

BY-LAW 19-96

A BY-LAW OF STRATHCONA COUNTY IN THE PROVINCE OF ALBERTA, FOR THE PURPOSE OF ADOPTING THE GILLIS ESTATES AREA STRUCTURE PLAN BY-LAW 19-96.

WHEREAS it is deemed advisable to adopt the Gillis Estates Area Structure Plan;

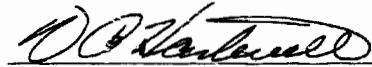
NOW THEREFORE, the Council of Strathcona County, pursuant to the authority conferred upon it by the Municipal Government Amendment Act, S.A. 1994, and amendments thereto, enacts as follows:

1. That this By-law 19-96 is to be cited as the "Gillis Estates Area Structure Plan".
2. That Schedule "A" attached hereto is hereby adopted as part of the By-law.


Read a first time this 19 day of March, 1996

Read a second time this 23 day of April, 1996

Read a third time and finally passed this 23 day of April, 1996



Mayor



Corporate Secretary

Date Signed: April 26 1996

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INTRODUCTION

The subject property legally described as Pt. of Block 1, Plan 4779MC in the N. W. 1/4 Sec. 32-52-22-W.4M. is located 1/2 mile south of the Baseline Road (Township Road 530) on the east side of Range Road 225. The property contains 7.28 Hectares (18 Acres) more or less.

A key plan on the following page depicts the location of the subject site.

OWNERSHIP

The property is held in fee simple title by Dean Larry Maloney and Patrick Maloney who are also the developers of the site.

STATUTORY PLAN COMPLIANCE

This Area Structure Plan conforms with the County of Strathcona General Municipal Plan and is not affected by the Edmonton Metropolitan Regional Plan.

ENVIRONMENTAL ELEMENTS

a.) Topography

Topographic relief on the property is rolling along the south side and east end with relief varying by about 30 feet (9.1 m). A predominant height of land is located along most of the south side and east end of the property. From this height of land the property drains to the north, northwest and west. The remainder of the property is relatively flat with several small depressions which in wet periods would contain and hold water.

b.) Vegetation

Approximately 10% or 2 acres of the subject property is treed. The largest areas are two woodlots, one in the northeast corner of the property and one along the south side just west of the southeast corner of the property. The remaining tree cover consists of shelterbelts around the existing barn and shelterbelts along the property lines. The overstorey is deciduous consisting mainly of aspen, black poplar and birch with the most predominant species being black poplar. The stands are interspersed with an assortment of associated deciduous vegetation consisting of willows, choke cherry, saskatoon bushes,

and the like. The shelterbelts consist of relatively mature planted spruce, maple and caragana. Other than three relatively small low areas, the remainder of the property is presently in native grass which appears to be neither grazed nor cut at present.

c.) Surficial Geology

The surficial geology of the site consists of approximately 0.10 to 0.61 metres of black, clayey organic topsoil which is underlain by glacial clay till and glacial silty sand. In some low areas spring run-off and rainfalls collect creating a shallow intermittent slough overlaying deposits. These depressions are small and are not a serious constraint to development.

d.) Soils

The soils on the subject site are 50% Cooking Lake Loam, 25% Falun Loam and 25% Uncas Loam. Cooking Lake Loam and Uncas Loam are Podzolic Soils which are orthic and dark grey-wooded soils developed on glacial till. Falun Loam is a Chernozemic Soil which is an orthic dark grey wooded soil also developed on glacial till. Under the Canada Land Inventory Soil Capability for Agriculture Index the soil is classified as number 4 with adverse topography and soil limitations. This designation reflects severe limitations that restrict the range of crops or require special conservation practices or both.

e.) Surface Drainage

Given the topographic characteristics of the site the general surface drainage is from the south side and southeast corner of the site to the north, northwest and west.

As previously noted the irregular nature of the topography has resulted in several landlocked slough and depression areas. Some of these will be eliminated by the construction of the internal roadway and the remaining two areas are small enough that they are not an impediment to the development of the lots on which they are located.

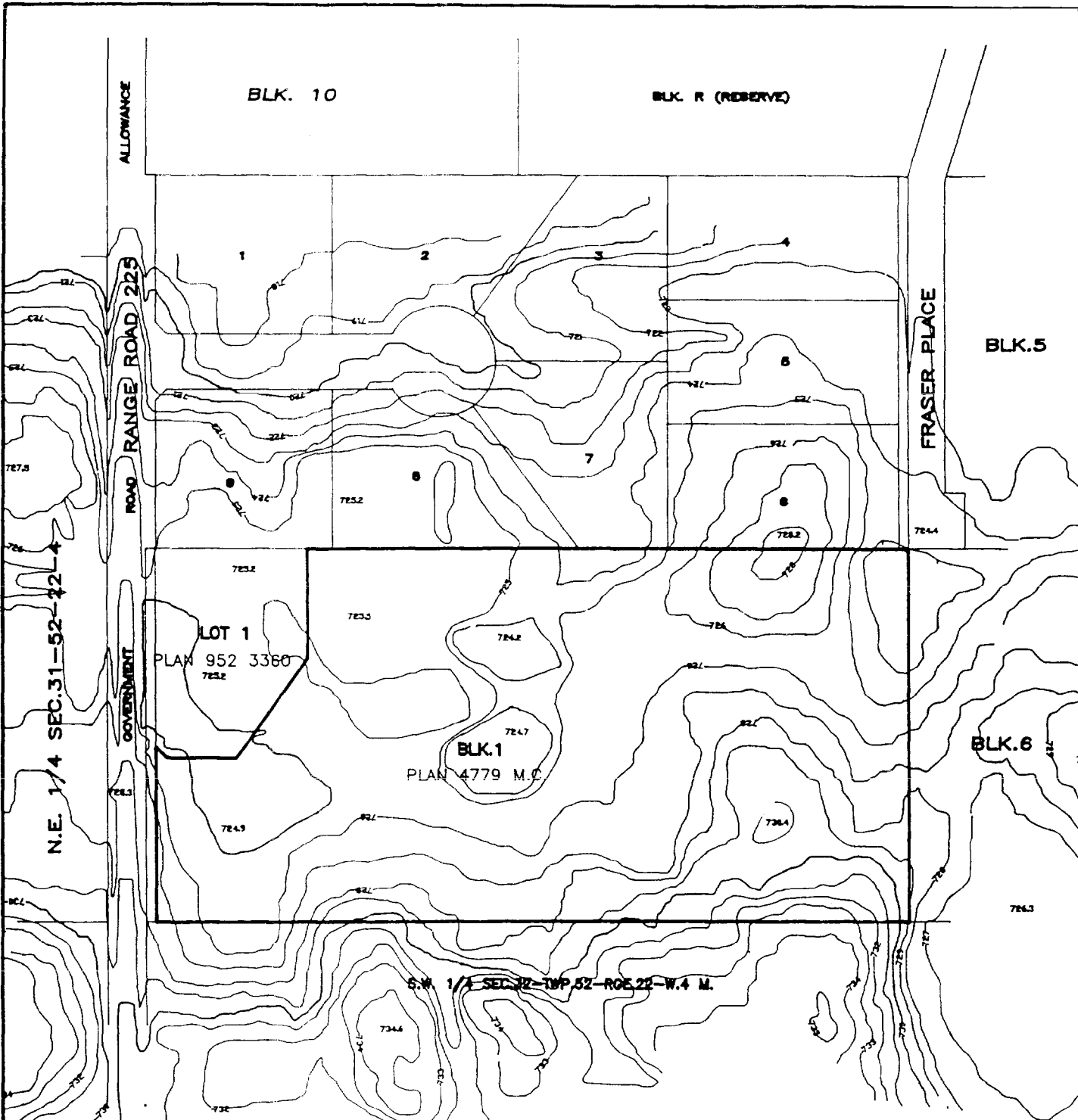
f.) Water Table

A series of water table test holes were drilled on the subject property by Omni-McCann Consultants Ltd. on October 14th of 1994. Eleven test holes were drilled to a depth of three metres to test depth of the water table. Water levels were measured between October 17th and October 26th of 1994. Groundwater tables within 2.4 metres of the surface were present in seven of the eleven test holes. Depth to water table in the holes with water at less than 2.4 metres varied from 0.64 metres to 2.08 metres. Of the seven holes that encountered water at less than 2.4 metres three were drilled in the low depressions. The remaining four holes encountered water from 1.52 metres to 2.08 metres.

Omni-McCann Consultants Ltd. summarized the situation in regard to water table by stating that, notwithstanding the shallow groundwater conditions, it is the considered opinion of Omni-McCann Consultants Ltd. that the proposed acreage subdivision could be developed. However, the design and construction of the subdivision should be engineered for the existing high groundwater conditions. We recommend that proposed housing development on each of the lots be carried out with geotechnical design input and construction supervision. Four of the proposed lots (Lots 2, 3, 5 & 9) have less than one acre of developable area using a definition that land with a 2.1 metre or greater depth to water table is developable land. It is proposed that a minimum bottom of footing elevation of 724.5 metres be established on these lots to ensure all basements are constructed above the water table. This advisement will be registered as a caveat against the title to these lots along with providing the department of the County responsible for development and building permits with this information as well. The developer concurs with these conclusions and will be implementing these recommendations as part of the development.

g.) Percolation


A series of percolation test holes were drilled on the subject property on October 14th of 1994. Nine test holes were drilled to a depth of 0.90 metres to test percolation rates. The holes were saturated with clear water to 0.45 metres below ground level for a 24 hour period before testing began. Percolation tests



HAGEN SURVEYS (1982) LTD.	
8928-20th STREET EDMONTON T8P1K8 Ph:464-6506	
SURVEYOR'S STAMP	DRAWN BY: TAST
	CALCD. BY: TAST
	FILE NO. 945324



CONTOUR PLAN
 OF
BLOCK 1 , PLAN 4779 M.C.
 IN THE
N.W. 1/4 SEC.32-TWP.52-RGE.22-W.4 M.
STRATHCONA COUNTY

1. DISTANCES ARE IN METRES AND DECIMALS THEREOF.
 2. AREA TO BE REGISTERED BOUNDED THUS.  AND CONTAINS 8.09 ha.

indicate that all test holes were associated with soil percolation rates which would be suitable for septic field disposal systems. Although percolation rates were good, much of the property is underlain by a shallow water table and it is recommended that methods of sewage disposal other than septic field disposal systems be used where necessary. It is the developers intent to use above ground mounds in the areas where depth to water table is a constraint.

h.) Potable Groundwater

A potable groundwater review was conducted by Omni-McCann Consultants Ltd. in October of 1994. During this review, consultants' reports, published maps, and Alberta Groundwater Information Service's files were evaluated. The majority of the wells in the area yield between 5 to 10 imperial gallons per minute. Chemical analyses suggest that the water is generally soft with high total dissolved solids. Iron commonly exceeds the recommended Canadian drinking water guideline limits. Sodium is also reportedly high between 400 to 650 milligrams per litre. While the groundwater does exceed the recommended limits for the above mentioned parameters, it is still considered to be of reasonably good quality.

MAN-MADE CONSTRAINTS

There are no apparent man-made constraints to development on the subject site.

SURROUNDING LAND USES

The surrounding land uses are country residential and small holdings. The land immediately south consists of two-twenty acre small holding parcels located in the Easton Acres subdivision. The land immediately east is a 19.77 acre small holding parcel located in the Barry Hill subdivision. The north boundary of the site backs onto four-two acre country residential parcels located in the Keystone Ridge country residential subdivision and the land across Range Road 225 to the west is a 17.10 acre small holding parcel located in the Daly subdivision.

EXISTING LAND USE

The existing land use of the property is agricultural in nature with the land being mostly open grazing land. Although there appears to be no livestock grazed on the property at present, the existence of an old barn indicates livestock may have been grazed on the property in the past. Other than the older barn and a lean-to style machine shed, there are no other buildings or structures on the property.

The current land use designation under the Land Use Bylaw presently in effect is RS (Small Holdings). The property is designated as Country Residential Infill Area under the County of Strathcona General Municipal Plan.

PROPOSED LAND USE

The proposed land use for the subject property is a country residential subdivision. Accordingly a redistricting will be required to accommodate the

proposed land use. The concept provides for a cul-de-sac roadway approximately 300 metres long running east to west through the middle of the property. The roadway originates directly off of Range Road 225 and ends about 100 metres from the east boundary of the property.

The major transportation routes in the area are the north/south Range Roads at one mile intervals and the east/west Township Roads at two mile intervals. Wye Road (Secondary Highway 630) is situated 1-1/2 miles south of the property while Township Road 530 (Base Line Road) is situated 1/2 mile north of the property. The routes are evident on the Key Plan.

Due to the small size of the development reserves will not be provided on site, but rather, money-in-lieu of reserves for 10% of the value of the original parcel area of 20 acres will be paid to Strathcona County to go towards a regional park which could be established in the general area at some point in the future.

The lot design meets the size requirements of the Country Residential District of the County of Strathcona Land Use Bylaw which calls for a minimum parcel size of .81 hectares (2.0 acres).

The Area Structure Plan and a Table of Land Use Allocation is provided on the following page.

N.E. 1/4 SEC.31--52--22--4

ALLOWANCE

ROAD RANGE ROAD 225

GOVERNMENT

BLK. 10
PLAN 6100 M.C.

BLK. R (RESERVE)
PLAN 6100 M.C.

1

2

3

4

932 1614

PLAN

5

9

8

7

6

FRASER PLACE

BLK.5
PLAN 1000 M.C.

LOT 1

LOT 2
0.81 ha.

LOT 3
0.81 ha.

LOT 4
0.81 ha.

LOT 5
0.81 ha.

RC

WILLOW

WAY

BLK.6
PLAN 1000 M.C.

LOT 9
0.81 ha.

LOT 8
0.81 ha.

LOT 7
0.81 ha.

LOT 6
0.81 ha.

S.W. 1/4 SEC.32--TWP.52--RGE.22--W.4 M.



CONCEPT MAP

AREA STRUCTURE PLAN

BLOCK 1 PLAN 4779 M.C.

IN THE

N.W. 1/4 SEC.32--TWP.52--RGE.22--W.4 M.

STRATHCONA COUNTY

**TABLE
OF
LAND USE ALLOCATION**

	Ha.	Acres	Percent
Gross Area(Pt. of Block 1, Plan 4779MC)	7.28	18.00	100.0%
LAND USES:			
Country Residential Lots	6.48	16.00	89.0%
Roadways	0.809	2.00	11.0%
TOTAL	7.28	18.00	100.0%

POPULATION

The Country Residential Subdivision proposes 8 lots each of a minimum of 0.81 hectares (2.0 acres) in size. The total number of housing units will be 8. According to the 1992 Municipal Census the average Country Residential household size is 3.3 persons. Based on this figure the projected population upon full development would be 26.

SCHOOL POPULATION

The school population is projected to be:

Elementary	7
Junior High	4
Senior High	5
Total	16

School population generation is based on the following ratios of public and private combined*:

Elementary	0.27 pupils per population
Junior High	0.14 pupils per population
Senior High	0.19 pupils per population

School busing will be required as the school population generated is inadequate to warrant the provision of any schools on the property.

*New Schools and Park Sites Study County of Strathcona No 20,1990

TRAFFIC PROJECTIONS

The proposed subdivision when fully developed will consist of 8 households. Using a figure of 12 vehicle trips per day per household the traffic generation rate upon full development will be 96 vehicle trips per day.

MUNICIPAL INFRASTRUCTURE

a.) Roadways

The roadways are proposed to have a semi-rural cross section with swale ditching within a 24.4 metre right-of-way. The carriageway is proposed to have a paved surface. A 5.18 metre road right-of-way widening is already provided along Range Road 225 under subdivision plan 4779MC. Culverts will be provided where required.

b.) Water Supply

Individual home owners will be responsible for their own potable water supply. As the potable groundwater in the area is acceptable both in terms of quantity and quality this leaves the individuals with two options, either a drilled well as a source of supply or a cistern with city water hauled to the site.

c.) Sanitary Sewers

Individual home owners will be responsible for sewage disposal either through septic tanks and fields, pump-out tanks or above ground evaporation mounds. The nature of a majority of the soils on the property are conducive to sewage fields but a good portion of the land is underlain by a 5 to 7 foot water table. In these areas the only acceptable means of sewage disposal is an above ground evaporation mound and the developer will be assuring through a caveat and other on site controls related to house construction that mounds are installed where necessary. For further details see the Omni-McCann Report attached as Appendix A to this report.

d.) Storm Water Management

Storm water management will be via surface utilizing the swale ditches of the roadways. If necessary swale ditches and the appropriate drainage easements will be provided to handle flows in natural depressions or areas where the natural drainage is not to the internal roadway. Culverts will be provided where required to facilitate proper drainage.

DEVELOPMENT CONTROL

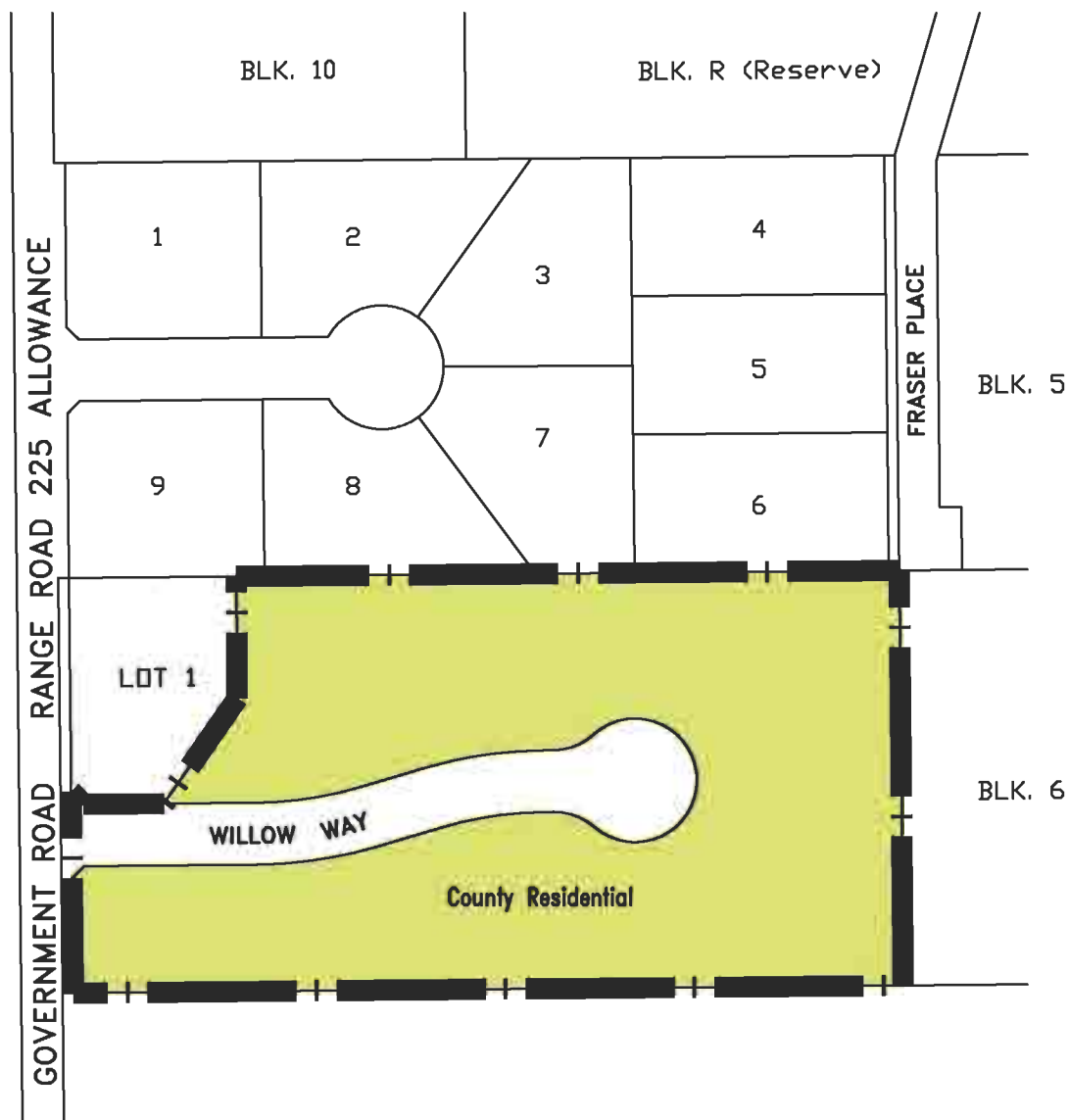
The development of the lots within the subdivision will be subject to Architectural Guidelines. The key elements of the guidelines will address minimum residential building size, site location, facade materials, screening of storage area and basic architectural standards. As well, due to the relatively high water table, strict engineering controls will be placed on house and septic system construction to ensure that they are not impacted by the water table.

FRANCHISE UTILITIES

The subdivision is proposed to be serviced with overhead power as well as natural gas, telephone and cable television.

STAGING

As this is a relatively small country residential subdivision it will be developed in one stage with construction to be completed in the spring of 1996.



Gills Estates Area Structure Plan Bylaw 19-96

County Residential



Road Plan



ASP Boundary

