

BYLAW NO. 3395

A BYLAW OF THE CITY OF MEDICINE HAT to adopt the Ranchlands Phase 2 Conceptual Scheme.

WHEREAS a conceptual scheme referred to as the Ranchlands Phase 2 Conceptual Scheme has been prepared to provide a framework for subdivision and development of an area of Ranchlands east of 11th Avenue NE;

AND WHEREAS an application has been made to adopt the Ranchlands Phase 2 Conceptual Scheme, attached as Schedule "A" to this Bylaw, for the lands legally described as a portion of Section 8-13-05-W4 and a portion of Block B, Plan 6164JK (hereinafter referred to as the "subject land");

AND WHEREAS it is deemed appropriate to adopt the Ranchlands Phase 2 Conceptual Scheme;

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 November 19, 2001 at 6:30 p.m.;

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

1. The Ranchlands Phase 2 Conceptual Scheme, attached as Schedule "A" to this Bylaw, is hereby adopted.
2. This Bylaw will come into force at the beginning of the day that it is passed.

READ A FIRST TIME in open Council on October 1, 2001

READ A SECOND TIME in open Council on November 19, 2001

READ A THIRD TIME in open Council on November 19, 2001

SIGNED AND PASSED on December 6, 2001


MAYOR - GARTH VALLEY


CITY CLERK - LARRY P. GODIN



Ranchlands Phase 2 Conceptual Scheme

Prepared for:

The City of Medicine Hat

Prepared by:

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November 2001

**Ranchlands Phase 2
Conceptual Scheme**

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A.	ROADWAY CROSS SECTIONS
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Ranchlands Phase 2 Conceptual Scheme

1. INTRODUCTION

A) Background

The Ranchlands Area Structure Plan (ASP) Bylaw #2933 was adopted by Medicine Hat City Council on August 8, 1994 (**Figure 1**). The Area Structure Plan anticipated four phases of residential neighbourhood development. This Conceptual Scheme defines the subdivision design and land use designations for Phase 2.

The Ranchlands Phase 2 Conceptual Scheme is consistent with the policies of the Medicine Hat Municipal Development Plan and the Ranchlands Area Structure Plan. Natural and man made development constraints have also influenced the ultimate subdivision design and land use classifications.

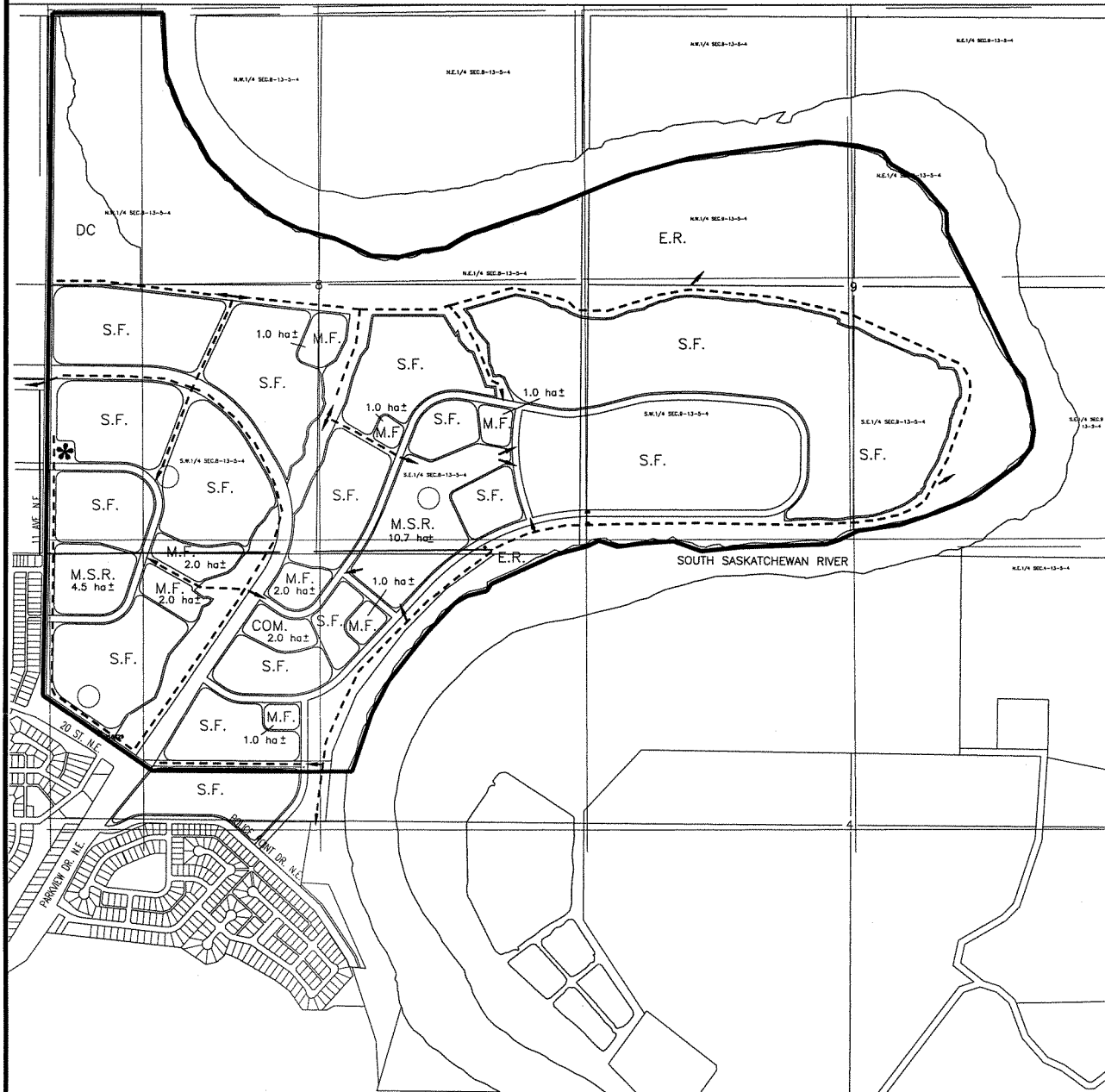
B) Location

The Ranchlands Phase 2 Conceptual Scheme is located north of 20 Street N.E. and east of 11 Avenue, N.E. as shown in **Figure 2**.

C) Purpose

Consistent with the policy framework of the Ranchland Area Structure Plan the Ranchland Phase 2 Conceptual Scheme outlines:

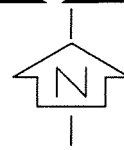
- i) the conceptual subdivision design,
- ii) the proposed land use classifications,
- iii) the roadway and trail alignments,
- iv) the parkland distribution, size and location, and
- v) the major utility alignments.



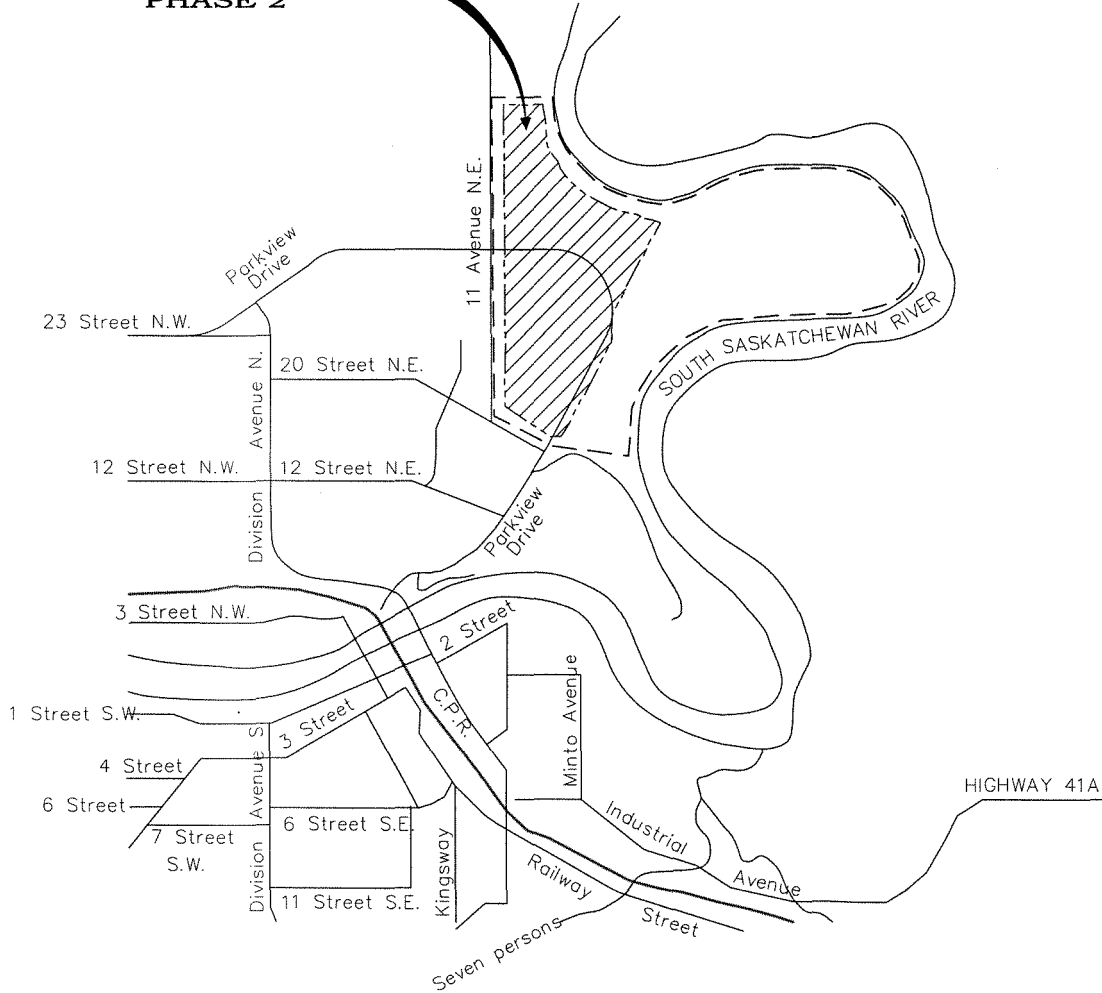
RANCHLANDS PHASE 2 CONCEPTUAL SCHEME

FIGURE 1 APPROVED RANCHLANDS AREA STRUCTURED PLAN

- M.S.R. - Municipal/School Reserve
- E.R. - Environmental Reserve
- M.F. - Multi-Family
- COM. - Commercial
- S.F. - Low Density Residential
- DC - Direct Control
- - Trail System
- * - Future Water Reservoir
- - Study Area
- - Gas Well



RANCHLANDS PHASE 2




Medicine Hat, Alberta

RANCHLANDS PHASE 2 CONCEPTUAL SCHEME

FIGURE 2
 CONTEXT PLAN

RANCHLANDS PHASE 2. 

RANCHLANDS AREA
 STRUCTURE PLAN
 BOUNDARY. 

Not To Scale

September 2001



2. SITE ANALYSIS

A) Plan Area

The Conceptual Scheme covers an area of 139 hectares (343 acres). The affected legal parcels are:

- Section 8-13-5-W4 (portion)
- Plan 6164 JK, Block “B” (portion)
- Plan 991 1333

The area is the upper bench land of three benches stepping down to the east and the edge of a large bend in the South Saskatchewan River. (**Figure 3**). The area is generally bordered on the north by the north boundary of Section 8-13-5-W4 and the South Saskatchewan River. To the east is the future alignment of Parkview Drive N.E. and a slope between the upper and middle benches which is to be retained as Environmental Reserve. The southern boundary of the area is 20th Street N.E. while the western boundary is 11 Avenue N.E.

The lands are vacant native grasslands with noticeable topographical variation particularly on the eastern edge where the slope exceeds 15% in some areas.

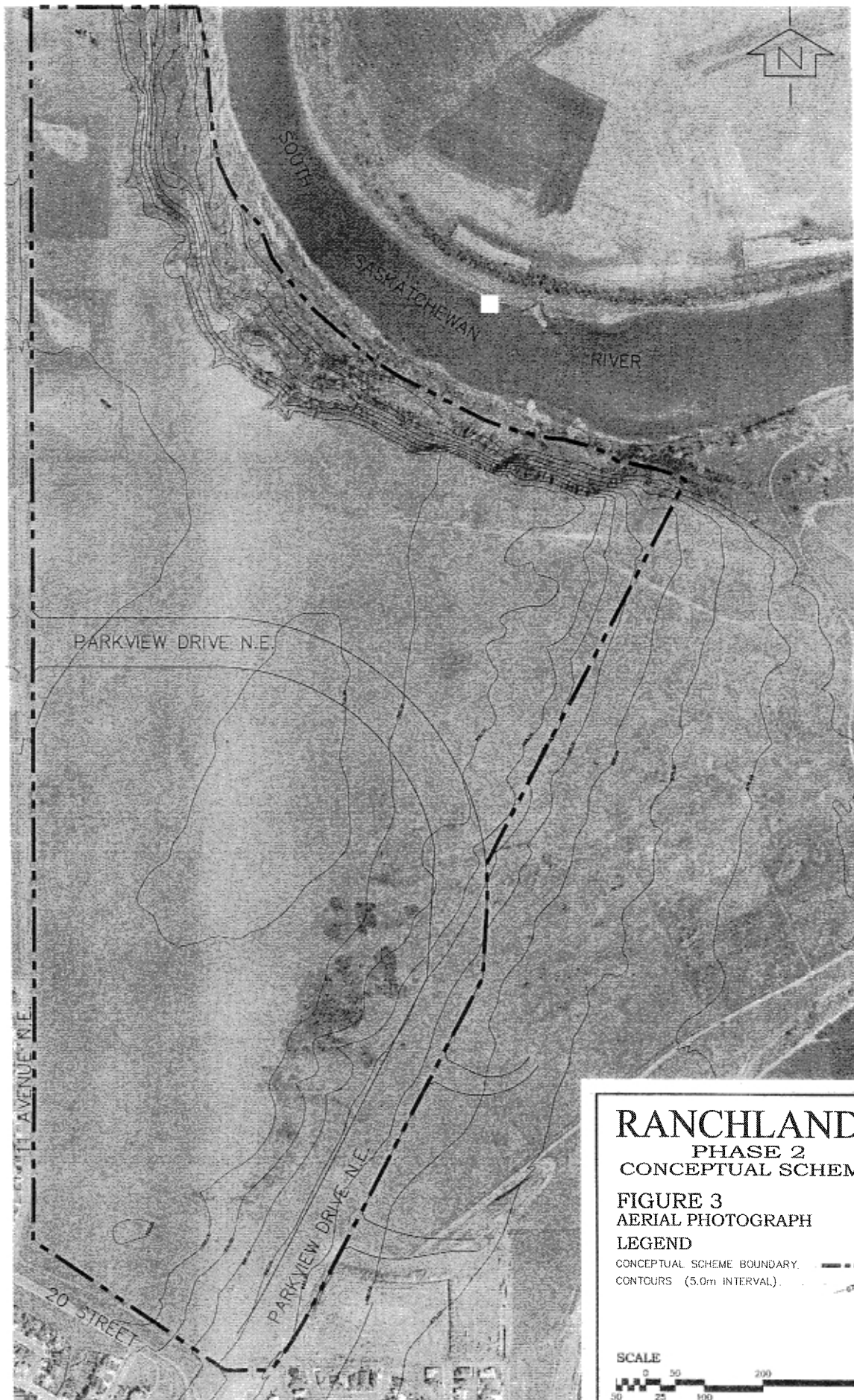
B) Archaeological Resources

Five archaeological sites were identified in the Conceptual Scheme area by a Historical Resources Impact Assessment first conducted in 1980. More detailed fieldwork was conducted in 1999. The City of Medicine Hat Planning, Building & Engineering Services Department advises that Alberta Community Development has no further concerns and does not object to development occurring within the Ranchlands Phase 2 area.

C) Development Constraints

The design of Ranchlands Phase 2 has been influenced by both natural and man made features (**Figure 4**). The boundaries for development have been physically defined by existing roadways on the west and south, proposed roadways and environmental reserve area on the east and a gas pipeline and future environmental reserve area to the north.

Adjacent to the alignment of the proposed Parkview Drive on the east side of the Conceptual Scheme is a sloped escarpment, separating the upper and





RANCHLANDS

PHASE 2 CONCEPTUAL SCHEME

FIGURE 3
AERIAL PHOTOGRAPH

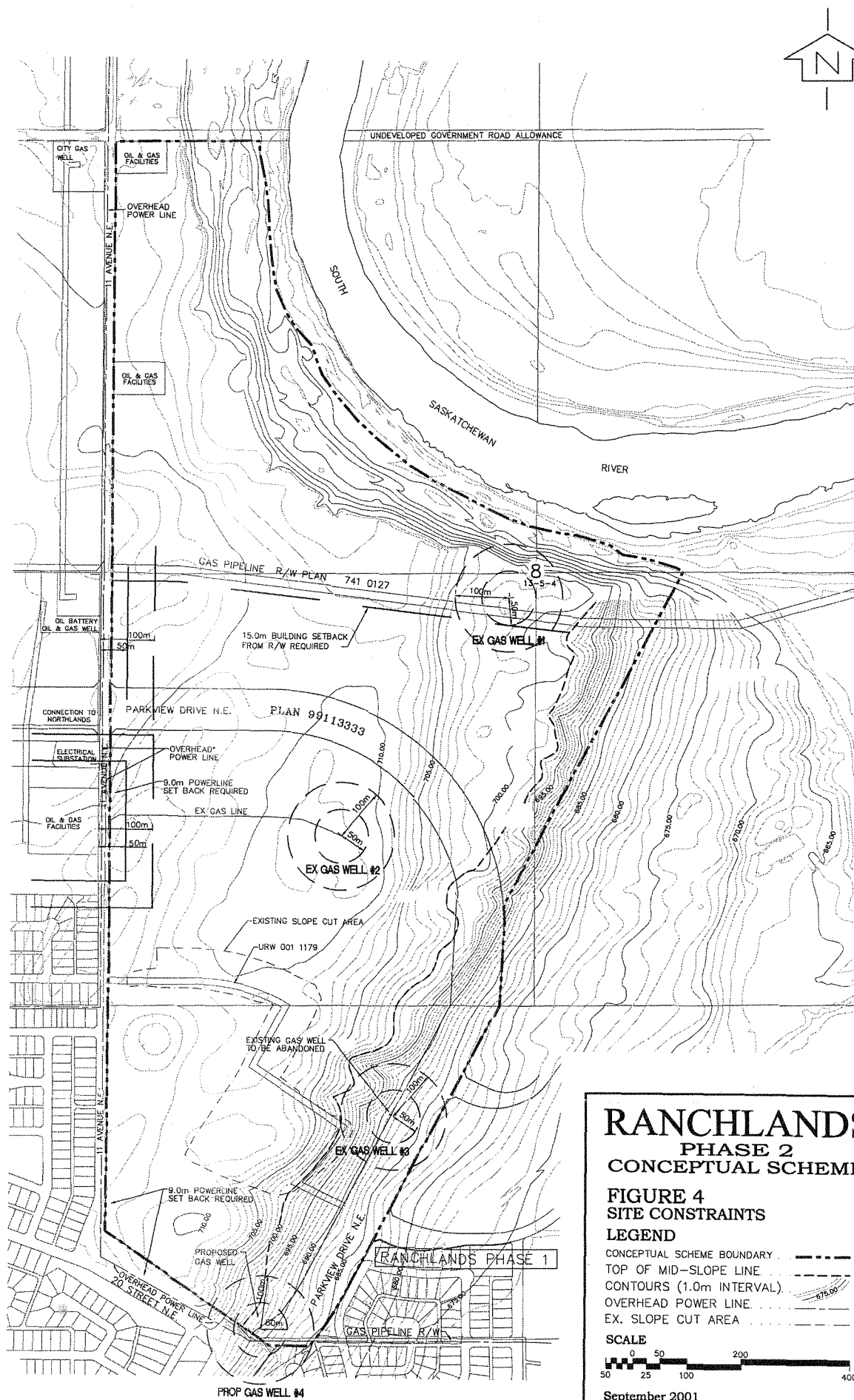
LEGEND

CONCEPTUAL SCHEME BOUNDARY. 
CONTOURS (5.0m INTERVAL). 

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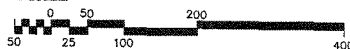
RANCHLANDS PHASE 2 CONCEPTUAL SCHEME

FIGURE 4 SITE CONSTRAINTS

LEGEND

- CONCEPTUAL SCHEME BOUNDARY
- TOP OF MID-SLOPE LINE
- CONTOURS (1.0m INTERVAL)
- OVERHEAD POWER LINE
- EX. SLOPE CUT AREA

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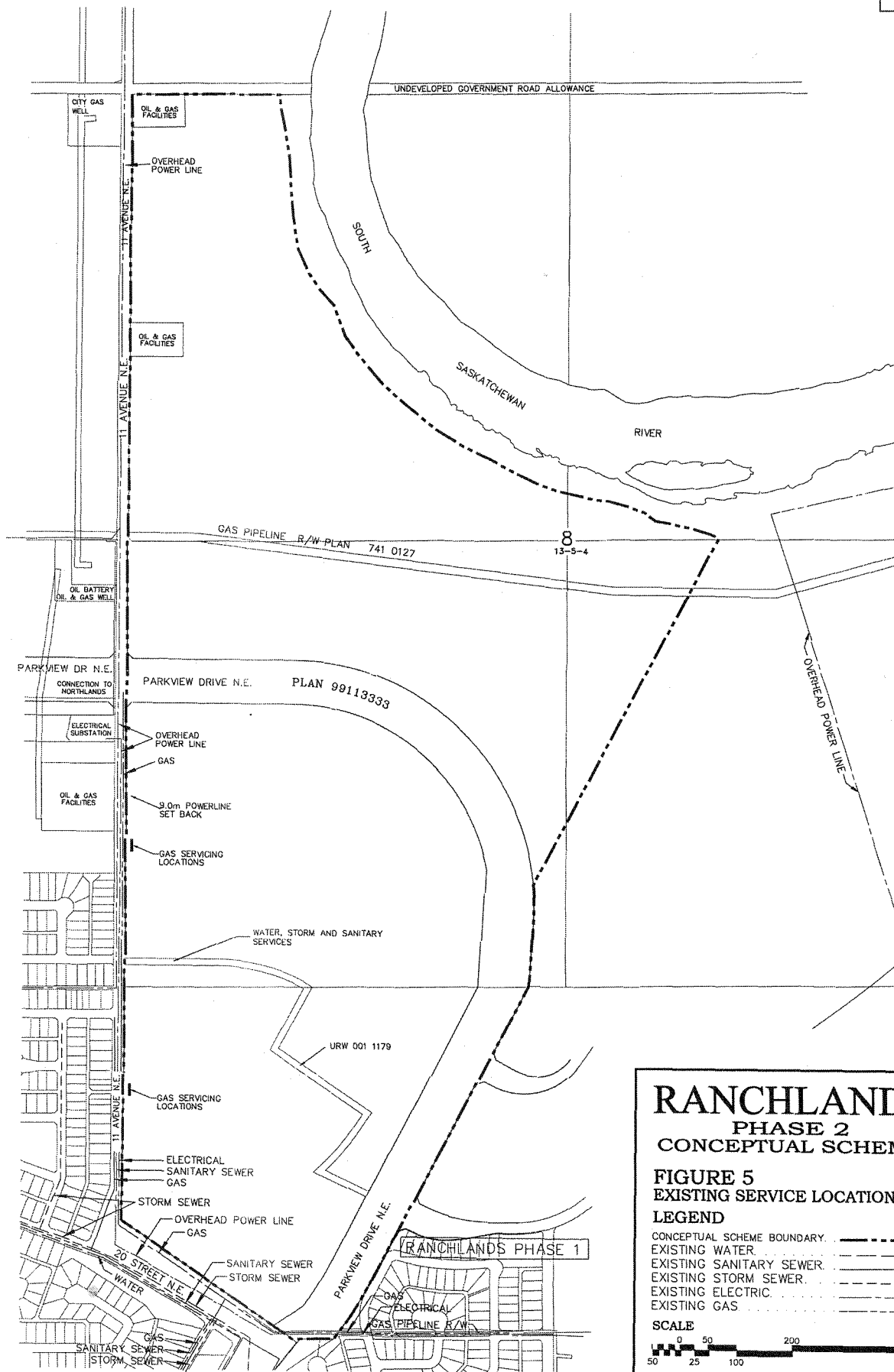
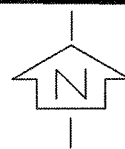
middle benches. Through a series of slope profiles and visual site surveys, a top of slope line has been determined. The further application of the Land Use Bylaw development setback requirements and servicing grades has defined the eastern edge of development.

Along the south and west boundaries of the site is an overhead power line, running along the north side of 20 Street, then north along the east side of 11 Avenue NE. It connects to the electrical sub-station located immediately west of 11 Ave at Parkview Drive. A nine meter separation distance is required from the powerline to the nearest habitable building. An easement to ensure the appropriate setback will be registered upon the affected residential lots at the time of subdivision.

To the north of Parkview Drive, the proposed development is bound by a high-pressure gas pipeline on its north side. A separation of 15 m will be required between this pipeline right-of-way and the nearest residential building. To the west of 11 Avenue N.E. are several active oil and gas storage facilities which will remain.

Within the Conceptual Scheme area there are four (4) existing or proposed gas wells and gas lines which will remain active until the reserve is exhausted and the sites reclaimed. Well 1 has been drilled immediately north of the gas pipeline (LSD 6 –8-13-5 W4M) near the River escarpment. Well 2 has been drilled approximately 150m south of Parkview Drive (LSD 3 –8-13-5-W4M). Well 3 lies within the Parkview Drive right-of-way and will be abandoned in the near future. The Gas Department advises that Well 4 will be drilled in the southern portion of the Conceptual Scheme area (LSD 12 –5-13-5-W4M) immediately north of 20 Street. The location and timing of Well 4 will need to be finalized in the early stages of development to determine any potential impacts on residential development. Development setbacks of 100 meters from these gas facilities are suggested for residential and school developments, consistent with Part 2, Section 10 (1) of the Subdivision and Development Regulations (AR 212/95). Opportunities to reduce these setbacks to 50m are being pursued by The City of Medicine Hat through application to the Energy Utilities Board.

Servicing requirements for Northeast Crescent Heights and ultimately Ranchlands Phase 2 has influenced the local road layout of the Conceptual Scheme. Water, sanitary and storm sewer mains currently exist within a utility right-of-way (R/W Plan 001 1179) which crosses the site, extending in a southeastward direction from Henderson Court NE. **(Figure 5)** Main



RANCHLANDS PHASE 2 CONCEPTUAL SCHEME

FIGURE 5 EXISTING SERVICE LOCATIONS

LEGEND

CONCEPTUAL SCHEME BOUNDARY	---
EXISTING WATER	---
EXISTING SANITARY SEWER	---
EXISTING STORM SEWER	---
EXISTING ELECTRIC	---
EXISTING GAS	---

SCALE



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extensions from these pipes can be made to accommodate development of Ranchlands Phase 2. The roadway alignments for the affected portion of the Conceptual Scheme have been designed to accommodate these existing utility lines.

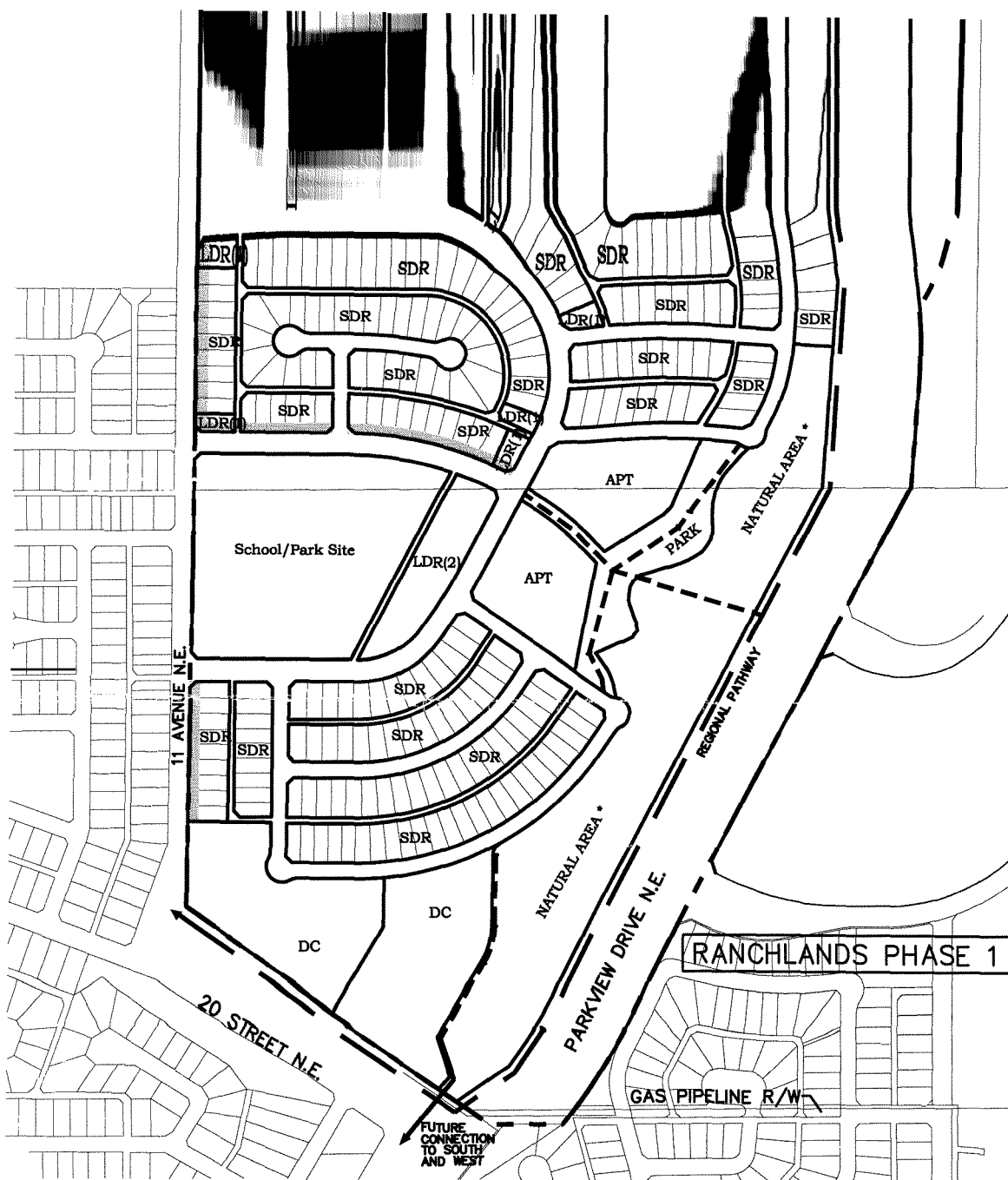
3. DEVELOPMENT CONCEPT

A) Planning and Design Objectives

The subdivision design and proposed Land Uses are shown in **Figure 6**. The neighborhood design responds to the unique topographical character of the area, man made and natural constraints, and the policies of the Ranchlands Area Structure Plan.

The planning and design objectives of the subdivision are:

- To maximize use of terrain variation and public view opportunities;
- To provide a variety of low density residential development opportunities, including single detached, duplex, triplex, and fourplex dwellings;
- To provide opportunity for low density, project based residential which incorporates a common architectural theme;
- To locate three medium density sites adjacent to the river valley escarpment;
- To service most single detached residential areas with rear lanes;
- To create distinct residential areas within the neighbourhood that minimize through traffic;
- To optimize recreational opportunities and experiences for residents by providing a variety of parks and open spaces throughout the neighbourhood;
- To include top of slope roadways and pathways in order to provide public access to parklands along the top of the escarpment, as well as to prevent the encroachment of private yards out onto public lands;
- To provide pedestrian and vehicle circulation opportunities that provide ease of access to neighbourhood amenities, such as school and park sites, and connections to amenities outside the neighbourhood such as the Northlands commercial development, Medicine Hat Family Leisure Centre, convenience commercial areas in Ranchlands Phase 3 and the South Saskatchewan River valley; and,



RANCHLANDS

PHASE 2

CONCEPTUAL SCHEME

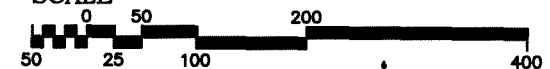
FIGURE 6

CONCEPTUAL PLAN


LEGEND

CONCEPTUAL SCHEME BOUNDARY.	—
REGIONAL TRAIL SYSTEM	—
LOCAL TRAIL SYSTEM	- - -
SINGLE DETACHED RESIDENTIAL	. SDR
LOW DENSITY DUPLEX	. LDR(1)
LOW DENSITY MULTI FAMILY	. LDR(2)
WALK UP APARTMENTS	. APT
PROJECT BASED LOW DENSITY	. DC
URBAN RESERVE DISTRICT.	. UR
NO FRONT VEHICLE ACCESS PERMITTED.	

SCALE



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 **Medicine Hat**
The Gas City

- To adequately separate oil and gas operations from residential uses and to allow their continued operation within the area.

Detailed land use statistics, dwelling unit generations and population projections and development densities are provided in **Tables 1, 2 and 3**, respectively at the back of this report.

B) Land Use

Low Density Residential

The primary land use is for Single Detached Residential (SDR). Based upon an average lot frontage of 15 m (49 ft), there are approximately 510 single-detached lots located within Ranchlands Phase 2. Lot sizes will be confirmed at the detailed subdivision stage, reflective of the market demands at that time.

Seventeen (17) Low Density-Duplex (LDR1) lots are located throughout the Conceptual Scheme area. The lots have been integrated into the community by siting the LDR1 lots within single detached block faces. The lots are sited to take advantage of proximity to parks, collector roadways, and corner site locations that enhance the development potential of the lots, or provide a transition between the SDR and medium density sites.

Two (2) larger Low Density-Multi Family lots (LDR2) provide the opportunity for self-contained, project-based housing with a mix of low density unit types, including duplexes, four-plexes and townhouses. These two sites have been located adjacent to public parks to permit enjoyment of open space by residents as well as to provide a transition to single detached residential.

Project Based – Low Density Residential

Two ± 2 ha (5 acre) lots are proposed in the southern portion of the Conceptual Scheme for project based, low density residential uses. The Conceptual Scheme proposes a newer concept for low density housing which allows for a comprehensively planned single detached, duplex and triplex project containing a common architectural theme. Adult living projects and “Horizon Villages” are common examples of this type of development. For a development of this scale it is proposed that land uses be controlled through the use of a Direct Control (DC) District to ensure that the project will be compatible with the proposed single detached homes in this area of

Ranchlands. Proposed development regulations for the two sites are addressed below in Section 4.

Walk-up Apartment Residential

Three (3) walk up apartment sites (APT) have been located adjacent to the eastern edge of the plan area, in keeping with the directions of the Ranchlands Area Structure Plan. Such locations allow for the maximization of River valley views by a greater number of residential units. The APT sites in the south portion of the Conceptual Scheme are also located near the school park site, collector roadways and a proposed commercial site in Ranchlands Phase 3. These locations provide for increased separation from low density uses in the area and good vehicular access with a minimum of disruption to the rest of the neighbourhood. They also provide for convenience of pedestrian accessibility from the apartment sites to the area's parks, trails and commercial facilities.

It is proposed that these three APT sites will be developed as walk-ups, with low rise apartment structures up to 4 storeys in height.

C) Parks and Trail System

A 4.4 ha (10.9 ac) School/Park site is located in the central portion of the Conceptual Scheme area. This site will be the open space focus of the community and accommodate a K-8 Public School and active play areas.

Smaller Parks of 0.5 hectare to 1 hectare in size are distributed throughout the Conceptual Scheme area. These parks provide opportunity for more localized active or passive recreation; adjacency to the escarpment; public views to the River valley and linkages to local and regional trail systems. The park adjacent to 11 Avenue NE, south of Parkview Drive, also provides some of the separation required between the oil and gas facility west of 11 Avenue NE and proposed residential developments in Ranchlands Phase 2.

All School and Park spaces will be acquired through Municipal Reserve (MR) dedications at the time of subdivision of the respective development stages. MR entitlements for the remainder of Plan 6164 JK and Section 8, not required in the Ranchlands Phase 2 community, will be deferred by caveat to the remnant parcels, for dedication at later phases of Ranchlands development.

A bicycle/pedestrian trail system runs through the Conceptual Scheme area taking advantage of the unique topographical features and view opportunities

from the top of the escarpment. The 80m wide Parkview Drive right-of-way will provide opportunity for a 2.4m wide regional bicycle pathway. This trail will be integrated into the larger City wide regional trail system south of 20th Street N.E. and west of 11 Avenue N.E., linking Ranchlands Phase 2 to the newly developed Medicine Hat Family Leisure Centre and the proposed Northlands commercial development. The gas line right-of-way along the northern limit of residential development is also proposed to be used for an east-west regional trail link, connecting 11 Avenue NE with the river valley.

Connections to these regional trails from the residential areas are accommodated within local road rights-of-way and local pathways. The local pathways are located to provide direct pedestrian linkages through small parks and along the edges of the escarpment system. They will be more passive in nature than the regional trails and focussed towards the quiet enjoyment of community residents.

D) Natural Areas

Along the eastern side of Ranchlands Phase 2, running in a slight N.E. to S.W. direction is a slope of varying grades. This land, which exceeds a 15% slope, is proposed in the Conceptual Scheme as “Natural Area”, to be designated as Environmental Reserve (ER) and retained in its natural state. Located between the alignment of Parkview Drive and the developable residential area (mid-slope line), the Natural Areas will also provide a separation of homes from vehicular traffic. A second Natural Area will be east of the residential areas north of Parkview Drive, lying above the future development in Ranchlands Phase 3. The Natural Areas makes up approximately 12.94 ha (32 acres).

Exact delineation of the Natural Areas will require detailed geotechnical investigation and legal survey to establish property lines for the ER parcels. This will occur prior to subdivision of the various phases of development, both above and below the sloped lands.

A future Natural Area will ultimately be dedicated on a portion of the lands lying north of the Gas Pipeline (R/W Plan 741 0127). Due to the bank erosion caused by undercutting of the South Saskatchewan River and the resultant unstable slopes, a portion of these lands were identified for Environmental Reserve purposes in the Ranchlands ASP. Left in their natural state these lands provide scenic opportunities for passive recreation activities, taking advantage of the visual assets offered by the South Saskatchewan River

Valley. The exact extent of the ER parcel will need to be established through detailed geotechnical survey which will define the limits of unstable land.

Given the unknown ER land requirements, the land lying north of the gas pipeline has not been designated for development at this time. The timing for abandonment and reclamation of the oil and gas facilities will also need to be determined prior to detailed land use planning and servicing studies. Therefore the Conceptual Scheme proposes that all lands lying north of the gas pipeline remain as UR (Urban Reserve) until the geotechnical studies are completed and land use and servicing analyses undertaken as part of a future amendment to the Ranchlands Phase 2 Conceptual Scheme.

E) Transportation

Ranchlands Phase 2 is well serviced by arterial and major collector roadways. Access to the subdivision is provided from 11 Avenue N.E., 20 Street N.E. and the future extension of Parkview Drive N.E. These roadways define a portion of the west, south and east boundaries of the Conceptual Scheme, respectively, and are the arterial roadway connections to other areas of the City. 11 Avenue and 20 Street are already developed. Parkview Drive is proposed to be extended in the next 2 to 5 years, from its current terminus at 20 Street N.E. to Division Avenue.

The collector road system provides direct access to the higher traffic generators such as the medium density residential sites and the school site. The local road network has also been designed to provide convenient and efficient vehicular and pedestrian access in and between different residential areas. A traffic study to assess development impacts and propose mitigation measures will be provided prior to subdivision approval. All road rights-of-way and carriageways will be designed and constructed to current City of Medicine Hat standards for local and collector roadways, as shown in **Appendix A**.

Noise impacts from Parkview Drive traffic on adjacent residential lots will also need to be determined as final roadway and lot grades are established. Where required, a 1.8 m screen fence or other noise attenuation devices will be provided at the rear of lots backing onto Parkview Drive. This fence will be installed by the developer to ensure a common design, material, colour and timely completion.

F) Servicing

Sanitary Sewer

A 300mm sanitary sewer enters Ranchlands Phase 2 from Northeast Crescent Heights Phase 4 at 11 Avenue and Henderson Court NE. The trunk sewer to convey this flow to Ranchlands Phase 1 was constructed through Ranchlands Phase 2 in 1999, in order to allow the development of NECH Phase 4A to the west. The sanitary sewer trunk connects to a downstream sewer (525mm) which flows southwards in Preston Avenue S.E. (Ranchlands Phase 1)

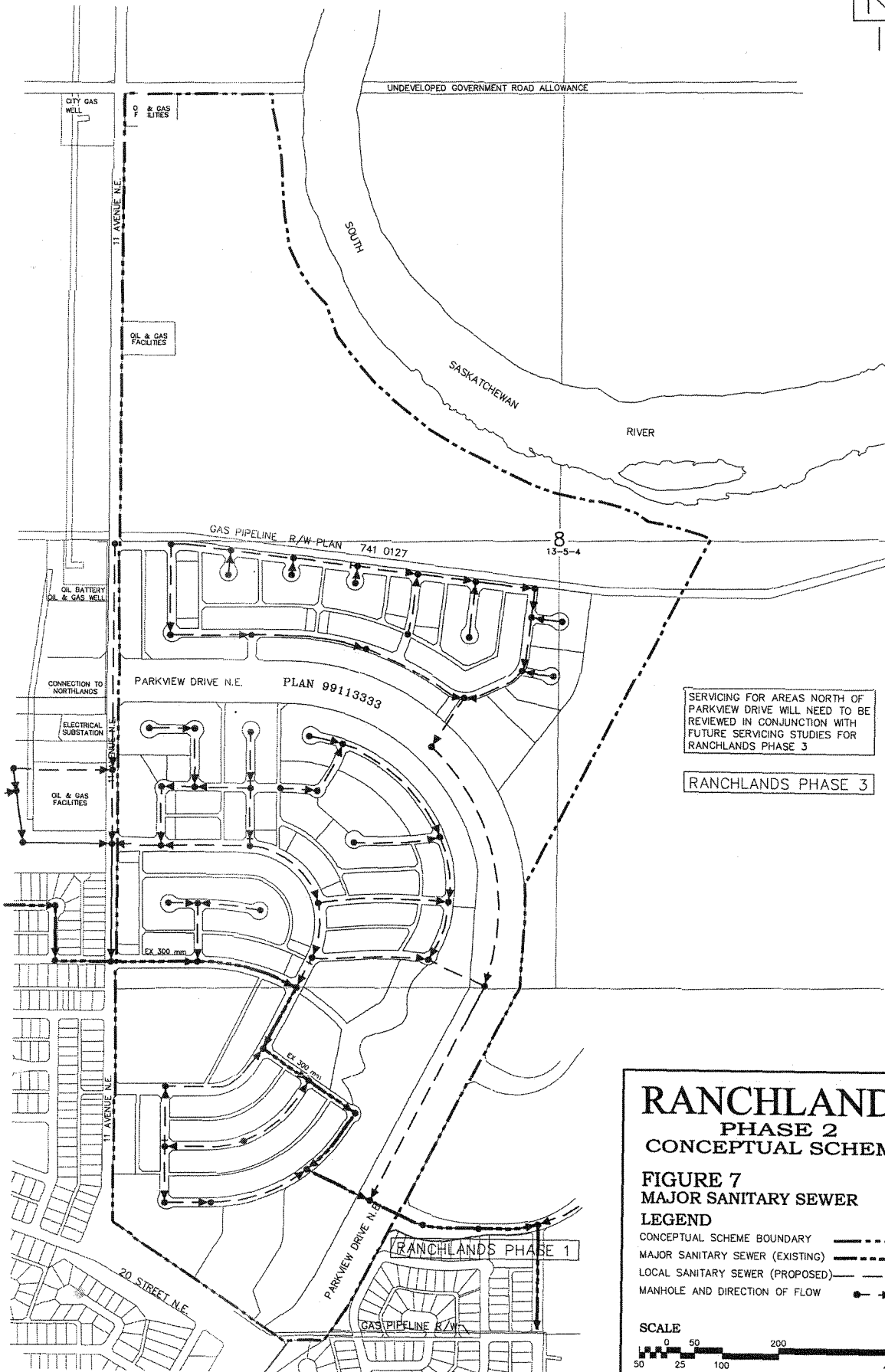
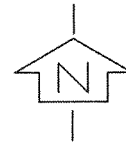
The overall preliminary layout of sewers for Ranchlands Phase 2 is shown in **Figure 7**. Pipe sizes will be confirmed at the detailed engineering stages.

Design loads for the sewers have been based on the current policy of connecting weeping tile to the sanitary sewer. As for NECH 4 design, the following parameters were used:

- 454 litres per capita per day (100 gals/cap/day). This figure includes a 15% allowance for infiltration and inflow from ground water, in keeping with City standards.
- Peak sewage flows will be calculated on the basis of the Harman Peaking Factor and sanitary sewers will be designed to accommodate peak flows with required wet weather and ground water allowances.
- Manning's n (pipe roughness) of 0.013.
- Unit densities of 3.0 persons per unit for Low Density developments and 1.5 persons per unit for Medium Density developments were used. This is keeping with per unit populations projections from the Ranchlands Area Structure Plan.

Storm Sewer

Stormwater Management for the Ranchlands Phase 2 area is addressed in a separate report (*“NE Crescent Heights/Ranchlands Medicine Hat Stormwater Management Plan”* – Reid Crowther & Partners Ltd. June 1999) which also addresses the conceptual design of a stormwater treatment facility to service the full development of this area, to Alberta Environment requirements. The SWM Plan proposed that immediate development from NECH and Ranchlands could be accommodated within a dry pond located immediately east of Ranchlands Phase 1, adjacent to the river. The dry pond works as a sedimentation pond to remove suspended solids from storm water flows prior to release into the South Saskatchewan River. The pond has been sized to



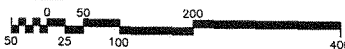
RANCHLANDS PHASE 2 CONCEPTUAL SCHEME

FIGURE 7 MAJOR SANITARY SEWER

LEGEND

- CONCEPTUAL SCHEME BOUNDARY ———
- MAJOR SANITARY SEWER (EXISTING) ———
- LOCAL SANITARY SEWER (PROPOSED) ———
- MANHOLE AND DIRECTION OF FLOW —●→

SCALE



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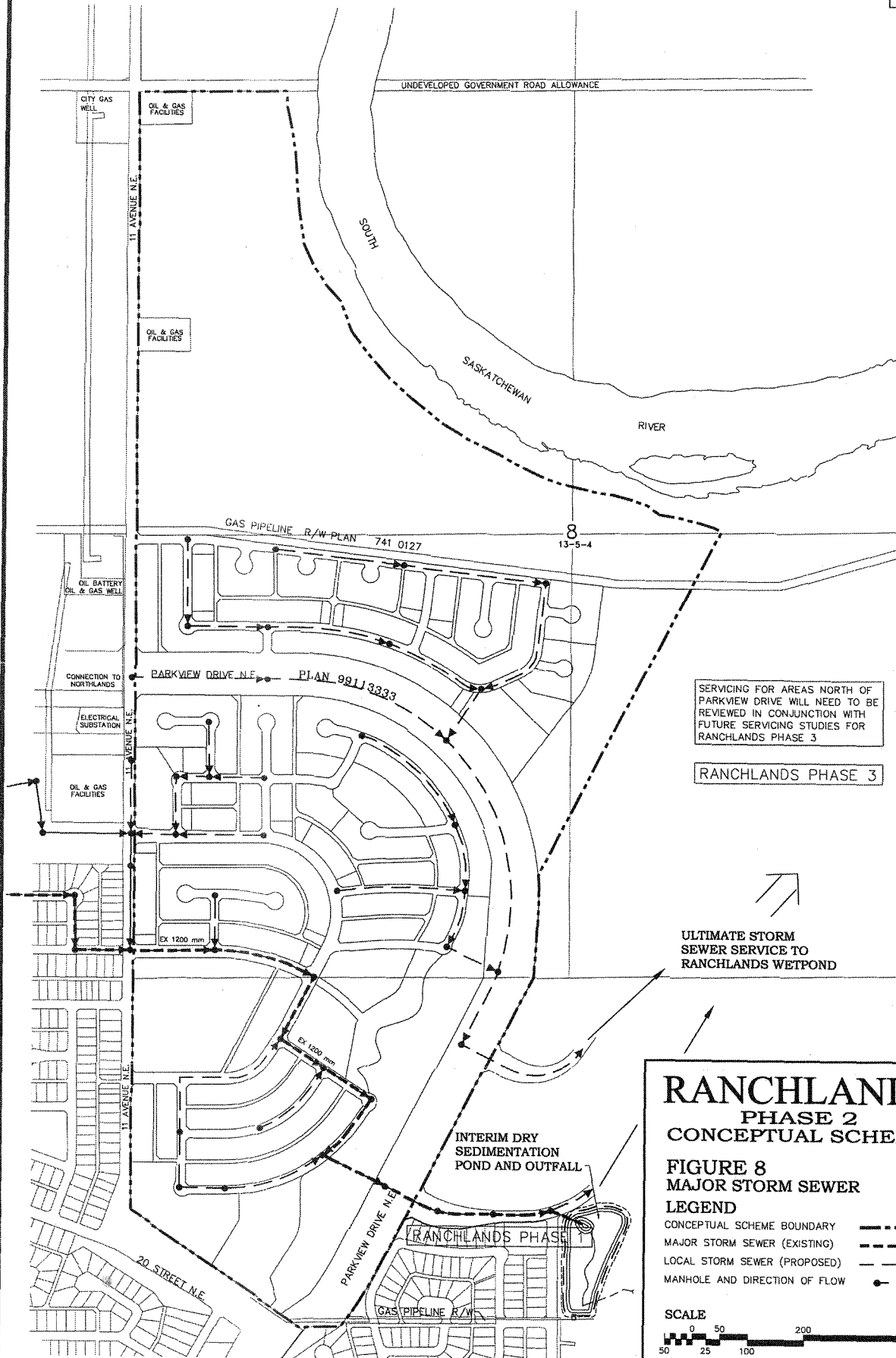
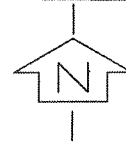
accommodate storm water flows from up to 38 ha of urban development. Ultimate stormwater treatment for any development beyond 38 ha (the entire NECH/Ranchlands tributary area is 247 ha) would have to be accommodated within a future treatment pond to be constructed in the river flood plain north of Ranchlands Phases 3 and 4. At that time the dry sedimentation pond would be converted to an on-line flow attenuation pond for the overall SWM system and the existing outfall to the river eliminated.

In 1999 a 1200mm stormwater trunk was constructed across Ranchlands Phase 2, to convey stormwater flows (both sewer and overland) from NECH Phase 4 to discharge into the dry sedimentation pond.

The overall layout of storm sewers, and general overland flow planning, for Ranchlands Phase 2 has been designed to discharge stormwater into the future stormwater pond, as shown in **Figure 8**. Immediate development in the south portions of Ranchlands Phase 2 will connect to the existing 1200mm main. The storm sewer system will be designed to handle the 1:5 year storm event as per new City standards. Sufficient capacities of overland conveyance and SWM facilities to detain run off from events in excess of 1:5 year return event will be provided and discharge will not exceed pre-development levels.

The existing SWM Plan will be updated during the detailed design of the first stage of Ranchlands Phase 2 development, to meet new City and Provincial standards and to determine new storage volumes requirements and pipe sizes. This update will be required in Spring 2002. Ultimate storm sewer services for that portion of Ranchlands Phase 2 lying north of Parkview Drive may also have to be assessed in this review to determine whether the northern portions can be more efficiently and economically serviced through Ranchlands Phase 3. All development will be coordinated with the approving authorities to provide a properly and well designed drainage system while minimizing the number of trap lows.

Alberta Environment has approved the interim use of the existing dry pond for storm water quality management for portions of Ranchlands Phase 2 up to a maximum 38 ha of tributary development. This will permit the development of Stage 2A (as discussed later in Section 4C). For the full build out of Ranchlands Phase 2, the ultimate stormwater management pond will be required for the entire Ranchlands area.



SERVICING FOR AREAS NORTH OF PARKVIEW DRIVE WILL NEED TO BE REVIEWED IN CONJUNCTION WITH FUTURE SERVICING STUDIES FOR RANCHLANDS PHASE 3

RANCHLANDS PHASE 3

ULTIMATE STORM SEWER SERVICE TO RANCHLANDS WETPOND

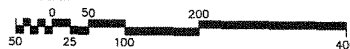
RANCHLANDS PHASE 2 CONCEPTUAL SCHEME

FIGURE 8 MAJOR STORM SEWER

LEGEND

- CONCEPTUAL SCHEME BOUNDARY ———
- MAJOR STORM SEWER (EXISTING) - - - - -
- LOCAL STORM SEWER (PROPOSED) - - - - -
- MANHOLE AND DIRECTION OF FLOW ● →

SCALE



September 2001

Water Supply

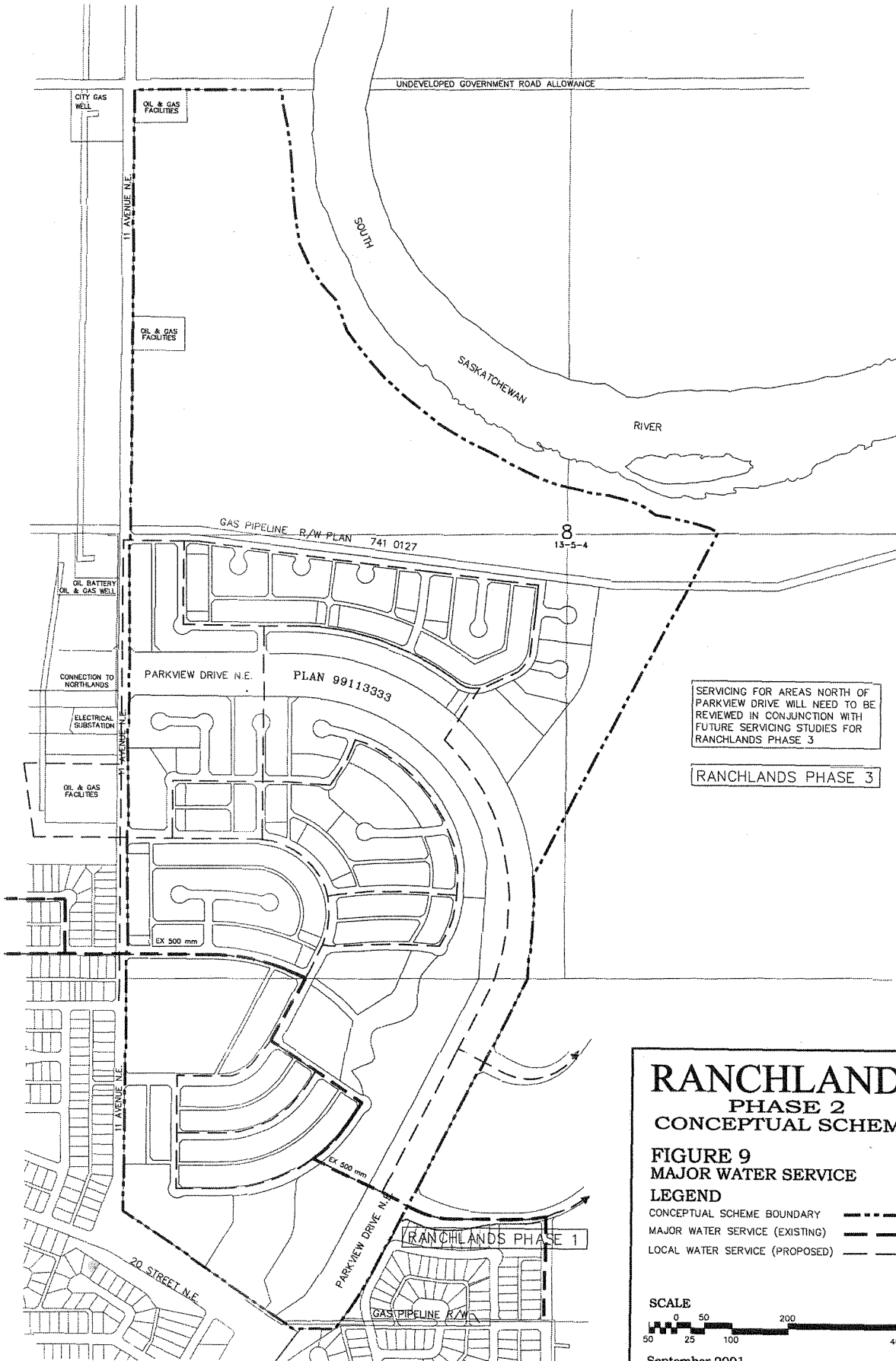
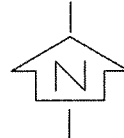
The area is serviced by an existing 500mm watermain from the North Reservoir at Division Avenue, through NECH, connecting to a 250mm main in Preston Avenue S.E. (Ranchlands Phase 1). This is part of the North Reservoir pressure zone.

The overall preliminary layout of watermain for Ranchlands Phase 2 has been designed as extensions from this main or existing services in 11 Avenue, as shown in **Figure 9**. This network has been modeled using the City watermain model (operated by Associated Engineering). The model used by Associated Engineering was a continuation of the model prepared in 1995 for the analysis of the entire city. This model was calibrated to measure system pressures on a city-wide basis. The results concluded that there is sufficient supply and pressure to service the area. Each development stage will be required to provide a looped water service to ensure adequate pressure and supply.

Shallow Utilities

Shallow utilities (cable, gas and electrical) will be provided to individual residential lots and the school site from the collector and local roadways. A 1.5 m right-of-way for shallow utilities will be provided on lots as required, at detailed design stage of roads and streets. Services will be extended as roadways are built for each particular stage of development.

Prior to any servicing in Ranchlands Phase 2C the electrical substation located west of 11 Avenue will require upgrades. This first phase of this upgrade is scheduled for Spring 2002. Development requirements will need to be coordinated with Medicine Hat Electric to ensure availability of services for later phases.



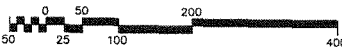
RANCHLANDS PHASE 2 CONCEPTUAL SCHEME

FIGURE 9 MAJOR WATER SERVICE

LEGEND

- CONCEPTUAL SCHEME BOUNDARY
- MAJOR WATER SERVICE (EXISTING)
- LOCAL WATER SERVICE (PROPOSED)

SCALE



September 2001

4. IMPLEMENTATION

A) Future Planning and Engineering Approvals

Upon approval of this plan by City Council, the Ranchlands Phase 2 Conceptual Scheme will form the basis for the orderly and economical development of the area. The City of Medicine Hat, Land & Properties Department, as developer, will coordinate future development provisions to ensure a smooth and timely approvals process.

The Conceptual Scheme establishes the general land use pattern that will guide future zoning changes, subdivision and facilitate the installation of major underground services. As market demands are better known and development proceeds, detailed zoning amendments will be made to designate the various sites with appropriate District of the Land Use Bylaw. District Overlays will be used where appropriate to achieve the land uses envisioned by this Conceptual Scheme.

Tentative plans of subdivision will be required to define proposed roadway rights-of-way, property lines and lot areas. Subdivisions will be carried out under the provisions of the Municipal Government Act. Approvals adjacent to the sloped lands will require additional geotechnical studies prior to the dedication of Environmental Reserve, to define both the upper and lower extents of the slope lands.

Prior to the first subdivision approval, the following technical studies will be required to be undertaken and approved by the City of Medicine Hat:

- The overall stormwater management study for Ranchlands will be commenced in Spring 2002.
- A geotechnical investigation to determine groundwater conditions and establish designs for housing foundations and roadway pavements structures will be completed. The investigation will also determine slope stability and setback requirements for development adjacent to the escarpment.
- The Traffic Impact Assessment for the Ranchlands Phase 2 neighbourhood will be completed .

A Development Agreement will lay out the developer's servicing requirements for the various phases of development. Engineering design, construction and acceptance approvals will be coordinated with The City of Medicine Hat.

B) Development Guidelines

The following development guidelines are recommended to enhance the appearance, function and character of the residential areas in Ranchlands Phase 2. As developer of Ranchlands, The City of Medicine Hat - Land & Properties Department will ensure these guidelines are met through detailed subdivision design and sales agreements to residential builders.

Guidelines for all Residential Developments:

- A variety of home styles, exterior design and exterior finishing materials are encouraged. As a general guideline, the same exterior style should not appear more than once in every five single family houses.
- Where there is no rear lane, the front driveways of two adjacent lots should be located along common property lines in order to maximize concentrations of front yard landscaping and to allow adequate spacing for on street parking along the block face. A driveway plan showing the proposed location of each set of driveways should be prepared on a block by block basis at the time of detailed subdivision design.
- Landscaping in the form of trees (minimum 2 per single family housing unit), shrubs and grass is encouraged.
- Where residential lots back onto a School/Park Site, Park, Natural Area or public roadway, other than a lane, a post and cable fence should be built prior to the construction of the first residential home in that area. This will prevent encroachment into the park and environmental areas during construction and ensure the proper location of fences once built by the residential owners.
- Where public lanes and roadways abut a Park or Natural Area, a post and cable fence should be installed in order to prevent vehicle access onto the public lands.

Guidelines for Single Detached Residential (SDR) Developments:

- Where single detached lots with rear lanes front onto 11 Avenue and the collector roadway north of the School/park site, there should be no front

driveway or vehicle access from the street. This will allow these busier roadways to function properly in dispersing traffic throughout the neighbourhood. These lots are shown in **Figure 6**.

- Front setbacks shall range between 5.5 m and 7.5 m with a 1.0 m stagger between adjacent houses where front attached garages are incorporated. On blocks where front driveways and garages are not permitted, the minimum front yard setback of 5.5 m should be adhered to in order to maintain the housing presence on the street.

Guidelines for Low Density – Duplex (LDR1) and Multi-Family (LDR2) Residential Developments:

- All LDR1 and LDR2 developments should be designed to address the front and side streets with entrances, windows and balconies oriented to the public thoroughfares.
- All developments should incorporate materials and design elements respective of surrounding single detached developments.
- All sites should have lane access. All parking should be accessed from the lane with no driveways or vehicular access from front or side streets. In cases where lane access cannot be provided, access and driveway locations should be consistent with single detached developments along the same block face.

Guidelines for Project Based Low Density (DC) Residential Developments:

The following development guidelines are proposed to enhance development of the proposed Direct Control (DC) Districts for the two sites in the southern portion of the Conceptual Scheme. The guidelines are proposed to better integrate project-style, low density development into the low density, single family neighbourhood.

- Single detached, duplex and triplex units are acceptable uses.
- Residential densities for each lot shall not exceed 12 units per acre (30 units per hectare).
- Site coverage shall not exceed 50 percent.

- A minimum yard of 5.5 m is required adjacent to 11 Avenue.
- Units shall reflect height characteristics of adjacent LDR residential developments and not exceed two storeys, or 10.5m, in height.
- All resident and visitor parking shall be provided on-site.
- Locking security gates between the residential project driveway and public street shall not be permitted.
- Development of the two DC sites shall require a comprehensive site plan, grading plan and building elevations at time of development permit application. The site/grading plan must show development of all proposed units, and include common architectural themes, building and roof materials, landscaping, access, parking and fencing.

Guidelines for Walk Up Apartment (APT) Residential Developments:

- Walk up apartment sites should be designed to address the street and create pedestrian friendly environments. Windows, balconies and landscaping should be oriented to the streets and public spaces. Main building entrances should be oriented to public sidewalks and not to the parking lots.
- Multi-building developments should include a common architectural theme throughout the entire project and incorporate materials and design elements respective of surrounding single detached and other low density developments.
- Surface parking lots should be located at the rear of the building and/or screened from public sidewalks, streets and parks through use of architectural elements and landscaping.
- A minimum 3 m side yard with elements such as grassed berms, screen fencing and mature trees should be incorporated to reduce visual impact of parking lots on adjacent residential and park areas.
- Development of the three walk-up apartment sites shall require a comprehensive site plan, grading plan and building elevations at time of development permit application. The site/grading plan must show development of all proposed units, and include common architectural themes, building and roof materials, landscaping, access, parking and fencing.

C) Staging

Watermain, sanitary sewer and storm sewer trunk main services will connect to the new trunks installed through the Ranchlands Phase 2 area in 1999. These utility alignments will provide the opportunity to stage development from south to north as shown generally in **Figure 10**. The first stage, 2A, will permit the two Direct Control sites (4.0ha/10ac) to be developed, tentatively commencing in 2002. A temporary access will be provided to Stage 2A from 11 Avenue until Stage 2B has been constructed in 2003, which will include the local road connections from 2A to 11 Avenue, single detached residential, the viewpoint park and one of the APT sites adjacent to the escarpment. Stages 2C, 2D and 2E will follow in order with a majority of development south of Parkview Drive being completed by 2008. Tentative plans of subdivision will be brought forward for approval for each stage of development. Exact lot dimensions and areas will be confirmed at that time, reflective of the current residential market.

The timing of development of Stages 2F and 2G cannot be determined at this time. However, it is unlikely that they will proceed until servicing of Ranchlands Phase 3 has been designed and constructed, as storm water and sanitary services may need to drain through the lower neighborhood. The servicing and routing of utilities to service these phases will be considered in the detailed planning for Ranchlands Phase 3.

The existing and proposed gas wells within the Study Area will also impact timing and the extent of development allowed within the various phases of Ranchlands 2, as indicated in **Figure 10**. A proposed well at the corner of Parkview Drive and 20 Street may impact full build out of Phase 2A. Development of Stage 2E-North may be delayed due to an existing gas well which is located within a proposed local Park site. The development of some residential lots in Stages 2D and 2F, lying adjacent to 11 Street NE may be delayed until the gas facilities west of the roadway are decommissioned. A portion of Stage 2G may also be impacted by the active well north of the gas pipeline. These gas wells and facilities generally require a 100m residential development setback until decommissioned. Opportunities to reduce these setbacks to 50m for each particular well or facility will be pursued by the City of Medicine Hat through application to the Energy Utility Board.

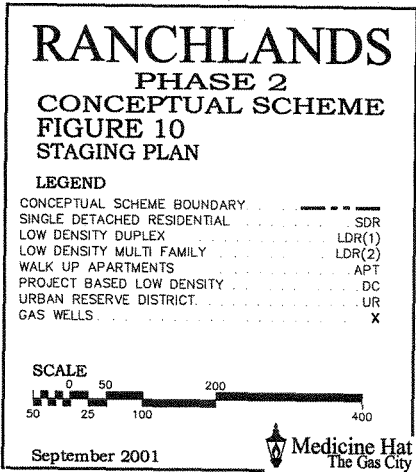


TABLE 1

LAND USE STATISTICS

	Area (ha.)	% of G.D.A.	Dwelling Units	Population / Unit	Population
Gross Plan Area	138.95				
Environmental Reserve (South of gas Pipeline)	12.94				
Gas Pipeline	1.56				
Oil and Gas Facilities	1.14				
Urban Reserve (North of Gas Pipeline)	39.64				
Gross Developable Area	83.68				
Municipal Reserve (School / Park)	8.37	10.0%			
Roads and Lanes (Incl. Parkview Drive)	29.33 ¹	35.1%			
SDR – Single Detached Residential	34.87	41.6%	510	3	1530
LDR1 and LDR2 Low Density Residential	2.98	3.6%	86	3	258
DC – Project Based Low Density	4.18	5.0%	125	1.5	188
APT – Walk-up Apartment	3.95	4.7%	311	1.5	466
Total	83.68	100.00%	1032		2442

¹ Parkview Drive right-of-way is ±15 ha. Local and collector roadways make up ±14.3 ha.

TABLE 2

Dwelling Units, Density and Population by Development Phase

Phase	Gross Developable Ha²	Type of Dwelling	Dwelling Units	Density Units/Ha	Population Generated
2A		Project Based Low Density(DC)	125		188
Totals	4.68 ha		125	26.7	188
2B		Single Detached (SDR)	90		270
		Low Density Multi-family (LDR2)	28		84
		Walk-up Apt (APT)	98		147
Totals	11.64 ha		216	18.6	501
2C		Single Detached (SDR)	80		240
		Duplex (LDR1)	6		18
		Walk-up Apt (APT)	103		154
Totals	14.38 ha		189	13.1	412
2D		Single Detached (SDR)	60		180
		Duplex (LDR1)	12		36
Totals	7.95 ha		72	9.1	216
2E		Single Detached (SDR) - South	45		135
		Single Detached (SDR) - North	60		180
		Duplex (LDR1)	2		6
		Low Density Multi-family (LDR2)	24		72
Totals	11.05 ha		131	11.9	393
2F		Single Detached (SDR)	75		225
		Duplex (LDR1)	6		18
Totals	7.29 ha		81	11.1	243
2G		Single Detached (SDR)	100		300
		Duplex (LDR1)	8		24
		Walk-up Apt (APT)	110		165
Totals	11.69 ha		218	18.6	489
Total	68.68 ha		1032	15.02	2442

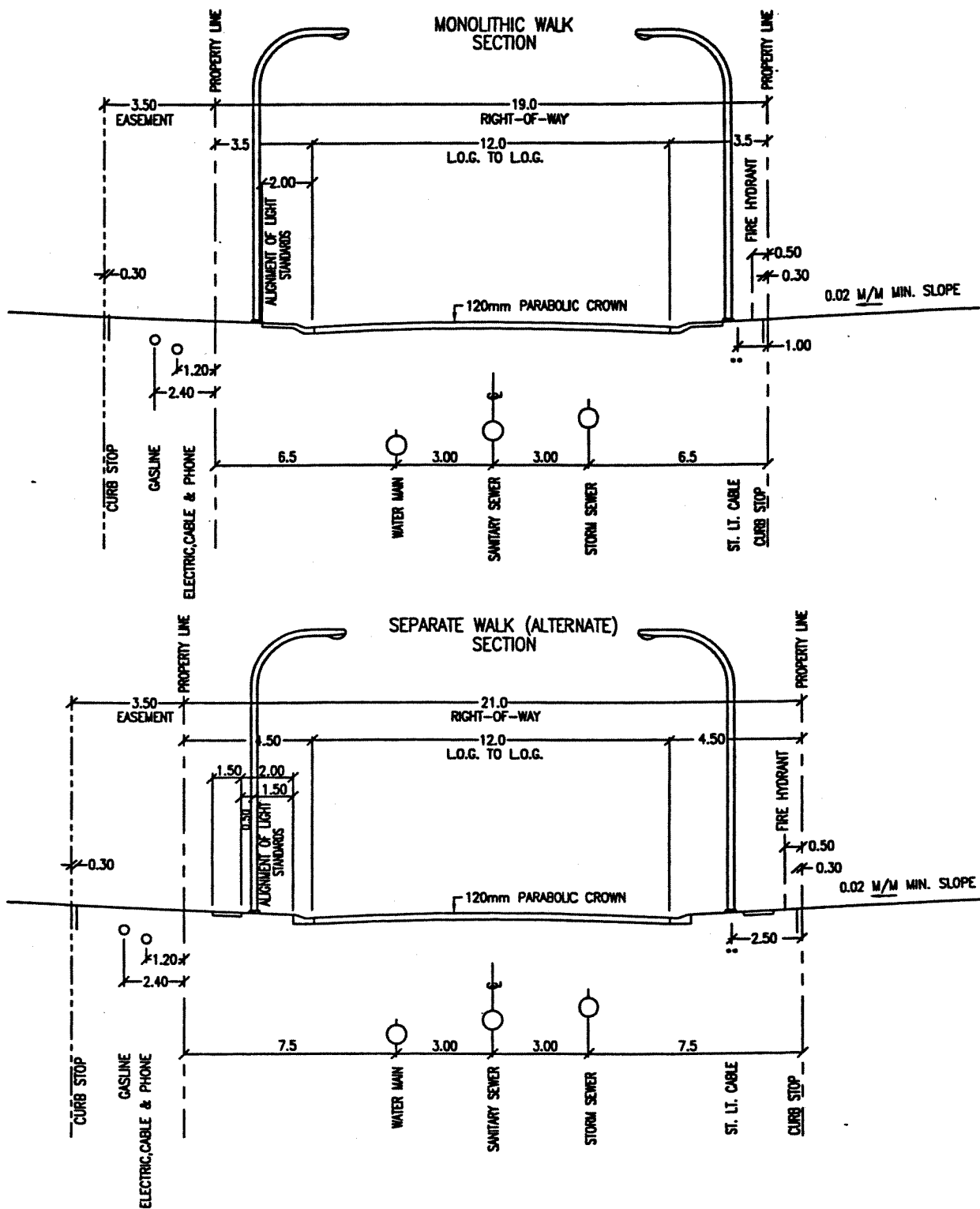
² Includes Road and Park areas within each Phase. Does not include UR, ER and Parkview Drive areas.

TABLE 3**Total Units, Population and Density by Dwelling Type**

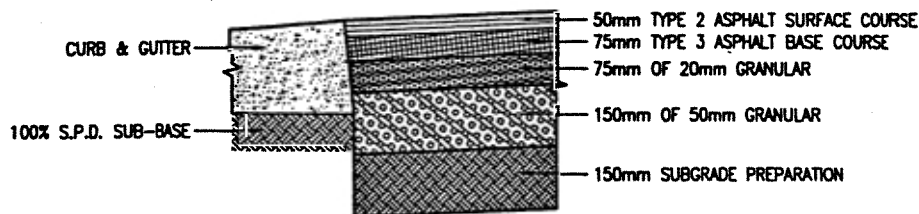
Type of Dwelling	Net Area³ (ha)	Total Units	Total Population	Density (Units/ha)	Density (Persons/ha)
SDR	34.87	510	1530	14.6	43.9
LDR1	1.53	34	102	22.2	66.7
LDR2	1.45	52	156	35.8	107.6
DC	4.18	125	188	29.9	45.0
APT	3.95	311	466	78.7	118.0
Total	45.98	1032	2442	22.4	53.1

³ Density expressed as Units and Persons per “Net Developable Hectare”.

APPENDIX A
ROADWAY CROSS SECTIONS



MINIMUM ROAD STRUCTURE



NOTES:

1. TRANSFORMER TO BE CENTERED 0.9M BACK OF PROPERTY LINE.
2. EASEMENTS TO BE USED WHERE FRONT SERVICING IS REQUIRED.
3. FOR MONOWALK ONLY- ALIGNMENT OF STREET LIGHT BASES TO BE ADJACENT TO BACK OF WALK.
3. STREET LIGHT CABLES TO BE 0.5 FROM BACK OF WALK OR FOLLOW ELECTRICAL DISTRIBUTION TRENCHES IN CASE OF FRONT SERVICING.
4. ALL DIMENSIONS IN METRES, UNLESS OTHERWISE NOTED.

DATE: 01/01/05

SCALE: NTS

DRAWN: LLV

APPROVED: S. DATENBERGER



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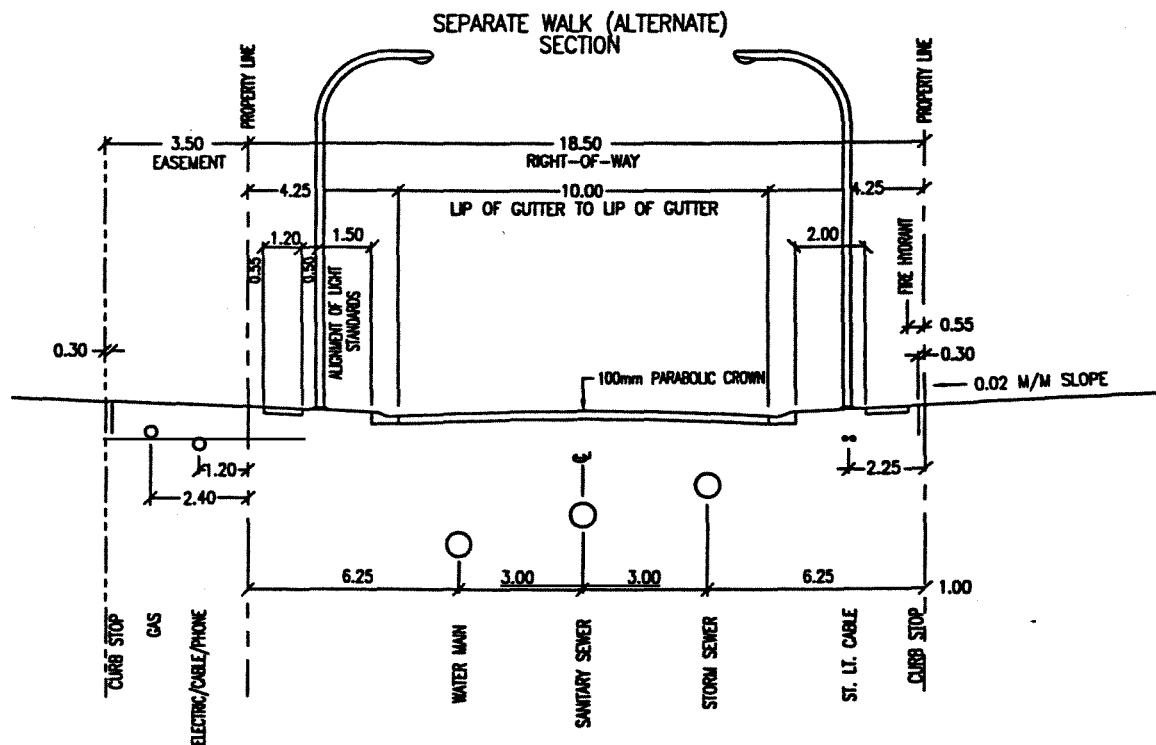
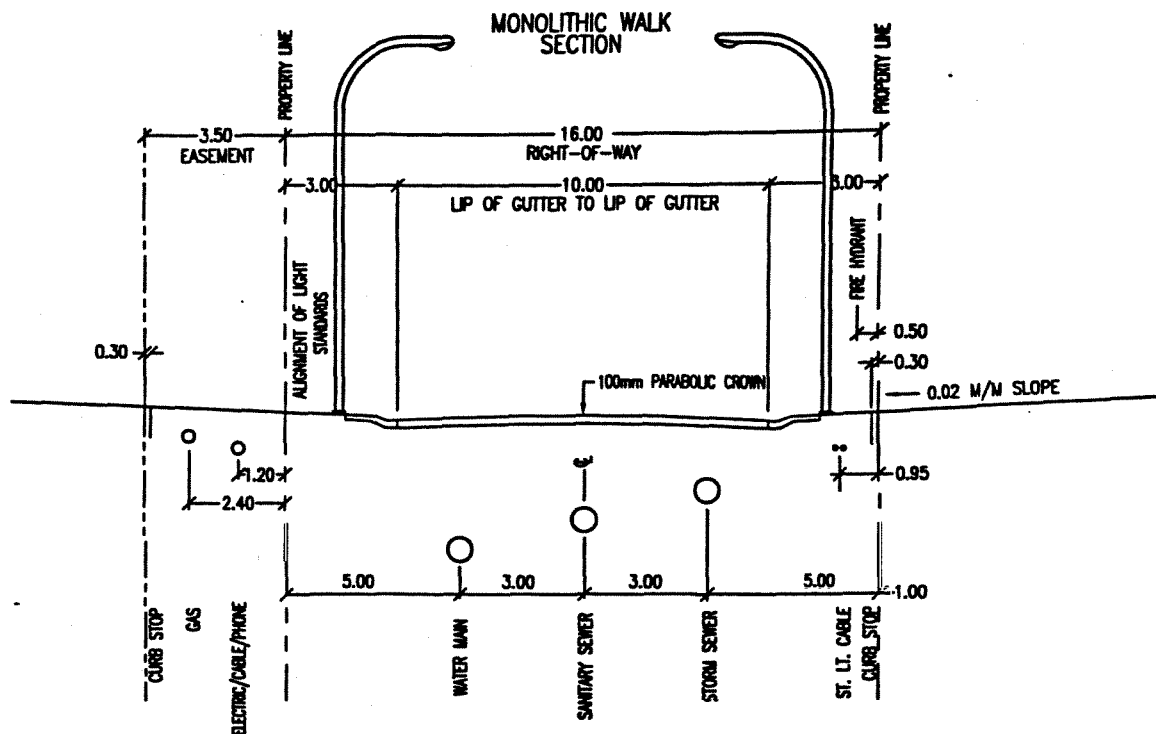
Planning, Building and Engineering

12M MINOR COLLECTOR

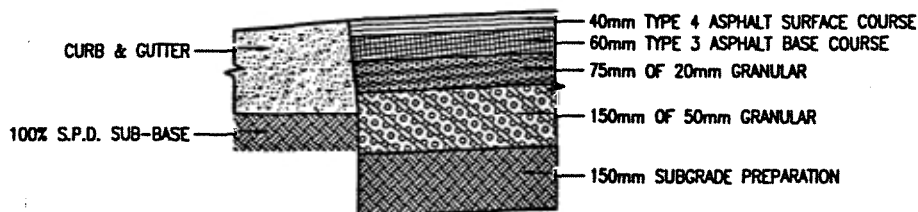
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No.	YY	MM	DD	REVISION DESCRIPTION

BY



MINIMUM ROAD STRUCTURE



NOTES:

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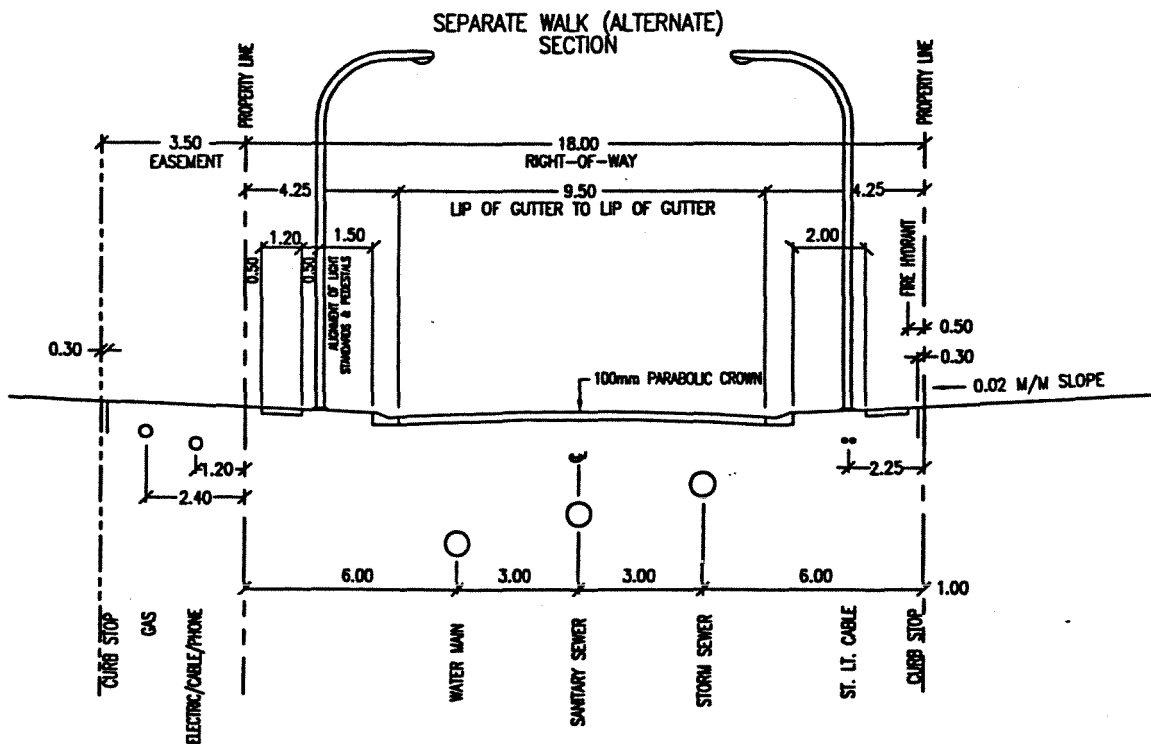
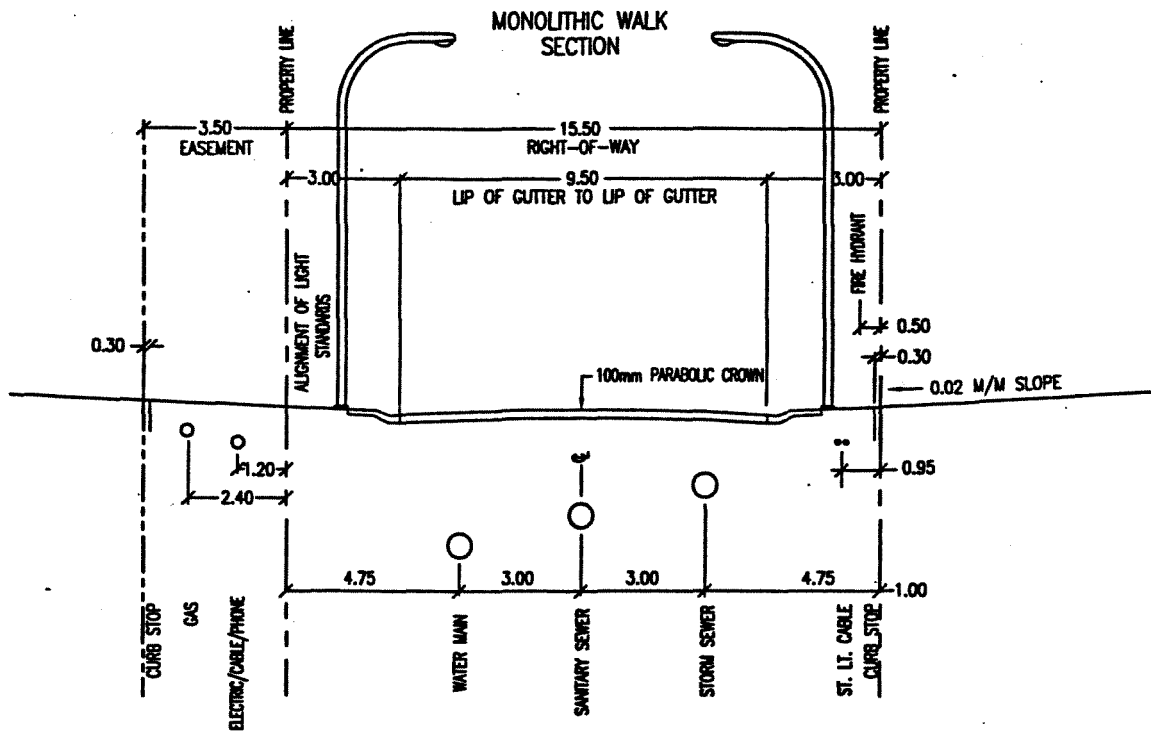


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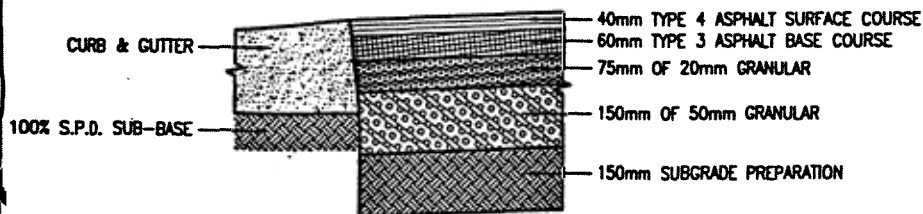
Planning, Building and Engineering

10M LOCAL RESIDENTIAL

DWG. No. RD-101 Rev.



MINIMUM ROAD STRUCTURE



NOTES:

1. TRANSFORMER TO BE CENTERED 0.9M BACK OF PROPERTY LINE.
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DATE:	01/01/05
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Medicine Hat
The Gas City

Planning, Building and Engineering

9.5M LOCAL RESIDENTIAL
(L500 VPD)

DWG. No. RD-100 Rev. •