BURNSIDE HEIGHTS AREA STRUCTURE PLAN



BY-LAW NO: 2531

BEING A BY-LAW OF THE CITY OF MEDICINE HAT to amend By-law No. 1989 being the City of Medicine Hat Land Use By-law; and to adopt the Burnside Heights Area Structure Plan.

WHEREAS Section 64 of the Planning Act R.S.A. 1980, c. P-9, as amended, empowers the council of a municipality to pass by-laws adopting area structure plans to control the subsequent development and subdivision of lands within areas of a municipality;

AND WHEREAS the General Municipal Plan By-law of the City of Medicine Hat designates the Burnside Heights lands as an area suitable for an area structure plan;

AND WHEREAS it is deemed desirable to establish servicing requirements of the Burnside Heights lands and co-ordinate these requirements with the Burnside Heights Area Structure Plan;

AND WHEREAS it is deemed necessary to amend By-law No. 1989 being the City of Medicine Hat Land Use By-law, by reclassifying the Burnside Heights lands from agricultural to such classifications as are indicated in the Burnside Estates Area Structure Plan:

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

1. This By-law may be cited as the Burnside Heights Area Structure Plan By-law.

- 2. The document attached to and forming part of this By-law, entitled the Burnside Heights Area Structure Plan, is hereby adopted as an area structure plan pursuant to Section 64 of the Planning Act R.S.A. 1980, c. P-9, as amended.
- 3. By-law No. 1942 is hereby amended by including the Burnside Heights Area Structure Plan lands in those various classifications as shown in Figure 7 on page 12 of the Plan.
- 4. By-law No. 1989 is hereby amended by including the Burnside Heights Area Structure Plan lands in those various classifications as are listed in Figure 17 on page 28 of the Plan.
- 5. This By-law shall take effect as of the date of the final reading thereof.

READ A FIRST TIME IN OPEN COUNCIL THIS 21

day of April A.D., 1987

READ A SECOND TIME IN OPEN COUNCIL THIS

29 day of June A.D., 1987

READ A THIRD TIME AND FINALLY PASSED IN OPEN COUNCIL THIS 29 day of June A.D., 1987

BURNSIDE HEIGHTS AREA STRUCTURE PLAN

Prepared for

The City of Medicine Hat

by the Staff of the

Southeast Alberta Regional Planning Commission

Adopted 29 June 1987

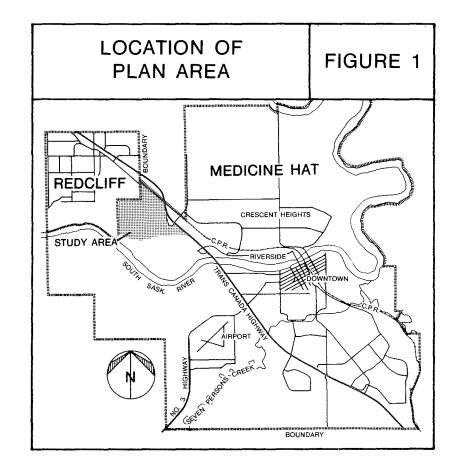
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1.0 INTRODUCTION

The Southeast Alberta Regional Planning Commission has at the request of the City of Medicine Hat, prepared this area structure plan for the land shown in Figure 1, commonly known as Burnside Heights. Based on the principle of making the most efficient and best possible use of land, the development concept formulated for the study area provides for a wide range of development opportunities, commensurate with both the natural and man-made features of the area. The area structure plan also includes a plan of subdivision for the Burnside Heights neighbourhood.



1.1 PURPOSE

The purpose of this area structure plan is to provide a detailed development concept for Burnside Heights in accordance with the policies established by City Council in the Medicine Hat General Municipal Plan and other relevant development guidelines. To this end, the key features of the area have been identified and incorporated into the following objectives to provide a guideline in the preparation of the plan:

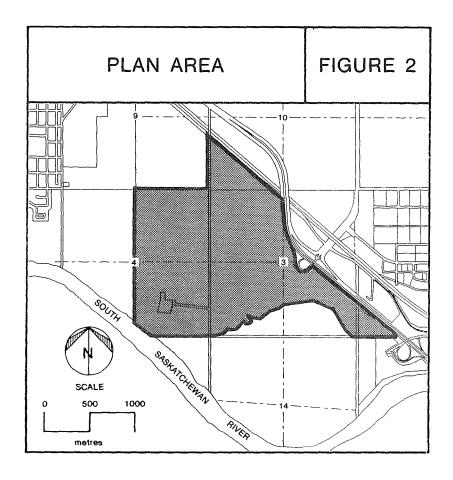
- To ensure that the pattern of land use reflects any development opportunities afforded through the area's proximity to the Trans Canada Highway, major arterial roads, and the river valley escarpment.
- 2. To ensure that the placement and design of roads in the area forms rational linkages to Burnside Estates, Redcliff, Crescent Heights and the Trans Canada Highway.
- 3. To ensure that the design of utility systems take into account possible oversizing requirements with respect to adjacent developments in Burnside Estates and Redcliff.
- 4. To ensure that the river valley escarpment is appropriately integrated with the future development of the area as well as with the parks system and protected with appropriate development setbacks.

1.2 PLAN AREA BOUNDARIES

The land included in this plan is situated in the northwest part of the City of Medicine Hat, just north of Burnside Estates, southwest of the Trans Canada Highway and southeast of the Town of Redcliff (Figure 2). The following are legal descriptions of the property which covers approximately 307 hectares (759 acres):

- (1) PN SW 1/4 Section 2-13-6-W 4th
- (2) PN of Section 3-13-6-W 4th
- (3) PN E 1/2 Section 4-13-6-W 4th
- (4) PN SW 1/4 Section 10-13-6-W 4th

The subject land is owned by the City of Medicine Hat, except for a small privately owned 2.5 hectare (6.2 acre) parcel which is located along the escarpment in the extreme southwest corner of the plan area.



1.3 HISTORIC BACKGROUND

The City of Medicine Hat established a land bank for development purposes in the depression years of the early 1930's when large tracts of land reverted to the City through tax recovery procedures. Over time, the City has purchased additional land to maintain its land bank in an operationally sound position. In accordance with the land banking policy, portions of land in Sections 2, 3, and 10 were purchased in the 1960's and a portion of Section 4 was purchased in 1980. An interesting footnote to the history of the area is that some of the land in Section 4 was subject to an ambitious subdivision plan undertaken by developers who had part of the area subdivided into lots in the early 1900's.

In 1974, the Medicine Hat-Redcliff Growth Study outlined two growth alternatives pertaining to the direction and the size of growth for the City. The recommended alternative included the development of Burnside which was to start by 1976 with the area being fully developed by the mid-1980's. This recommendation, which would have required further investigation with respect to the integration of services with Redcliff, was not approved by City Council at that time. Instead, the other alternative which recommended the immediate development of the southeast sector of the City was accepted, and the strategy was formally adopted in 1979 in conjunction with the Medicine Hat General Municipal Plan.

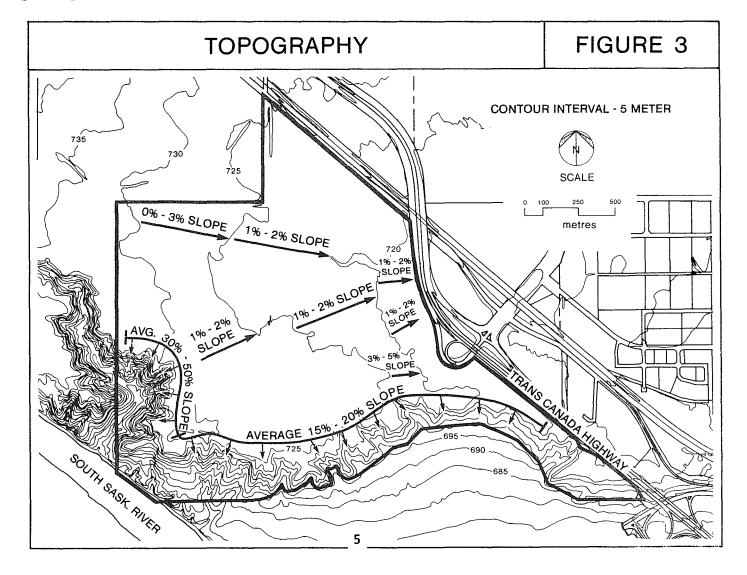
Under the General Plan, the development stages of the City are related to population thresholds rather than specific time lines. Burnside Heights is scheduled for development in Stages 3 and 4 which require threshold populations of 57,905 and 76,295 respectively.

2.0 SITE ANALYSIS

2.1 TOPOGRAPHY

The majority of that portion of Burnside Heights which is located above the river valley escarpment is relatively flat (Figure 3). Beginning in the northwest section of

the plan area, the land slopes gently at a 1 to 2 percent grade to the southeasterly corner where it is almost flat. Between these two areas of the plan there is a total elevation change of 20.6 metres.



The escarpment which covers approximately 77 hectares (109 acres) and runs along the southern boundary of the area slopes toward the river at an average grade of between 15 to 20 percent. A small area along the western boundary adjacent to Redcliff exceeds 20 percent and approaches 50 percent while a number of areas in the southeast portion are slightly below 15 percent.

Generally the slope of the land above the escarpment does not present any significant limitation to the development of that area. The river valley escarpment, however, should only be used for park purposes in accordance with the City of Medicine Hat Open Space Policy. Also with respect to the escarpment, careful consideration is required when locating road linkages with the Burnside Estates Area.

2.2 SOILS, VEGETATION AND WILDLIFE

The plan area is covered by primarily sandysilty loam which is part of the brown soils group. This group of soils were developed by weathering and biological actions on the deposits of post glacial sand and silt and while limited in organic material, are well supplied with minerals.

The majority of the site is covered in native prairie grass consisting mainly of buffalo grass, spear grass and fescus. The south facing slopes, which are subject to intense sunlight, are covered with prickly pear and cushion cactus. In the coulees along the escarpment area there are sparse growths of sage and buck brush. On the most westerly portion of the site, land is irrigated and used to produce crops.

The site, which in part is used as pasture land for cattle, supports a number of antelope and deer as well as a variety of smaller prairie animals.

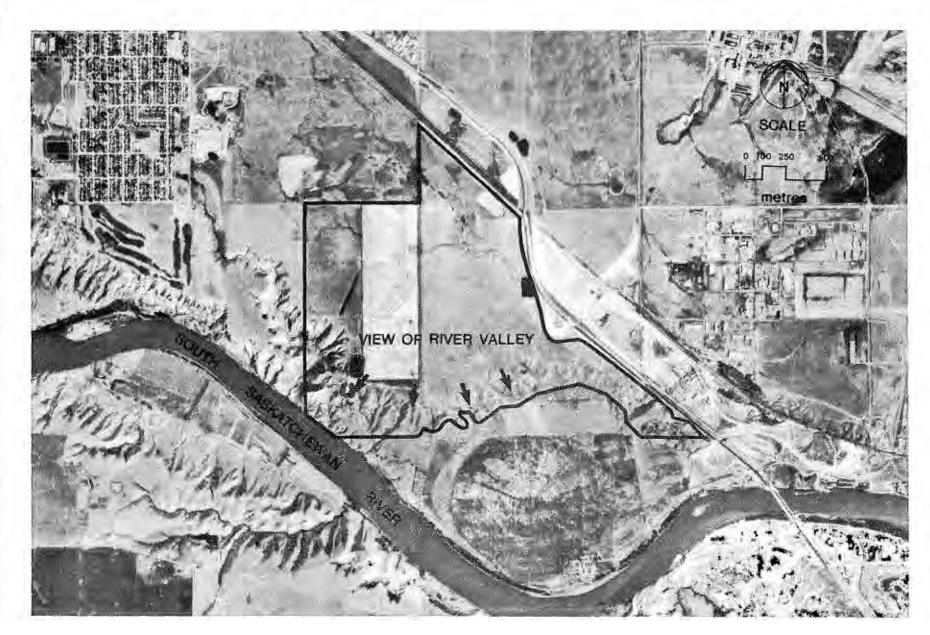
Presently, the natural vegetation and wildlife of the area is subject to man-made pressure originating in agricultural pursuits, resource extraction and adjacent urban development. It is expected that the natural vegetation and wildlife of the area will be effected by the proposed urban development. To ease the impact of the development, the escarpment area should be protected from development thereby allowing the preservation of the area's natural characteristics as much as possible.

2.3 VISUAL ANALYSIS

The escarpment area affords a number of excellent views of the South Saskatchewan River Valley and Echo Dale Regional Park and some other parts of the City (Figure 4). It should be noted that with the area at the top of the escarpment being relatively flat,

VISUAL ANALYSIS

FIGURE 4



the views are lost quickly as you move away from the ridge of the river valley. To take advantage of excellent views near the escarpment, a special effort is made to include view lots in the subdivision and development plans.

2.4 EXISTING LAND USE

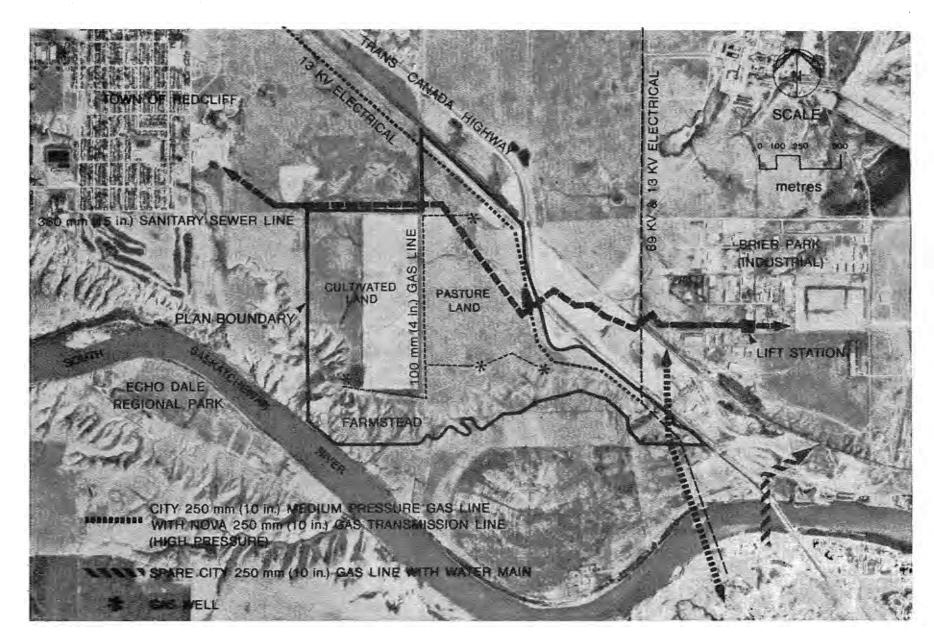
Currently, the majority of the area is used for agricultural purposes (Figure 5). A portion of land in the east half of the area is irrigated farmland and the balance of the area is used for the grazing of cattle. Other land uses include seven gas wells and connecting pipelines, a thirteen kilo volt overhead powerline along the east boundary, a 380 milimetre (15 inch) sanitary sewer line along the east boundary and a farmstead located in the extreme southeast corner. At the present time, the land adjacent to the plan area is undeveloped and is being used for agricultural purposes.

2.5 ARCHAEOLOGICAL SITES

During site inspections of the area a number of teepee rings were identified along the top and bottom of the river valley escarpment. At the time of subdivision an archaeological impact study of the plan area will be required. Once the study is completed, the significant archaeological sites may need to be incorporated into the subdivision design for the area.

EXISTING LAND USE

FIGURE 5

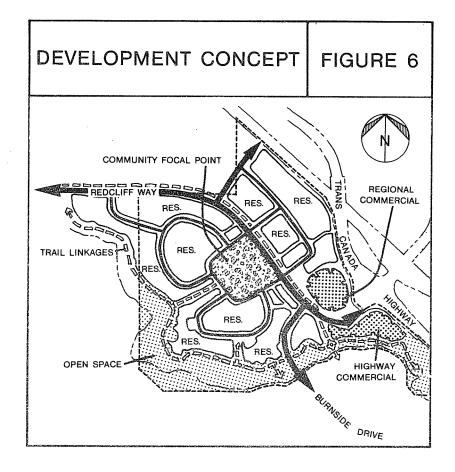


3.0 DEVELOPMENT CONCEPT

Based on the physical characteristics of the area, access from the Trans-Canada Highway and the locational advantages of the area, the development concept formulated for Burnside Heights is shown in Figure 6.

A fundamental aspect of this concept is the provision of a neighbourhood and community focal point around which the residential component in the plan area is located. The focal point consists of a major park and both the separate and the public school sites to form a 16 hectare (40 acre) site which is centrally located. The proposed school facilities combined with the recreational opportunities and potential aesthetic features of the park should provide an excellent facility to be used by the residents of Burnside Heights and adjacent neighbourhoods. This focal point also forms a crossroads from which pedestrian and park linkages provide reasonable access for residents of Burnside Heights to designated open space areas.

Other major components of the plan include the development of major commercial facilities in the southeast corner of the area which will function at a regional level with respect to the provision of goods and services. Directly south of the Box Springs Intersection a highway commercial site is shown to provide services to the travelling



public on the Trans-Canada Highway. The land in the area just south of the intersection of Burnside Drive and Redcliff Way has been designated as a Direct Control area which means a decision with respect to its specific use and development can be made at a future date. It is anticipated, however, that uses such as institutional, private recreational or commercial could be located on the site.

With respect to land use for child care facilities, group homes or religious institutions, a public/semi-public area is shown to the northwest of the pubic school site. The requirement of land for such uses should be reviewed at the time of subdivision and if necessary, additional sites should be designated prior to the actual development of the area.

3.1 LAND USE PLAN

Figure 7 outlines the details of the land use plan which is based on the general development concept as described above. Table 1 provides a statistical summary of land uses, reserve areas and road rights-of-way.

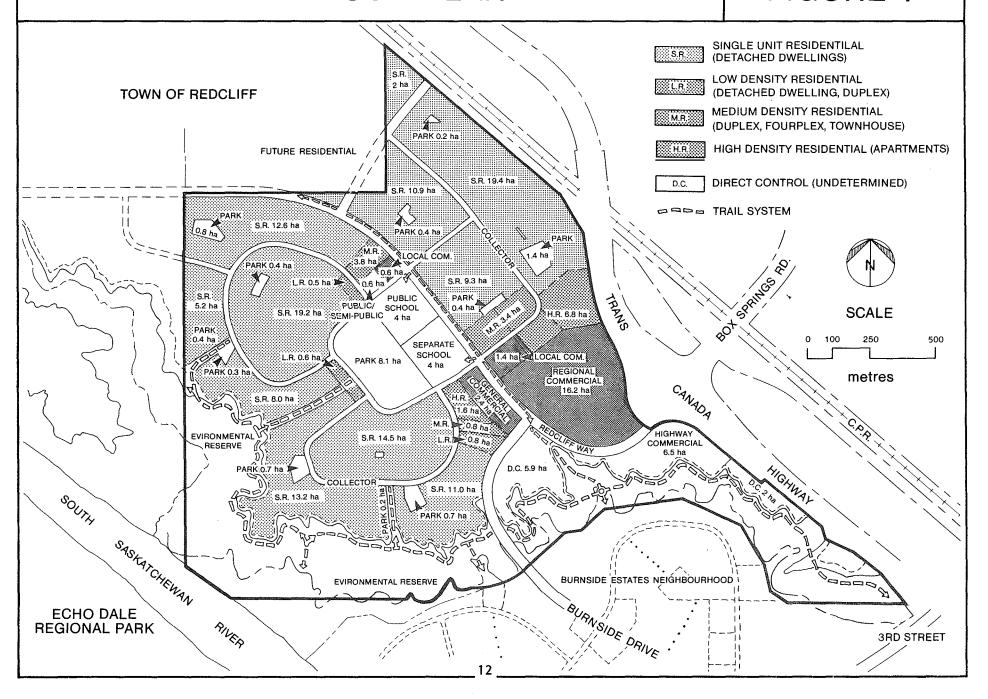
The major land use components of the Plan are described below in detail.

Table 1
<u>Statistical Summary of Land Uses</u>

		% of
Land Use	Area in Hectares (Ac)	Developable <u>Land</u>
Total Plan Area	307.0 (759.0)	
Slopes Setbacks Environmental Reserve	77.0 (190.0) 5.0 (12.0) 82.0 (202.0)	
Total Developable Land	225.0 (557.0)	100.0
Single Unit Res. Low Density Res. Medium Density Res. High Density Res. Total Residential	125.7 (310.7) 2.7 (6.6) 5.8 (14.5) 6.2 (15.4) 140.4 (347.2)	55.8 1.2 2.6 <u>2.8</u> 62.4
Regional Commercial Highway Commercial Local Commercial Total Commercial	16.2 (40.0) 6.5 (16.0) 4.4 (11.1) 27.1 (67.1)	7.2 2.9 2.0 12.1
School Sites Amenity Parks Neighbourhood Parks Community Parks Total Reserve	8.1 (20.0) 1.8 (4.5) 5.0 (12.5) 8.1 (20.0) 23.0 (57.0)	$ \begin{array}{r} 3.6 \\ .8 \\ 2.2 \\ \underline{3.6} \\ 10.2 \end{array} $
Arterial Roads Collector Roads Total Roads	10.2 (25.4) 11.1 (27.6) 21.3 (53.0)	4.6 5.0 9.6
Public/Semi-Public Direct Control Utility/Buffer Total Other	0.6 (1.5) 9.1 (22.5) 3.5 (8.8) 13.2 (32.8)	.2 4.0 1.5 5.7

LAND USE PLAN

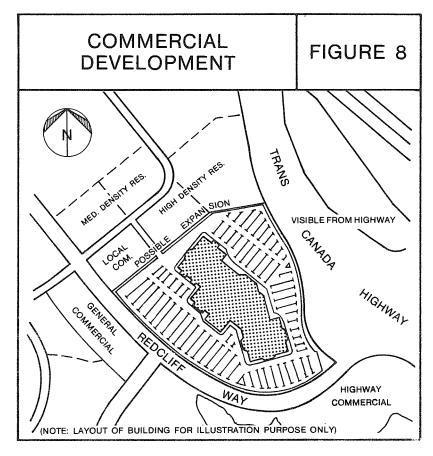
FIGURE 7



A. Commercial Land Use

A major regional commercial site is designated on the northwest side of the Box Springs intersection (Figure 8). The site has exceptional exposure and access to the Trans Canada Highway, as well as being located adjacent to an arterial road which will provide linkages to the trade areas of Redcliff, Burnside Estates and Crescent Heights. The site, which is approximately 16 hectares (40 acres) in area, could accommodate a major mall development in excess of 30,000 square metres and if required, could be expanded to include land immediately to the north and northwest which is designated for multi-unit residential and commercial land use. In the event that these sites are required as part of the regional commercial site, adjustments could be made in the plan to provide additional multi-unit residential sites.

Across from the regional commercial site, on the southwest corner of the Box Springs intersection, a 6.5 hectare (16 acre) parcel is designated for highway commercial use. The proximity of this site to a major intersection on the Trans Canada highway makes it an ideal location for travel related businesses such as service stations, hotels, restaurants or a small strip mall. Adjacent to this site, a 2 hectare (5 acre) parcel which



is designated as 'Direct Control' could accommodate additional commercial development of various types. At the southwest and northeast corners of Burnside Drive and Redcliff Way two local neighbourhood commercial sites covering a total of 3.8 hectares (9.4 acres) are shown. These sites can accommodate commercial uses often associated with a major shopping centre involving higher traffic flows.

A local commercial site, which covers .6 hectare (1.5 acres), is located along Redcliff Way and adjacent to the major park area. The primary purpose of this site is to provide a small localized shopping facility for the residents of the immediate area.

B. Residential Development

The majority of residential use in the Burnside Heights area represents single unit homes. The subdivision design covering the plan area includes lots along the escarpment of the river valley area to take advantage of a number of excellent vistas and cul-de-sacs which offer a variety of lot sizes and low

traffic volumes. The plan provides opportunities for the development of a variety of housing alternatives at different densities.

Table 2 lists the area of coverage for each of the designated densities for residential development.

North of the regional commercial site, 6.8 hectares (16.8 acres) are designated for high density residential development. This area which is adjacent to a major commercial site and public transit routes is ideal for development of apartments, senior citizen housing or townhouses. Another 1.6 hectare (3.9 acre) high density site is located on the south side of Redcliff Way just south of the major park area.

Table 2
Residential Development by Type

Residential Type	Hectares (Ac)	% of Residential <u>Area</u>	Population*	Percent (Population)
Single Unit	125.7 (310.7)	90	3,728	65
Low Density	2.7 (6.6)	2	182	3
Medium Density	5.8 (14.5)	4	599	10
High Density	6.2 (15.4)	4	1,270	_22
TOTAL	140.4 (347.2)	100	5,778	100

^{*} Population estimates are based on: Single Unit - 4 units/acre and 3 persons/unit

Low Density - 10 units/acre and 2.75 persons/unit

Medium Density- 15 units/acre and 2.75 persons/unit

High Density - 30 units/acre and 2.75 persons/unit

To the northwest of the regional commercial site, a 3.4 hectare (8.4 acre) site is shown for medium density residential development. Development for this area could range from duplex to four-plexes to townhouses and apartments. Another residential medium density site located on the south side of Redcliff Way just north of the major park area. density residential sites which include single unit homes to four-plexes is shown at various locations throughout the plan area.

C. Schools

Both the Public and Separate School Boards have indicated a need for school sites in this neighbourhood. Each school board has requested a 4 hectare (10 acre) site to accommodate a grades 1 to 9 facility. These school sites are located adjacent to a major public park area to better facilitate a variety of recreation opportunities.

D. Parks and Open Space

The escarpment forms a natural boundary between development in Burnside Estates and Burnside Heights. As recommended in the Geotechnical Study which forms the basis for the City of Medicine Hat Open Space Policy, the sloping bank and a 6 metre (20 foot) development setback along most of the escarpment is shown as environmental reserve. It should be noted that along the west boundary of the plan area where slopes exceed 30% the development setback is increased to 75 metres. The environmental reserve area, along which there are panoramic views of the river valley, should be left in a natural state or it could be used for uses such as pedestrian and bicycle paths. A number of linear parks have been established to provide direct access to these open space areas and linkages to other park developments.

The major community and neighbourhood park area which is 8 hectares (20 acres) in size and is located adjacent to the public and separate school sites just south of Redcliff Way. This park is suitable for the development of major recreational facilities at the community or city-wide level. It should be developed in cooperation with the school developments to enhance the overall recreation opportunities in both the school and park areas.

To link the major parks and open space areas, a trail system is proposed. Land needed for such development adjacent to major roadways should be part of the road rights-of-way. The pathway should be paved in order to accommodate bicycles as well as pedestrians and adjacent to major

arterials it should be buffered from the road with a tree belt (see Figure 9).

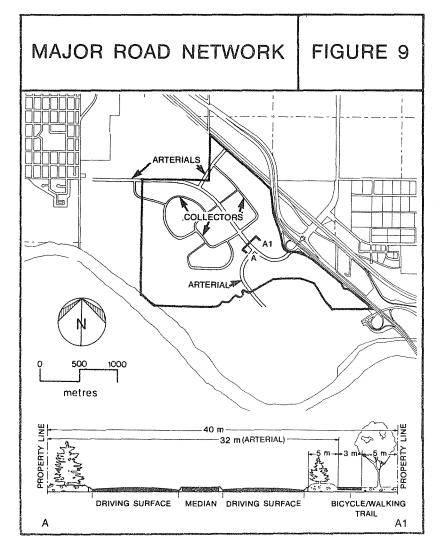
Finally, a number of smaller amenity and neighbourhood parks are located throughout the plan to provide play areas for younger children in the immediate area. The exact location of these parks is shown in the subdivision design (Figure 16).

E. Roads

A divided arterial road (Redcliff Way) is designed to pass through the plan area from the Box Springs interchange to the Town of Redcliff and serves as the transportation spine for the neighbourhood (Figure 9). Direct access from the plan area to the Trans Canada Highway will be permitted only through this arterial and interchange. Two other arterials connect with Redcliff Way; the Burnside Drive arterial which extends from Burnside Estates to an intersection immediately to the west of the shopping centre site and Redcliff Way which connects with Saamis Drive (1A Highway) in the northern edge of the plan area.

On both sides of Redcliff Way collector roads are shown which provide limited access to the arterial roads. Local residential roads will have limited access to these collectors to ensure the efficiency and safety of the system.

Lanes which are 6 metres are incorporated into most parts of the area with the

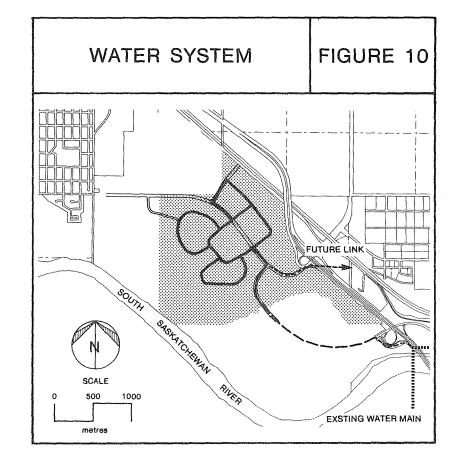


exception of lots located along escarpments, parks and major roadways. The road rights-of-way should be 40 metres wide for arterials (including an 8 metre pathway), 22 metres for collectors and 15 metres for residential streets.

F. Utilities

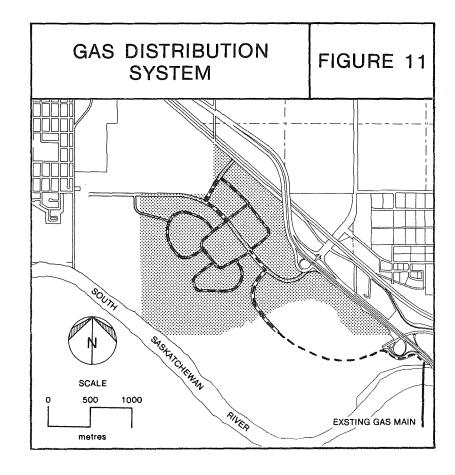
Water

To supply water to Burnside Heights, water lines will be extended north along Burnside Drive from the Burnside Estates area (Figure 10). To accommodate the development of Burnside Heights, the oversizing of the main distribution line in Burnside Estates is necessary and will be secured in conjunction with the implementation of the Burnside Estates Area Structure Plan. In addition, a connecting line may be installed under the Trans Canada Highway to Brier Park to create a looped water system for the area in the future.



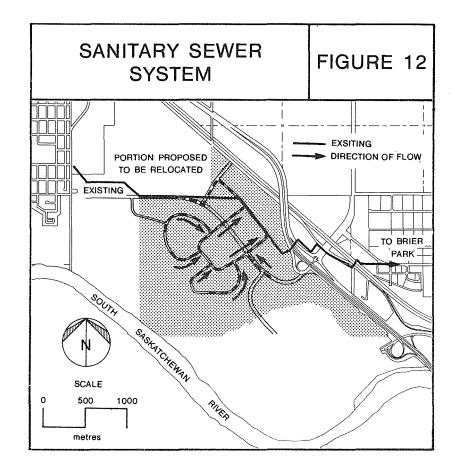
Gas

It is anticipated that the main natural gas feeder line to service this area will be extended north along Burnside Drive from the Burnside Estates neighbourhood (Figure 11). The existing gas wells and pipelines in the area would not be used as they presently feed into high pressure distribution systems. At some point in the future, the Burnside Heights system may be connected into one of these systems, but to do this, a new regulator station would be required.



Sanitary Sewer

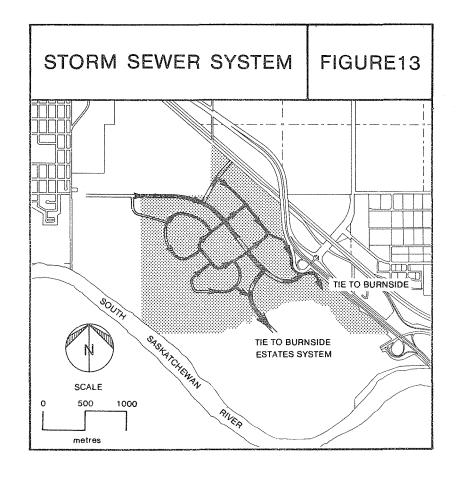
The road pattern outlined in the concept plan takes into account an existing 380 mm (15 inch) sanitary sewer line which flows to a lift station in Brier Park and is currently servicing the Town of Redcliff (Figure 12). The line has been designed to accommodate development in the Burnside Heights area. Burnside Heights will be served by a series of gravity mains which flow to this sewer line.



Storm Sewer

The slope of land in the plan area may present some difficulties for the development of a storm drainage system. A low area north of the Box Springs Interchange will require careful consideration during the design phase to ensure proper drainage is achieved (Figure 13).

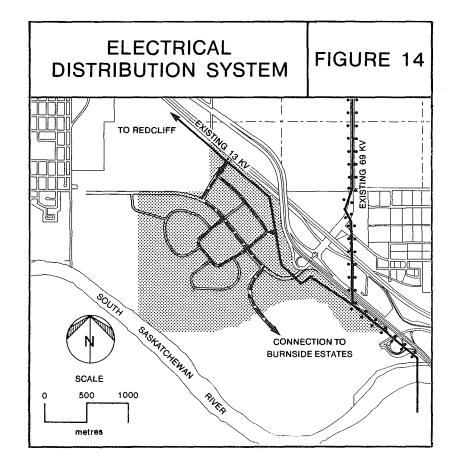
The balance of the site should present no problems and will be drained by storm mains that will follow the collectors and major arterials and empty into the Burnside Estates storm sewer system. The storm sewer requirements of this neighbourhood will require oversizing of the storm sewer in Burnside Heights. The location of the connection with the Burnside Estates system will be determined in due course.



Electric

The main electrical supply for Burnside Heights will be taken from the 13 kilovolt line which is presently feeding Redcliff. The line is located approximately 70 metres away from the edge of Saamis Drive (1A Highway) and runs parallel to the northeast boundary of the area. An underground system will be looped through the plan area and eventually connect to the circuit to be run through the Burnside Estates area (Figure 14).

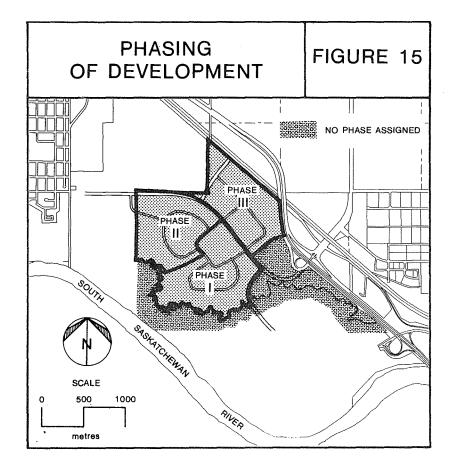
The 13 kilovolt power line presently isolates about 7.7 hectares (19 acres) of land along Saamis Drive. If the power line is moved into a narrow right-of-way closer to Saamis Drive some of this land could be used for residential development. The cost of relocating the line will have to be weighted against the revenues expected from development of the isolated land.



3.2 PHASING

The three phases of the plan, outlined in Figure 15, reflect a logical extension of major utilities into the area from the southern boundary of Burnside Heights. Phase I development includes a major block of residential land south of Redcliff Drive and adjacent to the river valley escarpment as well as the major park site and two school sites. Phase II development, which lies adjacent to Redcliff, is primarily residential with a local commercial site. Phase III is located north of Redcliff Way and includes primarily residential land, local commercial sites and several multifamily sites.

A summary of the area of the land uses in each phase of development with the exception of regional and highway commercial sites, direct control areas and environmental reserve is outlined in Table 3. The development of commercial and direct control sites which are not included as part of the phasing is more dependent on such factors as general market conditions or exposure of the site to highway traffic rather than the amount of nearby residential development. Also, since the utilities will be extended from the south side, the regional and highway commercial sites can be serviced in conjunction with Phase I and can be developed as required.



The direct control districts which lie on either side of the highway commercial site may be developed under similar conditions outlined for the regional commercial site. Table 4 provides an estimate of the number of residents which are expected in each phase of development according to residential density.

Table 3
Land Use By Phase

LAND USE	PHASE I	PHASE II	PHASE III	TOTAL
	Hectares (Ac)	Hectares (Ac)	Hectares (Ac)	Hectares (Ac)
Total Plan Area				307.0 (759.0)
Slopes Setbacks Environmental Reserve				77.0 (190.0)* 5.0 (12.0)* 82.0 (202.0)
Gross Developable Area	73.3 (181.7)	56.2 (139.3)	63.7 (157.6)	225.0 (557.0)**
Single Unit Residential	38.7 (95.7)	45.0 (111.3)	42.0 (103.7)	125.7 (310.7)
Low Density Residential	1.1 (2.8)	0.9 (2.2)	0.7 (1.6)	2.7 (6.6)
Medium Density Residential	0.9 (2.2)	1.5 (3.8)	3.4 (8.5)	5.8 (14.5)
High Density Residential	1.6 (4.0)	- (-)	4.6 (11.4)	6.2 (15.4)
Total Residential	42.3 (104.7)	50.7 (125.3)	47.4 (117.3)	140.4 (347.2)
Regional Commercial	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	- (-)	- (-)	16.2 (40.0)*
Highway Commercial		- (-)	- (-)	6.5 (16.0)*
Local Commercial		0.6 (1.5)	1.4 (3.6)	4.4 (11.1)
Total Commercial		0.6 (1.5)	1.4 (3.6)	27.1 (67.1)
School Sites Amenity Parks Neighbourhood Parks Community Parks Total Reserve	8.1 (20.0) 0.8 (2.0) 1.6 (4.0) 8.1 (20.0) 18.6 (46.0)	- (-) 0.2 (0.5) 1.8 (4.5) - (-) 2.0 (5.0)	- (-) 0.8 (2.0) 1.6 (4.0) - (-) 2.4 (6.0)	8.1 (20.0) 1.8 (4.5) 5.0 (12.5) 8.1 (20.0) 23.0 (57.0)
Arterial Roads	6.3 (15.7)	2.6 (6.5)	1.3 (3.2)	10.2 (25.4)
Collector Roads	3.7 (9.3)	3.0 (7.5)	4.4 (10.8)	11.1 (27.6)
Total Roads	10.0 (25.0)	5.6 (14.0)	5.7 (14.0)	21.3 (53.0)
Public/Semi-Public		0.6 (1.5)	- (-)	0.6 (1.5)
Direct Control		- (-)	- (-)	9.1 (22.5)*
Utility Lot		- (-)	3.5 (8.8)	3.5 (8.8)
Total Other		0.6 (1.5)	3.5 (8.8)	13.2 (32.8)

^{*} Note that as outlined in Section 3.2, Regional and Highway Commercial, Direct Control, and Environmental Reserve land uses are not designated in any phase.

^{**} Includes both phased and non-phased land.

Table 4
Summary of Population Estimates by Phase

Residential	PHASE I		PHASE II		PHASE III		TOTAL	
<u>Type</u>	Hectares (Ac)	Pop.						
Single Unit	38.7 (95.7)	1,148	45.0 (111.3)	1,336	42.0 (103.7)	1,244	125.7 (310.7)	3,728
Low Density	1.1 (2.8)	77	0.9 (2.2)	61	0.7 (1.6)	44	2.7 (6.6)	182
Med. Density	0.9 (2.2)	90	1.5 (3.8)	157	3.4 (8.5)	351	5.8 (14.5)	598
High Density	1.6 (4.0)	330	_ (_)		4.6 (11.4)	940	6.2 (15.4)	1,270
Totals	42.3 (104.7)	1,645	47.4 (117.3)	1,554	50.7 (125.2)	2,579	140.4 (347.2)	5,778

NOTE: Population estimates are based on:

Single unit - 4 units/acre and 3 persons/unit Low Density - 10 units/acre and 2.75 persons/unit Medium Density - 15 units/acre and 2.75 persons/unit High Density - 30 units/acre and 2.75 persons/unit Architectural controls should be instituted in this subdivision to ensure the development of a variety of housing styles with some common features in terms of cladding materials and colours. Proposals for consideration in high density areas should be reviewed from a number of aspects including siting of the building, vehicular and pedestrian access, parking, amenity space and compatibility with adjacent development. Wherever lots back onto major roadways or parks a common fence should be built by the developer. Such controls should lead to a more attractive residential environment in which builders will have some degree of certainty as to the nature of adjoining developments.

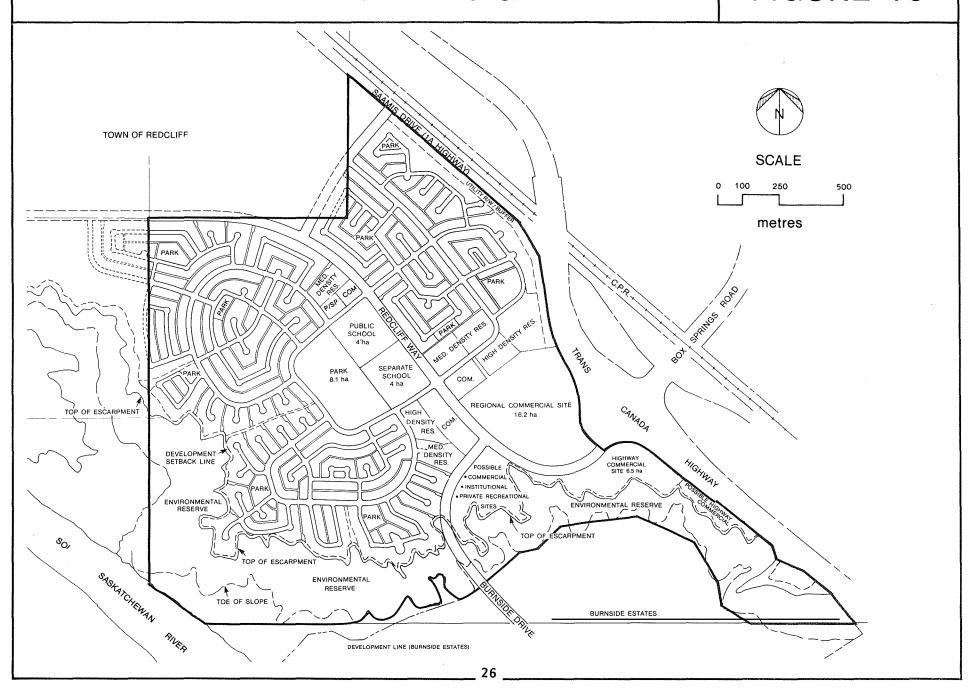
3.3 SUBDIVISION DESIGN

The attached subdivision design represents all three phases of development outlined in the Area Structure Plan (Figure 16).

The road layout and park linkages allow for public access to the escarpment areas which provide a number of excellent views of the river valley, including Echo Dale Regional Park. The road system limits the number of connections to the collector road and where possible uses 'T' intersections which are safer than 4-way intersections. The network also provides for a number of crescents and cul-de-sacs which permits very low traffic volumes in a large portion of the residential area and reduces overall servic-The layout of this subdivision ina costs. also provides a number of lots which back onto the escarpment areas and take advantage of the view of the river valley.

SUBDIVISION DESIGN

FIGURE 16



4.0 IMPLEMENTATION

4.1 ADOPTION PROCEDURE

The area structure plan must be adopted in accordance with the provisions of the Planning Act.

4.2 THE DEVELOPMENT OF BURNSIDE HEIGHTS

In the growth strategy outlined in the General Municipal Plan, Burnside Heights is scheduled for development as part of Stage III and IV with the threshold populations of 57,905 and 76,295 respectively. In the event that this area is needed for development at an early stage, appropriate amendments will have to be made to the General Municipal Plan.

LAND USE BY-LAW AMENDMENTS

FIGURE 17

