

BYLAW NO. 17-785 of the Municipal District of Greenview No. 16

A Bylaw of the Municipal District of Greenview No. 16, in the Province of Alberta, for adopting Bylaw 17-785, being the Grovesdale Area Structure Plan.

Whereas, Council wishes to repeal Bylaw No. 04-432, "Grovedale Area Structure Plan", as amended and wishes to adopt a new area structure plan pursuant to Section 692 of the Municipal Government Act.

Therefore, the Council of the Municipal District of Greenview No. 16, duly assembled, hereby enacts the following

- 1. That Bylaw 17-785 is to be cited as the "Grovedale Area Structure Plan".
- 2. That the Grovedale Area Structure Plan, attached hereto as Schedule A, is hereby adopted.
- 3. That Bylaw No. 04-432 is hereby repealed.
- 4. That this Bylaw shall come into effect upon the date of the final passage thereof.

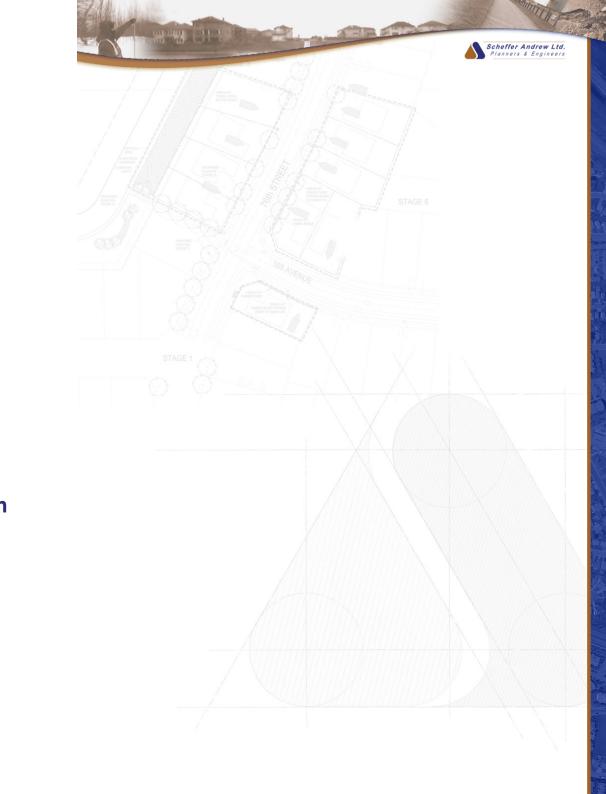
Read a first time this 27 day of June, A.D., 2017.

Read a second time this 14 day of May, A.D., 2018.

Read a third time and passed this 10 day of September, A.D., 2018.

REEVE

CHIEF ADMINISTRATIVE OFFICER



Grovedale Area Structure Plan

Table of Contents

1	Introdu	uction	
	1.1	Conforn	nance & Process1
		1.1.1	Municipal Government Act1
		1.1.2	Greenview Municipal Development Plan 2
		1.1.3	Upper Peace Regional Plan2
		1.1.4	Historical Resources2
		1.1.5	Community Consultation2
2	Existin	g Land Us	se4
		2.1.1	Green & White Areas4
		2.1.2	Natural Resource Extraction4
		2.1.3	Residential5
		2.1.4	Commercial & Industrial5
		2.1.5	Recreational5
	2.2	Environ	mental Conditions9
		2.2.1	Wapiti River9
		2.2.2	Farmland Rating9
3	Vision	& Guidin	g Principles11
	3.1	Vision &	Guiding Principles11
		3.1.1	Vision11
		3.1.2	Guiding Principles12
	3.2	Going G	reen12

4	Grove	dale & N	leighbourhood Framework	15
	4.1	Develo	pment Concept	15
	4.2	Rural L	ife	19
		4.2.1	Farmsteads & Rural Living	19
		4.2.2	Aspen Grove Country Residential	19
	4.3	Centra	lized Living	20
		4.3.1	Small Scale Agriculture	20
		4.3.2	River Valley Residential	20
		4.3.3	Estate Living	22
		4.3.4	Village Centre	23
	4.4	Land U	lse Statistics – Centralized Living Area	25
	4.5	Comm	erce & Industry	28
		4.5.1	Agriculture	28
		4.5.2	Village Centre Commercial	30
		4.5.3	Service Commercial	31
		4.5.4	Business Industrial	32
		4.5.5	Light Industry	34
		4.5.6	Heavy Industry	35
5	Trails	& Open	Space	36
	5.1	Parks 8	& Open Spaces	36
		5.1.1	Village Green	36
		5.1.2	Distributed Parks	37
		5.1.3	Green Spaces & Environmental Lands	38
	5.2	Trails		40
		5.2.1	Primary Network	40

İ

Grovedale Area Structure Plan

		5.2.2	Secondary Network41
6	Getting	Around	43
	6.1	Rural	43
	6.2	Estate R	esidential45
	6.3	Village C	Centre46
7	Service	s & Infra	structure48
	7.1	Water S	ervicing48
	7.2	Wastew	ater Servicing49
	7.3	Stormwa	ater Management50
8	Implem	nentation	ı53
	8.1	Implicat	ions for Other Plans & Bylaws53
	8.2	Further	Studies & Works53
	8.3	Minor A	rea Structure Plans and Concept Plans54
		8.3.1	Minor Area Structure Plans54
		8.3.2	Concept Plans55

List of Tables

Table 1: Land Use Statistics - Centralized Living Area20	5
Table 2: Unit & Population Estimates - Centralized Living2	7

List of Figures

Figure 1: Key Map Erro	r! Bookmark not defined.
Figure 2: Plan Context Erro	r! Bookmark not defined.
Figure 3: Existing Oil and Gas Facilities	8
Figure 4: Farmland Assessment	10
Figure 5: Development Concept	17
Figure 6: Development Concept - Centra	lized Living18
Figure 7: Existing and Future Trails	42
Figure 8: Future Transportation Network	44
Figure 9: Existing and Future Servicing No	etwork52

1 Introduction

The Grovedale Area Structure Plan (ASP) lies in the northwestern portion of the Municipal District of Greenview (Greenview), and is located south of the Wapiti River and the County of Grande Prairie. *Figure 1: Key Map* defines the location of the Grovedale ASP in the broader provincial and regional context, while *Figure 2: Plan* Context defines the Grovedale ASP plan boundary and provides a local context. The Grovedale ASP consists of approximately 46,394 hectares of land with the Centralized Living area being approximately 2,977.9 hectares in size.

The plan area contains the Hamlets of Landry Heights and Grovedale and is approximately 8 km south of the City of Grande Prairie. See *Figure 1: Key Map* and *Figure 2: Plan Context* for further details.

The Grovedale plan area contains both titled and untitled lands, with a variety of natural and man-made features that create unique opportunities and constraints for future development. In response to these opportunities and constraints and the need to manage growth in a responsible fashion, Greenview identified the need to both guide future development and protect the natural amenities offered by the surrounding landscape.

The Grovedale Area Structure Plan (ASP) is intended to provide direction for future growth and development within the plan area, in conjunction with the goals, objectives and policies outlined within Greenview's Municipal Development Plan.

The Grovedale ASP provides a long-term framework for development with a 50-year vision while accommodating in excess of 50 years of growth.

The Grovedale ASP will act as a foundation for future plans and studies, such as Minor Area Structure Plans, municipal infrastructure reports, and off-site levies.

1.1 Conformance & Process

1.1.1 Municipal Government Act

The Grovedale ASP has been prepared in accordance with Section 633(1) of the Municipal Government Act, which establishes the minimum requirements for Area Structure Plans in Alberta, and addresses other matters considered as necessary by the Greenview Council.

1.1.2 Greenview Municipal Development Plan

The Greenview Municipal Development Plan (MDP) was adopted September 21, 2016. The Grovedale ASP is in alignment with the objectives and policies of the Municipal Development Plan. The proposed Central Living area is in alignment with Section 5 of the MDP, which accommodates the future expansion of the Hamlets of Grovedale and Landry Heights and encourages commercial, industrial and institutional uses to locate in these centres by fostering sustainable growth and a desirable lifestyle in a livable, safe and walkable community environment.

1.1.3 Upper Peace Regional Plan

The boundary of the Upper Peace Regional Plan is based upon the major watershed in the region while being aligned to best fit with the boundaries of municipal districts and counties. This plan will include Greenview, as well as numerous other municipalities that fall within the watershed. This plan was prepared prior to the creation of the Upper Peace Regional Plan by the provincial government.

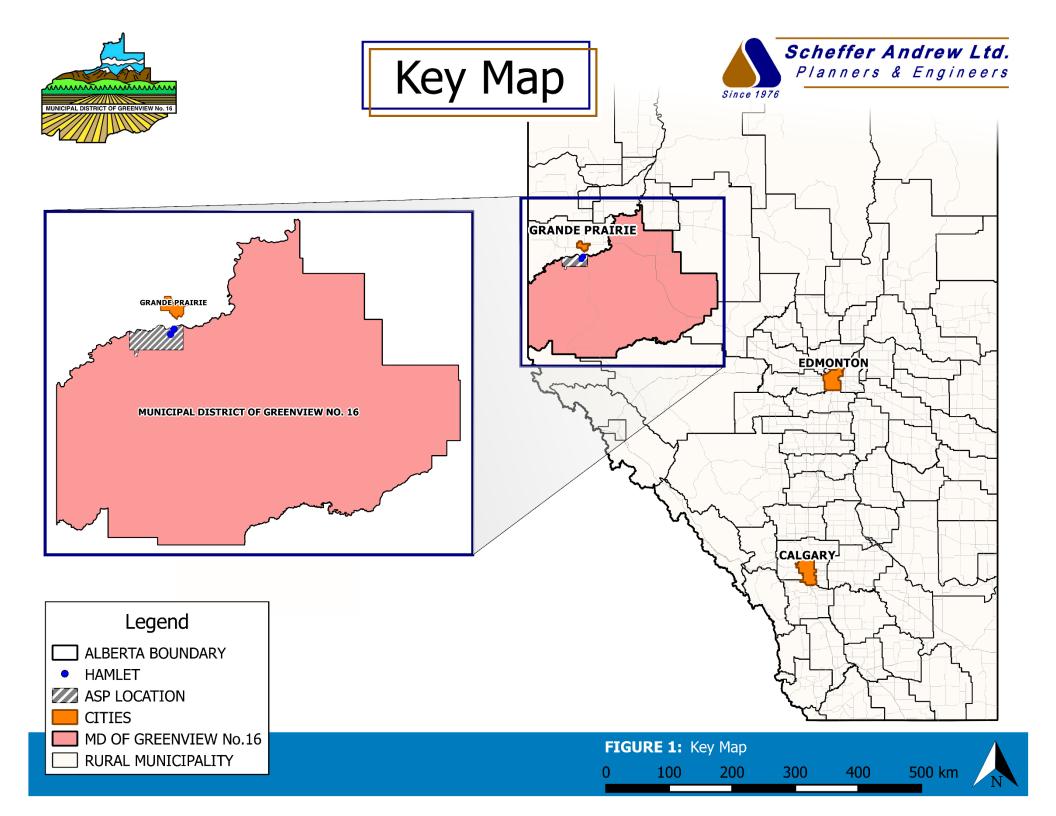
If any policies in this plan are in conflict with the policies of the Upper Peace Regional Plan, the latter shall take priority. This plan should be reviewed (and if necessary, amended) once the Upper Peace Regional Plan is approved by the Government of Alberta to ensure that it is consistent with the policies and concepts contained in the regional plan. As of January 2017, no work has commenced on the preparation of the Upper Peace Regional Plan.

1.1.4 Historical Resources

The plan area's proximity to the Wapiti River and the presence of significant natural areas increases the likelihood that it may be home to historical or archaeological resources, such as settlement structures, buried artefacts, and fossilized remains. Lands within the plan area are identified on the Provincial *Listing of Historic Resources* as prepared by Heritage Division of Alberta Culture and Tourism. Prior to further detailed planning and subdivision and development within the plan area, approvals must be sought from Alberta Culture and Tourism to ensure that, if present, these resources can be properly preserved and protected by qualified professionals.

1.1.5 Community Consultation

Community outreach has played a significant role in the preparation of the Grovedale Area Structure Plan, with the intent of having members of the community help guide the development of the plan. Consultation has consisted of meetings with the public, online surveys, as well as the establishment of a Citizens' Advisory Panel.



2 Existing Land Use

2.1.1 Green & White Areas

The plan area consists of settled (White Area) and unsettled (Green Area) lands which have been defined by the Crown. The White Area is the settled portions of the Province, while the Green Area is the unsettled (and largely forested) portion of the Province. The jurisdiction for the Green Area falls with the Crown, with all public lands being managed by the Province of Alberta.

A variety of activities occur within the Green Area, such as recreational activities; agricultural activities including livestock grazing; natural resource extraction (sand and gravel), oil and gas, forestry; and heavy industrial activities.

Adherence to Section 8 of the MDP will ensure that the interests of Greenview within the plan area are addressed.

2.1.2 Natural Resource Extraction

Within the plan area are several sites where natural resources are extracted, including oil and gas wells operated by private businesses (both on private and public land), and aggregate and mineral extraction facilities operated by both private and public entities. The extraction of natural resources is a provincially regulated industry, municipalities typically have little control over where these sites may be developed or how they may operate, particularly those operations related to the oil and gas sectors.

Existing oil and gas facilities are identified in *Figure 3: Existing Oil and Gas Facilities*.

The role of Greenview in planning for natural resource extraction activities in the plan area is to ensure that future developments, at a minimum, adhere to Alberta Energy Regulator's recommended setbacks from these activities, in order to limit land use conflicts in the future.



2.1.3 Residential

The single-family dwelling is the primary form of housing throughout the plan area, and is found in:

- Single-family residential parcels subdivided from an agricultural quarter section;
- Farmsteads;

- Aspen Grove Country Residential;
- Multi-lot Country Residential Subdivisions; and
- The Hamlets of Grovedale and Landry Heights.

The greatest concentration of housing is located in the Hamlets of Landry Heights and Grovedale.

2.1.4 Commercial & Industrial

Commercial development is limited to the Hamlet of Grovedale and currently consists of two general stores, which provide a variety of goods and services.

Industrial development is located throughout the plan area. Light industrial activities with minimal impacts on the surrounding land uses can be found within and adjacent to the Hamlet of Grovedale. Greenview's Grovedale Office [is located] within a light industrial area to the north of the Hamlet of Grovedale.

Heavy industrial activities are located along Highway 40 and consist of those industries related to the oil and gas sectors and the forestry sector. The largest single industrial activity within the plan area is directly related to the forestry sector and can be found on the east side of Highway 40 north of the intersection of Township Road 700 and Highway 40.

2.1.5 Recreational

A variety of recreational facilities exist within the plan area; these include O'Brien Provincial Park, Big Mountain Creek Provincial Recreation Area, Grovedale Fish Pond, as well as, Grovedale Golf & Country Club and the Nitehawk Year-Round Adventure Park, both of which are privately owned. Examples of recreational activities available (at select locations) are:

- Day use sites;
- Fishing;
- Gravity Mountain Biking Park;

- Hiking;
- Swimming;

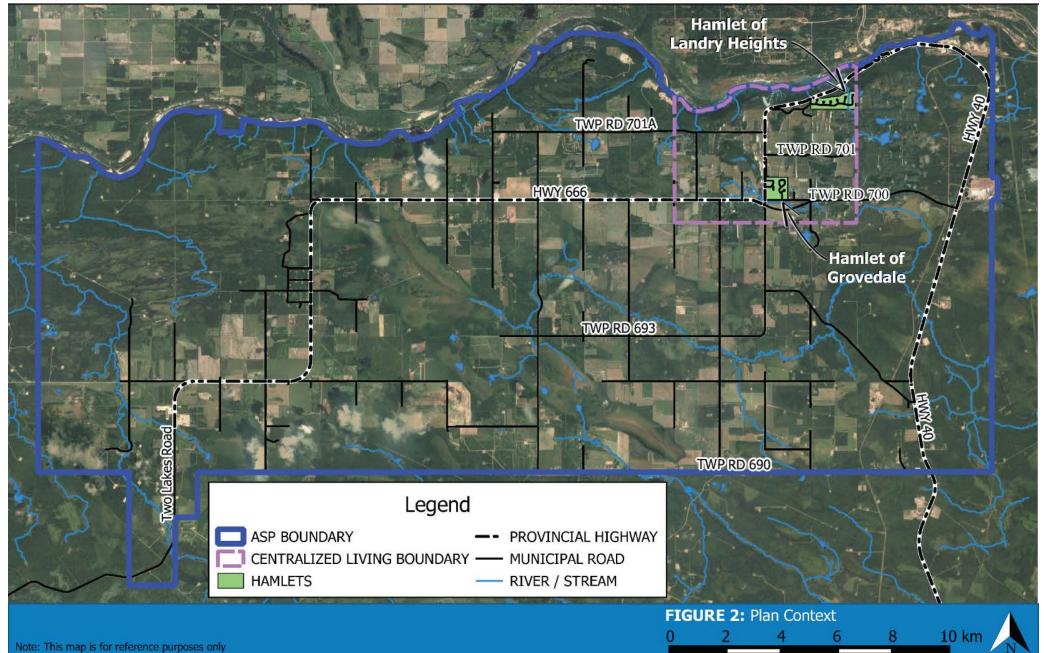
- Snowboarding and Skiing (cross-country and downhill);
- Luge Track and Freestyle Water Ramp
- Snowshoeing;
- Off-Highway All-terrain Vehicle Riding;
- Snowmobiling;
- Recreational Vehicle camping; and
- Golfing.

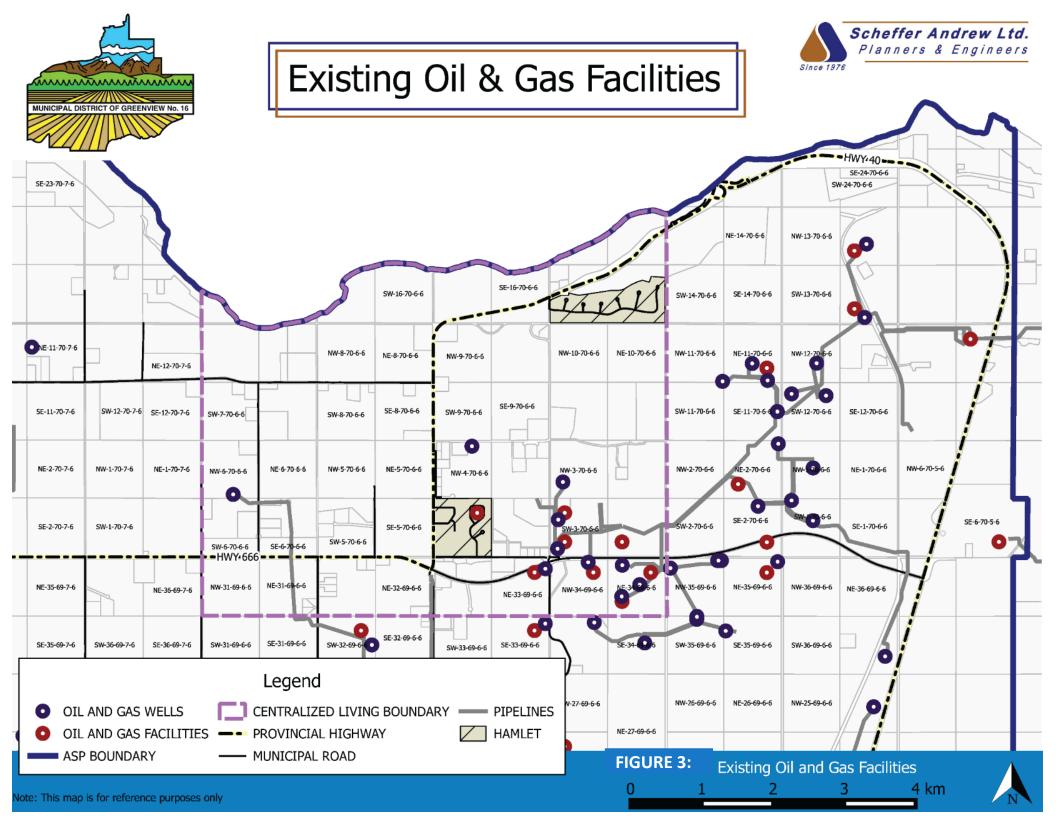




Plan Context







[Grab your reader's attention with a great quote from the document or use this space to emphasize a key point. To place this text box anywhere on the page, just drag it.]

2.2 Environmental Conditions

2.2.1 Wapiti River

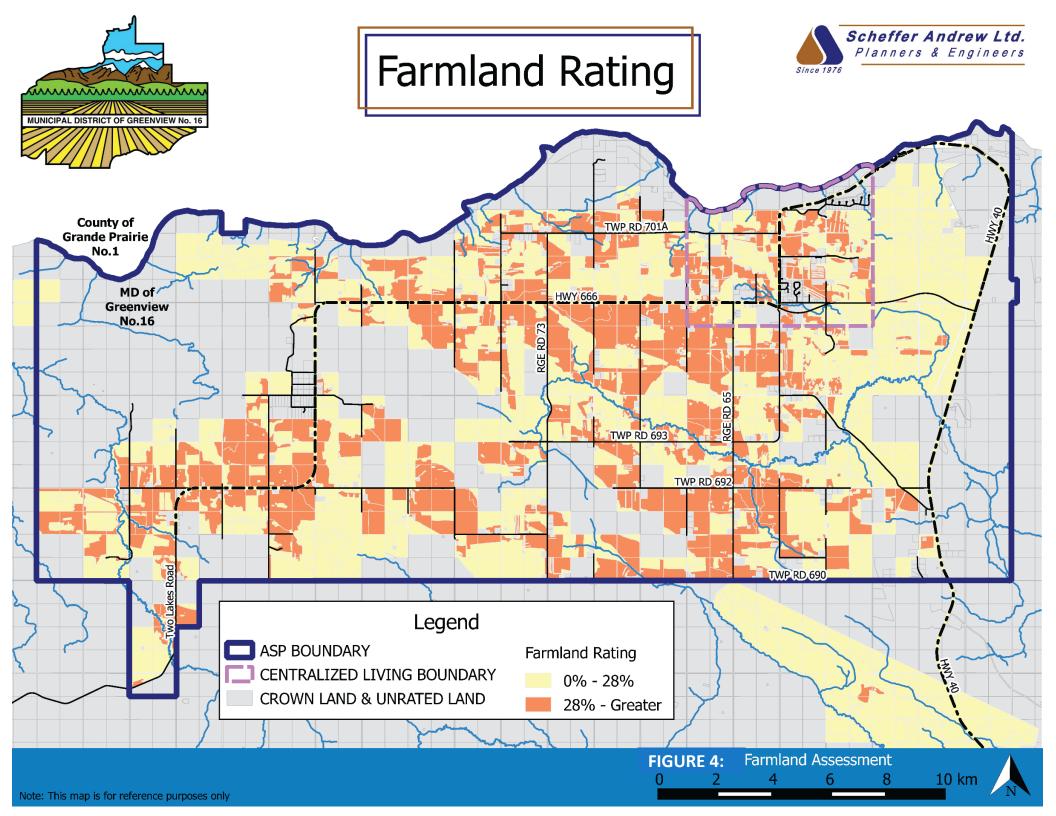
The Wapiti River is the primary feature in the local landscape, with it and its tributaries being environmentally significant. The Wapiti River is a source of recreational and employment opportunities, along with the water supply for neighbouring communities such as the City of Grande Prairie.

The Wapiti River is navigable and can be used by motorized and non-motorized watercraft. The shores of the Wapiti River are used for a variety of recreational opportunities, with O'Brien Provincial Park providing day use sites for picnicking and opportunities for biking, cross-country skiing and snowshoeing.

Aggregate resource extraction facilities are also located along the Wapiti River.

2.2.2 Farmland Rating

A detailed Farmland Assessment has been completed by Accurate Assessment on behalf of Greenview, for lands within the plan area, classifying lands into one (1) of two (2) categories based upon their capability to support agricultural activities. Lands with a Farmland Rating of 0% up to 28% are of lower quality and generally not as well suited for agricultural purposes, aside from pasture and grass, for a variety of reasons. Lands with a Farmland Assessment Rating of 28% or greater, are more suited for agricultural production and are considered Better Agricultural Land. Please see *Figure 4: Farmland Assessment* for further details.



3 Vision & Guiding Principles

Greenview has prepared this Area Structure Plan as a means of clarifying, communicating and protecting its vision for future development within the plan area.

A centralized growth area with a small town feel is envisioned, which will be the focus of 50 years of future growth and development for the community and will provide a variety of goods and services for the local and regional population. Long-term future growth and development of the plan area, and specifically the Centralized Living area, will promote a healthy, safe and pleasant community that is respectful of the local landscapes while being based upon a foundation of sound land use planning, policies and practices.

The Vision and Guiding principles found below provide a basis and direction for the policies found within the remainder of the plan.

3.1 Vision & Guiding Principles

3.1.1 Vision

The Grovedale Plan Area is a unique place enriched by a mixture of cultural and river valley landscapes. The Plan strives to protect and preserve the 'small town' character of the hamlet setting while minimizing the loss of the current agricultural heritage and environmentally significant land by fostering sustainable growth and a desirable lifestyle in a livable, safe and walkable community environment.



3.1.2 Guiding Principles

Environmental

The natural environment, with its natural Wapiti River Valley landscape, water bodies, wetlands and forest stands, forms part of the regional ecosystem that allows for recreational activities and employment opportunities. Care must be taken to ensure that impacts on the natural environment are minimized.

Cultural and Social

Area residents share a cultural identity that is characterized by the current rural lifestyle, which should be promoted and encouraged by preserving and enhancing areas of local and regional significance; while providing opportunities for social and community interaction to encourage a small town community atmosphere.

Economic

A strong and vibrant community is supported by a strong and diverse local and regional economy. Historically important sectors such as agriculture, forestry and oil/gas inclusive of heavy industrial activities, should be supported and encouraged to expand through the use of new and innovative practices; while new opportunities associated with tourism, value-added agriculture, green energy and manufacturing need to be fostered and nurtured in order to assist in creating a long-term sustainable local economy.

Housing and Infrastructure

The housing needs of the community will be met by encouraging a variety of development options while endeavouring to provide the supporting infrastructure for denser residential development that consists of an effective transportation network, a cost-efficient sanitary system, a stormwater management system and a municipal water supply system.

3.2 Going Green

Environmental sustainability and stewardship are to be key building blocks for future growth and development within the Grovedale Plan Area, and more specifically the core of the community as defined in *Figure 6: Development Concept – Centralized Living*. Moving forward it will be necessary to preserve and possibly enhance existing natural features such as wetlands and tree stands, as well as take measures to minimize the footprint of development on the environment through:

- managing water consumption;
- reducing waste;
- limiting the impact on local air quality;

- facilitating green energy initiatives; and
- managing water runoff.

- 1. All future residential, commercial, industrial and institutional construction or renovations should utilize low-flow plumbing fixtures.
- 2. Xeriscaping or low maintenance landscaping should be incorporated into all future developments within the area designated as Centralized Living in order to reduce potable water consumption.
- 3. Rainwater harvesting renovations should be incorporated into all developments. Collected rainwater may be utilized for irrigation or other approved non-potable uses.
- 4. The transportation network renovations should be developed using Fused Grid and Complete Streets methods in order to create an environment that is both cyclist- and pedestrian-friendly, while discouraging the use of automobiles for local trips.
- 5. All residential, commercial, industrial and commercial developments should include electric car charging points for private or public use.
- 6. All future residential, commercial, industrial and institutional new construction or renovations should incorporate systems for generating renewable energy, such as solar panels, geothermal heating, or wind turbines.
- 7. Individual geothermal heating systems are encouraged for residential, commercial, industrial and institutional uses should a District Energy Sharing System not be developed in the Centralized Living Area or in areas where a District Energy Sharing System will not be developed.



- 8. Green roofs renovations should be incorporated into all new construction of commercial, industrial, institutional and multifamily residential developments.
- 9. The principles of Low Impact Development renovations should be incorporated into all developments throughout the plan area, particularly within the Centralized Living area, these are:
 - a. Preserve natural site features and utilize existing natural systems;
 - b. Focus on limiting and minimizing runoff;
 - c. Treat and control stormwater as close to the source as possible;
 - d. Create multifunctional landscapes that allow for the integration of stormwater management facilities into other elements of the development area; and
 - e. Implement public education and municipal maintenance programs, inclusive of pollution prevention strategies.
- 10. Low impact development techniques, such as erosion and sediment control, bioswales, rain gardens, permeable pavement and box planters, green roofs, and on-site bioretention renovations should incorporated into all developments.

4 Grovedale & Neighbourhood Framework

4.1 Development Concept

The Development Concept reflects the Vision and the Guiding Principles identified in Section 3.1, along with the outcomes from consultation with Greenview Council, Administration, community members and the Citizens' Panel.

The Plan is made up of two distinct areas: the Centralized Living Area and the Rural Area. The Centralized Living Area is the focus for future residential and compatible non-residential growth, while the Rural Area addresses all the lands outside of the Centralized Living Area. See *Figure 5: Development Concept – Plan Area* and *Figure 6: Development Concept – Centralized Living* for further details. A summary of the details associated with the land use concept can be found below:

Agricultural

Agricultural activities continue to play an important role in the plan area, now and into the future, with activities ranging from cultivation of foraging crops, keeping of livestock, and maintenance of grazing pastures. In addition to agricultural operations, a limited amount of housing is also contemplated.

Aspen Grove Country Residential

The country residential community of Aspen Grove, located to the west of Highway 666, will continue to provide a community-oriented housing option on the west side of the plan area. Further expansion of this country residential area is not contemplated, while intensification of the currently developed area is a possibility.

Commercial

Commercial lands have been identified in locations that will support the local community as well as the travelling public and have situated in order to allow for easy access and visibility from the local and regional road network.

Commercial lands will consist of the Service Commercial area as well as the Village Commercial area along Main Street.

Crown Land

Crown Land falls under the jurisdiction of the Province of Alberta and may be utilized for a variety of activities, such as recreation, forestry, oil and gas activity, resource extraction, livestock grazing or other agricultural operations.

Educational Sites

New school sites have been identified to serve the future residential population within the plan area and region in addition to the existing Penson School. The conceptual, centrally located, school sites consist of two elementary (Kindergarten to Grade 9) schools and a high school.

Estate Residential

Estate Residential land use is a large lot suburban form of development that balances rural living - primarily the need for space and privacy - with urban characteristics, such as municipal water and wastewater servicing.

Heavy Industrial

Heavy Industrial development is a valuable contributor to both the local community and the regional economy and will continue to be supported in designated areas.

Light Industrial & Business Industrial

Light industrial and business industrial development will play an important role in the community, acting as employment centres for future residents.

Parks & Open Space

A centralized park has been identified within the Centralized Living Area to act as a focal point for the community and is anticipated to be intricately connected to development within the Village Centre; acting as an extension of the main street or village square.

A linear open space has been identified north of the Hamlet of Grovedale and will act as a buffer between business industrial activities and anticipated future residential uses.

River Valley Residential

River Valley Residential lands have been identified to the north of Township Road 701A and will provide an

alternative to more compact development by accommodating large lot multi-lot country residential subdivisions that are privately serviced and accessed by an internal local road network. Future development will need to be sensitive to the natural environment given the proximity to the Wapiti River.

Small-Scale Agriculture

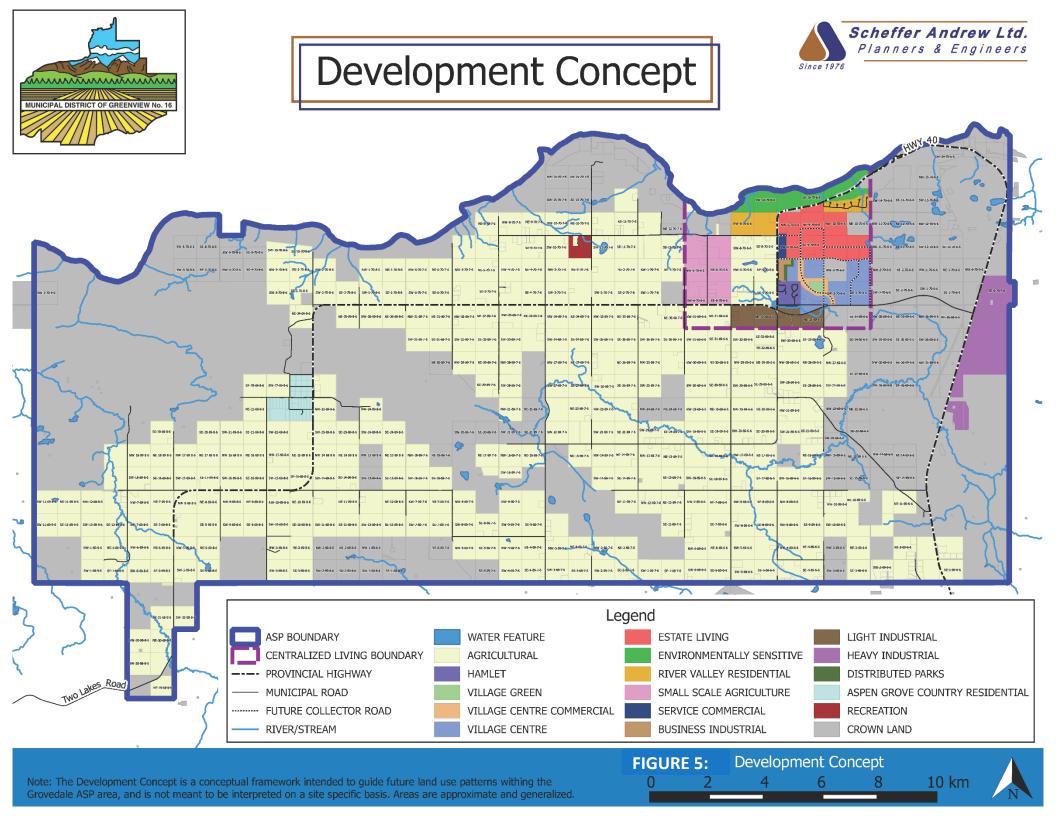
Small-scale Agriculture land use is an opportunity for agricultural operations to be located in such a fashion so as to minimize the impact on agricultural lands while maximizing the use of impacted agricultural lands. A variety of small-scale agricultural operations, from the rearing of livestock, growing produce, apiaries and u-pick berry operations are encouraged.

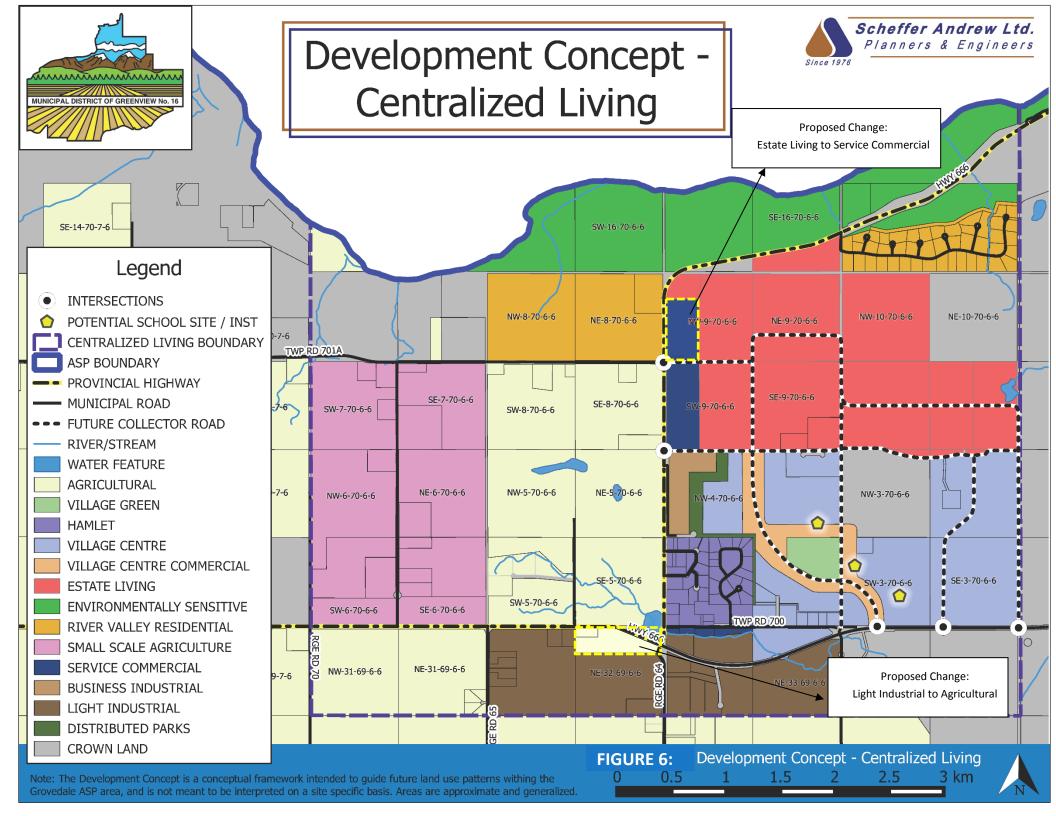
Trails

The trail network will connect future development and parks/open spaces with existing community spaces within the plan area; while extending to O'Brien Provincial Park and the trail network proposed for the Wapiti River Valley.

Village Centre

The Village Centre will be the focus area of the Centralized Living Area and the Grovedale ASP plan area. It is intended to be vibrant and urban in nature, yet have a small town feel, with a main street/village square at its heart. The Village Centre will be mixed use in nature, pedestrian-oriented and will accommodate a variety of uses and activities.





4.2 Rural Life

4.2.1 Farmsteads & Rural Living

Intent

Living in a rural setting is a popular choice for many individuals, whether you are a farmer that lives on and works the land or a non-farmer seeking to live in the tranquillity of the countryside. Rural residential living, be it on a farmstead or not, will continue to be supported within the plan area, while ensuring that agricultural lands and operations are minimally impacted.

Policy

- 1. Non-agricultural/residential lots should be located so as to minimally impact agricultural operations.
- 2. Residential development on agricultural parcels should be located in such a manner so as to minimize the development's impact on agricultural operations.
- 3. A minimum sixty-one (61) metre setback shall be provided from the upper bank of the Wapiti River Valley to a new property boundary in order to assist in protecting the integrity of the river valley.



Intent

The Aspen Grove Country Residential area will continue to play an important role in the western portion of the plan area as an established rural neighbourhood. Though expansion of Aspen Grove is not considered at this time, further intensification may be accommodated in order to capitalize on existing municipal road infrastructure.



1. Redevelopment and further subdivision of existing lots are encouraged where: minimum lot sizing can be achieved in accordance with the Greenview Land Use Bylaw, direct access to the internal/local road network can be provided and private water and wastewater systems can be accommodated.

4.3 Centralized Living

4.3.1 Small-Scale Agriculture

Intent

The Small Scale Agriculture area is intended to facilitate the development of a variety of small-scale agricultural operations not requiring extensive amounts of land in a centralized area, so as to minimize the impacts on more traditional agricultural lands and operations. These small-scale agricultural operations can consist of anything from the rearing livestock, produce production, apiaries to u-pick operations, and are generally not the primary income source for the resident.

Policy

- 1. The nature and form of development is not compatible with confined feeding operations, as such, they are discouraged.
- 2. Individual lots within multi-lot subdivisions are to be privately serviced.
- 3. Access to lots within multi-lot subdivisions shall be from the internal subdivision roads.
- 4. A diverse range of agricultural operations is encouraged, provided that they do not adversely impact adjacent landowners.

4.3.2 River Valley Residential

Intent

The River Valley Residential areas allow for the development of context-sensitive traditional country residential housing options consisting of large lot, multi-lot, privately serviced, residential subdivisions within close proximity to the Wapiti River Valley and urban services, while offering an alternative to more compact urban and suburban living found elsewhere within the Centralized Living Area. The River Valley Residential areas consist of undeveloped lands as well as the existing Hamlet of Landry Heights.

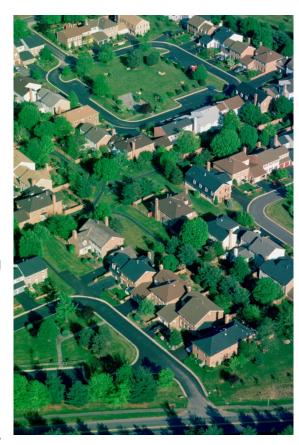
- 1. Subdivision design must have regard for the Wapiti River Valley and be context sensitive given the proximity of the Wapiti River and potential geotechnical constraints.
- 2. A setback with a minimum depth of sixty-one (61) metres shall be provided from the upper bank of the Wapiti River Valley in order to assist in protecting the integrity of the river valley and shall be defined during the preparation of Minor Area Structure Plans by a qualified professional. Where a Minor Area Structure Plan does not exist, the setback shall be defined as part of the subdivision and/or development permitting process, by a qualified professional.
- 3. Expansion of the Wapiti River trail system shall be provided as part of any multi-lot subdivision in order to ensure connectivity to the broader trail network.
- 4. Individual lots within multi-lot subdivisions are to be privately serviced; however, municipal water and wastewater systems may be considered at the discretion of Greenview for new development areas.
- 5. Future development/redevelopment within the Hamlet of Landry Heights should be context sensitive and limited to the development of low-density housing options compatible with the existing housing form, that can be adequately serviced using private water and wastewater systems or municipal water and wastewater systems.

4.3.3 Estate Living

Intent

The Estate Living area will provide housing options that blend both rural and urban characteristics on larger suburban lots. Development within the area will balance the desire for privacy and space with urban features, such as a diversity in housing form and a municipal water and wastewater system.

- 1. A variety of housing styles may be considered, from semi-detached to stacked row housing, where it can be demonstrated that the housing form blends seamlessly with the surrounding single detached housing form.
- 2. Traditional suburban "cul-de-sac and loop" road networks are discouraged in favour of a curvilinear road network that balances accessibility and mobility with the need to discourage "thru traffic", by the use of crescent streets, loop lanes and planting islands.
- 3. Expansion of a walking trail system shall be provided as part of any multilot subdivision in order to ensure connectivity to the broader trail network.
- 4. The intensification and redevelopment of lots within the Hamlet of Grovedale is encouraged should municipal water and wastewater services become available.



4.3.4 Village Centre

Intent

The Village Centre will be the focus area of growth within the plan area and is to be vibrant and urban in nature, yet retain a community focused and small town feel. The Village Centre will be mixed use in nature, pedestrian-oriented and accommodate a

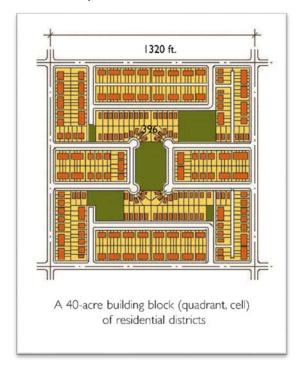
variety of uses and activities in order to cater to a variety of individuals throughout their lives. A central feature of the Village Centre will be the Village Green and Main Street, providing opportunities for shopping and community gatherings.

- 1. The development pattern shall reflect a Fused Grid Design in combination with a Main Street and Village Green, which will be the focal points of the Village Centre.
- Development along the Main Street and surrounding the Village Green shall be higher density and mixed-use in nature, ranging from two to six storeys and consisting of a combination of groundoriented commercial uses and residential uses on upper storeys.



- 3. Development along the main street and surrounding the Village Green shall be oriented toward the street and the Village Green, providing for a strong street edge; while also establishing a streetscape that promotes walkability and community interaction (such as wide sidewalks, benches, sidewalk cafes, planters, trees, bike racks, etc.).
- 4. Development within the Fused Grid quadrants shall consist of a variety of low and medium density housing options, with green spaces and walkways strategically located in order to ensure the walkability of the neighbourhood.
- 5. Local roads shall not traverse the entirety of a Fused Grid quadrant so as to discourage "thru traffic".
- 6. Higher density, multi-storey developments should be located on the periphery of a Fused Grid quadrant along collector or arterial roadways, with lower density housing forms located towards the centre of the quadrant.
- 7. A system of green spaces and paths shall be designed to encourage walkability and connectivity within each Fused Grid quadrant and the community as a whole.

- Development is to proceed in a contiguous and logical fashion with municipal infrastructure being extended in an efficient and cost-effective manner; leapfrog development is highly discouraged.
- A variety of housing forms are encouraged throughout the Village Centre, including, single detached, semi-detached, row housing, cluster or courtyard based housing and multi-storey multi-family structures.





10. Structures within the Village Centre, excluding those

along Main Street and surrounding the Village Green, should be limited to no more than four storeys in order to promote a sense of scale geared towards the pedestrian, while at the same time ensuring a sense of place is maintained.

- 11. A variety of housing forms and ownership models are encouraged in order to allow for individuals of varying ages and financial capabilities to reside within the community.
- 12. In order to promote a vibrant and active community, future schools and educational facilities shall be located within the Village Centre and in close proximity to the Village Green.
- 13. Development within the Village Centre shall be fully serviced with water, wastewater and stormwater infrastructure.

A Fused Grid Quadrant Design Example

Source: Canada Mortgage and Housing Corporation. Residential Street Pattern Design. 2002

4.4 Land Use Statistics – Centralized Living Area

Land use statistics, as well as unit and population estimates for the Centralized Living Area, are detailed in *Table 1: Land Use Statistics – Centralized Living Area* and *Table 2: Unit & Population Estimates – Centralized Living* respectively. Land use areas are presented based upon a gross developable area, with unit and population estimates also being calculated based upon gross development areas.

It is anticipated that 1829.4 ha (4,518.6 ac) of land will be available for the development of residential and mixed commercial/residential purposes within the Centralized Living Area. Given the amount of potentially developable land within the Centralized Living Area, it is anticipated that a total of 10,994 residential units, ranging from single-family housing to row housing to apartment units, may be accommodated, resulting in a total residential population of 29,682.

Grovedale Area Structure Plan		
Land Use Statistics - Centralized Living	Area	
	Area (ha)	% GDA
Gross Developable Area	2977.9	100%
Environmentally Sensitive	303.4	10%
Development Area	2674.5	90%
Existing Development Areas		
River Valley Residential (Landry Heights)	67.7	2%
Hamlet (Grovedale)	57.6	2%
Agricultural	541.8	18%
Crown & Untitled Land	380.4	13%
Business Industrial	18.4	1%
Light Industrial	30.6	1%
Total	1096.5	37%
Proposed Development Areas		
Village Centre	287.2	10%
Estate Living	443.4	15%
River Valley Residential	128.1	4%
Small Scale Agriculture	387.9	13%
Village Centre Commercial	54.0	2%
Service Commercial	31.2	1%
Light Industrial	190.6	6%
Village Green	16.5	1%
Distributed Parks	12.2	0%
Total	1551.0	52%
Total Developable Area	2647.5	89%

Note: Gross land areas are utilized in calculating the land use statistics and do not exclude wetlands, natural areas, etc.

Table 1: Land Use Statistics - Centralized Living Area

Grovedale Area Structure Plan					
Unit & Population Estimates - Cent	ralized Livi	ing			
	Area (ha)	Units/h a	# of Units	People/ Unit	Projected Population
Estate Living	443.4	6.00	2,660	2.7	7,183
Village Centre & Village Centre Commercial	341.2	20.00	6,823	2.7	18,423
River Valley Residential	128.1	1.00	128	2.7	346
Small Scale Agriculture	387.9	0.50	194	2.7	524
Agricultural	541.8	0.06	33	2.7	90
Total	1842.4		9,612		25,952
Note: estimates are based on gross density (gross	developable a	rea).			

Table 2: Unit & Population Estimates - Centralized Living

4.5 Commerce & Industry

4.5.1 Agriculture

Intent

Agricultural activities have played a strong role in the history of the plan area and have historically contributed to the local economy and the livelihood of residents. Through the preservation of agricultural lands and the diversification of agricultural activities, the agricultural sector will continue to be a strong presence in the community and the plan area and will continue to play an ever important role in the expanding local economy.

- 1. Support the agricultural sector by supporting Right-to-Farm legislation.
- 2. Do not permit the use of agriculturally designated lands for non-agricultural related activities; such as, trucking operations, oilfield services, heavy equipment repair, etc., which would be more appropriately located in an industrial setting.
- 3. Discourage the subdivision and fragmentation of quarter sections; where the subdivision of an agricultural quarter section occurs, it shall be 80 acres in size (more or less) unless the portion of the lands to be subdivided are fragmented from the remainder of the quarter section via a natural or manmade feature, such as a watercourse, railway or municipal/provincial highway.
- 4. Support the development of agriculturally related industries.
- 5. Land uses that conflict with agricultural activities should not be permitted.
- 6. Limit the expansion of existing non-agricultural uses and do not permit the establishment of new non-agricultural uses. Where non-agricultural uses occur on agricultural lands, work with the landowner to relocate those uses to a more suitable location.

- 7. Support the creation of a home-based business that are small in scale and do not have a detrimental impact on surrounding lands.
- 8. Support the development and diversification of agribusinesses that are related to primary agricultural operations, such as, harvest festivals, farm-to-plate dinners, corn mazes, market gardens, farm stands, bed and breakfasts, value-added agricultural products and other uses that support the continued development of the agricultural sector.
- 9. Encourage the retention of the natural landscape, such as tree stands and wetlands, as they provide an ecological benefit to the plan area.



10. Greenview will encourage the opportunity of converting Crown Lands into titled agricultural land in order to facilitate the expansion of agricultural operations within and in close proximity to the plan area.

4.5.2 **Village Centre Commercial**

Intent

The Village Centre is the heart of the community, with Main Street and the Village Green being the focus for a vibrant commercial district where the community can come to shop, eat and play. The Main Street and Village Green are intended to be mixed-use, balancing commercial and residential development so as to create a sense of place full of vibrancy and a unique sense of self, while also ensuring that the needs of the community and visitors are met.

Policy

- 1. Development along the Main Street and Village Green are to be human in scale and geared towards the pedestrian.
- 2. Commercial development is to range from two to six storeys with the ground floor being commercial in nature, while upper storeys may be either residential or commercial in nature.
- 3. A variety of commercial uses are encouraged, such as restaurants, speciality retail, professional offices, etc.
- 4. Large-scale and large format commercial uses are discouraged in their traditional big-box formats.
- 5. Off-street parking is discouraged along Main Street and the Village Green; where off-street parking is required, it shall be adequately screened to the satisfaction of Greenview.



6. Ground-oriented residential uses shall not be permitted along Main Street; however, they may be considered at the discretion of Greenview for the areas surrounding the Village Green.

- 7. Pedestrian access and connectivity to and from Main Street and the Village Green into the surrounding Village Centre shall be a priority.
- 8. Public spaces shall be incorporated along Main Street in order to encourage the congregation of people.
- 9. A commercial needs assessment shall be prepared prior to initiating any development or more detailed planning studies in order to further refine the amount of commercial development required along Main Street and the Village Green.
- 10. Urban design guidelines for Main Street and the Village Green may be prepared by Greenview to ensure a consistent design approach for the hub of the Village Centre.

4.5.3 Service Commercial

Intent

Geared towards the travelling public and providing quick and accessible service to surrounding industry, the Service Commercial area is vehicle oriented in nature and focused on providing those services not typically suitable for a Main Street. The intent of the Service Commercial area is to augment and support the Village Centre Commercial area and not detract from it.

- 1. Commercial uses oriented to servicing the agricultural sector, oil and gas sector and the travelling public are to locate within the Service Commercial area.
- 2. Commercial activities will need to ensure adequate screening and buffering from adjacent residential lands, while at the same time provide opportunities for connectivity with surrounding land uses.
- 3. Development within the Service Commercial area shall not be mixed-use and no residential component will be permitted.
- 4. At the discretion of Greenview, alternative methods of addressing water, wastewater and stormwater needs and management may be accepted in order to facilitate development in the interim until such time as full municipal water, wastewater and stormwater infrastructure is available.



- 5. Future development within the Service Commercial area shall be designed in a comprehensive fashion so as to ensure that the overall commercial area is developed in a functional manner.
- 6. Future development shall be held to a high aesthetic standard as the Service Commercial area is strategically located at one of the primary access points into the community. Landscaping and building facades shall be finished to the satisfaction of Greenview and will compliment adjacent development.
- 7. Access to the Service Commercial area shall not be from Highway 666 but from the local municipal road network.
- 8. A commercial needs assessment shall be prepared prior to initiating any development or more detailed planning studies in order to further refine the amount of commercial development required in the Service Commercial area.

4.5.4 Business Industrial

Intent

The Business Industrial area is geared towards accommodating industrial uses whose operations are primarily limited to within a building and require limited to no outdoor storage, providing a bridge for industrial uses that are not land intensive and require a higher level of servicing.

- 1. Residential uses shall not be permitted within the area designated for Business Industrial activities, in order to minimize land use conflicts.
- 2. Limited compatible non-industrial uses may be considered; however, commercial uses, such as retail, which rely heavily upon non-industrial traffic shall not be permitted within the Business Industrial area in order to minimize conflicts.

- 3. The Business Industrial area is located at one of the primary access points into the community and is highly visible; as such, development shall be held to a high aesthetic standard. Landscaping and building facades shall be finished to the satisfaction of Greenview and complement adjacent developments.
- 4. Development within the area shall be compatible with surrounding non-industrial development. Buffering of business industrial uses from surrounding non-industrial uses shall be achieved through a combination of berms, tree planting and other landscaping measures to the satisfaction of Greenview.
- 5. Industrial uses shall ensure that all operations and nuisances are limited to the interior of an enclosed building.
- Limited outdoor storage shall be accommodated provided that it is ancillary to the primary use occurring on a site and is screened from adjacent roadways and other land uses to the satisfaction of Greenview.
- 9. At the discretion of Greenview, alternative methods of addressing water, wastewater and stormwater may be accepted in order to facilitate development in the interim until such time as full municipal water, wastewater and stormwater infrastructure is available. The use of green technology is encouraged.



4.5.5 Light Industry

Intent

Light Industrial development servicing the agricultural, forestry and oil and gas sector is focused in future industrial parks along the Highway 666 and Township Road 695A corridor in order to provide a local employment opportunity for residents, easy access to the regional and provincial road networks, and to promote synergies between industrial users while minimizing the impact on non-industrial land uses.

- 1. Support the development of (an) industrial park(s) to address a variety of industrial activities whose operations occur both inside and outside of an industrial building.
- 2. Nuisances resulting from the industrial operations shall be limited to the industrial operations site and not impact adjacent properties or land uses.
- 3. At the discretion of Greenview, future industrial park(s) or development may be partially serviced with municipal water and wastewater infrastructure through a combination of "trickle water" and a low-pressure sanitary system. Alternatively, and at the discretion of Greenview, private water and wastewater servicing may be allowed on an interim basis until such time as municipal infrastructure is made available. Upon municipal infrastructure being made available, industrial users shall be required to connect to the municipal system.
- 4. The internal/local road network shall be designed so as to ensure the ease of access to and the visibility of industrial parcels.
- 5. All industrial parcels shall be accessed from the internal local road network. Direct access to provincial highways or township and range roads shall not be permitted.
- 6. Encourage a wide range of parcel sizes in order to support the needs of various industrial users while at the same time allowing for the flexibility to size industrial parcels as necessary to meet the varying needs of industrial users.
- 7. Landscaping and buffering to the satisfaction of Greenview shall be required for all industrial developments in order to create an aesthetically pleasing industrial streetscape.

- 8. Landscaping and buffering to the satisfaction of Greenview shall be required along the Highway 666 and Township Road 695A corridor in order to present a visually appealing entry into the community.
- 9. A trail and park system shall be developed within the industrial area in order to provide for recreation opportunities for employees, as well as to provide for pedestrian and cyclist connectivity to the trail network in other areas of the community.
- 10. A stormwater management system shall be developed so as to allow for stormwater management ponds to be utilized as a source of fire suppression water and green space.

4.5.6 Heavy Industry

Intent

Heavy industrial activity in both the forestry and oil and gas sector will continue to play an important and valuable contribution in the local and regional economy; as such, existing and future heavy industrial areas need to be protected in order to manage land use conflicts between heavy industrial and non-industrial activities while facilitating the growth and expansion of the heavy industrial sector.

- 1. Promote the continued growth and expansion of the heavy industrial sector along Highway 40.
- 2. Limit land use conflicts with non-industrial land uses by working with industry to minimize any off-site nuisances that may impact adjacent lands.
- 3. Work with the Crown to encourage that future heavy industrial development be completed in an environmentally sensitive manner.
- 4. Encourage synergies between industrial users by encouraging the Crown to limit industrial users to the areas defined for heavy industrial use.



5 Trails & Open Space

5.1 Parks & Open Spaces

5.1.1 Village Green

Intent

The Village Green is a central park and focal point for the community, acting as a hub for recreational and cultural activities. Along with commercial uses on its periphery, the possibilities for this space are endless. The Green will be intricately connected to the Village Centre, allowing for easy access to the Green, Main Street and beyond. It will not only act as an amenity space for residents but may also serve as a recreational space for future schools within the plan area.

Policy

1. Collaborate with provincial agencies in order to reclaim and repurpose the former wastewater lagoon for use as a public space.



- 2. Develop a long-term plan for the use of the Village Green as a hub for recreational and cultural activities. Uses such as camping and recreational vehicle camping should be discouraged along with formal recreational spaces such as baseball diamonds or soccer pitches.
- 3. The Village Green shall be designed in order to facilitate year-round outdoor activities celebrating all seasons.
- 4. A system of trails through the Village Green shall be developed in order to encourage connectivity between activities along Main Street and other developments on the periphery of the Village Green.
- 5. The Village Green shall not have dedicated on-site parking in the form of a traditional parking lot; however, parking along the periphery of the Village Green may be accommodated in order to provide ease of access and use of the Village Green.

6. Limited and select minor commercial activities are encouraged to locate within the Village Green, such as a café with outdoor seating.

5.1.2 Distributed Parks

Intent

A system of distributed parks shall be incorporated into future residential, commercial and industrial development in order to provide opportunities for residents to play in formal and informal spaces and to connect with one another, while at the same time providing opportunities to connect future developments with each other. The distributed park system will be a crucial component of the design of the Village Centre and the fused grid road network, acting as local hubs within the community, while contributing to the social, mental, and physical well being of community residents.



- 1. A system of distributed parks, greenways and open spaces shall be incorporated into each development in accordance with the principles of developing a fused grid road network.
- 2. The distributed parks shall provide for opportunities to connect one fused grid quadrant with another.
- 3. The distributed parks shall consist of a combination of formal and informal park spaces, with uses such as community gardens, play spaces for children, skate parks or other features included.
- 4. Distributed parks may include a system of linear parks, which may act as a buffer between non-compatible uses, such as the linear park buffering the Business Industrial area from the Village Centre.
- 5. Along Main Street, a series of pocket parks or small plazas are encouraged in order to provide opportunities to bring people together in an urban setting and facilitate such activities as farmers' markets or a variety of pop-up events.

6. The maximum amount of municipal reserve, in accordance with provincial legislation, shall be dedicated by developers in the form of land. An alternative combination of land and/or cash-in-lieu for non-residential areas may be considered by Greenview, at their discretion, in order to facilitate the development of reserve areas as required.

5.1.3 Green Spaces & Environmental Lands

Intent

Green spaces and environmental lands will constitute a critical component of the overall open space network in the community in conjunction with park spaces. Green spaces such as stormwater management facilities may act as features within the community, mimicking wetlands and providing opportunities to link together park spaces; while environmental features such as wetlands, watercourses or tree stands will continue to provide an ecological benefit to the plan area while also providing opportunities for improving connectivity within the community.

- Where possible, stormwater management ponds and facilities should be developed to mimic a naturalized system while utilizing Low Impact Development techniques and principles.
- Ensure that wetlands and other environmentally sensitive lands are protected and that development does not adversely impact their long-term viability or their stability. Integrate wetlands and environmentally sensitive lands with municipal stormwater management facilities by utilizing Low Impact Development best practices.
- Incorporate and integrate stormwater management infrastructure, wetlands and environmentally sensitive lands with structured park development.



- 4. Context sensitive trails, developed utilizing Low Impact Development principles, may be strategically incorporated into or adjacent to environmentally sensitive lands at the discretion of Greenview.
- 5. Specialized studies, such as but not limited to, a biophysical assessment or wetland assessment shall be completed by a registered Biologist in support of all developments in order to define environmentally sensitive lands.
- 6. A geotechnical assessment, completed by a suitably certified engineer, shall be prepared in support of all developments in order to define areas not suitable for development purposes.
- 7. As required by Greenview, a slope stability study shall be completed for all developments in close proximity to or where steep slopes exist, Development within areas of steep slopes shall be limited and shall be at the discretion of Greenview.
- 8. Limit development within the Wapiti River corridor, with its steep and treed slopes, to uses such as trails which shall be designed in accordance with Low Impact Development standards and as per specialized supporting studies such as a geotechnical assessment.
- 9. At the discretion of Greenview, Nitehawk Year-Round Adventure Park may expand its operations if they are able to demonstrate that any proposed expansion shall be completed in an environmentally sensitive fashion and not adversely impact the local environment.
- 10. Low Impact Development (LID) techniques should be utilized in an effort to minimize the impact of development on the natural hydrology of the area by attempting to manage stormwater close to its source; these techniques may consist of, but are not limited to Rain Gardens, Bioswales, Permeable Pavement, Box Planters, Natural Drainage Ways, or Green Roofs.

5.2 Trails

5.2.1 Primary Network

Intent

The primary trail network, conceptually identified in *Figure 7: Existing and Future Trails* will act as the principal trail corridor within the area, connecting together such features as the proposed Village Green and Main Street, Grovedale Community Hall, O'Brien Provincial Park, the Wapiti River Valley and the Grovedale Fish Pond with future planned communities. The primary trail network will act as a spine serving a broad area to which the secondary trail network will connect; thereby, providing connectivity throughout the community and beyond.

- The primary trail network shall be designed to discourage the use of motorized off-road vehicles such as All Terrain Vehicles (ATVs) and snowmobiles, so as to avoid conflicts with pedestrians and nonmotorized vehicles.
- 2. The primary trail network has been conceptually identified within this document. Further detailed work is required in order to delineate the ultimate location of the primary trail network.
- 3. The trail network should be designed using Low Impact Development techniques in order to improve and potentially reduce stormwater runoff and assist in enhancing any environmental features within the plan area.
- 4. Where feasible, the trail network should run along the edge of environmental features, while taking steps to ensure impacts on the environmental features are minimized.
- 5. The trail network shall be integrated with the parks and open space system.



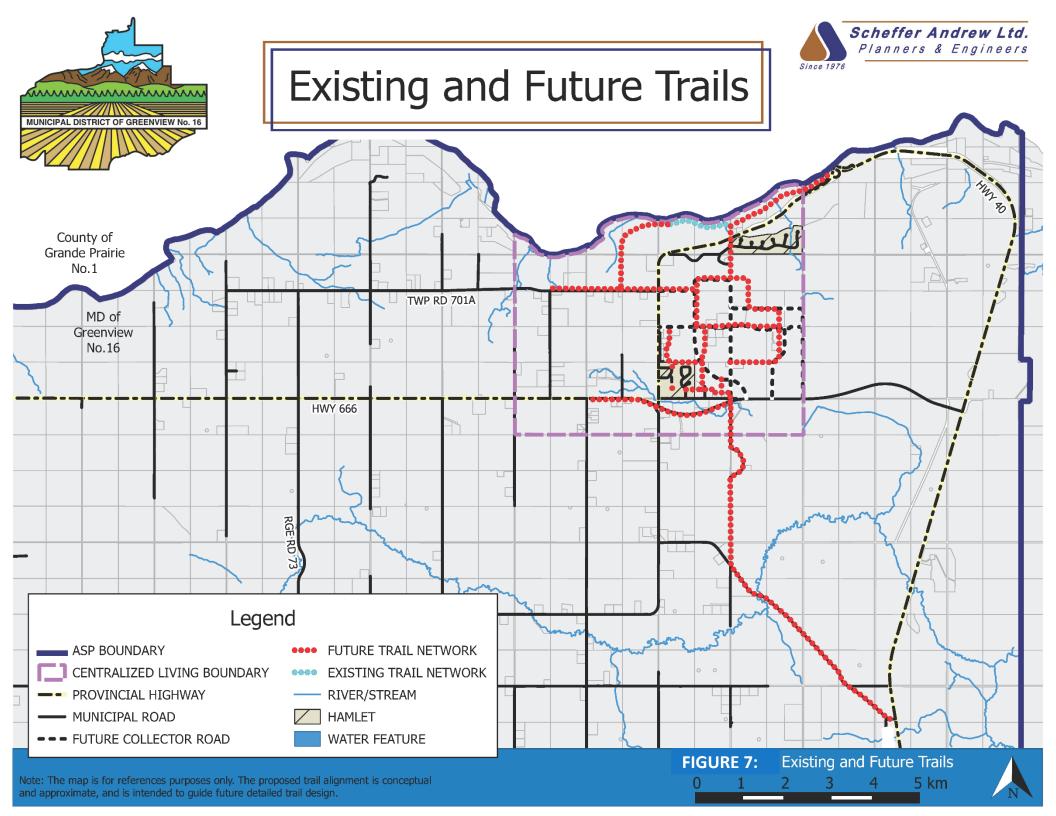
- 6. Where feasible, pocket parks shall be incorporated into the trail network so as to provide opportunities for trail users to passively enjoy significant environmental features such as wetlands or the Wapiti River.
- 7. At the discretion of Greenview and in accordance with Provincial legislation, trails may be incorporated within land designated as an environmental reserve.
- 8. The primary trail network shall be designed to primarily serve the Centralized Living Area, while also extending to other key recreational features in the plan area such as the Grovedale Fish Pond.

5.2.2 Secondary Network

Intent

The secondary trail network will act as the local trail network specific to each planned development, providing opportunities for residents to recreate and easily connect with one another at a local level while being able to access the primary network in order to reach various parts of the community safely and efficiently.

- 1. Secondary trail networks shall be incorporated into planned developments in order to meet the objectives of a fused grid design.
- 2. Secondary trail networks shall be integrated with Distributed Parks so as to improve access to Distributed Parks and encourage greater connectivity throughout the community.
- 3. In an effort to improve connectivity, trails may be incorporated into stormwater management infrastructure such as Public Utility Lots (PUL's) utilized for drainage purposes.
- 4. Trails should be designed using Low Impact Development techniques so as to minimize surface drainage and assist in managing stormwater. Examples of Low Impact Development techniques are permeable pavement, bioswales along the trail corridor or selective placement of rain gardens.



6 Getting Around

A functional and multi-modal transportation network that is safe and promotes a healthy and active lifestyle is an important component of any community. It forms the backbone of any community and allows its members to get where they need to either on foot, by bike or in a vehicle. It not only acts as a means to get you where you need to go; it helps define a sense of community and place. Given the nature of the plan area, we have three distinct transportation networks that serve various functions.

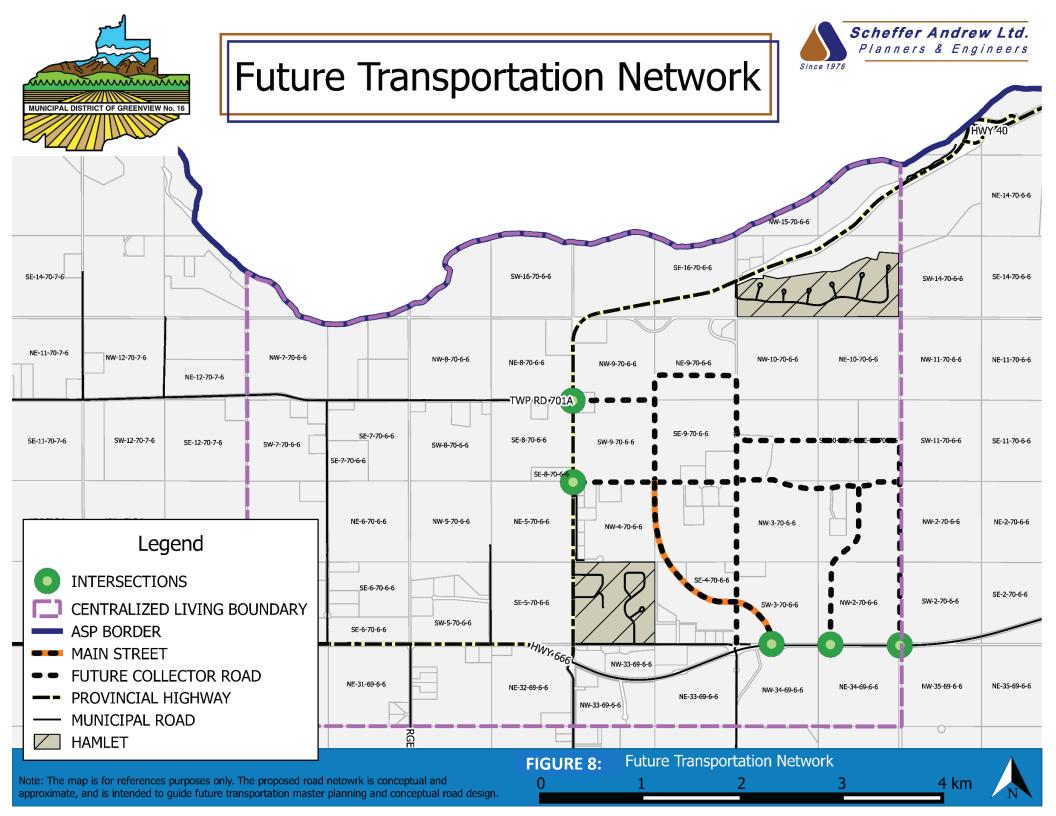
6.1 Rural

Intent

The rural transportation network has lower traffic volumes as it primarily serves agricultural lands and rural residences. Its primary focus is on the provision of access to farmland and getting the travelling public onto the provincial highway network while providing opportunities for rural residents living a rural lifestyle to safely utilize the road network as pedestrians and equestrians.

- Limit the number of accesses onto the rural road network in order to minimize potential conflicts between vehicles travelling on the road and those accessing the road.
- 2. Rural subdivisions shall contribute to the upgrades and intersection improvements to the rural road network through a levy, yet to be established by Greenview.
- 3. Use of the rural road network by heavy truck traffic is discouraged in order to minimize the conflict between commercial and non-commercial vehicle traffic.
- 4. Separate pedestrian and equestrian traffic from vehicular traffic by encouraging and permitting the development of bridle paths along the outer edge of a rural road right-of-way for the use of pedestrians and equestrians.





6.2 Estate Residential

Intent

The Estate Residential area will have a suburban transportation network that blends rural and urban characteristics; which will regulate vehicular traffic, provide a sense of privacy and local "community" while at the same creating a permeable environment with a high level of connectivity for pedestrians, motorists and other non-motorists alike.

- 1. Encourage developments to be designed using a curvilinear road network.
- 2. Discourage the use of conventional loops and cul-de-sacs in favour of crescent streets, eyebrow streets, loop lanes and planting islands in order to encourage greater connectivity.
- 3. Improve connectivity by limiting dead-ends and three-way intersections wherever possible.
- 4. Promote the use of smaller block lengths where feasible in order to improve connectivity.
- 5. Promote a high degree of pedestrian connectivity and permeability of the neighbourhood through the development of sidewalks and trails and the use of such techniques as paper streets, mid-block lanes or passageways.
- 6. Ensure local roads have, at a minimum, a sidewalk on one side of the street, with improved landscaping on the opposite side.
- 7. Ensure collector and arterial roads have sidewalks on both sides of the street.
- 8. Incorporate bike lanes on collector and arterial roads.
- 9. Trails, sidewalks and roadways shall be designed in such a way as to develop a single integrated network, allowing users to seamlessly utilize the system as a whole.

6.3 Village Centre

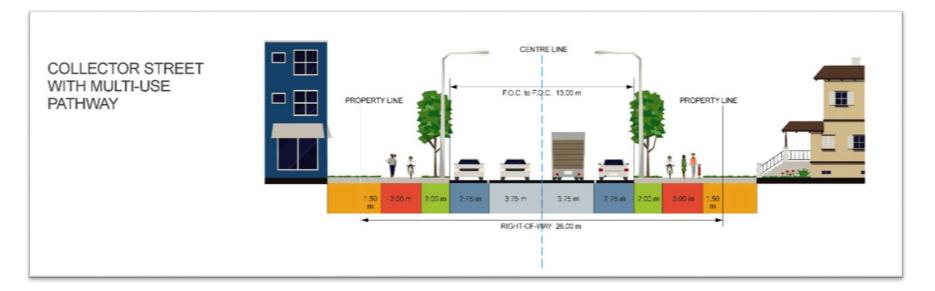
Intent

The Village Centre will have an urban transportation network that has a high degree of connectivity and permeability, prioritizing the pedestrian over the vehicle, in an effort to create safe and tranquil neighbourhoods, opportunities for increased social interaction and vibrant community spaces while at the same time allowing for ease of access and movement of vehicles.

- 1. The road network shall be developed using the Fused Grid model consisting of a quadrant that local roads do not traverse, with collectors and arterials being located along the periphery of the quadrant.
- 2. A quadrant shall be on average, 16 hectares (40 acres) in size.
- 3. Local roads shall not traverse the entire length or width of a quadrant in order to discourage "thru traffic".
- 4. Develop green spaces that are easily accessible and interconnected with one another so as to encourage walking and cycling within the community.
- 5. Promote a high degree of pedestrian connectivity and permeability within the neighbourhood through the development of sidewalks and trails and the use of such techniques as paper streets, mid-block lanes or passageways.
- 6. Ensure that local roads have sidewalks on both sides of the street and that these sidewalks form part of, and are connected to, the trail network.
- 7. Ensure that collector and arterial roads have sidewalks on both sides of the street.
- 8. Through the use of a Fused Grid system, the pedestrian is prioritized within the quadrant, with vehicular traffic (not local in nature) being pushed to the periphery of the quadrant along a series of collector and arterial roadways. *Figure 8: Future Transportation Network* conceptually outlines a series of major collector roadways.
- 9. Design streetscapes so that they are a welcome and safe space for the pedestrian and cyclist alike.
- 10. Incorporate bike lanes along collector and arterial roads and Main Street.

- 11. Develop a Main Street that is welcoming to the community and consists of a sufficiently wide right-of-way in order to facilitate landscaping, street furniture and features such as sidewalk cafes.
- 12. A Complete Streets approach should be taken to the development of all roadways within the Village Centre with a specific focus on the development of a pedestrian-friendly and vibrant Main Street.
- 13. Trails, sidewalks and roadways shall be designed in such a way as to develop a single integrated network allowing for users to seamlessly utilize the system as a whole.

Collector Street Complete Streets Cross-Section Sample



7 Services & Infrastructure

The degree of water, wastewater and stormwater servicing will range throughout the plan area from locations, which are entirely privately serviced to those with full municipal servicing. The level of servicing will be directly related to the form of development and the ability to deliver services in a cost-effective and efficient manner. Servicing levels will vary between rural uses and urban uses with each of the areas below being serviced in a manner unique to themselves.

7.1 Water Servicing

Intent

The level of servicing for water will range throughout the plan area with the level of service being directly related to land use, in order to develop an efficient, safe, and cost-effective water servicing network. The level of servicing will range from a private water supply for rural developments to full municipal services in urban areas.

- 1. Rural residential subdivisions and agricultural properties shall be privately serviced using an on-site private water service such as a water well or a cistern.
- 2. Lands designated as Small Scale Agriculture or River Valley Residential shall be privately serviced. Greenview shall require the submission of a certified groundwater feasibility assessment prepared by a qualified professional for proposed multi-lot developments within the lands designated as Small Scale Agriculture or River Valley Residential.
- 3. A detailed water servicing plan shall be prepared by Greenview for the central portion of the plan area as conceptually identified in *Figure 9: Existing and Future Servicing Network* of this plan.
- 4. Development within the Estate Residential designation shall be ultimately serviced to a full municipal and urban standard. However, at the discretion of Greenview, a trickle system may be permitted in the interim until such time as full municipal services can be extended.
- 5. Lands designated as Village Centre, Commercial or Industrial Business shall be serviced with a water supply to a full urban standard, including satisfactory fire flows to support high-density urban development. At the discretion of Greenview, Industrial Business and Service Commercial lands may be serviced using alternative means on an interim basis until such time as an urban water supply become available.

- 6. Lands designated as Light Industrial, and located directly south of Highway 666, shall ultimately be serviced using a trickle water system; however, at the discretion of Greenview, these lands may be privately serviced until such time as water servicing becomes available.
- 7. Greenview shall require developers to submit a detailed water servicing report, prepared by qualified professionals in support of a Minor Area Structure Plan associated with a proposed development. This report must identify the proposed servicing concept, capacity requirements of the proposed development and any impacts the development may have on existing systems in close proximity to the proposed development.

7.2 Wastewater Servicing

Intent

Wastewater servicing is to be provided in an efficient and cost-effective manner that is environmentally sensitive and effectively utilizes existing infrastructure within the plan area. The level of service will range from a private onsite wastewater treatment system for rural developments to full municipal wastewater collection and treatment systems in urban areas.

- 1. Rural residential subdivisions and agricultural properties shall be privately serviced using an on-site private wastewater system; open discharge systems are discouraged.
- 2. Lands designated as Small Scale Agriculture or River Valley Residential shall be privately serviced; a communal wastewater treatment system may be considered at the discretion of Greenview.
- 3. A detailed wastewater servicing plan shall be prepared by Greenview for the central portion of the plan area as identified in *Figure 9: Existing and Future Servicing Network* of this plan.
- 4. Development within the Estate Residential designation shall be ultimately serviced to a full municipal and urban standard; however, at the discretion of Greenview, a low-pressure collection system may be permitted.
- Lands designated as Village Centre, Commercial or Industrial Business shall be serviced with a wastewater system designed to a
 full urban standard. However, at the discretion of Greenview, Industrial Business and Service Commercial lands may be serviced
 via alternative means on an interim basis until such time as urban wastewater infrastructure becomes available.

- 6. Lands designated as Light Industrial, and located directly south of Highway 666, shall ultimately be privately serviced using an on-site private wastewater system.
- 7. Greenview shall require developers to submit a detailed wastewater servicing report prepared by qualified professionals in support of a Concept Plan or Minor Area Structure Plan associated with a proposed development. This report must identify the proposed servicing concept, capacity requirements of the proposed development and any impacts the development may have on existing systems in close proximity to the proposed development.

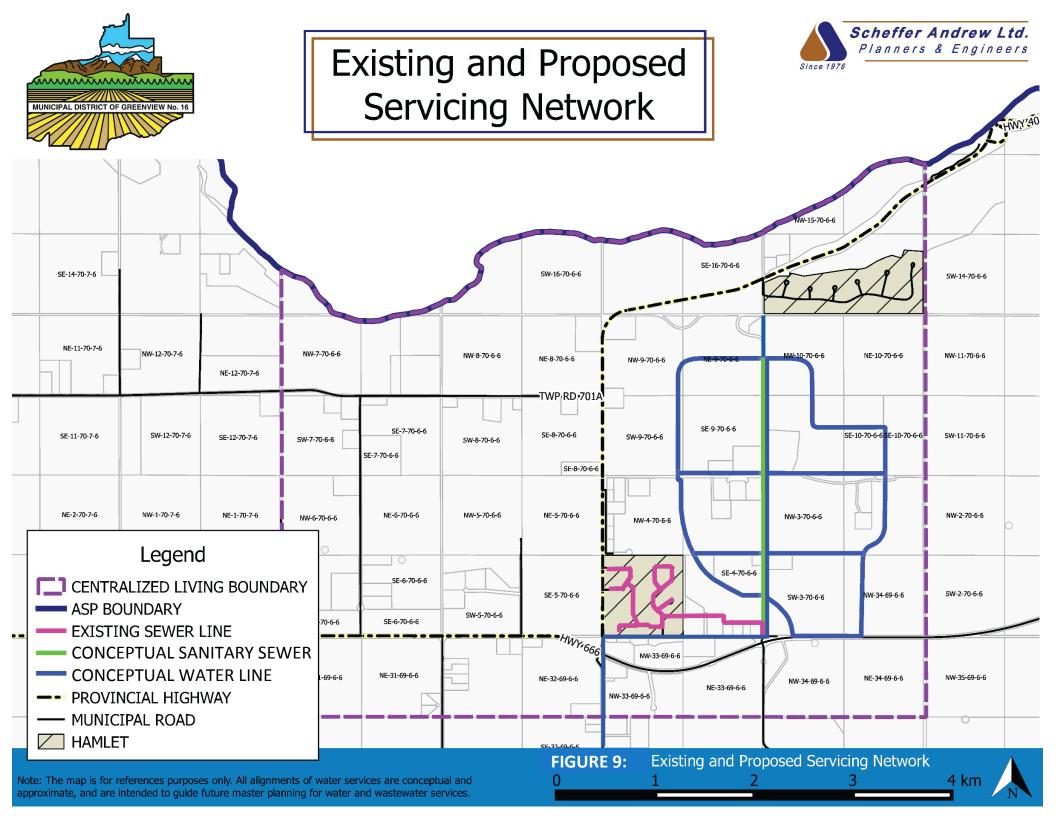
7.3 Stormwater Management

Intent

The stormwater management system will be developed in holistic and comprehensive fashion using Low Impact Development techniques wherever possible, in order to develop a stormwater management system that effectively and efficiently manages stormwater while at the same time preserving environmental features such as creeks, streams and wetlands.

- 1. Greenview shall coordinate the preparation of a Master Stormwater Management Plan for the Centralized Living Area.
- 2. Stormwater management infrastructure, such as stormwater management ponds, are an important and prominent feature within a neighbourhood and shall be integrated into the overall open space and park network.
- 3. Low impact development techniques should be incorporated into all developments in order to assist in regulating stormwater runoff and improving its quality.
- 4. Stormwater management facilities shall be integrated with natural wetlands in the plan area so as to ensure the long-term viability of the wetlands.
- 5. Stormwater management facilities should be developed utilizing low impact development techniques.
- 6. Stormwater management facilities, such as stormwater management ponds, should be developed as constructed wetlands, excluding those stormwater management ponds that act as a source of fire suppression water.

- 7. At the discretion of Greenview, stormwater management ponds may be used as a source of fire suppression water for lands designated as River Valley Residential, Small Scale Agriculture, Estate Residential, Service Commercial, Business Industrial or Light Industrial.
- 8. Greenview shall require developers to submit a detailed stormwater management report prepared by qualified professionals in support of a Minor Area Structure Plan associated with a proposed development. This report must identify the proposed servicing concept, capacity requirements of the proposed development and any impacts the development may have on existing systems in close proximity to the proposed development.



8 Implementation

In order to effectively implement this plan, it will be necessary to complete further planning and engineering related works such as Minor Area Structure Plan or Master Infrastructure Servicing Reports prior to accommodating further development within the plan area and more specifically the Centralized Living Area. Further clarity is provided below.

8.1 Implications for Other Plans & Bylaws

In order to facilitate development within the Centralized Living Area, it may be necessary to amend the Land Use Bylaw by creating new land use districts that can accommodate the proposed forms of development. The new land use districts will be created by the Greenview.

Rezoning shall only be considered for areas with an approved Minor Area Structure Plan or Concept Plan.

8.2 Further Studies & Works

Prior to the preparation of any further detailed planning by development proponents, it will be necessary for Greenview to complete more detailed planning and engineering work for the Growth Area. More specifically it will be necessary to:

- Prepare a Master Transportation Plan;
- Prepare Master Water and Wastewater Servicing Plans;
- Prepare a Master Stormwater Management Plan;
- Prepare a commercial/market needs assessment in order to assess the quantity, composition and form of future commercial development required to service the plan area as a whole;
- Investigate the feasibility of utilizing recycled water or grey water to recharge aquifers or as a source of irrigation or process water in lieu of potable water for multi-family residential developments, recreational facilities, parks & open spaces, commercial developments and industrial developments;
- Prepare a master plan identifying areas of natural and environmental significance;
- Reclaim the former sewage lagoon;

- Prepare detailed urban design guidelines reflective of a "small town" or "village" theme for all forms of development within the Centralized Living Area, in order to ensure, at a minimum, consistency in landscaping and building facades to a standard acceptable to Greenview;
- Prepare an Open Space Master Plan and a Trails Master Plan;
- Prepare a Concept Plan for the Main Street and confirm its alignment;
- Establish a levy bylaw in order to fund municipal infrastructure improvement;
- Prepare a waste management plan for the plan area and investigate the feasibility and associated timing of implementing curbside waste collection for the area designated as Centralized Living consisting of the separate collection of garbage, recycling and organics;
- Investigate the implementation of a local and regional public transit system to serve the Centralized Living area as future development proceeds;
- Investigate the feasibility of providing public vehicle charging stations as development proceeds within the Centralized Living area; and
- Investigate the feasibility of developing a District Energy Sharing System for the Centralized Living Area in order to supply heating and cooling to future residents and business.

8.3 Minor Area Structure Plans and Concept Plans

8.3.1 Minor Area Structure Plans

The preparation of Minor Area Structure Plans will be required prior to allowing the subdivision and development of lands contained within the Centralized Living Area. The Minor Area Structure Plans will be prepared and funded by the developer of future development and will provide a more detailed framework for development within the Centralized Living Area. Minor Area Structure Plans shall, at a minimum, provide detailed planning for the entirety of a quarter section and will need to address the following in greater detail:

- Environmental matters
- Water/Wastewater and Stormwater servicing

- Configuration of future developments
- Allocation of park space/open space
- Traffic generation and impacts
- Geotechnical concerns
- Market conditions
- Building and Landscaping Design Guidelines
- The interface with adjacent lands

In order to address the items referenced above, a variety of supporting studies are required, such as:

- Biophysical and Wetland Assessments
- Water, Wastewater and Stormwater Servicing Reports
- Geotechnical Reports
- Traffic Impact Assessments
- Commercial/Market Needs Assessments

8.3.2 Concept Plans

Concept Plans may be used, at the discretion of Greenview, in lieu of a Minor Area Structure Plan within the Centralized Living Area for areas designated as Business Industrial and Hamlet, as well as the Service Commercial area located adjacent to Township Road 700. The Concept Plan shall apply to the entirety of the designated area and shall, at the discretion of Greenview address the following:

- Environmental matters
- Water/Wastewater and Stormwater servicing

- Configuration of future developments
- Allocation of park space/open space
- Traffic generation and impacts
- Geotechnical concerns
- Market conditions
- Building and Landscaping Design Guidelines
- The interface with adjacent lands