

SCHEDULE "A" to
By-LAW # 94-23

AREA STRUCTURE PLAN

TOWN OF CALMAR

PORTION OF SW 1/4 SECTION 31-49-26-4-W4

Croylyn Developments Ltd.

W.J.Francl Consulting Ltd.

September 19, 1994



W. J. FRANCL CONSULTING LTD.

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LETTER OF TRANSMITTAL

September 19, 1994

Croylyn Developments Ltd.
Box 504, Cochrane, Alberta
T0L 0W0

Dear Mr. and Mrs. Merinoski,

Re: Area Structure Plan

We are pleased to submit to you the completed Area Structure Plan for the SW $\frac{1}{4}$ Section 31-49-26 West of 4th Meridian. Single copies of the Area Structure Plan are being submitted to Mr. and Mrs. Engberg, the Edmonton Metropolitan Regional Planning Commission and the Town of Calmar.

We like to express our gratitude to you and the staff of the EMRPC and the Town for the cooperation we received throughout the preparation of this report.

Please feel free to contact us, should you require any further information or assistance.

Yours very truly,
W.J.Francl Consulting Ltd

A handwritten signature in black ink that reads 'W. J. Francl'. The signature is written in a cursive style with a large, sweeping 'W' and 'F'.

W.J.Francl, P.Eng.

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1.0 INTRODUCTION

1.1 Mandate:

Mr. Robert Gordon Engbert and Mrs. Elizabeth Lillian Engbert are owners of about 91.2 acres (36.9 ha) of land in the SW¼ of Section 31-49-26-W4 (The Engbert Quarter). This land is located in the Town of Calmar, just north of Highway 39 and is presently classified as "Urban Reserve". Mr. and Mrs. Marinoski from Croylyn Developments Ltd. negotiated with Mr. and Mrs. Engbert the purchase of about 11.7 acres (4.76 ha) of the above land located along the north side of the highway for a commercial development. Since the proposed commercial subdivision along the highway will affect the further development of the remainder of the quarter section the Edmonton Metropolitan Regional Planning Commission (EMRPC) requested the preparation of an Area Structure Plan of the whole parcel (38.6 ha-95.5 acres). In compliance with this request, Croylyn Developments Ltd. commissioned W.J.Francl Consulting Ltd. to prepare the required plan.

1.2 Previous Area Structure Plan:

In 1985 the Town of Calmar requested the EMRPC to prepare an Area Structure Plan for the south half of the above Section 31. In November of 1985 the Planning Commission presented the plan to the Town, a copy of which is attached as "Appendix A". Since it also covers the adjacent quarter section, the EMRPC report provides an overview for the future development of the whole northeast quarter of the Town. The report presented now follows closely the concepts outlined in the EMRPC plan and should be considered an update of the previous study for the SW Quarter Section.

1.3 Purpose and Scope of the Study and Development Objectives:

These remain the same as outlined in the EMRPC study (see pages 1 and 2 in Appendix A).

1.4 New Developments and Modifications of the EMRPC Plan:

These will be discussed in the appropriate chapters, to a large extent in Chapters 3.0 and 4.0 of the present study.

2.0 SITE DESCRIPTION

2.1 Location and Land Ownership:

The area is bounded on the south by Highway No. 39, on the north and east by farmland and "represents a continuous and contiguous extension of the existing residential, recreational and commercial developments in the Town" (EMRPC Report). The area reviewed in this report amounts to about 38.6 ha (95.4 acres). The land ownership is as shown in Table 1. See also the Land Title Searches attached as Appendix B.

Table 1

LAND OWNERSHIP

Certificate of Title Number	Landowner	Area of Property ha	acres
145-A-250	Legal Well Strippers Ltd.	1.724	4.26
41-S-232	Robert Gordon Engberg and Elizabeth Lillian Engberg	36.906	91.194
TOTAL		38.630	95.454

2.2 Easements and Well Sites:

The letter from the Energy Resources Conservatration Board attached as Appendix C lists the well sites and pipelines in the study area and details their location, status and licencee. It appears that the majority of the installations is no longer in operation. In order to ensure an orderly development of the property, the status of the oil and gas installations has to be further investigated and the R/W and caveats of properly abandoned facilities should be withdrawn and discharged from the title. The ASP assumes that all oil and gas installations with the exception of the natural gas supply line for the Town have been abandoned. It is assumed that the gas pipeline owned by Centra Gas (Licence Number 1055) will remain in place and the subdivision design has been adjusted accordingly. Should development proceed while some of the oil and gas fa-

cilities are still in place, then the subdivision design may have to be adjusted to accommodate the situation. The policies of the Energy Resources Conservation Board concerning setbacks from well sites and pipelines and other pertinent regulations will have to be followed.

The subdivision design maintains the access road to the farmstead at all times. The existing housing and other facilities at the farmstead could be left in place indefinitely or could be integrated into the subdivision at a convenient time.

2.3 Topography, Soil Classification, Vegetation and Climate:

For details see pages 7 and 10 and figures 3 and 4 of the EMRPC report attached as Appendix A.

3.0 DEVELOPMENT CONCEPT

3.1 Design Approach:

The Area Structure Plan follows essentially the 1985 design. Any deviations are discussed in the pertinent sections.

The Area Structure Plan was discussed at various stages with representatives of the Department of Transportation, the Edmonton Metropolitan Regional Planning Commission and the Town Administration.

3.2 Development Policies:

The applicable policies of the 1985 report will be adhered to as outlined in the succeeding paragraphs.

(a)(b) Residential Uses:

The policies outlined for residential uses should apply.

(c) Commercial Uses:

The present ASP provides about 6.7 ha of Central Commercial space in the area designated for Downtown expansion in the 1985 report. This report provided 4.8 ha for "Downtown Expansion" and 3.9 ha for "General Commercial" use. The General Commercial area mentioned in the 1985 report was located in the adjacent quarter section and was "to serve as a supplement to the downtown retail area, by providing space for commercial activities which require locations close to the Downtown, but due to the nature of uses and larger space requirements cannot be accommodated downtown" (1985 report). The present design provides adequate land for this type of usage and it seems advisable to consolidate all these commercial developments in the newly expanded downtown core.

A small Neighbourhood Commercial area will be provided in the northwest portion of the development. This location is in the first phase of the residential development and will therefore be available to serve the initial stages and some of the existing developed area.

(d) Schools, Parks and Municipal Reserve:

The 1985 report does not foresee the provision of a school site in the quarter section under consideration. A new school site of about 6 ha has been set aside west of 50th Street, across from the existing school. The development of this site should accommodate a substantial increase in the school population. Any future requirements will be met by sites provided in the neighbouring southeast Quarter of Section 31 as outlined in the 1985 report.

A park area of 3.834 ha is provided, separating the commercial and residential portions.

Croylyn Developments Ltd. indicated that they would make a cash payment in lieu of providing municipal reserve land. The requirement for the 10% Municipal Reserve will be met as shown in Table No.2:

Table 2

MUNICIPAL RESERVE

Description	Hectares	Acres
Cash Payment by Croylyn Developments	0.476	1.176
Park	3.834	9.474
Buffer along North Boundary	0.414	1.023
TOTAL	4.724	11.673

(e) Circulation

Westview Drive is being maintained as east-west major collector and the extension of 51st Street as a minor collector. 46th Street and the extension of 53rd Ave are designated minor collectors in order to establish a north-south artery for the newly developed areas. All streets in the commercial area are designed to conform to the standard of minor collectors.

(f) Environmental and Resource Management Considerations

See the corresponding paragraph in the EMRPC Report.

(g) Well Sites and Pipelines

See section 2.2.

(h) Servicing

The sewage treatment facilities referred to in the 1985 report were built in 1987 and the sanitary sewer on Westview Drive has adequate capacity to service the new development. The servicing will be outlined in Chapter 4.0.

3.3 The Area Structure Plan Design Concepts:

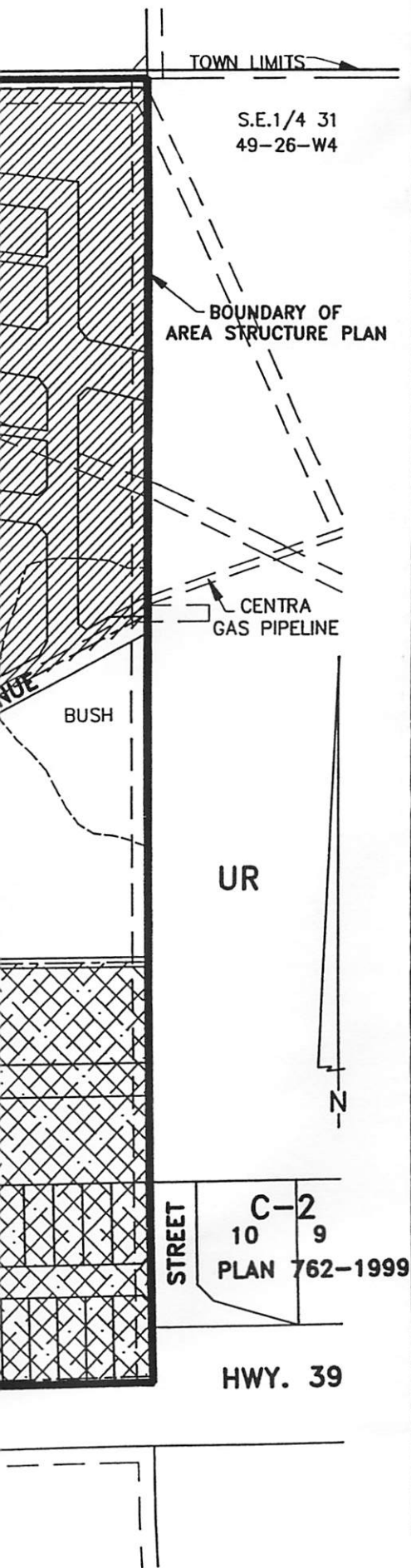
The applicable concepts outlined in the 1985 report are being followed.

3.4 Land Use:

Table 3 shows the breakdown of the land use as illustrated in Figure 1.

Table 3
PROPOSED LAND USES

LAND USE	AREA		PERCENT OF TOTAL
	Hectares	Acres	
Residential: R1	14.749	36.444	38.18
R2	1.001	2.473	2.59
R3	2.055	5.078	5.32
Commercial: C1	6.667	16.474	17.26
Neighbourhood	0.184	0.455	0.48
Park including Buffer	3.872	9.568	10.02
Urban Services	0.671	1.658	1.74
Roads	9.431	23.304	24.41
TOTAL	38.630	95.454	100.00



AREA STRUCTURE PLAN CROYLYN DEVELOPMENTS LTD.

ENGBERG QUARTER

PART OF THE

S.W.1/4 SEC.31 TWP.49 RGE.26 W.4Mer.

TOWN OF CALMAR



A L B E R T A

SCALE 1:4000

Metres



LAND USE DISTRICTS

- R-1 RESIDENTIAL - SINGLE FAMILY 
- R-2 RESIDENTIAL - GENERAL
- R-3 RESIDENTIAL - HIGHER DENSITY
- C-1 COMMERCIAL - CENTRAL 
- C-2 COMMERCIAL - HIGHWAY
- DC DIRECT CONTROL
- US URBAN SERVICES
- UR URBAN RESERVE
- MR MUNICIPAL RESERVE
- P PARK

Prepared: September 1994

Drawing No. 237-1

WJF W.J. FRANCL CONSULTING LTD.

N.E.1/4 36

N.W.1/4 31-49-26-W4

BUFFER-MR

S.E.1/4 36
49-27-W4

S.W.1/4 31
49-26-W4

US

UR

WESTVIEW
DRIVE

US
NEW
SCHOOL
SITE

R-2

R-1

R-3
BLK. 11

53 AVE.

BLK. 18

54

AVE.

R-3
BUSH &
FARMSTEAD

DC
BLK. 10

52 AVE.

US
PRESENT
SCHOOL

BLK. 13

R-1

BLK. 16

BLK. 15

53 AVE.

R-2

R-3

BLK. 9

51 AVE.

BLK. 5

R-2
BLK. 11

BLK. 10

BLK. 12

ARENA &
CURLING RINK
US

C-1

50 AVE.

C-2
BLK. 6

US

BLK. 2

C-1

BLK. 14

C-2

R-3

BLK. 4

BLK. 3

DC

BLK. 15

P
(MR)

3.5 Housing Units and Population:

Table 4 lists the expected yield of housing units.

Table 4
Housing Units Generated

DISTRICT	AREA HA	NUMBER OF UNITS	PERCENTAGE OF TOTAL
R1	14.749	192	68.8
R2	1.001	26	9.3
R3 @30 Units/ha	2.055	61	21.9
TOTAL	17.805	279	100.0

Based on 3.1 persons per unit the total population in the subdivision area would amount to 865.

The General Municipal Plan of 1980 assumes a school population of 0.97 per housing unit. This would add about 271 students to the school population.

3.6 Parks

See paragraph 3.2d.

3.7 Circulation

See paragraph 3.2e.

4.0 SERVICING

Figures 2,3,4 and 5 illustrate the major utility systems for the area under consideration. The commercial area in the south portion of the property can be serviced independently from the balance of the quarter section. The orderly servicing of the remaining area depends on the development of Westview Drive across the parcel of land separating it from 50th Street and along with it the extension of the water, sanitary and storm sewer facilities from the Westview Quarter (S.E.¼ 36-49-27-W4) to the boundary of the property.

Should there be the need to develop some portions of the land before Westview Drive and the services are extended to the property then measures could be devised to provide servicing facilities in an intermediate more costly fashion for instance via 51st Street, or 53rd and 54th Avenue.

4.1 Servicing of the Commercial Area

A partial development of the commercial property is expected to occur in the near future. It is therefore fortunate that this area can be opened up independently from the the remaining land as indicated in Figures 2 to 5.

The initial portion (shown as Stage IA in Figure 6) has access from the highway and from the newly constructed entrance to the highway commercial property in the east. The second phase (Stage IB in Figure 6) will have additional access from 51st Avenue in the west and will connect to an extension to the entrance road to the highway commercial subdivision in the east.

The 1985 EMRPC report states on page 16:

"The proposed Downtown expansion and general commercial areas are an extension of the existing commercial land use pattern along the northern edge of Highway 39. These areas have direct access to and from Highway 39 as well as to collectors within the North East Calmar area. The Highway Commercial area however will only have access from a service road along Highway 39."

The 1985 ASP thus gives the newly created Central Commercial areas direct access to Highway 39. In order to reduce the number of entries to the highway the original design was modified and now the only road entering it is the newly created 46th Street. This street replaces the existing access road to the farmstead.

The only property fronting onto the highway are the newly created

three lots in Block 14. It is proposed to have a common access to the highway for the two westerly lots and to provide access to the third lot from 46th Street.

Watersupply will be from the existing system in the intersection of 47th Street and 50th Avenue. In the second phase the water system will be looped to the existing mains on 51st Avenue.

It is proposed to provide a low pressure sewer system for the whole commercial area discharging into the existing sanitary sewer system on 50th Avenue.

A retention pond will be provided for the storm water as indicated on Figure 4.

Natural gas, power and telephone are easily extended into this area.

The development of the Commercial Area makes the extension of water and sanitary sewage services into the Highway Commercial area to the east possible and reduces the cost for the natural gas and power installation.

4.2 Circulation

The main interior collector is the extension of Westview Drive from 50th Street to the east boundary of the subdivision providing a connection to further developments in the adjacent quarter section. 46th Street, 53rd Avenue east of 46th Street, the extension of 51st Avenue and all the Streets within the Commercial Area are to be designed to "Minor Collector" standard. All other street are built to residential standard. All the above streets and walks and lanes are to be built to established Town standards. See Figure 2 for details of the arranged layout.

4.3 Sanitary Sewage System

In 1988 new sewage treatment facilities were constructed providing capacity for 1800 people with a possible expansion to 2600. Since the population reached 1779 in June of this year and there is ongoing growth in other areas, expansion of the sewage treatment facilities will be required even without the development of the Engbert Quarter.

The sanitary sewer main on Westview Drive has adequate capacity and depth to provide sanitary sewer service for the whole area even including areas beyond the quarter section. Figure 3 shows the system layout.

4.4 Storm Sewer System

The natural drainage of the land is to the north west. It is proposed to construct a detention pond and to discharge at a low flow rate into the drainage facilities in the Westview Quarter. Figure 4 shows a sketch of the proposed storm sewer collection system.

4.5 Water Supply System

The Capital Region Southwest Water Services Commission provides the Town with treated water through a 300mm pipeline. A 3,200,000 liter water reservoir and pumphouse provide adequate service for a population of about 2,400 people and can be expanded further to supply the increased demand.

The subdivision area would be supplied by a 200mm main in the south and a 250mm main on Westview Drive in the north. There are numerous cross connections to the existing water distribution system on 51st 53rd and 54th Avenue.

Figure 5 shows a schematic layout of the proposed water distribution system.

4.6 Other Utilities

Natural gas is provided by Centra Gas. Their pressure reducing station is just west of the subdivision and they are ready to provide service to the highway commercial area located to the east. Transalta Utilities and AGT supply electric power and telephone services. Al Cablesystem Inc. has a franchise for the cable television service. All the above companies will extend their services into the newly developed areas. Easements and right-of-ways will be provided as required.

5.0 DEVELOPMENT POTENTIAL AND SCHEDULING

The Town of Calmar experienced considerable growth over the past few years. Population increased from 1,271 in 1991 to 1,779 in June of 1994 and several new businesses were established. Further growth is expected, mainly in the Westview Subdivision which has the basic infrastructure facilities and offers low development costs. The development of the residential land of the Engbert Quarter and other areas to the east requires the extension of Westview Drive and the major services to the subdivision boundary.

There seems to be a demand for downtown space and Croylyn Developments Ltd. is planning to proceed with a commercial development shown as Phase IA on Figure 6. Since progress of this area is independent of development in the rest of the subdivision, Phase IA could proceed at any time and Phase IB could follow as soon as there is further demand for commercial property.

An orderly development of the residential part would require initially the construction of Phase II in the northwest part of the subdivision. This will establish the basic requirements for further development not only of the subdivision itself but also for all the areas to the east connecting to it at some future date.

The next stage, Phase III, will provide direct access to the commercial areas to the south.

Phase IV finally covers the balance of the land. Like the other phases, it can be broken down into smaller stages, meeting the housing demand as it exists at the time of the proposed development.

It has been pointed out earlier that the farmstead with its surrounding bush and parkland could be incorporated into the subdivision or could be left in place indefinitely.

N.E.1/4 36 N.W.1/4 31-49-26-W4

S.E.1/4 36 49-27-W4 S.W.1/4 31 49-26-W4

TOWN LIMITS

S.E.1/4 31 49-26-W4

WESTVIEW DRIVE

BOUNDARY OF AREA STRUCTURE PLAN

NEW SCHOOL SITE

AREA STRUCTURE PLAN
 CROYLYN DEVELOPMENTS LTD.
 ENGBERG QUARTER
 PART OF THE
 S.W.1/4 SEC.31 TWP.49 RGE.26 W.4Mer.
TOWN OF CALMAR

ALBERTA

SCALE 1:4000

Metres



ROAD SYSTEM

———— MAJOR COLLECTOR
 - - - - MINOR COLLECTOR

BLK. 11

53 AVE.

BLK. 10

52 AVE.

BLK. 9

51 AVE.

BLK. 5

50 AVE.

BLK. 6

PRESENT SCHOOL

STREET 49

BLK. 13

48

STREET

BLK. 16

47

STREET

BLK. 14

ARENA & CURLING RINK

BLK. 2

BLK. 14

BLK. 15

STREET 46

BUSH & FARMSTEAD

AVENUE 53

BUSH

ACCESS ROAD

STREET

10

9

PLAN 762-1999

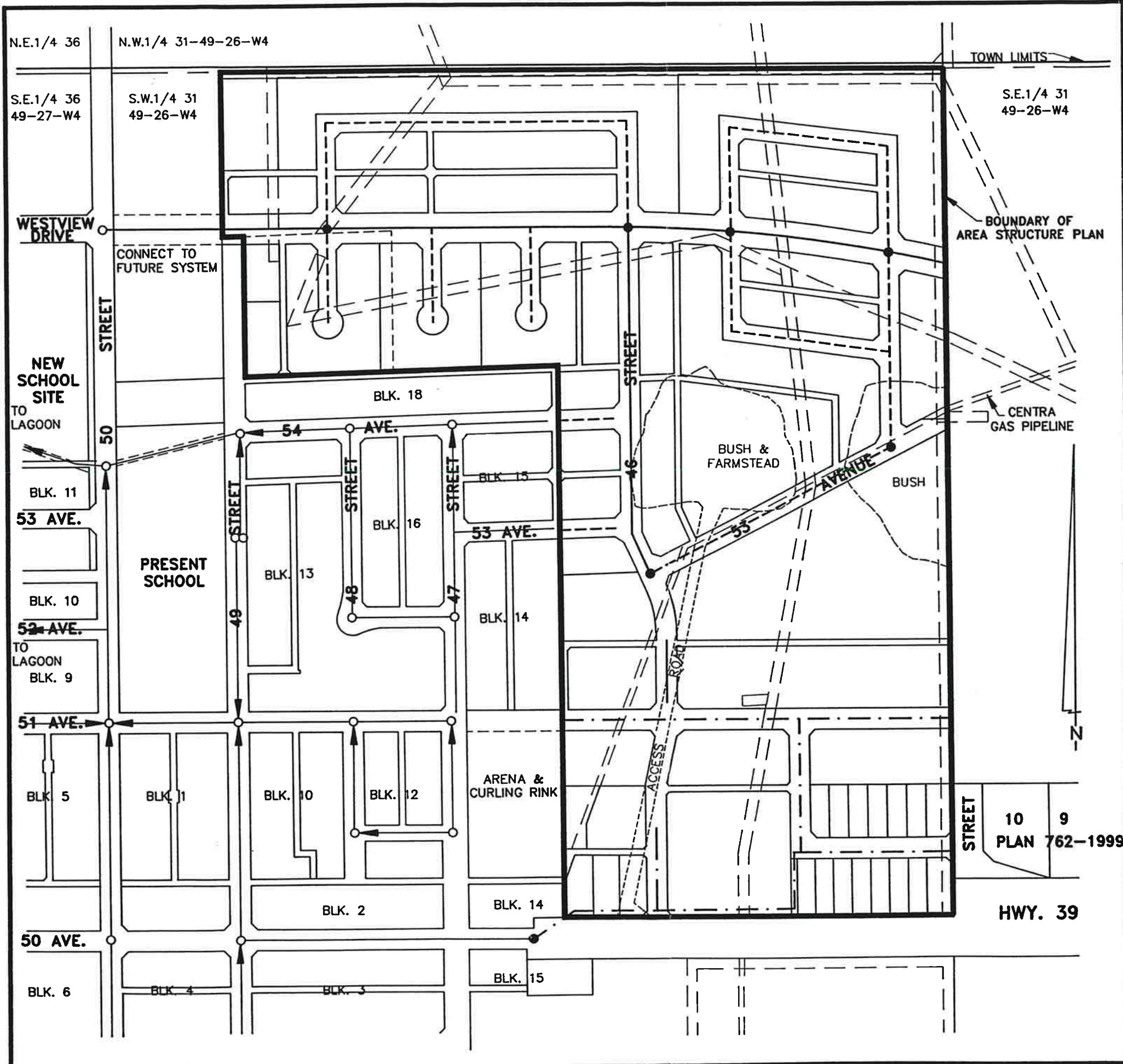
HWY. 39

N

Prepared: September 1994

Drawing No. 237-2

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AREA STRUCTURE PLAN
 CROYLYN DEVELOPMENTS LTD.
 ENGBERG QUARTER
 PART OF THE
 S.W.1/4 SEC.31 TWP.49 RGE.26 W.4Mer.
TOWN OF CALMAR

ALBERTA

SCALE 1:4000

Metres



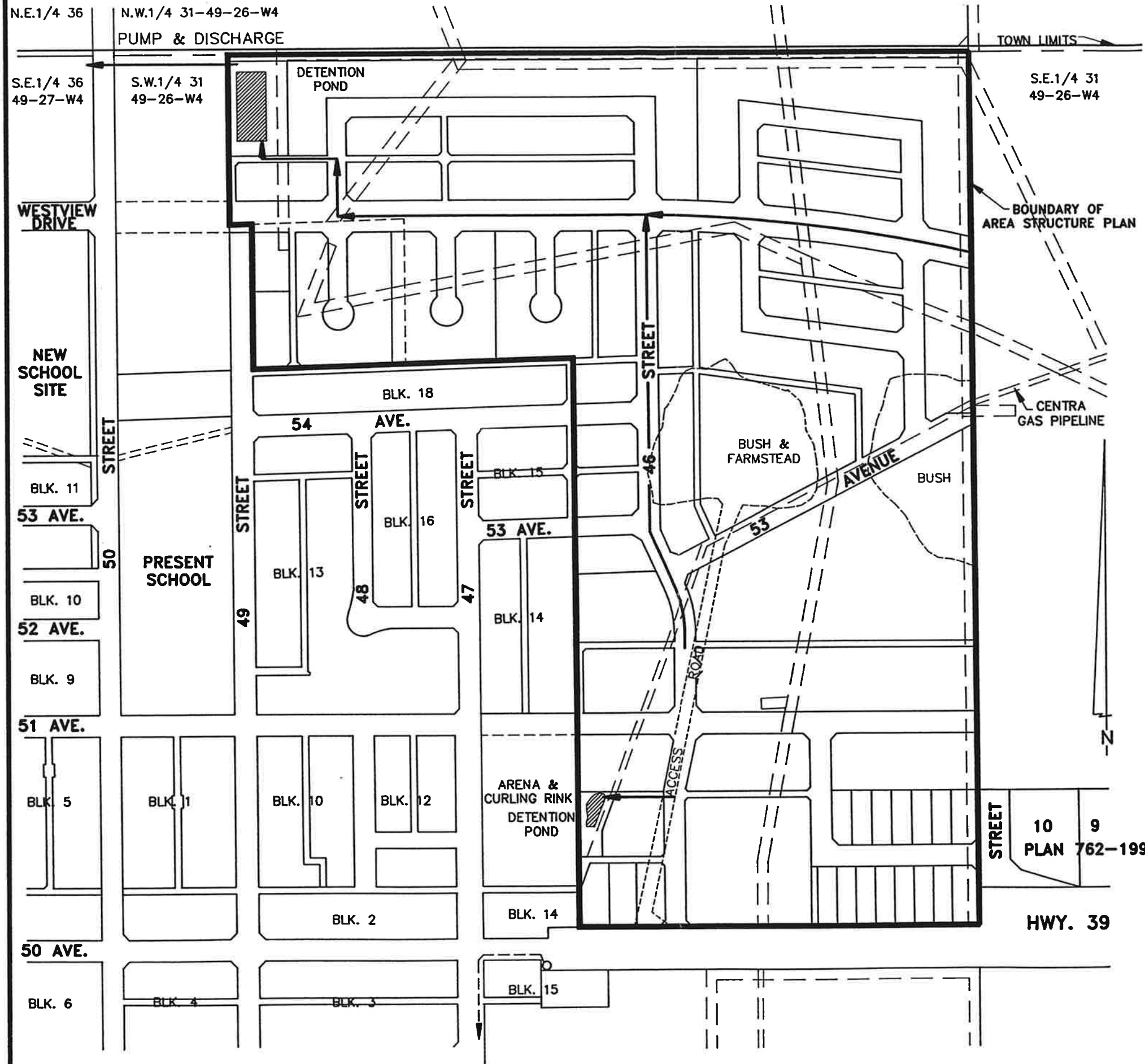
**SCHEMATIC OF
 SANITARY SEWER SYSTEM**

- LOW PRESSURE SEWER SYSTEM
- PROPOSED MAJOR COLLECTION SEWER
- - -○- - - PROPOSED MINOR COLLECTION SEWER
- EXISTING SANITARY SEWAGE COLLECTION SYSTEM

Prepared: September 1994

Drawing No. 237-3

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TOWN OF CALMAR

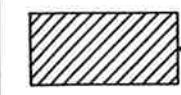
ALBERTA

SCALE 1:4000

Metres



**SCHEMATIC OF
 STORM SEWER SYSTEM**



DETENTION POND AND STORM SEWER
 COLLECTION SYSTEM

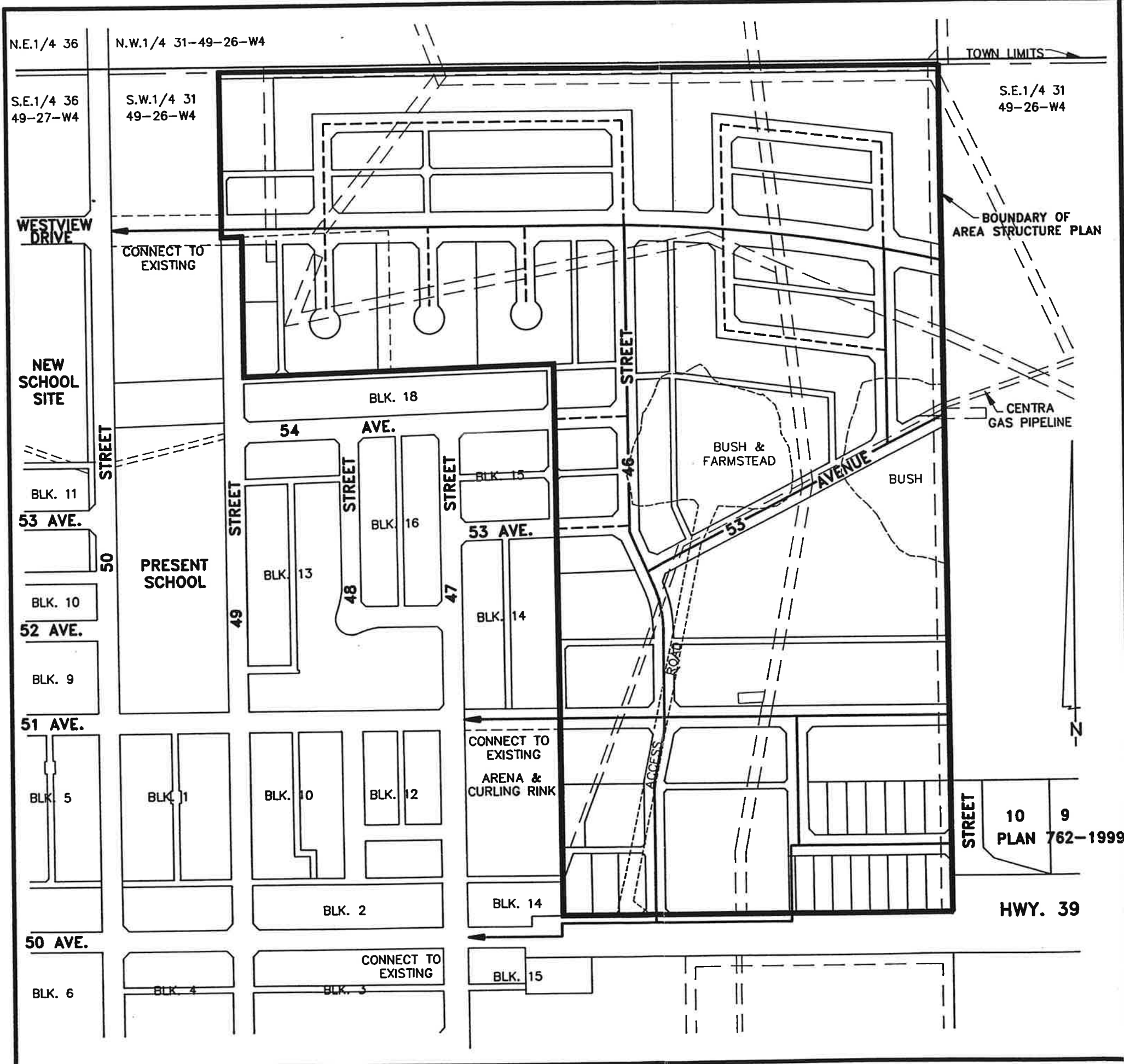


EXISTING STORM SEWER SYSTEM

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Drawing No. 237-4

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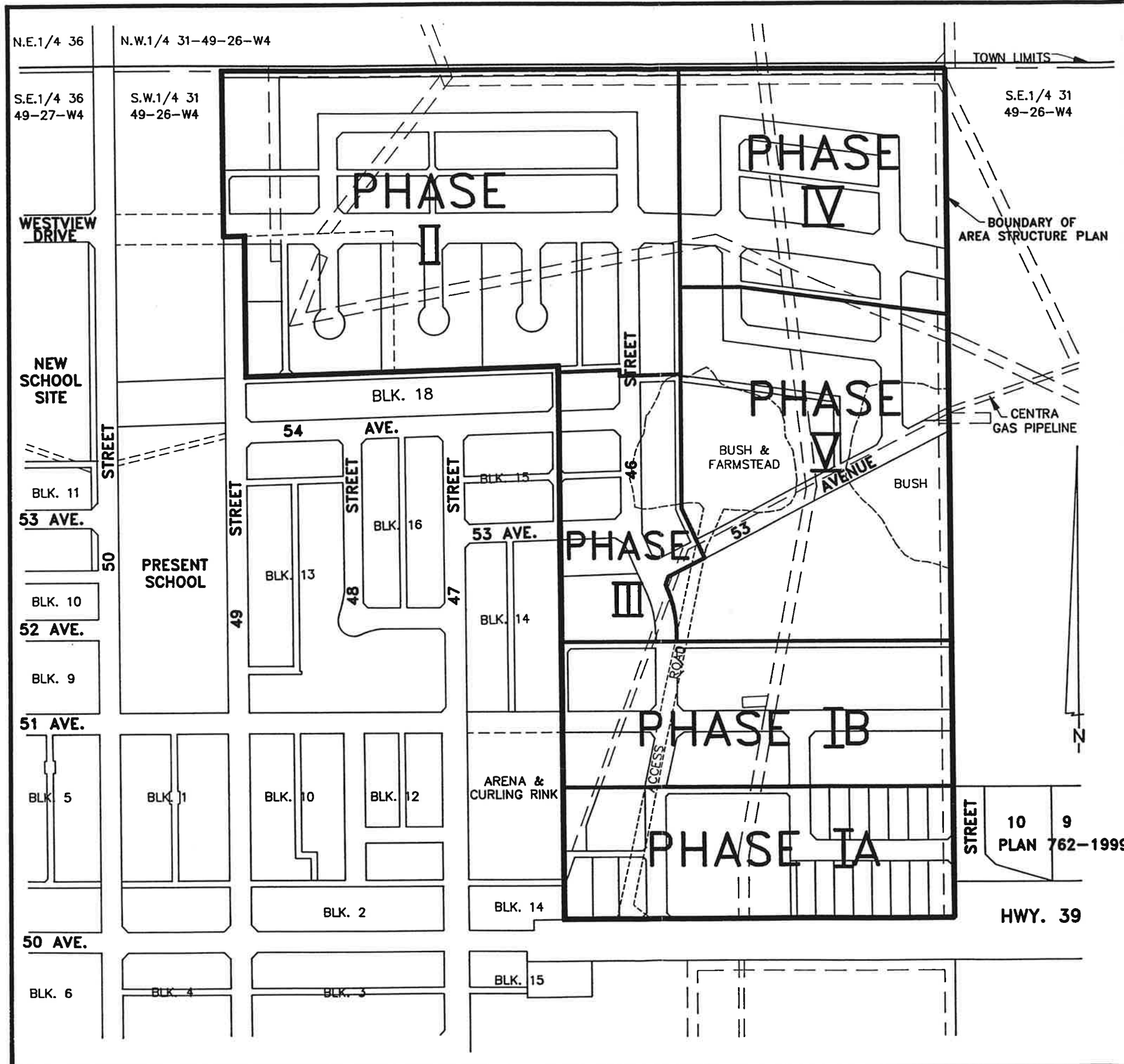
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 S.W.1/4 SEC.31 TWP.49 RGE.26 W.4Mer.
TOWN OF CALMAR

ALBERTA
 SCALE 1:4000
 Metres



**SCHEMATIC OF
 WATER DISTRIBUTION SYSTEM**

———— MAJOR WATERLINES
 - - - - - 150mm MAINS



AREA STRUCTURE PLAN
CROYLYN DEVELOPMENTS LTD.
 ENGBERG QUARTER
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 S.W.1/4 SEC.31 TWP.49 RGE.26 W.4Mer.
TOWN OF CALMAR

ALBERTA

SCALE 1:4000

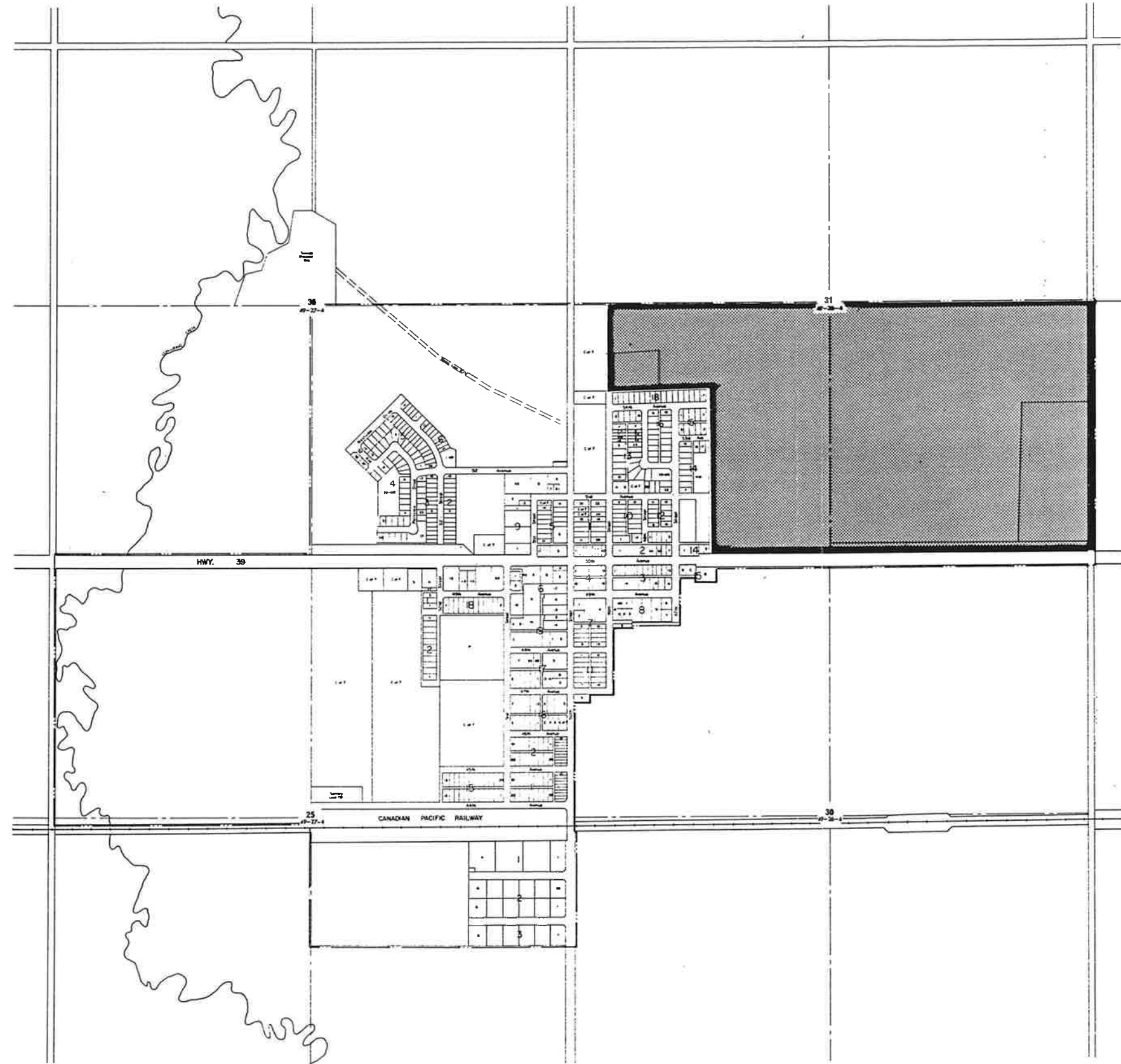
Metres



DEVELOPMENT STAGING

FIGURE 1
LOCATION of
SITE WITHIN CALMAR

 **Plan Area**



Town of Calmar

North-east Calmar
Area Structure Plan

August 1985



Feet 0 1000
Metres 0 300

 **Edmonton Metropolitan**
Regional Planning Commission

2. Legal Description

The North-east Calmar Area Structure Plan area was annexed by the Town of Calmar on January 1, 1980 and encompasses the following areas, as noted in Figure 1:

- (a) S.E. 31-49-26-4
- (b) Pt. S.W. 31-49-26-4

3. Size

The gross area that has been reviewed for development includes ±101.75 hectares (±251.4 acres) of land. All of this area is considered to be developable.

4. Surrounding Land Uses

Land uses in and adjacent to the North-East Calmar area are shown in Figure 2.

5. Land Ownership

Land ownership within the Area Structure Plan is delineated in Figure 2, and is noted below in Table 1.

TABLE 1
LAND OWNERSHIP

Certificate of Title Number	Landowners	Area of Property		Reserves Owing	
		(hectares)	(acres)	(hectares)	(acres)
145-A-250 ^a	Legal Well Strippers Ltd.	1.7	4.3	-	-
41-S-232	Robert Gorden Enberg & Elizabeth Lillian Enberg	36.9	91.2	3.7	9.1
772062707	Alberta Housing Corporation	51.4	126.9	6.3	15.6
762200512	Norman R. Denney & Janice L. Denney	9.3	23.0		
	Service Road	2.3	6.1		
TOTAL		101.8	251.4		

(a) For oil purposes only.

APPENDIX A

NORTH-EAST CALMAR AREA STRUCTURE PLAN

NORTH-EAST CALMAR
AREA STRUCTURE PLAN

Prepared By:

Edmonton Metropolitan Regional Planning Commission
General Planning Branch
October, 1985

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I. INTRODUCTION

1. Mandate

In May of 1985 the Town of Calmar requested that the Edmonton Metropolitan Regional Planning Commission prepare an area structure plan. Some preliminary planning had taken place in the area over the past five years however no formal plan had been approved. The North-east Calmar Area Structure Plan has been prepared pursuant to the provisions of the Planning Act R.S.A. 1980.

2. Purpose

The purpose of this Area Structure Plan is to provide a framework for the subdivision and development of lands within North-east Calmar. The Area Structure Plan sets forth objectives, policies and a land use concept that also ensures that the proposed land uses will be compatible with existing development within the Town of Calmar, as well as future growth.

3. Scope

The Area Structure Plan describes the general pattern of land use by type, size and location of development, development staging, the location of transportation routes and the location of major utility lines. It will provide a framework for development which is flexible and therefore responsive to the unknown nature of future demands of housing in Calmar.

4. Interpretation

(a) Flexibility

It is intended that the boundaries of land use areas, the location and configuration of roadways and all quantities and figures contained herein be considered as approximate only. Any minor adjustments or variances that may be necessary will not require an amendment to this plan.

(b) Continuance of an Existing Use

The Town may allow the extension or expansion of any existing development prohibited herein, provided that it continues to be used in the same manner and for the same purpose as it was used on the day this plan was adopted.

II. POLICY FRAMEWORK

The Edmonton Metropolitan Regional Plan (July 1984)¹ provides the broad framework necessary for comprehensive land use planning and development at the local level.

The existing Calmar General Municipal Plan (August 1980)² provides a more detailed policy framework for development of new areas within the Town of Calmar. The development objectives for the North-east Area Structure Plan, stated herein reflect the principles set out in the Edmonton Metropolitan Regional Plan (July 1984) and the Calmar General Municipal Plan (August 1980) policy framework and form the basis for the design concept.

1. Development Objectives

- (a) To develop the area in such a manner so that it will meet the residential, commercial and recreational requirements of the residents of Calmar.
- (b) To ensure that development takes place in the most logical and orderly manner, thereby contributing towards minimizing capital and maintenance costs for the Town.
- (d) To ensure that as urban development takes place, there is minimum adverse impact to the physical environment.
- (e) To ensure an acceptable level of safety and convenience for all future residents, the residential component of the development will be in close proximity to community facilities, transportation routes, schools, recreation, commercial facilities and other amenities.

III. SITE CHARACTERISTICS

1. Location

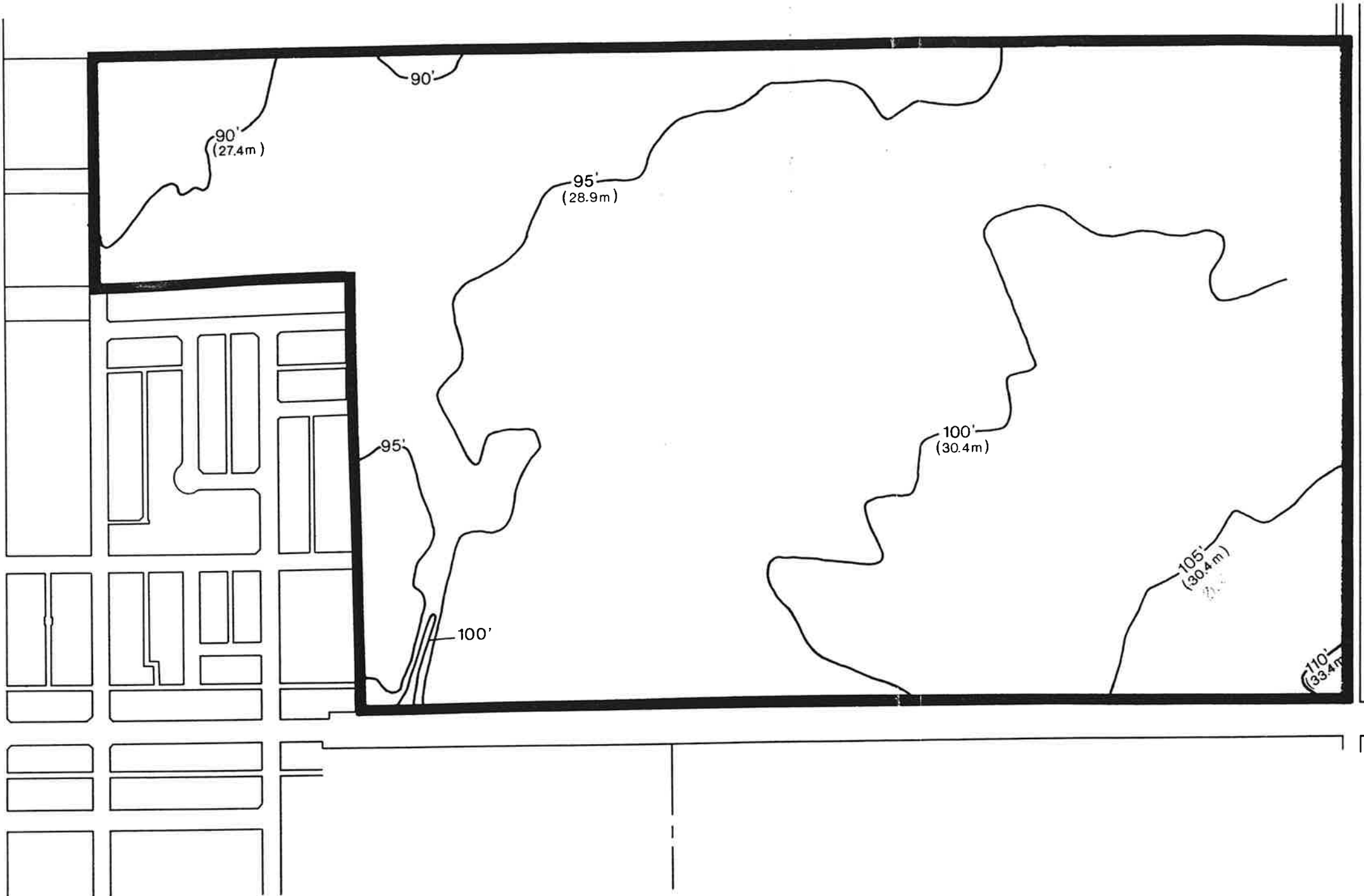
The subject area is located on the eastern edge of the existing development within the Town of Calmar (see Figure 1), and represents a contiguous and continuous extension to the existing recreational, residential and commercial development in the Town.

The area is bounded on the south by Highway 39 and agricultural land to the north and east.


1. Edmonton Metropolitan Regional Planning Commission, Edmonton Metropolitan Regional Plan, July 1984.
2. DelCan Ltd., DeLeuw Cather, Canada Ltd., Calmar General Municipal Plan, August 1980.

FIGURE 3

TOPOGRAPHY



 Plan Area

 95' Contours (add 2300 ft.)
(28.9m) (add 701 m)

Source: Calmar General Municipal Plan

Town of Calmar

North-east Calmar Area Structure Plan

August 1985

 Edmonton Metropolitan
Regional Planning Commission

IV. SITE ANALYSIS

1. Topography

The topography is relatively flat with a twenty (20) foot (6 m) increasing in elevation from the northwest corner of the plan area to the southeast corner. The average slope of the site is less than 0.5 percent (See Figure 3).

2. Soil Classification

According to the Canada Land Inventory Soil Capability for Agriculture classification, the soils in the area are Class 1 indicating no significant limitations in use for crops.

In a detailed soil survey completed by the Alberta Research Council in 1979³, it was found that the majority of the site consists of soil in the MMO 6 (Malmo) soil unit (See Figure 4). The soil is classified as Gleyed Eluviated Black with 15-30% Humic Gleysols indicating imperfectly drained soil with potential development due to potential frost action and soil texture. The remaining soil types in the area are MMO 1 (Malmo) and RVN 1 (Raven). The MMO 1 is classified as Eluviated Black, Orthic Black and is moderately drained with less development limitation. The RVN 1 (Raven) is classified as Orthic Humic Gleysol, Humic Tervic Gleysol indicating peaty phases and clay. This soil is usually a depression and poorly drained. It should be noted that the characteristics listed above only indicate potential limitations usually associated with the soil types mentioned. A more in-depth soil analysis should be undertaken at the time of subdivision to indicate whether or not the limitations actually exist in this case. It is also important to note that a large portion of the region is made up of similar or in many cases less suitable soil types. In relative terms, the soil within the site area is no more limited in development potential than the soil on which the town of Calmar and surrounding communities are built.

3. Vegetation

The site is used primarily for agriculture and a vast majority of the area is cultivated. The only other notable vegetation are the two large stands of mature deciduous trees located in the middle of the southwest quarter of Section 31.

4. Climate

The climate of Calmar and the rest of the Edmonton region can be described as a cold temperature continental climate. Climatic features for Calmar are noted in Table 3.

3. Alberta Research Council, Detailed Soil Survey of the Calmar, Thorsby, Warburg, Breton and Drayton Valley Areas, 1979.

6. Easement and Right-of-Ways

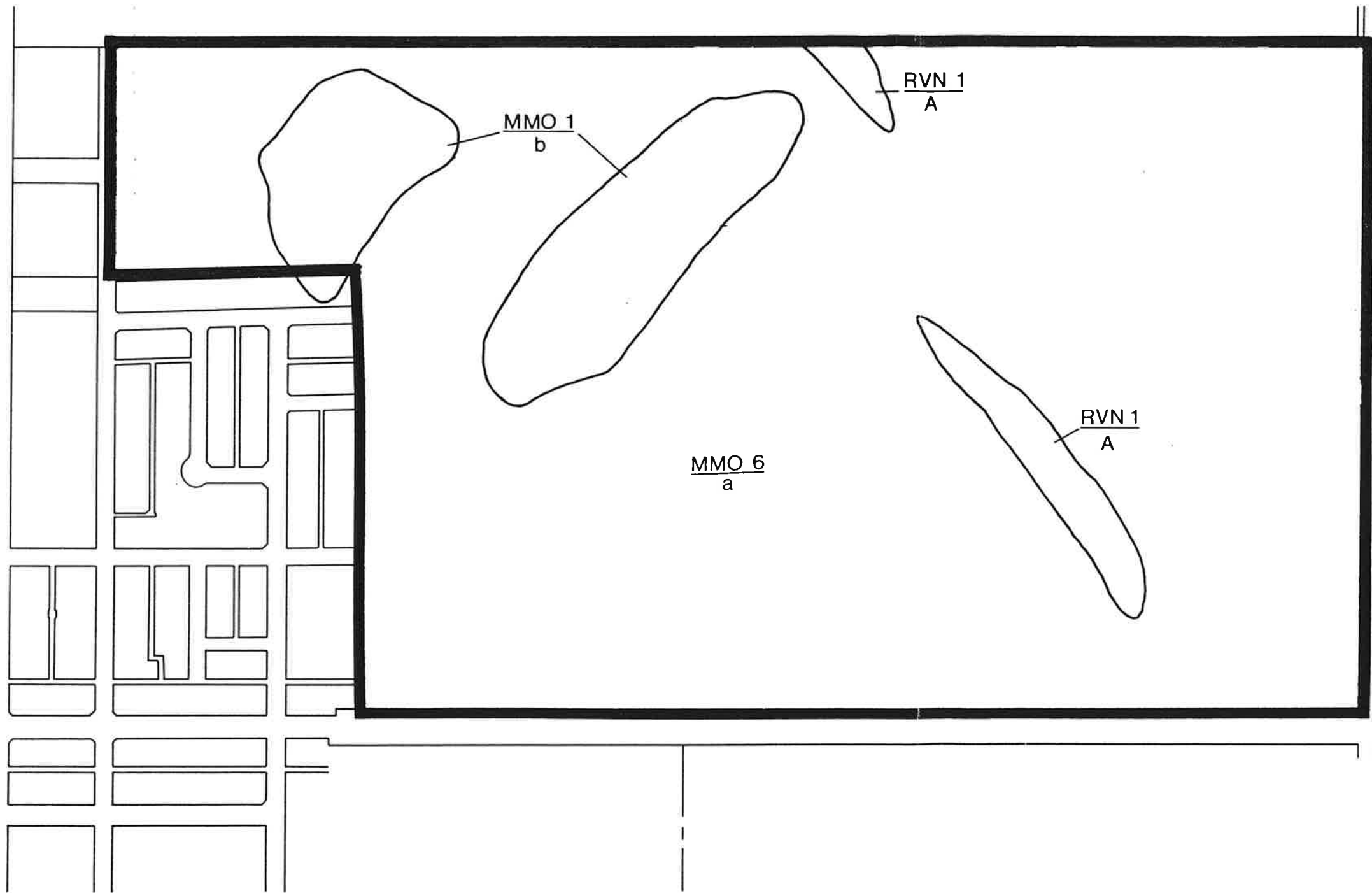
As indicated in Figure 2 and noted in Table 2 a number of easements transect the site.


TABLE 2
EASEMENTS ON TITLE

Title Number		
145-A-250	(Easement 998 HT)	Imperial Pipeline Co. Ltd. (1.47 ac.) (Plan 2162 HW)
41-S-232	(Easement 998 HT)	Imperial Pipeline Co. Ltd. (1.47 ac.) (Plan 2162 HW)
	(Easement 4219 HQ)	Imperial Pipeline Co. Ltd. (0.82 ac.) (Plan 2268 HW)
	(Easement 6599 HR)	Leduc Utilities Ltd. (Plan 2120 HW)
	(Easement 6753 HV)	Imperial Pipeline Co. Ltd. (1.108 ac.) (Plan 2996 HW)
	(Easement 899 SI)	Marjack Oil Co. Ltd. (1.19 ac.) (Plan 3852 HW)
	(Easement 958 RJ) (Easement 822632721) *(Caveat 3062 JE)	Of AGT Of Town of Calmar Devonian Natural Gas Co. Ltd. (Plan 5167 HW)
772062707	(Easement 4764 HQ)	Imperial Pipeline Co. Ltd. (Plan 2268 HW)
	(Easement 7325 HR)	Leduc Utilities Ltd. (Plan 2120 HW)
	(Easement 822011771)	To Town of Calmar (Plan 812 2460)
	*(Caveat 5423 JK)	Devonian Natural Gas Co. Ltd. (Plan 5167 HW)

FIGURE 4

SOILS



-  Plan Area
- MMO6 (Malmo)
a Gleyed, Eluviated Black
- MMO1 (Malmo)
b Eluviated Black,
Orthic Black
- RVN1 (Raven)
A Orthic Humic Gleysol
Humic Tervic Gleysol

Source: Alberta Research Council, 1979

Town of Calmar

North-east Calmar Area Structure Plan

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Feet 0 500
Metres 0 150

TABLE 3
CLIMATOLOGICAL DATA FOR CALMAR^a

<u>Monthly and Annual Average Temperature</u>			
	January	July	Annual
Temperature	-15.5°C	16.6°C	2°C
<u>Mean Precipitation</u>			
Rainfall (cm)	2.5	8.9	47.5
Snowfall (cm)			121.4

(a) SOURCE: Alberta Environment, Climate of Alberta, 1976.

5. Man-made Constraints

Calmar is located in the Leduc-Woodbend oil field, therefore most areas within the town including the North-east will have development constraints due to pipeline easements and right-of-ways (See Figure 2). According to the Energy Resources Conservation Board, there are presently four wells, two batteries, and five pipelines criss-crossing the North-east area. These numbers will change through time complicating mid to long range planning for the area. Most of these man-made constraints can be elevated by setbacks, staging, and minor variances to the design at the time of development. In other cases some lines may have to be relocated to ensure large tracts of developable land are not sterilized. It should be noted that the I.C.G. pipeline (R/W Plan 2120 HW) is the natural gas supply line for the Town of Calmar and is therefore to be a permanent constraint.

6. Development Potential

Topography and soil conditions were the two major factors used in determining limitations to development. Considering that the site is relatively flat with imperfect to moderately well drained soil covering most of the area, there are no perceived development limitations, over and above those considered normal for this region of central Alberta.

V. DEVELOPMENT CONCEPT

1. Design Approach

The land use concept formulated for North-East Calmar has been primarily based on the Calmar General Municipal Plan, (August 1980), as well as discussions with the Town's administration and the planning committee of the Town of Calmar.

2. Development Policies

In order to achieve the objectives noted in Part II Section 1, the following policies shall apply to the development of North-east Calmar.

(a) Housing Unit Mix

The overall housing unit mix will be no less than 70 percent single family detached units and no more than 30 percent multiple family units.

(b) Medium Density Housing

In order to provide a variety of housing types and to ensure that positive contributions to the community result. Medium Density housing will be developed according to the following provisions as outlined in the Calmar General Municipal Plan, (August 1980)⁴

- (i) Areas of medium density housing will preferably be served by separate residential and/or local collector roads having access to the major road system. Where medium and low density housing is to be served by a common road, the site design, number of units, and parking must be such that no disruption to adjacent single-family housing occurs.
- (ii) Medium density multi-family housing areas should be located within easy walking distance of schools, shopping, and recreational facilities.
- (iii) Medium density areas should be designed to incorporate walkways to further reduce pedestrian/vehicle conflicts and to maximize accessibility to community facilities.
- (iv) Adequate on-site parking should be provided to ensure that public streets do not become parking lots.

4. DelCan Ltd., August, 1980.

- (v) The relevant parts of the Land Use By-law on medium-density housing should be considered the minimum acceptable standards.

(c) Commercial Uses

The North-east A.S.P. will contain the following commercial functions:

- (i) An area will be provided to allow for the future expansion of the downtown to the east. Residents of the North-east will rely on the Downtown to provide the majority of commercial services.
- (ii) A General Commercial area will be provided to serve as a support to the downtown retail area, by providing space for commercial activities which require locations close to the Downtown, but due to the nature of uses and larger space requirements cannot be accommodated downtown.
- (iii) A Highway Commercial area will be provided north of Highway 39 to serve the travelling public. The area will be served by service road and will not have direct access from the North-east residential areas. Proper buffering will be required to separate this use from the residential uses.
- (iv) A Neighbourhood Commercial area will also be developed at the neighbourhood convenience level for North-east area residents. The development will be centrally located along a major collector and close to community facilities.

(d) School and Parks

Provision is being made for a large open area to accommodate an elementary school with playground, a vocational high school, exhibition grounds and open space. Space for the expansion of the curling rink will also be centrally located within the North-east area. All Municipal Reserve to be dedicated under the subdivision process will be located in this central area. In instances where there are property owners with lands on which there is no municipal reserve dedicated, the Town of Calmar, will recommend to the subdivision approving authority that money be taken in lieu of reserve as per the Planning Act, R.S.A., 1980.

(e) Circulation

Vehicular circulation will be based on a hierarchical system noted in the Calmar General Municipal Plan, (August 1980). The system will include an east-west collector which bisects the

area as well as north-south major collectors. The design of local residential streets will minimize through traffic by the use of cul-de-sacs, P-loops, and bays. Lanes will be provided along arterials and major collectors for rear yard servicing and vehicular access to lots.

(f) Environmental and Resource Management Considerations

The area is relatively flat with Class 1 soil, C.L.I. Rating and generally has no major limitations for urban development. The Town will endeavour to ensure that land not required for urban development remains in agricultural use until required for urban development. The major grouping of deciduous trees located in the northwestern portion of the area will also be preserved for compatible recreation uses and a natural habitat.

(g) Well Sites and Pipelines

In an effort to ensure the optimum safety of its residents while not placing undue constraints on either the developers or the petroleum industry, in establishing setbacks, the Town of Calmar will use as its guide the policies of the Energy Resources Conservation Board, as may be amended from time to time and may also consider more restrictive guidelines when deemed appropriate.

(i) Setback from Well Sites

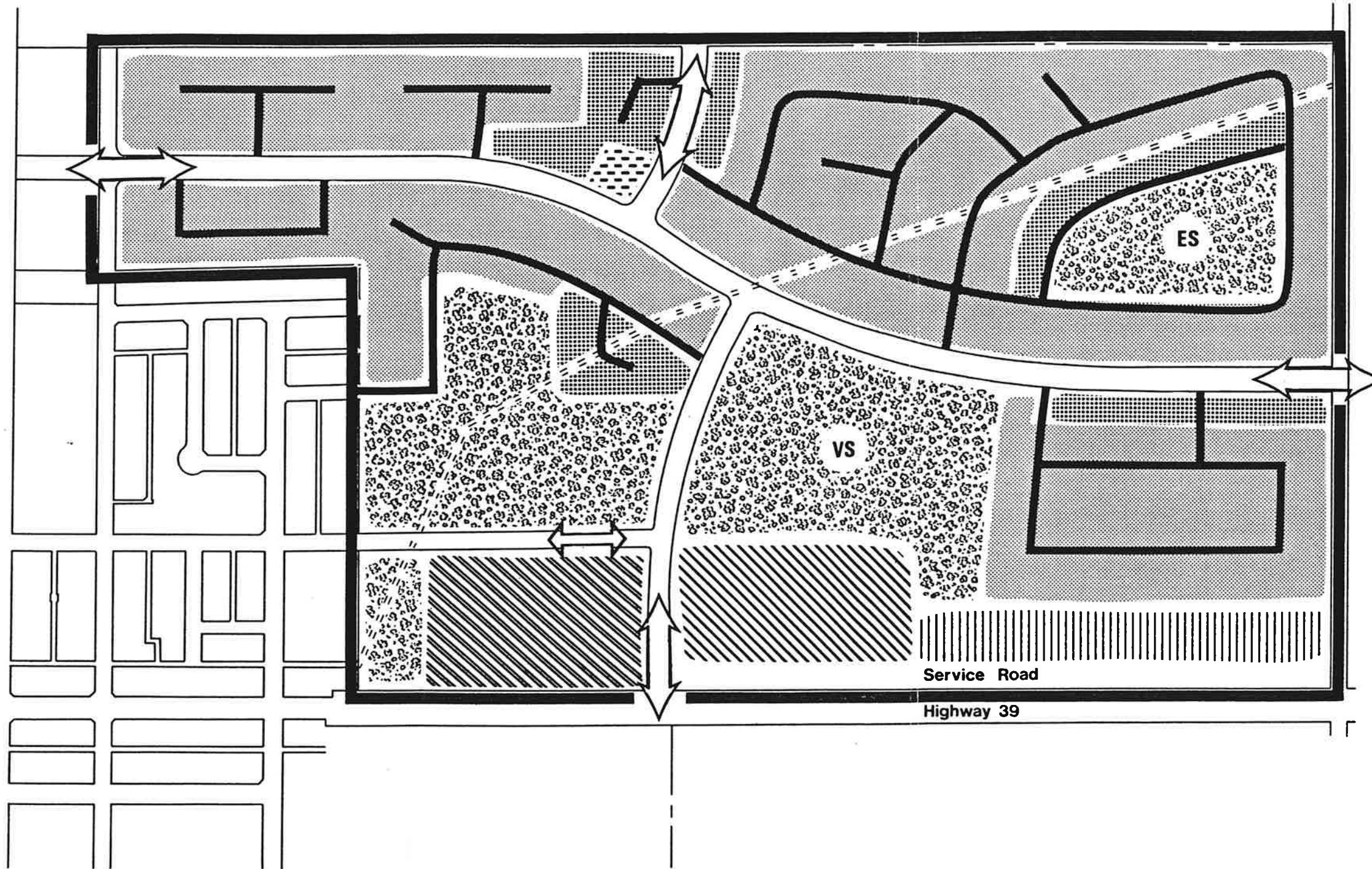
For permanent structures a standard separation distance of 100 m (328 ft.) shall be maintained. At the discretion of the Town the setback may be relaxed to a distance of not less than 50 m (164 ft.) provided that special practices are followed to minimize the visual, noise and odor impacts. The 100 m (328 ft.) setback shall not be reduced for public buildings or institutions.⁵













(ii) Setback from Pipelines

All permanent structures should be setback at least 15 m (50 ft.) from pipeline rights-of-way. For public institutions the minimum setback should be 200 m (656 ft.) from the centreline of any high vapour pressure (H.V.P.) pipeline of any hydrocarbon pipeline with an outside diameter equal or greater than 323.9 millimetres (12 inches) and an operating pressure equal to or greater than 3475 kPa (500 psi).

5. Energy Resources Conservation Board, E.R.C.B. Inquiry Report D-83-F, July 1983.

FIGURE 5
DEVELOPMENT CONCEPT



-  Plan Area
-  Low Density Residential
-  Medium Density Residential
-  Downtown Expansion
-  General Commercial
-  Highway Commercial
-  Neighbourhood Commercial
-  Schools/Recreation
- ES** Elementary School
- VS** Vocational Jr./Sr. High School
-  Major Collector
-  Minor Collector
-  Local Road
-  Pipeline R/W

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**North-east Calmar
Area Structure Plan**

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Feet 0 500
Metres 0 150

(h) Servicing

Upgrading and extension of any service of the system shall be in accordance with the requirements of the report entitled the Town of Calmar - General Design Standards of Local Improvements Required for Development by Private Developers, (April 1980)⁶. As well, in the case of the Sanitary Sewage system upgrading and extension will be in accordance with Council's adoption of a strategy based upon the report entitled Town of Calmar - Preliminary Engineering Study, Sewage Treatment Expansion, (February 1980)⁷.

3. The Area Structure Plan Design Concept

The central theme used in the design of the North-East Calmar Area Structure Plan (see Figure 5) is a framework which combines the features of economical servicing, efficient lot layout, a high quality residential environment and flexibility. The major components of the land use concept are identified below.

- (a) North-east Calmar will contain a residential neighbourhood with a population of approximately 3,500 persons. This represents a density of 43.2 persons per developable hectare (17.5 persons per developable acre) and conforms to the 70-30 single to multiple dwelling unit ratio outlined in the Town of Calmar General Municipal Plan.
- (b) Two levels of service are proposed in North-east Calmar. Within the neighbourhood, schools, passive and active recreation facilities and convenience level shopping are proposed. Also within the neighbourhood, but along the southern boundary, the plan makes provisions for the community level services such as the major commercial areas (downtown expansion, general and highway commercial, the fairgrounds, and the vocational high school).
- (c) The development consists of a cellular configuration as noted in Figure 5. The project is divided into cells of development interconnected by vehicular networks. This concept will encourage local resident interaction, and strong neighbourhood ties, as well as facilitate orderly and flexible development phasing.

6. DelCan, Ltd., Deleuw Cather Canada Ltd., Town of Calmar General Design Standards of Local Improvements Required for Development by Private Developers, April 1980.

7. DelCan Ltd., Deleuw Cather Canada Ltd., Town of Calmar - Preliminary Engineering Study, Sewage Treatment Expansion, February 1980.

(d) Focal points in the neighbourhood include the exhibition grounds, the elementary school, the vocational school and the open space area which make up the large centrally located green area.

(e) The proposed Downtown expansion and general commercial areas are an extension of the existing commercial land use pattern along the northern edge of Highway 39. These areas have direct access to and from Highway 39 as well as to collectors within the North East Calmar area. The Highway Commercial area however will only have access from a service road along Highway 39.

4. Land Use

Table 4 identifies the proposed land use distribution for North-East Calmar as illustrated in Figure 5.

TABLE 4
PROPOSED LAND USES

LAND USE	AREA		PERCENT OF TOTAL
	Hectares	Acres	
RESIDENTIAL:			
- Single Family - low density	38.1	94.2	37.4
- Multiple Family - medium density	7.3	18.0	7.1
- Recreation ^a	8.6	21.3	8.5
- School ^b	13.2	32.8	13.0
- Roads	21.9	54.2	21.5
COMMERCIAL			
- Downtown Expansion	4.8	11.9	4.7
- General Commercial	3.9	9.7	3.9
- Neighbourhood Commercial	0.4	0.9	0.4
- Highway Commercial	3.6	8.9	3.5
TOTAL	101.8	251.9^c	100.0

(a) The 8.6 hectares (21.2 acres) includes 1.3 hectares (3.2 acres) for arena expansion, 5.4 hectares (13.3 acres) for the fair-grounds and 1.9 hectares (4.7 acres) of open space.

(b) The 13.2 hectares (32.8 acres) of School Reserve includes 3.3 hectares (8.2 acres) for a proposed elementary school and 9.9 hectares (24.6 acres) for a proposed vocational Junior and Senior High School.

(c) Some rounding has occurred.

5. Population and Housing Units

Table 5 identifies the expected yield of units by housing type.

TABLE 5
HOUSING UNIT GENERATION

HOUSING TYPE	UNITS/ HECTARES ^a	NUMBER OF UNITS	PERCENT OF TOTAL
Single Family (R-1A) ^b	-	372	35.3
Single Family (R-1C) ^b	-	367	35.0
Multiple Family (R-2M) ^a	30	167	15.9
Multiple Family (R-3) ^b	86.5	147	14.0
TOTAL		1,053	100.2 ^c

- (a) Represents the density allowed under the Town of Calmar Land Use By-law No. 487.
- (b) Land Use Districts were specified; in this instance, only to provide a better degree of accuracy in the estimate.
- (c) Some rounding has occurred.

6. Schools

The expected student population of North-east Calmar is noted below in Table 6.

TABLE 6
STUDENT POPULATION

Number of Units	Elementary ^a	Junior High ^b	Senior High ^c
1,053	484	263	274

- (a) Based on 0.46 students per household generation rate, Calmar General Municipal Plan, (August 1980).
- (b) Based on 0.25 students per household generation rate, Calmar General Municipal Plan, (August 1980).
- (c) Based on 0.26 students per household generation rate, Calmar General Municipal Plan, (August 1980).

7. Parks and Recreation

All recreation facilities in North-east Calmar will be located within the central area, with the exception of the recreation area around the elementary school. Local and neighbourhood level facilities will be developed as integral parts of the school sites, while community and Town (regional level) areas will be developed independently. The 1.9 ha (4.7 ac.) of open space will remain in its existing semi-natural state.

8. Vehicular and Pedestrian Circulation

The vehicular circulation network is based on the concept presented in the Town of Calmar General Municipal Plan. A major collector will run from east to west through the northern portion of the area, this will eventually link up to the collector proposed through the Lanstrom Development in the western portion of the Town. The major collector is connected to two minor collectors one proposed to go north the other south through the recreation/school area and commercial areas adjacent Highway 39. Fifty-first Avenue will also be extended to join the southern collector providing direct access to the green area from the rest of the Town.

Local streets are primarily P-loops, bays and cul-de-sacs ensuring that through traffic will use only collector roadways, thus creating quieter and safer neighbourhoods.

The pedestrian circulation network will utilize local roads with short walkways at key locations. The network will facilitate easy access to the school sites and passive recreation areas.

VI. SERVICING AND STAGING

1. Servicing

Figure 6 illustrates the major utilities systems for the North-east Calmar area as outlined in the Calmar General Municipal Plan. Due to the large area encompassed by the North-east Area Structure Plan as well as the long period of time it will take to develop the area due to slower growth throughout the province, a detailed engineering study has not been carried out. In the future, when the need arises to develop the residential neighbourhoods within the area and final design details and neighbourhood characteristics can be confirmed, indepth engineering studies will be required before subdivision is allowed to take place.

(a) Sanitary Sewage Collection and Treatment

Before the residential components of the area can be developed, upgrading of the present facilities will have to take place. A study completed in 1980 entitled the Town of Calmar - Preliminary Engineering Study, Sewage Treatment Expansion outlines

alternatives for upgrading existing facilities to 3,000 persons, 8,000 persons and long term capacities. The current Anaerboic Treatment System is at its 1,120 person capacity.

(b) Water Supply, Treatment and Distribution

As of November 1981, the Town of Calmar was connected to the regional water line ensuring an adequate supply for future development. As Figure 6 indicates major trunklines will follow the proposed collector road system.

(c) Storm Services

Figure 6 outlines the storm drainage system to serve the northeast area and the Town of Calmar.

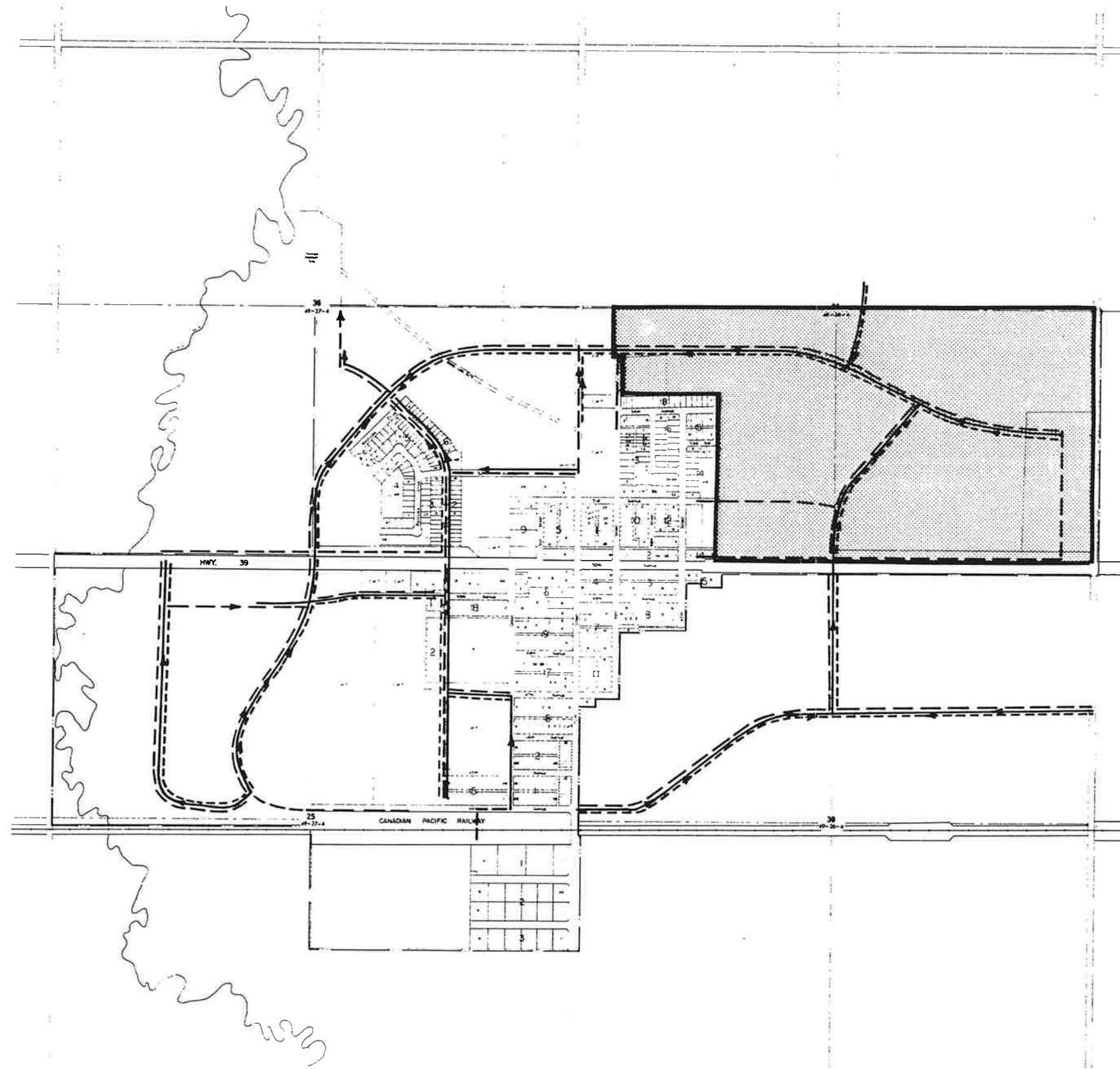
(d) Transportation System






The transportation system proposed for northeast Calmar is basically the network proposed in the Calmar General Municipal Plan. The road network is outlined in Figure 7, where the slight changes in alignment may be noted. Table 7 outlines the Urban Road Design Guidelines which are to be utilized at the time of development.

2. Staging

The staging sequence will generally follow the servicing from the west to the east. Development staging noted in Figure 8 will allow commercial development along Highway 39 in the first stage, followed by the extension of the present residential area in the northeast part of Town. The remainder will be subdivided when the need arises for additional residential land, first in the southeast portion and finally the northeast. The staging sequence should be reviewed periodically, as the situation with the various well sites in the area change, thus avoiding potential land use conflicts.

FIGURE 6
SERVICING CONCEPT



-  Plan Area
-  Proposed Major Water Line
-  Proposed Storm Sewer Trunk Line
-  Proposed Sanitary Sewer
-  Direction of Flow

Source: Calmar General Municipal Plan

Town of Calmar

**North-east Calmar
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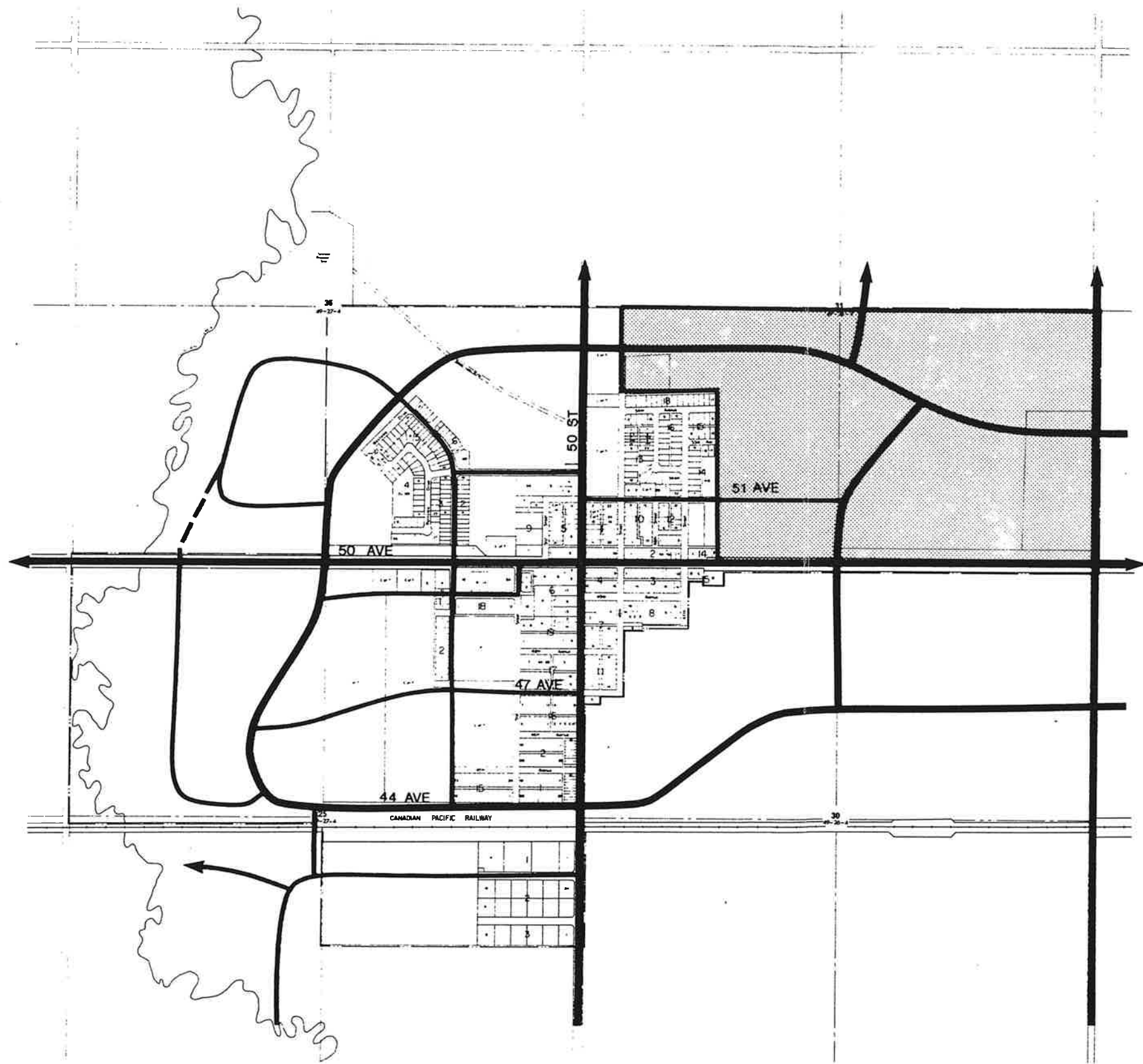
 Edmonton Metropolitan
Regional Planning Commission



Feet 0 1000
Metres 0 300

FIGURE 7
TRANSPORTATION
NETWORK

-  Plan Area
-  Major Collector
-  Minor Collector



Source: Calmar General Municipal Plan

Town of Calmar
North-east Calmar
Area Structure Plan

August 1985

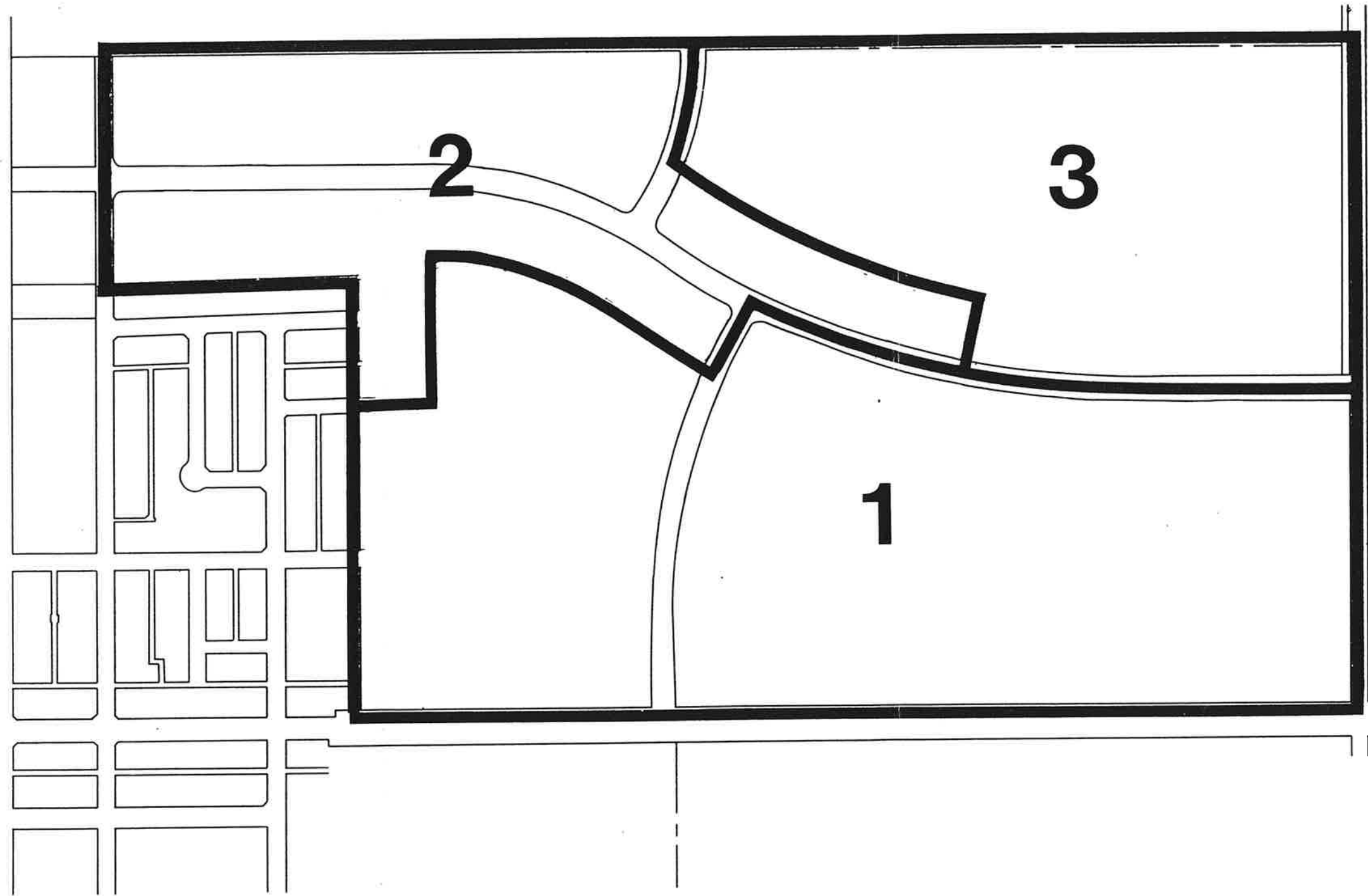


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FIGURE 8

DEVELOPMENT STAGING

2 Development Stage



Town of Calmar

North-east Calmar
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 Edmonton Metropolitan
Regional Planning Commission



Feet 0 500
Metres 0 150

APPENDIX B

TITLE SEARCHES

NORTH ALBERTA LAND REGISTRATION DISTRICT

REMOTE LAND TITLE SEARCH

SEARCH DATE: 05/08/1994

S	INC	SHORT LEGAL	TITLE NUMBER
	0023 028 624	4;26;49;31;SW	41S232

LEGAL DESCRIPTION

MERIDIAN 4 RANGE 26 TOWNSHIP 49
SECTION 31

ALL THAT PORTION OF THE SOUTHWEST QUARTER WHICH LIES NORTH OF THE ROAD AS SHOWN ON ROAD PLAN 3692J AND EAST OF THE LAND SUBDIVIDED UNDER PLANS 445HW AND 6312ET AND THE PRODUCTION SOUTHERLY OF THE EAST BOUNDARY OF SAID PLAN 6312ET AND ALSO EAST OF A LINE DRAWN PARALLEL TO THE WEST BOUNDARY OF THE SAID QUARTER SECTION AND 330 FEET PERPENDICULARLY DISTANT EASTERLY THEREFROM CONTAINING 120.154 ACRES MORE OR LESS

EXCEPTING THEREOUT:

(A) ALL THAT PORTION SUBDIVIDED UNDER PLAN 3956HW CONTAINING (4.12) ACRES MORE OR LESS

(B) ALL THAT PORTION SUBDIVIDED UNDER PLAN 2138HW CONTAINING 0.33 ACRES MORE OR LESS

(C) (0.98) ACRES MORE OR LESS

AS SHOWN ON ROAD PLAN 257JY

(D) ALL THAT PORTION OF THE SAID SOUTH WEST QUARTER TAKEN FOR OIL PURPOSES AS SHOWN OUTLINED IN RED ON FILED PLAN 3852HW CONTAINING (4.26) ACRES MORE OR LESS

(E) ALL THAT PORTION OF THE SAID SOUTH WEST QUARTER BOUNDED AS FOLLOWS:

ON THE WEST BY THE EAST LIMIT OF SECOND STREET EAST AS SHOWN ON SUBDIVISION PLAN 445HW, ON THE EAST BY A STRAIGHT LINE DRAWN NORTHERLY PARALLEL TO THE SAID EAST LIMIT THROUGH THE NORTH EAST CORNER OF THE LAND SUBDIVIDED UNDER PLAN 2138HW ON THE NORTH BY THE PRODUCTION EASTERLY OF THE NORTH LIMIT OF FIRST AVENUE NORTH AS SHOWN ON THE SAID SUBDIVISION PLAN 445HW ON THE SOUTH BY THE NORTH LIMIT OF THE LANE IN BLOCK 14 AS SHOWN ON THE SAID SUBDIVISION PLANS 445HW AND 2138HW CONTAINING 3.51 ACRES MORE OR LESS

(F) AS TO PARCEL (A)

CONTAINING (14.45) ACRES MORE OR LESS

AND PARCEL (B) CONTAINING (1.31) ACRES MORE OR LESS

BOTH AS SHOWN ON SUBDIVISION PLAN 4180TR

EXCEPTING THEREOUT ALL MINES AND MINERALS

STATE: FEE SIMPLE

MUNICIPALITY: TOWN OF CALMAR

D.C.T. ISSUED: YES

(CONTINUED)

LAND TITLE SEARCH

REGISTRATION	DATE (DMY)	REGISTERED OWNER(S)		VALUE	CONSIDERATION
		DOCUMENT	TYPE		
1S232	13/08/1968			\$28,838	REF. 3689PW

OWNERS

ROBERT GORDON ENGBERG (OIL WORKER)

AND

LIZABETH LILLIAN ENGBERG

BOTH OF:

1008-146TH STREET

EDMONTON

ALBERTA

AS JOINT TENANTS

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION NUMBER	DATE (D/M/Y)	PARTICULARS
998HT	19/10/1950	UTILITY RIGHT OF WAY GRANTEE - THE IMPERIAL PIPE LINE COMPANY, LIMITED. AS TO PORTION OR PLAN:2162HW "CONTG 1.47 ACRES"
219HQ	10/11/1950	UTILITY RIGHT OF WAY GRANTEE - THE IMPERIAL PIPE LINE COMPANY, LIMITED. AS TO PORTION OR PLAN:2268HW "CONTG 0.82 ACRES"
6599HR	26/02/1951	UTILITY RIGHT OF WAY GRANTEE - PLAINS WESTERN GAS & ELECTRIC CO LTD. AS TO PORTION OR PLAN:2120HW "DATA UPDATED BY:TRANSFER OF UTRW NO. 5960HT, 7006NH"
753HV	10/11/1951	UTILITY RIGHT OF WAY GRANTEE - THE IMPERIAL PIPE LINE COMPANY, LIMITED. AS TO PORTION OR PLAN:2966HW "CONTG 1.108 ACRES"
899JI	07/03/1953	UTILITY RIGHT OF WAY GRANTEE - MARJACK OIL COMPANY LIMITED. AS TO PORTION OR PLAN:3852HW "CONTAINING 1.19 ACRES"

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 3
41S232

REGISTRATION NUMBER	DATE (D/M/Y)	PARTICULARS
3062JR	21/04/1954	CAVEAT CAVEATOR - DEVONIAN NATURAL GAS CO LTD.
1379PE	20/04/1967	CAVEAT CAVEATOR - IMPERIAL OIL LIMITED.
3691PW	13/08/1968	CAVEAT CAVEATOR - JULIA ENGBERG "DISCHARGED 4862UP, 05 06 1974 AS TO PARCEL (A) CONTG 14.45 ACRES AND PARCEL (B) CONTG 1.31 ACRES AS SHOWN ON PLAN 4180TR"
58RJ	17/03/1969	UTILITY RIGHT OF WAY GRANTEE - ALBERTA GOVERNMENT TELEPHONES.
707UE	21/02/1974	CAVEAT CAVEATOR - ALBERTA HOUSING CORPORATION.
838UY	17/12/1974	CAVEAT RE : LEASE CAVEATOR - LEGAL WELL STRIPPERS LTD.
52 156 159	30/10/1975	CAVEAT RE : EASEMENT CAVEATOR - LEGAL WELL STRIPPERS LTD.
322 032 721	15/02/1982	UTILITY RIGHT OF WAY GRANTEE - CAPITAL REGION SOUTHWEST WATER SERVICES COMMISSION. "DATA UPDATED BY:TRANSFER OF UTRW NO. 852197004"
42 241 783	06/11/1984	CAVEAT RE : SEE CAVEAT CAVEATOR - TUMIT PETROLEUMS LTD. P.O. BOX 4645, SOUTH EDMONTON ALBERTA AGENT - JOHN C FORSTER

TOTAL INSTRUMENTS: 014
YOUR FILE #:

END OF SEARCH 05/08/1994 SR# - J861577 /AR0493

A. L. T. A.

NORTH ALBERTA LAND REGISTRATION DISTRICT

REMOTE HISTORICAL LAND TITLE SEARCH

TITLE CANCELLED ON JULY 18, 1991

SEARCH DATE: 01/09/1994

LINC SHORT LEGAL TITLE NUMBER
0018 743 857 3852HW;OT 145A250

LEGAL DESCRIPTION

FILED PLAN 3852HW
OIL PURPOSES CONTAINING 4.26 ACRES MORE OR LESS
SHOWN OUTLINED IN RED
EXCEPTING THEREOUT ALL MINES AND MINERALS

ATS REFERENCE: 4;26;49;31;SW

STATE: FEE SIMPLE

MUNICIPALITY: COUNTY OF LEDUC NO. 25

O.C.T. ISSUED: YES

REGISTRATION	DATE (DMY)	REGISTERED OWNER(S) DOCUMENT TYPE	VALUE	CONSIDERATION
145A250	20/07/1971		\$1,100	REF. 6138SJ

OWNERS

LEGAL WELL STRIPPERS LTD.
OF 5635-97 ST
EDMONTON
ALBERTA

ENCUMBRANCES, LIENS & INTERESTS

REGISTRATION NUMBER	DATE (D/M/Y)	PARTICULARS
119HM	31/01/1950	CAVEAT CAVEATOR - MARJACK OILS LTD. "LS 5 ONLY"
364HN	24/04/1950	CAVEAT

(CONTINUED)

ENCUMBRANCES, LIENS & INTERESTS

PAGE 2
145A250

REGISTRATION NUMBER	DATE (D/M/Y)	PARTICULARS
		CAVEATOR - SAMUEL J COHEN CAVEATOR - JACOB WENER COHEN CAVEATOR - MARJACK OILS LTD. "ABOVE & OTHER LAND & OTHER PET. NAT. GAS & R.H.C. EX. V.S."
098HT	19/10/1950	UTILITY RIGHT OF WAY GRANTEE - THE IMPERIAL PIPE LINE COMPANY, LIMITED. AS TO PORTION OR PLAN:2162HW "1.47 ACRES"
7613HV	03/12/1951	CAVEAT CAVEATOR - CALGARY POWER LTD.
899JI	07/03/1953	UTILITY RIGHT OF WAY GRANTEE - MARJACK OIL COMPANY LIMITED. AS TO PORTION OR PLAN:3852HW "INST. TYPE CORRECTED BY 922207749 JULY 17, 1992"
02 080 817	23/03/1990	TAX NOTIFICATION BY - THE TOWN OF CALMAR.
012 185 342	18/07/1991	AMENDMENT-LEGAL DESCRIPTION NEW TITLE ISSUED

TOTAL INSTRUMENTS: 007
OUR FILE #:

END OF SEARCH 01/09/1994 SR# - J923505 /AR0488

APPENDIX C

LETTER FROM THE ENERGY RESOURCES CONSERVATION BOARD



**Energy Resources
Conservation Board**

640 Fifth Avenue SW
Calgary, Alberta
Canada T2P 3G4

Telephone (403) 297-8311
Fax (403) 297-7040

Our File: SA 9420020

12 August 1994

W.J. Francl Consulting Ltd.
17 Birch Drive
St. Albert AB T8N 0E1

Dear Mr. Francl:

SUBJECT LAND: SW 31-49-26 W4

In response to your request by letter dated 27 July 94, I have enclosed a list of the wells in the subject 1/4 section indicating the location co-ordinates, status and licensee. Also a copy of the subject 1/4 pipeline plat, with the following information regarding the pipelines.

Pipeline Licence Number	Substance	Licensee
20295	Abandoned	Legal Oil & Gas
6930	NG	Legal Oil & Gas
1036	CO	Legal Oil & Gas
17187	OE	Foralta Resources
1055	NG	Centra Gas
5956	NG	Imperial Oil
1040	CO	Imperial

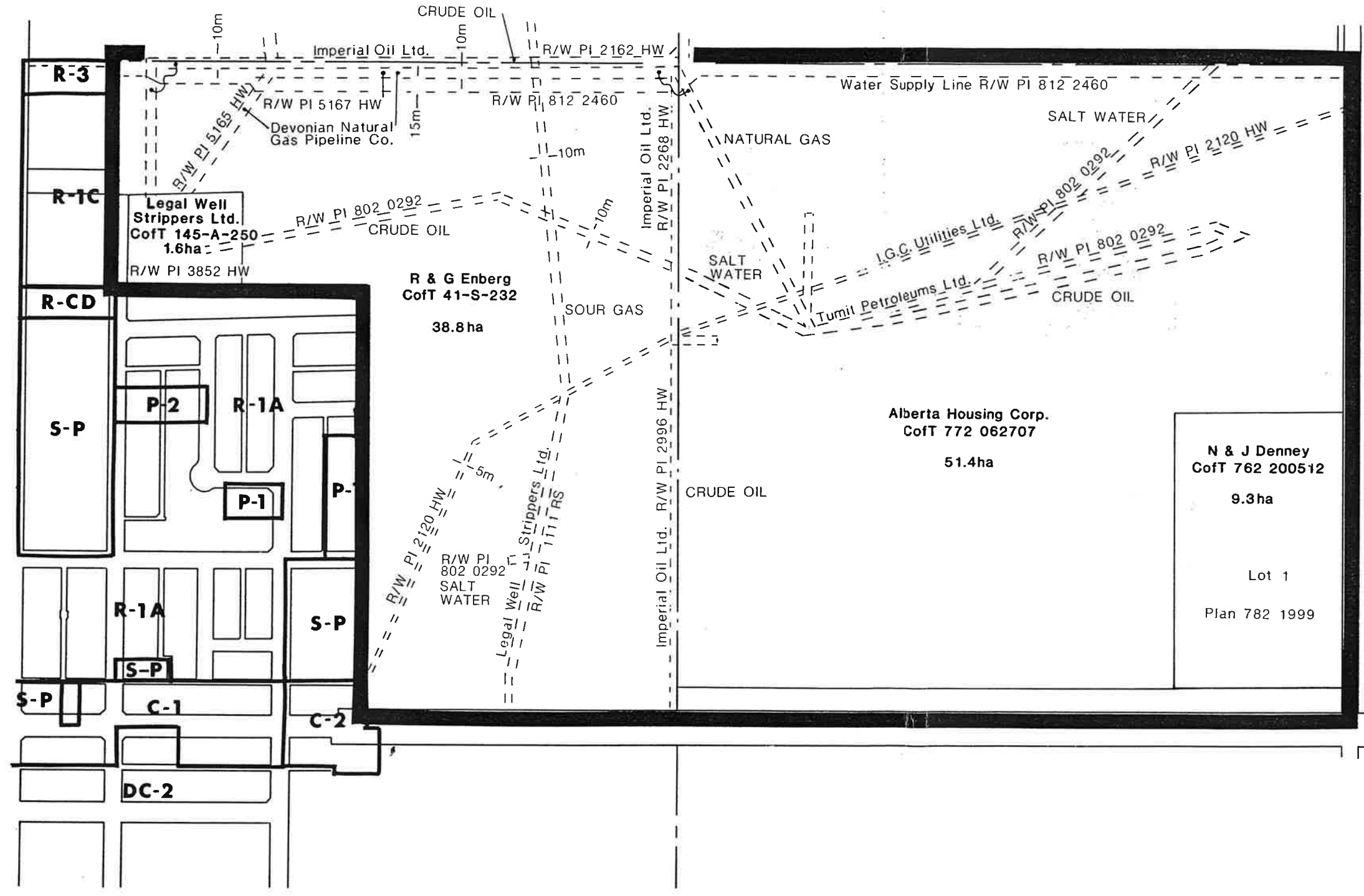
For more detailed information regarding these facilities, please call the licensee. If you have further questions regarding this information please contact the undersigned at 297-3714.




Yours truly,

Lisa Best
Environment Protection Department

/LB
enclosures

FIGURE 2
OWNERSHIP and
SURROUNDING LAND USES



-  Plan Area (101.75ha)
-  Title Area
-  Right-of-Way

Town of Calmar
 North-east Calmar
 Area Structure Plan

August 1985

