

Mill Woods Development Concept

Office Consolidation February 2009

*Prepared by:
Planning and Policy Services Branch
Planning and Development Department
City of Edmonton*

The Mill Woods Development Concept was approved by a resolution of Municipal Planning Commission in March 1971. In February 2009, this document was consolidated by virtue of the incorporation of the following amendments to the original Plan. This Plan is an amendment to the Mill Woods Development Concept was approved by a resolution of Council on March 1971.

Mill Woods Development Concept approved by Resolution in March 1971.

Amendment approved by resolution December 12, 2006 (as a result of Bylaw 14442 to accommodate row house development for first time homebuyers on a vacant surplus school building envelope located on a school/park site).

Amendment approved by resolution January 14, 2008 (to redesignate a commercial site to a High Density Residential site in the neighbourhood of Tweddle Place located in the northwest portion of the plan area).

Editor's Note:

This is an office consolidation edition for the Mill Woods Development Concept as approved by Resolution in March 1971. This edition contains all amendments and additions to the Mill Woods Development Concept Plan. For the sake of clarity, new maps and a standardized format were utilized in this Plan. All names of City departments have been standardized to reflect their present titles. Private owner's names have been removed in accordance with the Freedom of Information and Protection of Privacy Act. Furthermore, all reasonable attempts were made to accurately reflect the original Bylaws. All text changes are noted in the right margin and are italicized where applicable. This office consolidation is intended for convenience only. In case of uncertainty, the reader is advised to consult the original Bylaws, available at the office of the City Clerk.

City of Edmonton
Planning and Development Department

Foreword

City of Edmonton

"Mill Woods" is a sophisticated place name for a tract of land embracing nine square miles to the south east beyond the November, 1970 boundaries of The City of Edmonton. The official name for this gently rolling "wooded-area perpetuates both the natural ecology as well as the significance of the "Mill" Creek ravine, which wanders through the area adding picturesque beauty to an other-wise typical rural Edmonton landscape.

Mill Woods, however, almost succumbed to the project name SEUA, for during a year of concentrated planning and acquisition activity, the South East Development Area, or SEDA as it was known in both Provincial and Municipal inner circles, was a first priority concept. It was to become a proud symbol of joint co-operation between two levels of government, concerned with the fundamental need of land for economical housing development. Mill Woods is more than that. It is a direction of new growth for our rapidly expanding city; it is a corollary to industrial land development providing homes in proximity to expanding industry; it is an opportunity to plan conceptually for people; it is insurance that one of our most valuable resources will be "banked" for the financial benefit of the citizens of Edmonton.

The complicated accomplishment of the purchase of this area by the Provincial Government, its sale over the next fifteen years to the City, the conceptualization of such a development by the City Planning department, all are now history; but history that has reverberated throughout North America and even as far away as Australia.

This concept plan enunciates the goal of the total project. It establishes the objectives to accomplish that goal. It outlines the combined principles of sociological and physical integration. It provides a staged outline plan for comprehensive residential development and community housing with requisite service facilities. It projects, over a span of years, an orderly scheme of unrivalled quality providing a model of controlled environmental growth.



*Dr. P. F. Bergen
Chief Commissioner*

Alberta Housing Corporation

In recognition of the increasing demands being placed on our major municipalities by accelerating urbanization trends and more specifically the rising costs of services and land which are ultimately being reflected in the high cost of living, the Province offered the services of its Alberta Housing Corporation to the City of Edmonton for the purposes of assembling, servicing and disposing of land for housing purposes.

The emphasis of this proposal was focused at reducing land costs by the acquisition of a large tract of land to be utilized as a land bank thus offering the City the capability of not only controlling land costs in the future, but also employing the most advanced planning techniques in designing a comprehensive development plan conducive to accommodating the entire spectrum of income levels residentially as well as providing for all the requisite service facilities.

The subsequent negotiations and acceptance of our proposal resulted in the acquisition by our Corporation of some five thousand acres of land in close proximity to the City centre.

The effects of this acquisition are already being reflected in reduced land costs. In addition, a balanced supply of residential land within the context of a well planned community will be placed on the market over the next fifteen years.



*B. R. Orysiuk
Executive Director*

Acknowledgements

The Minister of Municipal Affairs

The Hon. F. C. Colborne

Alberta Housing Corporation

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To successfully complete a project of this size and scope, the Planning Department required the willing co-operation and technical assistance from a host of agencies and civic departments. The Department wishes to acknowledge this input so generously given by representatives of the following jurisdictions:

Civic Departments

Engineering and Transportation Edmonton Water and Sanitation

Social Service

Edmonton Parks and Recreation Edmonton Telephones

Edmonton Power

Property and Building Management Health

Fire

Public Service

Edmonton Public Schools

Edmonton Separate Schools Edmonton Public Library

Alberta Government Telephones Provincial Department of Health

Edmonton and Rural Auxiliary Hospital and Nursing

Home District No. 24

Alberta Liquor Control Board

Alberta Colleges Commission

Private Utilities

Northwestern Utilities Ltd

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INTRODUCTION

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Notwithstanding any part or policy of this Plan, an opportunity to develop housing for first time homebuyers exists on a vacant surplus school building envelope on the school/park site as illustrated on the approved land use Plan map and as specified under the Community Services Zone. The Community Services Zone reflects the underlying pre-existing zoning and will, in addition, allow for row housing and related accessory uses. The housing opportunity will occur on an area equal to the portion of the surplus school building envelope. The precise location of this housing within the entire School Park site will be reviewed and determined by the City. The dwelling units and population generated by this development under the Community Zone are not included in the statistical summary.

*Bylaw 14442
December 12, 2006*

INTRODUCTION

To be located in the southeast sector of the City of Edmonton, Mill Woods will be a new urban community housing over 120,000 people, in its own right – a new city in a suburban environment. This project represents a first in North America, the planning of a publicly sponsored major land assembly project. In total, the Mill Woods community will contain almost 6,000 acres (2428 *hectares*) of land and will have a development time span in excess of two decades.

Amended by Editor

Mill Woods does not purport to be a European New Town or a satellite community separated from Metropolitan Edmonton – but it has the potential, as described by Mayor Ivor Dent, of becoming a showpiece of new urban growth. Many successful elements of new town philosophies were evaluated, and adapted before they were incorporated into the Mill Woods Development Concept.

The Concept was developed on the philosophy that change had to be balanced with an adaptive planning approach. This will enable the two major goals of the project to be met successfully, that of effecting land and housing economies and creating an urban environment of the highest order.

The ultimate goal for Mill Woods is that it will be a place for people, a community with a sense of place where the physical environment will be realized in the context of human scale. This end can be achieved by incorporating sound principles of social, economic and physical planning along with significant participation by its citizens. To this end Mill Woods presents a challenge to all who participate in the development program.

Purpose and Philosophy

A modern urban community fulfills many roles, each dependent upon a host of interrelated service systems. Recent studies by government have identified the need for co-operation of effort and in-depth studies and research to fully understand functions of cities, their complexities and interrelationship of systems. Concurrently, public concern is increasing on such vital issues as pollution and environment.

To effectively plan Mill Woods where the City of Edmonton is a major land owner and developer the "open ended" planning process has been adopted as being the most appropriate technique. This method views the developing community as a complex interaction of diverse and functionally dependent parts – parts evolving over time as they themselves adjust to an ever changing context around them. Numerous alternative solutions must be evaluated against social and economic criteria. Therefore the planning analysis must expand to include these social and economic considerations. Planning must attempt, within realistically set economic limits, to strike a delicate balance between efficient engineering practice, positive environmental response and maximum market acceptance, while striving to improve the quality of life. New recreational, educational and social service systems may be designed, implemented and evaluated. Meaningful social intervention can provide better liaison with residents and understanding of community concerns.

The responsibility of planning the future home and environment for 120,000 people dictates that meaningful concern be given to their various needs, both in terms of contemporary life styles and possible future trends which might occur during the development period of the project. Superimposed on this social concern is the realization that considerable change will take place due to technological advances to such important components of the community as transportation, communication, and education.

It follows that planning analysis calls for an in-depth study involving social and economic considerations in addition to traditional physical concerns. The intent and philosophy of the General Plan combined with the commitment by City Council to Human Resource development emphasizes the basic premise

that the new community should be planned for people. To best meet this approach, a Development Concept has been prepared identifying the basic planning objectives which should serve as a guide for development. Based upon these broad objectives an outline plan or structural frame identifying all major elements of land use and transportation has been formulated to meet the terms of the enabling agreement between the City of Edmonton and the Alberta Housing Corporation.

Dedicated to the realization of a unique opportunity presented by comprehensive planning techniques combined with large scale public ownership of land, the Development Concept strives to:

- develop social, physical and economic objectives aimed at creating a residential community responsive to human needs and to changing circumstances.
- formalize a community urban form based upon the stated goals and objectives and in harmony with the geographical characteristics of the site.
- to inform the citizens of Edmonton of the Mill Woods project and the potential it presents.
- translate the anticipated needs of the community and its residents into a basic physical frame or outline plan which would identify key components essential to satisfactory community function and form.



This outline plan once formally approved, will constitute the basis for public administrative policy and a guideline for all public and privately sponsored development programs. Two major requirements, mainly implementation programming and detailed design preparation, remain as ongoing administrative responsibilities following adoption of the Development Concept Report.

This document deals with basic objectives which will guide the development of Mill Woods. It is advanced with confidence that no major changes will be required either to the underlying objectives or the concept form based upon these objectives. Within this broad frame, considerable flexibility can occur allowing adequate opportunity to innovate with new physical forms, development control, building techniques, and social service systems. Specific development proposals will be able to incorporate and accommodate the needs of the residents of the area once meaningful citizen participation can be implemented. This methodology allows maximum adaptation to changing market demands and the opportunity for the resident to become truly involved should he so desire.

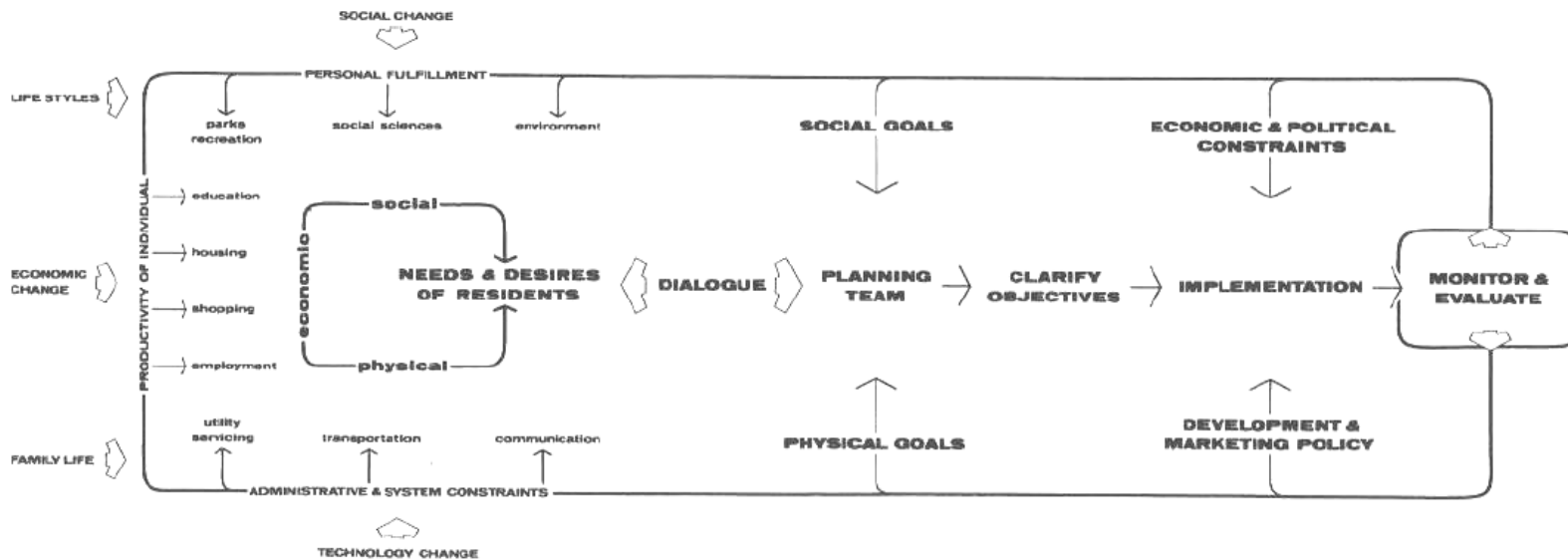
Such an approach calls for ongoing interdisciplinary implementation procedures with all departments involved in planning facilities and services having constant dialogue and relationship to the total process. The sensitivity of ongoing implementation and administration to the development concept and its goals and objectives is vital. A feedback process is essential to assure the quality of ongoing planning work and its successful fulfillment as related to the development objectives.

community will receive the benefits of current civic services and administrative policy. However, since both citizens and institutions tend to become committed to the status quo, effort will be required to evaluate existing programs in relation to the stated goals and objectives of the project.

Time restraints have dictated that the first subdivision in Mill Woods be planned and committed in accordance with normal standards — a conventional approach. The ongoing implementation process must evaluate these standards against the stated goals and objectives of the concept and appropriate physical, economic and social constraints. In this way, need for change can be identified and the detailed planning approach made innovative and imaginative.

This report strives to establish guidelines for the creation of a social and physical environment working for people and attendant opportunity for residents to respond and participate. To achieve such an environment, the planning process will play as important a role as the physical plans identified by the development concept.

As Mill Woods is an extension of the existing City, the residents of the new



SITE ANALYSIS

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Metropolitan Setting

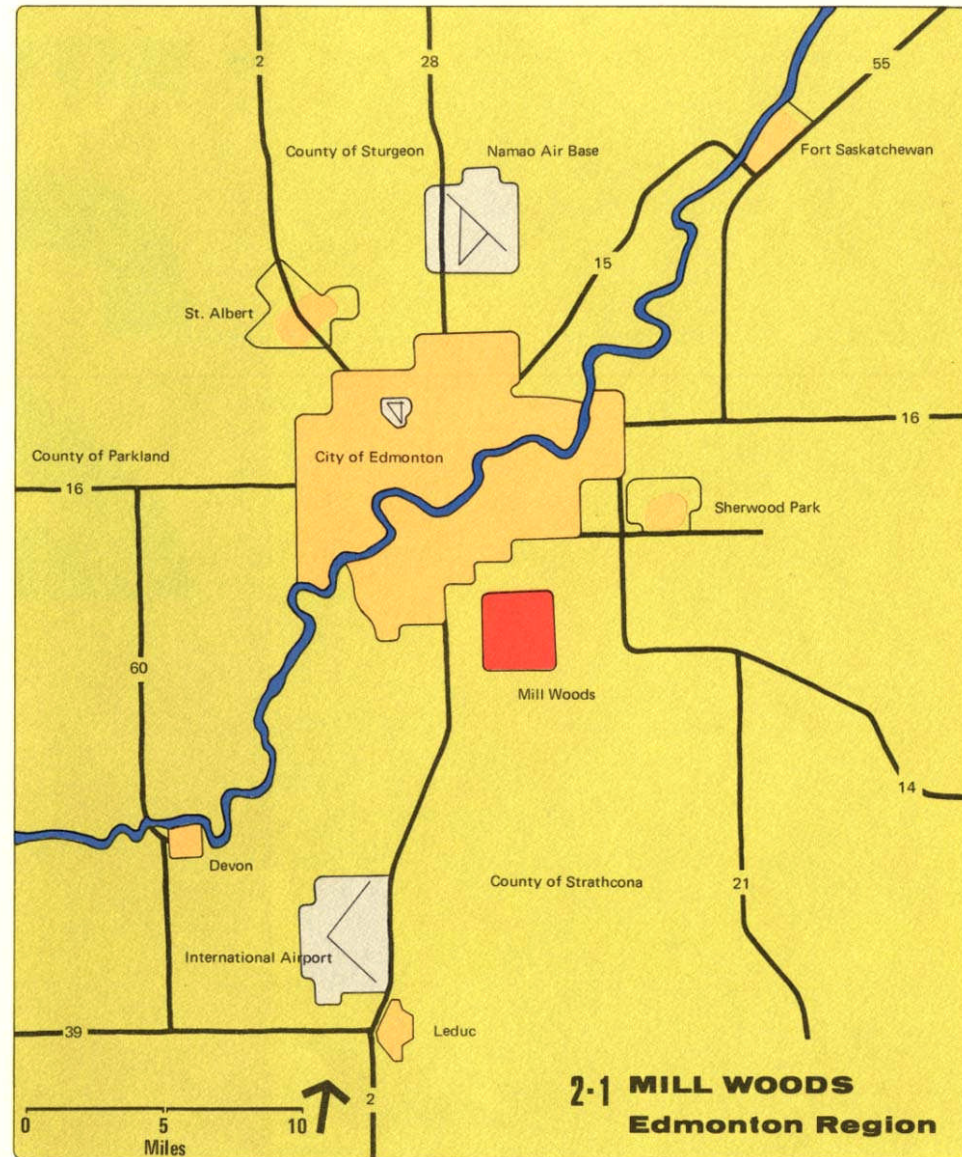
The new community of Mill Woods, to encompass nine square miles of land area, will abut the southeastern edge of urban development in Edmonton approximately seven miles distant from the City centre. Prior to annexation, the planning area overlapped the City boundary with approximately 5,600 acres of the total 6,500 acres extending into the County of Strathcona. The boundaries for the new community are identified by existing streets – 91 and 34 Streets to the west and east and 51 and 15 Avenues to the north and south.

Mill Woods will vie with five other major growth areas for the City's anticipated annual population increase. The satellite communities of St. Albert, Sherwood Park and Leduc are also expected to expand in relation to the metropolitan growth rate, one of the highest in Canada. Consequently, regional growth will take the form of a rapidly expanding central city comprised of contiguous growth areas and by satellite communities located within reasonable distance from the City, along major transportation corridors.

Historically, Edmonton's growth pattern has followed the direction of the North Saskatchewan River Valley in a northeasterly, south-westerly orientation. Heavy industrial sites have been established in the northwest and northeast sectors of the City, which in association with the major air base at Namao located immediately north of the City, have further influenced and emphasized residential growth patterns along the river valley. Mill Woods departs from this trend offering citizens the opportunity to reside in the southeast sector of the metropolitan area.

Mill Woods relationship to proposed regional roadway facilities is of major importance. Easy access to these highways will provide convenient connections to regional recreational facilities and the Inter-national Airport located eighteen miles south of the City. Engineering studies indicate two major roadway facilities will be warranted in the southeast quadrant of the metropolitan area, a new freeway facility to replace the highway function of the existing Calgary Trail and an outer ring freeway encircling the City. Both of these proposed major facilities will extend past the boundaries of Mill Woods — the South East Freeway on 91 Street, situated on the westerly flank providing direct vehicular access to the city centre and inter-city points, and the outer ring freeway along the southerly limit of the plan providing a bypass route and connections to peripheral metropolitan destinations.

The southern boundary of Mill Woods will be strengthened by the outer ring freeway, which in turn will be flanked by major new power transmission facilities. These uses will act as an effective physical demarcation of the southerly boundary of the project beyond which agricultural uses will extend under the jurisdiction

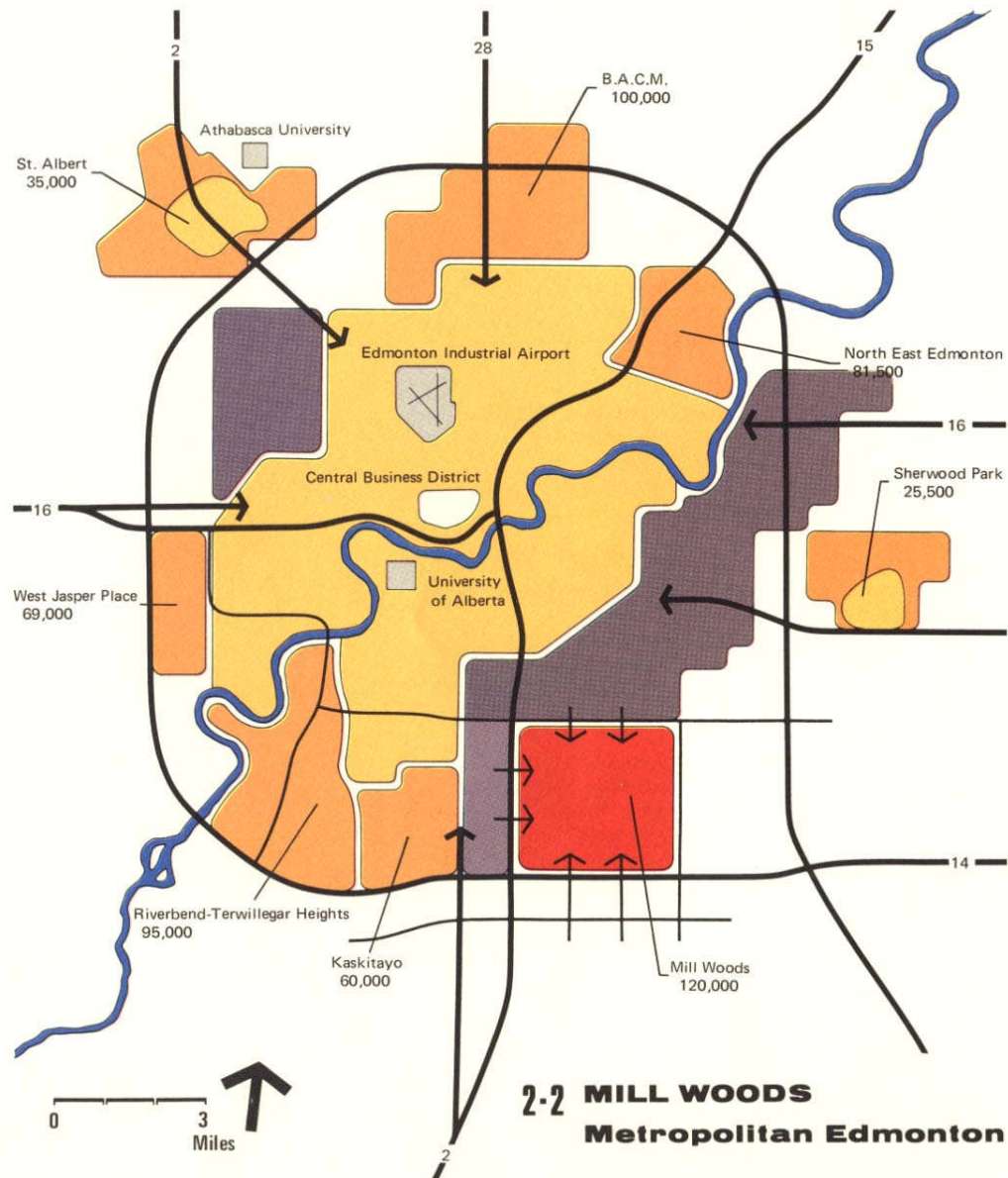


of the City, to the corporate limits located one-half mile to the south.

Although the land situated east of the Mill Woods community is under the jurisdiction of the County of Strathcona and the Edmonton Regional Planning Commission, it is not envisaged that the existing agricultural zoning classification will be changed.

Mill Woods will be separated from other residential districts by industrial uses to the west and north. As the Mill Woods community will be large enough in its own right to create its own identity and sense of place, meeting the normal day-to-day needs of the residents within its own boundaries, this separation need not be detrimental as many employment opportunities will be presented to residents in close proximity of their homes. It is inoperative however, that the approach roads to Mill Woods which traverse the industrial districts do not evolve as strip commercial concentrations – rather that quality industrial parks and planned secondary commercial centres be encouraged in order that the residential and industrial environments can mutually support the character of the other.

At present these industrial districts are in the main undeveloped; however, with utility service lines being constructed through these areas to service Mill Woods, industrial development will soon occur. The Marathon Industrial Park has established a good precedent to be fostered and encouraged by extended municipal development control. Unfortunately some rather dilapidated industrial ventures are located along the section roads leading to Mill Woods but it is expected that these marginal operations will soon disappear as the district develops. The main concern is that they present a visually detrimental effect upon road users who initially will have no option but to travel these roads pending major roadway improvements.



Topography

Mill Woods follows historical growth patterns by extending past present urban limits into gently rolling farm land – land generally of proven prime agricultural quality. With the exception of several small holding subdivisions containing scattered country residences, the Mill Woods Planning Area is rural in character with large farm holdings predominating. Although the land has been cleared of natural vegetation, scattered tree stands occur throughout the area, some of extremely high quality. Soft woods dominate but intermittent spruce groves offer pleasing visual contrast. Major tree growth occurs along the entire length of Mill Creek, the most significant single geographical feature which traverses the northeastern quadrant of Mill Woods.

Topography

Two major points of high ground occur within the planning area. The most prominent of these is situated immediately north of the geographical centre of the proposed community. Due to its special features, this knoll was previously subdivided with some twenty homes now taking advantage of the splendid view of the City skyline to the north.

The highest point of land occurs in the extreme southeast corner of the area, being one hundred seventy feet higher than the lowest point which falls near the centre of the westerly boundary.

Another topographical feature evident throughout the northerly portion of the plan is the embankment of an abandoned railroad line. This embankment rises five to ten feet above the general ground elevation.

Drainage

Most of the land within the study area is adequately drained by two natural water sheds divided by a ridge located one-eighth of a mile west of and paralleling the Mill Creek Ravine. The westerly water shed drains west towards White Mud Creek – the easterly via Mill Creek to the North Saskatchewan River. Major storm drainage facilities will be constructed following alignments respecting the natural drainage patterns.

Ponds of water now collect in several depressions or low lying areas in the central and westerly quadrants of the area during periods of heavy precipitation and spring runoff. Farmers have established several agricultural drainage ditches in the vicinity of 91 Street to alleviate this condition. Due to the general slope of the land and the proximity of the creek, the easterly side of the study area is well drained.

Vegetation and Tree Cover

Extensive tree growth, comprised of both coniferous and deciduous species, occurs along the entire length of Mill Creek within the planning area. It is especially important to protect these existing concentrations of trees and natural vegetation, for agricultural use of much of Mill Woods has left only scattered tree groupings, the majority of which are situated in the central, northeasterly and southeasterly quadrants of the planning area.

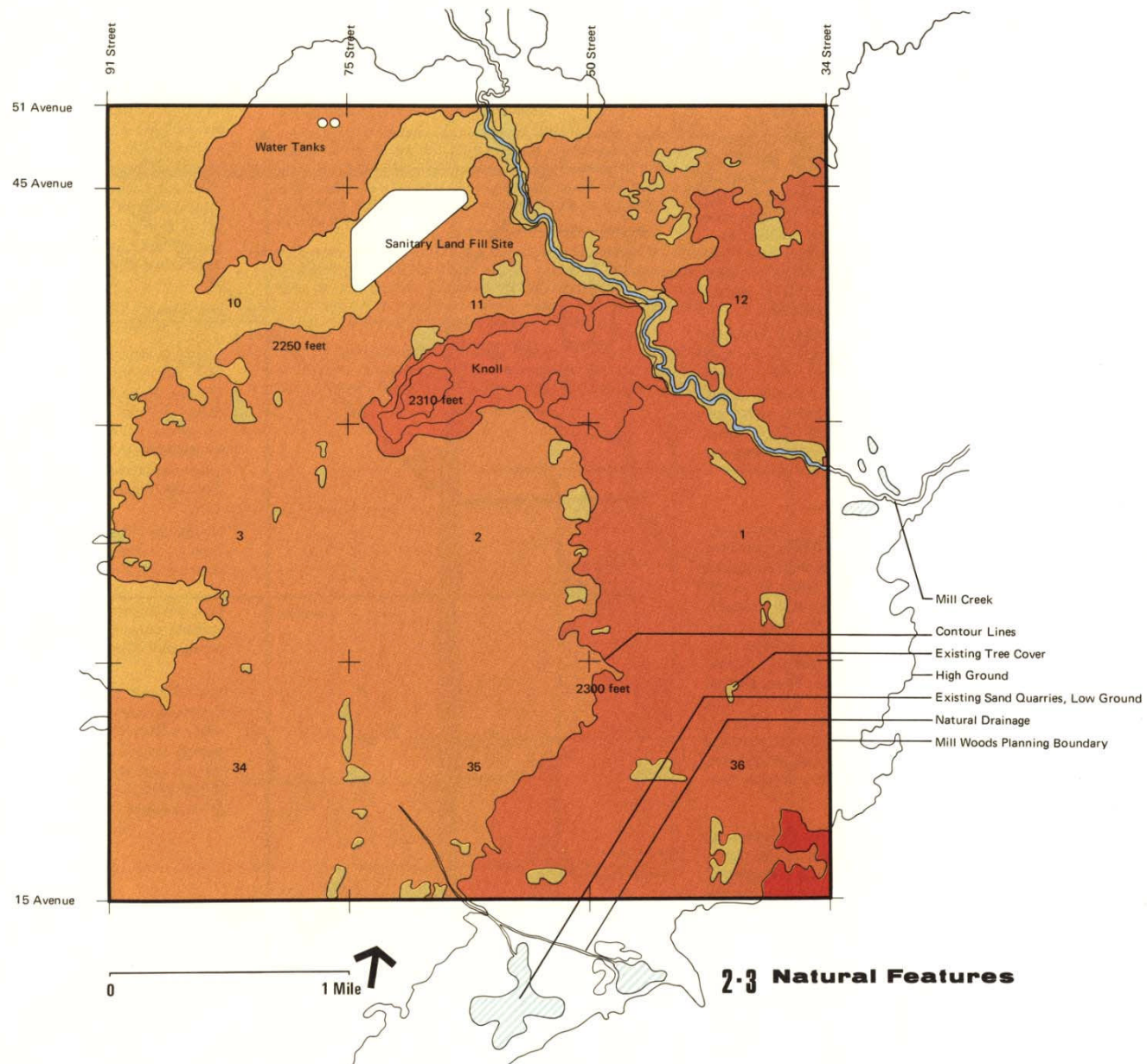
The existing vegetation consists almost entirely of native poplar, aspen and white spruce, with accompanying ground cover. Although every effort must be made to preserve existing tree growth, detailed analysis is required to assess the effect that urban development will have on these natural tree stands. It is anticipated that thinning of these stands for parks purposes and the lowering of the ground water table by storm drainage may greatly inhibit retention of natural poplar growth.

Soils

The soils found within the study area are classified as being of fair to fairly good arable quality with minimal stone content. The soil type ranges from loam to clay loam with a black top soil layer varying from four inches to twenty inches in depth. Glacial lacustrine material and glacial till underlie the west and east half of the study area respectively. In terms of quality, the westerly half contains relatively poorer soils, particularly in the northwest quadrant where a salinity condition occurs, while by comparison, the east half contains soil superior in quality for agricultural purposes.

Although no major difficulty to physical development is foreseen, specific reference should be made to soil characteristics during detailed planning and implementation stages in order that proper precautions may be taken as certain remedial measures may become necessary. Specifically, salt corrosion and leaching of soil must be studied with reference to underground construction of basements and utilities and the long term landscaping of public and private property.

Scattered sand and gravel excavations of minor nature occur along the easterly boundary of the planning area south of the Mill Creek Ravine. All but one is now under public ownership and it is inactive.



Special Features

- **Pipeline Corridors**

Within four major pipeline corridors, no less than twenty-three oil and gas transmission lines are routed through the Mill Woods planning area. In the main, these transmission facilities connect oil and gas fields southwest of Edmonton to the refinery and chemical complex located immediately east of Edmonton. The pipe sizes range from two inches to twenty-four inches, the pressures from five hundred pounds per square inch to twelve hundred pounds per square inch. Apart from the obvious physical constraints that these rights-of-way place upon the overall design concept, specific detailed design considerations will require careful attention.

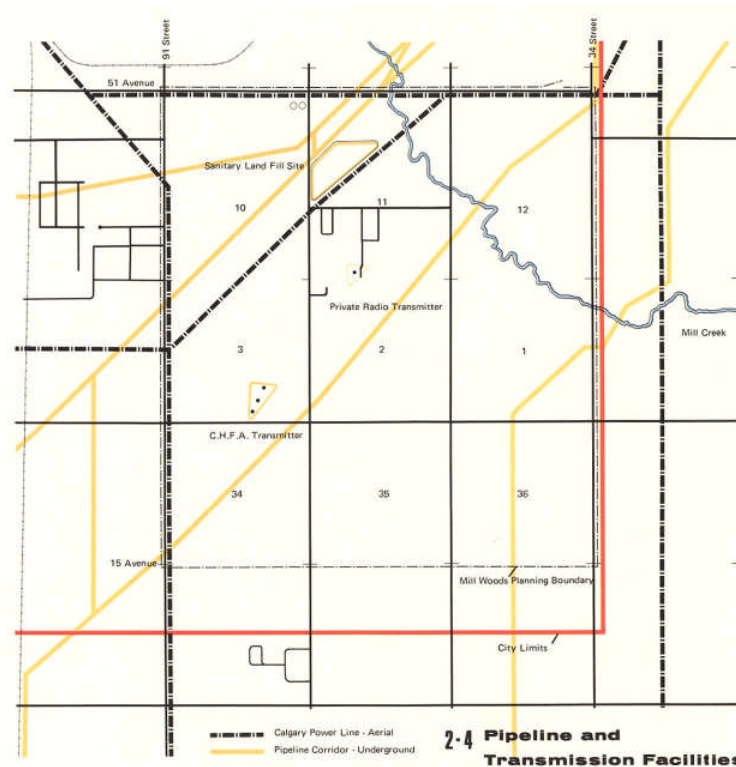
Neither Provincial subdivision regulations nor federal mortgage lending will unduly influence development potential of the land areas located immediately adjacent to the pipeline corridor. These restrictions can be successfully accommodated by detailed design analysis. In addition to the major pipelines, numerous natural gas lines of small diameter which serve the scattered farm dwellings occur throughout the area. These small gas lines will be phased out of operation as progressive development renders them obsolete.

- **Aerial Power Transmission Lines**

The north half of the planning area is affected by rights-of-way owned by a *private corporation*. Their primary facility, consisting of two circuits suspended on wooden pole structures, is located on a two hundred foot wide right-of-way. This line bisects the north-westerly quadrant of the project area, running in a northeast-southwest diagonal direction. The company also owns a two hundred foot wide transmission corridor, presently not being used, which bisects the planning area in an east-west alignment. The civic administration is currently negotiating with the *private corporation* to relocate their transmission facilities into a new corridor to be combined with the proposed ring freeway on 15 Avenue. Secondary circuits have been constructed by the company which run along the south side of the present 51 Avenue and the east side of 91 Street, using right-of-way of width varying from twenty feet to eighty feet.

- **Sanitary Land Fill**

The City operates a sanitary land fill site within the planning area, located immediately east of 75 Street and south of 45 Avenue directly affecting some eighty acres of land. Although it is expected that an alternative location will soon be acquired, permitting the present site to be phased out of operation, detailed site planning analysis will be required during implementation stages to minimize detrimental characteristics of the site. As extensive portions of the sanitary land fill site will only be appropriate for future recreational use, every effort must be made to co-ordinate the ultimate land fill contours to a master parks plan relating to ultimate recreation development



Amended by Editor

Existing Land Use

The planning area is predominately rural in character, comprised largely of farm holdings with a minimum of residential dwellings and non-residential uses. Effective regional zoning by the Edmonton Regional Planning Commission has prevented premature subdivision from occurring throughout the area. There are however, two sub-divisions, composed of small acreages upon which are situated country residences, most of good quality. The average size of lots in the Strathcona Heights subdivision is three acres while the small holdings located at 25 Avenue and 91 Street are generally of some twenty acres in area.

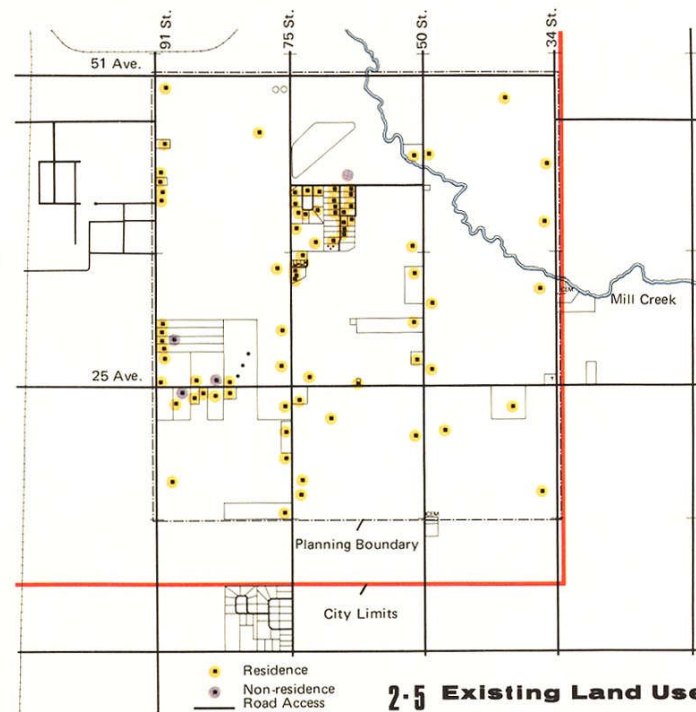
Some sixty-six dwellings are presently located within the planning area. These residences may be broadly classified as follows:

- the well established country farm house with associated accessory agricultural buildings, usually protected by extensive wind row planting. It should be noted that many of the original property owners have been allowed to retain ownership of their homes separated from the rest of the property by appropriate subdivision following public acquisition of their property. The relationship of future subdivision design to these structures and their compatibility with contemporary urban residential units will require individual assessment at the appropriate time.
- country estate residences constructed at considerable expense by the owners who have obvious pride in their property and homes. Every effort will be made to integrate these homes into compatible neighbourhood development and design.
- modest residences which appear to have been built to provide lower cost accommodation to the resident attempting to reduce the cost of living. These types of homes occur only occasionally through the area.

The planning area fortunately contains few restrictive industrial land uses – this is primarily due to the fact that many marginal operations usually associated with fringe zones of a large metropolitan centre have been jumped or "leap frogged" by the Mill Woods Project. Several undeveloped parcels of land within the planning area are used for storage of construction and oil equipment, but these are temporary in nature as no permanent structures have been built in association with the operation. The principal non-residential land uses are:

- a private radio transmitting station situated on eighty acres of land located at 86 Street and 25 Avenue in the central portion of the planning area. The actual development consists of three steel towers, each two hundred and thirty-three feet in height and a small equipment building. Fifty-five acres of the site is traversed by a net of underground wiring.
- a transmitter site operated by a group of oil companies on a leased three-acre parcel on the height of land located at 60 Street and 35 Avenue, within the Strathcona Heights subdivision. The site accommodates a number of small towers with high frequency directional antennae and a

- small accessory building.
- the City has constructed two water storage tanks one hundred feet in diameter and seventy-eight feet in height, which occupy a site on the southwest corner of 51 Avenue and 75 Street. Due to their relative size and elevation, they assume a visual prominence of considerable impact. Under the proposed roadway alignments, these facilities will be situated in the industrial district, located north of the residential limits of the Mill Woods community.
- the planning area, surveyed on a similar basis as other rural districts in Alberta, is served by a grid system of road allowances of a one mile east-west and a two mile north-south spacing. These roads are generally of good quality gravel surface, well maintained and in most instances improved by oil or asphalt surface. These main-section roads provide principal access to the majority of homes, however a limited number of secondary roads, usually dirt or gravel surface, serve the small holdings subdivisions. None of the roads within Mill Woods are paved to urban highway standards. Principal access to the site may now be obtained by the section road grid.



Land Ownership

The planning area for the Mill Woods project covers nine square miles (23.3 *square kilometres*) of land totaling some 6,500 gross acres (2630.5 *gross hectares*). The land acquired by the Alberta Housing Corporation comprises some 4,425 acres (1790.7 *hectares*) or 68% of the planning area. Approximately 660 acres (267.1 *hectares*) were acquired outside the planning limits chosen which are identified by 51 Avenue to the north, 15 Avenue to the south, 91 Street to the west and 34 Street to the east.

The lands so acquired give effective public control of the majority of the site with private holdings remaining in the southwest quadrant, the northeast quadrant and the central section. With the exception of two small parcels, both sides of Mill Creek now fall under public ownership within the confines of the planning area. Most of the land remaining under private ownership fell under the jurisdiction of the County of Strathcona prior to annexation.

The privately owned land is generally comprised of:

- large parcels of either one or more quarter sections of land.

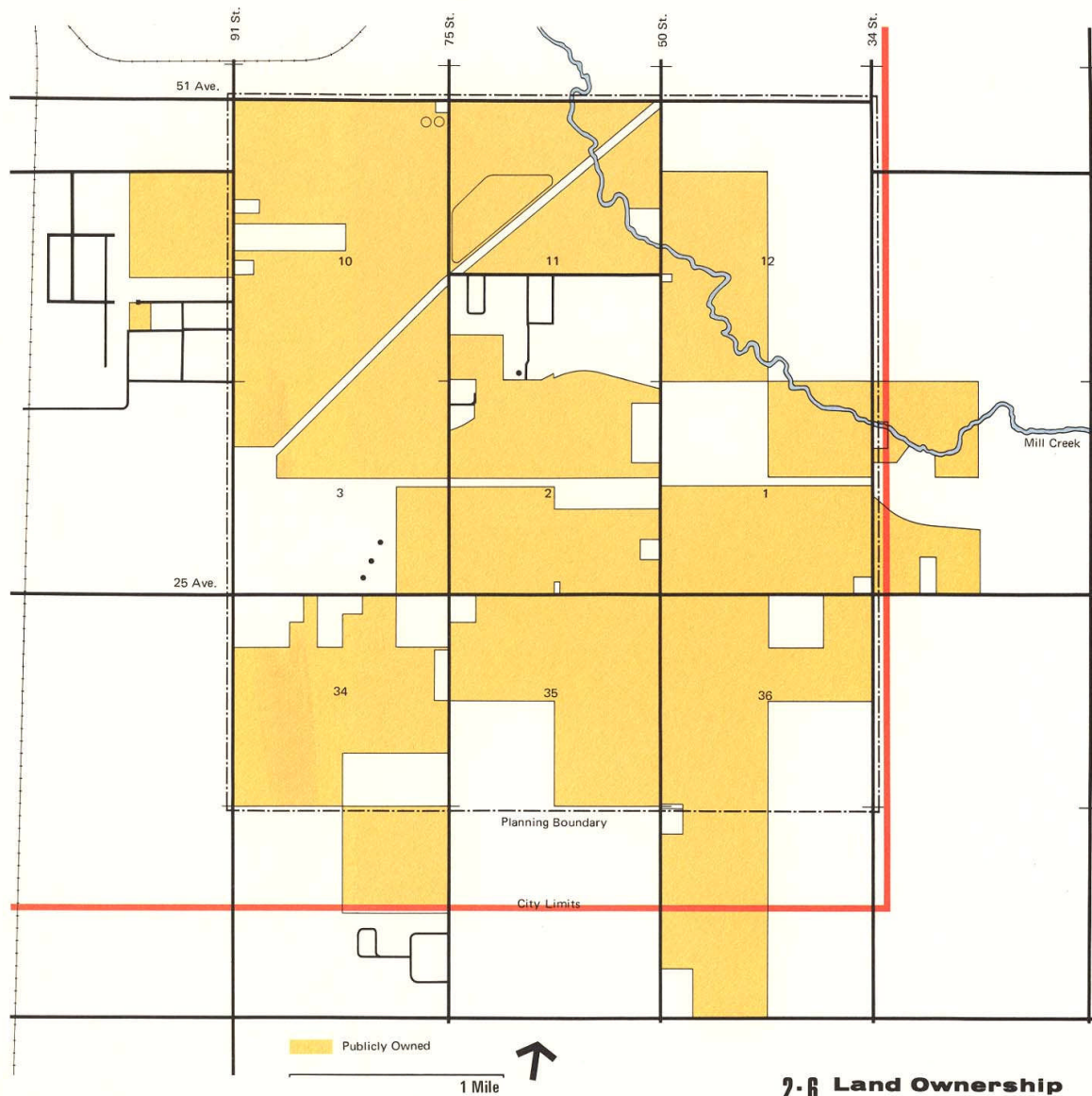
- small parcels either located within small holding subdivisions or at farm house sites subdivided at the time of public purchase in order that the owner could retain his dwelling for future personal use.
- transmission corridors for public and private utility companies which bisect the area with long narrow rights-of-way. All utility corridors with the exception of the two hundred foot wide Calgary Power rights-of-way are under easement rather than clear title.

Amended by Editor

The two properties under private ownership which are developed for non-residential purposes of a permanent nature are the eighty acre parcel used as a commercial radio transmitting site and a five acre church site at 34 Street and 25 Avenue. These parcels, as well as all other privately owned land, have been taken into account in establishing development principles and guidelines for the Mill Woods community structure.

LAND OWNERSHIP DISTRIBUTION (Amended by Editor)

Planning Area	Acres	Hectares	% of Total
Public Ownership	4,425	1790.7	68
Private Ownership	2,075	839.7	32
Planning Area	6,500	2630.5	100
Public Ownership			
Public Ownership in Mill Woods	4,425	1790.7	
Public Ownership Outside of Mill Woods	660	267.1	
Total Public Ownership	5,085	2057.8	



2.6 Land Ownership

DEVELOPMENT OBJECTIVES

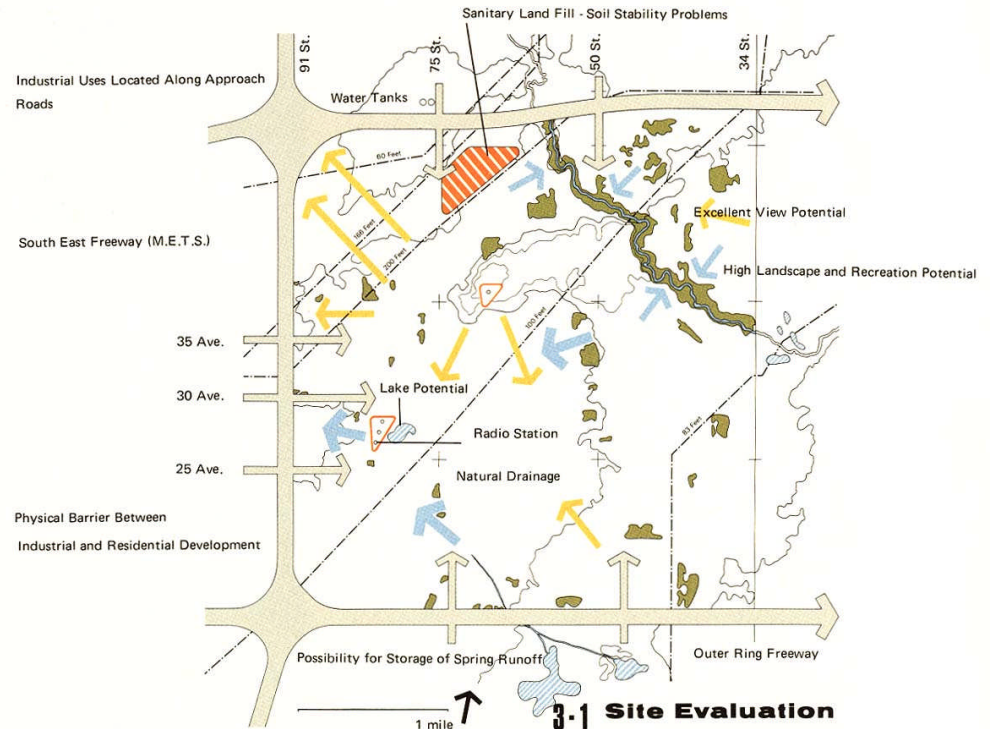
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Physical

From analysis of existing site conditions and characteristics, a set of guidelines or development objectives relating to physical conditions can be identified. Although of primary importance as design factors influencing the development concept, these development objectives will be monitored at all the stages of planning and implementation as they relate to specific design solutions.

These design objectives can be summarized as follows:

- to protect and utilize to maximum advantage the unique topographical features of the study area, having particular regard to the Mill Creek Ravine and the fine viewpoints from high ground. Land use patterns and transportation system alignments should relate as much as possible to the natural contours of the land, and provide minimum encroachment into ravine and natural park lands, striving for maximum retention of the existing tree cover.
- to create a functional, physical relationship to adjoining areas, i.e., the industrial districts to the west and north, the agricultural farm and to the east and south, and the small holdings subdivisions located within and immediately adjacent to the planning area boundaries.
- to recognize existing homes and country estates by establishing compatible land use in their vicinity under the outline plan and to protect their means of access during the interim period prior to full development of Mill Woods.
- to correlate the provision of community facilities for both new and existing residents of the area.
- to exploit the natural drainage patterns of the site in association with storm drainage control measures to create lakes and open water courses, wherever feasible.
- to minimize the adverse effects of the pipeline and transmission corridors by incorporating their fixed alignments into land use patterns and transportation system alignments, emphasizing their potential for open space and pedestrian use.
- to respect non-residential uses within the study area by correlating land uses and development schedules to their particular characteristics and location.
- to minimize possible adverse affects of scattered pockets of poor soil of high salinity.



Social

The physical form of a community must reflect its function - that of meeting the diverse needs of its resident population and the institutions supporting them. A study of life styles provides a basis for structuring the community plan and identifying the objectives that community life must meet to satisfy the resident. Man's environment must serve both his primary or physiological requirements for survival and security, and his secondary needs for human fulfillment and satisfaction as expressed through cultural and recreational activities. The urban environment must provide a complete range of diverse experiences to meet all needs — the peace and quiet of personal privacy to the excitement and stimulation of group participation.

Mill Woods must realize a sense of place, develop individual neighbourhood and community identity, focus on a common meeting place and provide ample opportunity for diverse urban experiences. The Development Concept can only state these needs as Development Objectives while identifying some of the basic land use components which will be conducive to the realization of these objectives under detailed planning analysis. In the main, the degree of success of achieving community environment will rest with detailed design and implementation procedures.

The development concept will provide the frame or basis for ongoing decisions and actions – it will fall to these decisions and actions as to how well the ultimate urban form of Mill Woods meets the physical and social objectives.

The social and physical planners that accept responsibility of the ongoing planning of the community must strive to realize these goals through sensitive and creative planning and design consideration.

There can be no contention that a physical plan in itself will solve social problems, primarily people and social institutions affect social behaviour, but a plan can be conducive to the realization of social goals and objectives and for that reason this concern has been incorporated into the Development Concept Report.

The sensitivity of the ongoing implementation approach to the social aspects of the concept will dictate the degree to which the ultimate environment reflects the character and aspirations of the resident. To assure this objective, it is recommended that the ongoing design team work directly with the residents of Mill Woods to identify citizen concerns and aspirations for future development in the community. Special effort should be made to identify and implement appropriate techniques to accomplish this goal which should include evaluation of the appointment of social animators. Meaningful and responsible dialogue between citizen and expert will lead to greater understanding and realization of community values. This does not suggest that the citizen, either individually or collectively, should dictate future development policy for that remains the responsibility and prerogative of City Council, but rather the citizen can make his needs known which in turn can be considered objectively and critically by the social and physical planners prior to detailed plans and programs being finalized and submitted for

approval. This approval would help assure that the development plans would be responsive to the changing needs of the residents and reflect their concerns.

The type of person encouraged to live in Mill Woods will be determined largely by land marketing policy reflecting the inter-relationship of the physical plan to social and economic influences. Social considerations, which will relate very closely to the economic policies adopted to implement the plan, must be incorporated into the development strategy once the characteristics of the new residents become known. Ideally, detailed implementation plans must include some degree of flexibility in order that the physical requirements of social service programs can be satisfied once service agencies working with the residents of the neighbourhood have identified the need for justifiable programs. These programs could range from vocational training to day care centres. This flexibility could take the form of a special zoning district which would protect appropriate sites until it was ascertained if they could be required for social service purposes. In this context social planners must assume responsibility for providing pertinent information and planning criteria to the physical design team who can then incorporate any physical requirements into the master development plan. For this reason, it is recommended that a high level sociological input continue following adoption of the Development Concept

Detailed physical plans will also be affected by administrative decisions concerning the provision of social service programs, now independently formulated and administered by separate service agencies – public and private. A special social service project is now being organized in the Westmount neighbourhood to ascertain the feasibility of providing social services on an integrated basis – incorporating health, welfare, recreation and education services with citizen participation and community development procedures.

Evaluation of this project could greatly influence administration policies concerning provision of social services in the Mill Woods community as well as the extent and location of facilities required. Involvement of The Human Resource Planning Group chaired by the Chief Commissioner, now providing general supervision of the Westmount project, with the implementation program of Mill Woods could greatly assist co-ordination of physical planning with social service programming in the new community.

The social view stresses the community as a vast complex of social interrelationships – as an environment which meets human needs and provides individual and collective opportunity for participation. The social community differs from the physical community in that it is based upon common interests, functions and life situations transcending geographical limits or boundaries. It is within this context that physical and social planning must be co-ordinated toward the realization of a viable new urban community satisfying both physical and social objectives.

Social Objectives of the Development Concept

In recognition of the intent and philosophy of the General Plan, the Development Concept must provide opportunities for expression of all man's needs, and be responsive to changing life styles and social patterns. To be conducive to realization of this objective, the plan should:

- encourage a composite and compatible population of a wide range of racial origins, income characteristics, and personal background.
- stress social values and concerns and encourage citizen participation, in evaluation and modification.
- improve the quality of life through environment.
- faster social interaction between different groups and individuals.
- support personal integrity, individuality, freedom of choice, movement and expression.
- meet both the common needs of the residents collectively and individual needs of special or minority groups.
- provide a range of creative and rewarding urban experiences.

Economic

LAND POLICY

General Statement

The Mill Woods project was initiated early in 1969 as a result of the difficulties the City was experiencing in two main areas:

- housing supply; and
- transportation implementation.

In the mid-1960's the supply of serviced land for suburban housing was declining and the cost of land was increasing dramatically. The City had no way of guaranteeing the maintenance of an adequate supply. Land in the declared expansion areas was under private ownership and servicing depended upon private sector decisions. The decision to establish a new direction of growth was essential if land for housing was to be available at an uninflated value.

The new transportation facilities required to serve the declared growth directions (essentially, west, southwest and northeast) were placing a great financial strain on the City. Land costs for rights-of-way, to serve these areas, had become a problem of major proportions.

The agreement between the City of Edmonton and the Alberta Housing Corporation describes the objects of the whole land assembly program to be:

- the maintenance of a continuous and adequate supply of land for housing so that the trend to spiralling costs, particularly for land, may be reversed; and
- the progressive servicing of land in the area to provide public and private housing of good quality at minimum cost.

The agreement further provides that the land will be acquired by the City over a fifteen year period beginning on January 1, 1971. The costs of the program will allow a great flexibility in establishing specific land values to achieve the goals as declared in the agreement.

The supply of land for housing has been identified as the main contributing factor in the escalation of housing costs. The agreement quite plainly recognizes this point and the adequate and continuing supply of land is an essential objective of the City's development program. The adoption of a program will have an effect much broader than within Mill Woods alone. The short supply of land in the suburbs for housing and its high cost has contributed, in large measure, to the apartment redevelopment phenomenon in the City. The increase in land values in the suburbs has been accompanied by an increase in value throughout the City in all areas. In many of these locations, the City is anxious to acquire land to carry out its long term public works proposals, particularly in the field of transportation. The City's need for land for public facilities has been satisfied in the past by acquiring land for a particular purpose — swimming pools, roadways, utility

buildings, etc., when the need for the facility is identifiable or arises.

The landholdings in Mill Woods means that the City should be able:

- to guarantee the availability of serviced lots for general housing purposes;
- guarantee sites for specific needs, such as schools, public housing, hospitals, parks, at minimum costs;
- guarantee the most economic form of growth for the City as a whole;
- control land value escalation so that fewer residents will be forced to rely on some form of subsidized housing;
- implement, at lower right-of-way costs, major transportation facility within the City; of orderly and economic growth in the City as a whole.

With this program the City is now firmly back into a controlled situation whereby some balance and reason can be applied to the supply of land in relation to the demand for it.

Land Values and Supply

Some ten years ago, as the City's residential landholdings were dwindling, the value of a lot for a one-family dwelling was in the vicinity of \$2,000. In 1969 and 1970, the City is discounting the land value on residential lots it is selling by approximately ten per cent to arrive at a lot price of between \$4,000 and \$5,000. The increase over the ten year period has thereby been in the order of 100 per cent. The additional \$2,000 to \$3,000 which has inflated land costs for an individual housing unit increases the overall cost of the unit, increases the down payment necessary to purchase the unit and increases the monthly payment required to amortize the amount of the loan from the mortgage company.

Using \$2,000 as the approximate 1960 land value figure and comparing it with \$4,500 and using nine per cent interest rate figure, the effect, if the whole of the \$2,500 were to be amortized over a period of 30 years, is to increase the monthly payment on each mortgage to almost \$20.00. These figures run for the period of the life of the mortgage and, therefore, the cumulative costs to the community in expendable income are massive. Alternatively a much higher down payment is required.

However, this is the side issue to the major one of providing more housing within reach of the income levels which are now not able to purchase housing because of its costs. Not only that, but an increasing number of people are not even able to rent reasonable family accommodation in which to raise families. A review of recent projects in the City shows rents ranging as high as \$230 per month for relatively modest family accommodation in the suburbs. Even with a substantial land price reduction, there will be some families which will still not be able to afford conventional housing on either a rental or a purchase basis. These would be accommodated in several

different ways, one of which being under public or community housing projects. There is a commitment by the City to provide a certain proportion of land for these sites at approximately 50 per cent of land cost. It is estimated that land cost will be in the area of \$2,000 a gross acre and, therefore, it can be seen that with multiple housing developments becoming the most likely type of housing for public housing projects, the land component will be a very minor element of the individual unit cost.

The time available to provide serviced land in 1971 is short and the amount of effort required to achieve this goal, formidable. However, subsequent marketing and development programs will be developed on an orderly basis throughout the life of the project.

Marketing Policy for 1971-2

Because of the sheer volume of work which must be completed from a utility and engineering point of view, in order to have housing occupied in this completely new residential area, it will not be possible to make land available in a general and unrestricted way to anyone who wishes to have land to construct housing. Therefore, the land must be made available on a basis which will guarantee that there will be no profiteering in land should the land be put on the market at approximately \$2,000 for a one-family dwelling, for example. This implies that the City will require a standard agreement to be signed by purchasers of land in the area. This agreement would have to do with the building commitment on the site and also the cost commitment which is referred to in the agreement between the City and the Alberta Housing Corporation.¹

On apartment sites, within the first stage of development, it is suggested that the City receive bids for these sites, specifying the form of development which is anticipated and the density levels, etc., and the successful bidder for the site would be required to commit a certain rental level on the various types of units over a period of time — say, five years. This would guarantee the passing on of immediate savings in land to occupants of such units and afford time during which the successive land areas within Mill Woods could be developed as competitive elements. The essential problem is one of competition in order to maintain land prices at a relatively low level. Such competition could not be guaranteed in Stage I because it will be necessarily limited to the extent that the area can be serviced during this most difficult first period of development. In successive time periods the problem will solve itself merely by the quantities of land which would be made available by the City for housing and other purposes.

Each neighbourhood plan should be reviewed with specific reference to the potential for providing sites to be made available only for such forms of housing as co-operative housing, condominium housing, experimental or innovative housing. In this way the City can encourage new forms of tenure and possibly new forms of development. This is not to say that similar techniques might not be applied to other lands within the area, but there

¹ Rates currently used by the Ontario Housing Corporation are:

\$15,000 maximum for 3 bedroom bungalow, excluding land and local improvements

\$16,000 maximum for 4 bedroom bungalow, excluding land and local improvements

should be ongoing obligation for the City to maintain an interest in these and any other forms of housing which may from time to time appear appropriate in relation to the needs of the community.

For commercial sites in the first stage area, these should be disposed of according to need for facilities and in accordance with the City's normal procedures, but including design considerations to control quality of development. There are public agencies involved in the development of the Mill Woods area which also have first stage needs for land and include such groups as the school boards and should be made available to the Boards at no cost as far as the normally dedicated lands are concerned. Anything over the dedication of land would be on the basis of the cost of the land to the City.²

Long Term Program

Because of the size of the project and the time span involved there will be many opportunities which will arise to develop new techniques for encouraging different forms of development. The City, itself, for example, may wish to construct certain facilities in the area as demonstration projects in the way of new housing types; or it may decide to construct housing in the area simply as a housing stock which it can use for exchange purposes with present householders whose property is required by the City in other locations. The City may develop a system of leasing property, rather than its sale. The lease of land and its ultimate recovery by the City is a technique which is attractive and will grow more attractive as the City is able to generate revenue from the sale of the land in the area. It must first maintain a satisfactory supply of land for municipal purposes. Leasing does not return investment immediately and the City will not, in the early years of this project, be in a position to adopt this system on a general basis. However, it is anticipated that a certain proportion of housing in the area could be operated in this way and be a significant method of deferring the payment to the City for land. It is certainly feasible to sell the land over a period of time to an individual householder by preparing the appropriate agreement and arranging for a full payout to be made after a period of, say five years. This is a technique which would greatly assist those families who are between the economic level to purchase housing in the normal way and yet are above the income levels which would allow them to take advantage of subsidized housing projects. Such draft agreements are currently under review.

During the implementation period, consideration should be given to inviting design and development submissions over a broad scale of development. It may be possible to invite proposals for the development of the whole neighbourhood within the general parameters established by the outline plan and this would take a great deal of pressure off the City from both a design and construction point of view and would allow the selection of the most appropriate development package bearing in mind the principles of the Mill Woods Development Area.

a) Land Bank

Mill Woods will establish a land bank for the City. The City's obligation to acquire land to supply public needs is well documented and has been demonstrated time and time again. Likewise, the City's difficulties in acquiring

² City Council Resolution dated December 21, 1970

land because of either financial constraints on the City or the hardship which this works on landholders has been well demonstrated, particularly of late. It is suggested that the City's policy: in future will be by use of the Mill Woods funds, to establish a very specific land acquisition program which will bear a direct relationship to the public works programs of the City. Land can thereby be acquired at the appropriate time in relation to the construction of a particular facility, without affecting the debt position of the City and its needs for funds generally.

The monies realized from the Mill Woods area should be exclusively used in a land bank so that the land sold will result automatically in land being acquired in other parts of the City. The land bank technique would allow the City a chance to remedy many of the ills about which it has long registered its concern but about which it has never been able to take any particular action because of financial or land value problems. For example, the acquisition of proper park sites in the older and now disadvantaged parts of the City, which could well be the areas of the most nagging social problems in the next generation unless some improvement to the environmental qualities of these areas occurs.

b) Actual Land Values

Current lot prices in three residential areas now developing are typically as follows:

Dickinsfield	\$3,800 - \$4,500
Thornclyff	5,000- 5,500
Duggan	6,000

Local improvements of \$50.00 per front foot will increase these by a further \$2,700.

These figures do not reflect the cost of land, and the City objective in Mill Woods is to reduce these amounts with the primary objective of putting available housing within the reach of far more citizens than is presently the case. However, to translate the City's actual acquisition costs into the resale value would serve to severely affect other growth areas.

Therefore, the establishment of a land value for sale purposes is an item which is arrived at by combining the prime objective of the program (lower cost housing) with:

- the effect pricing policies will have on other areas;
- the generation of funds for other land programs;
- the local economic situation with regard to availability of mortgage funds;
- the volume of serviced and serviceable land for housing in the City;
- the demand for housing of various types; and
- the economic capabilities of the home buyers and tenants.

The problem then is not a simple maximization of investment as might be the case within a competitive private corporation. In the early stages, supply and demand factors cannot be relied upon as demand will likely exceed capability to supply.

DEVELOPMENT CONCEPT

4

Goals and Objectives

The Development Concept, as symbolized by the accompanying graphical diagram, is intended to serve as a general guideline for development, both for the civic administration and private property owners wishing to develop their land. The concept has been structured to be conducive to the realization of social and economic objectives and to be responsive to changing life styles and technological advances. The concept has been kept free from detail, identifying only the key land use and transportation system components which are essential to the future form and function of the new community. Specific alignments and locations remain to be finalized during detailed design and planning analysis.

Respecting the primary residential function of the new community, the concept reflects two fundamental goals —

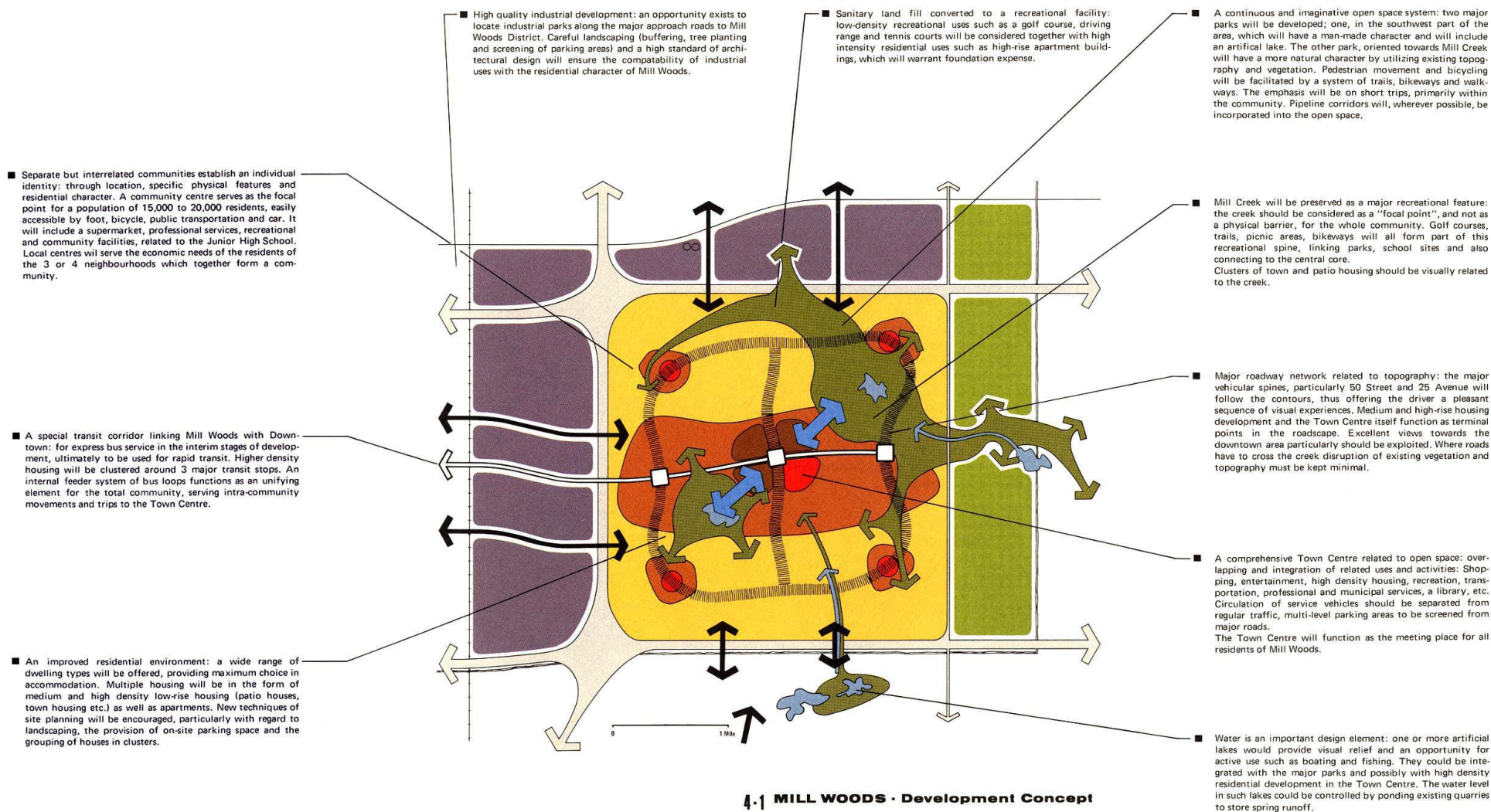
- to reduce the price of housing generally through land marketing and servicing programs, and
- to upgrade the quality of residential environment respecting the social, physical, and economical needs of the residents.

The first goal will be realized mainly through administrative policy decisions dealing with marketing issues. The second goal will be achieved primarily by planning and implementation decisions following adoption of the Development Concept.

The suggested form and structure of the Mill Woods community, influenced by its geographical relationship to Metropolitan Edmonton and the characteristics of the site, has evolved through an extensive process of design analysis. The primary development objectives of the concept may be summarized as follows:

- to obtain an overlapping system of community structures based upon the economical provision and maximum use of community facilities and the fostering of community participation and development.
- to focus the community onto an intensively developed central core incorporating the major social, cultural, and economic elements, serving as the main forum for community interaction.

- to structure the community by relating circulation systems and land use patterns to effectively serve the various needs of the residents in a safe, efficient and economical manner.
- to achieve a community population representing city wide demographic characteristics through the provision of a broad range of dwelling types and tenures.
- to preserve a sense of human scale and establish community identity — in the process creating a wide range of urban experiences.
- to allow the expansion of the new community on an orderly and sequential basis, meeting sound economic, social, and physical objectives.
- to maximize the open space potential within the Mill Woods community to provide a high level of residential environment.



Community Structure

The concept is comprised of a series of overlapping community structures, governed to a large degree by the key aspect of mobility. Starting with the basic element of a dwelling unit, the physical plan is built on the principle of individual house groupings and clusters of different dwelling types, functionally linked together by transportation systems, and centered around educational and recreational facilities in such a manner so as to maximize choice and convenience to the residents while allowing economical provision of servicing facilities and programs. The community structure will be a composite of land use patterns and circulation systems required to allow functional efficiency. The hierarchy of roads, described in detail under the transportation section, serves and emphasizes the various neighbourhoods, community and district components of the community structure.

A neighbourhood unit, primarily based upon the geographical location and separation of residences from the elementary school, is comprised generally of some 180 to 200 gross acres (72.8-80.9 gross hectares). Neighbourhood services will be concentrated around a neighbourhood centre comprised of educational, recreational, and community league facilities, and in some instances incorporating a convenience store. These neighbourhood centres, meeting the needs of 4,500 - 5,500 people, will provide those services which should be easily accessible to housewives and small children, who are generally without means of private transportation. It is anticipated that as communal facilities such as day care centres, nursery schools and drop-in centres become warranted that they too could be incorporated into neighbourhood centre complexes.

Pedestrian walkways will provide safe convenient means for the majority of neighbourhood children to reach school destinations. Shopping and multiple family sites will be directly related to the walkway system complementing its role as an extension of the public transportation system.

Although the first neighbourhood of Mill Woods has been designed on a conventional basis, ongoing neighbourhood design can incorporate new subdivision forms and techniques such as cluster housing with the objective of obtaining the highest quality of residential environment possible.

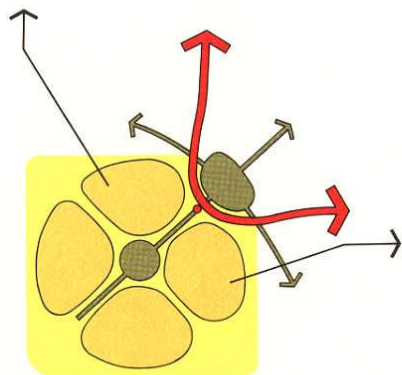
A community, as identified by the Development Concept, will consist of either three or four neighbourhood units, comprising some 15,000 to 20,000 persons. The community centre will consist of a group of service facilities comprised of commercial, educational and institutional elements, possibly supplemented by recreational functions such as shell arenas and special housing for senior citizens. In all communities other than the ones containing the community commercial centres, the focal point of activity will center on secondary educational facilities or the junior high schools of the Public and Separate School Boards. All centres will be located on bus routes, complementing direct access by car and pedestrian walkway systems. facilities together a sense of identity or place will be created together with advantages of functional linkage and interaction of uses.

A series of nine communities, each of different identity and character, constitute the Mill Woods Development Area. Although common elements will give an impression of continuity, different design approaches and environmental control could guarantee a difference of appearance essential to achieve overall vitality and interest. Each group of four communities warrants provision of district level facilities of educational and recreational nature. Thus district park and senior high schools, providing service to an attendant population of some 50,000 to 60,000 persons, are placed so as to provide convenient access to road and public transportation systems.

The community of Mill Woods will focus on the town core situated in the geographical centre of the development area. Within this centrally located intensively developed urban core area, the major commercial, cultural and social activities will be concentrated. High density residential and open space elements will serve to link the complex together based upon the rapid mass transportation systems serving the core. Pedestrian convenience, functional interrelationship of use, and retention of human scale will be stressed. The Town Centre will function as the major meeting place or forum for all the residents of the Community. The intensity of development will permit sensitive architectural designs to be formulated and implemented, achieving vibrant character and fostering a sense of community. It is at this location that special features are warranted to emphasize community identity and enhance its environmental quality.

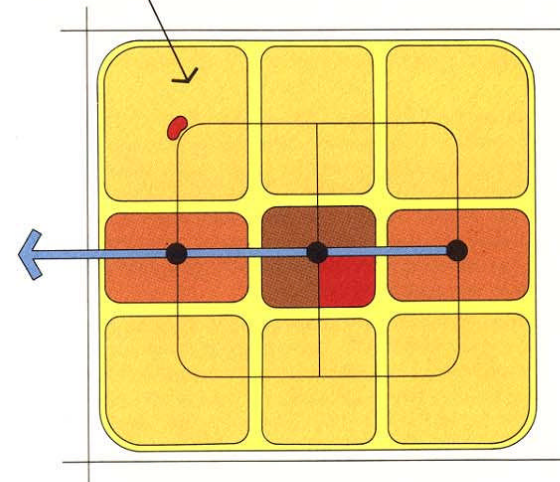
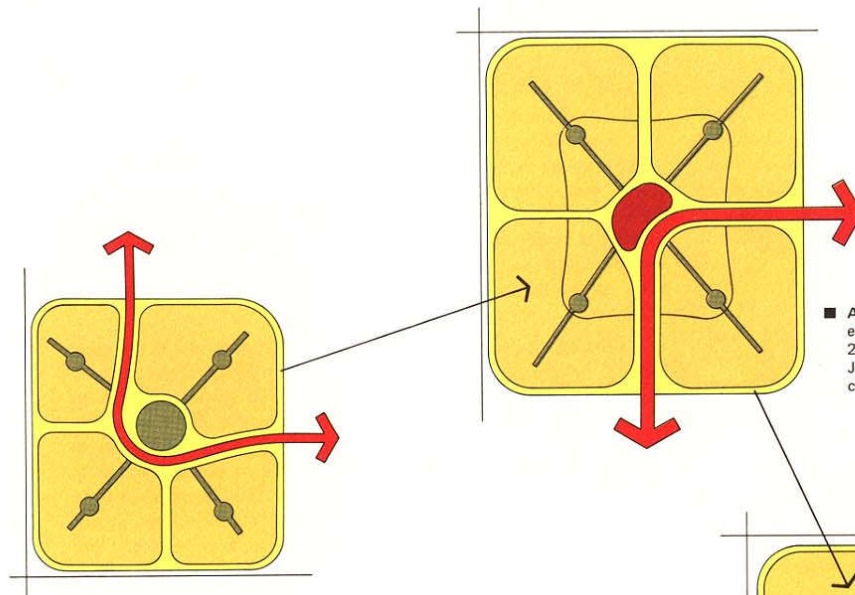
Amended by Editor

■ A neighbourhood consists of a number of relatively independent residential units, each comprised of two or more housing units, with an approximate total population in the vicinity of 5,000 persons.



■ Housing Units clustered around public transportation stops and small parks connected by walkways to major neighbourhood services such as schools and shops.

■ A community consists of three or four neighbourhoods encompassing a resident population of between 12,000 and 20,000 persons, focusing on a community centre related with Junior High School Facilities and served by efficient and convenient transportation systems.



■ Mill Woods Development Area consists of nine communities, three of which are orientated toward a main transportation corridor. A comprehensive central core, including a major shopping complex will serve the needs of Mill Woods and function as a community forum.

4.2 Community Structure

Circulation

Generally a physical design concept is comprised of two major elements — land uses and the transportation systems required to conveniently move vehicles, people, material and ideas generated by these various land uses. It is readily apparent the importance that transportation assumes in a modern urban community with every indication that it will only increase with time. Every effort has been made to structure Mill Woods so that the developing community can be systematically served by contemporary methods and facilities, yet flexible enough to readily adapt to innovation and technological advances in the field of transportation.

The Road System

In the main, functional success of the new community and acceptance by its residents will rest upon the capacity of the road system and how well the daily travel needs of the residents can be met. As current public transportation service depends solely on the motor bus in new districts, the transit system's patronage also depends upon the road system allowing free flow of peak hour traffic.

The main road system is structured to meet estimated traffic volumes, to respect functional relationship of the various land uses and topographical features, and to provide geometric design tolerances for the freeway systems flanking the community to the west, south, and north.

In this context the Development Concept sets forth as a planning principle the provision of a roadway hierarchy. This promotes the system that major arterials feed into major collectors hence into a local distribution system. The major premise for this system is one of traffic volume and type of road section. Each classification of road corresponds to the number of people and vehicles desiring to use the facility and possesses corresponding characteristics. Each type of road provides a distinct visual experience for the user.

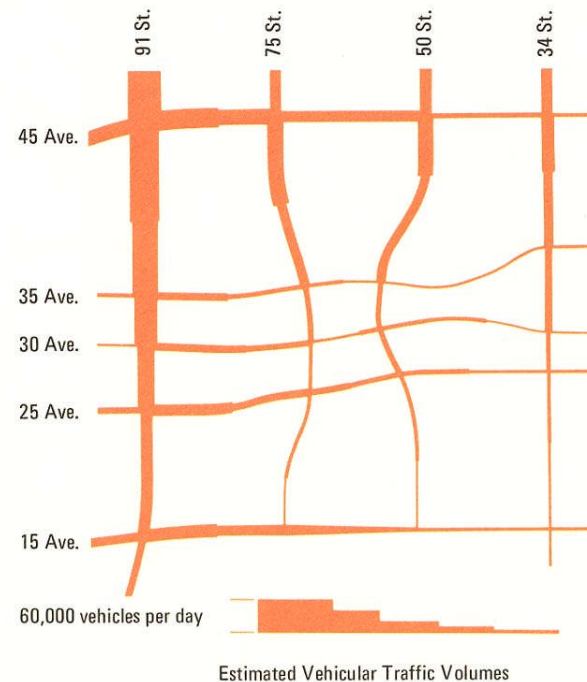
With the major arterial system accommodating the primary movements in and out of Mill Woods, the concept plan recommends a secondary system linking the neighbourhoods and communities by an internal looping roadway servicing both the community centres and the town centre. This system would be comprised primarily of an undivided four lane road, as identified by the roadway cross-sections.

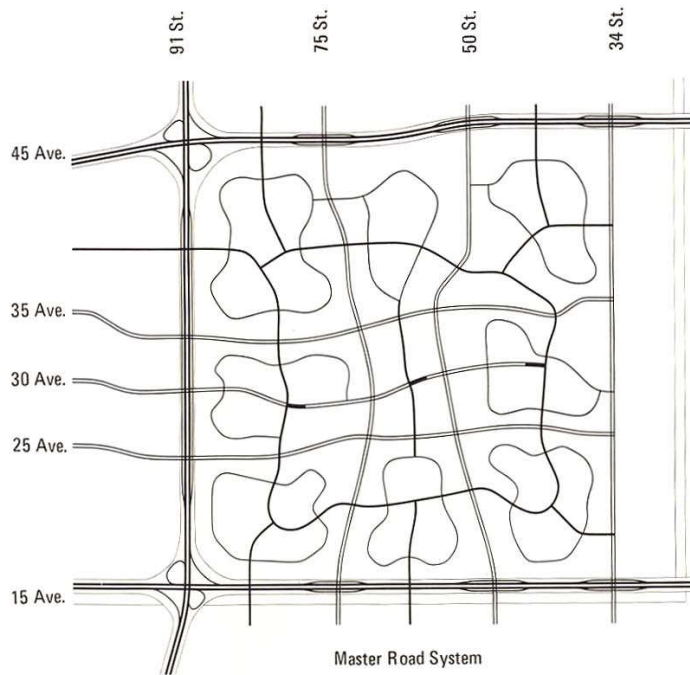
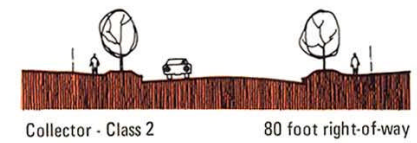
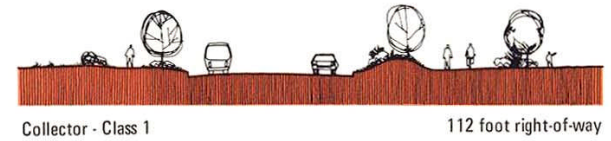
The secondary system, in combination with the major arterials, will generally provide a one-half mile grid spacing except in the central high density core where the spacing becomes much closer due to the higher intensity of use. Due to its continuity, the secondary road system will encourage inter-community travel and in a sense tie the Mill Woods community together. All of the roads comprising the primary and secondary systems require individual design consideration with regard to landscaping, signing and traffic control as they relate to adjoining land uses. Special emphasis should be given to roads in the central core area in this regard.

Neighbourhood collectors, refer to cross-sections, will focus internal

neighbourhood traffic toward and onto the primary and secondary grid systems. The neighbourhood collectors will provide continuity between neighbourhoods, paralleling the function of the secondary grid system on a lower scale. They will relate directly to the major neighbourhood and community elements of a commercial, educational, recreational and institutional nature. Local streets will be planned under detailed subdivision design to provide convenient residential access while discouraging through traffic. Generally of a smaller right-of-way width, these local roadways will provide direct vehicular access to small house groupings, respecting the need for convenience, safety and noise abatement.

To adequately meet the transportation requirement of the community, the road system must range from small local access roads to large regional arterials and freeway facilities. The concept recognizes the emphasis that the general public places upon mobility and convenience and meets those dictates. There is however, a real need to assess the role of the private automobile and the adverse effects it has upon the environment if the evolving urban form of Mill Woods is to keep a proper perspective to other social and environmental objectives. To this end the car must be accommodated but it should serve rather than dictate.





4.3 Roadway Hierarchy

Public Transportation

The Development Concept, while recognizing the current popularity of the automobile, strives to provide ample opportunity for improved public transportation facilities, both current and future, to effectively compete with the automobile — that is, to offer comparable convenience and comfort and in so doing, encourage a greater percentage of the community's residents to support public transportation systems.

The basic premise is that for the foreseeable future, the Mill Woods community will be served according to the present Edmonton Transit System policy which can meet a dual role if required of local service or express runs. The concept, recognizing that experimental projects now under evaluation in the United States and Canada may greatly influence future administrative policy in this regard, stresses flexibility so that new modes can be readily incorporated.

The public transportation concept is based upon the desirability of providing fast efficient bus feeder service to transportation centres located at three district nodes of the community. Individual neighbourhoods are served by bus routes using neighbourhood collector roadways with bus stops conveniently spaced at key locations. The concept stresses neighbourhood pedestrian walkway systems as an extension to the bus route. Land use patterns, with special emphasis on multiple family and commercial uses, are directly related to the bus routes, to foster and encourage bus patronage desirous of reaching neighbourhood, community or City wide destinations.

Subsequent stages of development would generate sufficient volumes to justify initiation of express bus service. This express service could then be directly correlated to the establishment of major transportation transfer points to be located in each of the three central communities. Community feeder loops, perhaps serviced by electric mini-buses providing a regular scheduled service during peak hour periods and "on demand" during off peak periods, would provide residents with convenient downtown connections. Based on today's standard of bus service, a fleet of some five buses will be required to service the community. Ultimately, the development concept acknowledges the desirability and necessity for an appropriate form of rapid transit service, linking station locations at the three district transportation centres to a City wide system. The physical frame of the new community can be enhanced by placement of major elements and higher residential densities to support the public transportation system, thereby reducing pressure on the freeway system. The secondary road-way system alignment will allow consideration of a sophisticated inter-community transportation system, should the need for

such a facility become valid at some point of time in the future.

The development concept incorporates the principle of a transportation corridor to be located on the 30 Avenue alignment, offering the greatest flexibility for linking to future extension of a City wide system. This right-of-way will allow possible future rapid transit facilities to be phased with construction of the secondary road system during early stages of development. Present plans envisage retention of a wide median within which future rapid transit facilities could be provided. Station stops would be directly related to the intersection of the secondary road system with the line at district transportation transfer points. Rapid transit service utilizing an extension of the University line could provide twenty-two minute service to downtown.

Pedestrian Circulation

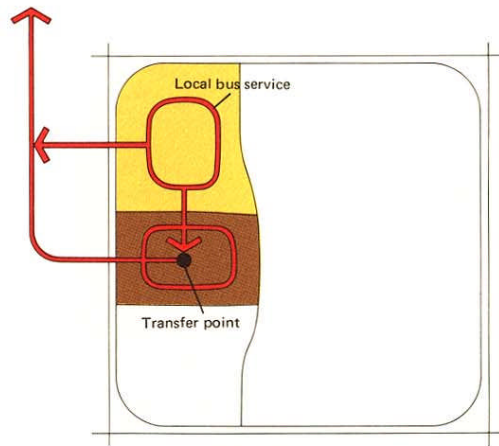
To achieve a balanced overall pattern for circulation in the Mill Woods community, the Development Concept recognizes the need for a comprehensive pedestrian system. At the pedestrian level there are three broad areas of mobility:

- that of pedestrian access to activity centres within each neighbourhood.
- pedestrian access to community level uses.
- extended movements of pedestrians of a district or community nature.

All three levels of pedestrian movement should be accommodated in planning of a functional pedestrian system. Extent and type of use must be carefully analyzed to ascertain desire, convenience, and functional relationship to the other elements of the overall circulation system. The provision and location of walkway must stress the co-ordination of major pedestrian movements to public transit operations — both rapid transit and bus. Relationship of the pedestrian to the private vehicle should be such that pedestrian — vehicular separation becomes a strong expression of the physical plan, thus minimizing points of conflict and personal hazard.

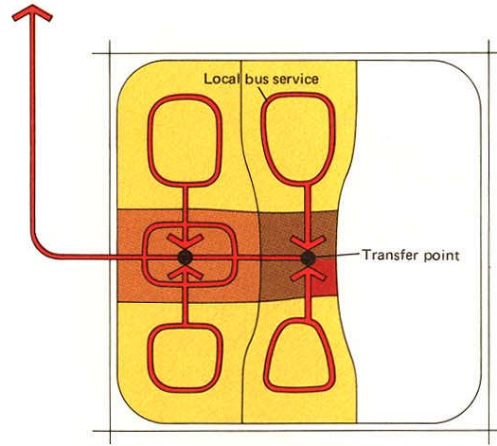
In all respects, any form of pedestrian circulation must be co-ordinated and integrated with the overall concept for open space, since walking forms the link between transportation and open space uses. Not only must this factor be translated into both the social and physical plan for Mill Woods but also it will be necessary, to monitor and evaluate the original design concepts in view of actual experience with the initial subdivisions.

Extension of existing bus service to Downtown



1. Initial Stage

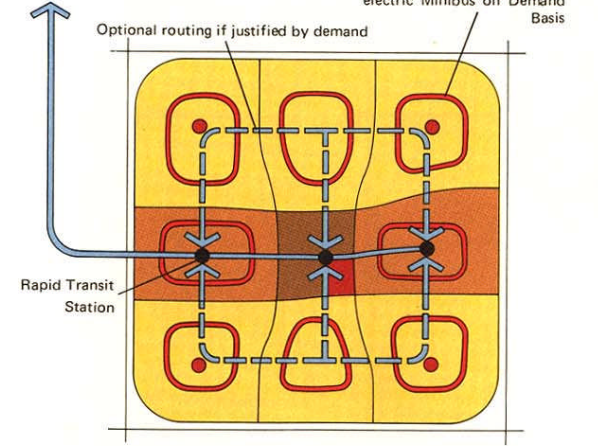
Express bus to Downtown



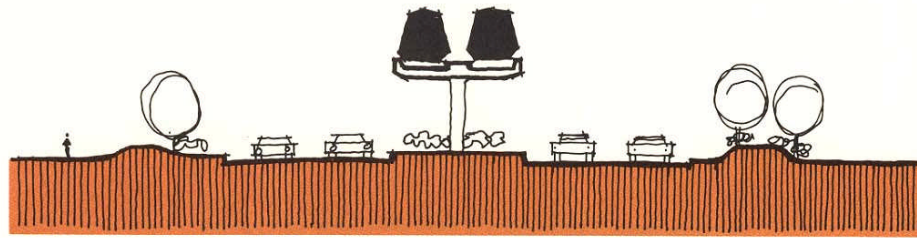
2. Intermediate Stage

Public Transportation Concept

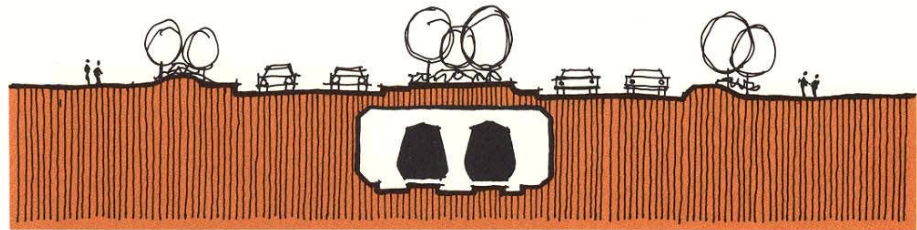
Rapid transit to Downtown



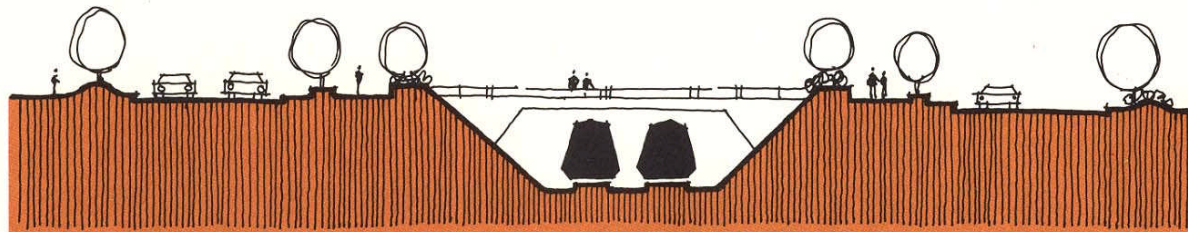
3. Ultimate Stage



■ Alternate A - Elevated Structure



■ Alternate B - Cut and Cover



■ Alternate C - Open Cut - Depressed Section

4.4 Transportation Corridor

Residential Environment

The Development Concept is based on the premise that the ultimate community will be comprised of a wide range of housing types and tenures, fostering and encouraging a community of diverse characteristics broadly representative of the City at large. The plan strives to allow freedom of design to encourage innovation and experimentation with residential environment and form of dwelling types. With these objectives in mind, the concept recommends that the ultimate community form of Mill Woods reflect the residential density characteristics of the central city — an intense urban core incorporating high density developments, a linear medium density zone focusing on the proposed transportation corridor which would support a wide range of dwelling types, and the outlying low density residential neighbourhoods emphasizing detached family type accommodation. This range of community characteristics allows ample opportunity for provision of conventional forms of housing in accordance with the social and economic objectives of the Concept as well as serving as an appropriate frame wherein new design techniques, building forms, and construction methods can be employed in accordance with the physical limitations of the Outline Plan.

Housing programs to be implemented will be determined to a large degree by the housing needs of the City at large and the competitive influence of other major growth areas. Housing demand as expressed through the real estate market will constitute only a portion of the real need. Special requirements of minority groups, such as the elderly and the handicapped, must be identified and assessed for inclusion into the Mill Woods Housing Program. Administrative policy to encourage diversity of tenures will be formulated to allow the greatest possible number of residents of varying economic capability to enjoy adequate accommodation and home ownership.

Based upon analysis of the current housing market, the Development Concept is cognizant of a decided shift to multiple family occupancy during the last decade. Respecting the trend, both the Concept and community structure have been based upon a continuation of this condition, however, there is a strong possibility that the market has been forced to some degree, due to the ever increasing cost of money, material, land and labor which all affect the final unit price and the consumers ability to purchase. Although it requires confirmation by a thorough market analysis, the concept allows for a potential total dwelling stock of some 33,000 units, generally comprised of 60% in the form of multiple accommodation. In the low density neighbourhoods, some 60-70% of the net residential land area has been allocated to single family use on the premise that a substantial demand for reasonably priced single family accommodation exists in the City at the present

time. Continual review and monitoring of the marketing policies and programs will be required to evaluate their relative success to the stated objectives of the Development Concept. Should the selected housing mix prove invalid by actual market experience, a re-evaluation of the Outline Plan will be required to assess the effect changes to the housing mix would have upon such interrelated factors as open space, educational facilities, densities and transportation.

In accordance with the basic philosophy of providing a complete range of opportunity for housing with maximum design flexibility, the concept recommends three density ranges — the low density peripheral residential communities of 20-24 persons per gross acre (*49-59 persons per gross hectare*) the medium density interior linear core communities at 25-30 persons per gross acre (*62-74 persons per gross hectare*), and the high density central core area at 50-60 persons per gross acre (*124-148 persons per gross hectare*). Within these broad density classifications, detailed planning can co-ordinate the provision of appropriate housing accommodation in accordance with development objectives. Multiple family development can be correlated to the location and function of open space, recreational facilities and access to transportation. Various forms of dwelling type ranging from high-rise towers to single-family cluster housing may be considered under comprehensive development schemes, placing emphasis on the realization of quality environment and retention of human scale.

Amended by Editor

The medium density and high density core communities allow ample opportunity for the establishment of compact high quality forms of housing — horizontal and stacked multiple in combination with vertical high-rise towers. Such development, co-ordinated with public transportation facilities, can provide a range of dwelling types and tenures meeting the accommodation requirements of young single persons, the elderly, and families of limited size. Strong functional relationship with open space and recreational facilities will allow excellent design opportunity to experiment with three dimensional housing forms. It is anticipated that such forms of high density housing will



High Density Housing Near Central Core

shift to a concentrated form of stacked or horizontal multiple housing. Occasional high-rise residential buildings should be encouraged to provide visual stimulation and focal points for the community.

The concept also recommends that multiple family accommodation be provided throughout the entire community structure, with individual sites of limited size decentralized throughout individual neighbourhoods but functionally related to shopping, public transportation and school and park facilities. In such a manner, different house types and groups will tend to inject vitality into the residential environment and by limiting their size discourage adverse neighbourhood reaction against typical multiple family projects in low density districts. Multiple dwellings will reinforce the form of the neighbourhood or community, emphasizing the focal or node points.

It is anticipated that development of new density control systems will encourage a greater mix of dwelling types with specific developments governed by open space and school generation requirements. The extent or intensity of use would be regulated, but the form of development could become flexible with social and market conditions determining the optimum mix of dwelling types. This type of control also presents opportunity for realization of greater open space, hence improving the residential environment.

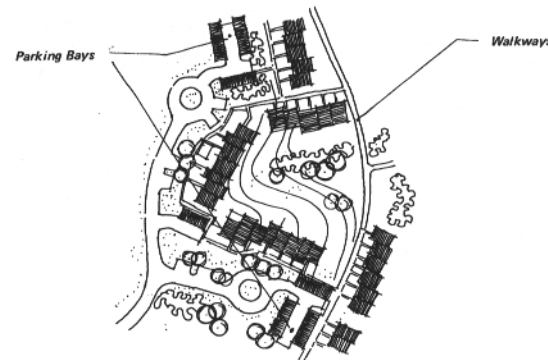
A diversity of dwelling types also encourages different systems of tenures. A significant increase of housing accommodation available to middle and low income groups can be achieved through such techniques as co-operative and condominium housing. It is anticipated that once comparable residential amenities are provided by well-planned multiple dwelling complexes that an increasing number of families seeking accommodation will choose this alternative. Single family housing enjoys current popularity primarily because of the amenities that it provides, such as privacy and independence.

In addition to meeting the needs of middle income groups unable to afford low density housing — provision will be made for housing low income groups such as the deprived and the elderly. The City is committed to provide sufficient community housing to accommodate a minimum of 5% of the communities' population. This type of housing with accompanying subsidy, provides dwelling units of high standard to families and individuals of limited means. The current administrative policy of placing small projects of some 50-150 units equally distributed throughout the community will be extended into Mill Woods. If possible, location of community housing projects should be identified and made public preceding development of any particular neighbourhood in order that prospective home buyers can purchase in full knowledge of future developments. Caution must be stressed as to the total allocation of community housing in any one neighbourhood or community as school capacities could be seriously affected. Equal consideration must be given to limited dividend or experimental housing projects for the same reason. To meet the immediate planning need of identifying school size, a ceiling figure of 10% of the population to be housed by community housing, limited dividend, or experimental low-cost housing was assumed. This figure allows considerable flexibility as increased school generation can be compensated by increasing single-family-dwelling content. Hence an increase of community or experimental housing would require a decrease of the 60% multiple component of the total housing mix.

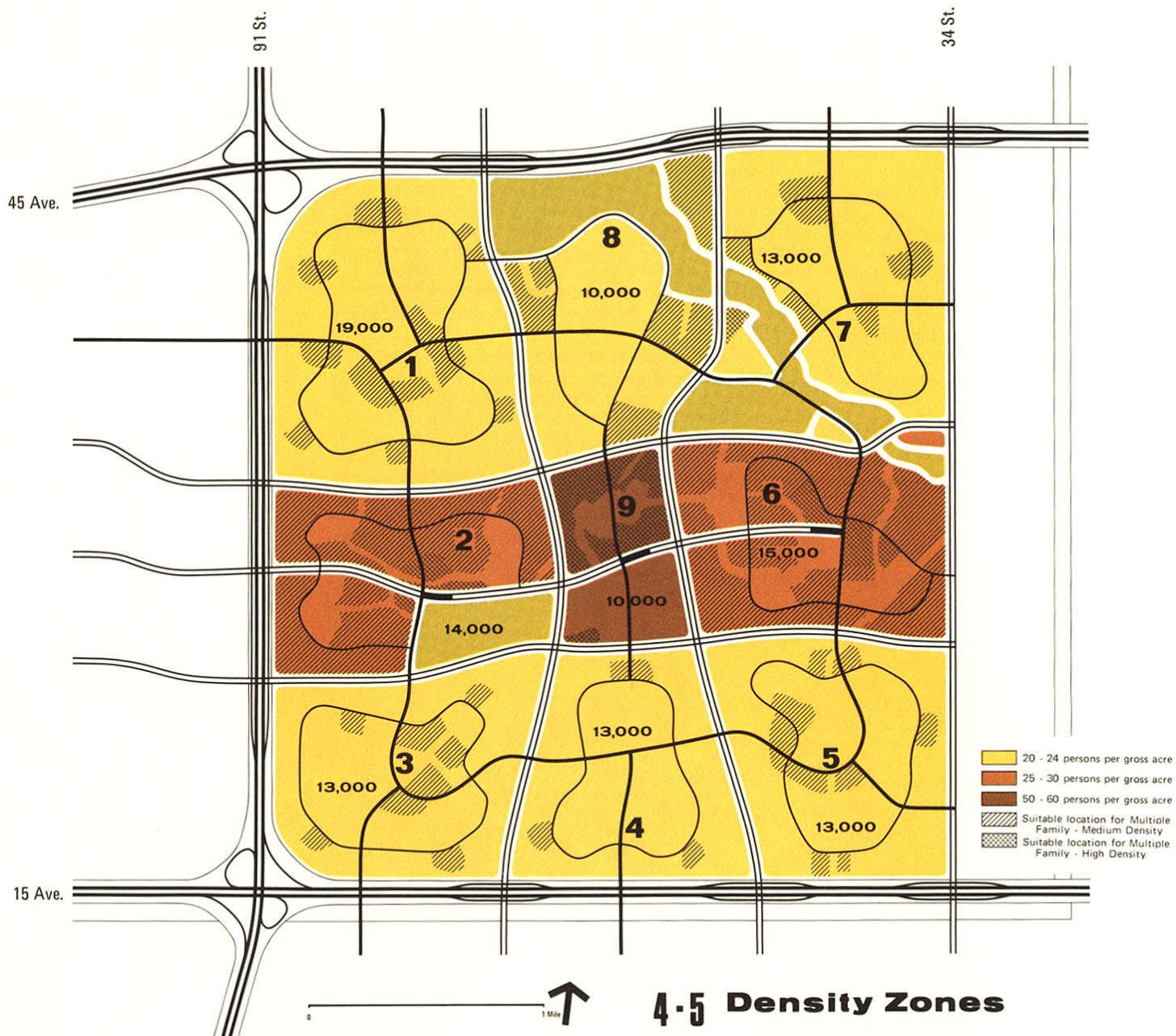
To further assist in the provision of a wide range of housing types serious consideration of mobile home parks is warranted. At present, poor standards of existing City trailer parks cast a negative influence on this form of housing, however, as has been proved in other areas, mobile home parks which are sensitively designed and properly maintained fulfill a valuable function. Serious consideration of including either one or more mobile home parks within the Mill Woods is justified during ongoing planning and implementation. Early identification of appropriate locations would allow comprehensive planning to incorporate such parks into the overall community and relate them to community facilities and services — now one of the major problems facing mobile home developments.

The housing mix as indicated in the accompanying chart was determined with reference to the General Plan forecasts for 1981, analysis of the current trends in housing starts and dwelling preferences, and computer analysis of housing mix related to student generation factors. Actual market experience must be monitored and evaluated against the initial housing mix selection. To assist in the marketing program, a city-wide study would be advantageous in order that the accommodation needs of those not reflected by market demand can be incorporated into future planning and administrative policy. It is of critical importance that the housing programs meet social as well as economic objectives.

In this context, and in accordance with the physical objectives dealing with quality of environment, due consideration to the quality of housing is as important as the quantity. Detailed analysis of the many components affecting the function and quality of residential environment will be required. These components include new sub-division form and siting techniques, architectural co-ordination and design control, mixture of dwelling types, experimental building forms and construction methods, effective landscaping control, and all visual elements of street appearance, improved environmental quality is a major design objective of the Development Concept — an objective which to be realized requires considerable time and effort during the detailed planning and implementation stages.



Example of Cluster Housing

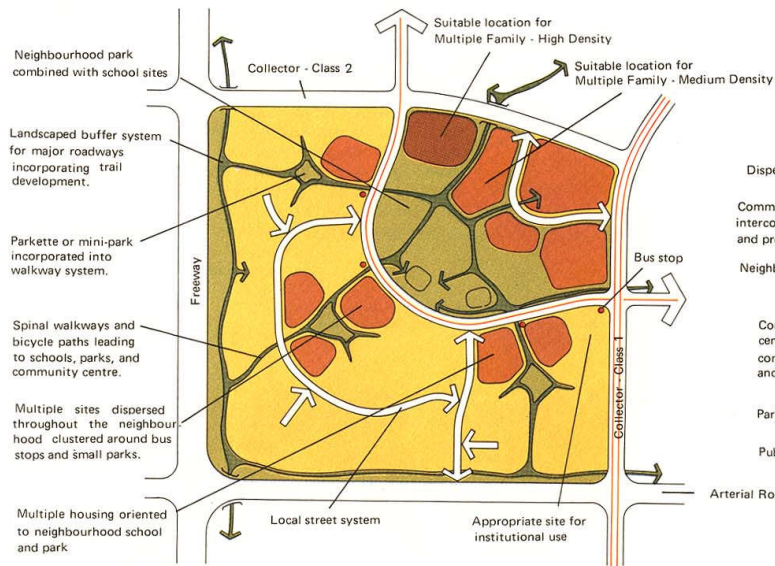


DWELLING UNITS – NUMBER

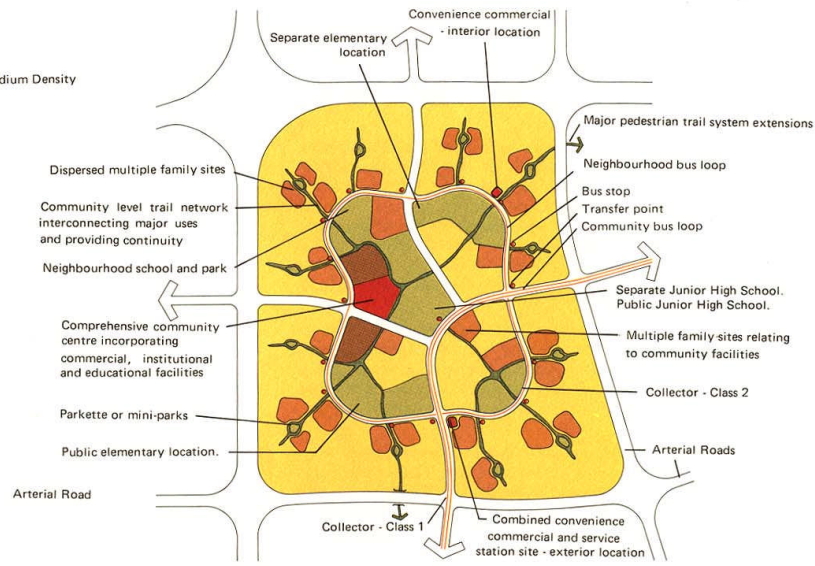
	Population	R-1	%	R-2A*	%	R-3*	%	PHA	%	PHR	%	Total D.U.	%
Community 1	18,784	2,041.6	40.5	1,075.1	21.3	1,308.9	25.9	333.5	5.6	287.5	5.6	5,046.6	
Community 2	13,804	956.5	25.0	1,254.3	33.0	1,287.5	33.0	176.6	4.0	125.2	3.0	3,800.1	
Community 3	13,052	1,514.2	43.0	773.8	22.0	832.0	24.0	235.7	6.0	141.5	4.0	3,460.6	
Community 4	12,513	1,451.5	43.0	741.8	22.0	797.0	24.0	191.4	5.0	135.7	4.0	3,317.6	
Community 5	13,484	1,614.2	45.0	799.4	22.3	859.4	24.0	206.2	5.7	146.3	4.0	3,575.0	
Community 6	15,171	1,051.2	25.0	1,378.6	33.0	1,415.0	33.0	194.1	4.0	137.6	3.0	4,157.9	
Community 7	12,836	1,489.1	43.0	761.0	22.0	818.2	24.0	196.4	5.0	139.3	4.0	3,403.4	
Community 8	9,212	1,068.7	43.0	546.1	22.0	587.2	24.0	141.0	5.0	99.9	4.0	2,442.4	
	108,856	11,151.0	38.2	7,325.1	25.1	7,905.2	27.1	1,674.9	5.7	1,213.0	4.2	29,203.6	
			33.0		21.6		23.4		4.9		3.6		86.5
						R-3	%	R-5	%	R-6	%	Total D.U.	%
Town Centre ¹	10,000					1,485.9	32.5	1,714.5	37.5	1,371.6	30.0	4,571.8	13.5
Community 9							4.3		5.1		4.1		
TOTALS	118,856					9,391.1	27.8					33,775.4	

* Contains Allocation of Limited Dividend and Experimental Housing

¹ Special Study Area



Schematic Neighbourhood Structure



Schematic Community Structure

Open Space and Recreation

The Development Concept for Mill Woods has allocated a generous amount of land for open space within the planning area. This has been done primarily for two reasons:

- to protect the natural environment and ecology of the site and
- to insure that the residents of Mill Woods have comparable access to parks and recreational activities as that enjoyed by residents of other districts in the City.

Open space of various forms and type is allocated on the basis of need for each district and for individual neighbourhoods. This hierarchy conforms to the philosophy and mean standards advocated by the Parks Master Plan. Variations will occur depending on local conditions and circumstances. Actual parks sizes will therefore be more specifically determined by plan implementation.

The major element of the open space concept is the Mill Creek Ravine. This ravine contains extensive tree growth and interesting topographical variation which provides tremendous potential for park development. Every effort should be made to utilize this unique resource to its maximum advantage. Intrusions into the ravine area by roadway rights-of-way and utility corridors should be minimized to prevent undue disturbance of the natural vegetation. In its natural state the ravine can be utilized for nature walks, picnic areas and cycling trails.

The topography of the area is such that a number of depressions and drainage courses have been naturally created. This presents a unique opportunity to enhance the residential environment of Mill Woods by the development of artificial lakes fed by controlled surface drainage.

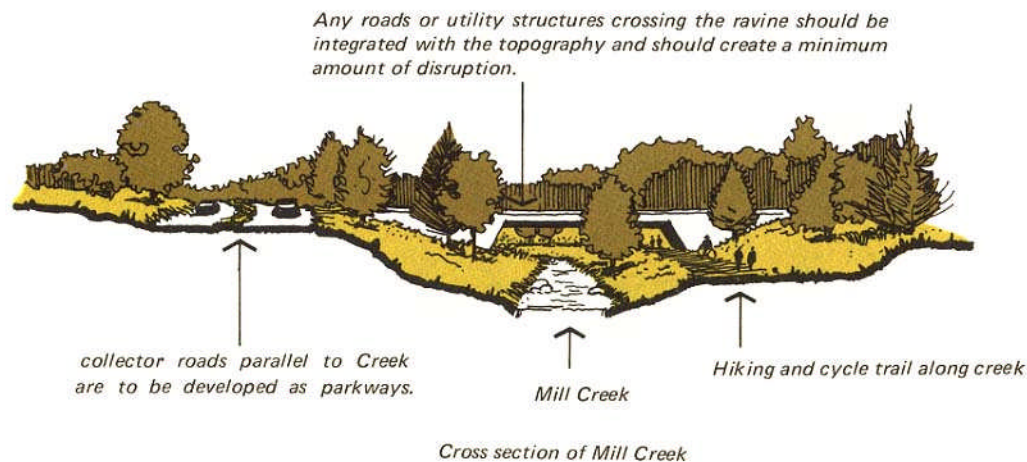
Preliminary engineering analysis has indicated that this is feasible. Natural runoff would be ponded in reservoirs located south and east of the planning area. Appropriate damming during heavy rainfall and spring runoff would ensure a constant source of water flowing in shallow artificial stream beds and lakes through the central core, district parks and possibly some residential areas. Small waterfalls should also be incorporated into this system for aeration and visual interest. During the winter months the ponded water could be utilized for recreational skating.

Extensive use of such water elements is strongly advocated by the development concept. Although subject to a detailed feasibility study an imaginative

use of water runoff and topography would provide additional passive and active recreational facilities as well as providing an exciting opportunity to enhance the urban quality of the community.

Another facility recommended adjacent to the Mill Creek Ravine would be a public sponsored 27 hole golf course. The site for the golf course could take advantage of both the wooded Mill Creek Ravine and the development potential of the sanitary land fill site to the west. This type of recreational use could also be incorporated into a comprehensive residential development including portions of the sanitary land fill site. If proven necessary, a second golf course could also be provided immediately outside the planning area to the south or east. This facility could be planned in conjunction with the ponding reservoirs which could be located in these areas.

In accordance with the philosophy and intent of the Parks Master Plan the Mill Woods Development Concept utilizes a two level system of open space in order to provide good access to park and recreational facilities for all future residents. The first level, as outlined previously, is the district park facility, servicing a population of some 40,000 to 60,000 inhabitants. These district parks are planned so that they possess convenient access both by arterial roadways and public transportation. The second level facility is the local park situated centrally within each neighbourhood unit within walking distance of each dwelling and serving approximately 5,000 residents. The use of parks space in combination with school facilities on both the neighbourhood and district level should be encouraged i.e., the public or separate elementary school with the neighbourhood park and the senior high schools combined with the district park. It should be noted that no provision is made for park



space on a community level although some recreational facilities such as shell arenas and curling rinks could be included in community centre complexes close to shopping and junior high school buildings.

For the total planning area the Development Concept recommends two district parks located so as to provide reasonable access to all the residents of Mill Woods. Located in the northeast quadrant, one of the district park sites will be situated adjacent to the Mill Creek Ravine and thus reinforce this natural feature. The other district park will be centrally located to serve the southerly portion of the planning area.

Being district level facilities these two parks will accommodate the major recreational elements in Mill Woods – each supporting a covered artificial ice arena, a swimming pool, a recreational building associated with either the senior high school or social service facilities. The possibility also exists that a "Class A" track, and a ski hill could be incorporated into final park designs.

In terms of area each district park site will require between 85 and 100 acres of land (*between 34.4 and 40.5 hectares*). This total will include the playing fields of the adjoining public and separate senior high schools. If warranted by detailed design analysis, junior high schools facilities could also be associated with the district parks. The acreage requirement for the district park would be raised accordingly. Such joint use of open space would provide efficient land use reflecting economies of scale. This development objective should be employed at the implementation stage.

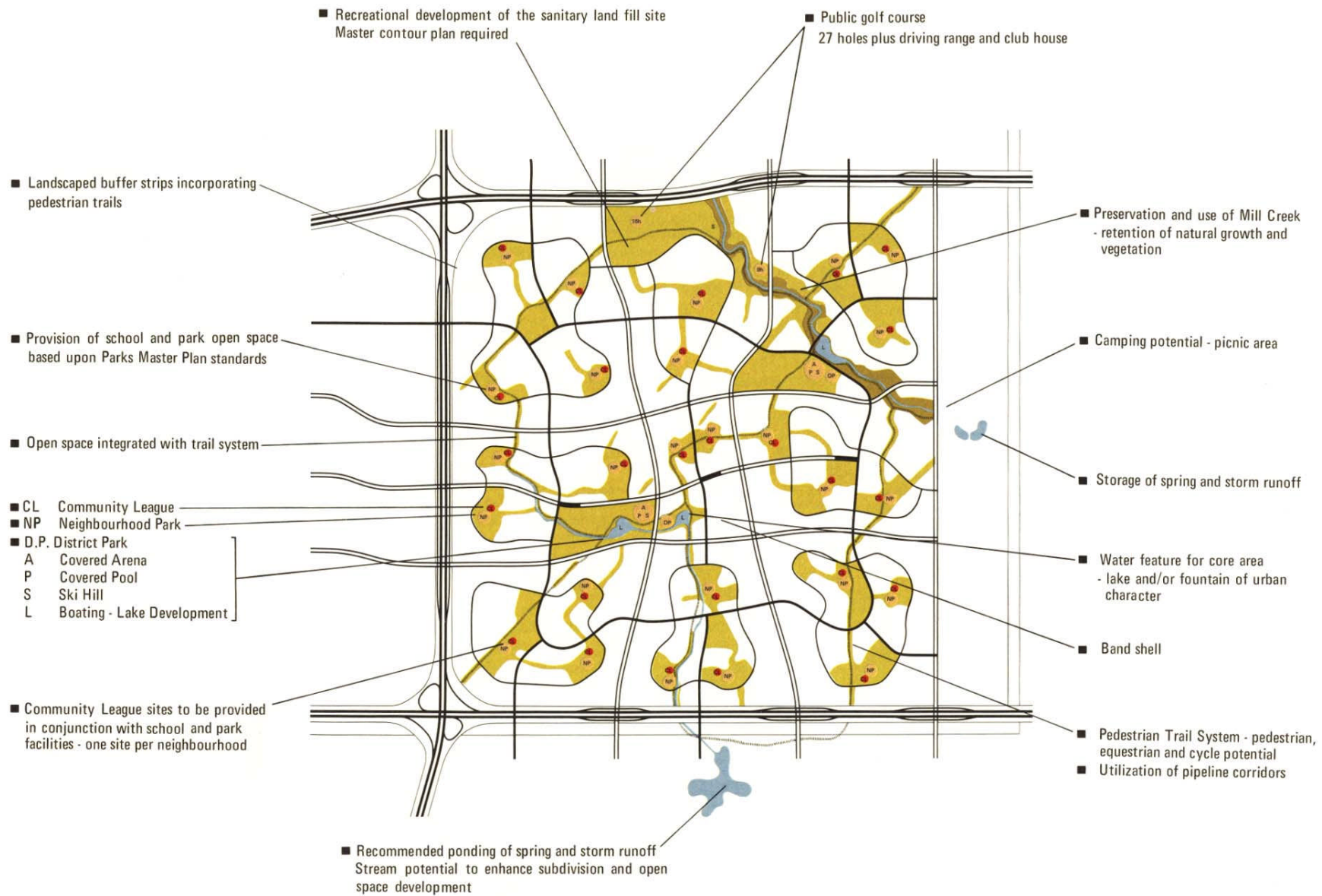
To enhance the residential environment, allocation of small "park-ones or mini-parks" interconnected with major walkways and serving house groupings within each neighbourhood is recommended.

Another special area requiring allocation of open space is the town centre. Open space here should provide strong visual stimulation and be integrated with a comprehensive core design.

Subject to detailed design considerations and correlation to land sales policy and total open space provision under public control will approximate 530 acres (*214.5 hectares*) or 8% of the total planning area. This figure relates only to publicly owned open space available for use by all residents.

Every effort will be made under detailed neighbourhood planning to encourage provision of open space amenities either by specific development projects or on a neighbourhood basis, through imaginative design relating to density control, new building forms and transportation systems. The maintenance and use of such open space generated by good design over and above mean standards, would be subject to detailed analysis and negotiation. Due consideration to valid commercial ventures providing or incorporating recreational facilities, will be stressed. The desirability of Mill Woods as a place to live will depend to a very large degree on provision and development of open space.

Amended by Editor



4-6 Open Space and Recreation

Educational Facilities

Since learning must be recognized as one of the key prerequisites for a community to meet social objectives, the choice of community structure as identified by the Development Concept has been strongly influenced by educational considerations. Convenient access and maximum use of all school facilities are basic to the concept.

With the concurrence of both the Separate and Public School Board Planning Staff, the concept identifies the provision of school facilities in accordance with population density levels and current student generation ratios as related to the anticipated housing mix for the Mill Woods Community. Considerable latitude is available for increased school enrollment without requiring amendments to the basic allocation and number and type of sites. For instance, public elementary school size can fluctuate between 16 and 24 classrooms and still meet normal administrative and operational requirements of the School Board.

The recommended physical size of neighbourhoods relates specifically to the limited mobility of younger school students, balanced by the requirement to create economically viable school facilities. It is also necessary to correlate the need for school and park land requirements against normal reserve dedication procedures to ascertain if serious shortages will occur. The provision of sites for the three classifications of school facilities, that is the elementary school of grades one to six, the junior high school of grades seven to nine and the senior high school of grades ten to twelve, supports and emphasizes the community structure of Mill Woods. Consequently, a public elementary school is situated at the geographical centre of each neighbourhood within easy walking distance of every student.

Due to a substantially smaller student enrollment, the Separate School Board requires between 113 to 112 of the facilities of the Public School Board. For example, in the first community in Mill Woods, the Separate School Board will serve two neighbourhood units with one elementary school site.

Public transportation routes and pedestrian walkways are located so as to provide convenient means of reaching school. Safety and convenience for the small child in addition to the encouraged use of school facilities by the community are key objectives to be reflected by the siting and location of school buildings.

The secondary level of school facility or the junior high school, will be located adjacent to the community shopping centre and related institutional uses forming a community hub or nucleus. As the concept is based upon the principle of a community consisting of either three or four neighbourhood units, both the public and separate junior high schools provide for a population of between 15,000 and 20,000 persons. Due to the increased distance pupils must travel to reach the school, sites will be located adjacent to the public transportation system routes servicing the community.

The third level or the senior high school, is provided for a basis of need and current administrative policy which stresses efficiency through consolidation. Recent trends have seen a trend toward large consolidated high schools,

usually located on a joint campus site with other major educational and recreational buildings to effect maximum efficiency through shared facilities, although this concept is now under serious scrutiny by both systems. The Mill Woods concept provides for two senior high locations, combined with District Park and Athletic facilities. Each site will accommodate public and separate high school buildings. Allocation of a third site can be easily made within the central town core should the anticipated need for special secondary educational facilities be confirmed during later stages of implementation.

With increasing enrollment for adult education courses, coupled with a broadening range and extent of leisure activities, the Mill Woods community could well warrant a community college site in future years. The concept recognizes this possibility by suggesting a reserve site in the easterly half of the community, which if proven to be unnecessary at the time of development, could revert to other institutional use or residential purposes. The characteristics of such a site would be primarily dependent upon the character of the institution and the curriculum offered — therefore two alternative sites are identified. A compact urban campus would be more ideally suited to a central core location in close association with the other major cultural, commercial and institutional land uses and serviced by fast convenient public transit facilities. Alternatively a spacious open campus would be obtainable close to Mill Creek where the natural features of the site offer marvellous opportunity for site planning and institutional design.

Although from the educational viewpoint, the Development Concept has been structured on current organizational and operational standards of the public and separate systems, it would be naive to expect that no change will occur during the development period of the project pertaining to educational standards and techniques.

The following points emphasize the need to maintain a flexible design approach capable of adapting to changing circumstances:

- Current political and public concern of the spiralling costs associated with educational programs and services. Meaningful attempts by the Provincial Department of Education to check and control attendant expenses may influence future school board planning policy.
- Internal review of the validity of conventional teaching techniques and sizes of facility by administrators and educationalists. Experimental projects incorporating open classroom, building design and function, and use of the community as a classroom, all indicate a changing emphasis from structured, rigid curriculum to freedom of choice and individual expression of the student.
- The tendency for a lower age for school enrollment, coupled with increasing pressure for kindergarten programs, may significantly increase the floor space required for school buildings to adequately meet enrollment, which in turn may affect school and site size requirements.

- Growing public interest for community use of schools following completion of usual day time school activities. Increased leisure time may dictate that the community at large must make best use of all available resources to meet the future needs of its citizens on a sound economic basis. Evaluation of several pilot projects based upon this principle will undoubtedly influence future administrative policy in this regard.
- Possible new building techniques whereby modular schools could be erected on the basis of need, readily adaptive to changing student enrollment and educational programs. As a temporary solution, greater dependency between schools is anticipated so that enrollment fluctuations can be dispersed placing emphasis on transportation systems linking site locations.
- Increasing emphasis and utilization of electronic teaching aids. Already Edmonton has one educational T.V. channel with every indication that such techniques will supplement current programs to an ever increasing degree with corresponding effect upon future physical requirements of the school systems.

It is anticipated that normal telephone and power servicing procedures would incorporate the provision of co-axial cable at the time of initial service connection. This would allow maximum flexibility for Mill Woods residents to obtain immediate access to commercial cable television programming in addition to possible educational television innovations in the future.

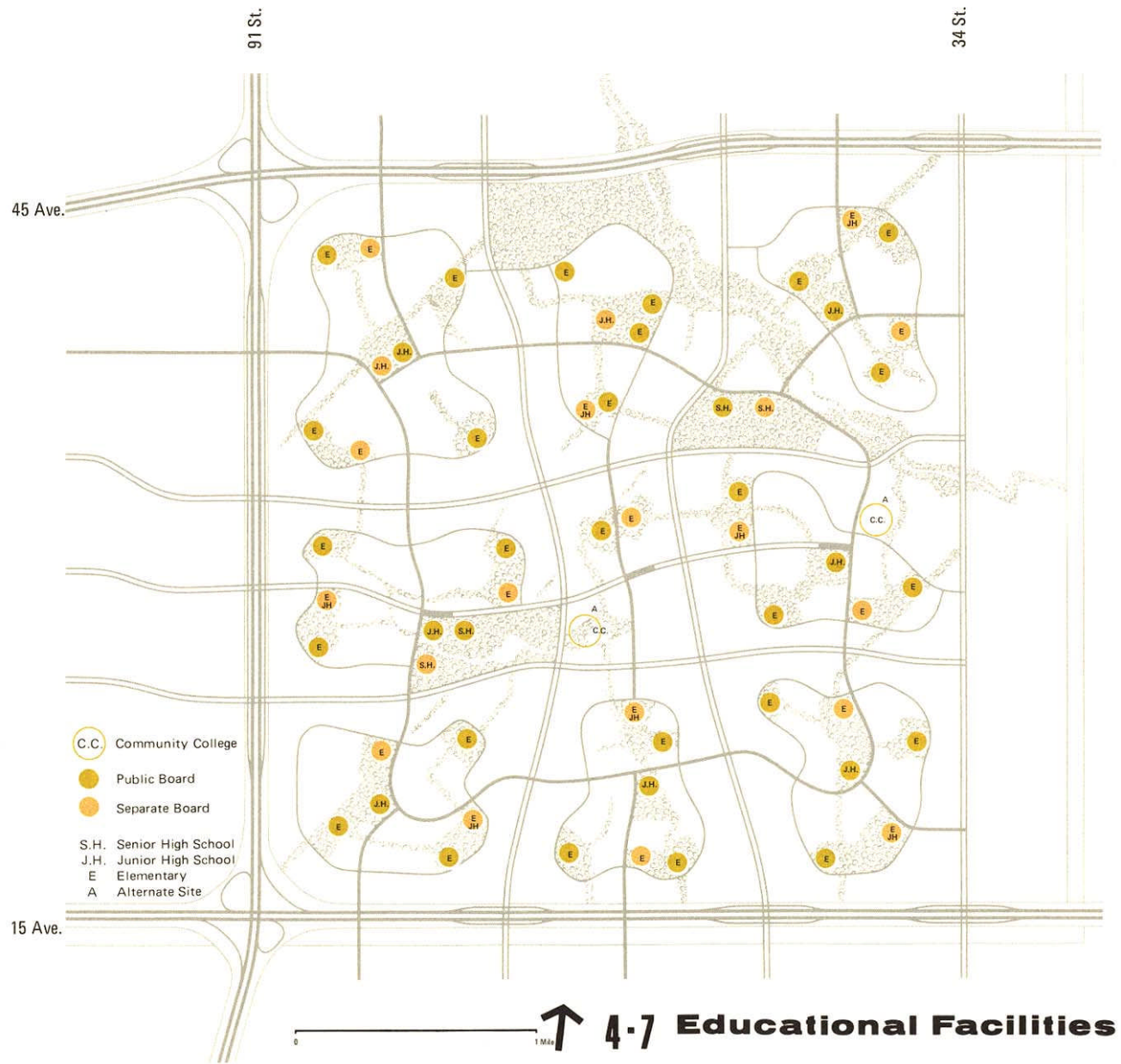
The projected ultimate population of Mill Woods of over 120,000 persons, indicates a potential school enrollment of approximately 13,000 elementary students, 6,000 junior high students and 4,500 senior high students in the public school system with 5,900 elementary, 2,700 junior high and 1,600 senior high students under the separate school system. To meet this projected enrollment, the Development Concept recommends allocation of 26 public elementary schools, 17 separate elementary schools, 8 public junior high, 8 separate junior high, 2 public senior high schools and 2 separate senior high schools.

Although the number and type of sites could remain constant over the development period, a reasonable degree of flexibility can be achieved due to the different size of schools which can be planned in response to specific neighbourhood and community design relating to housing mix variations as may be warranted by market conditions and economic considerations.

The ongoing detailed design process must correlate school needs to overall density, provision of open space, housing mix and pertinent educational and administrative requirements. As long as the basic principles of allocation of school facilities are met to the satisfaction of the school boards, considerable design flexibility is inherent under the Development Concept to allow for innovation and imaginative design solutions. Thus, size of the school site required for a specific location would be generally based upon the mean acreage requirements as identified by the Master Plan of the Parks and Recreation Department. Since size is directly dependent upon realization of joint use economics, each school site proposal should be discussed through the *Planning and Development Department* with the

school board involved and the *Community Services Department* to incorporate changing student generation ratios and current administrative policies.

From an educational viewpoint, the concept for Mill Woods recognizes the impact that advances in technology and communication can have on future city form and function. Educational and vocational patterns could be drastically affected, in turn influencing transportation systems. While it is not possible to accurately forecast how fast these changes may occur, it is prudent to incorporate current technological advances whenever feasible so maximum servicing economies can be realized.



Institutional Facilities

The plan allows for the provision of a wide range of institutional uses necessary to meet the needs of the Mill Woods residents specifically and those of the southeast sector of the metropolitan area generally. These facilities will range from a major health complex based on an active treatment hospital to a fire hall.

The development concept allows considerable flexibility in siting the required institutional uses as the central core communities, being serviced by excellent road and public transportation facilities, offer a multiple choice of acceptable sites. To a large degree, timing of development will ascertain priority determination. Facilities required within a relatively short period, such as five years, will obviously have to relate to the accessibility of services and the initial development stages. An extended time period would allow consideration of appropriate sites in either the central or easterly sections of the linear core. For this reason, alternative sites have been indicated, unless a specific location is required to meet the administrative policies of the sponsoring agency. This is the situation for both the Library Board and the Fire Department who require definite locations so identified by the concept. The Library Board will operate a regional facility of some 20,000 square feet of space offering the Mill Woods residents major library services. A central location, directly associated with the cultural, recreational, and commercial elements of the town centre, is essential to obtain maximum utilization of the facility.

Similarly the plan identifies a specific location for a fire hall site in the westerly quadrant. This site is well located to give Mill Woods fast and efficient fire fighting service. Access to major community roads with convenient connection to southerly metropolitan residential and industrial districts will be achieved. Proximity to the major institutional uses in Mill Woods would also be realized. Interim fire hall facilities planned by the Fire Department are to be accommodated in the first subdivision pending availability and development of the central location.

Population estimates suggest that two health clinics and two social service centres would be required in accordance with current administrative policy. Logically, these facilities would be accommodated together in a joint use facility possibly combined with the recreational centres planned at the senior high school locations by the *Community Services Department*. Alternatively, the town centre may be preferable for one of the sites due to the large number of persons using town centre facilities on a regular basis. Consequently, all three locations are indicated by the concept at this time as there is a strong possibility that changes to current policy on the provision of social service programs will result from evaluation of the pilot social service project in the Westmount area. Ultimate decisions on location will be closely related both to the objective of having social services readily accessible to the user, and the possible integration of the social functions of Health, Recreation, Social Service and Education.

The major institution to be located in Mill Woods will be an active treatment hospital with a minimum size of 550 beds supported by a 200 bed auxiliary

hospital possibly on the same site. Here too, the hospital site could equally well be located in the westerly or easterly side of the central core. As the hospital will be warranted by population growth, the rate of development of Mill Woods and the other southerly development areas will greatly influence priority for construction. A site of some 25 - 30 acres (*10-12 hectares*) is required with convenient transportation services in close proximity, while respecting the environmental requirement of convalescing patients.

In addition to hospital facilities, it is estimated that some four hundred nursing home beds, will be needed to provide an acceptable level of service to the community. Such facilities, probably of 200 beds per building, would best be located adjacent to community centres, related to commercial, educational and other institutional uses.

As churches are permitted at appropriate locations within residential neighbourhoods, detailed plan implementation will assess need for sites and accommodate them as required, relating them to appropriate land uses and circulation patterns. Interdenominational places of worship could be considered or alternatively individual church buildings could be grouped on a common site strengthening community or neighbourhood centres. Due to the multiplicity of denominations and the varying characteristics of the sites required, many individual sites will be required throughout the residential neighbourhoods of the community.

While there is little doubt that many institutions will seek to locate their facilities within the Mill Woods community due to relative availability of reasonably priced land, it is impossible to forecast the type or extent of institutional uses. To meet the anticipated demand, the development concept has been kept as flexible as possible to incorporate individual sites as the need arises. The institutional content of Mill Woods can be expected to be somewhat greater than the City norm.

In addition to the incorporation of institutional uses into the framework of the new community, the Development Concept also stresses and endorses the current trend toward community use of schools. In this manner, valuable physical resources of the community are utilized to their full potential while encouraging community participation in the initiation of projects and service, thereby fostering communication and understanding among the various segments of the population.

Amended by Editor



Commercial Facilities

Market analysis indicates that the commercial structure required in Mill Woods should primarily meet the direct needs of the residents residing within its boundaries. Very little external trade is forecast due to the geographic location of the area and the lack of meaningful population densities to the south and east.

The proposed allocation of commercial space is designed to provide appropriate levels of service and opportunity for economical ventures on three levels consistent with the overall community structure. These levels of service are of a neighbourhood, community and town classification.

The major commercial element proposed is a regional centre providing over 1,000,000 square feet (92,903 *square metres*) of commercial and service floor space. This commercial element will be the key to the vitality and strength of the central core area around which major cultural, institutional and residential elements of the community can be functionally grouped. It is anticipated that a facility of this nature will attract national department stores as the prime tenants supported by specialty shops and service functions. Convenient comparison shopping at par with other Edmonton centres will be readily available to all Mill Woods residents once the centre has been developed.

In accordance with retail marketing trends emphasizing consumer convenience and comparison shopping, the Development Concept recommends that the second or community level of shopping facilities in Mill Woods consist of four commercial centres of 272,000 square feet (25269 *square metres*) each sited on between 15 to 20 acres (6-8 *hectares*). This size of site allows opportunity for comparison shopping facilities to be provided, meeting the needs of the residents located in close proximity to their homes. The concept advocates that these four centres be located in the north-west, northeast, southeast, and southwest quadrants of the planning area at sites where the secondary road system provides maximum ease of access to the sites. Comprehensive design analysis of each site will incorporate educational, residential, and institutional uses to achieve maximum benefit of interrelationship of uses and utilization of circulation systems.

As the third level of shopping facility, the Development Concept proposes small convenience stores each of some 2,000 square feet (186 *square metres*) in size. This neighbourhood centre type store parallels the corner store function providing basic daily necessities to neighbourhood residents. In most instances these shops will be sited on a one acre parcel providing service to two neighbourhood units, and be located on bus routes and roadway intersections if at all possible. Some 20 convenience centres appear warranted according to the economic analysis with a support population of 120,000 persons.

In the majority of cases, it is considered desirable to combine the

convenience store with service station locations which places the combined facility on community collector roadways, usually at an inter-section with a neighbourhood collector. In certain instances, due to relationship to community commercial facilities it may be desirable to locate the convenience store in neighbourhood centres. The size of these convenience stores is flexible as it may be advantageous to incorporate drug store and dry cleaning establishments upon detailed analysis. Although it is difficult to forecast the marketing trends for drugs due to possible changes in legislation, the current city dry cleaning experience would indicate that a pick up and delivery depot should be combined with each convenience centre facility.

There will be many service and secondary retail establishments which, although required to meet the needs of the residents, will be difficult to incorporate into regular shopping centres due to economic reasons. This type of use is now associated with typical strip commercial districts. Although outside of the purview of the immediate planning area, it will be extremely important for consideration to be given to the need for these uses and allowance made for their inclusion into the plans and development control procedures yet to be considered for the industrial districts to the north and west of Mill Woods.

The concept attempts to insure adequate provision of service station locations to meet the daily needs of the community and provide effective competition between the various oil companies. In addition to sites incorporated in the commercial centres, some service stations will be required at appropriate locations relative to the road system and traffic control restrictions. The current marketing trends of the major oil companies indicates the need to allocate sites for three main classifications of stations: the comprehensive service centre incorporating car wash facilities on a site of some two acres or more, the community station of four to six bay capacity on a site of one acre and local station of two to three bays on a site of one acre.

In accordance with these requirements, some twenty-one neighbourhood service station sites are identified by Map 4-9 which will be incorporated into the detailed subdivision plans to be formulated at a later date. Adequate provision for the larger service station facilities will be met by allocating space for each type of facility at the community and regional shopping centres respectively.

Although it is hoped that major industrial and research firms will locate and develop in close proximity to Mill Woods on the approach roads through the industrial districts, the demand for office space to meet specific community requirements is not considered sufficient to allocate land within Mill Woods for this specific purpose. Office space provision can be incorporated into the commercial shopping centre sites either as free standing buildings or as vertical office towers constructed over a retail commercial base. Similarly dental and medical clinics can be successfully accommodated by detailed plan implementation of the community and regional centres.

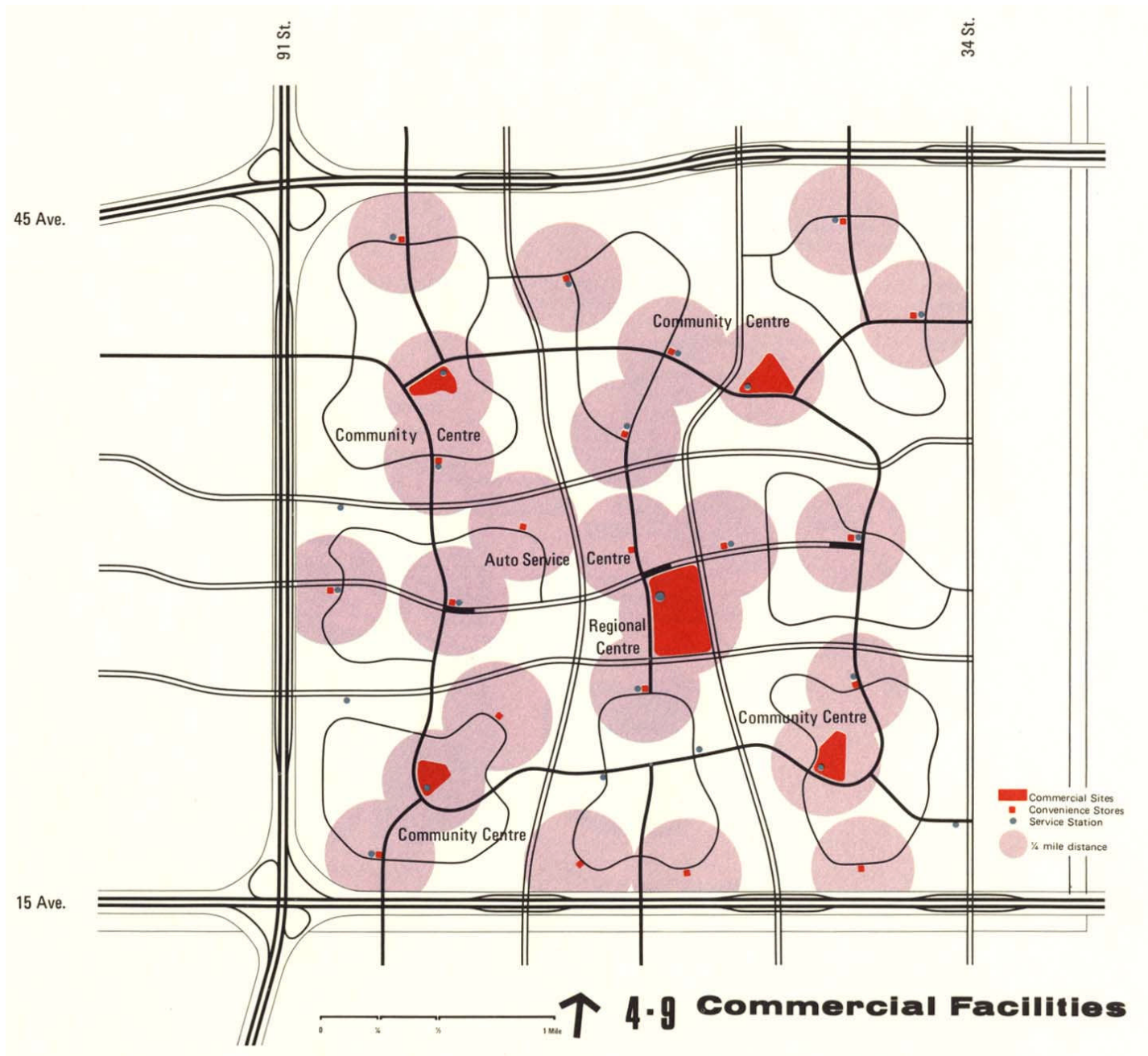
Amended by Editor

MILLWOODS COMMERCIAL FACILITY CONFIGURATION
(Amended by Editor)

TYPE	NO.	G.L.A / FACIL ITY	TOTAL G.L.A.
Regional	1	@ 1000,000 sq. ft. / 92,903 sq.m.	1,000,000 sq. ft. / 92,903 sq.m.
Community Centre	4	@ 272,700 sq. ft. / 25,334 sq.m.	1,090,900 sq. ft. / 101,348 sq.m.
Convenience Stores	20	@ 2000 sq. ft. / 186 sq.m.	49,000 sq. ft. / 4,552 sq.m
Auto Service Station	1	@ 1200 MC	
Service Stations		450 MG	
Community Level	4		
Neighbourhood Level	19		

MILL WOODS COMMERCIAL FACILITIES
MINIMUM ACREAGE REQUIREMENTS 1991
(Amended by Editor)

ACRES / HECTARES REQUIRED				
	BLDG. AREA	PARKING AREA	SERVICE STN. AREA	TOTAL AREA
Regional Centres	6.0/2.4	51.0/20.6	1.0/0.4	58.0/23.5
4 Community Centres	8.0/3.2	64.0/25.9	4.0/1.6	76.0/30.8
14 Convenience Stores	0.7/0.3	1.4/0.6	7.0/2.8	9.1/3.7
	14.7/5.9	116.4/47.1	12.0/4.9	143.1/57.9



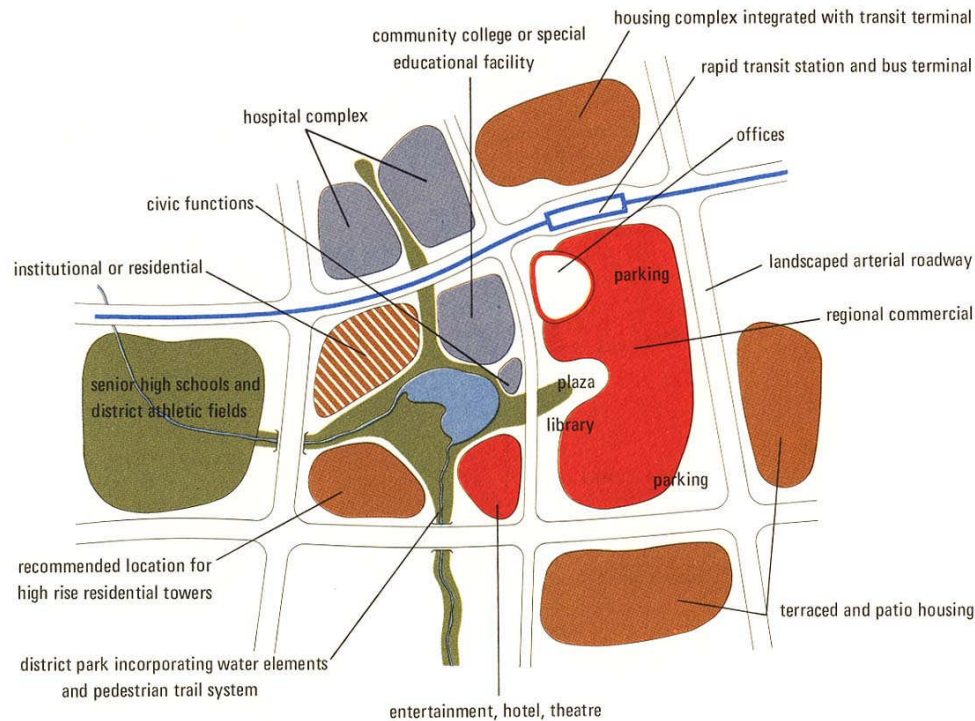
Town Centre

Vital to the new community will be the proposed town centre for it will determine to a large degree the pulse of activity, and provide a focus for all major community activities. Comprising some 250 acres (101 hectares) of land, the centre has been located so as to be directly served by the major circulation systems as well as current and future public transportation networks. Intense use of land allowing exciting architectural design solutions will permit new forms of personal transport, such as moving sidewalks. The design for the central core complex will stress functional linkage with preservation of human scale. Open space design in combination with well planned pedestrian walkway systems will link the various elements together into a compact efficient urban form. A multiplicity of use is envisaged, allowing vitality and diversification of environmental quality. A high design standard must be stressed for the town centre accompanied by comprehensive site planning. Special features will be incorporated providing community identity and stimulation.

Anchoring the centre will be the regional commercial complex which will require in excess of 60 acres (24 hectares) of land, subject to final design study. Modest analysis indicates that in twenty years time the residents of Mill Woods will support over one million square feet of floor area for commercial and service uses in such a facility. Office space, auxiliary service buildings and dental and medical clinics will be incorporated into the centre. Uses can be related to open space by contemporary design solutions, for instance restaurant and entertainment facilities may be extended over the recommended lake. Emphasis should be placed on design components such as colour and texture in construction with dynamic elements such as flag poles and fountains and waterfalls to further inject liveliness, excitement, and vitality into the pedestrian concourses.

Amended by Editor

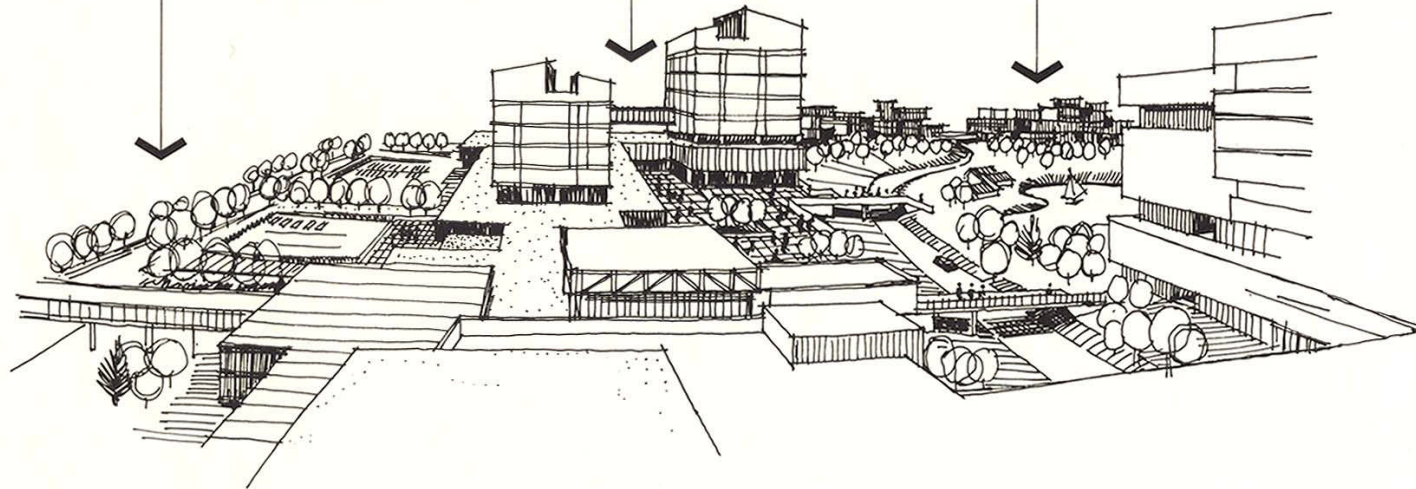
The central core area will establish the quality and character of the Mill Woods community. An unparalleled opportunity is presented to achieve both urban design of the highest order and maximum benefit to related functions and activities. The Mill Woods residents will look to their town centre for stimulation and enjoyment. Every effort should be directed to achieve this result.



Major parking areas depressed and screened by trees and berms. Pedestrian circulation facilitated by direct connections to shopping mall. Separate access for service vehicles.

Major commercial complex with outdoor plaza for community activities, concerts, exhibitions, open-air market.

Compact low rise high density housing surrounding core elements and recreational facilities.



Major Shopping Complex In Central Core

Employment

The Mill Woods community will offer a wide range of employment opportunities concentrated in educational, institutional, and commercial complexes. Immediately adjacent to the community, extensive industrial land, located to the north and west will provide further future job opportunities. While these industrial districts are not yet developed, it is anticipated that substantial industrial and service projects will be initiated shortly after the first residential areas of Mill Woods are serviced and inhabited. These industrial uses, which will supplement the existing plants located in the Marathon Industrial Park, will generate jobs requiring a variety of labor skills, thus providing economic opportunities for white and blue collar workers, male and female. It is anticipated that a substantial number of workers residing in Mill Woods will be able to find employment either within the Community or in the adjoining industrial district, which could result in reducing their transportation requirements substantially.

Work force estimates for Mill Woods would number some 40,000 persons, who are expected to follow similar home to work relationship patterns as established by workers residing in other southeastern residential districts of the City. Present employment distribution patterns indicate the majority of workers, some 36%, find employment in the central business district, followed closely by 9% in the University area, the major industrial areas in the central south side with 8%, and 7% in southeast. The remainder will tend to scatter throughout other city districts.

This premise reinforces the need for Mill Woods to have good public transportation links to major employment centres and road connections to adjoining industrial and residential districts.

Although it would appear that the prospective home purchaser tends to buy without regard to his place of employment, the Mill Woods Development Concept attempts to encourage a balanced social and economic community within the limits of practicality and feasibility given the proximity of major industrial districts.

The Development Concept excludes the allocation of industrial land uses within the boundaries of the Mill Woods community due to extensive industrial districts abutting to the west and north. As the Mill Woods community is another growth area within the City, it is only of academic interest to attempt to identify a correlation of job opportunities to place of residence. In this respect, the area will not differ from any of the other major growth areas in Metropolitan Edmonton. While full internal employment opportunities within the Community would be advantageous, practical considerations preclude this as being a realistic objective.

The Development Concept does, however, propose the establishment of major commercial and institutional facilities within the boundaries of the plan to ensure that as many of the service needs of the residents can be provided within the community as is reasonably possible. Major health facilities, comprising an active treatment hospital, an auxiliary hospital and two or more nursing homes are contemplated. Special educational complexes will

probably be required, possibly including a community college campus.

In meeting the institutional service needs of the residents, considerable job opportunities of varying types will result. These major institutions will complement the normal educational facilities of the elementary, junior high, and senior high levels of both the public and separate school boards. Preliminary analysis indicates that the institutional-educational sector will create job opportunities for some 4,900 persons.

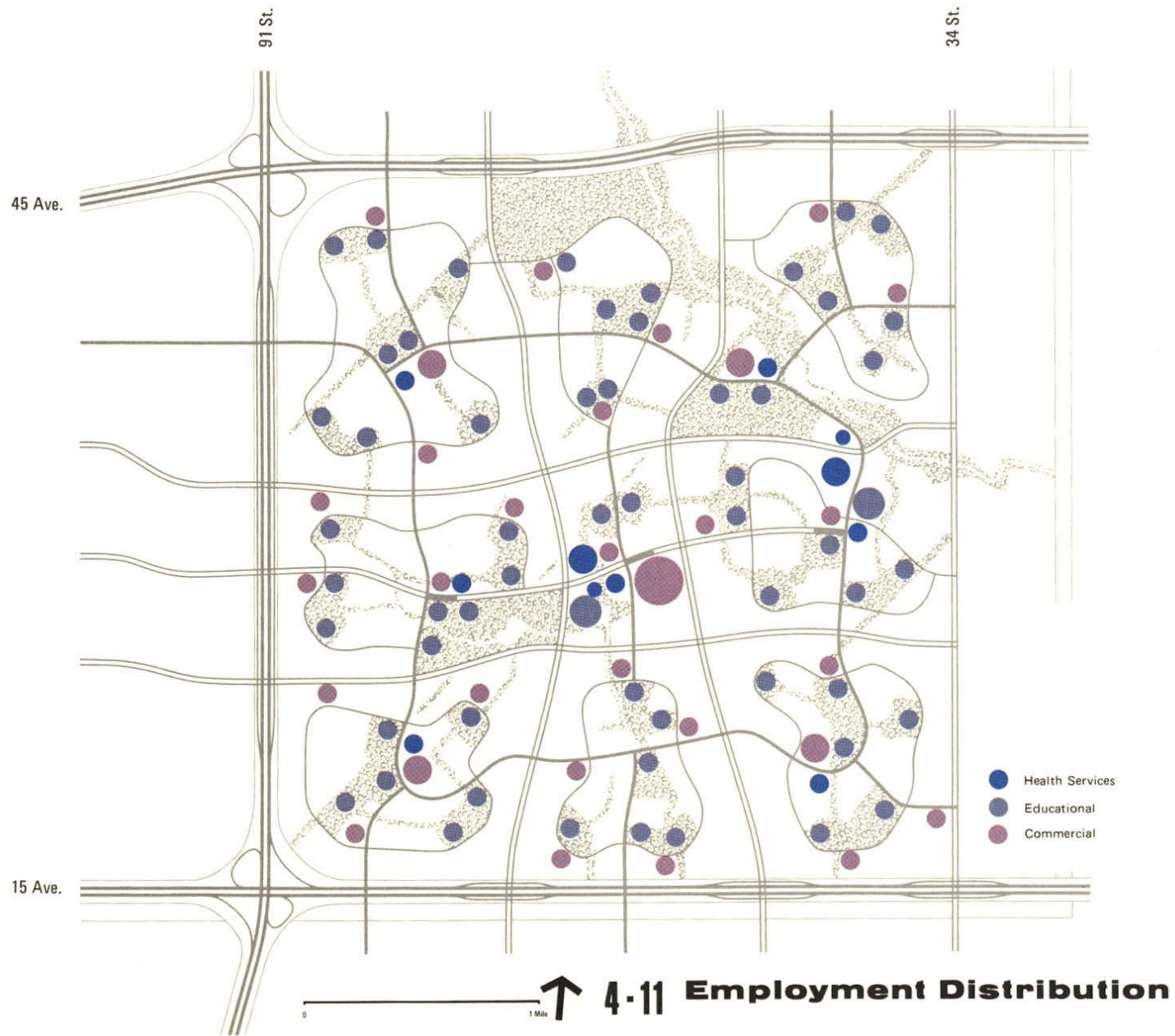
Major employment concentrations will be located at large institutional sites and at the proposed town centre, all supported by regional road connections and public transit service. The town centre will provide approximately 4,300 jobs. The industrial portion of the land assembly program, separated from residential uses by the proposed extension of the White Mud Freeway (145 Avenue), will generate in excess of 100 acres (40.5 hectares) of land, suitable for high quality industrial enterprises.

Within the new community, there will be over 10,000 job opportunities for both full and part-time employment. A substantial range of skills and training, both professional and technical in nature, will be required as the adjoining industrial districts develop. Hopefully this will encourage a diverse range of people to reside within the Mill Woods community, helping to achieve a representative population mix.

It has been estimated that approximately 6,700 people of the total resident work force will obtain employment within the community. This will mean that some 33,300 workers, who reside in Mill Woods, will journey to work in other parts of the metropolitan area and that some 3,300 external workers will travel daily into Mill Woods to work.

Amended by Editor

EMPLOYMENT STATISTICS: MILL WOODS	
Total Employment Potential (internal) :	10,167
School Employment: (excluding community college)	2,305
Commercial Employment:	4,398
Health Services:	2,615
Total Labour Pool (internal): from 120,000 population	40,000
Downtown Work Force:	12400
A. *Internally Employed: projection (in Mill Woods)	6,778
B. **Externally Employed: projection (in Mill Woods)	3,389
Percentage Employed Internally:	17%
Employed Throughout City at Large:	21,222
Potential Employment in South Industrial:	800
Number Employed from Mill Woods:	240
*Internal Employment Estimate	
**External Employees Working in Mill Woods	



Servicing

As with any major residential project, the provision of utility servicing becomes a major concern, both to the civic administration in regard to an efficient and economic servicing program and the resident, who expects convenience in addition to quality service. The co-ordination of engineering works become of critical importance in the initial stages of development due to the conflicting requirement of available road rights-of-way between vehicular traffic and underground utility construction. The accompanying maps indicate on a schematic basis, the proposed major servicing alignments as required by civic utility departments.

Storm and Sanitary Sewer

Initial servicing and subsequent staging of development in Mill Woods is largely dependent upon the availability of storm drainage due to the relatively high cost of providing deep sewers in comparison to other utilities. A tunnel will extend east from the White Mud Creek scene three and one-half miles to 91 Street to provide the necessary drainage for the first stages of development.

As indicated, the major sewer alignments focus on the intersection of the White Mud interceptor with 91 Street on the westerly boundary of the community. The main sewer leads follow the natural contours of the land extending into the various quadrants of the plan. The primary line is the extension of White Mud interceptor proceeding east approximately a mile, then running in a southeasterly thence northeasterly direction until it reaches the easterly boundary of the Mill Woods community. These main interceptors will vary in size depending upon the capacity required.

The initial storm line to service the first stage of development will extend north from 32 Avenue to 40 Avenue, thence running east to 66 Street. Development subsequent to neighbourhood one will necessitate the extension of the White Mud interceptor to the east in accordance with the overall sewer servicing program.

The storm drainage system will respect the two natural watersheds. The initial sewer system draining west with the northeasterly quadrant of the plan draining north via Mill Creek. When this later stage is ready for development, special engineering and planning studies will be required to solve the provision of storm sewer service without destroying the natural beauty and amenities of the Ravine. Preliminary analysis would suggest the feasibility and desirability of using the arterial road alignments in preference to ravine bottom land.

Tentative study has also indicated that it will be feasible and desirable to consider storing storm and spring runoff in reservoir sites located immediately to the east and south of the planning area. Existing gravel and sand pit workings provide good locations for ponding sites. Controlled discharge rates would ensure a continuous flow of water in the creek during the summer months. In addition to the creek flow, an artificial water course would then be possible extending through the southerly quadrant of the plan connecting to lake sites or water elements in the central district park and/or town centre.

The difference in elevation is sufficient to allow the creation of small waterfalls, which in addition to providing a visual attraction would serve to aerate the water.

Following completion of initial lines, interceptors will be progressively extended in accordance with land marketing policy, rate of development, and preparation of detailed subdivision plans.

Water Distribution

Due to its relative height to the City proper, a secondary water system operating at a pressure higher than the main City primary system will service Mill Woods. The permanent supply system will focus on a major transmission main located on 35 Avenue, initially extending from the 106 Street feed main, but ultimately connected to the proposed New West End Water Treatment Plant.

Upon reaching Mill Woods, a distribution system located along major roadway alignments will be looped to guarantee availability of service. The distribution system will be comprised of pipe varying in diameter depending upon capacity required.



The major requirement for the system is a new two cell reservoir to be located within a half mile of the intersection of 91 Street and 35 Avenue, west of 91 Street. The first cell will be required as soon as 20,000 persons are residing in Mill Woods. A 5-6 acre (2.0-2.4 hectares) site will be necessary to accommodate this facility. Water from the new reservoir will be pumped into the primary distribution main at a pressure of 70 pounds to insure adequate pressure through the system, with the exception of the extreme southeast corner of the plan where the difference in elevation will probably require an inline booster pump.

Natural Gas

By agreement with the City, natural gas service is provided by Northwestern Utilities Limited who install all facilities required for distribution purposes. In view of their high pressure pipeline transversing the northwesterly portion of the planning area, the company plans to construct a permanent gate station west of 91 Street, which will probably serve the industrial area as well as the Mill Woods community. Interim serving of the first subdivision will be obtained by the temporary measure of tapping the high pressure pipeline.

Following pressure reduction to medium levels at the gate station, a distribution grid system will follow primary and secondary road alignments. To provide house service a further reduction from medium to low pressure is required which necessitates provision of small substations as indicated at various locations on the grid. These sites will be co-ordinated into detailed plans under the ongoing implementation and planning process.

Telephone Service

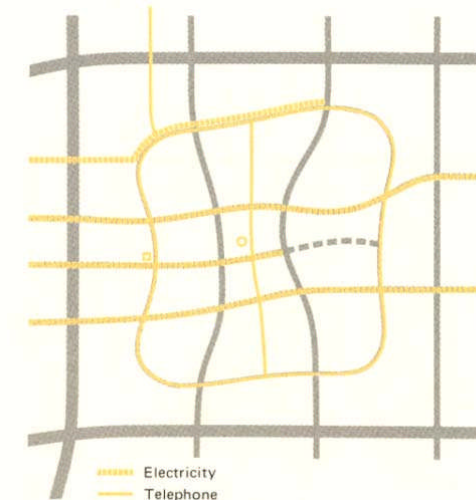
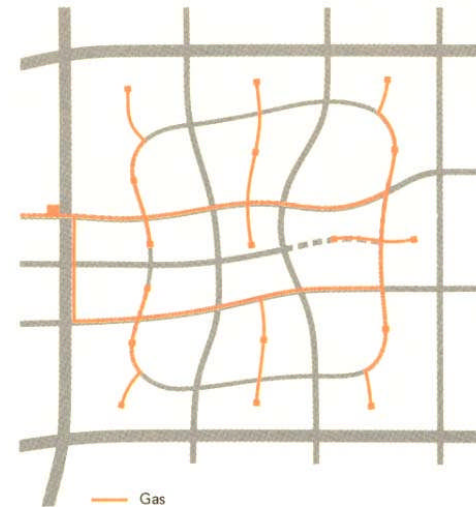
The Development Concept was prepared during the summer of 1970, upon the assumption that the new community would be serviced by Edmonton Telephones, following annexation of the area into the City. As Alberta Government Telephones may service the community, the provision of telephone service facilities remains subject to clarification. A possible exchange site, located at the geographical centre of the area, has already been acquired by Alberta Government Telephones.

If Edmonton Telephones obtains servicing jurisdiction, a looping distribution system of buried distribution telephone and coaxial cable could be constructed on the alignment of the secondary roadway system. This master distribution system would be comprised of trunk lines, subscriber lines and cable television transmission facilities. A two acre site for a wire centre would be required at the intersection of 25 Avenue and 86 Street.

Electrical Power

Edmonton Power will extend underground main feeds into the Mill Woods community, on alignments corresponding to the east-west alignments of the primary and secondary road systems as indicated on the accompanying plan. Future secondary circuits will be dependent upon detailed subdivision design. All power installations will be underground consistent with current servicing policies of the City.

Amended by Editor



Staging

The rate of development will be influenced by many factors but of primary importance will be real estate market conditions and the status of the economy. As one of the main economic objectives is to reduce the general price of housing through competitive marketing techniques, the development of Mill Woods must maintain a continual supply of building lots ahead of demand. Even so it is expected to take some 20-25 years to complete development of the area due to its massive size. The location of the initial subdivision is determined primarily by the availability of servicing, the major element being access to storm and sanitary sewer lines. Construction scheduling of the main outfall interceptor will permit the first neighbourhood to be connected in the fall. Due to the alignment of the deep sewer, the northwesterly quadrant of the plan was chosen for the location of the first stage of development. All other services are readily available on an economical basis although several utility corridors must be acquired through the yet undeveloped industrial districts to the west and north to connect Mill Woods to the existing service mains and utility alignments.

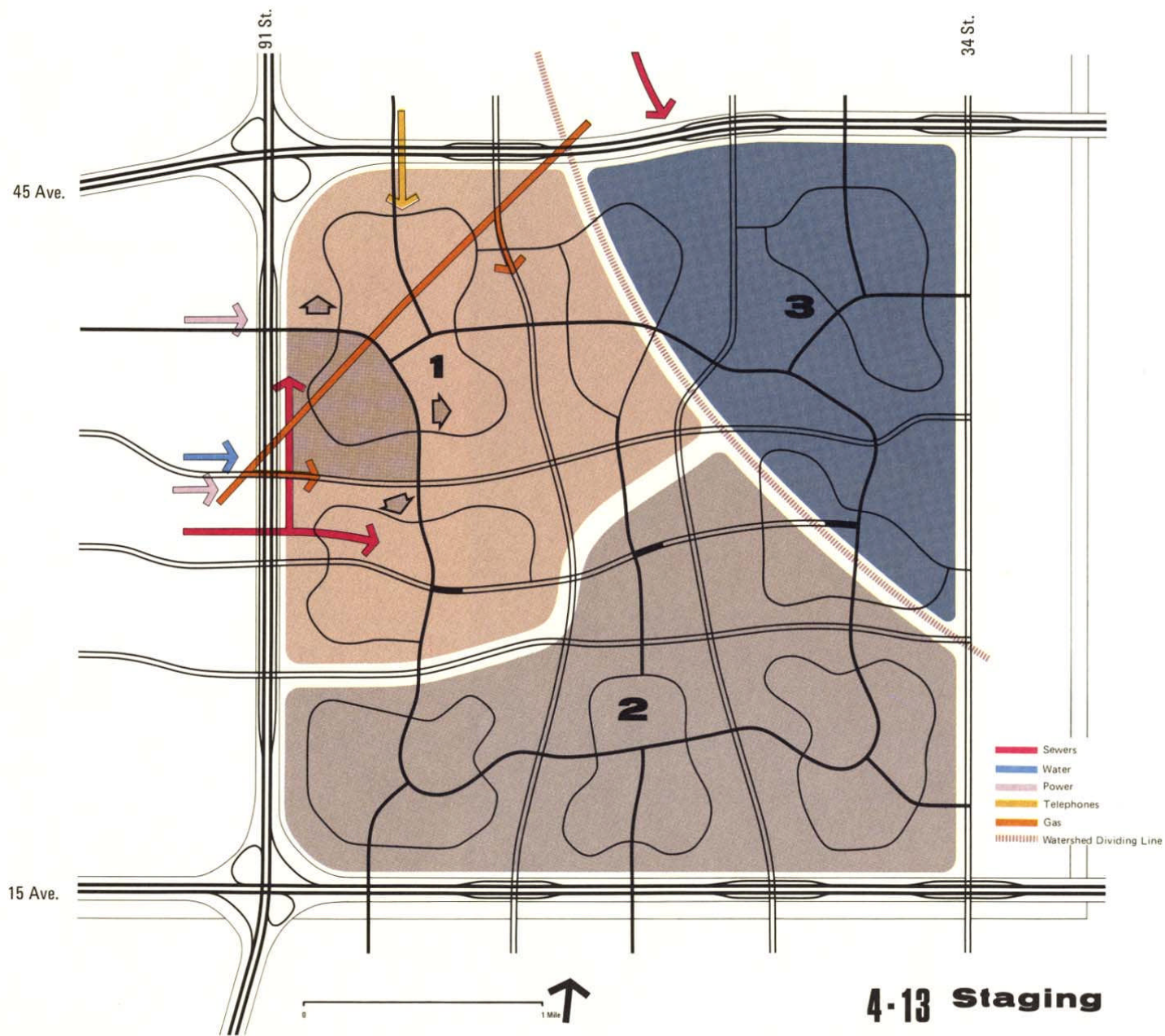
As illustrated on the Staging diagram, the Mill Woods Community is expected to develop in three major growth sequences, firstly the north-westerly and westerly quadrants, secondly the southwesterly, south and southeasterly quadrants, and thirdly the north, the northeasterly quadrants. Although the prime reason for this direction of growth is the presence of two watersheds, one draining west and the other draining north, sound planning principles also support this staging sequence:

- it is most desirable and beneficial from a community standpoint to develop neighbourhoods and communities as complete units as quickly as possible. In this manner, maximum utilization of community facilities is assured and a sense of community established at the earliest possible date. Sound marketing practices can be implemented, a wider range of housing provided, and a high quality community environment achieved.
- the Public School Board requires a senior high school site in Mill Woods for immediate development to ease a pressing space shortage in the south side of the City. It is of major advantage to have a major educational complex commenced with the first stages of residential development as this clear indication of public investment in the new community should greatly encourage consumer confidence.
- early development of the community centres incorporating commercial, institutional and educational uses will provide the residents of the first neighbourhoods with convenient service and foster pride of ownership and tenure in Mill Woods.
- a wider range of dwelling types and residential densities will be accommodated by the initial development stages, allowing greater adaptability to meet general market demands and to provide various forms of tenures of accommodation creating opportunities for families of all income levels.

- the initial stages of development are located as close as possible to existing city services, allowing maximum utilization of existing roads as interim access pending major roadway improvements being authorized and implemented.
- potential nuisance effects of the sanitary land fill site are minimized due to geographic isolation, allowing a reasonable length of time for an alternative site to be obtained prior to community development encroaching close to the existing location.
- phased growth of the Town Centre becomes feasible, further reinforcing evolving urban character and identity while providing facilities to meet the consumers' needs of the residents within the community as it expands.

Sound business practice will dictate that the project must be developed as quickly as is practical due to the extensive investments required to acquire and initially service the land. The City under the terms of the agreement with Alberta Housing Corporation must purchase all the land acquired over a fifteen year period. Regardless of the time so required to complete the project, the basic principles governing the direction of growth will remain valid and are advanced with confidence that little or no modification will be required.

The first three to five year staging program is the maximum extent of accurate forecasting as to the ongoing rate of development. Beyond that point, rate of growth will adapt to the current political and economic conditions responding to consumer demand, stated objectives of the project and costs of servicing.



OUTLINE PLAN

5

Outline Plan Summary

LAND AREAS

	Acres	%
Residential.....	2,652	47.7
Commercial	220	3.9
Schools	570	10.2
Open Space.....	230	4.1
Institutional	335	6.0
Major Roads	364	6.5
Internal Roads	1,185	21.3
TOTAL	5,556	100.0%

POPULATION

Northwest Mill Woods.....	19,000
Mill Woods West.....	14,000
Southwest Mill Woods	13,000
Mill Woods South	13,000
Southeast Mill Woods.....	13,000
Mill Woods East	15,000
Northeast Mill woods	13,000
Mill Woods North	10,000
Town Centre	10,000
TOTAL	120,000

OVERALL DENSITY

Gross Density	21.59 persons/gross acre
Net Density	45.61 persons/net acre

HOUSING COMPONENT

	Dwelling Units	%
Low Density Dwellings	11,200	38.2
Horizontal Multiple Dwellings	7,300	25.1
Vertical Multiple Dwellings	8,000	27.1
Public Housing Horizontal Dwellings	1,600	5.7
Public Housing Vertical Dwellings.....	1,200	4.2
TOTAL	29,200	100.0%

TOWN CENTRE

	Dwelling Units	%
Vertical Multiple Dwelling	1,500	32.5
Vertical Apartments	1,700	37.5
High-Rise Apartments	1,400	30.0
TOTAL.....	4,600	100.0%

SCHOOL SYSTEM

26.....	Public Elementary
8.....	Public Junior High
2.....	Public Senior High
17.....	Separate Elementary
8.....	Separate Junior High
2.....	Separate Senior High
1.....	Public Special Education
.....	Facility in Town Centre
1.....	Separate Special Education
.....	Facility in Town Centre

OPEN SPACE SYSTEM

26.....	Neighbourhood Parks
2.....	District Park
1.....	Town Centre Park
1.....	27 Hole Golf Course

COMMERCIAL (Gross Leasable Area)

1 Regional Centre	1,000,000 Sq. Ft.
4 Community Centres.....	1,168,000 Sq. Ft.
24 Convenience Centres.....	72,000 Sq. Ft.
TOTAL.....	2,240,000 Sq. Ft.

Offices	180,000 Sq. Ft.
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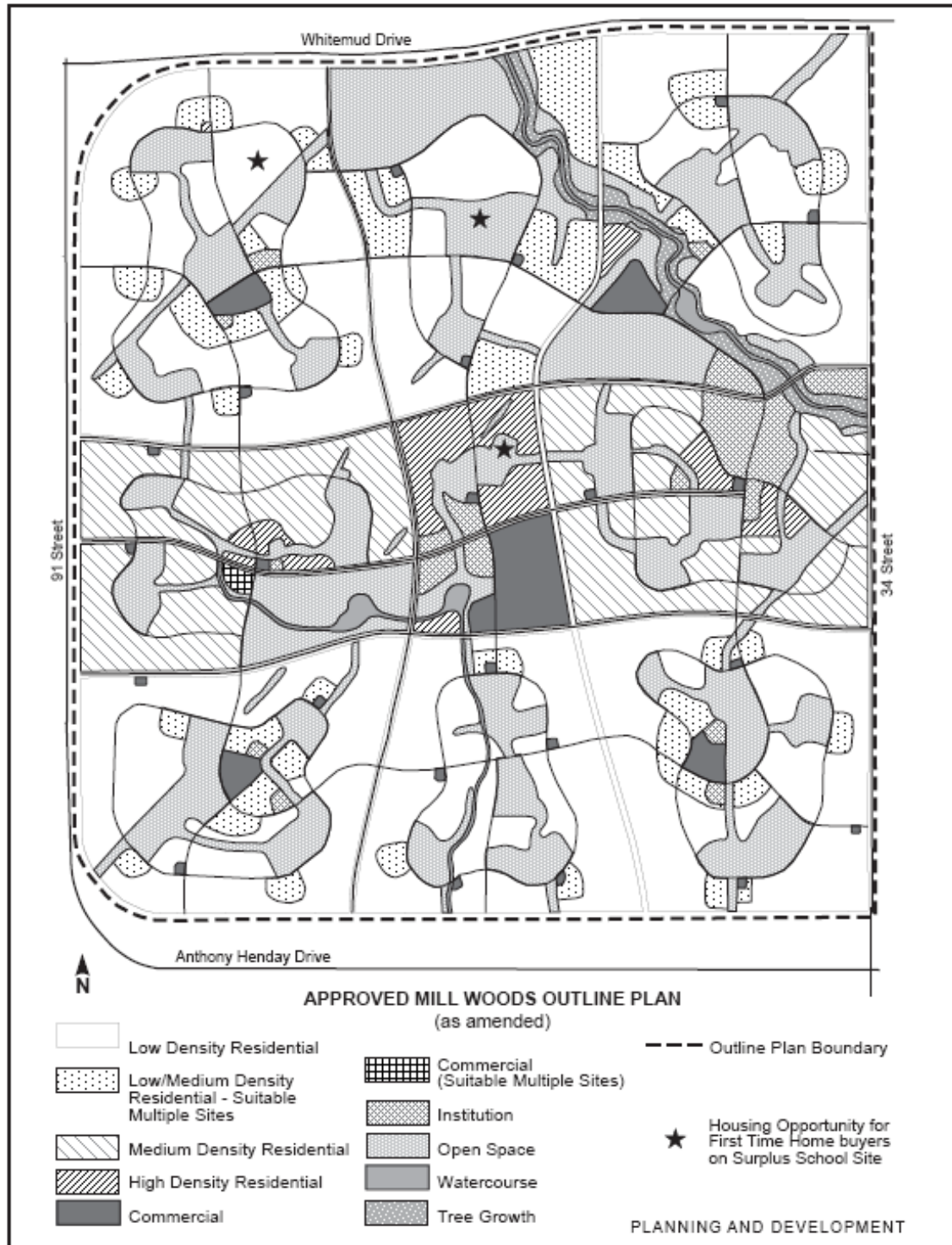
HOTELS – MOTELS

1 Hotel in the Town Centre

EMPLOYMENT

Estimated Work Force (30%).....	40,000 persons
Estimated Downtown (33%).....	12,000 persons
Estimated Mill Woods Employment Potential	10,000 + persons
Number of Persons Employed Internally	6,000 persons

FIGURE 5.1 OUTLINE PLAN
(Approved by Resolution, January 14, 2008)



Development Policies

Development Policies

The main physical development objective for Mill Woods is to achieve an urban environment of the highest possible order consistent with the economic goal of the project which is to reduce the general cost of housing. It follows therefore that consideration must be given to future actions required to implement the stated objectives of the Development Concept.

Administration

This project by reason of its size and complexity in effect creates a new role to be met by the civic administration, that of successfully developing and marketing a commodity in competition with all other privately sponsored development programs. Of primary importance to the success of the project from an economic, social and physical viewpoint, will be the administrative decisions reached to achieve the necessary co-ordination between the many diverse individuals and groups which will participate in the development of the community. Sound fiscal control will require the formulation and adherence to a critical path program backed up by economic analysis of cash flow and revenue. Effective co-ordination is especially important to relate the practical problems of implementation to the initial and ongoing planning functions and to modify each element as required. The planning approach assumed requires effective liaison and dialogue between all disciplines in order that all interrelated social, economic, and physical factors may be applied to adjudicate alternative planning and design solutions. Continual monitoring and feedback from the economic and social programs is required to allow proper program review and evaluation.

As indicated by the planning process diagram in the Purpose and Philosophy section, the planning and implementation stages of the project are directly related and should be administratively co-ordinated. In such a manner the civic administration can best parallel approaches taken by private enterprise which correlates all aspects of development programs from conception to construction. The adaptive or open ended planning process is advanced as the only realistic approach to reach development objectives for a project of this magnitude.

Even though the basic goals and objectives of the Development Concept will remain sound and valid over time, specific design solutions and economic and social programs must adapt to changing situations and circumstances. It is essential for the success of the project to achieve overall coordination through efficient and effective interdepartmental effort.

Design Policy

To achieve the main development objective of the concept, special emphasis must be placed upon the realization of high design standards. The City, through ownership of the land, possesses unique opportunity to achieve such a goal. To make optimum use of this opportunity becomes one of the major ongoing planning challenges and responsibilities. All possible techniques will

have to be evaluated for possible use and administrative policies formulated to best achieve the overall objectives. Design policies required for Mill Woods must stress the positive aspects of achieving good quality environment with appropriate design control procedures. This design responsibility may be assumed either internally by a planning team or through the use of consultants acting under specific terms of reference. In either event, many physical aspects of the future community require detailed consideration. These range from the major town centre core area elements to the micro-design assessment of street furniture. Maximum advantage could be derived from architectural competitions for the major elements of the plan. For instance, the town core justifies serious consideration of a national architectural competition to achieve the best possible design. Although other elements of the plan may not merit such importance, the overall environmental standard and quality will rest to a large degree on the attention given to detail. Design policies will be established following ratification of the concept report under the ongoing planning responsibilities. The City must lead the way by setting a high standard for all elements of the Plan under public sponsorship or control.

Landscaping

In addition to good design, landscaping is a key environmental component, for public opinion of the new community will be, to a large degree, dependent upon the visual impression given by the initial stages of development. Of special importance will be the public use areas and the transportation system alignments which comprised of parks, schools, buffer strips and medians, possess potential for effective landscaping treatment under ongoing Parks Department capital works programming. An ongoing development responsibility will be the evaluation of existing landscaping policies for publicly owned areas as well as serious appraisal of landscaping control techniques which could be applied through marketing and development control procedures.

Zoning regulation by density control may also offer real potential for achieving improved landscaping through bonus incentives to the private developer or builder. Technical information embodied with effective public relation programs would encourage private citizens to participate to achieve a high standard of planning for the Mill Woods community.

Action Recommendations

Upon analysis of the social, economic and physical objectives of the Development Concept, specific actions should follow adoption of the report.

RECOMMENDATION 1

that appropriate studies be undertaken to recommend what planning implementation resources are required to successfully fulfill the Development Concept objectives and how they should be administered.

RECOMMENDATION 2

to achieve the social objectives of the concept three steps are necessary:

- i) that the ongoing planning function incorporate a high level social input,
- ii) that the Human Resources Committee responsible for the West mount project be involved with detailed planning and implementation programing.
- iii) that appropriate procedures be established, such as social animators, with the residents of the new community to promote communication between residents and the administration.

RECOMMENDATION 3

to meet the economic goals of the project, detailed studies are required on the following points:

- i) cash -flow and capital budgeting,
- ii) market analysis for housing types,
- iii) City wide housing study to identify special need.