

BY-LAW NO. 1031/D&P/90

BEING A BY-LAW OF THE TOWN OF STONY PLAIN IN THE PROVINCE OF ALBERTA FOR THE  
PURPOSE OF AMENDING THE SOUTH EAST AREA STRUCTURE PLAN BEING BY-LAW NO. 865

WHEREAS pursuant to Section 109(1) of the Municipal Government Act, Chapter M-26 Revised Statutes of Alberta consolidated to October 4, 1989 and subsequent amendments thereto, which states:

"A Council may repeal or amend any by-law, but when the by-law has received the assent of the electors the repeal or amendment shall be similarly assented to."

AND WHEREAS the Council of the Town of Stony Plain deems it advisable and necessary to amend the South East Area Structure Plan being By-Law No. 865;

NOW THEREFORE the Council of the Town of Stony Plain, in Council duly assembled, enacts as follows:

1. That the South East Area Structure Plan being By-Law No. 865 is hereby amended as follows: See Attached South East Area Structure Plan Marked Exhibit A.
2. This By-Law shall come into force and take effect upon the date of its final passage.


Read a first time this 12th day of February , A.D. 1990.

  
MAYOR REG R. KOTCH

  
RICHARD H. MAH  
SECRETARY-TREASURER

Read a second time this 26th day of March , A.D. 1990.

  
MAYOR REG R. KOTCH

  
RICHARD H. MAH  
SECRETARY-TREASURER

Read a third time this 11th day of February , A.D. 1991.

  
BARRIE DAY  
DEPUTY MAYOR

  
RICHARD H. MAH  
SECRETARY-TREASURER

TOWN OF STONY PLAIN

South East Area Structure Plan

Amendment

(Bylaw 1031 - D & P - 90)

September 1990

I.D. ENGINEERING COMPANY LIMITED

Bylaw 1031-D&P-90

# TOWN OF STONY PLAIN

## SOUTH EAST AREA STRUCTURE PLAN AMENDMENT

SEPTEMBER 1990



I.D. ENGINEERING COMPANY LIMITED  
Planners and Engineers

## TABLE OF CONTENTS

		Page
1.0	INTRODUCTION	1
2.0	BACKGROUND	2
	2.1 Golf Course Area Structure Plan	2
	2.2 Graybriar Area Structure Plan	2
	2.3 Revisions to Golf Course Area Structure Plan	2
	2.4 South East Area Structure Plan	3
	2.5 High Park Neighbourhood	4
	2.6 General Municipal Plan	4
3.0	THE NEED FOR REVIEW	5
4.0	PLANNING APPROACH	6
5.0	ARTERIAL REALIGNMENT	7
6.0	COLLECTOR ROAD SYSTEM	8
7.0	SCHOOL SITES	9
	7.1 Catchment Areas	9
	7.2 Student Populations	11
	7.3 School Capacities	12
	7.4 School Facilities	12
8.0	THE SEPARATE SCHOOL SYSTEM	14
9.0	MUNICIPAL RESERVES	15
10.0	INTERIM SITUATION	17
11.0	IMPLEMENTATION	18

## LIST OF FIGURES

		After Page
1.	Study Area	1
2.	Golf Course Area Structure Plan	2
3.	Original South East Area Structure Plan	3
4.	Current South East Area Structure Plan	4
5.	South East Area Structure Plan Proposed Amendments	7

## 1.0 INTRODUCTION

This report describes a proposed amendment to the South East Area Structure Plan in the Town of Stony Plain. The South East Area Structure Plan was originally approved by Council in August, 1983. Since that time, the plan has been amended with respect to development west of Golf Course Road. In addition, the Golf Course Area Structure Plan to the north has been adopted, and the Town has expressed its preference that long term planning for the south east area include the half-section between the existing Town boundary and Boundary Road. It is now appropriate to review the provisions of the South East Area Structure Plan, particularly with respect to school facilities and the road network. No further work was done with respect to servicing issues.

As development occurs, more detailed plans will be prepared on a neighbourhood basis as was done in High Park. The proposed revision to the South East Area Structure Plan will provide a conceptual framework for the preparation of these more detailed plans. As such, the revised South East Area Structure Plan describes the arterial and collector road network, the location and type of school facilities, the general location of stormwater facilities, and proposed neighbourhood boundaries.

In order to account for future development to the east and north, the study area has been expanded to include the Golf Course-related lands south of the CNR rail line and the lands outside the Town boundary west of Boundary Road. However, they are not included in the ASP amendment. The study area is shown on Figure 1.

This report provides background on development within the study area, a description of the need for a review of the existing South East Area Structure Plan, a description of the planning approach used in reviewing the current plans, and finally a description of, and a rationale for, the proposed amendment.



## 2.0 BACKGROUND

### 2.1 Golf Course Area Structure Plan

In 1980, an area structure plan was prepared for Nu-West Development Corporation for the Stony Plain Golf Course and surrounding residential area. It included a rather long narrow school site sandwiched between a road along the golf course and adjacent residential development. While part of the overall proposed site was on lands owned by Graybriar Industries Ltd. to the north, it appears some effort was made to provide a developable site on the Nu-West lands. This site, however, was laid out in an awkward fashion and was crossed by the Trans-Alta power line right-of-way.

The golf course was subsequently developed but further planning for residential development around the golf course was abandoned until a new area structure plan was approved in 1990.

### 2.2 Graybriar Area Structure Plan

In late 1988, an area structure plan was submitted and later approved for the Graybriar lands, as shown on Figure 2. This plan provided for low density half acre estate lots. The plan did not provide for any part of the school site proposed by the Nu-West plan. This made the provision of a desirable school site even more difficult in this area.

### 2.3 Revisions To Golf Course Area Structure Plan

New owners purchased the former Nu-West lands around the golf course and initiated a new area structure plan, as shown on Figure 2. This plan was revised and approved in 1990. As part of that planning initiative, the new owners requested the Town delete the requirement for a public elementary school site. In support of their request, it was suggested:

- (a) What remained of the original site was inappropriately sandwiched between the golf course and the Trans-Alta power line.

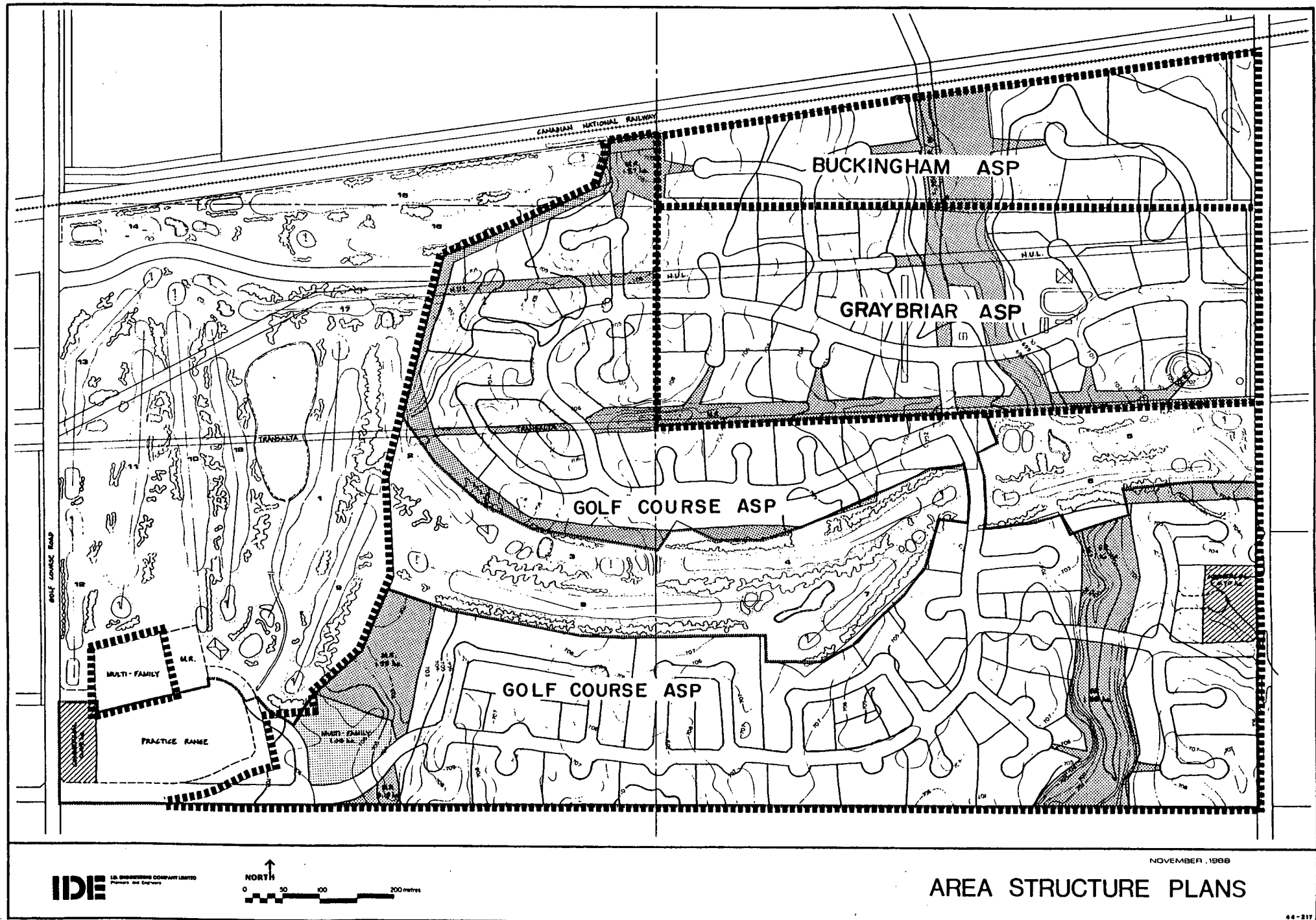


Fig. 2



- (b) As such, its shape was not conducive to effective site planning or management of a school facility. This problem was compounded by the deletion of any part of a school site on the Graybriar lands.
- (c) Because of lower proposed densities in the golf course subdivision and the approved Graybriar low density subdivision, it was suggested that these lands would not likely generate the population, and resulting school generation, to support a school.
- (d) The originally proposed site was located on a collector road which was to connect to Golf Course Road across the golf course. The Town has decided that economics and the integrity of the golf course make this road undesirable, and thus it is not to be constructed. This means the originally proposed school site would have been isolated north of the golf course, inaccessible to the future students of a wider catchment area.

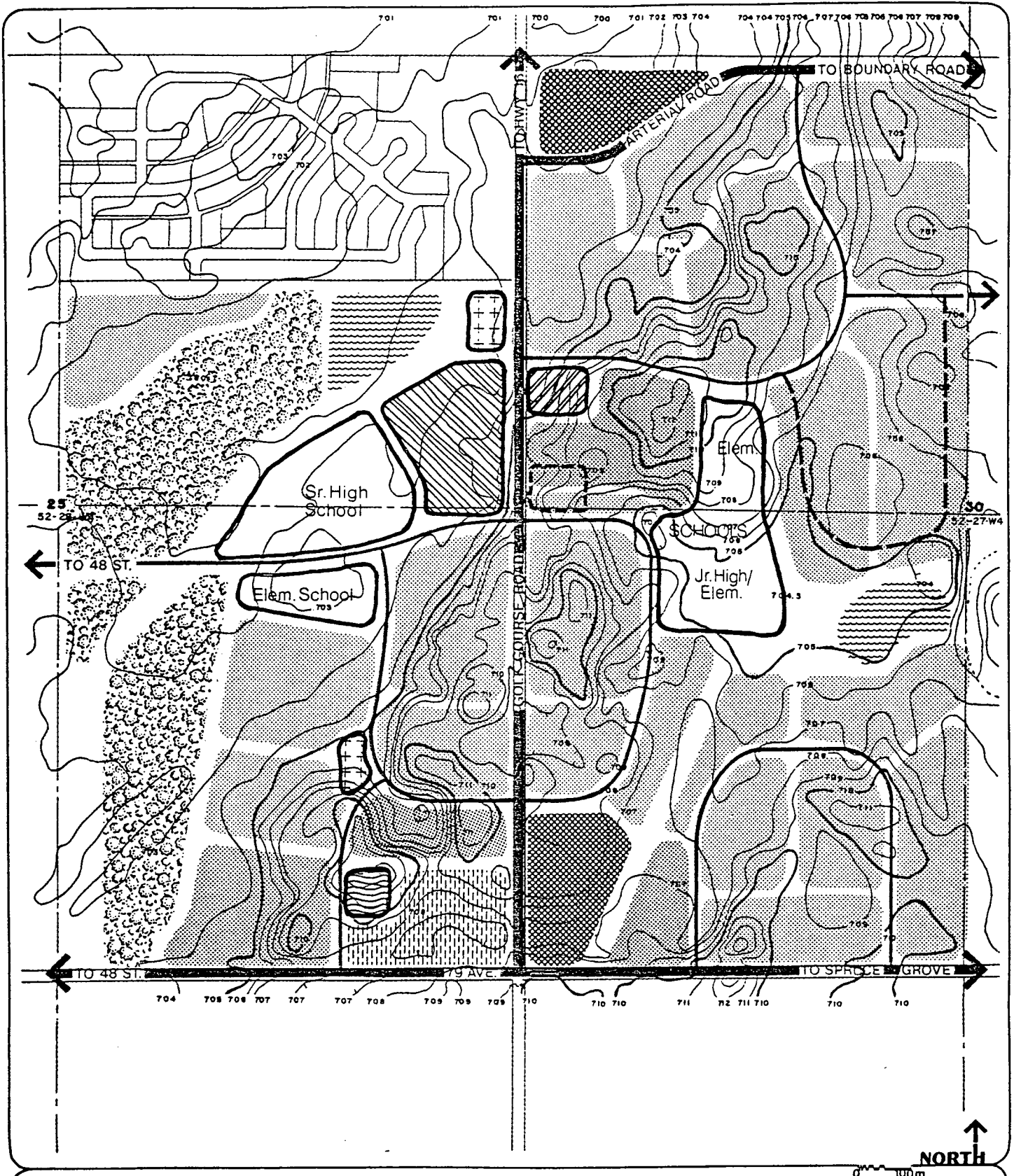
The Town and the School Board planning staff responded that this appeared to be a reasonable request, but it had to be shown that other future sites would be available to accommodate future students. This required a re-evaluation of the lands to the south, those contained within the South East Area Structure Plan.

#### 2.4 South East Area Structure Plan

This plan, as shown in Figure 3, had been prepared in 1983 for 3 1/2 quarter sections straddling Golf Course Road, south of the golf course and the Southridge neighbourhood to 79 Avenue.

On the east side of Golf Course Road, the plan included one elementary school and one elementary/junior high school on a campus site located at the quarter section line.

On the west side of Golf Course Road, the plan included an elementary school and a senior high school site adjacent to the parkway corridor. It also proposed a site for a private institution, presumably a religious school.



# SOUTHEAST STONY PLAIN AREA STRUCTURE PLAN 1983

- |  |                    |  |                             |
|--|--------------------|--|-----------------------------|
|  | SINGLE FAMILY DEV. |  | NEIGHBOURHOOD COMMERCIAL    |
|  | MEDIUM DENSITY     |  | ALTERNATE NEIGH. COMMERCIAL |
|  | HIGH DENSITY       |  | STORM WATER DETENTION POND  |
|  | CHURCH             |  | PRIVATE INSTITUTION         |
|  | NATURAL AREA       |  | WATER RESERVOIR             |
|  | SCHOOL             |  | HOSPITAL                    |

Fig. 3

DESIGN CONCEPT

## 2.5 High Park Neighbourhood

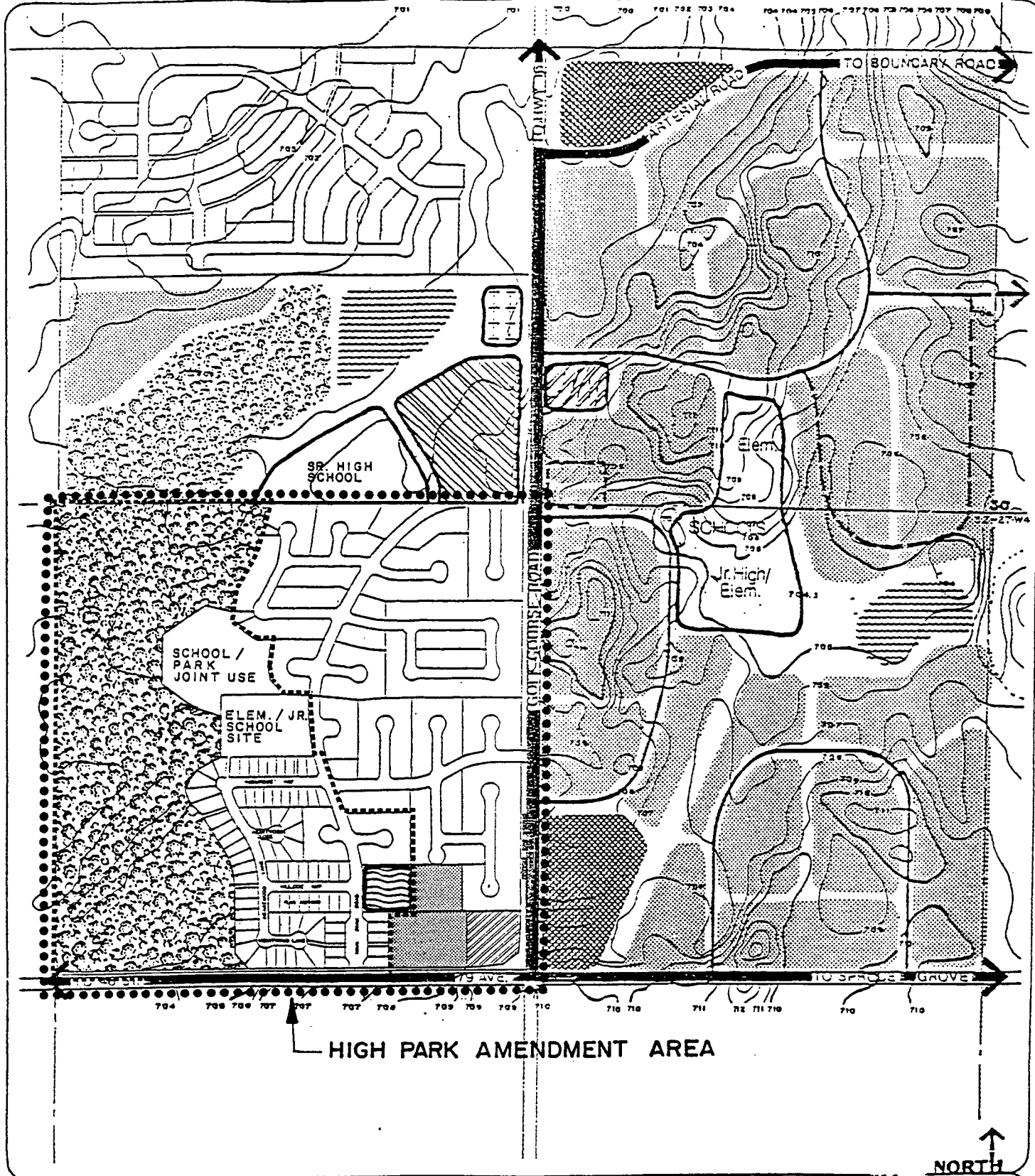
Residential development commenced, in 1988, in the High Park subdivision directly north of the Westerra Institute of Technology. A site for a future elementary/junior high school was provided. As noted above, the South East Area Structure Plan designated only a public elementary and a senior high school in this area.

After the first stage of development in High Park, an amendment to the South East Area Structure Plan was prepared for the remainder of the quarter section (see Figure 4). It altered some land uses and significantly reduced the overall density. It did not affect any of the lands east of Golf Course Road. This amendment was approved by Town Council on May 15, 1989.

## 2.6 General Municipal Plan

Prepared in 1983, the General Municipal Plan designated the following:

- (a) an elementary school site north of the golf course,
- (b) an elementary school in High Park,
- (c) a senior high school on the Hennig land north of High Park,
- (d) two elementary and one junior high on the two quarters immediately east of Golf Course Road, and
- (e) two additional elementary schools, a junior high, and another senior high school on the two quarters further east between the Town limits and Boundary Road.



# SOUTHEAST STONY PLAIN AREA STRUCTURE PLAN - PROPOSED REVISION

- |  |                    |  |                             |
|--|--------------------|--|-----------------------------|
|  | SINGLE FAMILY DEV. |  | NEIGHBOURHOOD COMMERCIAL    |
|  | MEDIUM DENSITY     |  | ALTERNATE NEIGH. COMMERCIAL |
|  | HIGH DENSITY       |  | STORM WATER DETENTION POND  |
|  | CHURCH             |  | PRIVATE INSTITUTION         |
|  | NATURAL AREA       |  | WATER RESERVOIR             |
|  | SCHOOL             |  |                             |

OCTOBER, 1989

Fig. 4

DESIGN CONCEPT

### 3.0 THE NEED FOR REVIEW

Circumstances have changed since the early 1980's, when most of this planning was done, as follows:

- (a) the hospital site was moved out of the South East Area Structure Plan area;
- (b) re-evaluation made it appear logical to delete the school north of the golf course;
- (c) desired residential densities have decreased because of changing housing markets and municipal preferences;
- (d) the collector roadway across the golf course has been deleted;
- (e) the east/west collector through the Golf Course Area Structure Plan area was aligned further south than was originally anticipated;
- (f) consequently, the east/west arterial shown in the South East Area Structure Plan also requires realignment;
- (g) the overall transportation layout appears rather discontinuous;
- (h) amendments have been made to the High Park portion of the South East Area Structure Plan;
- (i) the Graybriar Area Structure Plan was approved at low densities;
- (j) the proposed private institutional area west of Golf Course Road no longer seems likely;
- (k) school funding continues to be an issue; and
- (l) the Town wishes to extend long term planning for the South East Area to include the half-section east of the Town boundary, and west of Boundary Road.

As a result, it seems prudent to re-evaluate the provisions of the Southeast Area Structure Plan with respect to the circulation system and the number and location of future school sites.

#### 4.0 PLANNING APPROACH

The proposed revisions were arrived at by first considering necessary changes to the arterial road network which defines neighbourhood boundaries and public elementary school catchment areas. Within the areas so defined, estimates of gross residential unit densities were made as a basis for calculating projected public elementary and other student populations. Using accepted school capacities and school location guidelines set out in the Town of Stony Plain General Municipal Plan, appropriate school facilities and locations were identified.

With the requirements for arterial realignments and school facilities locations identified, the collector road network has been revised to best serve the school facilities in particular and residential neighbourhoods in general.

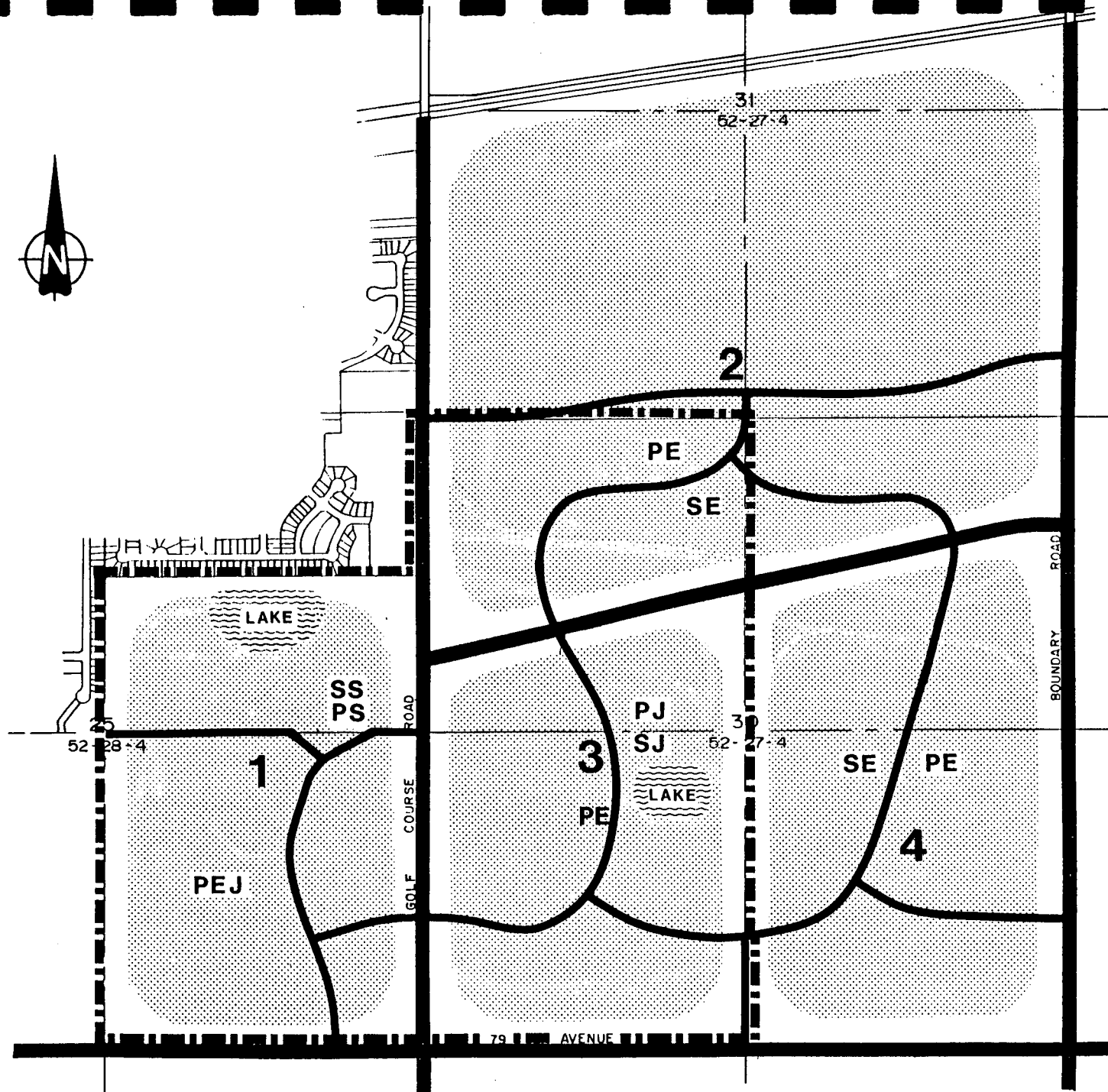
The proposed plan revision is based on the assumption that, ultimately, the area between the current Town boundary and Boundary Road will become a part of the Town. However, the proposed revision must also be workable in the interim prior to the annexation and development of those lands. A section discussing the interim situation is included in this report.

## 5.0 ARTERIAL REALIGNMENT

Current planning for the development of the land around the golf course does not include a collector across the golf course itself. It provides instead for an east/west collector aligned south of the golf course between Boundary Road and Golf Course Road. This change renders the proposed east/west arterial road shown in the South East Area Structure Plan along the north boundary of Section 30-52-27-4 redundant.

In terms of its functional role in the Town's road network, and in terms of its function in defining residential neighbourhoods, the east/west arterial should be aligned further south as shown in Figure 5. In this alignment, the arterial would tend to draw traffic away from the neighbourhood collector in the golf course area without reducing the efficiency of the overall road network. It would also serve as the southern boundary for a residential area including the golf course lands and the northern portion of the north half of Section 30. It would similarly define the northern extent of two neighbourhoods between Boundary Road and the Golf Course Road.

CN has suggested that there may be a long term requirement for a grade separation where either Golf Course Road or Boundary Road cross the mainline. This should be evaluated in future planning initiatives by the Town.



### LEGEND

- ARTERIAL
- COLLECTOR
- NEIGHBORHOOD AREA
- SOUTHEAST AREA  
STRUCTURE PLAN  
BOUNDARY
- PE PUBLIC ELEMENTARY
- PJ PUBLIC JUNIOR HIGH
- PEJ PUBLIC ELEMENTARY/JUNIOR HIGH
- PS PUBLIC SENIOR HIGH
- SE SEPARATE ELEMENTARY
- SJ SEPARATE JUNIOR HIGH
- SS SEPARATE SENIOR HIGH

# IDE

OCTOBER 1989

## SOUTHEAST AREA STRUCTURE PLAN PROPOSED AMENDMENTS



#### 6.0 COLLECTOR ROAD SYSTEM

Figure 5 shows a proposed collector road system which provides appropriate access to both the public elementary and public junior high school facilities. The proposed collector road system also reinforces the definition of the neighbourhood areas. It would accommodate the operation of public transit.

The collector roads proposed serve to move traffic in an orderly fashion from local residential roads to the arterial roads for trips outside the southeast area. They also serve to move traffic internally through the neighbourhoods.

## 7.0 SCHOOL SITES

### 7.1 Catchment Areas

The neighbourhoods referred to in the previous section as being defined, at least in part, by arterial roadways have long been the basic unit of residential subdivision design in Alberta. These neighbourhood units are intended to accommodate a residential population sufficient to support one elementary school. One basic principle behind the neighbourhood unit is that elementary students should not be required to cross arterial roads in order to get to school.

Figure 5 indicates the proposed boundaries of four neighbourhoods in the expanded southeast planning area. Each neighbourhood is defined as far as possible by arterial roads or other significant physical features. Each neighbourhood boundary also defines an appropriate catchment area for a public elementary school. In each case, consistent with the basic principle identified above and the locational criteria for elementary schools provided in the General Municipal Plan, no public elementary students from within the study area would be required to cross an arterial road.

Because the junior high schools have, in general, larger capacities than elementary schools, it is difficult to avoid situations in which junior high school students are required to cross major roads. However, with these more mature students, crossing such roads is less likely to create a problem. Catchment areas for public junior high schools need not correspond to neighbourhood boundaries in the same way that elementary school catchment areas do. The principal criterion for the location of junior high schools is that the school be central to its catchment area. It is also desirable that the distance from the school to the furthest extent of its catchment area be kept to a minimum.

In the case of senior high schools, school location is not oriented to the neighbourhoods but to the arterial road network.

In this review, only public elementary catchment areas have been specifically identified (i.e., neighbourhood boundaries). It has been assumed that catchment areas for junior high school and senior high school facilities will be defined and redefined by school authorities based on staging and changing patterns of population distribution and attendance.

Table 1 below provides estimates of the gross developable areas of each of the neighbourhoods identified in Figure 5.

TABLE 1

NEIGHBOURHOOD	RESIDENTIAL
	UNITS
1.	566
2.	1263
3.	972
4.	1012

The numbers of units expected in each neighbourhood are taken directly, or are derived, from area structure plans (approved or proposed). The Buckingham area is assumed to have the same unit density as the Graybriar area. It is assumed that Section 30-52-27-4 will develop at 10 units per gross hectare (upha), which is comparable to the density proposed for the Golf Course ASP. The area north of High Park is expected to develop at 14 upha. This somewhat higher density is expected because the developable area remaining after environmental reserve, the stormwater lake, and the high school site are removed will likely not contain neighbourhood parks, which normally act to reduce residential densities.

## 7.2 Student Populations

Table 2 gives student generations per dwelling unit for all six school types. These figures are taken from the Town of Stony Plain General Municipal Plan.

TABLE 2

	<u>ELEMENTARY</u>	<u>JR. HIGH</u>	<u>SR. HIGH</u>
Public	.34	.16	.13
Separate	.27	.13	.10

Table 3, below, multiplies the number of residential units expected for each neighbourhood (Table 1) by the student generation factors (Table 2) to give the number of students anticipated for each type of school facility.

TABLE 3

Neighbourhood	<u>Public</u>			<u>Separate</u>		
	<u>Elementary</u>	<u>Jr. High</u>	<u>Sr. High</u>	<u>Elementary</u>	<u>Jr. High</u>	<u>Sr. High</u>
1.	192	91	74	153	74	57
2.	429	202	164	341	164	126
3.	330	156	126	262	126	97
4.	344	162	132	273	132	101

### 7.3 School Capacities

The County of Parkland indicates that public elementary schools have a maximum design capacity of 400 pupils. Public junior high schools have a capacity of up to 600. Where elementary and junior high schools are combined in a single facility, the maximum number is 400 for elementary students and 200 for junior high students.

### 7.4 School Facilities

Figure 5 shows proposed school facility locations for each of the neighbourhoods, including the expanded southeast planning area.

The school facilities proposed for Neighbourhood 1 consist of a combined public elementary and a public junior high school. While the projected combined student population of 283 (PE - 192 plus PJH - 91) is considerably lower than the minimum requirement for such a facility, it is the intention of the school authority to bus rural students to this site. This will raise the student population to an acceptable level. The extra capacity in the High Park schools may also be available to accommodate junior high school students from east of Golf Course Road.

Neighbourhoods 2, 3, and 4 will generate a minimum of 520 public junior high school students. This an ideal population to support one independent public junior high school. Figure 5 shows such a school located centrally to these three neighbourhoods.

Neighbourhoods 2 and 4 are capable of supporting independent public elementary schools. Neighbourhood 3 would generate, at the assumed unit density of 10 upha, only 330 public elementary students. If more detailed planning confirms this figure, it would be in order for the municipality to encourage somewhat more intense residential development in this neighbourhood. Using current generation factors, a unit density of 12 upha would result in a public elementary school population of 396 pupils, and full utilization of the facility. The increase in density would also increase the number of public junior high school students to 550 for the 3 neighbourhoods east of Golf Course Road.

The ultimate locations of all these proposed facilities (with the exception of the High Park school site) must be regarded as conceptual only, and subject to refinement as more detailed planning for each of the individual neighbourhoods is undertaken.

## 8.0 THE SEPARATE SCHOOL SYSTEM

As has been noted in Section 6.1, the school catchment areas reflected in this amendment are based on public elementary school attendance. Because the catchment areas for the separate school system do not necessarily coincide with those of the public schools, the Stony Plain Roman Catholic Separate School District #151 has been consulted as to their requirements and preferred locations. These are shown in Figure 5, and are based on the student generation estimates provided in Table 3.

## 9.0 MUNICIPAL RESERVES

This plan revision has the effect of slightly decreasing the school land requirements in the Southeast Area Structure Plan area. It also reduces the anticipated requirements in both the Golf Course and Boundary Road areas. This will improve the relationship between land required versus reserve generated thereby allowing the municipality to acquire land for schools and/or parks in the study area through the dedication of reserve lands.

Detailed planning is currently underway for the High Park and Golf Course areas. Both are expected to result in a balance between reserve generated and reserves required for school and park use. Table 4, below, compares the total reserve generation anticipated against the requirements identified for the remainder of the plan area. The reserve generated is 10% of the gross study area excluding the High Park and Golf Course areas, and excluding an estimated 22 ha (55 ac.) of environmental reserve. The school site requirements are based on standards provided by the County of Parkland and the Separate School District.

TABLE 4

	<u>Hectares</u>	<u>Acres</u>
Public Schools	7.5	18.5
Separate Schools	6.5	16.0
Joint Use Area	<u>12.9</u>	<u>31.9</u>
TOTAL	26.9	66.5
Anticipated Reserve Generation	<u>26.9</u>	<u>66.5</u>
Difference	0.0	0.0



It is possible that schools located adjacent to one another could share joint-use area and thereby reduce the total requirement. Table 4, therefore, assumes that the total requirement for joint use area will be reduced from a maximum (based on the County's standards) of 15.4 ha (38.0 ac) to 12.9 ha (31.9 ac). This adjustment assures a balance between reserve generation and all elementary and junior high school site requirements for the study area.

Table 4 excludes the high school campus site, which could require as much as 16.2 ha (40 ac.). It is likely that land for the campus site must be purchased rather than taken as reserve dedication.

## 10.0 INTERIM SITUATION

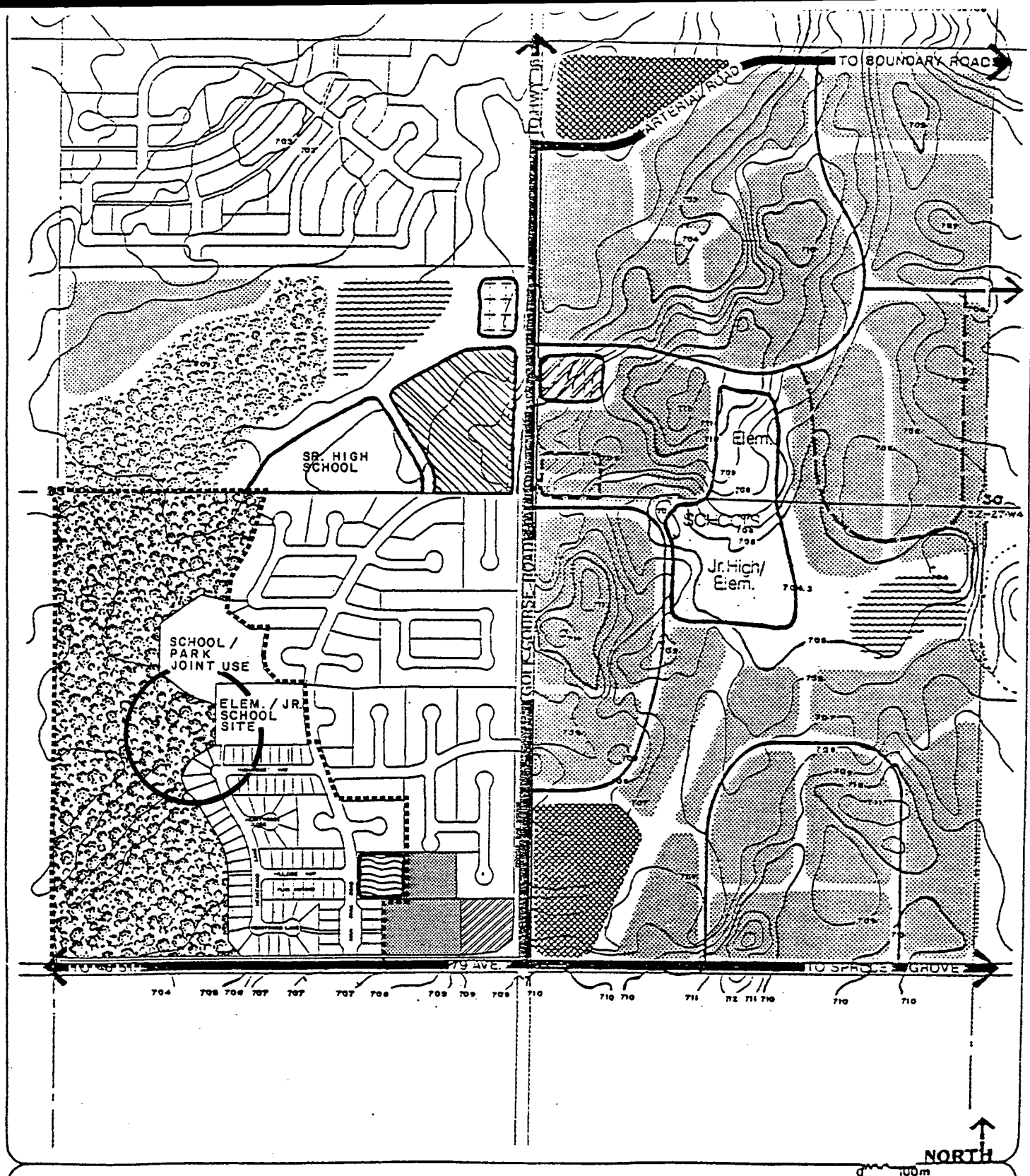
Because it is furthest from the existing built up area of the Town, and because it is currently outside the Town's boundary, the proposed Neighbourhood 4 can be expected to be the last to be developed. This staging of development is normal in urban growth, and certain inequities and imbalances in the provision of services such as schools may be expected in the interim. However, annexation may not occur in a timely fashion, and it is appropriate to examine the circumstances which would occur should the majority of the southeast area be developed before Neighbourhood 4 is annexed.

Fortunately, Neighbourhood 4 is an independent public elementary school catchment area so that schools in Neighbourhoods 1, 2, and 3 would be unaffected by a delay in the development of Neighbourhood 4. Neighbourhood 4 is, however, part of the catchment area for the proposed public junior high school east of Golf Course Road. In the interim, the public junior high would be obliged to operate with an anticipated enrollment, without Neighbourhood 4, of 364 pupils. This is within the acceptable range of student population required to justify the operation of such a school.

## 11.0 IMPLEMENTATION

This document proposes revisions to the Southeast Area Structure Plan with respect to the physical design and the anticipated number of dwelling units. It is proposed that the provisions of this document with respect to the Southeast Area Structure Plan area be enacted as an amending by-law to the existing plan. Further development within the Southeast Area Structure Plan area would be undertaken consistent with the amended plan.

The provisions of this document with respect to the remainder of the study area defined in Figure 1 are not proposed to receive by-law status. The golf course area is the subject of planning and plan amendments which are currently in progress and which are generally consistent with this document. The area west of Boundary Road but outside the Town is beyond the Town's municipal jurisdiction. As noted in the introduction, these areas were considered only to ensure that the review of the existing Southeast Area Structure Plan was conducted in an appropriate planning and development context.



# SOUTHEAST STONY PLAIN AREA STRUCTURE PLAN - PROPOSED REVISION

- |  |                    |  |                             |
|--|--------------------|--|-----------------------------|
|  | SINGLE FAMILY DEV. |  | NEIGHBOURHOOD COMMERCIAL    |
|  | MEDIUM DENSITY     |  | ALTERNATE NEIGH. COMMERCIAL |
|  | HIGH DENSITY       |  | STORM WATER DETENTION POND  |
|  | CHURCH             |  | PRIVATE INSTITUTION         |
|  | NATURAL AREA       |  | WATER RESERVOIR             |
|  | SCHOOL             |  |                             |

OCTOBER, 1989

Fig. 8

*[Handwritten signature]*

DESIGN CONCEPT