67: Plan overview for West Garson

Figure 70: Mapping exercise

Figure 71: Feedback session

Figure 72: Final exhibition

7 Community Feedback

Comments on our preliminary proposals were made at the final community presentation (Figure 72). One community member pointed out that a challenge in developing residential and commercial activity in certain areas, such as the proposed Tyndall South site, might be because land owners are disinterested in selling their parcels for development.

Water drainage was a concern at the proposed Tyndall Centre site. A major bioswale carrying rainwater runs along the north side of the site and the proposed residential development may not be appropriate at this location. Community members also noted that consideration be given to snowmobile traffic in existing open spaces, particularly in Garson. The current Thompson Avenue park space is often occupied with snowmobile traffic, posing a danger to people using the space. Therefore, open spaces in Garson may need to be designed in a way that discourages snowmobile use to ensure the safety of other users. Regarding the presentation of proposals, it was noted that the sectional drawings may be too technical to be easily understood by the community and that the perspective drawings were lacking in detail and appeal. Some feedback also suggested that the proposals did not meet immediate needs of the communities.

8 Reflection and Next Steps

The purpose of the project was to observe and analyze Tyndall and Garson from an age-friendly perspective and to present proposals to enhance the age-friendliness of the LUD. In general, the proposals focused on infrastructure improvements and bigger-picture land-use planning rather than small projects and enhancements. The group's analysis is that broader discussion about fundamental infrastructure planning would benefit the community, not only older residents. However, it must be stated that age-friendly design is good design for everyone. Since managing rapid growth is a timely challenge for the LUD, further research into how to engage and honour community input, especially that of older residents, is crucial for ensuring that age-friendly criteria is met. Concepts of walkability, density, historic preservation and community connectivity, for example, are fundamental to managing growth in Tyndall and Garson.

The research group had contact mainly with LUD and RM committee members. Future steps would include presenting design ideas to the broader community. In addition, the economic viability of the proposed designs and the necessary ecological studies for designs that included water-drainage were not within the scope of this project. These aspects should be studied if more complete proposals were required. Ultimately, the hope is that this document will be used to inform policies and plans for future development. Working with Tyndall and Garson has been a great experience and there are many opportunities to build an age-friendly community.

Figure 73: Historic Ukrainian Orthodox Church, Tyndall

Figure 74: Former church, now private home, Garson

Figure 75: Historical photo of quarry in Garson

9 List of Figures

13 **References**

American Trails. (n.d.). Accessible Trails: surfacing considerations and examples. Retrieved from National Trails Training Partnership:
        http://www.americantrails.org/photoGalleries/cool/3-ADA-Accessible-Trail-Surface.html

Brokenhead River Planning District. (2013). Housing Starts. Personal Corrsesondance.

Chang R, Poapst, J, Ines R, Menec, V. (2012). Showcasing Services and Programs for Seniors in Manitoba Winnipeg, MB: Centre on
        Aging.

Charette, Y. (2011, October). Recreational Pathway Network for Canada's Capital. Ottawa, Ontario, Canada.

Czuboka, Michael (1981) They Stopped at a Good Place: A History of the Beausejour, Brokenhead and Tyndall Area of Manitoba.
        Beausejour: Beausejour-Brookenhead Historical Committee.

Dudeck, G. (2013). Personal Correspondance.

Trans Canada Trail. (2013). Facts About the Trail. Retrieved from http://tctrail.ca/about-the-trail/facts-about-the-trail/

Federal/Provincial/Territorial Ministers Responsible for Seniors. (2011, July 5). Age-Friendly Rural and Remote Communities A Guide.
        Retrieved from Age-Friendly Rural and Remote Communities: A Guide: http://www.phac-aspc.gc.ca/seniors-aines/
        publications/public/afc-caa/rural-rurales/index-eng.php

Kembhavi, R. (2012, November). Canadian Seniors: A demographic profile. Retrieved from Elections Canada: http://www.elections.ca/
        res/rec/part/sen/pdf/sen_e.pdf

Statistics Canada. 2012. Tyndall (Tyndall-Garson), Manitoba (Code 460084) and Manitoba (Code 46) (table). Census Profile. 2011
        Census. Statistics Canada Catalogue no. 98-316-XWE. Ottawa. Released October 24, 2012. http://www12.statcan.
        gc.ca/census-recensement/2011/dp-pd/prof/indexcfm?Lang=E

Statistics Canada. 2012. Garson (Tyndall-Garson), Manitoba (Code 460099) and Manitoba (Code 46) (table). Census Profile. 2011
        Census. Statistics Canada Catalogue no. 98-316-XWE. Ottawa. Released October 24, 2012. http://www12.statcan.
        gc.ca/census-recensement/2011/dp-pd/prof/index.cfm?Lang=E

Statistics Canada. 2007. Garson, Manitoba (Code4612058) (table). 2006 CommunityProfiles. 2006 Census. Statistics Canada
        Catalogue no. 92-591-XWE. Ottawa. Released March 13, 2007. http://www12.statcan.ca/census-recensement/2006/
        dp-pd/prof/92-591/indexcfm?Lang=E

Warren, K., & Warren, A. (1981). History of Tyndall. In M. Czuboka, They stopped at a good place: a historyof the Beausejour,
        Brokenhead, Garson and Tyndall area of Manitoba, 1875-1981 (pp. 108-139). Beausejour: Beausejour-Brookenhead
        Historical Committee. Retrieved from Our roots: http://www.ourroots.ca/e/toc.aspx?id=14528

Tyndall Stone cladding - Faculty of Architecture - University of Manitoba