A BYLAW OF THE CITY OF MEDICINE HAT to adopt the North Sector Commercial/Residential Area Structure Plan and Conceptual Scheme, amend Bylaw No. 3184, the Municipal Development Plan Bylaw, and amend Bylaw No. 3181, the City of Medicine Hat Land Use Bylaw.

WHEREAS pursuant to Section 633(1) of the *Municipal Government Act*, S.A. 1994, Chapter M-26.1, a council may pass a bylaw for the purpose of adopting an area structure plan to provide a framework for subsequent subdivision and development of land within the City;

AND WHEREAS the re-alignment of Division Avenue North and its intersection with Parkview Drive will create an area of land, legally described as a portion of the SE Quarter of Section 12, Township 13, Range 6, W4M, and a portion of the SW Quarter of Section 7, Township 13, Range 5, W4M (hereinafter referred to as the "subject lands"), that can be developed for commercial and residential purposes;

AND WHEREAS an application has been made to adopt an Area Structure Plan and Conceptual Scheme for the subject lands and to make necessary amendments to the Municipal Development Plan, and Land Use Bylaw;

AND WHEREAS an Area Structure Plan and Conceptual Scheme referred to as the North Sector Commercial/Residential Area Structure Plan and Conceptual Scheme has been prepared for the subject lands and is attached as Schedule "A" to this bylaw;

AND WHEREAS it is considered appropriate to adopt the North Sector Commercial/Residential Area Structure Plan and Conceptual Scheme;

**AND WHEREAS** this area is not identified in the Municipal Development Plan growth strategy nor has this area been the subject of an Area Structure Plan;

AND WHEREAS the subject lands are presently designated as UR "Urban Reserve District" under the City of Medicine Hat Land Use Bylaw;

**AND WHEREAS** an application has been made to re-designate the subject lands as C-3 "General Commercial District", R-3 "Medium Density Residential District", R-2 "Low Density Residential District", R-1 "Single Family Residential District", DC "Direct Control District" and TU "Transportation and Utilities District under the City of Medicine Hat Land Use Bylaw, as shown on Schedule "B" to this bylaw;

**AND WHEREAS** the requirements of the *Municipal Government Act* S.A. 1994, Chapter M-26.1 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* S.A. 1994, Chapter M-26.1;

**AND WHEREAS** a public hearing with respect to this Bylaw was held in the Council Chambers at City Hall on the 16<sup>th</sup> day of October, 2000, at 6:30 p.m.;

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

- The North Sector Commercial/Residential Area Structure Plan and Conceptual Scheme, attached as Schedule "A" to this bylaw, is adopted.
- Bylaw No. 3184, being the Municipal Development Plan Bylaw is amended by:
  - (a) deleting the second paragraph in the section entitled "STAGE I / 1999 2004", on page 33 of the Municipal Development Plan and replacing it with the following:

"This stage would provide for an additional population of 6,550 between 1999 and 2004, bringing the total population of the City to 55,200. During the same time, the total dwelling units will grow by 2800 units."

- (b) incorporating the commercial and residential lands identified in this Area Structure Plan into Figure 2 Medicine Hat Growth Strategy (page 36).
- (c) replacing STAGE1/1999-2004 of Table 1 with the revised STAGE 1/1999-2004 of Table 1, attached as Schedule "C" to this bylaw.
- (d) replacing Table 2 with the revised Table 2 attached as Schedule "D" to this bylaw.
- Bylaw No. 3181, being the City of Medicine Hat Land Use Bylaw, is hereby amended by re-designating the subject lands from UR "Urban Reserve District" to C-3 "General Commercial District", R-3 "Medium Density Residential District", R-2 "Low Density Residential District", R-1 "Single Family Residential District", DC "Direct Control District" and TU "Transportation and Utilities District", as shown on Schedule "B" to this bylaw.
- This Bylaw shall come into force at the beginning of the day that it is passed.

| READ A FIRST TIME in open Council on | September 18 | , 2000 |
|--------------------------------------|--------------|--------|
|                                      |              |        |

| READ A SECOND TIME in open Council on October 16   | 2000 |
|--|------|
| READ A THIRD TIME in open Council on October 16  | 2000 |
| SIGNED AND PASSED on October 17 by:  MEDICINA  OF MEDICIN | 2000 |
| MAYOR TED J. GRIMM  CITY CLERK - L.P. GODIN  |      |

# North Sector Commercial/Residential Area Structure Plan and Conceptual Scheme

Prepared for:

The City of Medicine Hat

Prepared by:

Reid Crowther & Partners Ltd. Consulting Engineering Worldwide 300 Atrium VII, 340 Midpark Way SE Calgary, Alberta T2X 1P1

> Phone: (403) 254-3301 Fax: (403) 254-3333

> > September, 2000

Project No. 26725-01

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# 1.0 INTRODUCTION

#### 1.1 PURPOSE

The purpose of the North Sector Commercial/Residential Area Structure Plan (ASP) is to describe the land use framework and development objectives for the plan area, and to provide for development compatible with the surrounding areas. The ASP provides more detailed planning and development direction than that described in the Municipal Development Plan for the City of Medicine Hat.

The North Sector Commercial/Residential ASP provides a land use and phasing framework for development of the area, to ensure orderly and efficient development of the land. It outlines:

- Density and pattern of development;
- Proposed land uses;
- Sequence of development;
- Roadway and walkway alignments; and
- Conceptual servicing schemes.

Additionally, the Phase 1 Conceptual Scheme provides more detail regarding the allocation of municipal reserves, land use designations within the ASP, and subdivision within Commercial Phase 1.

#### 1.2 DEFINITION OF PLAN AREA

The North Sector area is located in the north end of Medicine Hat (Figure 1). It is an approximately 25 hectare (62 acre) area (as shown on Figure 2) and is generally bound by the following:

- Future Parkview Drive alignment to the north and west;
- The linear park and North East Crescent Heights neighbourhood to the east and south; and
- The Family Leisure Centre to the southwest.

The plan area includes the southeast corner of SE ¼ Sec.12, Twp.13, Rge.6, W4, and the southern portion of SW ¼ Sec.7, Twp.13, Rge.5, W4.

Division Avenue in its current and proposed alignment bisects the western portion of the site. The Plan area excludes the linear park that constitutes the north boundary of the existing North East Crescent Heights neighbourhood.

# 1.3 LAND OWNERSHIP

Land contained within the plan area is currently owned by Western Cooperative Fertilizers Ltd. The City of Medicine Hat has an interest in this land by way of an agreement with Western Cooperative Fertilizers Ltd. Pending the completion of an environmental impact assessment, title for the land will be transferred to the City.

Adjacent parcels of land are owned by numerous residential property owners, Western Cooperative Fertilizers Ltd., or are owned by or leased to the City of Medicine Hat.

PLOI DATE: UB/28/2000 10:46 PLOI SCALETE? BY TONGS H. PROEETS/MUN/2872601/02A\1113\qqqe-struct-plon\16-06-2000\fig2.d=g

# Commercial/Residential CONTEXT PLAN North Sector

Medicine Hat, Alberta



Figure 2 2000.05.12 26725-01

S.E.1/4 SEC. 7, TWP. 13, RGE. 5, W4 R/W PLAN 741 0127 I Jet kere LINEAR PARK PLAN 801 0575 S.W.1/4 SEC. 7, TWP. 13, RGE. 5, W4 AGRICULTURAL URBAN RESERVE GAS DEVELOPMENT SITE \* at my ms BLOCK 22 1, TWP. 13, RGE. 6, W4 MILY LEISURE S.E.1/4 SEC. 12, TWP. 13, RGE. 6, W4 AGRICULTURAL URBAN RESERVE

# 2.0 STATUTORY PLAN & POLICY CONTEXT

#### 2.1 MEDICINE HAT MUNICIPAL DEVELOPMENT PLAN

The Medicine Hat Municipal Development Plan (MDP) provides a policy framework for the future growth and development for the City of Medicine Hat. The North Sector Commercial/Residential Area Structure Plan proposes amendments to the Municipal Development Plan to incorporate this area into the growth strategy for the City.

Section 3.12 of the Medicine Hat MDP addresses the need for an attractive interface between major commercial centres and the City's major roadways and entrance roads. For new commercial developments, the following design requirements are specified:

- Commercial-residential land use interface;
- Landscaping of boulevards, medians and setback areas;
- Loading and servicing areas not visible from roadways;
- Landscaping of large surface parking areas;
- Consistency in architectural styles;
- Integration with transit services;
- Accessibility for the physically challenged; and
- Pedestrian and user safety.

The MDP also specifies (in Section 4.1) the need to incorporate urban design principles into the functional design of major roadway corridors. Such principles could include streetscaping, noise attenuation, lighting and roadside vegetation. Since both Parkview Drive and Division Avenue are identified as Arterial Roadways in the City's long-term transportation strategy, these considerations have been made within the North Sector Commercial/Residential ASP.

# 3.0 SITE CONTEXT AND DEVELOPMENT CONSIDERATIONS

#### 3.1 EXISTING LAND USE

The plan area is currently vacant prairie land. A linear park separates the site from the North East Crescent Heights neighbourhood.

Two gas well sites are also located in the plan area, one at the northeast corner and one at the southwest.

#### 3.2 TOPOGRAPHY AND VEGETATION

The plan area is a relatively flat upland bench, with elevations varying from approximately 708 to 712 metres. The highest areas are located at the northeast and northwest ends of the site, and the lowest point is at the southeast corner. Soils in the area are mostly glacial sand deposits, with some bands of clay.

The lands are vacant native grasslands, generally dry and sparsely vegetated. Limited moisture and sandy soil in the area create a semi-arid climate. Vegetation predominantly consists of native prairie grass. There are no trees on the site.

#### 3.3 SURROUNDING LAND USES

Land south of the plan area is designated for recreational and residential uses, and includes the Family Leisure Centre, the linear park and the residential neighbourhood of North East Crescent Heights.

The Family Leisure Centre is located west of Division Avenue and south of 23<sup>rd</sup> Street. This is a large scale leisure complex which includes 4 slowpitch diamonds, 3 soccer pitches, 1 lighted multi-purpose sports field, 50 metre lane pool, tot's pool, leisure/wave pool with lazy river, waterslide, Olympic-size arena and a bmx-style bicycle track. The building housing the pools and arena is approximately 7990 m<sup>2</sup> or 85,900 square feet.

The linear park is a 32.4 hectare (80 acre) site, acquired by the City of Medicine Hat from Western Cooperative Fertilizers Ltd. (Westco) circa 1981. The intention of the park at the time was to provide a 'safety buffer' between Westco's fertilizer plant, and residential areas. Since that time, however, Westco has decommissioned the plant site. Although the linear park will remain in existence, it is no longer required as a safety buffer by Westco.

A playground intended for use by the North East Crescent Heights neighbourhood has been planned within the linear park, in the southeast 'corner' of the park. North East Crescent Heights is a predominantly single-family residential neighbourhood, with some multi-family residential development situated next to the linear park.

Land to the north, across the future Parkview Drive alignment, is primarily vacant grassland. At present, there are no plans or policies in place for the future development of this land for any use other than agricultural, as designated in the MDP. This area does have development potential in the long term, provided all environmental concerns have been addressed.

#### 3.4 GAS WELL OPERATIONS

#### 3.4.1 Gas Well Sites

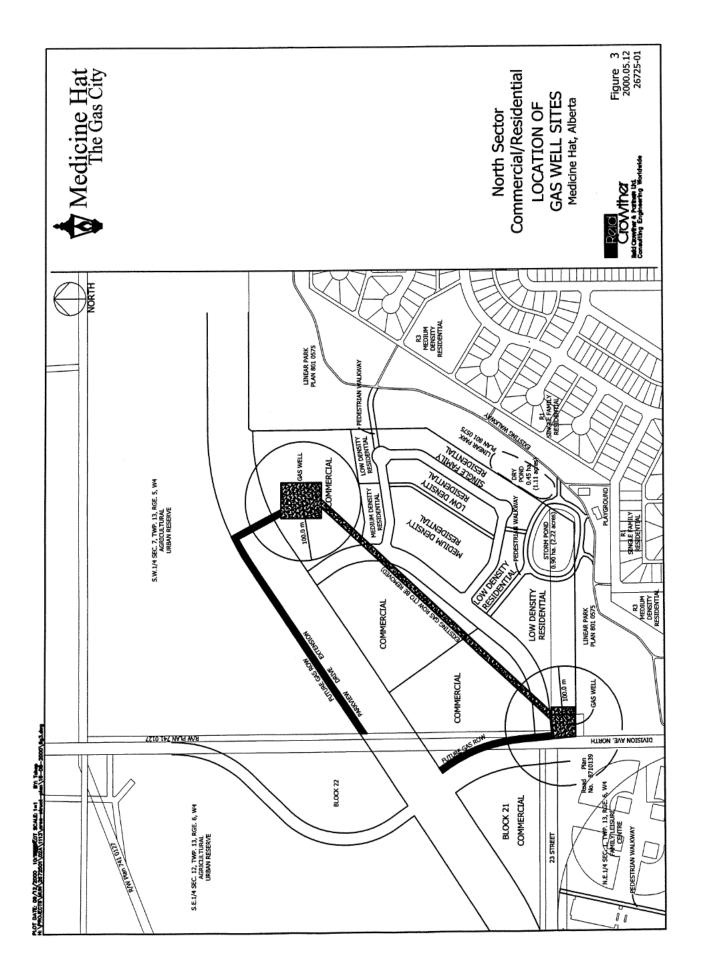
Two gas well sites are in operation within the plan area. One is located at the northeast corner of the site, the other at the south boundary, directly east of Division Avenue (see **Figure 3**). The Subdivision and Development Regulation prescribes a setback of 100 metres from gas wells to buildings used for accommodation. This may be reduced by application, by the owner, to the municipal planning authority, which in turn (and if in agreement) makes application to the Alberta Energy and Utilities Board.

The Plan has been phased to allow for the long-term development of the northeast corner of the site, in the event that operations at this well site cease. Recommended phasing allows for commercial development of the site, while respecting the need for a defined setback around the abandoned gas well to guarantee access.

#### 3.4.2 Pipeline Rights-of-Way and Facilities

Currently a pipeline right-of-way bisects the site, connecting the two gas wells. The gas pipelines will be relocated to the alignment of the Parkview Drive and Division Avenue rights-of-way. The existing gas right-of-way will be purged and abandoned to accommodate development of the site, and information regarding the abandoned lines will be communicated to prospective owners.

Additional gas pipelines currently adjacent to the eastern edge of the existing Division Avenue will be relocated to the new road right-of-way adjacent to the new Division Avenue alignment. This will provide more land available for development.



# 4.0 DEVELOPMENT PRINCIPLES

A number of development principles have been considered in the preparation of the North Sector Commercial/Residential Area Structure Plan. The principles address residential and commercial land uses, vehicular circulation within the plan area, pedestrian access, municipal reserves, and gas well operations.

# 4.1 RESIDENTIAL LAND

The following principles apply:

- Provide for a variety of residential opportunities that complement the scale and character of the adjacent predominantly single-family neighbourhood.
- Locate residential development adjacent to the linear park and storm water pond to maximize the benefits of these amenities for future residential populations.
- Provide a suitable transition from the North East Crescent Heights neighbourhood to the planned commercial development directly south of Parkview Drive.

# 4.2 COMMERCIAL LAND

The following principles apply:

- Provide commercial opportunities suitable to support the population and demographic composition of the northern portion of the city.
- On commercial property west of Division Avenue, provide commercial development complementary to use and style of the Family Leisure Centre.
- Locate commercial development along arterial roads to provide high visibility and convenient access.

# 4.3 VEHICULAR CIRCULATION

The following principles apply:

- Access to the plan area should be provided through the Parkview Drive and Division Avenue arterials.
- Direct access within the site should be provided primarily from internal roads, to disperse traffic movement and reduce the potential for congestion on the arterial roads.

# 4.4 PEDESTRIAN CIRCULATION

The following principles apply:

- The plan should allow for the safe, comfortable and efficient movement of pedestrians throughout the area.
- The commercial and residential areas should be linked by sidewalk to each other, and by a walkway system to the existing North East Crescent Heights neighbourhood and to the Family Leisure Centre site.
- Boulevarded sidewalks shall be provided along the interior collector road to separate vehicular and pedestrian traffic.
- All walkways shall be integrated with and connected to the linear park walkway system.

# 4.5 GAS WELL OPERATIONS

The following principles apply:

- Provision shall be made for the continuation of the gas well operations and their integration into the developed plan.
- Upon the gas wells being discontinued, the sites will be integrated with the plan in a compatible manner.

# 5.0 DEVELOPMENT CONCEPT

Land uses within the plan area generally consist of commercial, single family residential and low and medium density residential (shown in **Figure 4**). A land use and demographic profile for the development is provided in **Appendix A**.

Commercial land is situated along the northern edge of the plan area, directly south of the Parkview Drive extension. Residential land is located between this commercial land and the linear park to the south – single family residential is situated adjacent to the linear park, and the allowable residential densities increase closer to the commercial land. This strategy ensures:

- High visibility for the commercial land from both the Parkview Drive and the Division Avenue arterials; and
- An appropriate and gradual transition between the commercial area and the neighbouring predominantly single family residential area of North East Crescent Heights.

Phasing for both commercial and residential development moves from west to east. The westerly end of the site is a logical first phase from a servicing perspective and access is available from the existing Division Avenue alignment. Commercial development may initially proceed on either the east or west portion of Phase 1, depending on market preferences.

As the new alignments of Division Avenue and the Parkview Drive extension are realized, development will generally progress to the east. It should be noted that Block 21 cannot be developed until 23<sup>rd</sup> Street is re-aligned to the north and the existing road right-of-way is closed and consolidated. The new roadway and servicing can be incrementally developed as the phases progress.

#### 5.1 RESIDENTIAL

The existing linear park separates the existing primarily single family residential development to the south and east from the plan area. Future development of residential between the proposed commercial and existing residential development will create a further transition between these uses.

The residential component of the North Sector Commercial/Residential ASP is intended to provide a suitable transition between the existing residential and planned commercial areas, which respects the character and nature of adjacent land uses. As such, single family residential is planned along the northwest edge of the linear park within the plan area. Moving northwest through the site towards the commercial area, densities increase to allow for duplexes, and then cluster housing, fourplexes, townhouse dwellings, and low-rise apartment housing. This 'stepped' sequence of land use respects the scale of the North East Crescent Heights neighbourhood; provides a transition to the larger-scale commercial uses; and allows for sufficient population density to augment demand for local services at the commercial sites. The residential environment within the plan area is enhanced by its proximity to the linear park, and by the development of the storm water pond as a visual amenity.

The residential development is planned to accommodate 170 units, at densities of 12 units per hectare for low density dwellings, and 50 units per hectare for medium density developments. Residential development will be limited to a height of 2 storeys plus developed basement. The overall density target is expected to yield population densities of 41 persons per hectare (17.3 persons per acre).

#### 5.2 COMMERCIAL

Generally, commercial land uses will be accommodated adjacent to the Parkview Drive extension. This location provides high visibility for the commercial uses, and ensures good access from arterial roadways.

The site is of sufficient size to provide for 32,300 m<sup>2</sup> (347,647 ft<sup>2</sup>) of commercial development, or approximately 25% of the commercial site area. Uses in Commercial Phase 1(east) through Phase 3 are intended to serve adjacent residences, as well as meet broader commercial service demands for the northern portion of the city.

In Commercial Phase 1(west) of the Plan, uses will be restricted to those that are complementary to the Family Leisure Centre. A Direct Control land use district shall be applied to this area (Block 21) to achieve this objective.

#### 5.3 STORM POND

A stormwater retention pond is located in the southeast 'corner' of the site, and is classified as a public utility lot. As discussed previously, the storm pond will be landscaped and developed as a visual amenity for the neighbourhood, and will complement the adjacent linear park.

A dry pond, or active storage area, has been designed to the north east of the wet pond. This storage area will remain dry under normal conditions, and will only contain water during, and for a short time after, rainfall.

# 5.4 MUNICIPAL RESERVES

Municipal reserves will be taken as a combination of land dedication and money in lieu at the time of subdivision. The requirement for municipal reserve is 6.2 acres, based on a total plan area of 61.97 acres.

Pedestrian walkways account for 0.77 acres of the total plan area. These walkways will be considered part of the municipal reserve dedication. The remaining 5.43 acres required for the reserve may be accounted for through money in place of reserve, the amount of which to be determined at time of subdivision.

A proposed park space in Block 21 (Commercial Phase 1 West) will be part of the municipal reserve dedication for that parcel of land. Additional land for park purposes may be provided within the commercial and residential sites at the time of subdivision.

# 5.5 GAS WELL OPERATIONS

The gas well operation in the north end of the plan area will continue for the foreseeable future. Development adjacent to the well site will be set back a minimum of 100 metres, or a distance approved by the City of Medicine Hat's municipal planning authority and the Alberta Energy and Utilities Board.

Upon closure of the northern-most well site, the lands shall be designated for commercial development purposes consistent with Section 5.2 of this ASP.

#### 6.0 TRANSPORTATION

#### 6.1 ROADWAYS

A traffic impact assessment has been conducted to establish the impact of residential and commercial development in the area on traffic volumes. The impact assessment has concluded that the roadway network proposed below can be developed to accommodate the development concept described in Section 5 of the North Sector Commercial/Residential ASP.

#### 6.1.1 Arterial Roadways

Two planned arterial roadways (Parkview Drive and Division Avenue) will provide access to the area. Both of these roadways have been identified in the City of Medicine Hat's future roadway plans as four lane divided urban arterials. The traffic impact assessment suggests that rights of way be established for both these arterials. The first two lanes of roadway should be built in the rights of way, with the next two lanes built as traffic demand warrants.

A portion of the Parkview Drive extension will be built at the Division Avenue intersection, concurrent with re-alignment of 23<sup>rd</sup> Street to the northeast for the new intersection. The realignment and upgrading of Division Avenue is anticipated to occur during the development of the North Sector area. The widening of Division Avenue will occur north of 20<sup>th</sup> Street.

Right in/right out turning movements are possible on both Parkview Drive and Division Avenue. Details of any right in/right out access off Division will need to be further explored during subsequent design stages. A right in/right out turning movements is currently planned on Parkview Drive, approximately mid-way between Division Avenue and the interior roadway. This right in/right out movement is not anticipated to have a significant impact on traffic flow on Parkview Drive, and it will be accommodated in the roadway design to mitigate impacts to the extent possible.

# 6.1.2 Interior Roadways

Within the plan area, two interior roadways have been designed to provide adequate road access within the site. No new roadway connections to the North East Crescent Heights neighbourhood are planned. This will avoid potential commercial bound traffic using the existing internal neighbourhood roadway system in North East Crescent Heights.

One roadway is a collector, which has been designed to connect with Division Avenue, at the current 23<sup>rd</sup> Street alignment. This road runs northeast through the site, and also connects to Parkview Drive. The collector provides access to all commercial uses and limited residential

areas within the plan area, and limits the number of accesses to Parkview Drive by providing an alternative access route.

The collector is designed as a four lane undivided roadway, and will be wide enough to incorporate sidewalks and treed boulevards on both sides of the road, and a berm on the south (residential) side, as shown in **Figure 5**. This will provide for ease of pedestrian movement, as well as for a visual separation between the two land uses.

The other interior roadway is a local roadway, designed to carry traffic to the remainder of the residential areas. The local road will incorporate sidewalks on both sides of the road, as shown in **Figure 6**. Front lot access will be provided from the local road to the single family lots, as an alley has not been included in the design.

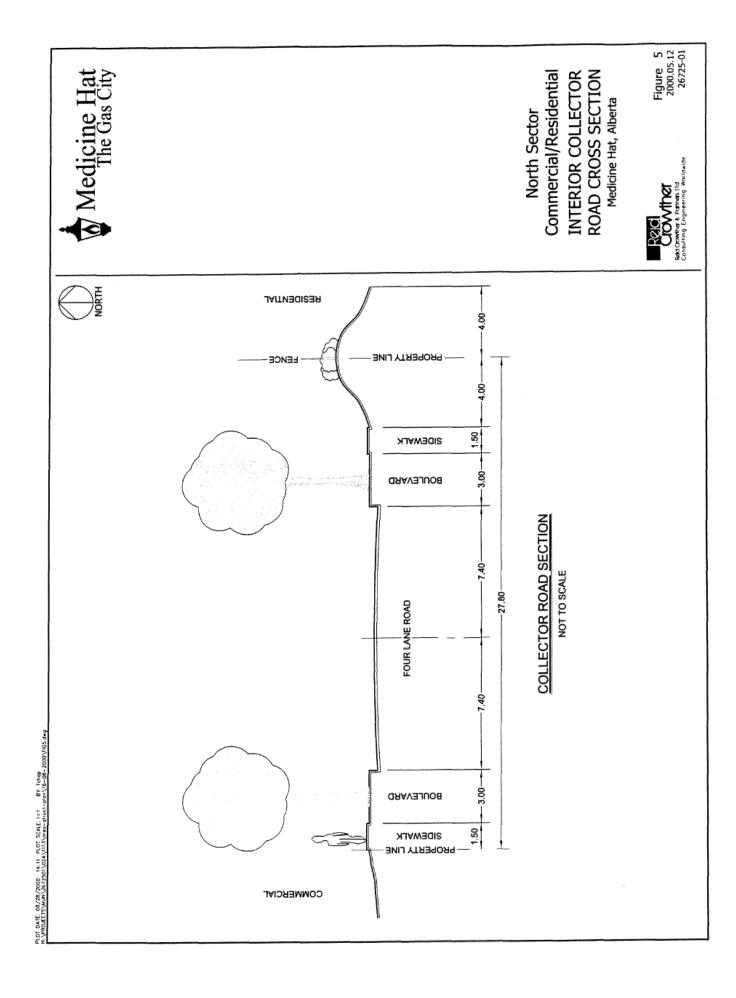
#### 6.2 TRANSIT SERVICE

Arterial and interior roadways will be designed to accommodate public transit. This includes paratransit service for seniors and persons with disabilities.

#### 6.3 PEDESTRIAN CIRCULATION

Pedestrian walkways will connect the North Sector area to the linear park, the existing residential area and the Family Leisure Centre. The walkway system will also border the wet pond required to accommodate stormwater runoff created by the project. The wet pond will become a visual amenity incorporated into the new residential development and the park.

Continuous boulevarded sidewalks along the new interior roadway will connect the areas, and provide effective, pleasant and safe pedestrian-vehicle separation. Effort will be made to ensure that the sidewalks are user friendly for children and families.



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# 7.0 ENGINEERING SERVICES

#### 7.1 STORMWATER DRAINAGE

# 7.1.1 Existing Services

The plan area is currently open grassland, which has not previously been considered for development. Accordingly, there is no evidence that any allowance has been made in existing infrastructure to accommodate drainage from this area.

Currently, the area slopes generally from the northwest to the southeast, where there is a low area adjacent to the existing North East Crescent Heights neighbourhood. Due to generally flat topography, and a number of other topographically low areas just north of the (future) Parkview Drive, the area which currently drains to this low area is only slightly larger than the North Sector Plan area. Also, due to the gentle gradient of the land and the apparent high permeability of the soil in this area, there is little evidence of "wetland conditions", or even intermittent wetweather ponding, in the topographically low areas.

#### 7.1.2 North Sector Area

In order to make earthwork amounts reasonable, the grading design of the developed areas will follow the existing topography in general. Therefore, the developed area will drain to the low area in the southeast corner, as it does currently.

The only existing storm sewer in this area is a 250 mm local storm sewer in Hull Way, which connects to a larger storm sewer on Hatcher Drive, and in turn connects to the main trunk, which runs eastwards along 20<sup>th</sup> Street. The capacities of the downstream trunks have been checked, and an allowable discharge rate of 15 L/s has been selected as appropriate.

In order to limit the stormwater discharge to this value, a stormwater pond (wet pond) and an active storage area (dry pond) will be constructed in this location, with a controlled discharge to the sewer in Hull Way. If possible, an aquifer will be drawn on as required to keep the water in the wet pond at an appropriate level. Barring this possibility, potable water (or another water source) will be required to maintain the wet pond.

The stormwater retention pond and the sewer in Hull Way will service the developed area east of Division Avenue, as well as Division Avenue itself. Runoff from the development area west of Division Avenue (Block 21) will be directed to the irrigation storage pond in the Family Leisure Centre site.

#### 7.1.3 Parkview Drive

The "Functional Planning Study for Parkview Drive" (UMA, 1995) assumed that this area would remain undeveloped and would therefore be available to absorb runoff from Parkview Drive. Parkview Drive is designed as a rural divided arterial, with drainage to side-ditches. The longitudinal profile of Parkview Drive will be re-designed (i.e. will be different from the UMA pre-design) in order to grade the ditches eastwards towards natural low areas and westwards to the Leisure Centre pond. In this way, runoff from Parkview Drive and the area to the north will not contribute to the North Sector stormwater pond.

Parkview Drive design will need to be revised to provide a minimum longitudinal grade of 0.5% in order to allow possible future conversion to an urban cross-section (i.e. with curb and gutter).

#### 7.2 SANITARY DRAINAGE

The existing sanitary sewers in this area were not designed to accommodate sanitary servicing of the project area. There are three possible connection points for discharge to existing sewers: local 200 mm sewers in Hull Way and Horne Blvd., and the 600 mm Trunk in 20<sup>th</sup> Street. Due to topography, a lift station would be required for any of these.

The option selected is to build a sanitary lift station near Division Avenue to service the east area (Block 20). This will discharge to a gravity sewer in Division Avenue, which will also serve (by gravity) the development in Block 21. This 250 mm sewer will be connected to the existing 600 mm trunk sewer at Division Avenue and 20<sup>th</sup> Street.

#### 7.3 WATER DISTRIBUTION

Existing watermains in this area include the large 500 mm trunk main along Hatcher Drive and Division Avenue, and a number of 150 mm local mains. A commercial development area of this size requires a looped system (i.e. at least 2 supply points) with a pipe size capable of delivering commercial fire flows to hydrant and sprinkler systems.

Therefore, the proposed system consists of a 250 mm diameter loop from the 500 mm trunk main at Division Avenue, through the new development, and back to the 500 mm trunk main in Hatcher Drive. The tie back to Hatcher Drive (from the North Sector internal road) will be approximately 550 m long, but is required due to the necessity of looping the system. A tie back nearer the storm pond would leave a considerable number of residential units and a large area of commercial on a single-source "dead-leg", which is not acceptable. A 200 mm diameter loop will be provided through the residential area along the crescent.

#### 7.4 GAS MAINS

Two existing gas main routes conflict with the proposed development. Gas facilities will be realigned and accommodated as follows:

- Existing gas wells #126 and #400 (6-7-13-5 W4M) lie in the northeast corner of the plan area. They will remain in operation for the foreseeable future but are accommodated in the Area Structure Plan within a large "commercial phase 3" lot.
- The 50 mm high pressure (HP) line from well #126, and the associated right-of-way, will be abandoned and a new 75 mm HP line will be installed along Parkview Drive to join the 100 mm HP line which runs north along the Division Avenue alignment.
- The existing 100 mm HP line running north from gas well #35 along Division Avenue will be abandoned. A new 100 mm HP line will be installed from 23<sup>rd</sup> St., NE along Parkview Drive to join the existing 100 mm HP line north along Division Avenue alignment. This 100 mm HP line will serve the existing 50 mm HP line from gas well # 354 and a new 75 mm HP line running west from gas well # 35.
- The existing 250 mm HP line which runs east along 23<sup>rd</sup> St. and north along Division Ave. will be abandoned and re-routed from 23<sup>rd</sup> St., northeast along Parkview Drive to join the existing 250 mm line running north along Division Avenue.
- A portion of the existing 200 mm medium pressure (MP) distribution main along Division Avenue will be abandoned and re-routed to the new Division Avenue alignment.
- Local distribution lines will run from the 200 mm MP main around the perimeter of the commercial and residential lots as required.

#### 7.5 ELECTRICAL

Two factors resulted in the need for major power line alterations in this area:

- The City installed a new 69 kV line along the north side of Parkview Drive to connect a new co-generation facility (west along 23<sup>rd</sup> St) with the existing sub-station at Parkview Drive and 11<sup>th</sup> Avenue. This crosses the alignment of the existing Transalta line (along the west side of Division Avenue) and the City 13.8 kV line (along the east side of Division Avenue).
- Both the City 13.8 kV and the Transalta lines along Division Avenue run across the corner of the proposed block 20 development.

Accordingly, a line realignment has been completed as follows:

- The Transalta line has been re-aligned to "cut the corner" from 23<sup>rd</sup> St., along the south side of Parkview Drive, to Division Avenue.
- The City 13.8 kV line has been re-aligned to follow the new alignment of Division Avenue.

The new City 69 kV line crosses below the TAU 138 kV line and above the City's 13.8 kV line.

Local distribution for the North Sector area will be served from the City 13.8 kV line.

#### 8.0 IMPLEMENTATION

#### 8.1 CONCEPTUAL SCHEME

This Plan provides additional details regarding phasing, Land Use Bylaw designations and subdivision, rather than adopting a separate conceptual scheme.

Phases outlining the sequence of development in this area are described in **Figure 7**. Three commercial phases, and four residential, have been described in the Plan. Development will begin at the southwest end of the site. Development will generally progress eastward from there. This will allow servicing of the area to be done sequentially as development occurs across the site.

Commercial Phase 1 will include building two lanes of Parkview Drive west to 23<sup>rd</sup> Street. In the second commercial phase, two lanes of Parkview Drive will be built to 20th Street.

Residential Phase 1 requires the construction of the collector road up to the walkway to the storm pond. Residential Phase 2 will include extension of the collector to the local road, and construction of the local road to the northeast bulb. The 3<sup>rd</sup> phase will complete the local road.

Parcel sizes within the plan area are described in the following chart:

| Residential       | Ha.  | Acres | Commercial 24    | Ha.   | Acres | Other 7     | B Hase | Agres |
|-------------------|------|-------|------------------|-------|-------|-------------|--------|-------|
| Phase 1           | 1.96 | 4.84  | Phase 1(west)    | 3.17  | 7.83  | Roadway     | 3.58   | 8.85  |
| Phase 2 – R2      | 1.18 | 2.91  | Phase 1(east)    | 3.63  | 8.97  | Storm Pond  | 0.90   | 2.22  |
| Phase 2 – R3      | 1.71 | 3.43  | Phase 2          | 3.26  | 8.06  | Walkway     | 0.31   | 0.77  |
| Phase 3           | 2.19 | 5.4   | Phase 3          | 2.86  | 7.07  | Total Other | 4.79   | 11.84 |
| Total Residential | 7.04 | 16.58 | Total Commercial | 12.92 | 31.93 |             |        |       |

As noted previously, commercial development will occur adjacent to the arterial roadways. This will allow the commercial parcels high visibility and convenient access from the neighbouring arterial roadways (Parkview Drive and Division Avenue). The residential development will permit single family and low and medium density developments. A maximum height limit of 2 storeys, plus developable basement, will be placed on the residential development through the land sales agreement.

# 8.2 RE-DESIGNATION OF LAND USE DISTRICTS

Development proposed under this ASP will be implemented through amendments to the City of Medicine Hat Land Use Bylaw. The land use districts will be consistent with the design considerations and principles described in this Plan, and appropriate commercial and residential districts will be applied, as illustrated in **Figure 8**.

Figure 7 2000.08.03 26725-01 Medicine Hat The Gas City North Sector Commercial/Residential Medicine Hat, Alberta PHASING PLAN DEVELOPMENT R3 MEDIUM DENSITY RESIDENTIAL LINEAR PARK R1 SINGLE FAMILY RESIDENTIAL NORTH SECTOR DRY POND 0.45 hs. (1.11 scres) RESIDENTIAL PHASE 2 239 hs. (7.13 screet WELL S.W.1/4 SEC. 7, TWP. 13, RGE. 5, W4 AGRICULTURAL URBAN RESERVE COMMERCIAL PHASE 3 337 hs. (8.32 serss) RESIDENTIAL PHASE 3 2.19 ha. (5.40 acres) NORTH SECTUS: STORM POND PHASE 1 (190 hs. (2.22 acres) Z COMMERCIAL PHASE 2 3.25 hs. (8.06 acres) RESIDENTIAL PHASE 1 LINEAR PARK 1.96 hs. (4.84 acres) MEDIUM DENSITY ~ COMMERCIAL PHASE 1 (EAST) 3.63 hs. (8.97 acres) GAS WELL 100.0 m DIVISION AVE. NORTH -YS10 IPK NAJ9 W/A BLOCK 22 PLOT DATE: 09/12/2000 06:27 PLOT SCALE: i=i Bh Tohay h: VPROJECTSVALMV2072501 VOZA\1113\crea-struct-plon\16-08-2000\PREJAH-F107.dvg BLOCK 21 COMMERCIAL PHASE 1 (WEST) 3.17 hs. (7.83 scres) S.E.1/4 SEC. 12, TWP. 13, RGE. 6, W4 AGRICULTURAL URBAN RESERVE N.E.1/4 SEC. 1, TWP. 13, RGE. 6, W4 SAMILY LEISURE CENTRE DOSTING LEISURE BOSTING CENTRE STORM POND PLAY FIELDS 23 STREET N.W.

Regarding Block 21, a Direct Control district will be applied to ensure that only uses complementary to the Leisure Centre will be allowed. The following uses would be appropriate within this district, and will be subject to approval by Council:

- · Convenience store with associated gas bar;
- · Medical and health services with associated pharmacy;
- Liquor stores;
- Eating and drinking establishments (including gas bars);
- Amusement establishments;
- Strip mall allowing permitted uses;
- Florists;
- Day care; and
- · Similar uses.

#### 8.3 MUNICIPAL DEVELOPMENT PLAN AMENDMENT

The Municipal Government Act, in Section 638, states that "all statutory plans adopted by a municipality must be consistent with each other". Currently, the MDP identifies the plan area as agricultural land, and the land is designated Urban Reserve. An amendment to the MDP to allow for large-scale commercial and multi-family residential development in this area is therefore required. This is in keeping with the recognition that the MDP is not a static document, and that as the City of Medicine Hat grows and changes, the MDP should be reviewed and amended (where appropriate) in light of more in-depth studies or policy changes.

An overall growth strategy for the City of Medicine Hat is included in the Medicine Hat MDP. The strategy identifies areas that are expected to contain future residential development, and outlines a general phasing strategy for this development. The North Sector Area is not included in the strategy. As such, the growth strategy included in the MDP will also require an amendment, to incorporate the 170 residential units (287 people) that this plan anticipates into the overall growth of the city.

# APPENDIX A

# North Sector Commercial/Residential Area Structure Plan Land Use and Demographic Profile

#### Residential Land Uses

| Phase  | Site Area (ha) | Site Area (acres) | # of units 5.3% | # of residents |
|--------|----------------|-------------------|-----------------|----------------|
| 1 - R2 | 1.96           | 4.84              | 24              | 38             |
| 2 - R1 | 1.18           | 2.91              | 16              | 42             |
| 2 - R2 | 1.71           | 3.43              | 21              | 33             |
| 3 - R3 | 2.19           | 5.4               | 110             | 175            |
| Total  | 7.04           | 16.58             | 170             | 287            |

#### **Commercial Land Uses**

| Phase | Site Area (ha) | Site Area (acres) | Floor Space (sq.m.) | Flów Spáce (sq.fis) |
|-------|----------------|-------------------|---------------------|---------------------|
| la    | 3.17           | 7.83              | 7,925               | 85,304              |
| 1b    | 3.63           | 8.97              | 9,075               | 97,682              |
| 2     | 3.26           | 8.06              | 8,150               | 87,726              |
| 3     | 2.86           | 7.07              | 7,150               | 76,962              |
| Total | 12.92          | 31.93             | 32,300              | 347,674             |

# Other Land Uses

| Dan User Light | Area (ha) | Area (acres) a sue |
|----------------|-----------|--------------------|
| Roadway        | 3.58      | 8.85               |
| Storm Pond     | 0.90      | 2.22               |
| Walkway        | 0.31      | 0.77               |
| Total          | 4.79      | 11.84              |

# Assumptions:

- 1. R1 units calculated at 60-foot lot widths.
- 2. R2 units calculated at 12 units/ha.
- 3. R3 units calculated at 50 units/ha.
- 4. Commercial floor space estimated at 25% of site area.

# **Commercial Equivalent Population**

| Comm. Area     | 12.92 |
|----------------|-------|
| @50 people/ha. | 50    |
| Total CEP      | 646   |

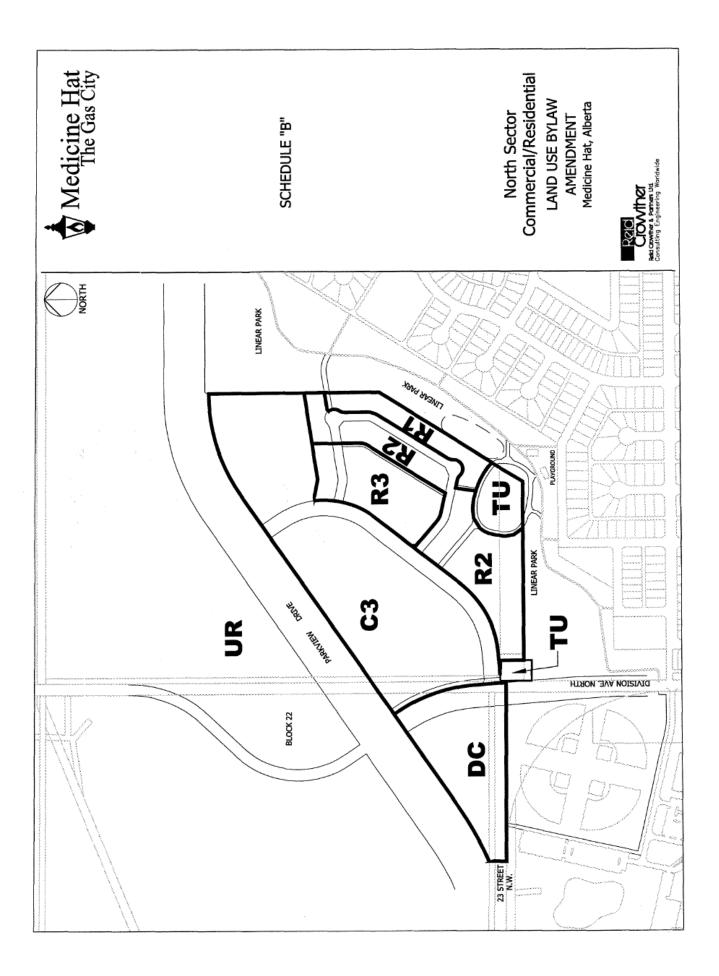


TABLE 1
STAGING OF RESIDENTIAL DEVELOPMENT

# STAGE I / 1999 - 2004

| MAP<br>REF. AREA NAME                                     | TYPE OF<br>DEVELOPMENT   | NUMBER OF<br>DWELLING<br>UNITS | POPULATION       | LAND AREA (ha)     |  |
|---|--------------------------|--------------------------------|------------------|--------------------|--|
| SOUTH RIDGE<br>Phase 5B                                   | S.F.                     | 154                            | 400              | 12.8               |  |
| SAAMIS HEIGHTS (South<br>(A.S.P. Phase 1)                 | Ridge 6)<br>S.F.<br>M.F. | 557<br>100                     | 1,448<br>160     | 46.4<br>2.0        |  |
| RANCHLANDS<br>(A.S.P.Phase 1)<br>(A.S.P. Phase 2 (A & B)) | S.F.<br>M.F.<br>S.F.     | 52<br>25<br>247                | 135<br>40<br>643 | 5.3<br>0.5<br>20.6 |  |
| N.E.C.H.<br>(A.S.P.Phase 4)                               | M.F.<br>S.F.             | 100<br>230                     | 160<br>598       | 2 26.3             |  |
| NORTH SECTOR A.S.P.                                       | S.F.                     | 16                             | 42               | 1.2                |  |
| BURNSIDE ESTATES (A.S.P. Phase 1)                         | M.F.<br>S.F.             | 155<br>634                     | 246<br>1,647     | 5.9<br>52.8        |  |
| (A.S.P. Phase 2A)   | M.F.<br>S.F.<br>M.F.     | 225<br>228<br>50               | 360<br>593<br>80 | 4.5<br>19<br>1     |  |
| Total   |                          | 2772                           | 6,551            | 200.3              |  |

# SCHEDULE "D"

TABLE 2 **RESIDENTIAL STAGING SUMMARY** 

| Stage<br>Time Line                     | Land Allocation<br>(ha) | Dwelling Units<br>Generated | Population<br>Generated | Cumulative<br>Population<br>(Base 48,673) |
|--|-------------------------|-----------------------------|-------------------------|---|
| I / 1999 - 2004                        | 200.3                   | 2,772                       | 6,551                   | 55,224                                    |
| II / 2005 - 2009                       | 195.5                   | 2,798                       | 6,680                   | 61,904                                    |
| III / 2010 - 2015                      | 203.2                   | 3,115                       | 7,208                   | 69,112                                    |
| TOTAL                                  | 599                     | 8,685                       | 20,439                  | 69,112                                    |
| RESERVE<br>RESIDENTIAL<br>LAND / 2016+ | 621.6                   | 9,437                       | 21,933                  | 91,045                                    |
| GRAND TOTAL                            | 1,220.6                 | 18,122                      | 42,372                  | 91,045                                    |