

MEDICINE HAT

AREA STRUCTURE PLAN



Adopted August 17, 2009 Bylaw No. 3940











A BYLAW OF THE CITY OF MEDICINE HAT to adopt the Cimarron Area Structure Plan (Schedule "A") and amend Bylaw No. 3181, the City of Medicine Hat Land Use Bylaw.

WHEREAS an Area Structure Plan has been prepared for the land known as Cimarron to provide a framework for future subdivision and development;

AND WHEREAS an application has been made to adopt the Cimarron Area Structure Plan;

**AND WHEREAS** Schedule "B" attached to this Bylaw identifies the Land Use District for a portion of the Cimarron plan area and proposes to change the designation of this property from UR "Urban Reserve District" to C3 "General Commercial District";

**AND WHEREAS** it is deemed appropriate to adopt the Cimarron Area Structure Plan and amend the Land Use Bylaw accordingly;

**AND WHEREAS** the requirements of the *Municipal Government Act* R.S.A. 2000, Chapter M-26 regarding the advertising of this Bylaw have been complied with;

**AND WHEREAS** copies of this Bylaw and related documents were made available for inspection by the public at the office of the City Clerk as required by the *Municipal Government Act* R.S.A. 2000, Chapter M-26;

**AND WHEREAS** a public hearing with respect to this Bylaw was held in the Council Chambers at City Hall on 17 August, 2009 at 6:30 p.m.;

# NOW THEREFORE THE MUNICIPAL CORPORATION OF THE CITY OF MEDICINE HAT, IN COUNCIL ASSEMBLED, ENACTS AS FOLLOWS:

- 1. The Cimarron Area Structure Plan, attached as Schedule "A" to this Bylaw, is hereby adopted.
- 2. Bylaw No. 3181, the City of Medicine Hat Land Use Bylaw, is amended by redesignating the lands in the plan area from UR "Urban Reserve District" to C-3 "General Commercial District" as shown in Schedule "B" to this Bylaw.
- 3. This Bylaw shall come into force at the beginning of the day that it is passed.

READ A FIRST TIME in open Council on	JUL 2 0 2009	, 2009
READ A SECOND TIME in open Council on _	AUG 17 2009	, 2009
READ A THIRD TIME in open Council on	AUG 17 2009	, 2009
SIGNED AND PASSED ON AUG	1 8 2009	, 2009 by:
MAYOR - NORM BOUCHER	Steden COTY CLERK – LAR	RY P. GODIN

## SCHEDULE "A"

## CIMARRON AREA STRUCTURE PLAN

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#### 1 INTRODUCTION

The preparation of the Area Structure Plan is consistent with the legislative requirements outlined in Section 633 of the Municipal Government Act, and the City of Medicine Hat standards and policies.

#### 1.1 Purpose of Plan

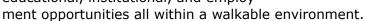
The purpose of this Area Structure Plan (ASP) is to provide policy guidance for the plan area to ensure orderly development.

An ASP is a long term document with a horizon around 20 years. It is anticipated that as variables change this plan may be required to

evolve with amendments. Plan amendments are generally discouraged but if needed in the future, should remain consistent with the broad intent of the plan.

#### 1.2 Vision

Cimarron will be a sustainable community of 15,000 people, and will be the community services and district commercial hub for the adjacent surrounding neighbourhoods. Cimarron will provide community services, neighbourhood commercial, recreation opportunities, a diverse mix of housing, educational, institutional, and employ-



Cimarron will have a distinct sense of place, and be a unique community within the City. The strong sense of place established by the pedestrian orientated design, and quality private and public spaces will provide a high quality of life for residents.

Cimarron will be a desirable place to live, shop, work, and play because of its strong identity, unique sense of place, and the dynamic pedestrian environment.

#### 1.3 Policy Context

#### Municipal Government Act

This ASP has been prepared in accordance with the requirements established in Sections 633 of the Municipal Government Act (Revised Statutes of Alberta 2000 Chapter M-26). An ASP as defined by the Municipal Government Act must address the below:





- The sequence of development for the plan area,
- the land uses proposed for the area, either generally or with respect to specific parts of the area,
- the density of population proposed for the area either generally or with respect to specific parts of the area,
- the general location of major transportation routes and public utilities, and
- may contain any other matters the council considers necessary.

#### Municipal Development Plan

This ASP is consistent with the Municipal Development Plan (MDP) By-law No. 3565. The subject lands are listed as the southwest residential growth node within the MDP.

#### Land Use Bylaw

The City of Medicine Hat Land Use Bylaw #3181 establishes districts for all lands within the City. The entire plan area currently is classified as (UR) Urban Reserve District.

An amendment to the Land Use Bylaw will be required to establish the appropriate districts to allow for the development of the plan area. The amendments to the Land Use Bylaw will occur in stages with development.

#### Adjacent Area Structure Plans

There are several adopted ASPs adjacent to the plan area. These policy areas are listed below.

South Ridge ASP (adopted in March 1986 Bylaw No. 2473)

South Vista Heights ASP (adopted in May 2003 Bylaw No. 3485)

Saamis Heights ASP (adopted in July 2001 Bylaw No. 3374)

Canyon Creek ASP (adopted in July 2006 Bylaw No. 3734)

Desert Blume ASP - Cypress County (amended in 2007)

A review of each of the above ASPs has been completed. Generally, the above ASPs include the provision for primarily low density residential communities. Cimarron is consistent with the adjacent ASPs and does not present negative impacts. Rather it is anticipated that these adjacent communities may benefit from the retail and service uses planned for Cimarron.

### 1.4 Plan Interpretation

The areas listed and the boundaries shown in this plan are approximate and deviations within the broad plan context are expected as development occurs.

This plan refers to policies in regards to 'shall' and 'should' statements to identify compliance requirements. 'Shall' policy statements are considered mandatory and compliance is required. With 'should' policy statements compliance is generally expected, but there may be circumstances where compliance is not practical or technically possible.

### 2 INFLUENCING FACTORS

### 2.1 Plan Boundary

The plan area is bordered by:

- South Ridge Drive and Naismith Coulee on the east;
- South Boundary Road on the south;
- the Seven Persons Creek valley on the west; and
- the Seven Persons Creek valley and a public utility corridor on the north.

Figure 1 shows the plan area in its regional context.

#### 2.2 Access

Access to the plan area will be accommodated by Sierra Boulevard in the north, South Ridge Drive in the east, South Boundary Road in the south, and Range Road 62 in the west.

### 2.3 Ownership

The plan area consists of ten land owners. The land owners are listed in Table 1, and their respective ownership is displayed in Figure 2.





#### **Table 1 Land Owners**

Land Owner	Area (Ha)	%
Hatview Dairy Farm SE 1/4 Sec. 14-12-6-W4 & Ptn. SE 1/4 Sec. 13-12-6-W4	103.0	29%
1073645 Alberta Ltd. SW 1/4 Sec. 13-12-6-W4	65.0	18%
Evelyn Fried, S. Carr, & C. Philips Ptn NE 1/4 Sec. 14-12-6-W4	54.4	15%
Rolling Acres Greenhouses Ltd. Ptn SW 1/4 Sec. 14-12-6-W4	43.9	12%
Coulee Lands Developments Ltd. Plan 3467AV Blk X & Ptn NW 1/4 Sec. 13-12-6-W4	37.0	10%
Medican Developments Inc. Plan 0614558 Blk 1 Lot 1	27.0	8%
City of Medicine Hat 10th Ave SW ROW & Plan 7810 Blk R1	8.8	2%
Albert and Evelyn Fried Plan 7810488 Blk 3	8.5	2%
John P. Jeffrey Professional Corp. Ptn NW 1/4 Sec. 14-12-6-W4	4.0	1%
John Hoff Ptn SW 1/4 Sec. 14-12-6-W4	2.3	1%
Total	353.9	100%

#### 2.4 Location and Adjacent Land Use



Saamis Heights

The suburban neighbourhoods of Saamis Heights and South Vista Heights, are located to the north and east of the plan area. These communities are nearing buildout.

A portion of the plan area is bordered by the Seven Persons Creek valley, and a substantial tributary coulee (Naismith Coulee). As a part of the Saamis Heights community a City trail was developed within the Naismith Coulee. North of the plan area within the Seven Persons Creek valley is the Cottonwood Golf Course.

The City boundary is located immediately south of the plan area. There are primarily agricultural uses south of the plan boundary. The draft Tri-Area Intermunicipal Development Plan (IDP) states that the lands



south of South Boundary Road will be designated as Potential Growth Area with limited development in the short to medium term.

The current adjacent land uses are displayed in Figure 3.

#### 2.5 Environmental Conditions

The environmental constraints are displayed in Figure 4.

#### Topography

The plan area in the north and west borders the Seven Persons Creek valley with elevations of 711 m at the top of bank. The land rises to the south and reaches a high of 740 m adjacent to South Boundary Road. The low lands adjacent to the creek are at an approximate elevation of 685 m.

The topography of the plan area provides dramatic views of the Seven Persons Creek valley system, and the existing development north of the Seven Persons Creek valley.

#### Biophysical Assessment

The majority of the subject lands have been extensively cultivated. There are small portions of undisturbed natural grasses adjacent to the Seven Persons Creek valley and Naismith Coulee.

Biophysical assessments shall be completed at the conceptual scheme level. Conceptual schemes will be consistent with the recommendations of the biophysical assessments and the applicable regulatory requirements of the day. Biophysical assessments prepared far in advance of development occurring will be reviewed at the conceptual scheme level to ensure regulatory compliance.



Seven Persons Creek valley

#### Seven Persons Creek Valley

The Seven Person Creek valley system is a significant feature in the plan area. Portions of the valley system are undeveloped and could potentially be home to sensitive plant and animal species. No residential development shall occur within the Seven Persons Creek valley including the lower vegetated portion of the Naismith Coulee. Recreation development (i.e. trails), essential infrastructure (i.e. storm conveyance and outfalls, and road connections) are appropriate within the valley.



#### Dugouts

There are several dugouts within the plan area. Over time dugouts can develop vegetation and provide habitat for species. At the conceptual scheme level a biophyiscal assessment shall be completed to establish appropriate reclamation and mitigation measures.



Seven Persons Creek valley

#### Geotechnical

The Seven Persons Creek valley is a significant topographic feature with substantial slopes.

The estimated safe development setback in this ASP will be reviewed and adjusted by geotechnical investigations to be completed in the conceptual schemes.

The soil within the plan area is primarily comprised of clay and clay till. At lower depths (10 m - 23 m) silty sand is present. For the majority of the plan area the groundwater is 6 m or deeper. The soil type and groundwater within the plan area do not present development constraints.

#### History/Archaeology

Alberta Community Development has reviewed the plan area and has indicated that a historical resources impact assessment is not required for the lands east of 10th Ave. SW.

For the lands west of 10th Ave. SW the requirement of a historical resources impact assessment shall be determined by Alberta Community Development at the conceptual scheme level.

#### 2.6 Man Made Constraints

The man-made constraints are displayed in Figure 4.

#### Land Use

Currently the lands are being utilized for agricultural operations, cattle grazing, a dairy farm, and a greenhouse operation.

The City of Medicine Hat airport is located north across the Seven Persons Creek valley from the plan area. The plan area is outside of the Municipal Airport Vicinity Protection Area, and as such there are no related building height restrictions.

There is a registered aerodrome approximately 2 km south of the plan area in Cypress County. There are no building height restrictions imposed on the plan area related to the registered aerodrome. The full development of the plan area will require the aerodrome operator to obtain certification by Transport Canada.

#### Transmission and Distribution Corridors

Within the plan area there are a number of transmission corridors, including electric lines, potable water transmission lines, and natural gas production and distribution lines which pass through Cimarron. The majority of the corridors will remain in their current alignment. Those corridors that provide a substantial constraint to development will be relocated at the developer's expense.

The specific lines and locations will be further examined at the conceptual scheme level.

#### Resource Extraction

There are four active City of Medicine Hat sweet gas wells located within the plan area. The legislated setback from well heads is 100 m. It has been common practice in the region for the Energy Resources Conservation Board (ERCB) to grant a setback relaxation to 50 m. The setback relaxation request to the ERCB will be made at the conceptual scheme level unless the ERCB indicates their desire to review the request at the time of subdivision.

According to ERCB records there is one abandoned well within the plan area. There are no sour gas wells in the surrounding area.

#### **Environmental Site Assessments**

There are several sites within the plan area that will require an environmental site assessment. Environmental site assessments will be completed in the subsequent conceptual schemes for the following sites:

- · the dairy farm;
- greenhouse site; and
- · each of the active gas well sites.

If other sites are discovered they will require environmental site assessments as well.

#### 2.7 Community Consultation

A public open house was held August 6, 2008 at the South Ridge YMCA. Approximately 35 members of the community and City observers attended the open house.



The open house included a series of posterboards which displayed a version of the draft plan and key components of the plan. Additionally, there was a questionnaire which the participants were encouraged to complete.

Both the verbal and written records from the open house showed strong support for the concept, land use plan, and the overarching plan principles. A summary analysis of the open house was submitted to the City under separate cover.

### 3 DESIGN APPROACH

#### 3.1 Neotraditional Neighbourhood Design

This plan aims to create a community that is unique and distinguishable from other neighbourhoods. This will provide residents with a living space that has an attractive streetscape, and establishes a sense of community, which contributes to a high quality of life. The endeavour is to present environments that encourage, rather than discourage, social and community interaction.

Neotraditional design stresses the importance of creating walkable communities and accommodating social interaction. The central core of the community is designed to be unique and have a great deal of character as contrasted against the homogeneous residential and retail formats found in conventional suburban communities.

#### 3.2 Smart Growth

This plan achieves a number of the smart growth principles. The smart growth components and policies are discussed in Section 7 Urban Ecology.

### 3.3 Attainable Housing

This plan addresses the provision of attainable housing by establishing a compact community. A compact community is one that provides an increased number of dwelling units within a designated area. Cimarron provides a greater opportunity to accomplish this as compared to the adjacent, less efficient, low density conventional suburban neighbourhoods. Compact development creates an advantage with respect to attainable housing as purchasers enjoy the reduction of a portion the land cost associated with home ownership. Additionally, compact communities are more sustainable because the infrastructure and service provision is less costly to maintain. This may translate into a lower tax responsibility per City household to maintain the community infrastructure, which contributes to providing attainable housing.

Although Cimarron will have design guidelines and architectural controls the intent is to provide an inclusive community that offers a num-

ber of different housing forms to accommodate a number of economic realities.

Specific multifamily sites dedicated to attainable housing will be specified at the conceptual scheme level.

This ASP is a long-term policy document which will set out guidelines with respect to the creation of attainable housing. It is anticipated that government strategies and definitions of attainable housing will evolve over time. The current benchmarks for attainable ownership that this plan recognizes are guidelines such as those set out in the Affordable Housing Partnerships Initiative Modesty Assurance Guidelines, completed by Alberta Municipal Affairs and Housing and CMHC.

#### 4 LAND USE CONCEPT

### 4.1 Development Objectives

The development objectives for Cimarron are listed below.

- Provide a compact, walkable community with a variety of housing options.
- Protect the areas that have been identified as environmentally significant, and provide the framework to incorporate sustainable designs.
- Establish a community that has a strong sense of place with appealing streetscapes.
- Establish a distinct sense of place with a main street that is the focal point for the community.
- Provide an efficient use of the land, and maximize synergies between uses.
- Provide appropriate sites for passive and active recreation opportunities, and informal social gathering areas.
- Accommodate a variety of transportation modes.
- Provide a safe environment for residents.
- Provide an efficient and economical servicing concept.
- Ensure consistency with statutory plans, regulations, and standards.

#### 4.2 Land Use Plan Overview

Cimarron is anticipated to be home to 15,000 people. It features a mixed use core referred to in this plan as 'Main Street'. Main Street





features the most compact development, amenities, and services within Cimarron. Within and adjacent to Main Street there is housing, retail, office, health and education facilities, and recreational opportunities.

Cimarron's Main Street will serve as the focal point for Cimarron and the surrounding communities and add to the quality of life of residents.

Figure 5 displays the Land Use Plan.

#### 4.3 Main Street

Main Street is the heart and focal point of Cimarron where the sense of place is most evident. Main Street (shown as 50th St. SW) is located in the southeast corner of the plan area. This 3 ha area is anchored by

a neighbourhood commercial site on the east and by the Town Square in the west. The visibility and access from the two high traffic arterials will ensure a sustainable retail and office node.

Main Street features vertical mixed use buildings which include ground orientated retail and office with residential dwellings above on the upper floors. The mixing of the commercial and residential components creates a dynamic, and vibrant area.

Main Street will be an active place that is walkable and focuses on the pedestrian by featuring wide sidewalks, buildings orientated to the street, street trees, benches, and street side patios. The streetscape will be inviting, active and safe.

The commercial uses within mixed use buildings will provide the services required by the residents of Cimarron, and surrounding communities. To retain the main street form and function the ground floor commercial and office uses will exhibit a small neighbourhood shop format as opposed to a large box format. A size restriction on street level uses is not considered, but the street level elevation must break the larger uses visually into smaller bays. Appropriate uses include professional offices, retail (speciality or chain stores), drug store, speciality food store, barber shop, beauty salon, laundromat, dry cleaning, restaurant, coffee shop or cafe, travel agency, video store, institutional uses (medical clinic or public library), etc. With the presence of residential above the retail not all commercial uses may be appropriate within the mixed use. Consideration to potential nuisance factors generated by the commercial will be given and where necessary mitigation measures will be implemented.

A market assessment (Urban Development Advisors, 2009) was completed and it is estimated that the mixed use Main Street can accommodate approximately 7,500 m<sup>2</sup> - 13,000 m<sup>2</sup> (80,000 sqft - 140,000 sqft) of retail and office space. The primary trade area determined by the market assessment includes the communities south of the Trans



Main Street includes low rise multifamily (up to 4 storeys), with retail and office development on the ground floor.

Canada Highway west of 13<sup>th</sup> Ave. SE.

Within the proximity of Main Street there is a public transit station. It is intended that this station will be the transit transfer point for Cimarron and the surrounding communities. Developing multifamily residential and mixed uses around the transit station (transit orientated development) encourages the use of public transit, and allows for the efficient provision of transit service. Compact development near transit stations provides a convenient alternative transportation option.



Vertical Mixed Use. Commercial on the ground floor with residential above.

#### West Mixed Use Site

There is a small mixed use site adjacent to 10th Ave. SW and 49th St. SW. This site is intended to be a small secondary node to Main Street, which will provide residents in the immediate area the opportunity to have commercial uses within walking distance.

#### Objectives:

- Create a vibrant and active Main Street in a mixed use environment.
- Establish Main Street as the central focus and landmark of the community.
- Create a pedestrian orientated environment.
- Provide the required neighbourhood retail and office uses to serve the community.

The following policies apply within the Main Street designation:

- 4.3.1 Buildings along Main Street shall be mixed use, with primarily retail, office, and personal service uses at the ground level.
- 4.3.2 All buildings fronting onto Main Street shall be orientated towards the road and provide a strong street edge.
- 4.3.3 All buildings within the Main Street core shall be 2 to 4 stories in height.
- 4.3.4 The streetscape shall feature elements which enhance walkabil-



- ity (i.e. wide sidewalks, benches, bike racks, pedestrian lighting, planters, trees, etc.).
- 4.3.5 The design of the pedestrian spaces shall take local climatic conditions into consideration.
- 4.3.6 Building entrances, windows and balconies shall be orientated to Main Street.
- 4.3.7 Off-street parking lots shall be screened from the street to enhance the pedestrian environment of Main Street.
- 4.3.8 The maximum density of residential uses shall be 90 units/ha. The implementation of the maximum density will occur at the subdivision and development permit stages.

### 4.4 Medium Density Residential



This section pertains to the medium density residential located outside of the Main Street core. There is 26 ha of medium density residential within Cimarron. These medium density sites are strategically located adjacent to collector roadways, schools, Main Street, potential public transit routes, and parks and open space.





Medium density residential includes low rise multifamily buildings (up to 4 storeys).

#### Objectives:

- Ensure that the buildings are integrated into the predominately low density neighbourhood.
- Ensure that large multifamily development sites appropriately interface with the public realm.

The following policies apply within the Medium Density Residential designation:

- 4.4.1 Medium density residential shall include the development of low rise multifamily buildings (up to 4 storeys).
- 4.4.2 The area of 4 storey multifamily sites shall be less than 2 ha to



- ensure appropriate scale of development in regards to adjacent low density residential.
- 4.4.3 Buildings shall be architecturally integrated within community, ground level orientated to the street with the appearance of row housing.
- 4.4.4 Parking lots shall be screened from public spaces or placed underground.
- 4.4.5 The maximum density of apartment sites shall be 100 units/ha. The implementation of the maximum density will occur at the subdivision and development permit stages.

### 4.5 Townhouse/Row Housing

The plan includes 17 ha of land dedicated to townhouse and row housing. These sites include both street orientated housing and comprehensive project developments.

#### Objectives:

• Ensure that the buildings are integrated into the predominately low density neighbourhood.

The following policies apply within the Townhouse/Row Housing residential designation:

- 4.5.1 Parking lots shall be screened from public spaces.
- 4.5.2 The maximum density of townhouse sites shall be 50 units/ha. The implementation of the maximum density will occur at the subdivision and development permit stages.

Low-density residential includes single detached and semi-detached units.

### 4.6 Low Density Residential

The plan includes a substantial area (117 ha) that is dedicated to low density residential. The low density residential is buffered from high density uses by parks/open space and the gradual transition of the intensity of uses.

#### Objectives:

- Provide a variety of lot sizes
- Provide a substantial amount of small lots to address affordable housing.
- Reduce negative impact and increase community identity by clustering intensity of uses.



• Provide the foundation for attractive and functional streetscapes.

The following policies apply within the Low Density Residential designation:

- 4.6.1 Low density residential shall include the development of single detached and semi-detached dwellings
- 4.6.2 Semi-detached units should be clustered to reduce negative impacts, address market preferences, and improve the streetscape.
- 4.6.3 Local roads within low density residential areas should be placed to utilize topography and maximize view and walkout lots.
- 4.6.4 The local road network should incorporate a modified grid system. A modified grid system provides a walkable community and grants multiple routes for vehicular traffic.
- 4.6.5 A substantial number of single detached lots should be designed to accommodate attainable housing (i.e. small lots).



Existing trail and vegetation in Naismith Coulee.

4.6.6 The maximum density of low density residential shall be 30 units/ha. The implementation of the maximum density will occur at the subdivision and development permit stages.

#### 4.7 Environmental Reserve

The plan features 75 ha of environmental reserve. The area identified includes the portion of Naismith Coulee north of the transmission corridor, the Seven Persons Creek valley, and the required development setback from the top of bank.

#### Objectives:

- Ensure the protection of rare plants and species.
- Ensure development is set back a safe distance from the slopes, and that the integrity of the slopes is not compromised by development.
- Retain significant vegetation which may not be recognized as rare, but is part of the natural environment.
- Provide low intensity passive recreation opportunities within natural

areas.

The following policies apply within the Environmental Reserve designation:

- 4.7.1 In accordance with the provisions of the Municipal Government Act, upon subdivision the City of Medicine Hat will require the dedication of environmental reserve.
- 4.7.2 The rear property line of lots adjacent to significant slopes shall be established at a safe distance by geotechnical investigations to the satisfaction of the City of Medicine Hat.
- 4.7.3 The placement of utilities within environmental reserve should be avoided wherever possible to retain the integrity of the sensitive areas, and retain them in their current state.
- 4.7.4 Where utility installation is required, careful design and review of construction techniques shall be completed to minimize disturbance of the vegetation.
- 4.7.5 The majority of the natural drainage patterns shall be retained to ensure the sustainability of the existing vegetation within the Naismith Coulee and other draws and finger coulees.
- 4.7.6 Low impact passive recreational opportunities (i.e. trails & benches) can be located within environmental reserve.

#### 4.8 Parks and Open Space

The park and open space network is displayed in Figure 6.

This plan designates 27 ha of park and open space. The parks and open space are strategically placed to be within proximity of the majority of residents, and to serve as buffers and transitions between uses and intensity of uses.

#### School Sites

There are two schools sites identified within the plan area. The schools are located to accommodate existing school site spacing and to provide an elementary school within walking distance for all Cimarron residents.



Lighting, benches & fountain in neighbourhood park.



The eastern 3 ha site will accommodate a Public elementary school. The western 4 ha site will accommodate a Catholic Separate elementary school.

If the school sites are not required for school facilities they will be retained as park and open space.

#### Neighbourhood Parks

This plan provides for several different sizes and types of formal parks distributed throughout the plan area. There are four larger neighbourhood parks. These parks will accommodate active recreation and are in the order of 1-3 ha in size.



Hard landscaping and benches in a neighbourhood park.

The central neighbourhood park could accommodate outdoor City recreation facilities (i.e. City ball diamonds, etc.). If future City requirements indicate a need for a larger site to accommodate a substantial recreation facility, this site could be enlarged. If additional municipal reserve is required for a facility the land will need to be purchased as this plan fully allocates the available 10% municipal reserve dedication.

Several of the neighbourhood parks have a City of Medicine Hat gas well within their borders. These wells will be fenced and screened, as permitted by the well operator, so that it does not detract from the use and enjoyment of the park. Additionally, the parks must be sized and designed to ensure sufficient space is available to

accommodate for park facilities and ensure a functional open space.

#### Town Square

The Town Square is intended to serve as the focal point and major attraction within the community. The square is intended to draw upon the urban pedestrian streetscape of Main Street. It is anticipated that the Town Square will include components that encourage community interaction. This may include; a higher level of hard landscaping, benches, focal points, gazebos, fountains, water parks, etc.

#### Tot Lot

The plan includes five small tot lots in the order of 0.4 ha - 1 ha in size. The tot lots will provide active recreation amenities to the sur-



rounding dwellings. The tot lots are sited strategically to ensure they are appropriately spaced from the larger neighbourhood parks.

Playgrounds may be located with neighbourhood parks or in tot lots as long as they will be within 600 m walking distance of 95% of the residents.

#### Trails

As part of the open space network this plan includes a significant trail system. The trails link the nodes within the community, provide pedestrian connections to adjacent communities, provide passive recreation opportunities and accommodate alternative modes of transportation. The location of the trails in the Seven Persons Creek valley are conceptual and their ultimate location is dependent on local conditions, and as a result the trails may be within the valley or above the top of bank. Minor adjustments to the trail network will not require an amendment to this plan.

In addition, to trail corridors the plan features pedestrian corridors on the collectors and select strategic local roads. The pedestrian corridors are anticipated to feature a sidewalk separated from the street by a boulevard containing street trees.

#### Municipal Reserve Dedication

This plan dedicates 9% of the net developable area as municipal reserve. Municipal reserve credit for landscaping of the stormwater management facility, in accordance with the City's Municipal Reserve Credit Policy, will be equivalent to approximately 1% of the net developable area. This will bring the municipal reserve dedication up to the maximum 10% threshold.

All of the parks and open spaces shown on Figure 6 will be public parks and dedicated as municipal reserve at the time of subdivision.

#### Objectives:

- Provide appropriate sites for two elementary schools.
- Attain the spacing requirements for parks and playgrounds outlined in the City's standards.
- Provide open space within proximity of all residents.
- Provide a variety of park sizes and types to meet recreation and social needs.
- Provide buffers and transitions between uses and intensities.
- Provide a central place/focal point for the community.
- Provide a comprehensive trail and pedestrian network linking the



community.

The following policies apply within the Park and Open Space designation:

- 4.8.1 In accordance with the Municipal Government Act up to 10% of the gross developable area will be dedicated as municipal reserve, excluding areas identified as environmental reserve.
- 4.8.2 School sites shall be in the order of 3-4 ha. The school sites will be dedicated as municipal reserve at the time of subdivision
- 4.8.3 Neighbourhood parks shall be in the order of 1 to 3 ha.
- 4.8.4 The Town Square shall be in the order of 1.5 ha.
- 4.8.5 The Town Square shall be developed to reflect the urban nature of the surrounding uses.
- 4.8.6 The Town Square is intended to be the major focal point within the community and as such it should be designed to attract and accommodate community social interaction.
- 4.8.7 The neighbourhood parks should have public road access on at least one side and preferably on two to four sides.
- 4.8.8 Tot lots shall be a minimum of 0.4 ha.
- 4.8.9 As a minimum tot lots shall be provided in those areas bounded by collector roads where no other park facilities are proposed. These should be accessible and visible facilities. Exceptions to this policy may only be considered where uses are limited exclusively to single detached housing.
- 4.8.10 Playgrounds shall be within 600 m walking distance of 95% of all residents.
- 4.8.11 The school sites, prior to school development, shall be landscaped by the developer to the satisfaction of the City.
- 4.8.12 Parks shall be connected to the community via trails and pedestrian corridors.
- 4.8.13 Pedestrian street corridors shall have sidewalks separated from the road, and include street trees in the boulevards.
- 4.8.14 Where there is a gas well within a park all facilities including playgrounds shall be outside of the well servicing area. In addition, there must be enough space for the recreation facilities to provide a functional park space.
- 4.8.15 All parks should be designed by a registered Alberta Landscape Architect.

#### 4.9 Institutional

There is a 5 ha institutional site adjacent to South Boundary Road. It is anticipated that the development of the site will include a large format religious assembly.

#### Objectives:

- Provide an adequate site to accommodate a large format faith based facility to serve the community.
- Provide appropriate sites for community based services.

The following policies apply within the Institutional designation:

- 4.9.1 The religious assembly site shall be in the order of 5 ha, and should be located adjacent to South Boundary Road.
- 4.9.2 Parking for the institutional sites shall be screened from the street and adjacent residential.
- 4.9.3 There should be community based institutional space within the mixed use Main Street.

#### 4.10 Commercial

There is a 3 ha commercial site located adjacent to South Boundary Road and South Ridge Drive. This site will have excellent visibility from the above mentioned high traffic arterials. It is anticipated that this site will feature vehicular orientated uses (i.e. grocery store, gas station, fast food restaurant, financial institutions, etc.). It is likely that this site will provide approximately 6,500 m² (70,000 sqft) of conventional commercial space.

The commercial space will provide a strong anchor to Main Street and provide for the commercial needs of the residents of Cimarron and the surrounding neighbourhoods.

#### Objectives:

- Provide a commercial site in a high visibility location to accommodate a conventional commercial format catering to vehicular access.
- Provide a commercial site that can serve as an anchor and gateway to the mixed use Main Street.

The following policies apply within the Commercial designation:

- 4.10.1 The neighbourhood commercial site should be in the order of 3 4 ha.
- 4.10.2 The exterior of the building(s) and their interface with public

spaces shall respect the character and intent of Main Street.

- 4.10.3 General vehicular access locations to the site shall be determined through the conceptual scheme and refined during the detailed design process.
- 4.10.4 Parking lots shall be screened from the adjacent residential and Main Street uses.

### 4.11 Utility Infrastructure

The utility infrastructure designation is intended to recognise and protect public and private utilities. The public utility lots (PULs) include utility corridors and a future gas regulator station site adjacent to South Boundary Road west of  $10^{\rm th}$  Avenue SW. This plan designates a total of 5.5 ha, which will be registered as public utility lots at the time of subdivision.

#### Objectives:

• To protect public and private infrastructure.

The following policies apply to the Utility Infrastructure designation:

- 4.11.1 Utility infrastructure lands shall be registered as public utility lots at the time of subdivision.
- 4.11.2 Utility infrastructure lands shall be landscaped in accordance with City requirements.

### 4.12 Stormwater Management Facilities

The plan area includes six stormwater management facilities. The location and areas of the facilities are generally consistent with past City studies for the area.

The function of the stormwater management facilities is discussed in Section 6.

#### Objectives:

- To provide adequate area for the stormwater management system.
- To utilise stormwater management facilities as community amenities and recreation opportunities.

The following policies apply to the Stormwater Management Facilities designation:

4.12.1 The stormwater management facilities will be dedicated as pub-



Stormwater management facility.

lic utility lots at the time of subdivision.

- 4.12.2 Stormwater management facilities should accommodate trails for passive recreation.
- 4.12.3 Stormwater management facilities landscaped according to the City's Municipal Reserve Policy will receive partial municipal reserve credit.

### 4.13 Land Use Distribution

The land use statistics are displayed in Table 2 and the unit and population projections are displayed in Table 3.

**Table 2 Land Use Statistics** 

	Avec (be)	0/ CDA
Cross Davolanable Area	Area (ha) 354.0	<b>% GDA</b> 100%
Gross Developable Area		100%
Natural Area	78.4	
Net Developable Area	275.6	
Public Open Space		
Schools	7.8	3%
Parks and Open Space	16.5	6%
Stormwater Management	3.3	1%
Total	27.6	10%
Public Dedication		
Stormwater Management* (PUL)	11.0	4%
PUL	5.3	2%
Circulation	60.0	22%
Total	76.3	28%
Intstitutional		
Religious Assembly	4.9	2%
Other Sites	0.0	0%
Total	4.9	2%
Commercial	3.4	1%
Residential		
Single Detached	117.0	42%
Townhouse/Row Housing	17.0	6%
Medium Density	26.0	9%
Main Street Mixed Use	3.4	1%
Total	163.4	59%
<b>Total Developable Area</b>	275.6	100%

<sup>\*</sup> Excludes the area of stormwater management that is considered public open space.



**Table 3 Unit & Population Projections** 

	Area (ha)	Units/ ha	# of Units	People/ Unit	Projected Population
Low Density	117.0	22	2,574	3.0	7,722
Townhouse/Row Housing	17.0	50	850	2.5	2,125
Medium Density (Apartment)	26.0	100	2,600	2.0	5,200
Main Street Mixed Use	3.4	90	306	2.0	612
Total	163.4		6,330		15,659

Note: estimates are based on net density (net developable area).

Net Density (excludes natural area, parks, PUL, roads)

People/ha	Units/ha	Units/ac
96	39	16

Net Community Density (excluding natural area, parks, PUL, roads)

39 units/ha (16 units/ac) and 96 people per ha

Note: The above unit and population estimates are for servicing purposes. It is recognized that for implementation purposes the following density ranges are acceptable: low density 15-30 units/ha, townhouse 30-65 units/ha, medium density 70-100 units/ha, and mixed use 30-90 units/ha.

### 5 TRANSPORTATION NETWORK

The collector road network is shown on Figure 7.

#### 5.1 Road Network

The transportation network does not include a typical hierarchical collector road network. There are key roads that will be collectors, but the local road system will be in a general grid pattern to distribute traffic uniformly rather than concentrating it to the collector roads.

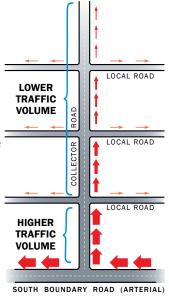
Cimarron is a compact urban community unlike adjacent conventional suburban communities. The higher than typical density will generate high traffic volumes on the collectors near the arterial intersections. It is recognized that the current public perception may not have progressed to an urban transportation network with high traffic volumes, but it is anticipated that community expectations will evolve as development occurs and the benefits of compact community are realized.

As previously mentioned the use of a grid pattern for the local road network is important because it will partially mitigate the higher traf-

fic volumes by dispersing traffic from the collectors to the local roads. Additionally, a grid network provides multiple navigation routes which will further reduce traffic volumes on the collector network. The traffic volumes expected on the collectors will still fall within the City's standards and the intent is to retain a high level of livability along these roadways through careful design of the cross sections.

The plan includes the extension of existing collectors and the construction of new ones to service the community. Intersections at South Ridge Drive and South Boundary Road will provide access to the community. Additional land is required and will be dedicated to accommodate the ultimate configuration of South Ridge Drive and South Boundary Road.

The transportation network for the extreme far west end of the plan area will be determined by future studies as the ultimate connections to Highway 3 and the network configuration west of Seven Persons Creek are unknown at this time. Additionally, the transportation network will have to accommodate the planned water transmission line in the area. Adjustments to West Ridge Trail in the future to recognise the ultimate transportation network configuration west of the Seven Persons Creek will not require an amendment to this plan.





The traffic quickly disperses and is distributed onto local road grid network.

## 5.2 Walkable Community

In order to achieve the desired pedestrian streetscape various design measures will be incorporated within the development. It is anticipated that the primary strategies will be road narrowings (bump-outs), median islands with plantings, on-street parking, tighter corner radius, separate sidewalks, and street trees.

#### 5.3 Transit Station

The Cimarron transit station will be a collection and transfer point for transit riders from the surrounding communities. Additionally, due to the transit orientated development immediately surrounding the station there is a substantial amount of residents, and businesses in proximity to the station.

#### 5.4 Arterial Road Access

#### South Boundary Road

Cimarron will have six all-turns accesses at approximately 400 m intervals on South Boundary Road. The number and spacing of intersections on South Boundary Road does not match the current functional plan for the roadway, but they are required to accommodate the compact community. As a result of the intersection spacing it is anticipated that the posted speed limit on South Boundary Road will be 50-60 kph. It is expected that the intersections on South Boundary Road will be signalized. At 400 m intersection spacing reasonable signal progression is achievable.

The current South Boundary Road Functional Study Update (completed in June 2005) determined that the road was to function as a south bypass route between Highway 1 and 3 at an expressway standard with 800 m intersection spacing and 80 kph speed limit adjacent to Cimarron. Considering smart growth and a significantly more compact growth node the requirements of South Boundary Road are no longer consistent with the South Boundary Road Functional Study Update. As a consequence of the adjacent compact development it is more appropriate for South Boundary Road to function as an urban arterial servicing a greater population and mix of uses than previously contemplated.

#### South Ridge Drive

There are two all-turns accesses on South Ridge Drive. This is generally consistent with the South Ridge Drive Functional Study (completed in January 2005), with the exception of a four leg intersection at Vista Dr. rather than a T intersection. The function and speed limit of South Ridge Drive remains unchanged. It is anticipated that both the intersections will be signalized at full buildout.

#### 10<sup>th</sup> Ave Connection

The City's current Roadways Master Plan does not contemplate a connection at 10<sup>th</sup> Ave SW over the Seven Persons Creek. The decision to establish a connection through the Seven Persons Creek valley will be completed independently of this ASP, by the City and the decision shall be reflected in the conceptual scheme for the affected lands. At this time two connections through the Seven Persons Creek valley is not contemplated only the connection at Highway 3 is planned.

#### 5.5 Objectives and Policies

#### Objectives:

• Ensure adequate land is provided for the ultimate development of the adjacent arterials.

- Ensure that collector roadways accommodate the expected vehicular traffic.
- Provide local roads to service the majority of individual lots.
- Ensure the community is accessible to a variety of transportation modes.
- Ensure that the plan area can be efficiently serviced by public transit by providing a site dedicated to a major public transit station.
- Develop a road network that accommodates pedestrians.

The following policies apply to the Transportation Network in the plan area:

- 5.6.1 Roadway cross-sections located within the plan area shall be consistent with the Municipal Servicing Standards with the exception of designs which improve walkability. The anticipated alternatives include sidewalk widths (wider), bump-outs, curb radii (tighter), and low volume local road cross sections (reduced pavement widths).
- 5.6.2 Additional unanticipated roadway alternatives to the Municipal Servicing Standards, can be considered and accepted by the City without an amendment to the ASP.
- 5.6.3 Land adjacent to South Ridge Drive and South Boundary Road shall be dedicated as road widening as required.
- 5.6.4 Block length within Cimarron should not be greater than 200m. Short to medium length blocks promote walkability and provide multiple routes for vehicular and pedestrian trips.
- 5.6.5 The local road system shall allow for a number of routes linking destinations. Multiple navigation opportunities through the community will improve vehicular and pedestrian accessibility.
- 5.6.6 Roads, lanes, roundabouts, road narrowings, and bump-outs will be designed to accommodate solid waste collection, emergency service, maintenance, and transit vehicles.
- 5.6.7 A public transit route shall be within 400 m of 90% of all residents.
- 5.6.8 The public transit station shall be placed in proximity to Main Street. The siting, and configuration shall be determined at the detailed design stage to the satisfaction of the City.
- 5.6.9 An appropriate road cross-section that recognizes the urban characteristic and compact development of the South Growth Node communities shall be explored if a connection is construct-



ed over the Seven Persons Creek at 10<sup>th</sup> Ave SW. However such a change shall be considered as an amendment to the ASP given the potential impacts on the land use and transportation.

5.6.10 The location of right-in/right-outs onto the arterial network shall be considered at the conceptual scheme level.

### 6 SERVICING

The servicing concept is displayed in Figure 8.

#### 6.1 Water

A portion Cimarron can be serviced by extending the existing 300 mm main in Vista Drive and looping it with the existing 200 mm main at the intersection of South Boundary Road and Southridge Drive east of the development.

The plan area will ultimately be serviced by a new water transmission line to be constructed within the South Boundary Road right-of-way from the west of the development.

The ultimate development will include emergency connections to the Saamis Heights, and South Vista Heights water networks to provide a backup supply in either direction.

#### 6.2 Sanitary

The City's southwest sector sanitary trunk and forcemains will be extended within South Boundary Road to service the southwest sector lift station and a separate local main will be routed through the community to service the lands north of South Boundary Road. Approximately 100 ha of the plan area will be drained by gravity through this local main.

The western 18 ha of the plan area will drain by gravity to the existing lift station within the Seven Persons valley. This lift station has been appropriately sized to accommodate the catchment area.

The balance of the lands will drain by gravity to a new lift station. A forcemain from this lift station to the local gravity main will be required. The final location of the sanitary lift station and alignment of the forcemain will be determined in discussion with the City and land owners at the conceptual scheme level.

#### 6.3 Storm

A small portion of the subject lands, in the southeast corner, will drain to the existing stormwater management facility in South Vista Heights. The South Vista Heights stormwater management facility drains east to the Bullshead Creek. The facility and pipes have been constructed to accommodate this area.

The rest of the community will be serviced by six stormwater management facilities. Stormwater management facilities 1-4 (ponds) will accommodate the stormwater flow from the majority of the plan area. Ponds 1-4 share one outfall to the Seven Persons Creek. This outfall was constructed and appropriately sized to accommodate the storm flows from the catchment areas.

The southwest portion of the plan area will be serviced by Ponds 5-6. These two facilities will share a new outfall to the Seven Persons Creek.

#### Low Impact Development

Wherever possible low impact development strategies should be utilized. The design and construction of the stormwater conveyance systems shall respect environmentally sensitive areas. The storm system should retain existing drainage patterns to ensure vegetation and habitat is not disrupted by development.

A progressive stormwater management system (low impact development) is more sustainable and less damaging to the natural environment. Cimarron will:

- retain as much as possible the natural topographic structure of the Naismith Coulee and other finger coulees;
- retain as much as possible the natural vegetation found in the Naismith Coulee and other finger coulees by retaining natural drainage patterns;
- utilise portions of open space (parks, boulevards) for stormwater storage and infiltration; and
- reuse stormwater runoff for irrigation.

### 6.4 Shallow Utilities

The shallow utilities will be extended from the existing adjacent neighbourhoods. These utilities will be placed underground, and the developer will grant rights-of-way. Alternative non-typical shallow utility alignments will be required to implement the pedestrian corridors.

#### 6.5 Solid Waste Collection

Solid waste collection for multifamily residential sites will be serviced by both public and private solid waste collection providers dependent on individual site layouts and level of service requirements. The low density residential areas will be serviced by the City. As stated in Sec-



tion 5.6 roads and lanes will be designed to accommodate solid waste collection vehicles.

#### 6.6 Customized Design



Alternative bollard, trails surface, & fence.

Customized design recognizes that in certain site specific instances designs could be engineered to create a better and more efficient community. Customized design requires additional engineering, but the end result is an efficient design that specifically addresses the particular development's constraints and opportunities.

Customized design not only leads to more efficient designs, but it also creates unique high quality areas which aid in establishing a sense of place.

Examples of where customized design could be explored include:

- road cross sections (low volume local roads);
- street lighting;
- sidewalks (wider);
- pedestrian surfaces (i.e. paving stones, etc.);
- bollards;
- low impact stormwater management;
- utility alignments; and
- street furniture.

Customized design should be explored in all aspects of design.

### 6.7 Objectives and Policies

#### Objectives:

- Ensure the community has adequate and reliable servicing infrastructure.
- Ensure that the servicing systems meet the level of service envisioned in the City of Medicine Hat and Alberta Environment standards.
- Provide the opportunity for customized design.

 Provide the servicing infrastructure in an economically efficient manner.

The following policies apply to Servicing in the plan area:

- 6.7.1 Servicing infrastructure shall be designed to the level of service envisioned in the City of Medicine Hat and Alberta Environment standards.
- 6.7.2 Customized designs which provide better and more context based designs should be applied where technically possible.
- 6.7.3 The developer is encouraged to explore the most cost efficient servicing options available.
- 6.7.4 The developer shall take into consideration the long term operation and maintenance cost, to the City, when evaluating servicing options.
- 6.7.5 Wherever possible, stormwater management facilities and utility corridors shall accommodate passive recreation opportunities.
- 6.7.6 Site specific geotechnical investigations shall be conducted to determine the ultimate locations and design of the stormwater management facilities.
- 6.7.7 The stormwater management system shall, where possible, utilise portions of parks and open space within the community as part of a progressive stormwater management strategy.
- 6.7.8 Infrastructure shall be designed to accommodate lands outside of the plan area where appropriate.

## 7 URBAN ECOLOGY

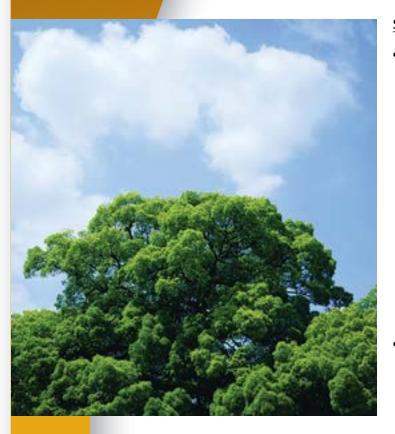
Cimarron will be an environmentally progressive community with a comprehensive sustainability strategy. The strategy is broad and involves multiple scales of development from community to dwelling/ building scales.

### 7.1 Community Strategies

The detailed design of the community provides the working component of the community fabric, and thus the design can establish a sustainable framework. Designing a sustainable community can be accomplished with the design of the overarching systems, but also through small site specific design elements, which together can reduce the impact of urban development.

The community sustainability strategies are listed below.





#### Smart Growth

- Compact development. Less land is required for urban development which means more land is retained for environment and agricultural uses. Additionally a compact community reduces the amount of infrastructure required, reduces the length and frequency of vehicular trips, and increases the efficiency of service provision (i.e. community services, public transit, etc.). Cimarron will be developed at a gross density of 22 units/ha (net density of 39 units/ha) as compared to adjacent lower density developments (i.e. South Vista Heights) which is at a density of 11 units/ha (net density of 20 units/ ha).
- Mixed use. By providing retail and office opportunities in the community residents have less reason to leave the community and as a result vehicular trips are reduced or shortened.
- Walkable design. By ensuring the community is pedestrian friendly people are encouraged to walk/bike which reduces vehicular dependence.

#### Sustainable Community Design

- Sustainable open space and park design. Xeriscaping is the practice of utilizing landscaping which can thrive in the local environment. Sustainable landscaping reduces the financial and resource costs associated with traditional landscaping, and conserves water. In addition, sustainable landscaping focuses on naturally occurring vegetation, thus recognizing the local place.
- Street trees. Street trees aid in carbon dioxide capture, and they reduce the energy required to cool buildings in the Summer months as they reduce passive solar heating. Also, street trees have a positive social impact and make communities more walkable.
- Alternative water supply for irrigation. Water is a valuable resource in Southern Alberta, and thus utilizing non-potable water for irrigation of parks and open space reduces the amount of potable water required for park irrigation. Non-potable water sources available include SMRID water and water treated from stormwater manage-

ment facilities. There are a number of precedents in the City which use non-potable water to irrigate public and private parks and open spaces.

- Protecting natural areas. As previously noted the lower portion of Naismith Coulee is a valuable environmental area. An overland stormwater conveyance in Naismith Coulee (rather than a piped system) allows the existing sensitive vegetation to retain its water supply, and the animal species are retained as their habitat is preserved. An overland conveyance can be constructed with minimal disturbance as compared to a piped system.
- Transportation network. Roundabouts at key locations can reduce vehicle stops and starts, and provide geometric barriers to slow traffic.
- Subdivision design. Designing individual lots to accommodate a flatter grade for the front and rear yards of the lots will increase and encourage stormwater infiltration, and reduce stormwater peaks. Thus, stormwater is recharged into the ground rather than being conveyed by a piped system.
- Solid waste diversion and collection. Cimarron is a green community and an important aspect to achieving a sustainable community is diverting and reducing the solid waste generated both during construction and after. Additionally, the community designs should be flexible to accommodate future innovative solid waste diversion and collection service provision. Innovative strategies that may be incorporated include; multiple bin sorting, automated pick-up, communal collection points, yard waste management and curb side recycling. If a need is identified by the City, the developer and City will work collaboratively to select a suitable site to accommodate a recycling facility at a future stage of development.

### 7.2 Building/Dwelling Strategies

The building/dwelling strategies are listed below.

#### Low Density Residential

Green homes. Building using 'green' design, materials, and methods reduces the energy required to construct and operate a building while using recycled materials, and local products. An energy efficient building is in the long-term best interest of the home owner and the community, in terms of financial costs and overall resource management. There are several recognized benchmarks for building energy efficient dwellings, these include the Built Green standard set by the Built Green Society of Canada, and Leadership in Energy and Environmental Design (LEED) set by the Canada Green Building Council. The City recognizes the Built Green stan-

dard as the local benchmark preference.

- *Progressive stormwater management*. Rain gardens, rain barrels, and cisterns on private lots can reduce the stormwater runoff and retain and utilise the water for plantings. This conserves potable water as it reduces irrigation needs of private lot owners.
- Impervious surfaces. Impervious surfaces (i.e., driveways, sidewalks, etc) cover a substantial portion of private lots, and as a result stormwater is forced to drain into the storm system in the street, rather than being infiltrated into the ground. By limiting the proportion of impervious surfaces more stormwater will infiltrate into the ground, and stormwater peaks will be reduced.

#### **Multifamily Residential**

- *Progressive stormwater management*. Rain gardens and cisterns designed into multifamily projects can reduce the potable water irrigation requirements for watering private park space.
- Green building technologies. Multifamily developments can incorporate green building technologies (green roofs, geothermal heating/cooling, solar, energy efficient mechanical systems, low flow fixtures, etc.) to become more sustainable.

## 7.3 Objectives and Policies

#### Objective:

 Provide the underlying foundation of the community to reduce the impact on the natural environment at both the community and building scales.

The following policies apply to the Urban Ecology section:

- 7.3.1 The landscaping of the public parks and open spaces shall feature xeriscaping principles as per the City of Medicine Hat Xeriscaping Guidelines. Plantings shall include Chinook tolerant and drought resistant species which are sustainable in local climate conditions.
- 7.3.2 Street trees along the pedestrian corridors shall be planted to reduce solar heating during the Summer and capture carbon dioxide.
- 7.3.3 The stormwater management system shall incorporate where possible best management practices to reduce the impact of urban development.
- 7.3.4 Non-potable water (i.e. SMRID water, stormwater) shall be used to irrigate public parks and open space where technically pos-



sible.

- 7.3.5 The stormwater conveyance system through the Naismith Coulee and other finger coulees shall be overland wherever possible rather than a piped system. The conveyance system shall be designed and constructed to mitigate negative environmental consequences.
- 7.3.6 Local roads should be placed to maximise passive and active solar designs.
- 7.3.7 Roundabouts shall be used in key locations to reduce vehicle emissions.
- 7.3.8 The front, and rear yards of individual lots should, where walkout lots are not possible, be designed to accommodate decreased lot grades in accordance with Alberta Environment Best Management Practices.
- 7.3.9 Single detached dwellings shall be built to an environmental standard equivalent to a minimum of the Bronze level of the Built Green standard. Dwellings will be certified as Built Green Bronze level or provide verification that the standard has been met.
- 7.3.10 Multifamily developments shall incorporate progressive stormwater management (rain garden and/or cisterns, etc.) on the site. Implementation will occur at the development permit stage.
- 7.3.11 Multifamily developments should wherever possible incorporate green building technologies (green roofs, geothermal, solar, energy efficient mechanical systems, low flow fixtures, etc.).
- 7.3.12 Community designs should be flexible to accommodate future innovative solid waste diversion and collection programs and services.

# 8 COMMUNITY HEALTH & SAFETY

Fire protection for Cimarron will be provided primarily from the Airport Sub Fire Station #3, and other stations as required. With the current station locations and road network the plan area is outside of the travel time identified by the Medicine Hat Emergency Services Functional Study. Emergency Medical Services (EMS) and police services will be carried out from their respective existing locations.

In addition to the fire, police and emergency services the health and safety of a community can be enhanced through design. Therefore the





design of the public realm (i.e. roads, parks, trails, etc.) should consider the utilisation of crime prevention through environmental design (CPTED) principles. Elements of CPTED include the consideration of providing spaces with natural surveillance, landscaping, lighting, and other elements.

#### Objectives

- Ensure that the community is sufficiently served by protective and emergency services.
- Ensure Cimarron is designed to be a safe community for residents.

The following policies apply to Community Health and Safety in the plan area:

8.1.1 CPTED principles shall be considered in the design of public and private spaces.

## 9 RESOURCE EXTRACTION

Within the plan there are active gas wells and pipelines. These resource extraction facilities need to be protected to ensure they remain viable and to ensure public safety.

#### 9.1 Active Wells

The Municipal Government Act Subdivision and Development Regulation states:

Gas and Oil Wells

- 11(1) A subdivision application or development application shall not be approved if it would result in a permanent additional overnight accommodation or public facility, as defined by the ERCB, being located within 100 meters of a gas or oil well or within a lesser distance approved in writing by the ERCB.
- (2) For the purposes of this section, distances are measured from the well head to the building or proposed building site.
- (3) In this section, "gas or oil well" does not include an abandoned well as defined by the ERCB.
- (4) An approval of the ERCB under subsection (1) may refer to applications for subdivision or development generally or to a specific application. (2002, p. 12)

The Subdivision and Development Regulation reflects the Energy Resources Conservation Board's (ERCB) recommendation requiring a minimum setback distance of 100 m from the wellhead of non-sour

gas wells. The building of occupied structures is prohibited and certain surface improvements may be restricted within this setback distance. An application can be made by the City of Medicine Hat to the ERCB for the consideration of a setback relaxation to allow the placement of certain occupied structures and surface improvements closer than 100 m, but no closer than 50 m, to the well head. All applications are reviewed individually, must be approved in writing by the ERCB (who has the discretion to either approve or reject any application), and be acceptable to the well's licensee. If a setback relaxation to allow residential uses within the 100 m setback is not granted by the ERCB then the park spaces will be expanded accordingly.

This ASP designates open space/parks, stormwater management facilities and road allowances within the 50 m or 100 m setback area. This is consistent with the Subdivision and Development Regulation stating that no permanent overnight accommodation or public facility will be created within the setback area. At the time of subdivision and development the proposed uses will be reviewed by the City of Medicine Hat and the well licensee to ensure consistency with this ASP and the Subdivision and Development Regulation requirements.



## 9.2 Abandoned Wells

The ERCB recommends that permanent structures are setback at least 5 m from abandoned wells, and underground utilities to be setback at least 3 m. The City of Medicine Hat requires a minimum setback area (distance to be determined on a per site basis including an access area) around an abandoned well which must be incorporated into any development plans. In the event that well servicing is required to the abandoned well in the future, no permanent structures will be allowed within this setback area or the access lane. To document this abandoned well setback area and the access lane, at the time of subdivision or development permit stage and at the applicant's expense, the applicant will provide a registered easement to the City. Possible land uses that incorporate abandoned gas wells include boulevards, road allowances, parking lots, open storage areas, parks, open space, and playing fields. Appropriate land uses for abandoned wells will be determined at either the subdivision or development permit stage and must be approved by the City of Medicine Hat with the consent of the well licensee. If it is determined that the well sites are to be seeded, a course grass mixture will be utilised that meets the approval of the City.



## 9.3 Pipelines

For all ERCB licensed pipelines (including abandoned pipelines), the minimum setback distance is the edge of the right-of-way. If the pipeline is not contained within a right-of-way, and development takes place within 10 m of the pipeline, the minimum setback distance will be reviewed and approved on a per site basis by the City.

While it is never advisable to place any form of permanent or temporary structure within the setback distance area, some land uses may be compatible. Acceptable land uses typically allowed would be cultivation, certain storage yards, walkway/paths, road crossings, playgrounds, berms and parking lots. The pipeline licensee must first approve any use within the setback distance area.

## 9.4 Objectives and Policies

#### Objective:

- Ensure the continued viability of resource extraction within the plan area.
- Relocate resource extraction infrastructure to allow for efficient urban development.
- Provide adequate separation to ensure public health and safety.

Resource Extraction shall be provided in accordance with the following policies:

- 9.4.1 In accordance with the Alberta Subdivision and Development Regulation development shall respect the setbacks from resource extraction infrastructure (i.e. well heads).
- 9.4.2 Resource extraction companies are encouraged to remove and reclaim abandoned facilities.
- 9.4.3 Pipelines and rights-of-way servicing resource extraction activities should be located so they do not unnecessarily constrain urban development.
- 9.4.4 Resource extraction infrastructure will be relocated where possible to allow for efficient urban development. The cost of relocation shall be at the developer's expense.
- 9.4.5 The owner of affected resource extraction infrastructure will be consulted during the detailed design process to ensure continued maintenance access is accommodated.
- 9.4.6 ERCB minimum recommendations regarding setbacks from abandoned wells shall be maintained.



## 10 IMPLEMENTATION STRATEGY

## 10.1 Community Maintenance

This plan includes more public community amenities than found in conventional neighbourhoods in Medicine Hat, and therefore Cimarron will require additional maintenance compared to the conventional surrounding neighbourhoods.

There are a number of benefits to the residents and the City as a whole realized with the proposed community amenities. The benefits include a higher quality of life for residents due to the pleasant and livable environment and the establishment of a distinct sense of place. Additionally, the amenities aid in encouraging residents to reside in a compact community (smart growth). Compact development is a highly desirable land use form in terms of sustainability, but with it a higher level of amenities are required to offset the greater population to ensure the quality of life is maintained.

The amenities within Cimarron will result in higher maintenance costs for the City than a typical low density community. Some of the proposed amenities which will require additional City maintenance include:

- More hard landscaped park spaces;
- park amenities (i.e. fountains, gazebos, clock tower, etc.);
- · street trees in the boulevards; and
- · snow clearance on main street.

Cimarron is a compact community that utilizes half of the land that conventional neighbourhoods in Medicine Hat require per resident. Thus, generally, there is half the amount of roads, parks, and pipes in Cimarron per resident compared to surrounding communities. Although the maintenance costs of Cimarron will be higher on an area basis as compared to surrounding neighbourhoods they will not be higher per resident. Thus, if maintenance is analyzed on a per resident basis rather than a community basis then the cost to maintain Cimarron per resident will be less or equal to that of the surrounding conventional neighbourhoods while achieving the desired smart growth.

#### Objective:

- To ensure the developer incorporates community amenities which accommodate compact development.
- To ensure the City recognizes and commits to equally fund community infrastructure on a per capita basis.



Community Maintenance shall be provided in accordance with the following policies:

- 10.1.1 The developer will incorporate high quality public community amenities within Cimarron with the goal of encouraging compact development (smart growth).
- 10.1.2 The City will commit the resources required to maintain the community amenities with the understanding that it encourages compact development (smart growth).
- 10.1.3 The additional maintenance is not intended to be higher than the per capita amount of the existing conventional neighbourhoods within the City.

## 10.2 Implications for Other Plans and Bylaws

Amendments to the Land Use Bylaw needed to implement the Area Structure Plan shall only be considered for areas in which there is an approved conceptual scheme. Future Land Use Bylaw amendments must be consistent with the policies of this Area Structure Plan and its implementing conceptual schemes.

## 10.3 Conceptual Scheme

This plan addresses future development in general terms. Prior to redistricting and subdivision it will be necessary for the City to consider, and if acceptable approve, conceptual schemes that provide specific policy detail and implementation measures related to that particular phase within the context of the ASP.

#### Objective

• Establish a general plan for a specific development area prior to redistricting and subdivision.

Conceptual schemes shall be provided in accordance with the following policies:

- 10.3.1 Prior to the approval of districting or subdivision that would allow development to proceed, conceptual schemes shall be prepared by the developer to the satisfaction of the City.
- 10.3.2 Each conceptual scheme will provide the detail required consistent with the City of Medicine Hat Municipal Planning Process.

  Conceptual schemes will address among other items the following: land use, transportation/transit, servicing, customized design, resource extraction setback application, design guidelines, and conceptual layouts for Main Street and multi-family.
- 10.3.3 Council may consider individual site re-districting proposals

- where such proposals satisfactorily demonstrate that the ability to implement future conceptual schemes is not compromised.
- 10.3.4 New Land Use Districts shall be created in the Medicine Hat Land Use Bylaw that accommodate the requirements of compact development.

## 10.4 Development Sequence

The development sequence is displayed in Figure 9.

The development sequence is designed to accommodate flexibility, changes in the local market, and servicing constraints.

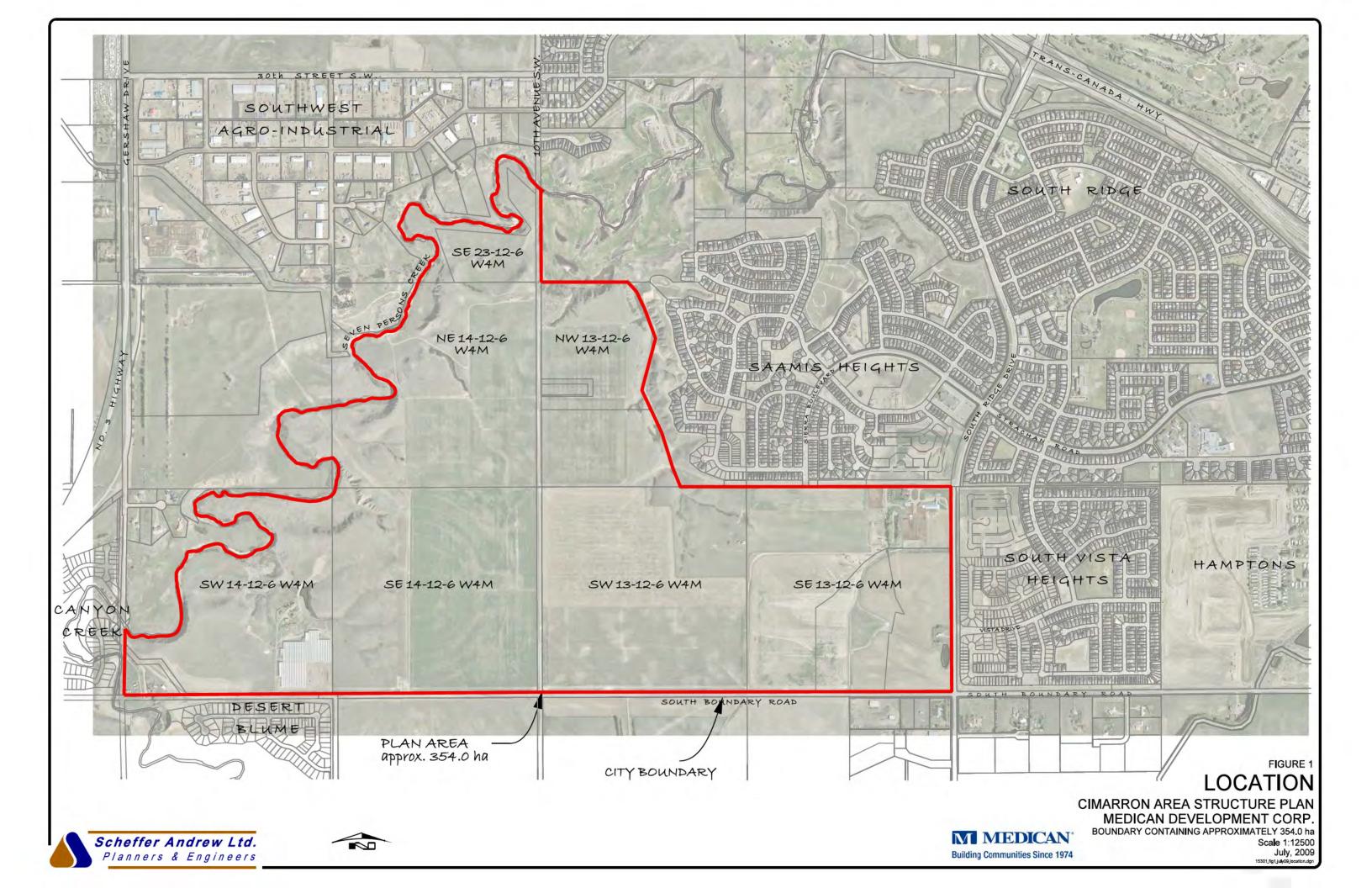
Although the development sequence allows for flexibility the servicing constraints, site constraints (dairy farm remediation), must be respected.

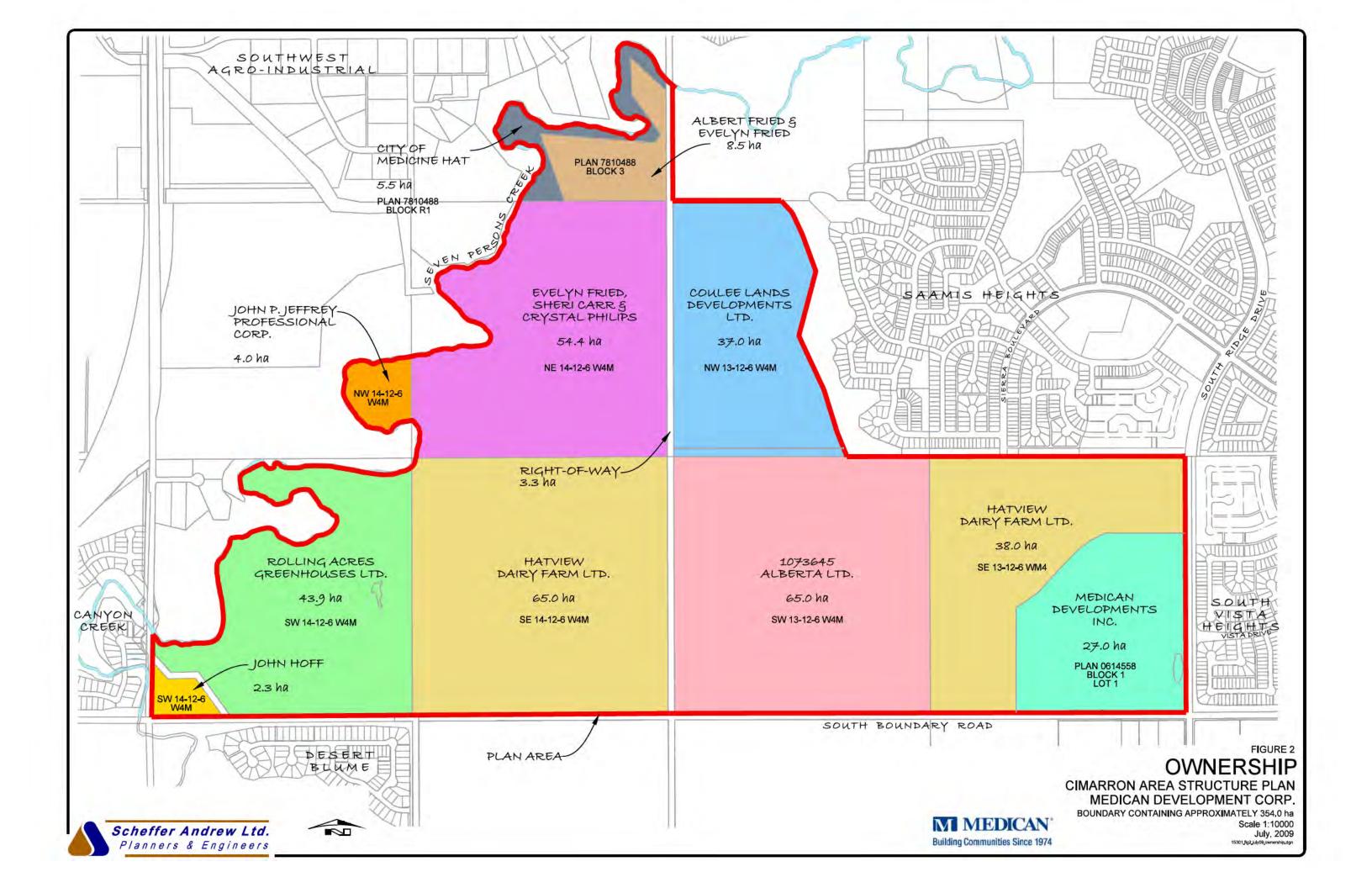
#### Objective

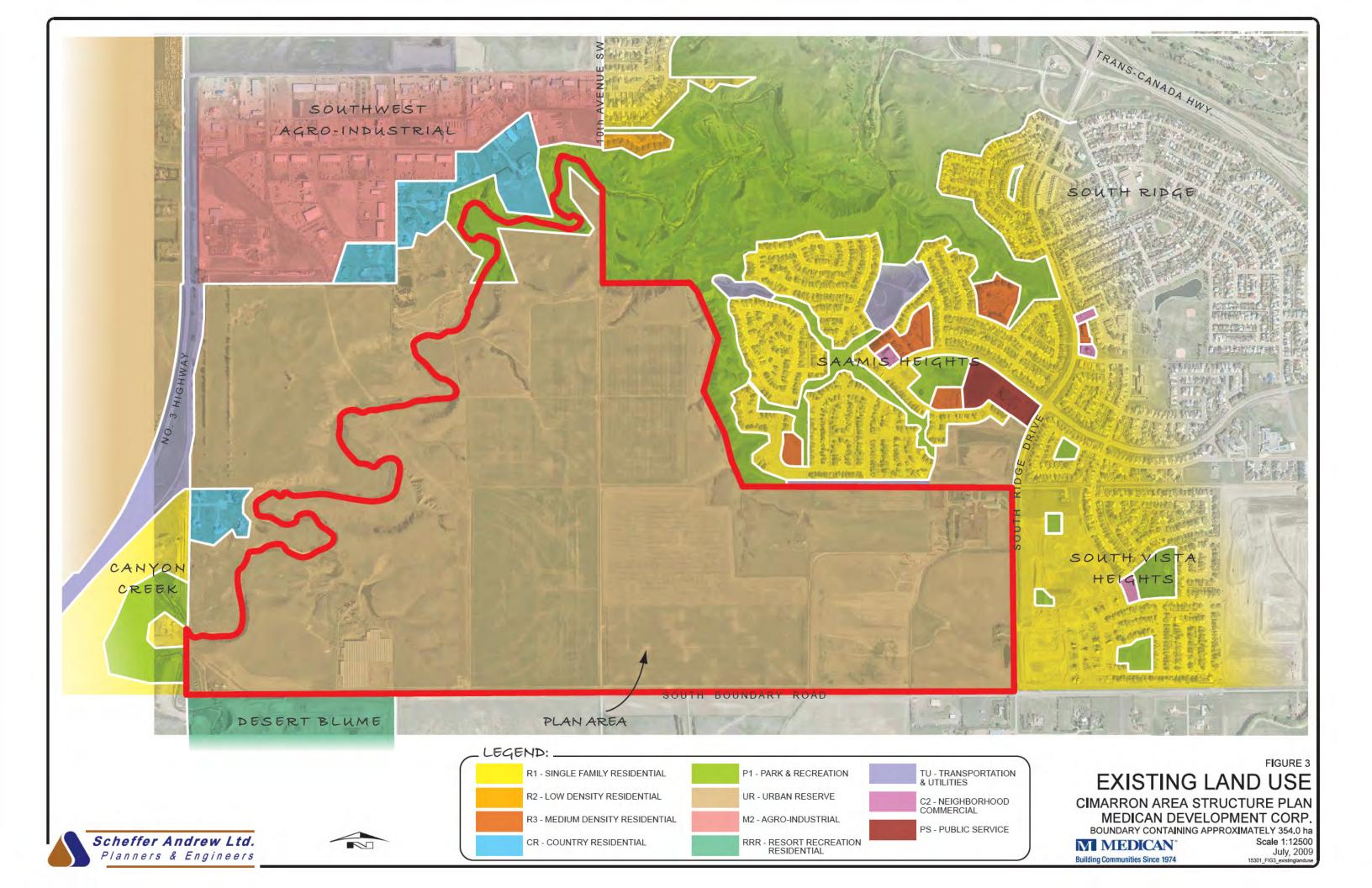
• Ensure that development occurs in an efficient and economical fashion.

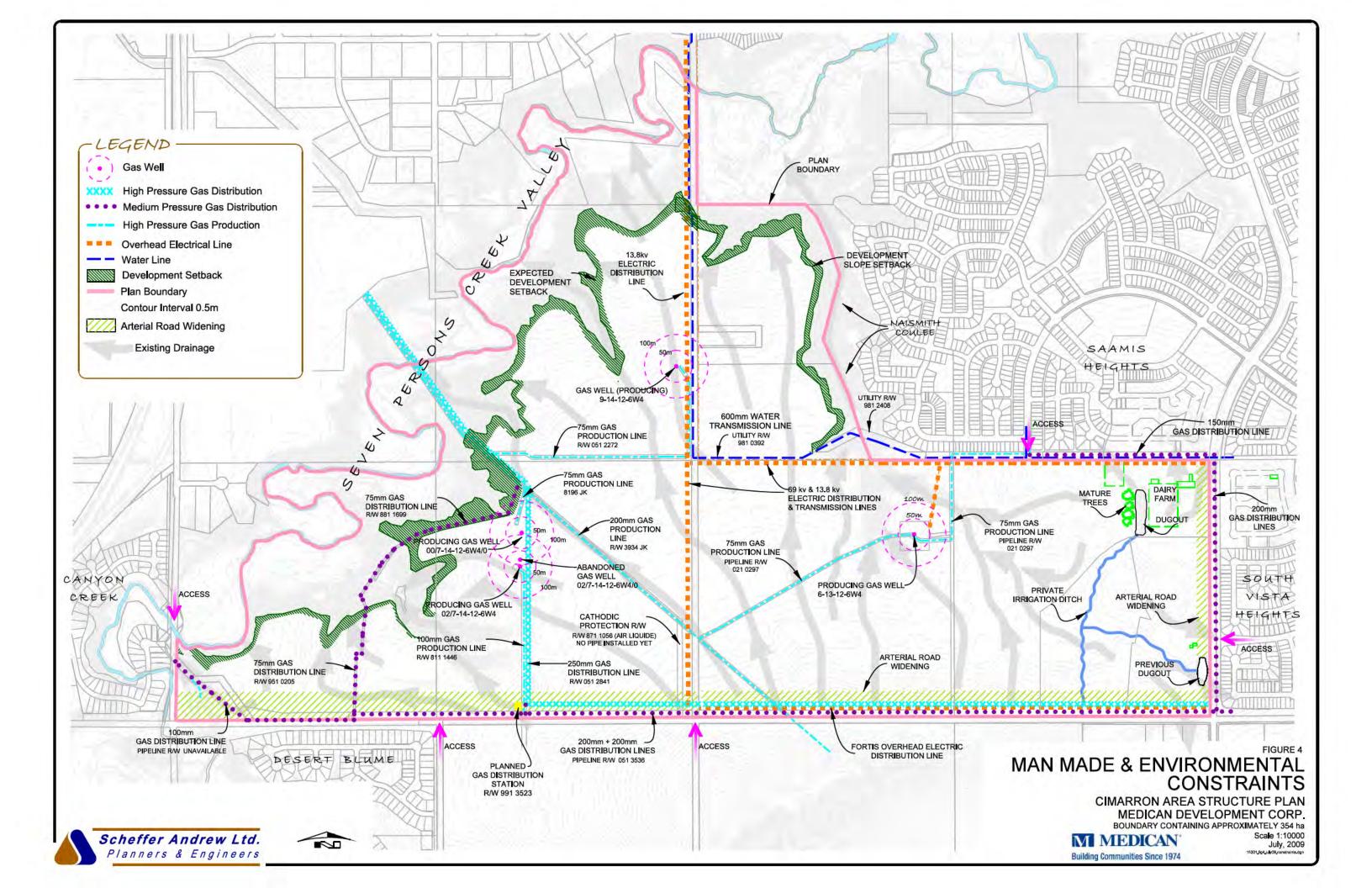
The development sequence shall be provided in accordance with the following policies:

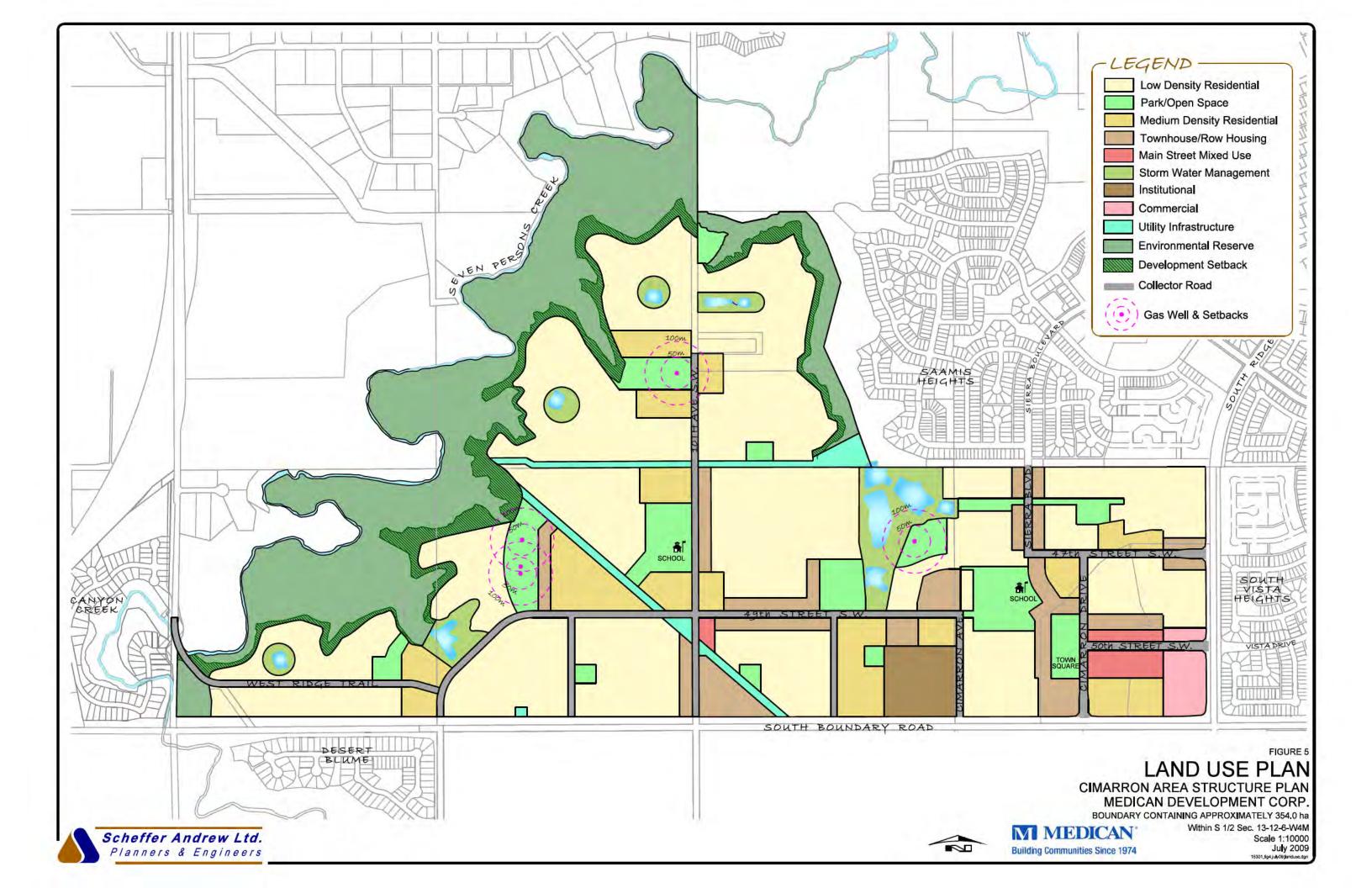
- 10.4.1 The size of the development stages should be based on market conditions and servicing constraints.
- 10.4.2 Conceptual schemes for each of the phases shall be completed prior to commencement of subdivision and development.
- 10.4.3 The phase boundaries and direction of development shall respect servicing and site constraints.
- 10.4.4 At the conceptual scheme level more detailed sub-phases shall be established based on servicing and market considerations.

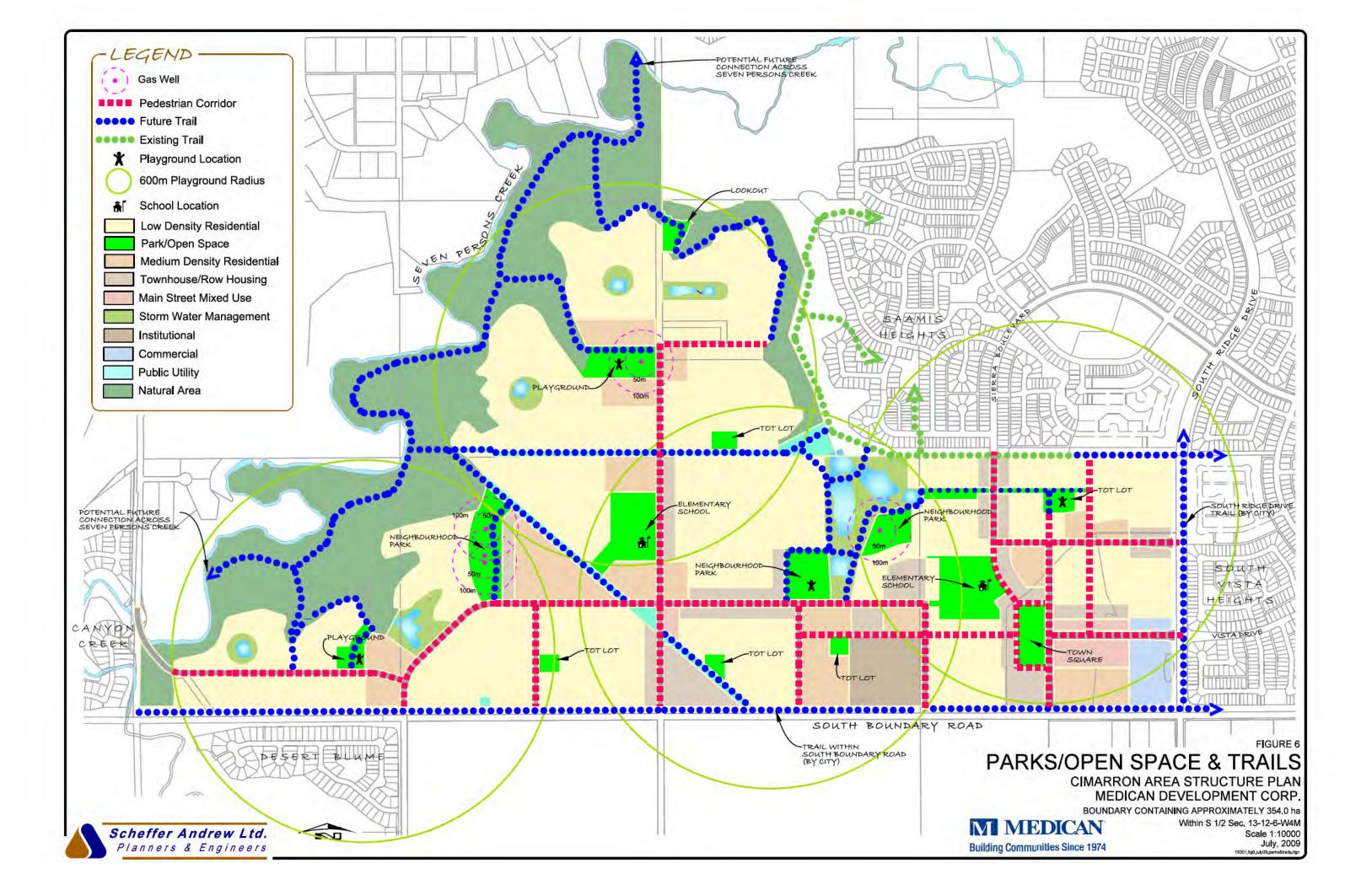


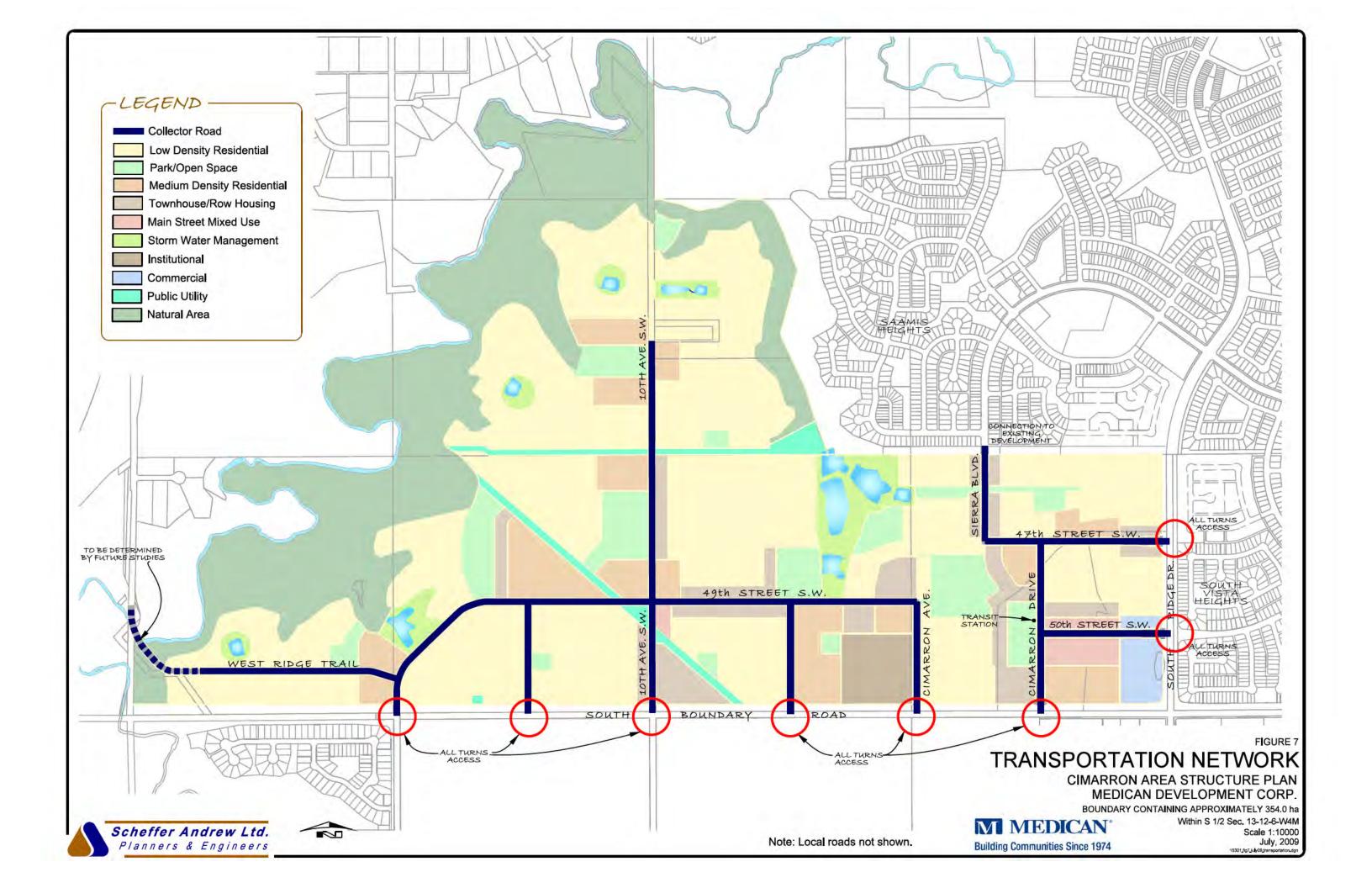


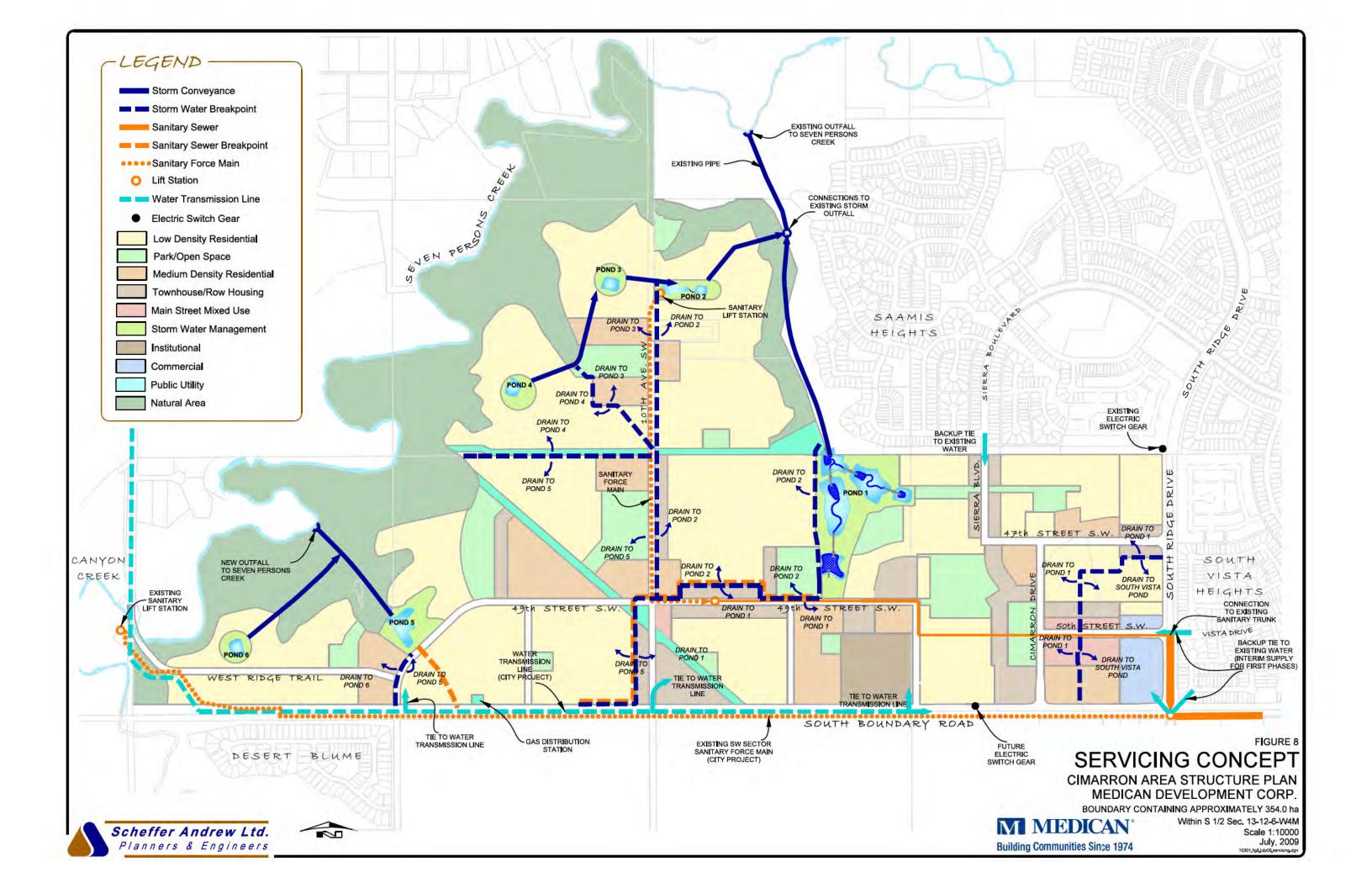


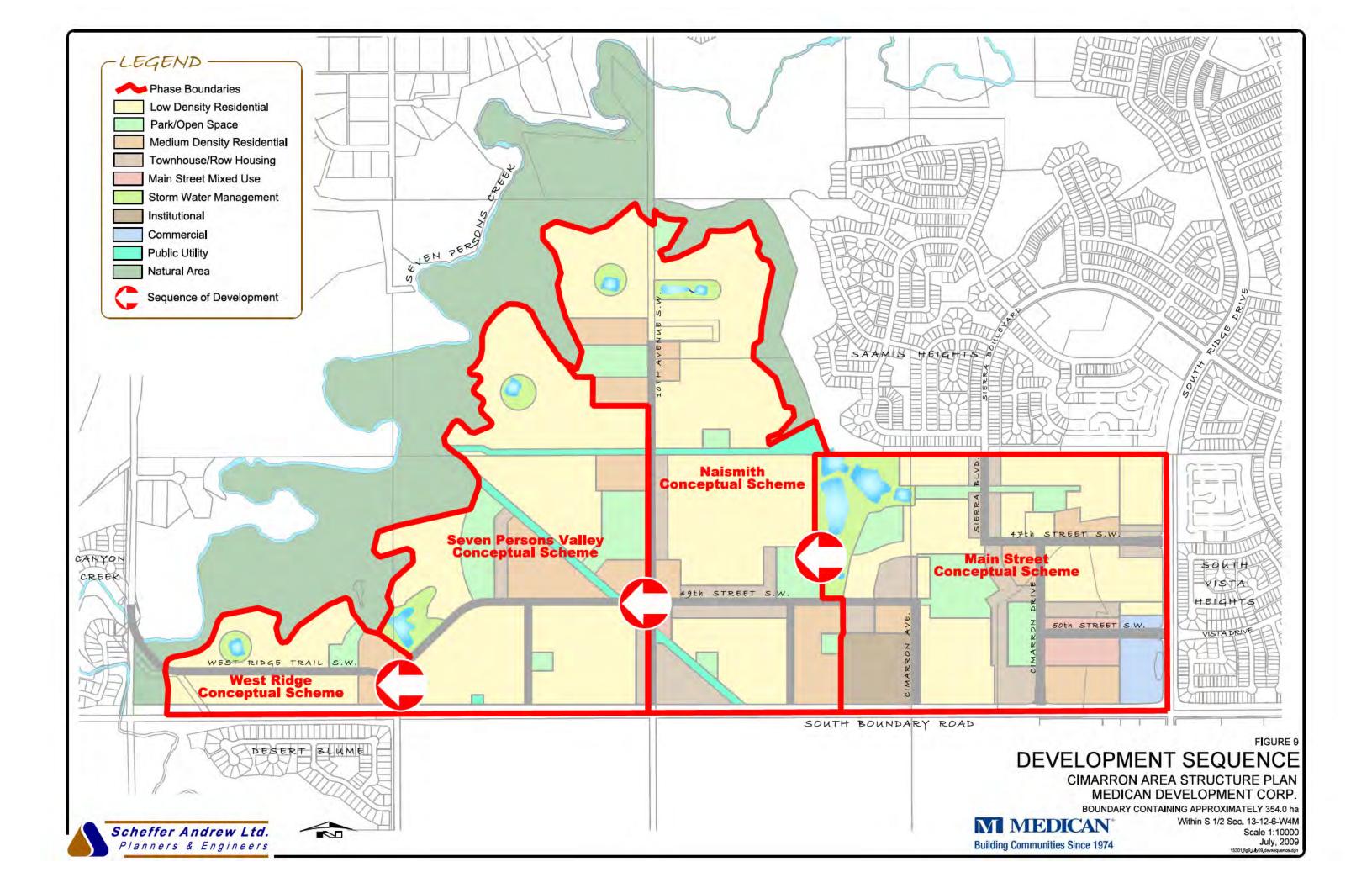












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