

**THE TOWN OF GRANDE CACHE
BY-LAW NO. 688**

BEING A BY-LAW OF THE TOWN OF GRANDE CACHE IN THE PROVINCE OF ALBERTA, PURSUANT TO SECTION 692, PART 17 OF THE ALBERTA MUNICIPAL GOVERNMENT ACT, BEING CHAPTER M-26.1 OF THE REVISED STATUTES OF ALBERTA, RSA 2000, AND AMENDMENTS THERETO, TO ADOPT THE TOWER PARK AREA STRUCTURE PLAN

WHEREAS the Council of the Town of Grande Cache considers it necessary to adopt, in accordance with Sections 633 and 636 of the Alberta Municipal Government Act, the Tower Park Area Structure Plan to specify policy and regulatory direction for the lands on the east and south east edge the Town's Settlement boundary.

WHEREAS the Council of the Town of Grande Cache deems it advisable to adopt the Tower Park Area Structure Plan to refine and further specify the general policy direction applicable to this area in the Town of Grande Cache Municipal Development Plan, being By-Law No. 595, and amendments thereto.

AND WHEREAS the Council of the Town of Grande Cache deems it advisable to adopt the Tower Park Area Structure Plan so that it clearly and effectively serves as a basis for required amendments to the Town of Grande Cache Land Use By-Law, being By-Law No. 641, and amendments thereto.

NOW THEREFORE Under the authority of the Alberta Municipal Government Act, the Council of the Town of Grande Cache, in the Province of Alberta, duly assembled, enacts as follows:

That By-Law No. 688, being the Tower Park Area Structure Plan, be adopted.

Should any provision of this By-Law be determined to be invalid, then such provisions shall be severed and the remaining By-Law shall be maintained.

That this By-Law shall come into full force and effect upon the final passing thereof.

Read a first time this twenty-fourth day of June, 2009 A.D.

AND ADVERTISED the seventh day of July, 2009 AND the fourteenth day of July, 2009 in the GRANDE CACHE MOUNTAINEER

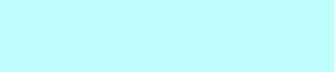
PUBLIC HEARING held the twenty-ninth day of July, 2009.

Read a second time this twelfth day of August, 2009 A.D.

Read a third and final time this twelfth day of August, 2009 A.D.



Louise Krewusik Darren
Mayor Councillor



Ottaway
Town Administrator

Town of Grande Cache
Tower Park Estates Area Structure Plan



Prepared by:

AECOM Canada Ltd.

17007 – 107th Avenue, Edmonton, AB, Canada T5S 1G3
T 780.486.7000 F 780.486.7070 www.aecom.com

Project Number:

5120-019-00-01-4.6.1

Date:

June 2009

*Regular mtg - June 24/09
Public Hearing - July 29/09*

Table of Contents

	page
1. Introduction	1
1.1 Purpose	1
1.2 Location and Area	1
1.3 Timeframe	5
1.4 Interpretation	5
1.5 Background	5
2. Policy and Regulatory Context	6
2.1 Municipal Government Act	6
2.2 Municipal Development Plan	6
2.2.1 Goals and Strategies	6
2.2.2 Land Use Designations	7
2.2.3 General Development Policies	7
2.2.4 Residential Development Policies	8
2.2.5 Industrial Commercial Development Policies	8
2.2.6 Parks, Recreational Land Use and Urban Design Policies	8
2.2.7 Transportation Policies	8
2.2.8 Servicing and Utilities Policies	9
2.3 Area Structure Plans	9
2.4 Land Use Bylaw	10
3. Planning Influences	12
3.1 Winter City Design	12
3.2 New Urbanism and Smart Growth	12
3.3 Form-Based Zoning	13
3.4 20/20 Vision of the Future: Town of Grande Cache Strategic Sustainability Plan	15
4. Site and Site Context	16
4.1 Location and Access	16
4.2 Surrounding Land Use	16
4.3 Environmental Context	17
4.4 Topography and Drainage	17
4.5 Geotechnical Conditions	17
4.6 Environmental Site Assessment	20
5. Development Concept	21
5.1 Vision	21
5.2 Development Concept – General Description	21

5.3	Urban Village	25
5.3.1	General	25
5.3.2	Residential Development	27
5.3.3	Public Spaces: Recreational, Civic and Parks	28
5.3.4	Commercial Land Use – Urban Village	32
5.3.4	Walkway Connections	32
5.4	Business Park	33
5.4.1	General	33
5.4.2	Transition – Commercial	33
5.4.3	Transition – Business/Residential Mixed Use	33
5.4.4	Commercial/Light Industrial	33
5.4.5	Open Space	33
5.4.6	Access and Circulation	35
5.4.7	Future Access to Crown Lands	35
5.4.8	Special Planning Area	35
6.	Transportation	37
6.1	Regional Context	37
6.2	Provincial Highway	37
6.3	Access and Circulation	37
6.4	Pedestrian Connectivity	38
6.5	Traffic Impact Assessment	38
7.	Servicing	39
7.1	Water Supply and Distribution	39
7.2	Wastewater Collection System	39
7.3	Stormwater Management	42
7.4	Shallow Utilities	42
8.	Implementation	44
8.1	Land Use Bylaw	44
8.2	Subdivision and Development	44
8.3	Development Staging	45
8.4	Force and Effect	45
	References	49

List of Figures

Figure 1 – Location Plan.....	2
Figure 2 – ASP Boundary	3
Figure 3 – Land Ownership	4
Figure 4 – Current Land Use Districts	11
Figure 5 – Site Topography	18
Figure 6 – Geotechnical Evaluation – Borehole Locations.....	19
Figure 7 – Development Concept.....	22
Figure 8 – Urban Village Development Concept	23
Figure 9 – Business Park Development Concept	34
Figure 10 – Water Servicing	40
Figure 11 – Wastewater Servicing.....	41
Figure 12 – Stormwater Management	43
Figure 13 – Development Staging	46

List of Tables

Table 1 - Land Use Statistics.....	36
------------------------------------	----

1. Introduction

1.1 Purpose

The purpose of the Tower Park Area Structure Plan (ASP) is to provide guidelines and policies for a land use, transportation and servicing pattern for the subject lands (the ASP area). In so doing, the ASP supports the Town of Grande Cache Municipal Development Plan (MDP) in providing a further level of definition for desirable land use and development patterns for a specific area of the Town.

The ASP also provides a firm development concept to enable Alberta Transportation to evaluate subsequent development proposals within the ASP area and surrounding lands.

Finally, the Tower Park Estates ASP is intended to inform the citizens of the Town and other stakeholders about future development within the community that will enhance its appearance, quality of life and sustainability.

1.2 Location and Area

The ASP area is located in the eastern portion of the Town, to the north and northeast of Highway 40 (**Figure 1**). It occupies a southeast facing site to the southeast of existing industrial development. The site constitutes an easterly extension of the built-up area of the Town of Grande Cache.

Much of the ASP area lies within 800 metres of Provincial Highway No. 40. Although no direct access to the highway is proposed, traffic generated from the ASP area will utilize the three existing access points between the Town and Highway 40.

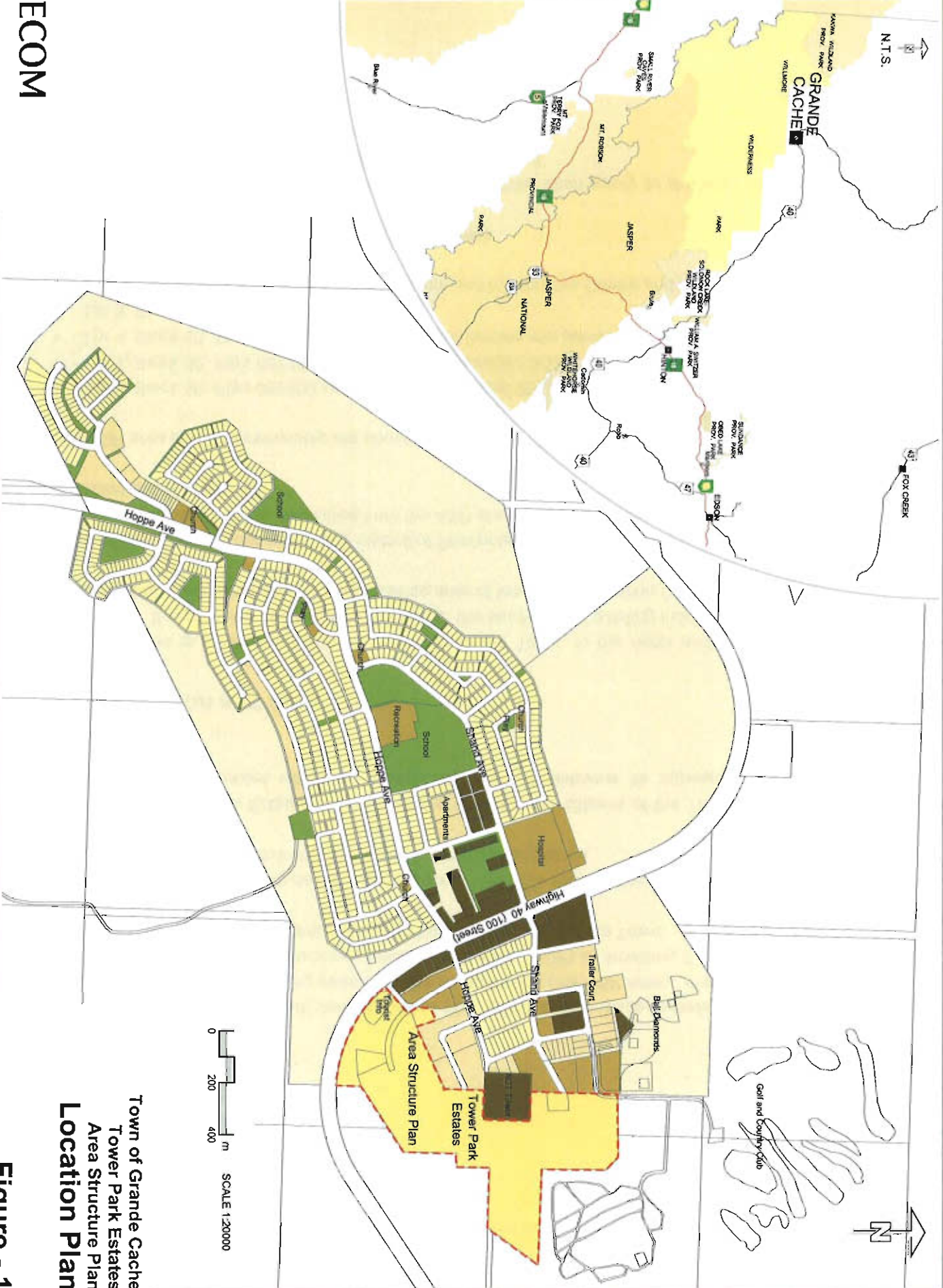
The ASP area and land ownership are shown on **Figure 3**. The ASP area comprises the following:

- Lot 3, Block 50, Plan 082600 approved on November 29, 2007;
- Lot 1, Block 52, Plan 0828373 approved in September, 2008;
- Lot 1, Block 30, Plan 062 5887 – the helicopter landing site owned by the provincial government;
- Lot 3, Block 38, Plan 972 0898; and
- Lot A, Plan 6285 NY – the site of the Tourism and Interpretive Centre and Birds Eye View Park.

The ASP area comprises 40.45 hectares (100.0 acres).

Policy 1.1 *The Tower Park Estates Area Structure Plan shall apply to the area contained within and defined by the boundaries shown on Figure 2.*

THIS DOCUMENT IS PROTECTED BY COPYRIGHT LAW AND MAY NOT BE USED, REPRODUCED OR MODIFIED IN ANY MANNER OR FOR ANY PURPOSE EXCEPT WITH THE WRITTEN PERMISSION OF UMA ENGINEERING LTD. OR A PARTY TO WHICH ITS COPYRIGHT HAS BEEN ASSIGNED. UMA ACCEPTS NO RESPONSIBILITY, AND DENIES ANY LIABILITY WHATSOEVER, TO ANY PARTY THAT USES, REPRODUCES, MODIFIES, OR RELIES ON THIS DOCUMENT WITHOUT UMA'S EXPRESS WRITTEN CONSENT.

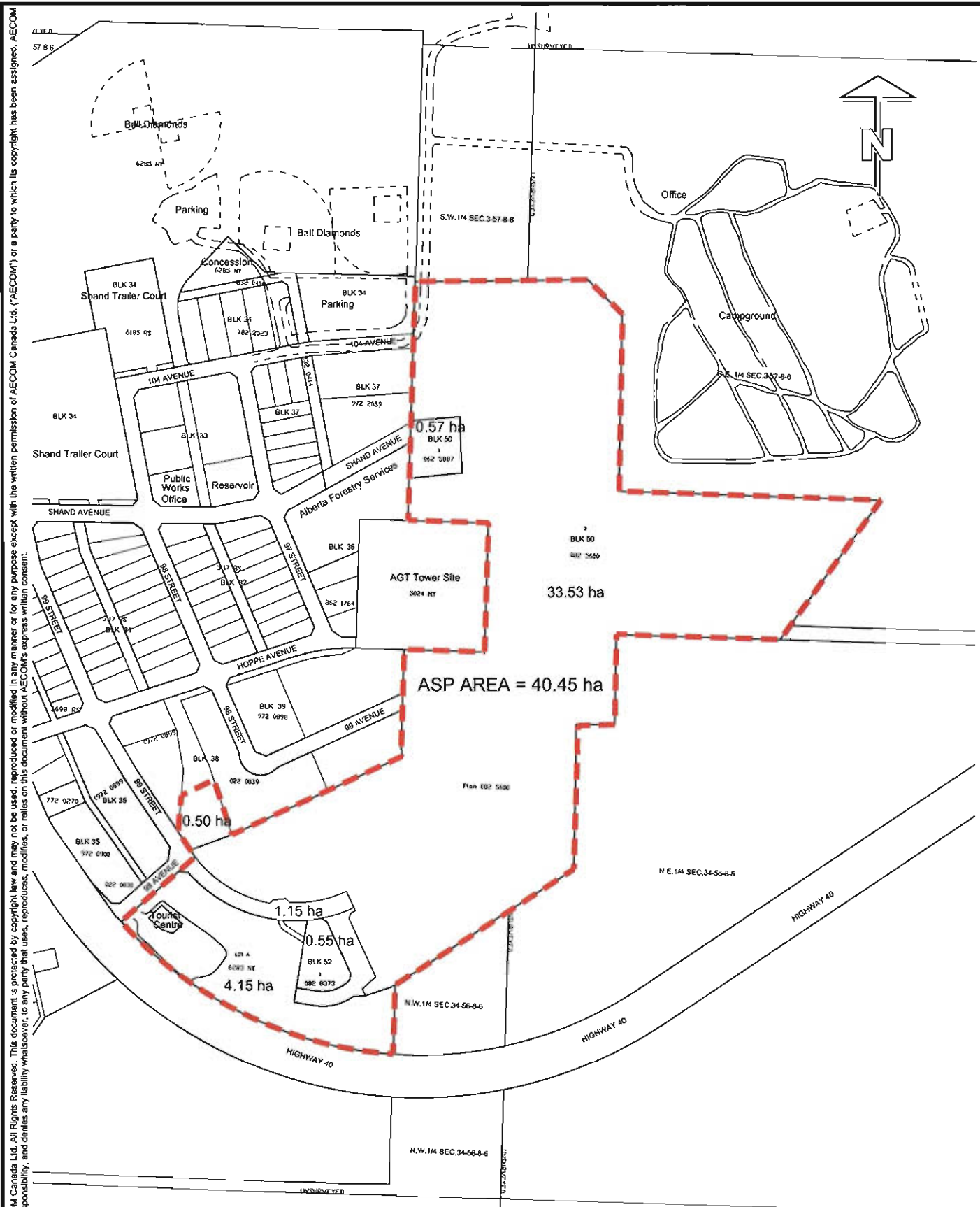


Town of Grande Cache
Tower Park Estates
Area Structure Plan
Location Plan

Figure - 1

AECOM

ISS/REV: A
 AECOM FILE NAME: 5120-019-00_01-CP4002_RX.dwg Saved By: brulottem PLOT: 09/06/17 10:19:03 AM
 A SIZE 8.5" x 11" (215.9mm x 279.4mm)



LEGEND
 - - - - - Area Structure Plan Boundary

Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
ASP Boundary

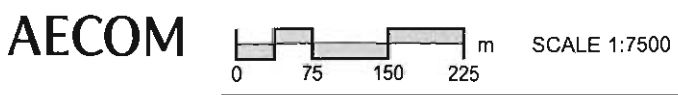
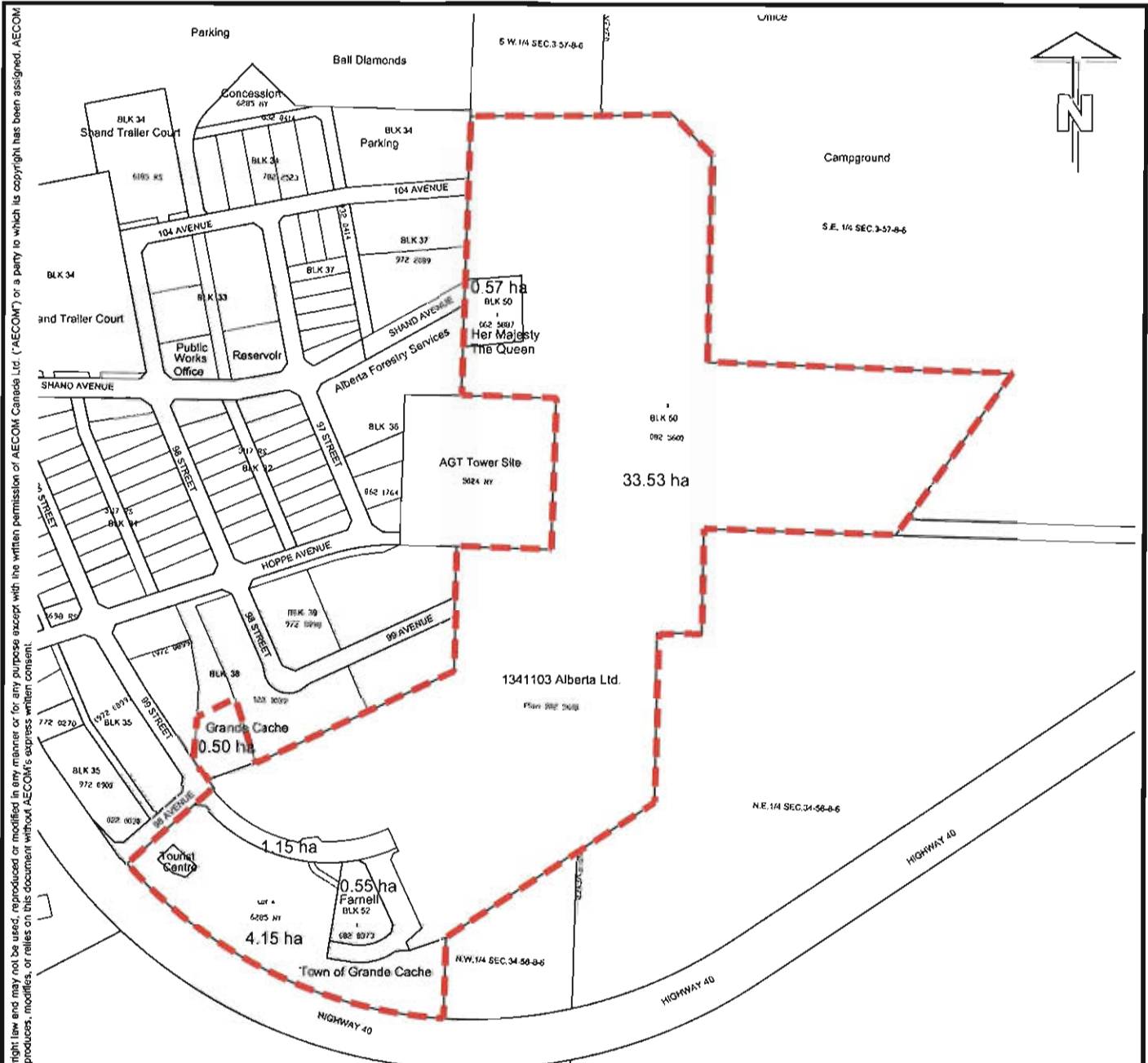


Figure - 2

ISS/REV: A
 AECOM FILE NAME: 5120-019-00_01-CP4003_RX.dwg Saved By: brulottem PLOT: 09/06/17 10:19:18 AM
 A SIZE 8.5" x 11" (215.9mm x 279.4mm)



Legal	Title No.	Owner	Area on Title	Area in ASP
Lot 3, Blk 50, Pln 082 5600	082 442 470 +1	1341103 Alberta Ltd.	33.88 ha	33.53 ha
Lot 1, Blk 50, Pln 062 5887	072 042 450	Her Majesty The Queen In Right of Alberta	0.573 ha	0.57 ha
Lot 1, Blk 52, Pln 082 8373	082 451 958	Farnell Properties & Development Ltd.	0.73 ha	0.55 ha
Lot3, Blk 38, Pln 972 0898	972 086 143 +4	Town of Grande Cache	0.94 ha	0.50 ha
Lot A, Pln 6285 NY	082 255 211 +2	Town of Grande Cache	138.02 ha	4.15 ha
Road Right of Way	N/A	Public	N/A	1.55 ha
Total				40.45 ha

LEGEND
 - - - - - Area Structure Plan Boundary

**Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
 Land Ownership**

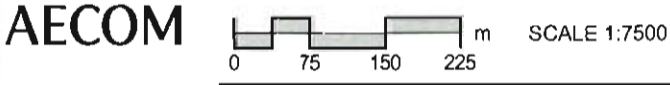


Figure - 3

1.3 Timeframe

The build-out of Tower Park Estates will be determined by market demand and be related to future economic conditions.

1.4 Interpretation

All symbols, locations and boundaries shown in the Area Structure Plan shall be interpreted as conceptual unless otherwise specified in the document or where they coincide with clearly recognizable physical or fixed features within the plan area.

A policy statement(s) containing 'shall' is mandatory and must be implemented. Where a policy provides direction that is impractical or impossible, an application may be made to amend the plan. A policy statement(s) containing 'should' is an advisory statement and indicates the preferred objective, policy and/or implementation strategy. If the 'should' statement is not followed because it is impractical or impossible, the intent of the policy may be met through other means to be agreed upon.

1.5 Background

The ASP area was originally Crown land in right of the Province of Alberta. It was transferred to the Town of Grande Cache to meet the continuing demand for industrial and related land uses. Rather than act as developer as it had done previously, the Town chose to seek private interests to develop the land. In preparation for this transfer, the Town commissioned preliminary grading and servicing drawings as the basis for development.

The successful purchaser and developer has modified the original development concept and provided additional planning and design work accordingly. The southerly portion of the ASP area is proposed as a mixed use urban village incorporating Smart Growth urban design principles. It will integrate residential, commercial, institutional and open space uses to create 'Tower Park Urban Village'. The northerly portion of the ASP area will continue as a more conventional industrial/commercial business park.

An Area Structure Plan is required for several reasons. First, the terms of the transfer of the land to private interest require the preparation of an ASP. Second, Alberta Transportation requires an approved Area Structure Plan and Traffic Impact Assessment prior to any further subdivision. Third, the Town's Municipal Development Plan requires the preparation of Area Structure Plans or conceptual schemes for the development of new areas or expansion of existing areas (Policy 15.1). Finally, the preparation of an Area Structure Plan represents comprehensive master planning and thus fulfills sound planning principles.

2. Policy and Regulatory Context

The preparation of the Tower Park ASP has been guided by and is intended to be consistent with applicable provincial and municipal land use legislation and policy.

2.1 Municipal Government Act

The Municipal Government Act (MGA) is the provincially enacted regulatory framework that directs municipalities how to enact land use policy. It enables the preparation of Municipal Development Plans (Section 632), Area Structure Plans (Section 633) and Land Use Bylaws (Section 640).

The Subdivision and Development Regulation (AR43/2002) is pertinent to this Area Structure Plan, as it states that "a subdivision authority shall not in a municipality other than a city approve an application for subdivision if the land that is the subject of the application is within 0.8 kilometres of the centre line of a highway right of way unless ...the land is contained within an area structure plan satisfactory to the Minister of Infrastructure and Transportation and the proposed use of the land is permitted under that plan" (Section 14).

2.2 Municipal Development Plan

Municipal Development Plans (MDPs) are created by municipalities to guide the long-range direction of land use within their boundaries. The Town of Grande Cache Municipal Development Plan, Bylaw 595, was adopted in 2000. It contains a number of goals, strategies and policies that affect this Area Structure Plan.

2.2.1 Goals and Strategies

The Town's current MDP identifies several goals and strategies that have been considered throughout the development of this ASP.

Economic Development Goals (Section 7.2) include the following:

- a) To create conditions that are conducive to the diversification of Grande Cache's economy [...] for which Grande Cache has an obvious economic or locational advantage.*
- b) To emphasize four season tourism and commercial recreation as a key component of Grande Cache's economy, [...] and to facilitate its continued growth and development.*
- c) To build upon Grande Cache's excellent and ever-improving transportation advantages, especially in terms of its strategic location for tourism.*
- d) To maintain and enhance the function and integrity of the Town Centre, Highway No. 40 corridor and commercial/industrial block.*

A clearly stated **population stability/growth** goal (Section 7.4) is:

To ensure a stable population base of at least 5,000 people in order to make full use of existing facilities and services.

Community resources and standards goals include the following:

- a) ***To plan and operate the Town so as to provide a social and physical environment that is conducive to growth and that unifies the community.***
- b) ***To maintain and improve upon when necessary within budgetary limits, the current high level of community parks, recreation facilities and service provision.***
- c) ***To encourage improvements to the existing level of cultural, educational and health facilities and programs available in Grande Cache.***
- d) ***To recognize the desirability of a unifying design theme and pursue the implementation of the same with the community generally and the business community in particular.***

The MDP land use designations and policies that particularly support or relate to the Tower Park Estates Area Structure Plan are presented in the following sections.

2.2.2 Land Use Designations

The Municipal Development Plan also provides generalized direction for the future use of the subject site. Map 2 of the Municipal Development Plan indicates that the site is generally 'Developable'. Map 3, the 'Generalized (Predominant) Future Land Use Concept' designates the lower portion of the subject lands for 'Highway/Tourism Commercial' use and the northern portion for 'Industrial' uses. To ensure that Section 638 of the MGA is satisfied, it may be prudent to amend Map 3 of the MDP redesignating the corresponding area to "Tower Park Urban Village".

2.2.3 General Development Policies

MDP Policy 10.4 ***"The Town, in conjunction with local/provincial/federal agencies, will engage in a concerted and coordinated effort to attract businesses that would benefit from Grande Cache's proximity to outstanding commercial tourism/recreational opportunities."***

MDP Policy 10.5 ***"[T]he Town shall ensure that a good supply of highway/tourism commercial lots of various sizes are always available for development east of Highway 40 at any given time."***

MDP Policy 10.6 ***"The Town [will] promote not only the Town's tourist and commercial/recreation attractions but those in the surrounding area as well."***

2.2.4 Residential Development Policies

MDP Policy 12.3 *“The Town will engage in a concerted and coordinated effort to attract new residents whose choice is to reside in Grande Cache would not be dependent on finding employment in the area, typically retirees.”*

MDP Policy 12.7 *“When it is appropriate to open up new residential areas, the Town shall allow residential development in small phases so as to minimize the potential problems of only a few dwellings being constructed on a single block.”*

MDP Policy 12.9 *“All new residential areas will set aside at least 15% of the net developable land for multi-household dwellings. This may be allocated to a wide variety of medium to high density housing options. These multi-household family sites will be dispersed to reduce any negative effects of large-scale grouping”.*

2.2.5 Industrial Commercial Development Policies

MDP Policy 10.2 *“[T]he Town shall ensure that a good supply of light industrial/service commercial lots of various sizes are always available for development east of Highway 40 at any given time.”*

2.2.6 Parks, Recreational Land Use and Urban Design Policies

MDP Policy 10.8 *“[T]he Town will establish design/landscape guidelines for [highway/commercial lands] to maintain an attractive visual appeal and a unifying design theme. To this end, the Town will continue to prohibit billboards, as is stipulated in the Land Use Bylaw.”*

MDP Policy 11.2 *“The Town shall ensure that Highway 40 users are well informed of the availability and specific location of major Town-provided recreation facilities.”*

2.2.7 Transportation Policies

MDP Policy 13.1 *“The Town will strive to achieve continuity of arterial and collector roads and ensure that the provision of transportation facilities is coordinated with the development of new areas.”*

MDP Policy 13.2 *“The Town will apply a general road hierarchy in which design of roadways is consistent with their function.”*

MDP Policy 13.3 *“The Town will maintain specific performance standards for road design and construction, but will encourage innovation where alternative designs will serve an equivalent function consistent with the provisions of this Plan.”*

MDP Policy 13.4 *“The Town will work with developers and other agencies to develop a continuous pedestrian and bicycle circulation system which links residential areas, schools, commercial facilities, parks and leisure facilities.”*

2.2.8 Servicing and Utilities Policies

MDP Policy 13.6 *"The Town shall ensure that appropriate utility infrastructure is in place to serve development. The Town shall periodically reassess this infrastructure in relation to anticipated demands."*

MDP Policy 13.7 *"The Town will not initiate the extension of municipal services to any developable area currently unserved until in-filling of existing serviced areas for the same types of land uses occurs to suitable levels."*

MDP Policy 13.8 *"Any development on slopes greater than 15% may require analysis of slope stability through geotechnical study and measures may need to be taken to mitigate slope instability if required."*

2.3 Area Structure Plans

The MGA outlines the requirements for an Area Structure Plan (ASP). Specifically, the MGA states that ASPs must describe:

- a) the sequence of development proposed for the area,
- b) the land uses proposed for the area,
- c) the density of population proposed for the area,
- d) the general location of major transportation routes and public utilities, and
- e) other matters the council considers necessary.

These requirements are reiterated in Policy 15.1 of the MDP that outlines the requirements for ASPs as follows:

"Area structure plans or conceptual schemes shall be prepared for the development of new areas or where existing areas are being significantly altered or expanded, they shall be consistent with this Plan and shall address the following:

- a) proposed land uses,
- b) sequence of development,
- c) location of roads and public utilities,
- d) location and extent of reserve lots,
- e) major physical or manmade constraints to development, and
- f) any other matters that the Town considers necessary for a particular area."

2.4 Land Use Bylaw

The subject lands are currently zoned C-2 (Commercial Highway-Oriented) and CM (Commercial Service and Light Industrial Mixed) (**Figure 4**). The purpose of the C-2 (Commercial Highway-Oriented) district is to “provide for a range of commercial uses to serve the travelling and local public using Highway 40” (page 11-28).

The purpose of the CM (Commercial Service and Light Industrial Mixed) district is to “to provide for a wide variety of service oriented commercial outlets [...] at lower densities [and to] establish an area of light industrial uses” (page 11-31).

Although the C-2 (Commercial Highway-Oriented) district allows for a Mixed Use Development as a discretionary use, a Direct Control district is necessary for the Urban Village area of the ASP area in order to create an area of special character with a higher level of design. The Direct Control district provisions shall address but not be limited to the following elements:

- Form and character of buildings;
- Landscaping;
- Public amenity space; and
- Access and circulation.

The CM (Commercial Highway-Oriented) district may be sufficient for the proposed Business Industrial Area. Discretionary uses included within the CM (Commercial Highway-Oriented) district which pose a level of environmental risk to adjacent residential lands will not be permitted. These uses include the following:

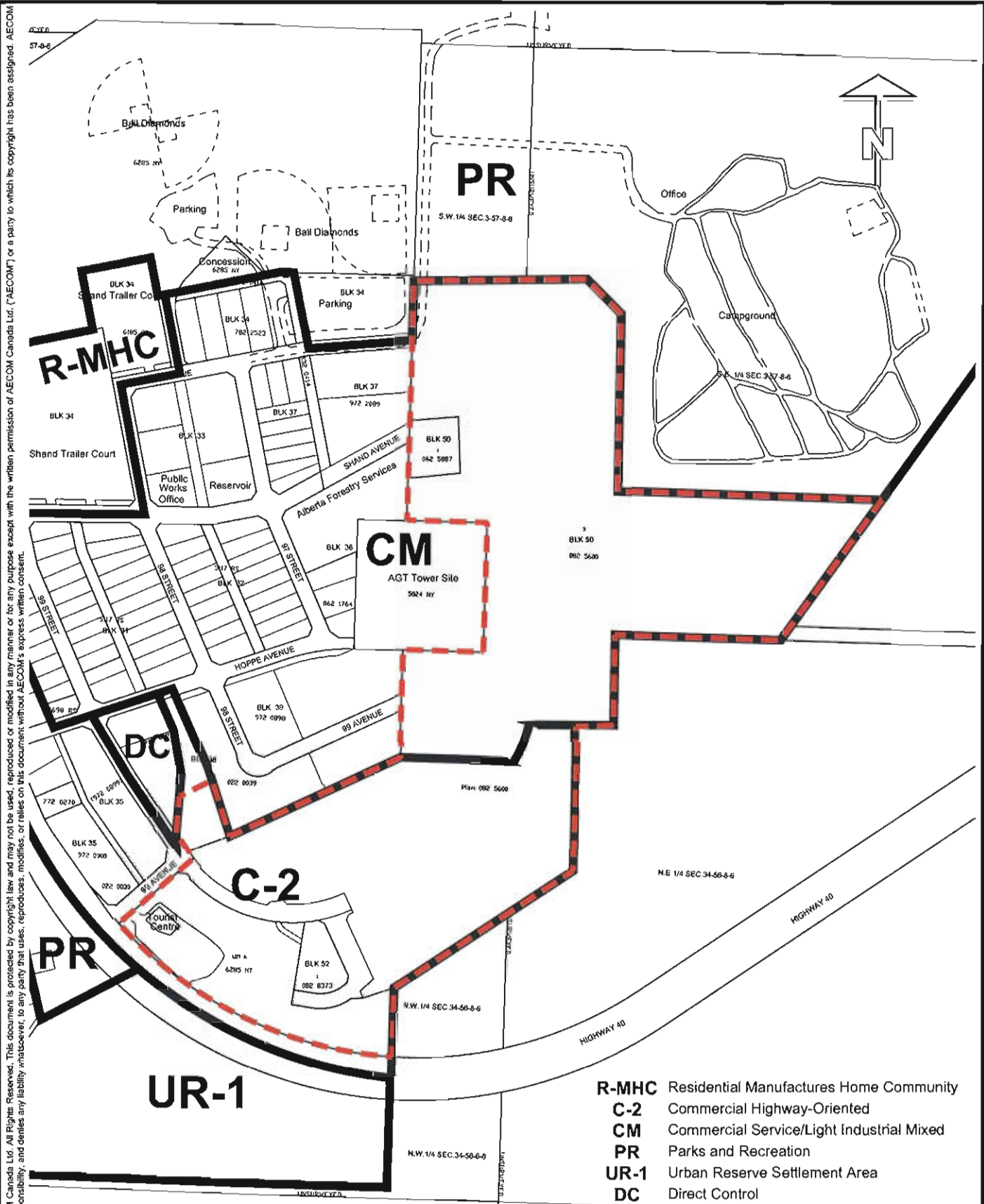
- Bulk fuel and chemical storage
- Oilfield support
- Waste management.

One or more Direct Control Districts or site-specific district may be required to ensure a higher standard of development, to limit noxious uses, to manage the provision of residents and for other purposes.

Additional sections of interest within the Land Use Bylaw that may apply to the ASP area include the following:

- a) Section 8.5 Design, Character and Appearance of Buildings and Structures,
- b) Section 8.10 Hazard Lands (building set-back of 20.12 m from top-of-bank of any watercourse or escarpment bank or slope exceeding 15 percent grade),
- c) Section 8.16 Noise Sensitive Land Uses which may address the potential for mitigation between mixed-use/residential and commercial/industrial land uses.

ISS/REV: A
 AECOM FILE NAME: 5120-019-00_01-CP4004_RX.dwg
 Saved By: brulottem
 PLOT: 09/06/17 10:20:19 AM
 A SIZE 8.5" x 11" (215.9mm x 279.4mm)



- R-MHC** Residential Manufactures Home Community
- C-2** Commercial Highway-Oriented
- CM** Commercial Service/Light Industrial Mixed
- PR** Parks and Recreation
- UR-1** Urban Reserve Settlement Area
- DC** Direct Control

LEGEND
 - - - - - Area Structure Plan Boundary

Town of Grande Cache
 Tower Park Estates
 Area Structure Plan

Existing Land Use Districts

AECOM



Figure - 4

3. Planning Influences

3.1 Winter City Design

Winter City Design principles are premised on the understanding that many communities must strive to maximize quality of life during cold, winter months. Winter is not viewed as a hindrance but rather a positive attribute that creates variety in experience for residents. Winter City Design seeks to minimize the negative implications of a cold climate (cold weather, limited daylight, slippery surfaces, snow removal) and embellish the positive (beauty, variety in experience, opportunity for new activities). Many Canadian and Scandinavian countries have been adopting Winter City Design principles to create urban spaces that are conducive to year-round activity.

Examples of measures that can be taken to implement Winter City Design in a community include the following:

- **Improving walkability** – using non-slip surfaces, providing handrails, raising pedestrian crossings to allow for snow/ice accumulation, space between sidewalks and roadways to mitigate spray from vehicles, providing awnings to protect pedestrian walks.
- **Appropriate use of vegetation** – provision of street trees, use of salt-resistant plants near roadways, planting deciduous trees on the south side of streets to shade in summer and permit sun in winter, planting coniferous trees to provide year-round colour and protection in winter.
- **Minimizing wind and cold** – sheltered transit stops and entranceways, building design to prevent wind tunnels, provide pedestrian walks on 'sunny side' of the street.
- **Other design considerations** – seasonal lighting, use of warm colours, continuous building facades, consider room for snow storage.

3.2 New Urbanism and Smart Growth

In 1993, the Congress of New Urbanism developed a set of planning and design principles which led to a popularization of this approach across North America. New Urbanism seeks to reduce the scale of urban spaces to recreate the intimacy and sense of place that was once valued as part of the design of urban spaces. This often involves prioritizing pedestrian and public spaces and minimizing the importance of vehicular activities. Mixing residential with other complementary uses (retail, offices, parks) is understood to create 24 hour activity in a place, thereby increasing opportunity for social interaction and enhancing community safety.

Principles of New Urbanism include the following:

- Walkability
- Connectivity
- Mixed Use
- Quality architecture
- Neighbourhood structure
- Density
- Alternative transportation.

3.3 Form-Based Zoning

Zoning (land use) bylaws are the predominant means of regulating land use in Canada. These bylaws ascribe to the traditional notion of districting land based on use (also known as 'Euclidian zoning'). Euclidian zoning originally emerged in an effort to separate noxious uses from areas of human habitation but has translated into the (albeit unintended) separation of uses based on income, class and even race through districting land use based on housing type.

Form-based zoning is an approach to regulating the manner in which development occurs which focuses less on the uses of the land and, instead, emphasizes organizing building placement and exteriors as well as the nature of streets and public spaces. A form-based code can be defined as "a regulatory approach designed to shape the physical form of development while setting only broad parameters for use" (Garvin and Jourdan, 2008, p. 396).

Form-based codes comprise two components:

- a) **Regulating plan** - an aerial map of what type of building goes where
- b) **Building standards** - a set of building cross-sections and plan diagrams indicating:
 - a. Minimum and maximum height
 - b. Setbacks
 - c. Location of entrances
 - d. Parking
 - e. Yards/courtyards
 - f. General uses
 - g. Street cross-sections
 - h. Landscape standards
 - i. Architectural standards (optional).

Form-based codes are argued to support a more socially integrative community, wherein housing types and tenure forms are mixed together.

SmartCode is a template for form-based zoning developed by Duany Plater-Zyberk & Company. SmartCode involves the delineation of transects throughout a community or region. A transect is defined as “the systematic gradation of a community from its most urban to its most rural sector” (Langdon, 2006, p. 29). Transects consist of six zones, as outlined below (Duany and Talen, 2002, p. 247):

- a) Rural Preserve
- b) Rural Reserve
- c) Sub-Urban
- d) General Urban
- e) Urban Center
- f) Urban Core.

Transects seek to create a sequence of human habitats composed of varying degrees of urban intensity (Duany and Talen, 2002, p. 250). Each transect zone should have a particular set of standards attached to them, as appropriate to local conditions.

An alternative to adopting form-based zoning for an entire municipality is to adopt an overlay wherein developers can use form-based rather than conventional ordinances.

Principles by which diversity can develop (Talen, no date, pp. 30-31):

- a) Housing mix
- b) Neighbourhood facilities and services
- c) Centers and edges
- d) Connectivity.

Design guidelines have traditionally been an attempt to toe the line between prescription and discretion (Sitkowski and Ohm, 2006, p. 170). Hiring a town architect a means by which to define ‘good design’ rather than appointed review boards (Ibid, p. 171).

The Tower Park Area Structure Plan will be a site specific plan showing blocks, specifying building forms and establishing density guidelines. Should the Town of Grande Cache choose to adopt a form-based code, this plan can become a special district within it. Should zoning remain Euclidian, the ASP area, or at least the Urban Village portion, may be regulated by a Direct Control district.

3.4 20/20 Vision of the Future: Town of Grande Cache Strategic Sustainability Plan

Many of the concepts and themes of sustainable community development, smart growth and winter city design are at the heart of the Town's sustainability plan, the **20/20 Vision of the Future: Town of Grande Cache Strategic Sustainability Plan**. This vision forms the basis for the community's planning and has informed the preparation of this Area Structure Plan. Therefore key excerpts from that vision and strategic plan are stated here to show the community values and directions that inform planning for the Town of Grande Cache.

The vision statement for the Town states that

Grande Cache will be a vibrant and progressive mountain community that achieves excellence by embracing cultural diversity, safe and healthy neighbourhoods, leading edge environmental stewardship, and a sustainable diversified economy.

The vision statement is built on a set of community values that guide community decisions, help set priorities and provide direction for actions to achieve goals. These values are stated as follows:

- Strong, healthy, diverse, vibrant neighbourhoods where social interaction, culture, recreation, social and health services and life-long learning are accessible;
- A sustainable, diversified and stable economy;
- Well planned and managed community
- Strong tourism economic placing a high value on environmental stewardship;
- Environmental stewardship resulting in leading edge environmental practices;
- A safe community for diverse residents and guests;
- A culture of customer service to residents and guests;
- Healthy living, recreational and cultural activities taking place within a unique mountain environment; and
- Citizen engagement and volunteerism.

The application of the vision statement and community values will lead to community design for liveability, the incorporation of progressive green technologies into new development, a balance between trail development and roadway development, affordable housing, and pedestrian orientation in neighbourhoods all within the context of public safety and security. The Town aspires to providing outstanding indoor and outdoor recreational opportunities and facilities. All of these factors are intended to provide a superior quality of life for residents and visitors alike.

4. Site and Site Context

4.1 Location and Access

The ASP area is located east and south of the most easterly built-up area within the Town of Grande Cache. It occupies about 40 ha (100 acres) of land extending in an arc from the existing Tourism and Interpretive Centre north and east of the industrial area. A portion of the site occupies the ridge on which most of Grande Cache has been built, while the southern portion extends onto a south facing slope below the ridge.

There are three existing and one potential roadway access points to the ASP area.

Access to the southern portion of the ASP area is from the intersection of 99th Street and 98th Avenue. Ninety-eighth Avenue provides direct access to Provincial Highway 40. It is the third roadway access to Highway 40 within the Town of Grande Cache. The first phase of 99th Street has been extended into the ASP area as Main Street to provide access to initial development.

Ninety-ninth Avenue provides a second access from the industrial area to the west near the centre of the ASP area.

The third access is from 104th Avenue near the north end of the ASP area.

An additional access point could be created by the physical extension of Shand Avenue from the west. This would complement the 104th Avenue access point and provide a more direct link to the Highway 40/Shand Avenue major intersection.

4.2 Surrounding Land Use

The Tower Park Estates ASP area is located north-east of Highway 40. The subject lands are bound to the southeast by undeveloped, unpatented Crown land currently under forest cover. A small portion of these lands are designated for Industrial and Community and Commercial Recreation in the Town's Municipal Development Plan. Hence they may represent a future development opportunity if such lands could be acquired from the Crown.

To the south, the ASP area is bound by Highway 40. Across Highway 40 to the southwest is the future site of 'Townsite 2', an area designated for future urban development.

To the north and west the ASP area is bound by existing industrial development within the Floyd McLennan Industrial Park. Immediately to the west and along the northeast frontage of Highway 40 is a highway commercial area comprising hotels, motels, restaurants and service stations. The Town Centre of Grande Cache is located about 400 metres to the northwest.

To the north the ASP lands are bound by Crown lands that have been developed for the municipal campground and the municipal golf course.

The Development Concept for the ASP area includes provisions for potential access to lands to the north, east and south, including the municipal campground.

4.3 Environmental Context

Grande Cache is located within the montane ecosystem at an elevation of approximately 4,200 feet. Typical forest cover comprises aspen poplar, white spruce and lodgepole pine. Much of the site has been cleared in anticipation of development. The site is located on a south-facing slope creating a sheltered, attractive site taking maximum advantage of solar orientation for human use and enjoyment.

4.4 Topography and Drainage

The ASP area extends along the top of the ridge on which Grande Cache is located and along the southeast and south facing slope of the ridge (**Figure 5**). The highest point in the ASP area is above 1,295 metres above sea level (asl) in the northern portion, while the lowest point is 1,230 metres asl at the extreme southern end. The vertical difference is therefore about 65 metres.

The southern portion of the ASP area is the area of greater slopes. Here the elevations range from 1,230 m asl to 1,270 m asl, a vertical difference of 40 metres. Overall, the gradient averages between 10% and 15%. Locally, gradients can be as low as 5% while there are also small areas where local slopes exceed 25%. Careful site planning will address the challenges of a sloping site through grading and terracing, as has been done throughout Grande Cache. At the same time, the south facing aspect, views across the valley, positive drainage and overall rolling topography define very positive attributes for site development. Street and building alignments can be adapted to the 'grain' of the land in a creative and satisfying manner.

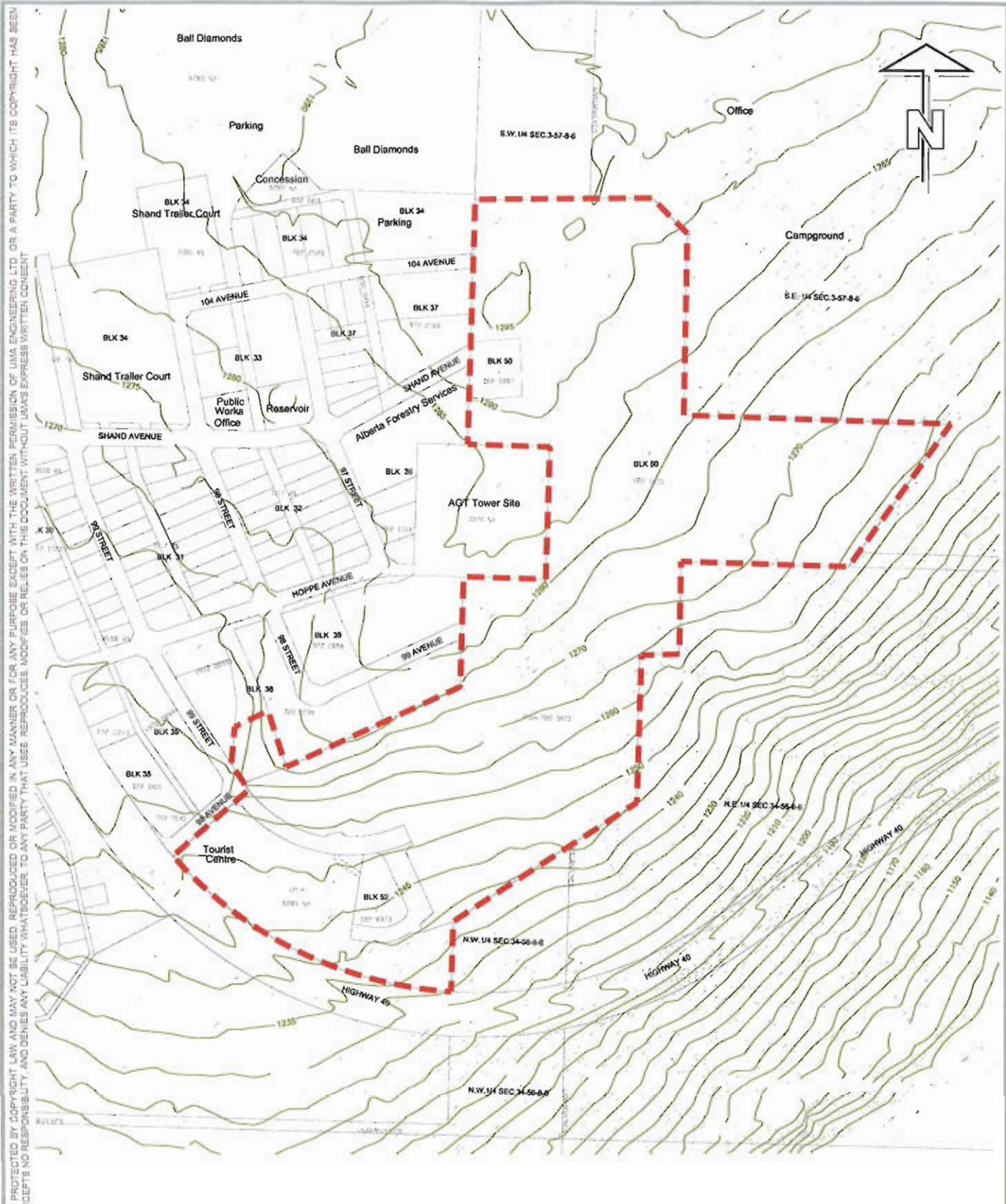
There are no apparent water courses draining the site. Downslope drainage would ultimately end up in Victor Lake, located in the valley to the south.

4.5 Geotechnical Conditions

Parkland GEO conducted a geotechnical investigation of the ASP area in December of 2006. The investigation involved drilling nine (9) boreholes throughout the property to provide recommendations for site preparation, foundation design/construction and pavement structures (**Figure 6**).

The geotechnical investigation found subsurface conditions of sand and gravel overlying clay till, in places, and over bedrock in other places. The sand and gravel ranges in depths from 0.5 m to 3.0m below existing grade and contains some cobbles. The bedrock is either a highly weathered sandstone or a hard clay shale.

ISS/REV: A
 UMA FILE NAME: 5120-019-00_01-CP4005_RX.dwg Saved By: bnulottem PLOT: 09/06/17 10:20:33 AM A SIZE 8.5" x 11" (215.9mm x 279.4mm)



- LEGEND**
- - - Area Structure Plan Boundary
 - 5.0 m Contour

**Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
 Site & Topography**

AECOM

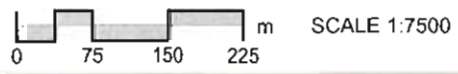
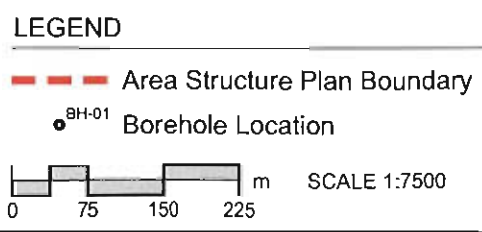
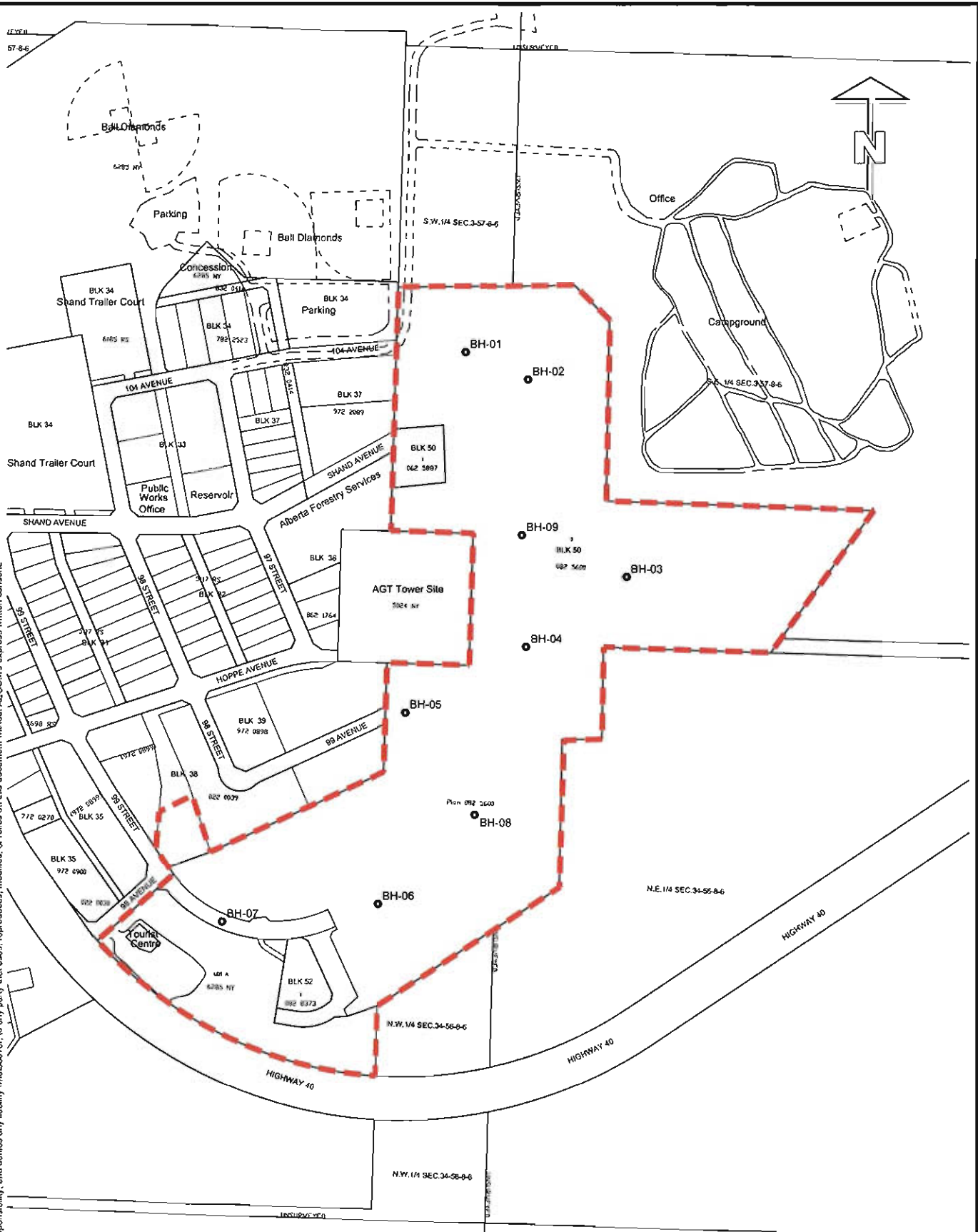


Figure - 5

ISS/REV: A
 AECOM FILE NAME: 5120-019-00_01-CP4006_RX.dwg Saved By: bruijltom PLOT: 09/06/17 10:20:43 AM
 A SIZE 8.5" x 11" (215.9mm x 279.4mm)
 © 2009 AECOM Canada Ltd. All Rights Reserved. This document is protected by copyright law and may not be used, reproduced or modified in any manner or for any purpose except with the written permission of AECOM Canada Ltd. ("AECOM") or a party to which its copyright has been assigned. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses, reproduces, modifies, or relies on this document without AECOM's express written consent.



Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
Borehole Locations



Figure - 6

The report determined that the soil conditions within the ASP area are well suited to commercial and light industrial development. Road construction and asphalt parking areas may be placed directly onto a prepared subgrade. Utility trenching needs to consider dense gravel and sandstone at shallow depths. Building foundations will need to use shallow systems such as conventional footings; however, some areas will permit deep foundation options such as driven steel piles.

Additional geotechnical investigation will be required in conjunction with each development stage to provide recommendations regarding specific foundation and site development considerations.

4.6 Environmental Site Assessment

Parkland GEO prepared a Phase 1 Environmental Site Assessment (ESA) for the ASP lands in August, 2008. The ESA consisted of a review of historical air photos, interviews with individuals knowledgeable about the property, a site inspection and the preparation of a final report. The Phase 1 ESA concluded that the current owners do not pose a significant environmental liability or risk to the property. It was also determined that adjacent lands do not possess any high-risk environmental concerns that would influence the subject lands. The Energy and Utilities Board and Petroleum Tank Management Association of Alberta confirmed that there are no well sites or active or abandoned storage tanks on the property. Four underground storage tanks were identified in proximity to the subject area but are considered to be of low to moderate environmental concern. Lastly, municipal and provincial agencies had no environmental concerns to report.

The Phase 1 ESA concludes that the subject lands do not have any significant environmental concerns that would necessitate additional investigation. Therefore no further analysis of environmental risk was recommended.

5. Development Concept

5.1 Vision

The Tower Park Estates Area Structure Plan will provide a new focus for culture, shopping, residency, business and destination tourism for the Town of Grande Cache.

The area is located within a mountain environment, capitalizing on its setting to maintain views of the surrounding foothill and mountain environment. It will provide an urban setting close to nature.

It will be characterized by a mix of uses within a village setting providing a new and distinct residential environment close to shops, civic features, recreational facilities and employment opportunities. The village will have a compact, urban character, featuring pedestrian friendly, traffic calmed streets and a network of internal and external walkway linkages. Its focus will be a civic plaza, a gathering place for people of all ages.

Finally, it will provide an opportunity for sustainable features such as water reuse and recycling, stormwater bioswales and retention of natural areas.

5.2 Development Concept – General Description

Tower Park Estates will comprise two distinct, related precincts: an Urban Village and a Business Park. The Development Concept for Tower Park Estates is shown in **Figure 7**, while greater detail for the Urban Village is shown in **Figure 8**. Development statistics for the ASP area are presented in Table 2.

Urban Village

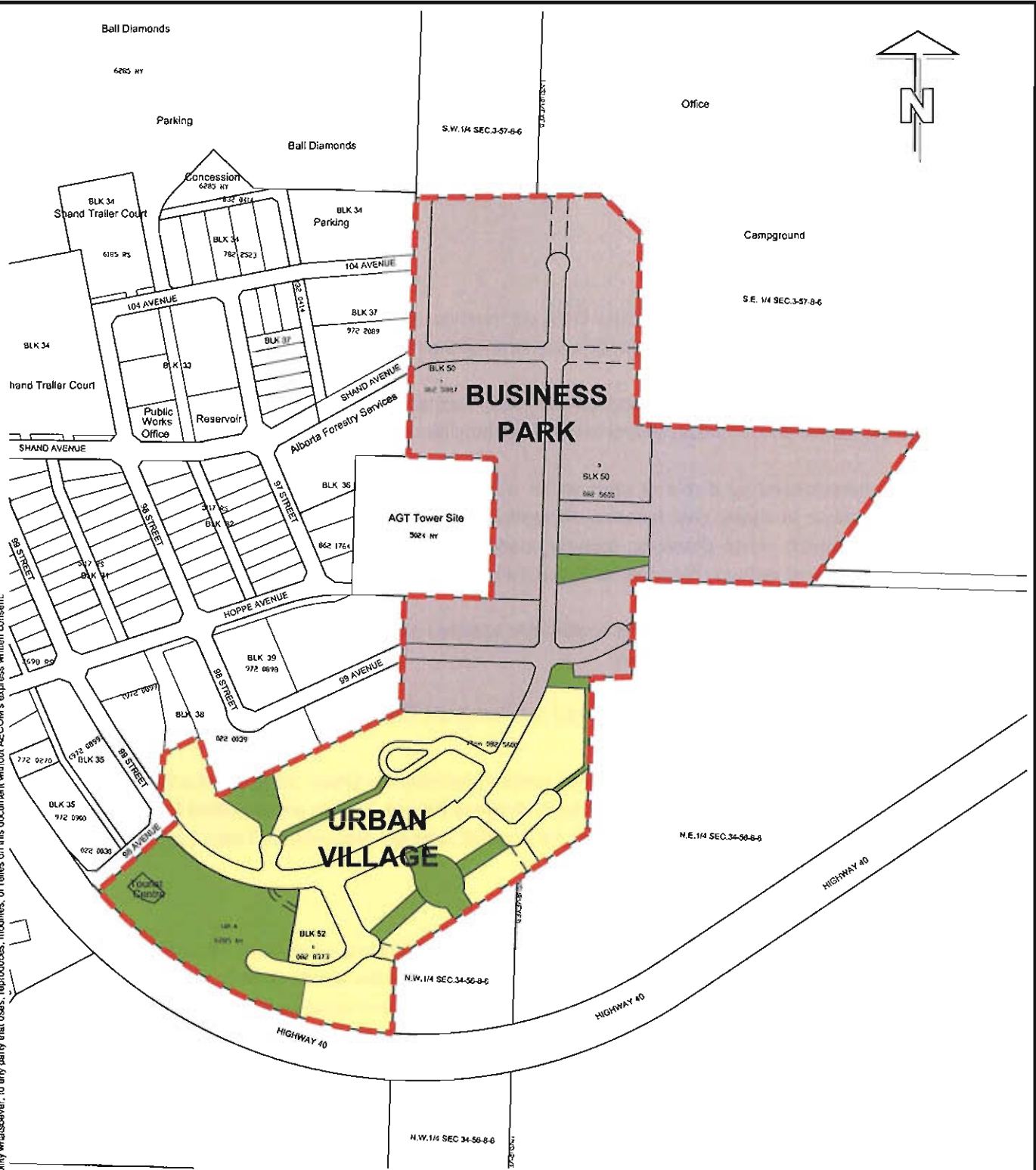
Generally, an Urban Village can be defined as a compact and distinct urban form with clearly defined edges and central focal point. It is intended as a place where most of the needs of daily life can be met within a convenient 400 metre walking distance. An Urban Village is a self-contained, integrated community with a mix of complementary land uses and activities, including residential, commercial, civic and recreational land uses. It is intended to provide a range of housing options which are predominantly of medium density housing forms such as town houses and low and mid-rise apartments. Live/work units are also a common feature of urban villages.

The Tower Park Estates Urban Village will occupy about 17 ha (40 acres) within the southern half of the ASP area. It has a location on a south and southeast facing slope providing dramatic views of the valley below and the mountains beyond. The slopes provide an opportunity to terrace development into the hillside creating interest and a variety of sites.

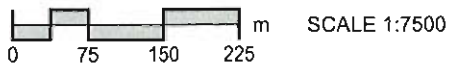
Land Use within the Urban Village will be a mix of residential, commercial and civic uses, with the opportunity of vertical integration of residential and commercial uses within multi-storey buildings.

ISS/REV: A
 AECOM FILE NAME: 5120-019-00_01-CP4007_RX.dwg Saved By: brulotem PLOT: 09/06/23 10:49:49 AM
 A SIZE 8.5" x 11" (215.9mm x 279.4mm)

© 2009 AECOM Canada Ltd. All Rights Reserved. This document is protected by copyright law and may not be used, reproduced or modified in any manner or for any purpose except with the written permission of AECOM Canada Ltd. ("AECOM") or a party to which its copyright has been assigned. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses, reproduces, modifies, or relies on this document without AECOM's express written consent.



- LEGEND**
- Area Structure Plan Boundary
 - Urban Village
 - Business Park
 - Public/Open Space



AECOM






*Development Concept by Urban Systems

Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
Development Concept

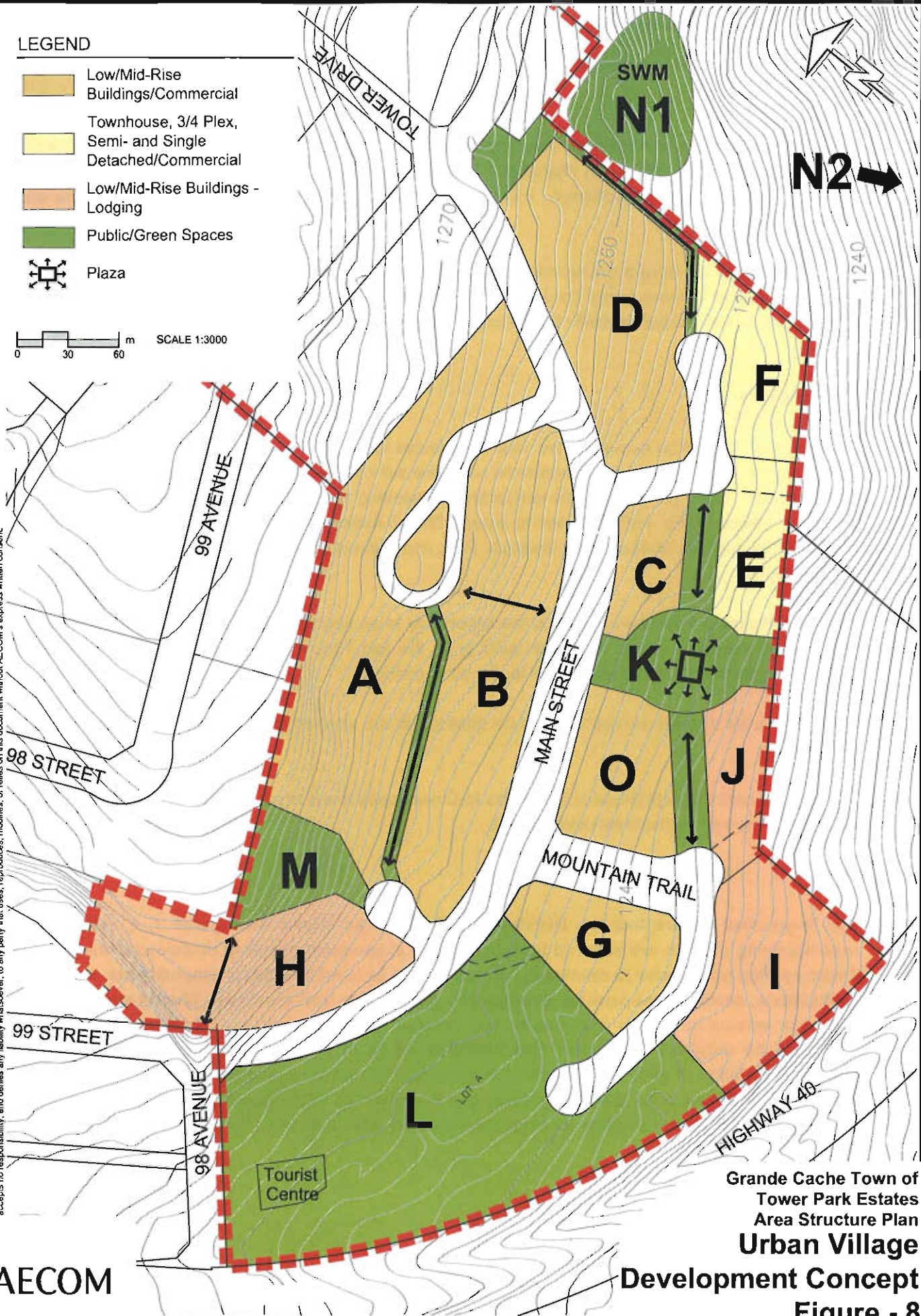
Figure - 7

© 2009 AECOM Canada Ltd. All Rights Reserved. This document is protected by copyright law and may not be used, reproduced or modified in any manner or for any purpose except with the written permission of AECOM Canada Ltd. ("AECOM") or a party to which its copyright has been assigned. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses, reproduces, modifies, or relies on this document without AECOM's express written consent.

LEGEND

-  Low/Mid-Rise Buildings/Commercial
-  Townhouse, 3/4 Plex, Semi- and Single Detached/Commercial
-  Low/Mid-Rise Buildings - Lodging
-  Public/Green Spaces
-  Plaza

0 30 60 m SCALE 1:3000



Main Street will constitute the primary roadway through the Urban Village, with buildings aligned close to the street to create a distinctly urban character. A variety of civic uses focusing on a central plaza will be connected by sidewalks and walkways. External walkway linkages will provide connections with the rest of the community.

The Urban Village will have a distinct sense of place and will be 'branded' accordingly to convey its special character. Special features along Tower Drive will mark the west and east entry into the Urban Village and will discourage heavy industrial traffic from passing through.

Business Park

The Business Park will be located on the ridge and plateau to the north of the Urban Village. It will provide an opportunity for light industrial and commercial uses and will constitute an easterly extension of the existing industrial park. Tower Drive will be the central street extending through the Business Park and linking it with the Urban Village. This ASP proposes to extend Shand Avenue from the west to provide an additional access to the northern portion of the Business Park and a direct connection to Highway 40 and the Town Centre beyond.

Within the Business Park there will be some opportunity in an appropriate area for a business to co-locate with a single residence within the same building on the same lot, thus providing additional security and surveillance, convenience and economies for business owners.

Opportunities for commercial use only will be provided in the southern portion of the Business Park along 99th Avenue.

The Development Concept provides for access to Crown lands to the north, east and southeast if and when these lands become available for development.

Policy 5.1. Development Concept

The Town shall ensure that the Development Concept as shown on Figures 7, 8 and 9 and all accompanying policies are adhered to in making all subsequent planning decisions within the Area Structure Plan boundaries in relation to but not limited to Land Use Bylaw amendments, subdivision applications, development permits, development agreements and servicing. Should such a decision require or amount to a major deviation from or relaxation/variation of this ASP, an amendment to this ASP shall be required. Decisions that would result in or amount to a minor deviation from or relaxation/variation of this ASP may be considered without an amendment to this ASP, in accordance with Policy 8.10, where the owner/developer can demonstrate to the satisfaction of the Town that the deviation, relaxation or variation does not substantively alter the intent, force or effect of this ASP.

5.3 Urban Village

5.3.1 General

As stated in the previous section, the Urban Village will constitute a mixed-use, pedestrian oriented neighbourhood activity centre (**Figure 8**). It will comprise a fine-grained mix of three major land uses within a relatively small area: residential, commercial and civic uses. The mixed use character of the Urban Villages will have two dimensions, horizontal and vertical. Horizontal mixed use will be achieved by locating various uses in proximity to each other. Vertical mixed use will be achieved through building forms that provide for commercial space on the ground floor and residential units above. The emphasis will be on integration of uses in common building forms, rather than a rigid segregation of land uses.

The extension of 99th Street through the Village will constitute a 'Main Street' around which major buildings and features are organized. The Main Street will have ample sidewalks on each side for ease and convenience of pedestrian movement. Buildings will be required to 'build to' the front property line and thus directly address the street. Angle parking will be accommodated within an expanded right of way to increase parking efficiency and to provide traffic calming.

Distinct entry features at the east and west end of Main Street will mark the transition to and from the Urban Village and thus contribute to its distinctive identity. These entry features are also intended to discourage heavy truck traffic from passing through, other than those required to service local businesses.

A central plaza will constitute the heart and focus of the Urban Village and will be located just south of Main Street. The plaza will provide a setting for neighbourhood and community events, social interaction, displays and a variety of formal and informal social activities. Walkway connections will radiate outwards from the central plaza providing connectivity within the village and externally to all areas of the Town. As the Urban Village will extend about 700 metres from east to west and about 300 metres from north to south, all areas will be well within 400 metres of the central plaza, providing a very walkable environment in all seasons.

At full development, a population of up to 1050 may be achieved (Table 1) depending both on final built form and household size. Along with the commercial and civic uses, the Urban Village will be characterized by a sense of vitality and amenity to meet the housing, social and work needs of a significant portion of the residents of Grande Cache.

The Development Concept shows four distinct land use zones, each zone having a distinct range of building forms, land uses and densities. Each zone comprises several sites or blocks as designated by a letter, with appropriate guidelines and policies as outlined in the policies that follow.

The Development Concept also makes provision for future roadway connections to Crown land to the south, in the event that such lands become available for development.

Policy 5.2. Main Street Entry Treatment

Special features will be required along Main Street to mark the entry and exit points along the Main Street through the Urban Village and thus reinforce the sense of place and distinct character. These defining features may include expanded curbs, changes in pavement surface markings, signs, trees or other landscape features. This will serve two purposes: one, to reinforce the special sense of place inherent in the Urban Village, and two, to discourage and divert large trucks from the adjacent business areas from travelling through the mixed use area. The nature of the features will be determined through negotiations between the Town and the developer at the time of subdivision approval for the relevant stage, and enforced through the development agreement.

Policy 5.3. 'Build-to Lines'

'Build-to Lines' shall be established within the Direct Control district that is adopted to regulate development within the Urban Village. 'Build-to' lines are the converse of setbacks. 'Build-to lines' specify that buildings shall be built on or near the front property line to create a satisfactory relationship between the building, sidewalk and street and to avoid front on-site parking.

The 'build-to' lines for buildings fronting Main Street shall specify that buildings are built either to the front property line or a short distance, less than three metres, from the front property line where there is a compelling reason, acceptable to the Town, for not building to the front property line.

'Build-to' lines shall be established for local streets other than Main Street to meet similar urban design objectives of a successful building/sidewalk/street interface.

Policy 5.4 Pedestrian Environment

Sidewalks along Main Street shall be sufficiently wide to encourage easy and convenient pedestrian movement in all seasons, to facilitate social interaction, to allow for the effects of vehicle bumper overhang, to allow ample space for street furniture, signs, light standards and public art, to provide space for merchants' sidewalk displays, to encourage storefront browsing, and generally to enliven and animate this element of the public realm. Generally, a width of four (4) metres will be adequate, increasing or 'bulbing out' at intersections and mid-block crossings.

Design guidelines for the creation of lively and safe sidewalks for both Main Street and local streets shall be created jointly by the developer and the Town with the designs enforced through the development agreement accompanying subdivision approval.

Policy 5.5 Access to Adjacent Lands

The dashed lines in the Development Concept at the southeast corner of Mountain Trail and below the southeasterly cul-de-sac indicate a future alignment for potential roadway extensions to Crown lands to the south. Regardless, a public utility corridor will be required at these two points to convey stormwater to downstream storm ponds.

5.3.2 Residential Development

Policy 5.6 Residential Land Use

Three residential building zones are established for the Urban Village, as follows:

1. **Low/mid rise Building Zone**

Residential buildings may be a maximum of five storeys in height and a minimum of two storeys. Parking may be internal (underground or at grade) or external at grade. This land use zone may also include town house units and live/work units in which the residential units are on a second and/or third storey above a main floor commercial unit. However, town house units shall comprise no more than twenty five per cent (25%) of units within this zone.

Commercial and business uses may occupy the first storey of any building within this zone. Commercial and business use may occupy the first two storeys of any building fronting onto Main Street within this zone.

The location of free-standing commercial buildings within this zone is addressed by Policy 5.12 in Section 5.3.4.

The low/mid rise building zone shall apply to Urban Village Zones A, B, C, D, G and O.

2. **Town house and Three/four-plex Building Zone**

Town houses are five or more dwellings divided by common walls and having separate entrances. They may be two to three storeys in height and have internal or external parking. Three/four-plex buildings are divided from each other by common walls and have individual or common entrances. They may have internal or external parking.

Single, semi-detached and duplex residential buildings may also be developed within this building zone, provided that the total number of such residential units does not exceed fifty per cent (50%) of the total number of units.

The Town House and Three/four-plex Building Zone shall apply to Urban Village Zones E and F.

3. **Residential Lodging Building Zone**

Residential Lodging comprises hotels, motels and related food, service, entertainment and convention facilities contained within the same building. Residential accommodation buildings shall be two storeys or more in height, and may have internal or external parking. Residential accommodation may provide both short-term and long-term stay.

The Residential Lodging Building Zone shall apply to Urban Village Zones H, I and J.

The Residential Lodging Zone may also include low/mid rise residential buildings as an alternative building form and land use, if the demand for residential lodging is insufficient for provide for build out of the three Urban Village Zones.

5.3.3 Public Spaces: Recreational, Civic and Parks

The public/civic realm will comprise three sites, each with its own distinctive character. The public realm also includes the walkways and sidewalks that provide both internal and external connectivity between these sites and the overall Town Trails system.

The three public place sites comprise the following:

1. a **civic plaza** precinct;
2. a **Hillside Park** natural area left under native forest cover; and
3. **Birds Eye View Park** in the western portion of the ASP area, and the site of the Town's **Tourism Information and Interpretive centre**.

In addition, two **stormwater management facilities** will be located on Crown land to the east and south of the ASP area, along with a bioswale to convey stormwater to these facilities (Section 7.3). It will be important to make connections with these facilities and integrate them within the overall public space system.

Civic Plaza Precinct (Zone K)

The heart of the Urban Village open space system will be a **civic plaza precinct**, comprising a plaza surrounded by businesses, civic buildings and/or residential buildings and two walkway/utility links extending east-west in each direction. The plaza will be a focal point for community gatherings, special events, art displays, markets, outdoor cafes or entertainment and cultural events as well as serving informally for informal gatherings and social interaction. The scale and size of the Urban Village is such that any point within the Village will be within 400 metres walking distance of the plaza. The civic plaza will add value both to adjacent properties, and to the entire Urban Village as a major landmark and activity centre.

It is intended that the civic plaza precinct be the subject of a planning and design exercise, jointly sponsored by the Town and the developer. Development of the plaza would be jointly undertaken by the Town and developer under a funding formula to be determined. Ongoing programming and maintenance could be led by the Town. The Town could also explore the opportunity for a separate not-for-profit group, comprising adjacent businesses, community organizations, the Town and other groups, to take responsibility for programming and maintenance. This is an arrangement that has been successful in other situations.

The thoughtful and creative design of a sustainable civic plaza is paramount to the success of the Urban Village. A clear definition of the size and scope of the plaza is premature in this Area Structure Plan.

However, the Area Structure Plan does establish development principles to guide its planning and design, and these are expressed in the policy statements that follow.

Policy 5.6 Planning and Design Process for Civic Plaza Precinct

The Town of Grande Cache will, in conjunction with the developer, take a leadership role in initiating the planning and design of the Civic Plaza Precinct. The plaza precinct will be comprehensively designed as one urban place, combining and integrating the disciplines of landscape architecture, architecture, urban design, urban planning and engineering to create an outstanding example of fine civic design.

The planning and design process shall include a consideration of capital and operating costs and measures for cost-effective programming and maintenance of ongoing operations. These measures may include the creation of a not-for-profit organization comprising business and community interests that have an interest in the success of the plaza.

Policy 5.7 Development Guidelines for Civic Plaza Precinct

The following development guidelines will be considered and incorporated into the planning and design of the Civic Plaza Precinct;

1. The size and shape of the civic plaza precinct as shown on Figure 8 is conceptual only. The final size and shape will be determined through the planning and design process. The process will consider that the plaza shall be small enough to maintain and foster a human scale and a sense of intimacy but large enough to support a variety of activities and functions.
2. The plaza will be defined by building facades on at least two sides and a street on no more than two sides.
3. The building forms that define the plaza edges will be managed as to location, height and orientation so as not to unduly block the sun and thus create a shadowing effect.
4. Commercial/civic activity will be encouraged at street level and the plaza would ideally be an extension of adjacent commercial and civic activities.
5. The plaza will be open to the south, southwest and southeast to maximize exposure to the sun in all seasons and to maximize views of the valley, foothills and mountains.
6. The two east-west walkway connections shall be an integral part of the plaza precinct to provide links with nearby parts of the Urban Village. The alignment of these walkways is also essential to accommodate critical utility connections and to provide any additional road access that the developer may require in relation to Blocks C, E, J and O.
7. There will be a direct visual and physical connection to and from Main Street to the north.
8. The planning and design process will consider the slopes of the site and consider the opportunities for spatial differentiation and interest through terracing, steps or other creative adaptations to a sloping site.

9. The plaza will have an appropriate balance between hard landscaped areas and soft or natural landscaping to evoke the forested and alpine environment within which Grande Cache is located.
10. The plaza will include such amenities as public art, water features, trees/planting beds, benches, informal seating, bandstand, kiosks and other elements to be identified through the design process. The design process will also define a suitable distinctive, iconic landscape element or landmark to provide visual focus and a strong sense of identity for the plaza as both the heart of the Urban Village and a major civic space within the Town of Grande Cache.

Hillside Park (Zone M)

The park will be located on steeper slopes in the northwest portion of the ASP area. With an area of 0.34 ha (0.84 acres) it is one of the few areas that has not been clear-cut through site development, and serves as an example of the forest environment surrounding Grande Cache. It provides opportunities for trails leading to a vantage point overlooking the Urban Village and beyond, with appropriate interpretive treatment of the natural and built environment. An appropriate alternate name for the park may be selected to commemorate an environmental, community or historical feature, person or theme.

Policy 5.8 Hillside Park

Hillside Park shall be left in a natural condition, with improvements limited to trails and a lookout for interpretive purposes. A walkway connection will be provided across private land to the west to provide a link with Main Street and 98th Avenue, and thus provide a variety of trail loops for a varied walking experience. The ownership of Hillside Park shall be negotiated between the Town and the landowner, to be confirmed at the time of subdivision approval through the development agreement process.

Birds Eye View Park - Tourism and Interpretive Centre (Zone L)

This large area at the east entry to the Town of Grande Cache is an existing well-used landmark and activity area for Town residents and visitors alike... The Tourism Centre is an attractive architectural icon that welcomes visitors to Grande Cache. The park's existing conditions and possible development are outlined in the 'Open Space Assessment' prepared for the Town of Grande Cache in 2008 by the EDS Group Inc. The park is described as an "existing passive interpretive park featuring a walking path, gazebo seating and forest ranger stations from different decades (p.20)". It is a stopping point for tourists and a meeting place for white water rafters and contains a large gravel parking lot. The Park and the Tourism and Interpretive Centre also provide fine views of the Rocky Mountains to the west.

This will be the major park area within easy walking distance of the Urban Village. The site is large enough to provide recreational facilities and services to future residents and visitors alike. It also forms a critical link in the network of walkway and trail connections between the open space elements of the Urban Village (Civic Plaza and Hillside Park), the Town Centre, and the Town's proposed multi-use trail system. Because the site is relatively level, it provides an opportunity for parking for both on- and off-site use.

Because of the variety of potential uses that could be located on this site, and because of its strategic location relative to Highway 40, the Urban Village, the Town Centre and the rest of the community, it is felt that a Site Master Plan would be appropriate.

Policy 5.9 Bird's Eye View Park – Tourism and Interpretive Centre

The Town of Grande Cache will initiate a community-based site master planning process to identify and balance needs for this site, with the suitability of the site for a variety of purposes. Major objectives will be: to complement and enhance the activities of the Tourism and Interpretive Centre, to balance interpretive, recreational, parking and environmental needs and to define appropriate on-site and off-site trail linkages.

Storm Ponds (Zones N1 and N2 – Off-site)

Two storm ponds and connecting bioswales are proposed to handle runoff from the ASP area, as outlined in Section 7.3 and in locations shown on Figure 12. These are located on Crown land and will require successful negotiation of a lease or public utility lot with the Province.

An internal walkway connection provides a link between the plaza precinct and the northerly pond between Zones D and F.

Storm ponds in or near residential neighbourhood have a place-making function, add to the visual amenity of the neighbourhood, and provide valuable wetland habitat for a variety of plant and animal species. While these two ponds and connecting bioswales will be off-site, there are opportunities to extend the trail system along the bioswales to link the Urban Village, the storm ponds and the Town's trail system. This would add significantly to the passive recreational opportunities available to residents of the Urban Village.

Policy 5.10 Walkways to Storm Ponds

The Town will investigate the feasibility of providing trail linkages to connect the Urban Village, the storm ponds and the Town's trail system, including considerations of optimal routing, access to Crown land, responsibility for development costs and responsibility for ongoing maintenance obligations. The Town will direct the implementation of the trail linkages according to the outcome of the feasibility investigations.

5.3.4 Commercial Land Use – Urban Village

The Development Concept does not identify sites for commercial use only. The intent is that commercial use be integrated into buildings that have a residential function, whereby the first storey is commercial and the storeys above are residential. It is also possible that, in certain locations, the market place may support commercial or other business functions on the first two storeys of the residential buildings.

It is also reasonable to anticipate a demand for commercial facilities where a residential function simply may not be feasible. Yet commercial and business functions are an integral part of an Urban Village. Therefore guidelines are appropriate to designate free-standing commercial facilities at certain locations such as the Main Street. At the same time, some limitation on the total footprint of free-standing commercial facilities is appropriate to maintain the mixed use character of the village as determined by the balance between residential and commercial use.

Policy 5.11 Commercial Uses

Commercial uses will be allowed on the main storey of any building within the Urban Village. Commercial uses will be allowed on the first two storeys of any building on lots fronting Main Street.

Policy 5.12 Free-standing Commercial Uses

Commercial uses will be encouraged as part of any residential building. However, free-standing commercial buildings without a residential component will be allowed on any lot fronting Main Street to a maximum of fifty per cent of the frontage of either side of Main Street. Residential lodgings are not considered to be free-standing commercial uses.

Free-standing commercial buildings on local streets may be permitted on a discretionary basis, depending on the established character of the street.

5.3.4 Walkway Connections

The Urban Village Development Concept shows two walkway connections, likely across private lands, to provide a wider range of options for pedestrian circulation through the Urban Village. The first is a walkway connection linking Zone M, the Hillside Park with 99th Street through Zone H. The second will be a connection through Zone B opposite the civic plaza precinct, Zone K. This will require a mid-block pedestrian crossing of Main Street to provide continuity between residential areas to the north and the plaza precinct.

5.4 Business Park

5.4.1 General

The general land use pattern for the Business Park is illustrated in **Figure 9**. A transition area at the southern end will provide for commercial land use and for appropriate/compatible businesses to co-locate with a single residence within the same building on the same lot. The balance of the land is designated for commercial and light industrial use, with one parcel to be left as open space. The Town may consider establishing 'build-to lines' within the relevant Land Use District(s) in the Land Use Bylaw for the Business Park or portions of it, similar to those created within the Urban Village.

5.4.2 Transition – Commercial

The uses in the commercial area will comprise those permitted and discretionary uses now contained within the C-2 Commercial Highway-Oriented land use district with the addition of the permitted and discretionary uses listed in the CM Commercial Service and Light Industrial Mixed Use land use district. The commercial area will extend on both sides of 99th Avenue and will include an additional site east of Tower Drive and south of 99th Avenue extension.

5.4.3 Transition – Business/Residential Mixed Use

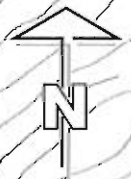
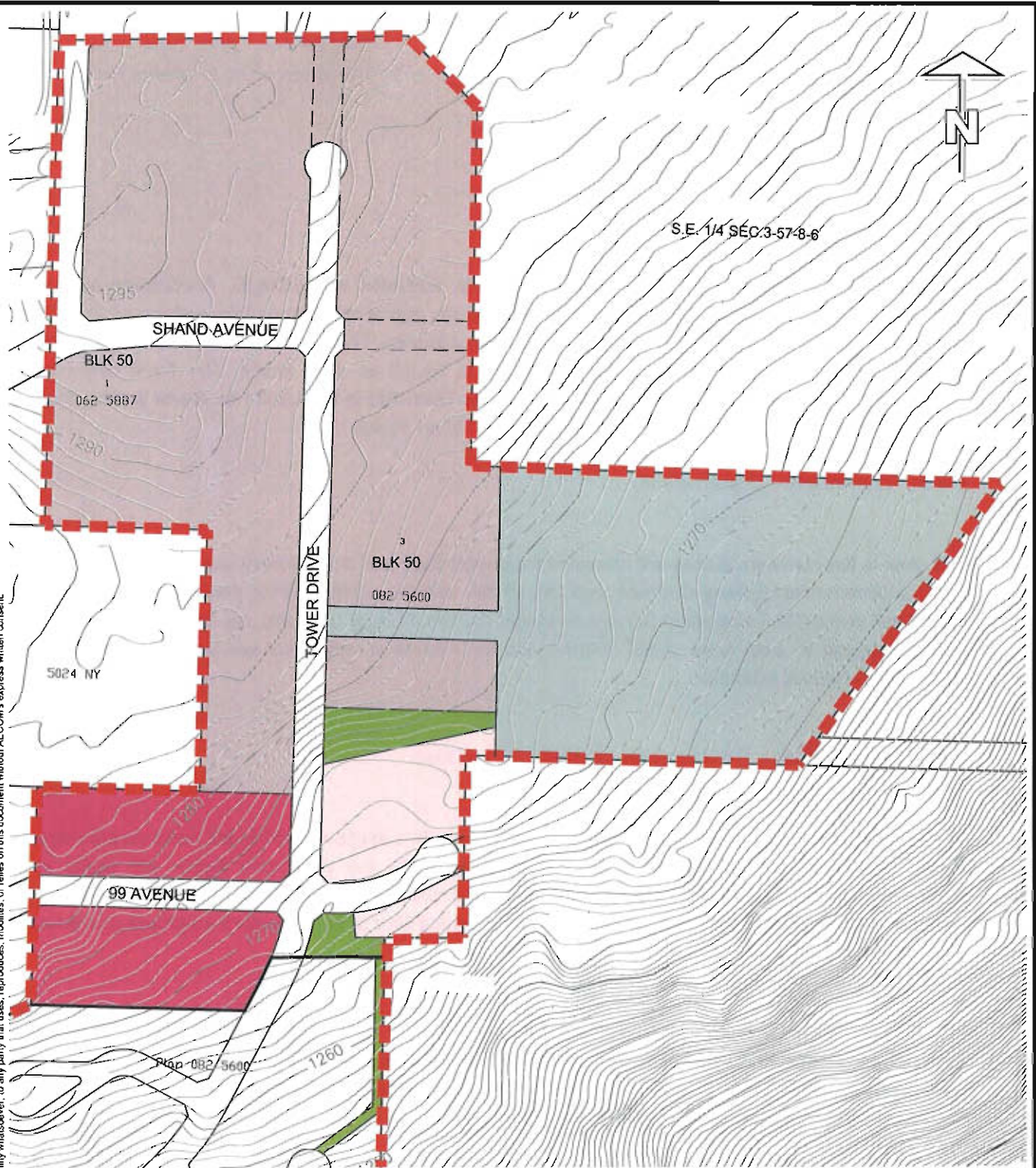
The opportunity for appropriate business uses co-locating with a single residence will occur on the north side of 99th Avenue extension. An area-specific amendment to the Land Use Bylaw will assist in the implementation of this aspect of the Business Park and clarify decision-making. The residence may be occupied by the owner of the business situated on the ground floor or be an owner's employee or a tenant.

5.4.4 Commercial/Light Industrial

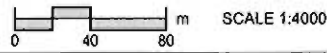
The northerly portion of the Business Park will accommodate a variety of commercial and light industrial land uses identified within the CM Commercial Service and Light Industrial Mixed Use land use district. A variety of lot sizes will be created to meet a range of market needs.

5.4.5 Open Space

An area of open space is shown that is intended to be left under existing forest cover. This area will mark the interface between the transition area to the south and the commercial/industrial portion of the Business Park to the north.



LEGEND



- Area Structure Plan Boundary
- Light Industrial
- Commercial
- Business/Residential Mixed use
- Special Planning Area
- Public/Open Space

Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
Business Park

Development Concept

Figure - 9

5.4.6 Access and Circulation

Tower Drive will be the main collector street, extending north from the Urban Village where it will be known as Main Street. It will terminate, temporarily, at the easterly extension of Shand Avenue, but may continue further north in the future to provide access to land to the north.

The extension of Shand Avenue will provide a direct roadway connection between the Business Park and Highway 40 and will complete the 'loop' collector roadway through the Business Park. Its extension will require the acquisition of Lot 50, Plan 062 5887 from Alberta Sustainable Resource Development. The matter of physically constructing Shand Avenue from the point where the roadway ends at 97th Street to the edge of the ASP area needs to be resolved between the developer and the Town. An additional benefit of extending Shand Avenue will be to provide a more direct route between the residential portion of the Town and the municipal golf course, without the necessity of traffic using the residential route along 99th Street and 104th Avenue.

5.4.7 Future Access to Crown Lands

Provision is indicated by the dashed line to protect for future access points to Crown land to the north and east. There are two potential future access points: (1) the northerly extension of Tower Drive, and (2) the easterly extension of Shand Avenue.

5.4.8 Special Planning Area

The easterly 'panhandle' within the Business Park is designated as a 'Special Planning Area'. Access shall be provided to future Stage 5 within the Business Park as shown, until an alternate access is provided across what are now crown lands in right of Alberta Sustainable Resource Development.

Policy 5.13 Special Planning Area

At the time that the ultimate land use for Stage 5 (see Figure 13) is determined, an amendment to this Area Structure Plan will be required to address land use, access, the possible provision of alternate access across Crown lands, water and sewer servicing, stormwater management and other ASP issues.

Table 1 - Land Use Statistics

	AREA (ha)	% OF GDA	DU/ha	UNITS	% OF TOTAL	PPDU	POP	% OF TOTAL
Gross Area	40.45							
Environmental Reserve	0.00							
Gross Developable Area	40.45	100%						
Collector road	2.95	7.3%						
Local road	2.68	6.6%						
Public Spaces/Parks	4.92	12.2%						
Subtotal – Other Uses*	10.55	26.1%						
Business/Residential Mixed Use	1.04	2.6%	10	11	1.9%	2.2	25	2.3%
Commercial	2.25	6.4%						
Business Industrial	11.15	27.6%						
Special Planning Area	5.97	14.8%						
Subtotal – Business Park	20.41	51.2%		11	1.9%		25	2.3%
Low/Mid-Rise Buildings/Commercial	6.17	15.3%	85	525	90.2%	1.8	945	88.2%
Townhouse/Three/Four Plex./Commercial	0.92	2.3%	50	46	7.9%	2.2	102	9.5%
Low/Mid-Rise Buildings – Lodging	2.40	5.9%						
Subtotal – Urban Village	9.49	23.5%		571	98.1%		1047	97.7%
TOTAL	40.45	100.0%		582	100.0%		1072	100.0%

*Stormwater Management Facilities located off-site total 1.50 ha and are not included in these statistics.

6. Transportation

6.1 Regional Context

Provincial Highway 40 is a major highway in west-central Alberta, linking Hinton and the Yellowhead Highway to the south with Grande Prairie to the north. As the only highway access to Grande Cache, it is a vital route for residents, visitors and industry and the ASP area occupies a strategic location adjacent to this main highway.

6.2 Provincial Highway

While Highway 40 forms the southwestern boundary to the ASP area, another access to Highway 40 south of 98th Avenue may not be appropriate due to site lines and grades and the policies of Alberta Transportation. It is important to note that a recent draft Access Management Plan from Alberta Transportation did not identify an intersection south of 98th Avenue.

6.3 Access and Circulation

As shown in the Development Concept, a continuous collector will traverse the ASP Area. Its character, appearance and standards will vary between the two components of the ASP area, reflecting the difference in anticipated vehicles, traffic patterns and pedestrian focus between the Urban Village and the Business Park. The collector will be known as 'Main Street' within the Urban Village and 'Tower Drive' within the Business Park.

In all parts of the ASP area, but especially in the Urban Village, the importance of pedestrian movement and walkability will be reinforced through traffic calming, wide sidewalks and an overall pedestrian system defined by destinations and linkages.

Traffic calming measures may include narrower roadways, raised pedestrian crossings, curb extensions at pedestrian crossings, pedestrian islands, medians, and changes in surface materials.

Section 5.2.1 addresses the special treatment to be provided on Main Street at the east and west entry/exit points to the Urban Village.

It is proposed road standards that Main Street/Tower Drive, as the collector street through the ASP area will have an urban standard through the Urban Village and a rural standard in the Business Park. All roadways will be paved. Right-of-way, road surface, sidewalk and speed standards will be modified from the Town's standards to reflect the goals and objectives of the ASP area.

As it relates to this Area Structure Plan, the Town, in conjunction with the developer, will need to address the improvement, including pavement, of roads, such as Shand Avenue and 99th Avenue, that provide access to the ASP area.

The goal is for visitors to the Urban Village to park at a single location and walk to their destinations. This will require the development of parking lots distributed throughout the Urban Village. Standards for screening and landscape development of public and private parking lots will need to be prepared and managed to provide a safe, convenient and accessible parking for residents and visitors.

Within the urban village, diagonal parking along Main Street will be enabled by a wide right of way of 30 m to act both as a traffic calming measure and to provide greater parking yield.

6.4 Pedestrian Connectivity

A safe, convenient and attractive pedestrian system within the ASP area is essential to ensuring a liveable and walk able environment. Appropriate surface materials and places to walk to and from (origins and destinations), wayfinding signs and links to the Town's community trails system are all elements of a safe and convenient system.

The sidewalk and walkway system will link all civic and park spaces with residential areas and with the rest of the community, its Town Centre, schools, and recreational and other community facilities. Sidewalks will also be provided on at least one side of all collector streets within the Business Park.

6.5 Traffic Impact Assessment

Once the development concept for the ASP area is confirmed, a traffic impact assessment may be required to determine the effect of traffic on the adjacent roadway system, the need and cost for necessary roadway, intersection and sidewalk upgrades, and the assignment of cost for necessary upgrades.

Policy 6.1 Traffic Impact Assessment

The Town may require applicant(s)/owner(s)/developer(s)/proponent(s), at their sole expense, to prepare a Traffic Impact Assessment (TIA). The timing and scope of a TIA in relation to Highway 40 shall be as determined by the Town in consultation with Alberta Transportation. The TIA prepared in relation to Highway 40 shall be to the satisfaction of Alberta Transportation as well as the Town.

7. Servicing

7.1 Water Supply and Distribution

In 2007 a Water Distribution Master Plan was completed for the Town of Grande Cache by ISL Engineering with the intent of determining required upgrades to the existing water distribution system. Water servicing the Town is pumped from Victor Lake and treated at a plant west of Highway 40, after which water is pumped to a reservoir located in the industrial lands located east of Highway 40. The Master Plan determined that the Town's reservoir has sufficient capacity to service existing population but that planning should occur for a second reservoir when the Town's population reaches 6,600 people. It was also determined that the industrial lands east of Highway 40 do not have sufficient fire flows. As such, the Master Plan recommends upgrades to fire pumps, water lines and Pressure Reducing Valves in proximity to the ASP lands. These upgrades will be able to service the subject area.

The Master Plans proposes that the ASP area will be serviced by a 300 mm water line creating a loop extending from the existing system at 99th Street and 98th Avenue along Tower Drive to the existing system at 104 Avenue and 97 Street (**Figure 10**)

7.2 Wastewater Collection System

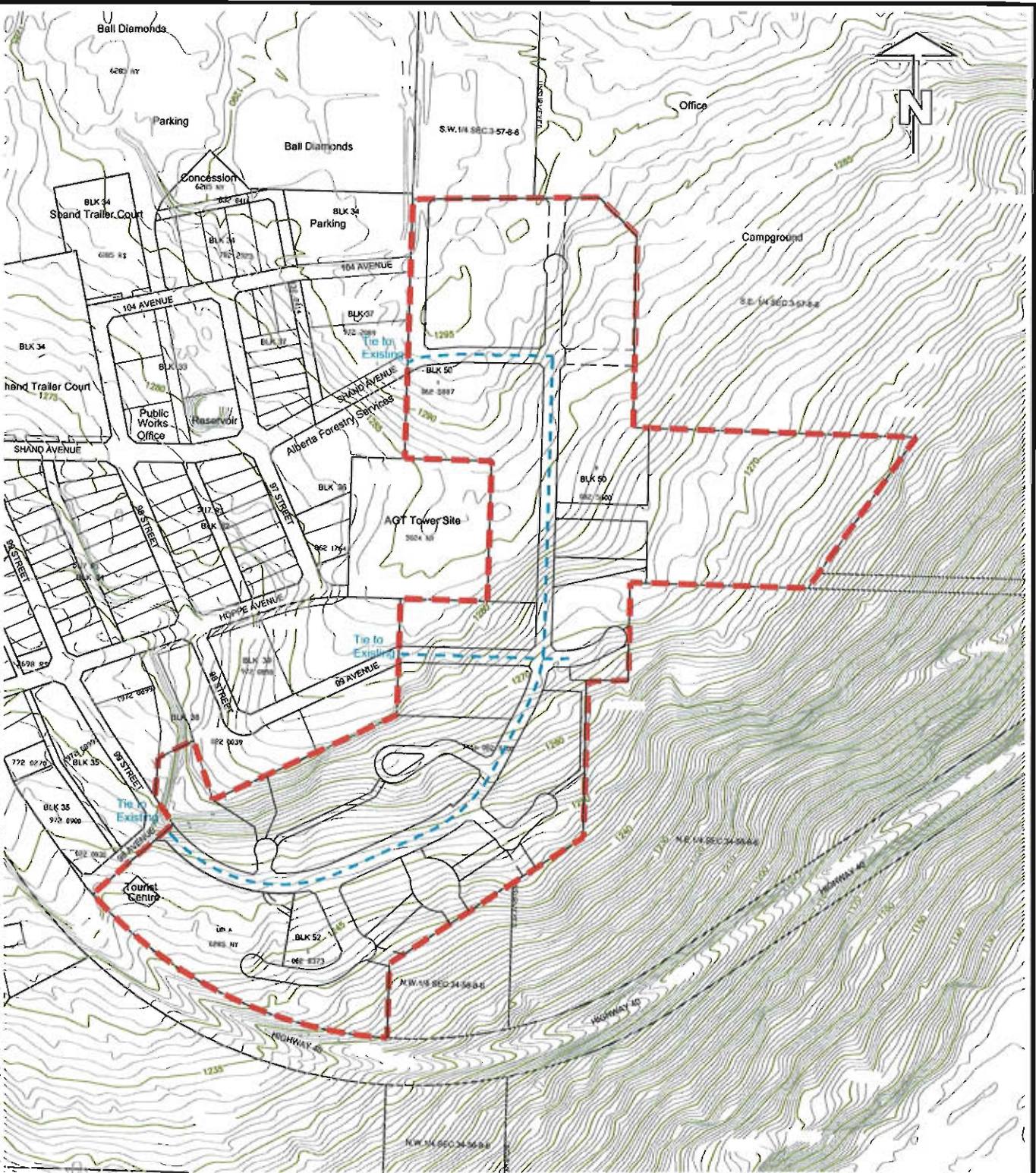
The Wastewater Collection System Master Plan was completed in October of 2007 by ISL Engineering on behalf of the Town. Its purpose was to determine upgrades required to the existing collection system and to develop servicing plans for future growth.

The Master Plan contains proposals for servicing the ASP area. Specifically,

"The Tower Site development will be serviced by gravity to the future 375/525 mm trunk which passes through Townsite 2 and connects with the 375 mm/600 mm outfall line. The proposed Tower Site 250 mm piping also allows for the connection of the campground to the Town sanitary system, and decommissioning of the septic field" (ISL, 2007, p. 11).

The 375/525 mm trunk was constructed in 2008 to a point on the opposite side of Highway 40. It will service not only the ASP area but also much of the adjacent industrial area to the north. Wastewater flows will be conveyed by the new trunk to the Town's wastewater treatment plant located about three kilometres to the southwest (**Figure 11**).

The Master Plan also recommends the decommissioning of the 200 mm trunk located just south of the subject lands, within the Tourism and Interpretive Centre site and replacing it with a 300 mm line.



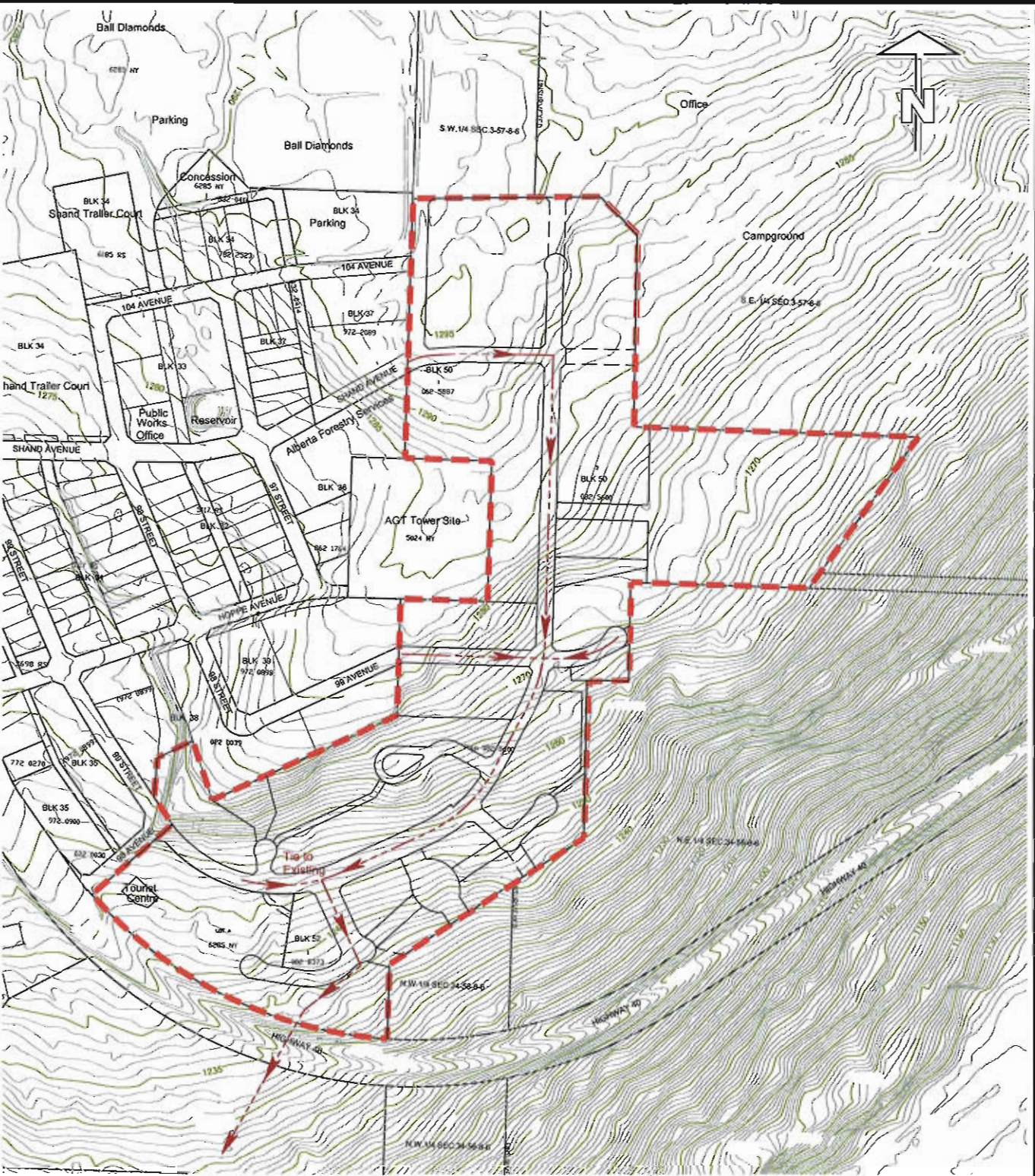
LEGEND

- - - Area Structure Plan Boundary
- - - Water Mains

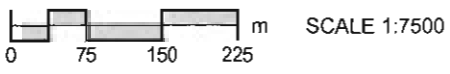


**Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
 Water Servicing**

© 2009 AECOM Canada Ltd. All Rights Reserved. This document is protected by copyright law and may not be used, reproduced or modified in any manner or for any purpose except with the written permission of AECOM Canada Ltd. ("AECOM") or a party to which its copyright has been assigned. AECOM accepts no responsibility, and denies any liability whatsoever, to any party that uses, reproduces, modifies, or relies on this document without AECOM's express written consent.



- LEGEND**
- - - Area Structure Plan Boundary
 - - -> Sanitary Servicing



Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
Sanitary Servicing



Figure - 11

7.3 Stormwater Management

Stormwater and meltwater is proposed to be collected by open swale in the Business Park and by piped system in the Urban Village. Flows will be conveyed south and west to two ponds to be located on Crown lands to the south of the ASP area (**Figure 12**). The upper, smaller pond will act as a forebay or settlement pond primarily for stormwater flows from the Business Park. Water will then flow through an open, naturalized channel to a larger pond located just north of Highway 40. The Urban Village will drain via a pipe system to exit in an open channel system located south of and parallel to the south limit of the ASP area. This channel will be a naturalized bioswale to provide some water quality management before entering the lower storm pond.

All elements of the stormwater management system will require that the proponent receive approval from Alberta Environment at the design stage, prior to construction.

Approval will also be required from Alberta Sustainable Resource Development (ASRD) for access to and construction on Crown land. Application for such access will be made by the Town of Grande Cache.

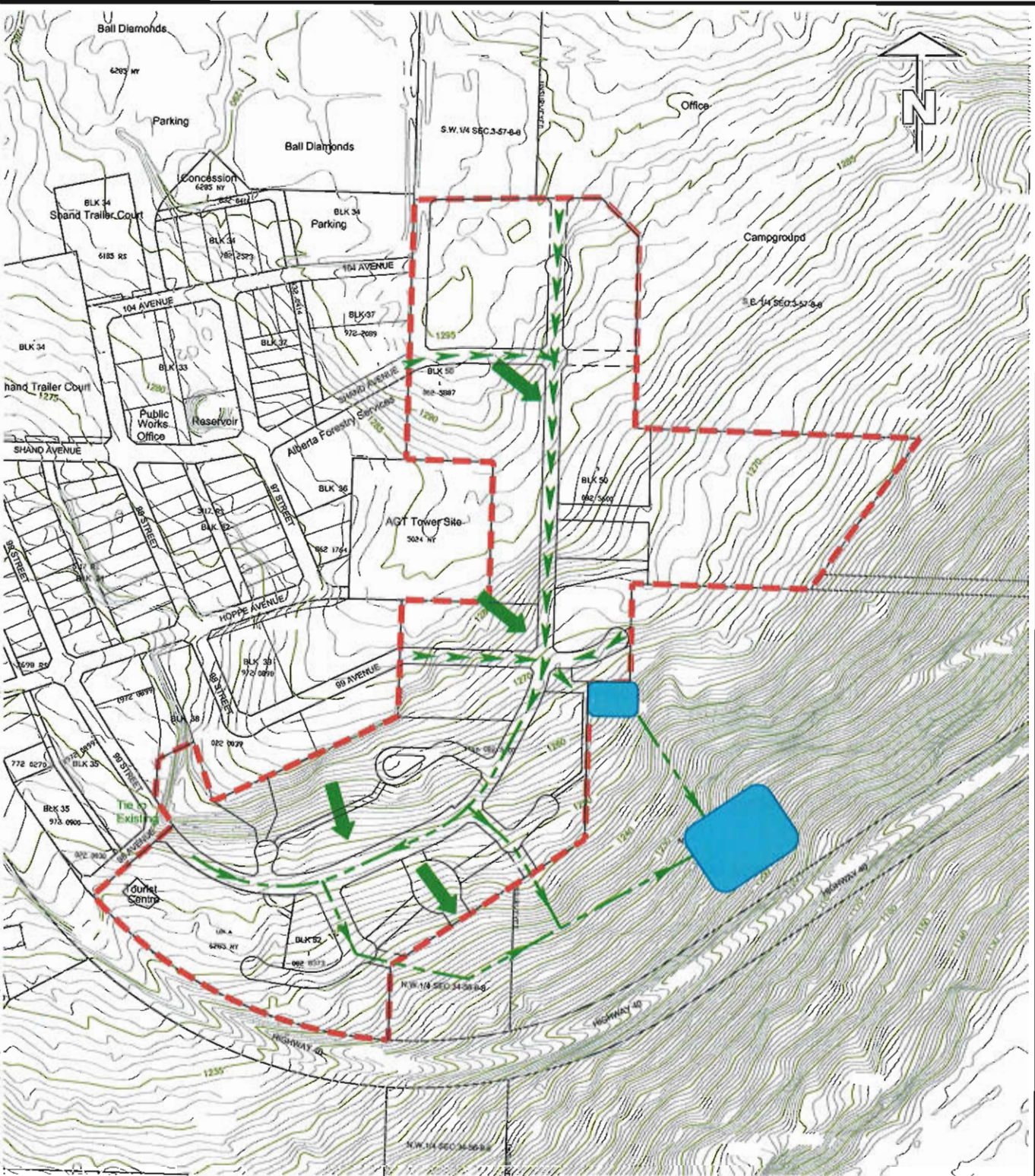
Policy 7.1 Stormwater Management Guidelines

Subdivision and development permit applications shall comply with the Stormwater Management Guidelines for the Province of Alberta 1999, prepared by Alberta Environment. There shall be no change between pre- and post-development off-site flows except where the application conforms to an approved stormwater management plan approved in conjunction with the Town.

7.4 Shallow Utilities

Policy 7.2 Power lines

Proposed power lines to service the ASP area and other shallow utilities such as gas and telephone shall be installed underground.



- LEGEND**
- - - Area Structure Plan Boundary
 - ➔ General Drainage Direction
 - Storm Sewer
 - - - Surface Drainage
 - Stormwater Management Facility

Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
Stormwater Management

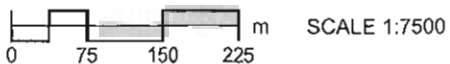


Figure - 12

8. Implementation

8.1 Land Use Bylaw

Policy 8.1 Direct Control Districts

A specifically tailored Direct Control land use district shall be prepared and inserted in the Land Use Bylaw corresponding to the Urban Village area of the ASP area to guide the development of an area of special character and higher level of design. Under this Direct Control District,

Provisions shall include but not be limited to the following:

- Form and character;
- Landscaping;
- Public amenity space; and
- Access and circulation.

Direct control districts may be prepared and adopted for those portions of the Business Park Area where warranted by special circumstances and the need to maintain a high quality environment. Site specific land use districts will be prepared and adopted for unique situations.

8.2 Subdivision and Development

Policy 8.2 Technical Information

Detailed engineering analysis and information shall be required with respect to geotechnical conditions, roads and servicing (both on- and off-site) prior to decisions being made at the subdivision and development level. All site preparation, public utilities, public roads, pedestrian walkways and any other public facilities and improvements shall be professionally designed and constructed to the satisfaction of the Town in accordance with the Town's standards.

Policy 8.3 Development Agreement

The Town may require owners/developers to enter into an agreement with the Town as a condition of an approved subdivision or development permit application pursuant to the Municipal Development Act.

Policy 8.4 Stormwater Management Approvals

The Town shall take responsibility for making all necessary arrangements and securing all required approvals regarding the disposal and management of stormwater off-site and all required documentation, permission, approvals and/or other forms of authorization from all relevant agencies

having jurisdiction in relation to the application. If an owner/applicant/proponent is prepared to undertake the required engineering, the Town may consider interim and/or on-site stormwater management until the overall stormwater management system or required components of it are in place and approved.

8.3 Development Staging

Policy 8.5 Staging

The staging of development will be determined by market forces and the cost-effective provision of infrastructure.

An illustrative staging sequence is shown on Figure 13. This staging sequence is illustrative only and may be altered to fit changing circumstances.

8.4 Force and Effect

Policy 8.6 Decisions Consistent with Area Structure Plan

The Town shall ensure that all future land use, subdivision, development and servicing decisions made regarding lands within the Tower Park Estates Area Structure Plan (ASP) shall comply with the provisions, policies, maps and drawings contained within this Area Structure Plan.

Policy 8.7 Compliance with the ASP

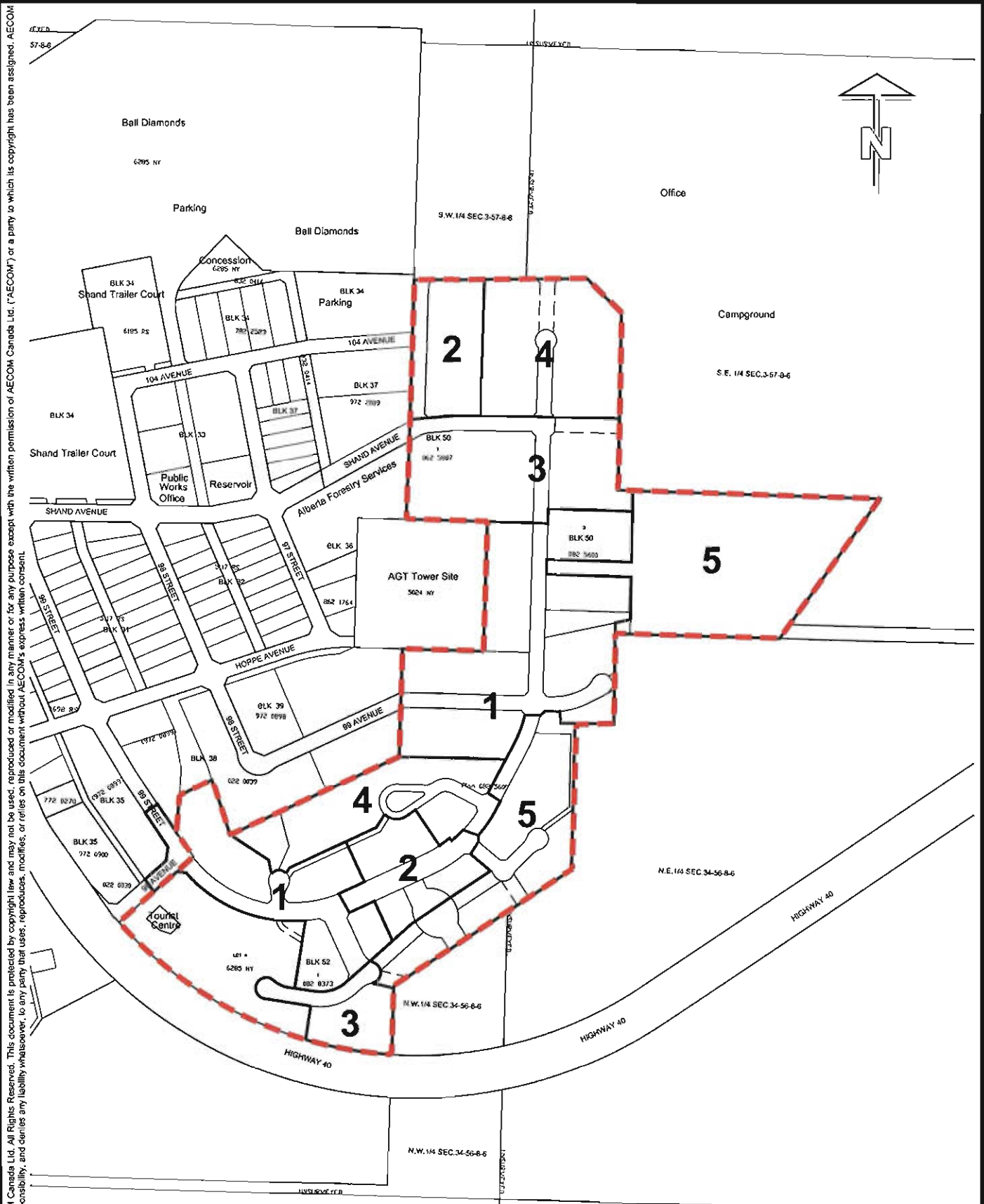
The Town shall pursue whatever actions are deemed appropriate or necessary to secure compliance with the provision of this ASP.

Policy 8.8 Amendments

If any decisions referred to in Policy 8.4 would constitute a major change of the provisions of this ASP, an amendment to this ASP shall be required. Decisions that would constitute a minor change to the provisions of the ASP may be considered without an amendment where the owner/developer can demonstrate to the satisfaction of the Town that the change does not substantively alter the intent, force or effect of the provisions of this ASP.

Amendments that may be required to this ASP shall be completed in accordance with the Municipal Government Act and all other applicable bylaws, policies and procedures.

ISS/REV: A
 AECOM FILE NAME: 5120-019-00_01-CP4013_RX.dwg Saved By: brulottem PLOT: 09/06/23 11:00:01 AM
 A SIZE 8.5" x 11" (215.9mm x 279.4mm)



LEGEND

- - - - Area Structure Plan Boundary
- Stage Boundary



**Town of Grande Cache
 Tower Park Estates
 Area Structure Plan
 Development Staging**

Figure - 13

Policy 8.9 Effect on Decision Making

This ASP, its concepts and provisions shall be used in conjunction with the relevant provision of the Town of Grande Cache Municipal Development Plan and Land Use Bylaw, particularly in guiding the exercise of discretion in making decisions on subdivision and development permit applications. This ASP will be used to guide any required amendments to the provisions or land use designations or districts in the Municipal Development Plan or the Land Use Bylaw. To this end, Map 3 of the Town of Grande Cache Municipal Development Plan will be amended to redesignate the corresponding area to "Tower Park Urban Village" and "Business Park" to ensure consistency with Section 638 of the Municipal Government Act.

Policy 8.10 Principles for Decision Making

The exercise of discretion or variance in deciding an application or an amendment to this ASP must be both reasonable and defensible within the letter and spirit of this ASP as well as widely accepted planning principles.

If a requirement or provision of this ASP is to be deviated from or if an amendment is to be made, it is essential that those making the decision clearly understand the rationale for the requirement or provision they are being asked to vary or amend.

Discretion, variance and amendment shall only be considered if it can be demonstrated that the discretion, variance or amendment being considered will, at a minimum, not jeopardize the policies of this ASP and, at best, better serve them.

Any variance or discretion exercised or any amendment made shall be fully documented so that the reasons and rationale for the variance or discretion exercised or the amendment are accurately recorded and clearly understood.

Policy 8.11 Compliance with the ASP

The Town shall pursue whatever actions are deemed appropriate or necessary to secure compliance with the provision of this ASP.

Policy 8.12 Repeated Amendment Applications

Should an owner/developer make repeated applications to amend this ASP once it is in effect, the Town may undertake or require that the owner/developer undertake an overall review of this ASP instead of continuing to make individual, isolated amendment applications so that the implications of the revision to this ASP can be considered and evaluated, at a minimum, in the context of the entire ASP area and, if warranted, beyond this ASP area.

Policy 8.13 FireSmart Principles

The Town shall consider the principles presented in “FireSmart: Protecting Your Community from Wildfire” in an effort to minimize the risk of wildfire within this ASP area.

Policy 8.14 Historical Resources

In any area identified by Alberta Culture and Community Spirit (ACCS), the Town shall refer any land use, subdivision or development application to ACCS and impose any conditions necessary, should the application be approved, to ensure that the owner/developer complies with any requirements ACCS identifies pursuant to historical resources legislation and regulations.

References

- Berke, Philip. (2006). "Does It Make a Difference?". *Planning*. pp. 39-40.
- Burdette, Jason T. (2004). "Form-Based Codes: A Cure for the Cancer Called Euclidean Zoning?". Master's Thesis.
- Duany, Andres and Emily Talen. (2002). "Transect Planning". *APA Journal*. Volume 68, No. 3, pp. 245-266.
- Garvin, Elizabeth and Dawn Jourdan. (2008). "Through the Looking Glass: Analyzing the Potential Legal Challenges to Form-Based Codes". *Journal of Land Use*. Volume 23:2, pp. 395-421.
- ISL Engineering and Land Services Ltd (2007). "Wastewater Collection System Master Plan – Draft Report.
- ISL Engineering and Land Services Ltd. (2007). "Water Distribution System Master Plan – Draft Report".
- Katz, Peter. (2004). "Form First: The New Urbanist alternative to conventional zoning". *Planning*. pp. 16-21.
- Langdon, Philip. (2006). "The Not-So-Secret Code". *Planning*. pp. 24-29.
- Rouse, David and Nancy Zobl. (2004). "Form-Based Development Codes". *Zoning Practice*. Pp. 2-6.
- Sitkowski, Robert J. and Brian W. Ohm. (2006). "Form-Based Land Development Regulations". *The Urban Lawyer*. Volume 38, No. 1, pp. 163-172.
- SmartCode Central. (2008). SmartCode Version 9.2. Accessed online from:
http://www.smartcodecentral.com/smartfilesv9_2.html.
- Talen, Emily. (no date). "SmartCode Justice". *Places*. 18:1, pp. 30-35.
- Town of Grande Cache. (2006). 20/20 Vision of the Future, Town of Grande Cache Strategic Sustainability Plan.

**ITEM: PROPOSED TOWER PARK AREA STRUCTURE PLAN (ASP),
ADOPTING BYLAW 688**

ISSUE: Council is to decide whether to adopt proposed Bylaw 688, being the Tower Park ASP.

UPDATE/FOLLOW-UP: Subsequent to the public hearing Council opened and recessed July 29th, 2009, discussions have occurred and correspondence has been exchanged which appears to have satisfied Alberta Transportation's concerns with the ASP. Though we are now expecting support from them, written conformation of this was not in hand as of the writing of this report.

In addition, discussion has taken place, correspondence has been exchanged and proposed revisions to the ASP have been considered with respect to the issue of the helicopter site immediately adjacent to the Urban Village. What follows is a set of proposed revisions to the Tower Park ASP intended to address this issue. It is recommended that Council incorporate these proposed revisions as part of their approval of this ASP.

5.3.2 Residential Development

Policy 5.6 Residential Land Use

Three residential building zones are established for the Urban Village, as follows:

.1 Low/mid rise Building Zone

Residential buildings may be a maximum of five storeys in height and a minimum of two storeys. Parking may be internal (underground or at grade) or external at grade. This land use zone may also include town house units and live/work units in which the residential units are on a second and/or third storey above a main floor commercial unit. However, town house units shall comprise no more than twenty five per cent (25%) of units within this zone.

Commercial and business uses may occupy the first storey of any building within this zone. Commercial and business use may occupy the first two storeys of any building fronting onto Main Street within this zone.

The location of free-standing commercial buildings within this zone is addressed by Policy 5.123 in Section 5.3.4.

The low/mid rise building zone shall apply to Urban Village Zones A, B, C, D, G and O.

.2 Town house and Three/four-plex Building Zone

Town houses are five or more dwellings divided by common walls and having separate entrances. They may be two to three storeys in height and have internal or external parking. Three/four-plex buildings are divided from each other by common walls and have individual or common entrances. They may have internal or external parking.

Single, semi-detached and duplex residential buildings may also be developed within this building zone, provided that the total number of such residential units does not exceed fifty per cent (50%) of the total number of units.

The Town House and Three/four-plex Building Zone shall apply to Urban Village Zones A, E and F.

Within Zone/Area A on Figure 8, the tree cover existing as of the coming into force of this ASP, the general location of which indicated with cross-hatching on Figure 8, is to remain in its natural state and be so protected by means of a Restrictive Covenant registered against title(s) or via other instrument or means acceptable to the Town. Within Zones/Areas A and D, sound-proofing/noise attenuation in relation to ceiling/roofing and windows shall be provided for any residential development to a standard/level and through means/mechanisms satisfactory to the Town.

.3 Residential Lodging Building Zone

Residential Lodging comprises hotels, motels and related food, service, entertainment and convention facilities contained within the same building. Residential accommodation buildings shall be two storeys or more in height, and may have internal or external parking. Residential accommodation may provide both short-term and long-term stay.

The Residential Lodging Building Zone shall apply to Urban Village Zones H, I and J.

The Residential Lodging Zone may also include low/mid rise residential buildings as an alternative building form and land use, if the demand for residential lodging is insufficient for build out of the three Urban Village Zones.

Within Zone/Area H on Figure 8, the highest elevation of any building, structure or other development shall not exceed the lowest current elevation of the adjoining lot labelled "Helicopter Facility". In addition, should a residential development/building be located within any portion of Zone/Area H on Figure 8 as an alternative to residential lodging, as provided for immediately above, sound-proofing/noise attenuation in relation to ceiling/roofing and windows shall be provided to a standard/level and through means/mechanisms satisfactory to the Town.

5.3.3 Public Spaces: Recreational, Civic and Parks

The public/civic realm will comprise three sites, each with its own distinctive character. The public realm also includes the walkways and sidewalks that provide both internal and external connectivity between these sites and the overall Town Trails system.

The three public place sites comprise the following:

1. a **civic plaza** precinct;
2. a **Hillside Park** natural area left under native forest cover; and
3. **Birds Eye View Park** in the western portion of the ASP area, and the site of the Town's **Tourism Information and Interpretive centre**.

In addition, two **stormwater management facilities** will be located on Crown land to the east and south of the ASP area, along with a bioswale to convey stormwater to these facilities (Section 7.3). It will be important to make connections with these facilities and integrate them within the overall public space system.

Civic Plaza Precinct (Zone K)

The heart of the Urban Village open space system will be a **civic plaza precinct**, comprising a plaza surrounded by businesses, civic buildings and/or residential buildings and two walkway/utility links extending east-west in each direction. The plaza will be a focal point for community gatherings, special events, art displays, markets, outdoor cafes or entertainment and cultural events as well as serving informally for

informal gatherings and social interaction. The scale and size of the Urban Village is such that any point within the Village will be within 400 metres walking distance of the plaza. The civic plaza will add value both to adjacent properties, and to the entire Urban Village as a major landmark and activity centre.

It is intended that the civic plaza precinct be the subject of a planning and design exercise, jointly sponsored by the Town and the developer. Development of the plaza would be jointly undertaken by the Town and developer under a funding formula to be determined. Ongoing programming and maintenance could be led by the Town. The Town could also explore the opportunity for a separate not-for-profit group, comprising adjacent businesses, community organizations, the Town and other groups, to take responsibility for programming and maintenance. This is an arrangement that has been successful in other situations.

The thoughtful and creative design of a sustainable civic plaza is paramount to the success of the Urban Village. A clear definition of the size and scope of the plaza is premature in this Area Structure Plan. However, the Area Structure Plan does establish development principles to guide its planning and design, and these are expressed in the policy statements that follow.

Policy 5.67 Planning and Design Process for Civic Plaza Precinct

The Town of Grande Cache will, in conjunction with the developer, take a leadership role in initiating the planning and design of the Civic Plaza Precinct. The plaza precinct will be comprehensively designed as one urban place, combining and integrating the disciplines of landscape architecture, architecture, urban design, urban planning and engineering to create an outstanding example of fine civic design.

The planning and design process shall include a consideration of capital and operating costs and measures for cost-effective programming and maintenance of ongoing operations. These measures may include the creation of a not-for-profit organization comprising business and community interests that have an interest in the success of the plaza.

Policy 5.78 Development Guidelines for Civic Plaza Precinct

The following development guidelines will be considered and incorporated into the planning and design of the Civic Plaza Precinct;

- 1. The size and shape of the civic plaza precinct as shown on Figure 8 is conceptual only. The final size and shape will be determined through the planning and design process. The process will consider that the plaza shall be small enough to maintain and foster a human scale and a sense of intimacy but large enough to support a variety of activities and functions.**
- 2. The plaza will be defined by building facades on at least two sides and a street on no more than two sides.**
- 3. The building forms that define the plaza edges will be managed as to location, height and orientation so as not to unduly block the sun and thus create a shadowing effect.**

4. **Commercial/civic activity will be encouraged at street level and the plaza would ideally be an extension of adjacent commercial and civic activities.**
5. **The plaza will be open to the south, southwest and southeast to maximize exposure to the sun in all seasons and to maximize views of the valley, foothills and mountains.**
6. **The two east-west walkway connections shall be an integral part of the plaza precinct to provide links with nearby parts of the Urban Village. The alignment of these walkways is also essential to accommodate critical utility connections and to provide any additional road access that the developer may require in relation to Blocks C, E, J and O.**
7. **There will be a direct visual and physical connection to and from Main Street to the north.**
8. **The planning and design process will consider the slopes of the site and consider the opportunities for spatial differentiation and interest through terracing, steps or other creative adaptations to a sloping site.**
9. **The plaza will be have an appropriate balance between hard landscaped areas and soft or natural landscaping to evoke the forested and alpine environment within which Grande Cache is located.**
10. **The plaza will include such amenities as public art, water features, trees/planting beds, benches, informal seating, bandstand, kiosks and other elements to be identified through the design process. The design process will also define a suitable distinctive, iconic landscape element or landmark to provide visual focus and a strong sense of identify for the plaza as both the heart of the Urban Village and a major civic space within the Town of Grande Cache.**

Hillside Park (Zone M)

The park will be located on steeper slopes in the northwest portion of the ASP area. With an area of 0.34 ha (0.84 acres) it is one of the few areas that has not been clear-cut through site development, and serves as an example of the forest environment surrounding Grande Cache. It provides opportunities for trails leading to a vantage point overlooking the Urban Village and beyond, with appropriate interpretive treatment of the natural and built environment. An appropriate alternate name for the park may be selected to commemorate an environmental, community or historical feature, person or theme.

Policy 5.89 Hillside Park

Hillside Park shall be left in a natural condition, with improvements limited to trails and a lookout for interpretive purposes. A walkway connection will be provided across private land to the west to provide a link with Main Street and 98th Avenue, and thus provide a variety of trail loops for a varied walking experience. The ownership of Hillside Park shall be negotiated between the Town and the landowner, to be confirmed at the time of subdivision approval through the development agreement process.

Birds Eye View Park - Tourism and Interpretive Centre (Zone L)

This large area at the east entry to the Town of Grande Cache is an existing well-used landmark and activity area for Town residents and visitors alike... The Tourism Centre is an attractive architectural icon that welcomes visitors to Grande Cache. The park's existing conditions and possible development are outlined in

the 'Open Space Assessment' prepared for the Town of Grande Cache in 2008 by the EDS Group Inc. The park is described as an "existing passive interpretive park featuring a walking path, gazebo seating and forest ranger stations from different decades (p.20)". It is a stopping point for tourists and a meeting place for white water rafters and contains a large gravel parking lot. The Park and the Tourism and Interpretive Centre also provide fine views of the Rocky Mountains to the west.

This will be the major park area within easy walking distance of the Urban Village. The site is large enough to provide recreational facilities and services to future residents and visitors alike. It also forms a critical link in the network of walkway and trail connections between the open space elements of the Urban Village (Civic Plaza and Hillside Park), the Town Centre, and the Town's proposed multi-use trail system. Because the site is relatively level, it provides an opportunity for parking for both on- and off-site use.

Because of the variety of potential uses that could be located on this site, and because of its strategic location relative to Highway 40, the Urban Village, the Town Centre and the rest of the community, it is felt that a Site Master Plan would be appropriate.

Policy 5.910 Bird's Eye View Park – Tourism and Interpretive Centre

The Town of Grande Cache will initiate a community-based site master planning process to identify and balance needs for this site, with the suitability of the site for a variety of purposes. Major objectives will be: to complement and enhance the activities of the Tourism and Interpretive Centre, to balance interpretive, recreational, parking and environmental needs and to define appropriate on-site and off-site trail linkages.

Storm Ponds (Zones N1 and N2 – Off-site)

Two storm ponds and connecting bioswales are proposed to handle runoff from the ASP area, as outlined in Section 7.3 and in locations shown on Figure 12. These are located on Crown land and will require successful negotiation of a lease or public utility lot with the Province.

An internal walkway connection provides a link between the plaza precinct and the northerly pond between Zones D and F.

Storm ponds in or near residential neighbourhood have a place-making function, add to the visual amenity of the neighbourhood, and provide valuable wetland habitat for a variety of plant and animal species. While these two ponds and connecting bioswales will be off-site, there are opportunities to extend the trail system along the bioswales to link the Urban Village, the storm ponds and the Town's trail system. This would add significantly to the passive recreational opportunities available to residents of the Urban Village.

Policy 5.101 Walkways to Storm Ponds

The Town will investigate the feasibility of providing trail linkages to connect the Urban Village, the storm ponds and the Town's trail system, including considerations of optimal routing, access to

Crown land, responsibility for development costs and responsibility for ongoing maintenance obligations, The Town will direct the implementation of the trail linkages according to the outcome of the feasibility investigations.

5.3.4 Commercial Land Use – Urban Village

The Development Concept does not identify sites for commercial use only. The intent is that commercial use be integrated into buildings that have a residential function, whereby the first storey is commercial and the storeys above are residential. It is also possible that, in certain locations, the market place may support commercial or other business functions on the first two storeys of the residential buildings.

It is also reasonable to anticipate a demand for commercial facilities where a residential function simply may not be feasible. Yet commercial and business functions are an integral part of an Urban Village. Therefore guidelines are appropriate to designate free-standing commercial facilities at certain locations such as the Main Street. At the same time, some limitation on the total footprint of free-standing commercial facilities is appropriate to maintain the mixed use character of the village as determined by the balance between residential and commercial use.

Policy 5.142 Commercial Uses

Commercial uses will be allowed on the main storey of any building within the Urban Village. Commercial uses will be allowed on the first two storeys of any building on lots fronting Main Street.

Policy 5.123 Free-standing Commercial Uses

Commercial uses will be encouraged as part of any residential building. However, free-standing commercial buildings without a residential component will be allowed on any lot fronting Main Street to a maximum of fifty per cent of the frontage of either side of Main Street. Residential lodgings are not considered to be free-standing commercial uses.

Free-standing commercial buildings on local streets may be permitted on a discretionary basis, depending on the established character of the street.

5.3.4 Walkway Connections

The Urban Village Development Concept shows two walkway connections, likely across private lands, to provide a wider range of options for pedestrian circulation through the Urban Village. The first is a walkway connection linking Zone M, the Hillside Park with 99th Street through Zone H. The second will be a connection through Zone B opposite the civic plaza precinct, Zone K. This will require a mid-block pedestrian crossing of Main Street to provide continuity between residential areas to the north and the plaza precinct.

5.4.6 Access and Circulation

Tower Drive will be the main collector street, extending north from the Urban Village where it will be known as Main Street. It will terminate, temporarily, at the easterly extension of Shand Avenue, but may continue further north in the future to provide access to land to the north.

The extension of Shand Avenue will provide a direct roadway connection between the Business Park and Highway 40 and will complete the 'loop' collector roadway through the Business Park. Its extension will require the acquisition of Lot 50, Plan 062 5887 from Alberta Sustainable Resource Development. The matter of physically constructing Shand Avenue from the point where the roadway ends at 97th Street to the edge of the ASP area needs to be resolved between the developer and the Town. An additional benefit of extending Shand Avenue will be to provide a more direct route between the residential portion of the Town and the municipal golf course, without the necessity of traffic using the residential route along 99th Street and 104th Avenue.

5.4.7 Future Access to Crown Lands

Provision is indicated by the dashed line to protect for future access points to Crown land to the north and east. There are two potential future access points: (1) the northerly extension of Tower Drive, and (2) the easterly extension of Shand Avenue.

5.4.8 Special Planning Area

The easterly 'panhandle' within the Business Park is designated as a 'Special Planning Area'. Access shall be provided to future Stage 5 within the Business Park as shown, until an alternate access is provided across what are now crown lands in right of Alberta Sustainable Resource Development.

Policy 5.134 Special Planning Area

At the time that the ultimate land use for Stage 5 (see Figure 13) is determined, an amendment to this Area Structure Plan will be required to address land use, access, the possible provision of alternate access across Crown lands, water and sewer servicing, stormwater management and other ASP issues.

Policy 8.13 FireSmart Principles

The Town shall consider the principles presented in “FireSmart: Protecting Your Community from Wildfire” in an effort to minimize the risk of wildfire within this ASP area.

Policy 8.14 Historical Resources

In any area identified by Alberta Culture and Community Spirit (ACCS), the Town shall refer any land use, subdivision or development application to ACCS and impose any conditions necessary, should the application be approved, to ensure that the owner/developer complies with any requirements ACCS identifies pursuant to historical resources legislation and regulations.

Policy 8.15 Development on or Near Slopes

This ASP reinforces the provisions of the Municipal Development Plan (Policy 13.8 most particularly) and the Land Use Bylaw (Section 8.10 most particularly) related to development on or near slopes.

Policy 8.16 Notification Concerning Adjacent Uses

Further to Policy 5.6, the Town, in issuing decisions regarding land use, subdivision and development applications, shall consider utilizing ways and means of notifying owners and residents within residential developments in the Urban Village portion of this ASP of the presence of adjacent industrial uses including a helicopter facility.