

BY-LAW 71-93

A BY-LAW OF THE COUNTY OF STRATHCONA NO. 20 IN THE PROVINCE OF ALBERTA,  
FOR THE PURPOSE OF ADOPTING THE MEADOWLARK HILLS AREA STRUCTURE  
PLAN.

THE AREA WITHIN THE AREA STRUCTURE PLAN, COMPRISING OF 60.7 HECTARES  
(150 ACRES) IS LOCATED WITHIN THE NE ¼ SEC 28-52-22-W4.

NOW THEREFORE, the Council of the County of Strathcona No. 20, pursuant to the authority  
conferred upon it by the Planning Act, 1980, R.S.A., enacts as follows:

1. That this By-law 71-93 is to be cited as the "Meadowlark Hills Area Structure Plan.
2. That Schedule "A" attached hereto is hereby adopted as part of the By-law.

Read a first time this 24th day of August, 1993.

Read a second time this 14<sup>th</sup> day of September, 1993.

Read a third time and finally passed this 14<sup>th</sup> day of September, 1993.



Reeve

  
Corporate Secretary

MEADOWLARK HILLS AREA STRUCTURE PLAN

N.E. 1/4 SEC. 28-52-22-W.4M.

COUNTY OF STRATHCONA NO. 20

PREPARED BY:

HAGEN SURVEYS (1982) LTD.

JUNE, 1993

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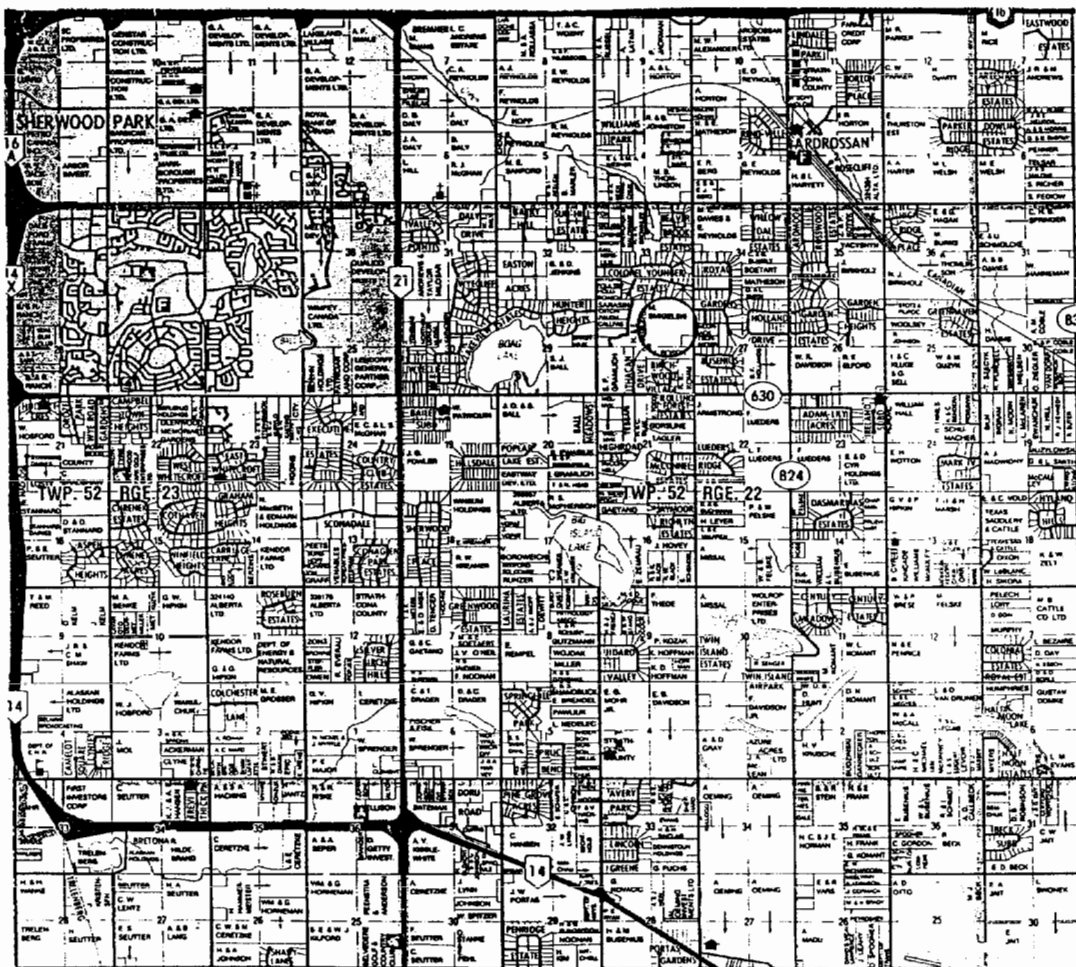
**INTRODUCTION**

The subject property (N.E. 1/4 Sec. 28-52-22-W.4M.) is located 1/2 mile north of the Wye Road on the west side of Range Road 223. The property contains 150 acres.

A key plan on the following page depicts the location.

**OWNERSHIP**

The property is held in fee simple title by Martin Smigelski who has in turn granted an option to Meadowlark Properties Inc. a body corporate registered in the Province of Alberta.



# KEY PLAN

AREA STRUCTURE PLAN  
N.E. 1/4 · 28 · 52 · 22 · W4M  
COUNTY OF STRATHCONA  
NO.20

BASE MAP BY COUNTY OF STRATHCONA

## **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 and varies by about 40 foot (12.25m). A predominant height of land is located in the east central portion of the property. From this height of land the property drains to the northwest, west and south. The remainder of the property is characterized by a mixture of localized hills and depressions having relief in the order of six (6) metres. Some of the depressions are land locked sloughs which in wet periods contain and hold water. A manmade drainage ditch traverses the southwest corner of the property.

### **b.) Vegetation**

Approximately 20% of the subject property is treed. The largest area is a strip of trees averaging about 100 metres in width along the entire south boundary of the property.

The predominant overstory is deciduous consisting mainly of trembling aspen stands. The stands are interspersed with an assortment of associated deciduous vegetation consisting of willows, choke cherry, saskatoon bushes, hazelnuts and the like. Other than two relatively large low areas and several depressional sloughs, the

remainder of the property is cultivated. A portion of the cultivated area is now in grass and other portions grew oats, barley and rapeseed last year.

**c.) Surficial Geology**

The surficial geology of the site consists of glacial till of a loam texture. In some low areas spring run-off and rainfalls collect creating a shallow slough overlaying deposits. These depressions are quite small and are not a serious constraint to development.

**d.) Soils**

The soils on the subject site are Podzolic (Grey-Wooded). Primarily they are Cooking Lake Loam i.e. orthic grey-wooded developed on glacial till of Edmonton Formation. Under the Canada Land Inventory Soil Capability for Agriculture Index the soil is classed as predominantly no. 3. This designation reflects moderately severe limitations for agricultural purposes due to soil limitations and adverse topography.

**e.) Surface Drainage**

Given the topographic characteristics of the site the general surface drainage is from east central to the northwest, west and south.

As previously noted the irregular nature of the topography has resulted in several land locked slough and depression areas. Some of these will be drained via the roadway network. The majority of the development will be drained to the low areas

designated as Environmental Reserve in the northwest and southwest corners of the site. An important man made drainage channel traverses the southwest corner of the site. This drainage course is already protected by easement in favour of the County of Strathcona and will be further protected as it will be contained entirely within the Environmental Reserve in the southwest corner of the development.

**f.) Groundwater**

A series of test holes were carried out on the subject property by Omni-McCann Consultants Ltd. Ten (10) of the test holes were drilled to a depth of three (3) to test depth to groundwater table. Water levels were measured one week after drilling. Groundwater tables within 2.4 metres of the surface were present in only one hole drilled near the Environmental Reserve. Water in this test hole was found at 2.39 metres.

The groundwater table is not a serious constraint to development and the subdivision design is such that any of the localized depressions should be drained by the roadway ditches. If necessary minor lot grading may have to occur on some parcels after road construction to ensure a ground elevation 2.4 metres above the water table.

**g.) Percolation**

Ten (10) of the test holes drilled on the property were drilled to a depth of 0.90 metres to test percolation rates. The holes were saturated with clear water for a 24 hour period before testing again. Percolation tests indicate that all test holes except for one were associated with soil percolation rates which would be suitable for septic field

disposal systems. The one hole in the northwest corner tested too slow for effective sewage treatment. It would appear that soil percolation is not a constraint to development and that indeed a good portion of the development will support conventional sewage disposal in the form of septic field disposal systems. In any area where the percolation rate was too slow effective sewage disposal could be provided either through pump-out tanks or the provision of on-site mounds. For further details on groundwater table and percolation testing the Omni-McCann Report is attached as Appendix A to this report.

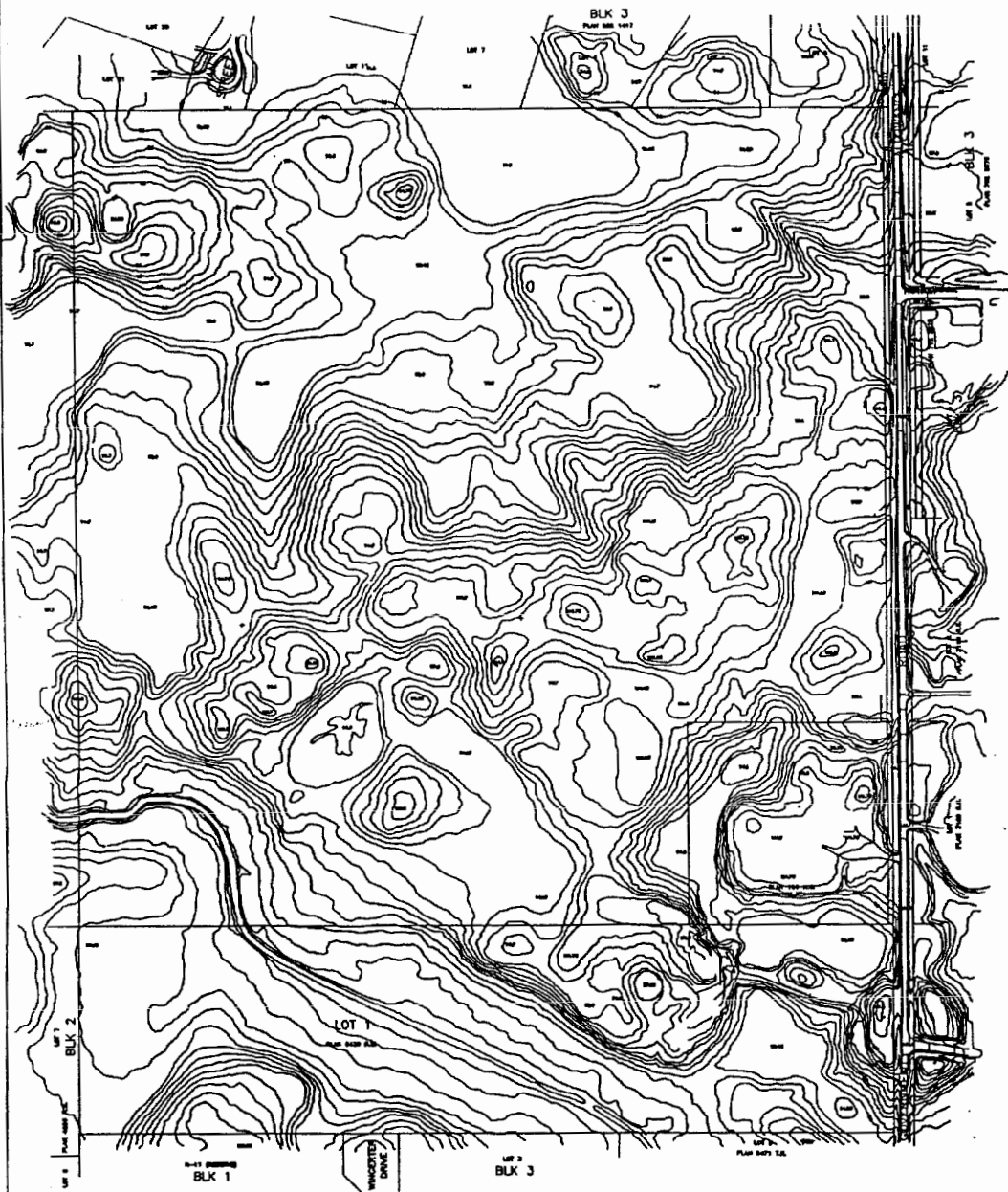
#### **MAN-MADE CONSTRAINTS**

The only man-made constraint on the subject property is the drainage channel traversing the southwest corner of the property. As the drainage channel will be contained entirely within the Environmental Reserve and as Environmental Reserve development is not allowed under the Planning Act it will not be a constraint to development.

#### **SURROUNDING LAND USES**

The surrounding land uses, with the exception of the land immediately south and immediately west, are country residential and small holdings subdivisions. The land immediately south is a 40 acre agricultural parcel and the land immediately west is a 60+- acre agricultural parcel.

-5A-



ALBERTA LAND SURVEYORS REGULATED BY THE LAND SURVEY ACT, 1985	
<b>HAGEN SURVEYS (1982) LTD.</b>	
4020-10 STREET, EDMONTON, ALTA. T6C 2K6	
MEMBERSHIP NO.	12345
ISSUED ON	12/31/88
EXPIRES ON	12/31/91
REG. NO.	925538

NOTE:  
 - Contours are at 10m intervals unless otherwise shown.  
 - All elevations are in meters above sea level.  
 - Contours are shown in 1m intervals.  
 - Contour interval - 0.2 m



**CONTOUR PLAN**

N.E. 1/4 SEC. 28-TWP.52-RGE.22-W.4 M.  
 COUNTY OF STRATHCONA NO. 20

**EXISTING LAND USE**

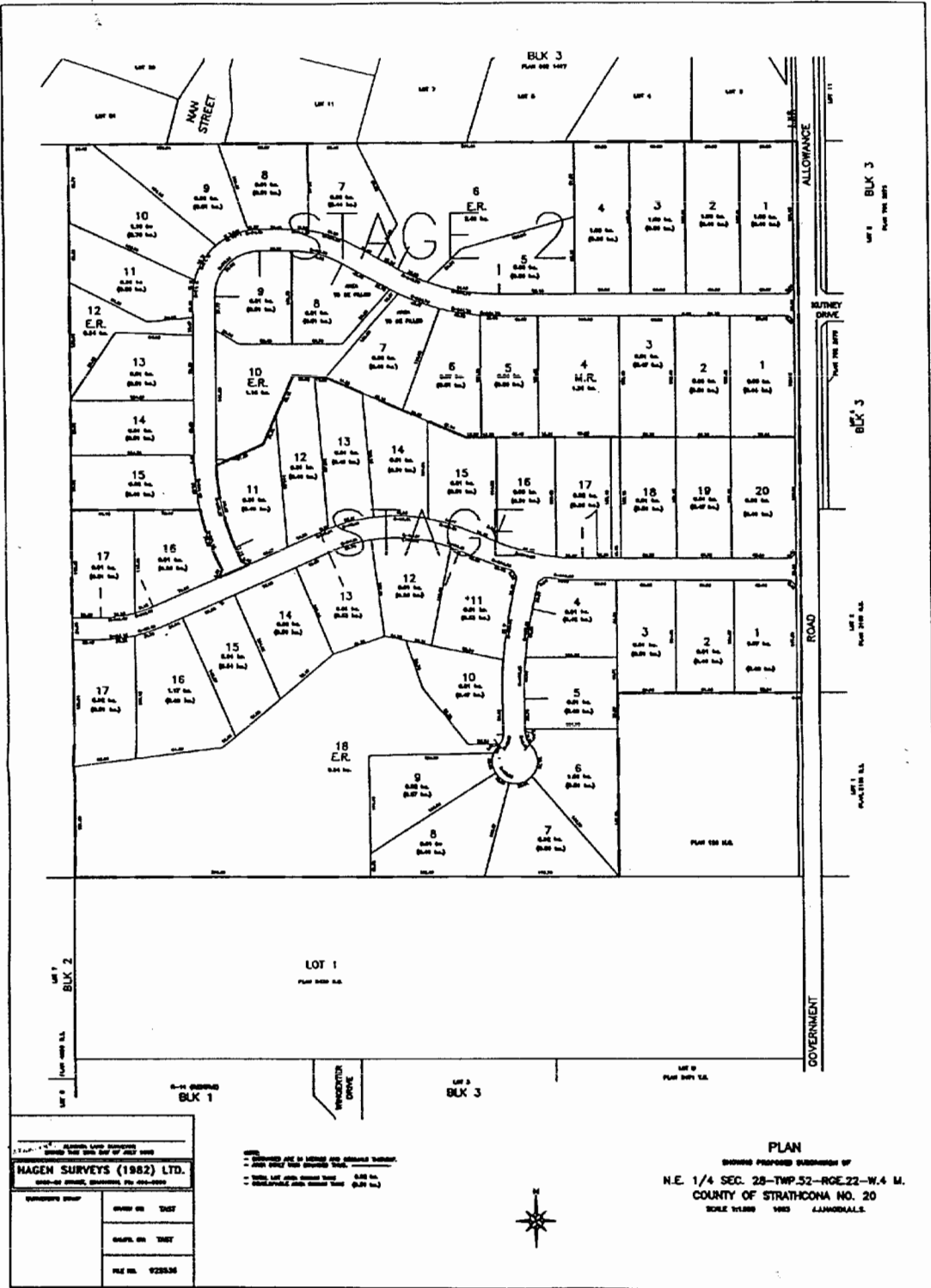
The existing land use of the property is agricultural in nature with production of cereal crops and hay as the only activity. Other than several small granaries of little or no value there are no other buildings or structures on the property.

The current land use designation under the Land Use Bylaw presently in effect is Rural District. The property is designated as Country Residential Infill under the County of Strathcona General Municipal Plan.

**PROPOSED LAND USE**

The proposed land use for the subject property (N.E. 1/4 Sec. 28-52-22-W.4M.) is a Country Residential Subdivision. Accordingly a redistricting will be required to accommodate the proposed land use. The concept provides for a collector roadway through the subdivision accessing Range Road 223 at the intersection of Kutney Drive and at a point 290 +/- metres south of the intersection. The collector roadway affords one (1) cul-de-sac as well as a linkage to the property immediately west of the subject property. A Caveat will be filed against all newly created lots to advise purchasers that the linkage road to the west is for the purpose of accommodating future country residential development on the N.W. 1/4 Sec. 28-52-22-4.

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 1/2 mile south of the property while Township Road 530 (Base Line Road) is situated one mile north of the property.



-V9-

HAGEN SURVEYS (1982) LTD. 600-82 STREET, EDMONTON, ALBERTA T6C 0K8	
SURVEYOR'S NAME HAGEN SURVEYS (1982) LTD.	DRAWN BY DATE
CHECKED BY DATE	FILE NO. 925536

- NOTES:
- DIMENSIONS ARE IN METERS AND DECIMAL THEREOF.
  - DIMENSIONS ARE IN FEET AND DECIMAL THEREOF.
  - TOTAL LOT AREA: 0.25 AC.
  - TOTAL LOT AREA: 0.25 AC.



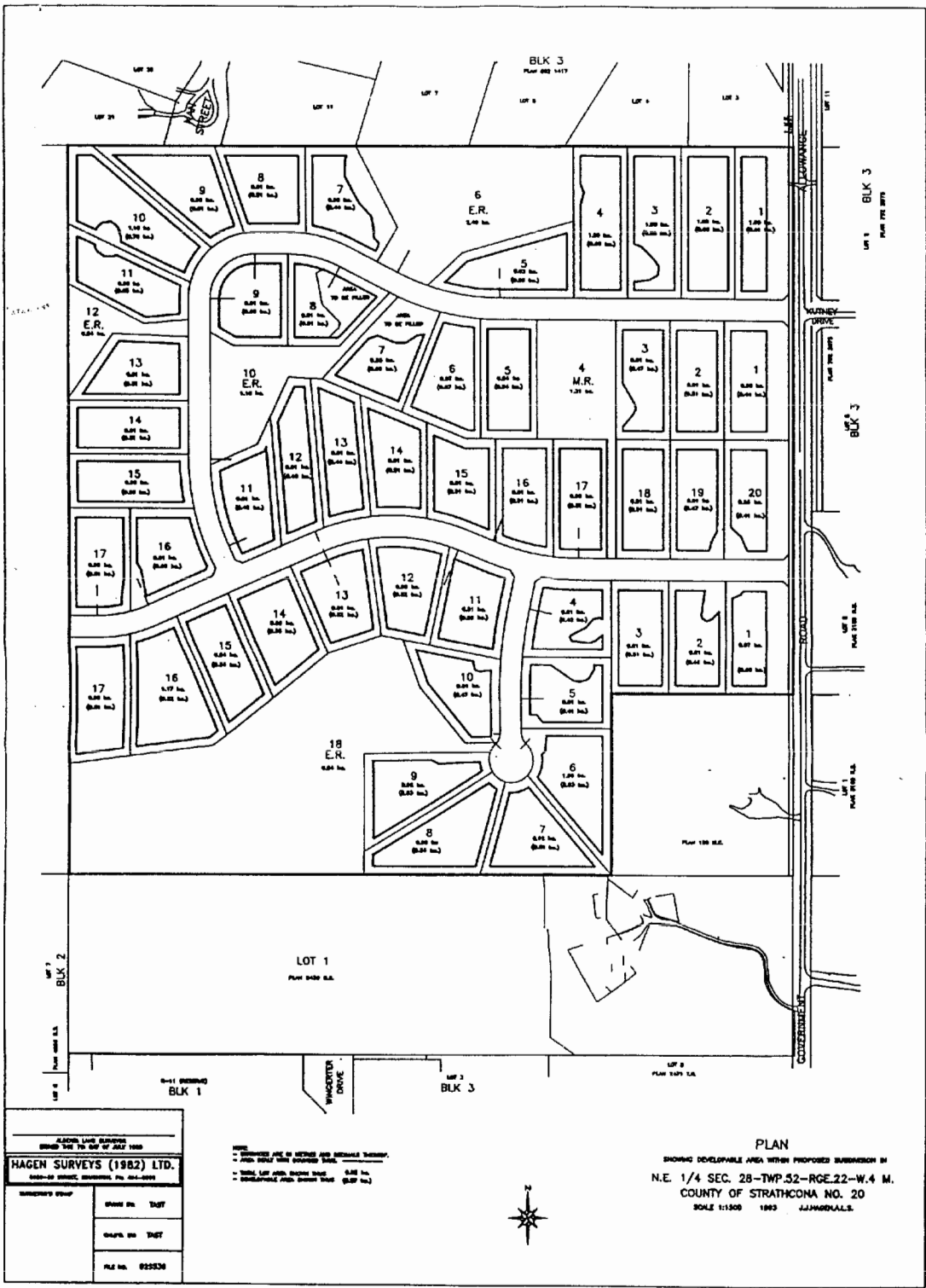
PLAN  
 SHOWING PROPOSED SUBDIVISION OF  
 N.E. 1/4 SEC. 28-TWP.52-ROE.22-W.4 M.  
 COUNTY OF STRATHCONA NO. 20  
 SCALE 1:1000 1982 LAMORALS.

The routes are evident on the Key Plan.

A 6.54 hectare Environmental Reserve with 4.42 hectares of creditable Municipal Reserve is located in the southwest corner of the property, which could provide for linkages with future reserves on the undeveloped adjoining properties to the south and west. The Environmental Reserve also encompasses an established drainage course which is presently protected by an easement in favour of the County of Strathcona. Three additional Environmental Reserves totalling 4.19 hectares are provided in the northwest quadrant of the development to protect a natural drainage course running northeast through the property. As well, a 1.31 hectare Municipal Reserve is provided in the centre of the development with access from both roadways to allow for a future playground if necessary. The lot design meets the size requirements of the County of Strathcona Land Use Bylaw and provides for a minimum of one acre (0.40 Hectare) for building site purposes on each lot except Lot 8 in the centre block which is presently affected by a flat area of high water table. The high water table area on this lot will be filled at road construction stage and after filling will be tested again to insure a minimum of one acre developable area.

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





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TABLE  
OF  
LAND USE ALLOCATION

	Ha.	Acres	Percent
Gross Area (NE 1/4 28-52-22-W4M)	60.70	150.00	100.0%
<b>LAND USES:</b>			
Country Residential Lots	43.30	106.99	71.3
Roadways	5.06	12.50	8.3
R.R. 223 Widening	0.30	0.75	0.5
Municipal Reserve (Lot 4MR)	1.31	3.24	2.2
Creditable Environmental Reserve	7.02	17.35	11.6
Non-Creditable Environmental Res.	3.71	9.17	6.1
<b>TOTAL</b>	<b>60.70</b>	<b>150.00</b>	<b>100.0%</b>

**POPULATION**

The Country Residential Subdivision proposes 50 lots each of a minimum of 0.81 hectares (2.0 acres) in size. The total number of housing units will be 50. 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 165.

**SCHOOL POPULATION**

The school population is projected to be:

Elementary .....	45
Junior High .....	23
Senior High .....	31
Total .....	99

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 50 households. Using a figure of 12 vehicle trips per day per household the traffic generation rate upon full development will be 600 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 metre right-of-way. The carriageway is proposed to have a paved surface. A five (5) metre road right-of-way widening is proposed along Range Road 223. Culverts will be provided where required. Acceleration and deceleration lanes will be provided on Range Road 223 at its two (2) intersections with the subdivisions' internal collector roadways.

### **b.) Water Supply**

Potable water will be supplied by servicing the entire subdivision with city water through a tie into the Tofield water line which runs along the Wye Road one half mile south of the subject property.

**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. 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 will be provided to handle flows in depressed areas or to the ditch of Range Road 223. Culverts will be provided where required to facilitate proper drainage.

**DEVELOPMENT CONTROL**

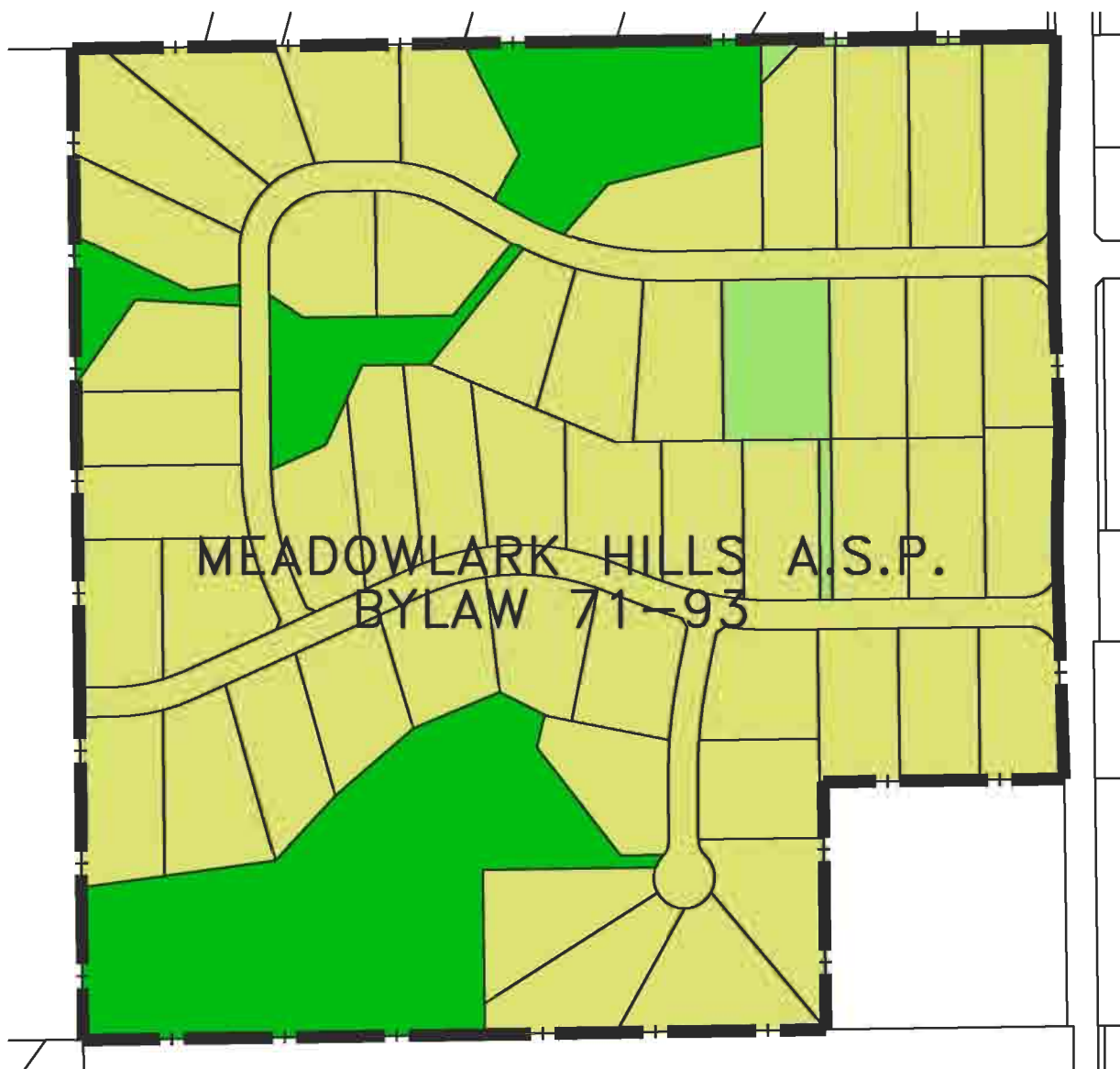
The development of the lots within the subdivision will be subject to Architectural Guidelines. The key elements of the guidelines will address minimum residential building size, site location, facade materials, screening of storage area and basic architectural standards.

**FRANCHISE UTILITIES**

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

**STAGING**

The first stage of the subdivision consisting of 29 lots in the south end of the subdivision is scheduled for construction in the fall of 1993. The second stage will be developed when demand warrants.



# Meadowlark Hills Area Structure Plan Bylaw 71-93

Residential		Road Plan	
Municipal Reserve		ASP Boundary	
Environmental Reserve			