

Calgary North Phase 2 Community Plan



THE CITY OF CALGARY
PLANNING & BUILDING DEPARTMENT



Calgary North

Phase 2

Community Plan



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PLANNING & BUILDING DEPARTMENT

NOTE: This Adopt by Resolution includes the following amendments:

Amendment	Bylaw	Date	Description
1	M-2009-006	2009 June 01	a) Delete and Replace Map 2 "Concept Plan" b) Delete and Replace Map 3 "Open Space and Joint Use Sites" c) Delete and Replace Table 1 "Joint Use Site Requirement"

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ACKNOWLEDGEMENTS: The policies contained in the Calgary North Phase 2 Community Plan were developed through a consultative process involving landowners and their consultants, key City departments, school boards and others who will be directly affected by the Plan. The policies are specific to the Calgary North Phase 2 planning area. They reflect local context, special external influences and landowner aspirations and are not necessarily applicable outside the planning area.

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PREFACE

What is a Community Plan?

A community plan is a non-statutory planning document that establishes a framework for the development of new suburban communities. That framework is in the form of a set of plan objectives, a design concept and a comprehensive package of required and desirable uses, features and actions intended to ensure that the plan is achieved.

A community plan must achieve two things. It must implement the City's strategic planning objectives by promoting the design of communities that are more fiscally, socially and environmentally sustainable in the long-term (see Section 1.2 - Goals and Objectives). At the same time, it must be flexible so that developers can respond to prevailing market conditions and exercise creativity and innovation in design details.

This community plan is a non-statutory document but, once adopted, **it represents Council policy for the planning area** and is to be used accordingly in making development decisions.

Organization of the Calgary North Phase 2 Community Plan

This document is in two parts. Part I is The Plan itself and Part II is Supporting Information that is useful in understanding the plan.

Part I starts with a Vision of life in the Calgary North Phase 2 community when it is fully built out and functioning. Next, it sets out key public interest Goals and Objectives for the plan that are in keeping with that vision. Then, with text and maps, it explains the Design Concept and Organizing Principles for spatially arranging the major elements. Subsequent sections describe the Required and Desirable Uses, Features and Actions necessary to meet the intent of each element. Implementing the Plan describes information that may be required by developers submitting planning applications and how the various planning criteria should be used in making decisions on the plan. Finally, Monitoring the New Communities describes how the City intends monitoring the plan to identify if it is achieving the public interest goals and objectives set for it.



PART I: THE CALGARY NORTH PHASE 2 COMMUNITY PLAN

VISION

The Calgary North Phase 2 Community Plan area has over 24,000 residents and has become a successful and attractive suburban community. The mix of residents is reflective of the greater Calgary community – there are residents at all stages of life, living a broad range of lifestyles. Housing choices are abundant, ranging from estate, modest and affordable detached, semi-detached, townhouse and apartments. This variety enables residents to select a home compatible with their particular lifestyle.

The community's main meeting place is at the community core, where residents can shop, run errands, or attend community or school events. While the shops, including a food store and personal services are key attractions, residents also enjoy spending time in the core because it is designed for people. Whether residents have travelled by foot, bicycle, car or bus, once at the core, it is easy, safe and enjoyable to walk around. Higher density housing in the core is convenient for people who want to live close to shops and services, and helps to create a more vibrant place where activity continues even after the shops and services are closed for the day.

Streets and pathways link the core to the surrounding neighbourhoods. In most neighbourhoods, there is a neighbourhood node that serves as a local gathering place, and with key features that may include a park, a public building, such as a school, higher density housing, or services such as daycare. Transit stops with direct pedestrian access from the surrounding neighbourhood are integral to the node. The extensive public transit service provides a viable alternative to driving for many and helps to reduce the dependency on private automobiles.

Residents also enjoy a wide variety of open spaces. Walking and biking have become favourite recreational activities and people enjoy the extensive, well-linked open space and regional pathway network. More active recreational needs – baseball, soccer, tennis – are provided at the joint use sites associated with the community's schools. Other small parks throughout the community provide younger residents with creative play areas. Natural drainage courses have been restored where possible and integrated into the design of the community and the West Nose Creek escarpment is an important natural amenity. Landmarks such as the McDougall Cairn, a historic rock quarry and a glacial erratic have also been incorporated into the community's parks. These natural and historical features, along with views of Nose Hill, the mountains and the downtown core all contribute to a unique sense of place.

The residents of the Calgary North Phase 2 community do not have to travel far for other needs such as regional shopping, library services or high school – the Country Hills Town Centre is just a short trip away. For those who do need to travel downtown or to other parts of the city, the train or express bus from the transit station off of Harvest Hills Boulevard is very convenient.

Overall, residents find this community to be a very enjoyable place in which to live, work, learn and play. People are better able to meet their needs closer to home and this, in turn, has helped to create a strong community and contribute to a healthier city.

1.0 THE PLAN

1.1 Planning Area

The Calgary North Phase 2 planning area is located in the northwest quadrant of the city, as shown on the Community Location Map (Map 1). It lies northeast of the Hidden Valley community and west of the Country Hills Town Centre.

The planning area is bounded on the north and northwest by the Transportation/ Utility Corridor (future Stoney Trail), on the south by Country Hills Boulevard, on the west by the Hidden Valley community and West Nose Creek, and on the east by Harvest Hills Boulevard.

The planning area is approximately 557 hectares (1,377 acres) in size and includes the existing residential development in Panorama Hills.

A portion of Panorama Hills was fully planned and nearly complete when this community plan was started and this document recognizes the existing and planned development pattern for the land south of the 112 Avenue right-of-way.

1.2 Goals and Objectives

In planning a new community, the City and the developer have several common goals. Both want roads, services and facilities to be safe and efficient, both want to keep down costs and both want the community to be a desirable place to live and a successful project for the developer. In addition, the plan must also meet a number of public interest goals which benefit not only community residents, but also indirectly, the public at large. These goals are set out in certain policy documents approved by Calgary City Council, including the **Calgary Transportation Plan**, the **Sustainable Suburbs Study**, **The City of Calgary Environmental Policy**, the **Urban Parks Master Plan**, the **Natural Area Management Plan** and the **Transit Friendly Design Guide** (see Section 6.0). They translate into the following goals and objectives for the Calgary North Phase 2 planning area.

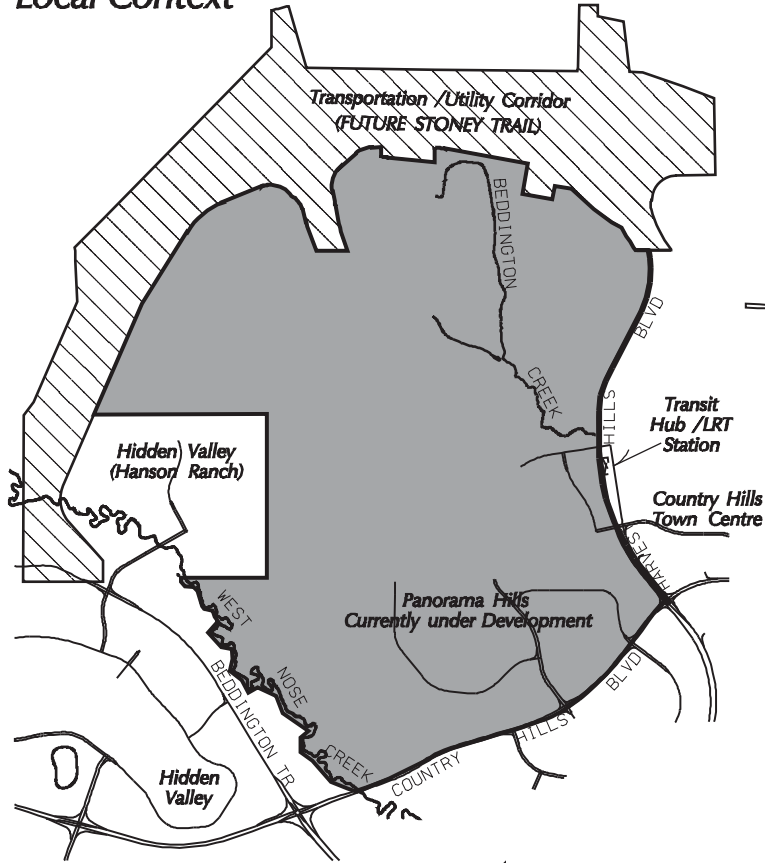
Reduced Car Dependency

- To reduce vehicle trips and encourage people to walk or cycle more often.
- To encourage greater use of transit.

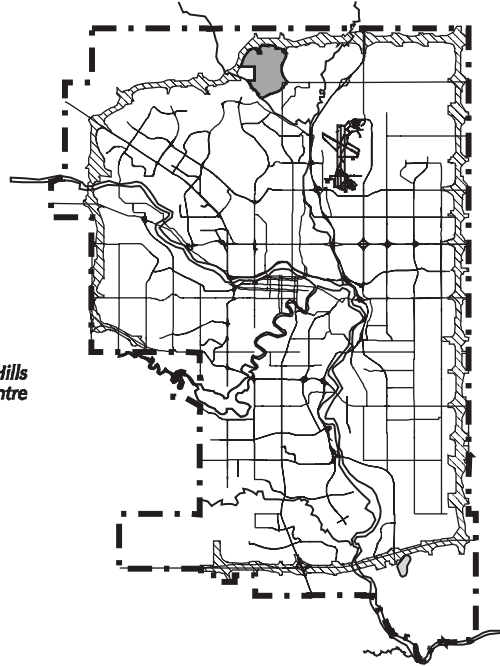
Reduced Costs

- To design the community with an aim to reducing the per capita cost of services, including the construction and maintenance costs of infrastructure.

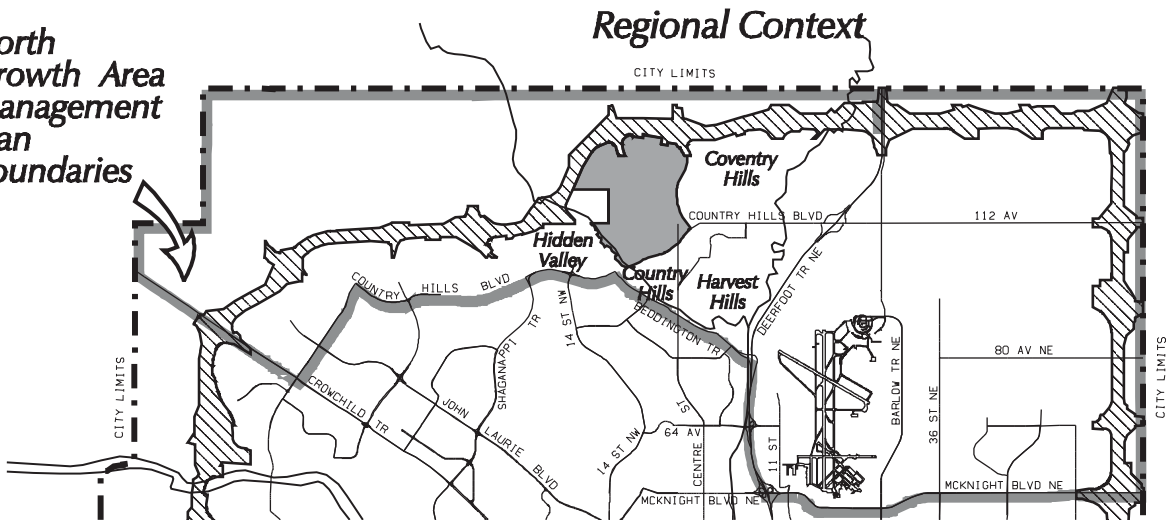
Local Context



City Context



North Growth Area Management Plan Boundaries



This map is conceptual only. No measurements of distances or areas should be taken off this map.

DRAW NO. CNORTH+LOCATION.1 PLOT DATE: 13-SEP-2001

- To use land efficiently and organize residential development such that it is capable of achieving a relatively higher residential density.

Improved Community Life

- To provide schools, shops, services and recreational facilities within the community to meet people's daily needs and offer local employment opportunities.
- To give the location and quality of public facilities and areas, including roads, high priority to develop a sense of place and to encourage community activity and civic pride.
- To encourage community diversity by providing a choice of housing and a variety of densities to accommodate a variety of household types and lifestyles.

Increased Environmental Protection

- To protect environmentally significant areas and natural features.
- To reduce solid waste and water and energy consumption.
- To protect public health by preventing, reducing or remediating soil, water and air pollution.

1.3 Design Concept and Organizing Principles

The Design Concept

The design concept (Map 2) reflects a number of key planning principles, as outlined below. These principles are derived from current policies, but also are based upon the unique opportunities and constraints of the Calgary North Phase 2 area.

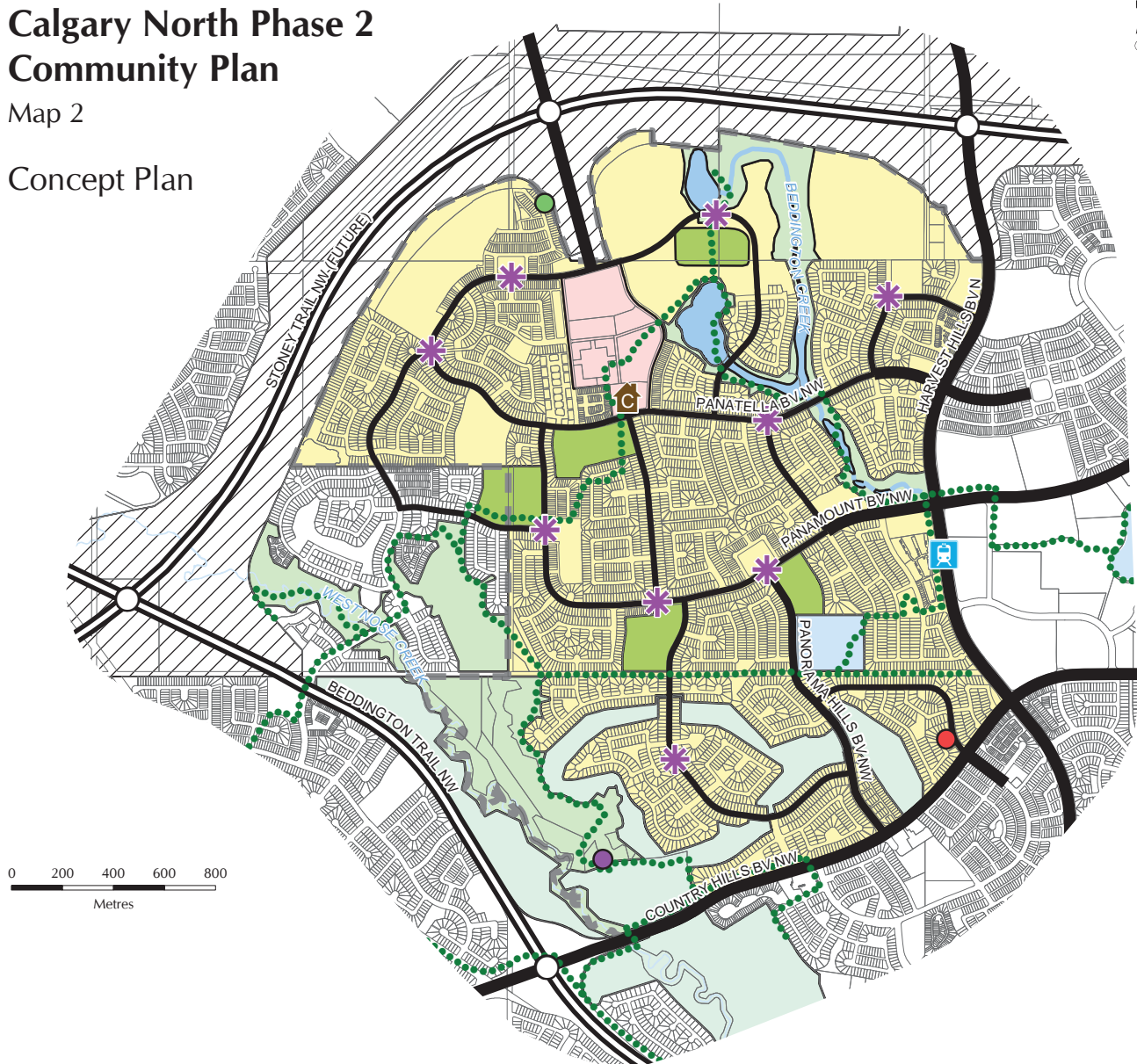
The Organizing Principles

1. **Provide a mixed-use community core** that can be accessed easily by most residents, and that serves as the primary commercial and public activity centre. Uses include a variety of housing types (including multi-dwelling), retail and services, transit facilities, parks and other public amenities.
2. **To the extent possible, given the specific characteristics of the land, organize communities into neighbourhoods** so that all residents can relate either to a neighbourhood or to the community core.

Calgary North Phase 2 Community Plan

Map 2

Concept Plan



Legend

- | | | |
|----------------------------------|------------------------------------|------------------|
| Study Area Boundary | Expressway/ Freeway | Glacial Erratic |
| Transportation/ Utility Corridor | Major Road | McDougall Caim |
| Neighbourhood Area | Local Major Road | Rock Quarry |
| Community Core | Primary Collector/ Collector Road | Community Centre |
| Natural Area | Regional Pathway | |
| Storm Water Retention Facility | Full Interchange | |
| Joint Use Site | Future Transit Hub/ L.R.T. Station | |
| Water Reservoir | Neighbourhood Node | |
| Country Hills Golf Course | | |

This map is conceptual only. No measurements of distances or areas should be taken from this map.



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Neighbourhood boundaries should be as distinct and clearly defined as possible by a natural feature, such as a creek or escarpment, or by a park or road, and should allow for a comfortable 400 metre walk to a bus stop.

3. **Provide for small scale, mixed-use neighbourhood nodes** at key transit stop locations. Uses include a variety of housing types, joint use sites or other open space, and transit features. Designed around key uses or focal points and integrated with transit, neighbourhood nodes serve as social gathering places and create safer, more enjoyable transit environments.
4. **Provide a variety of open spaces** including parks and schools to meet the needs of residents. The open space system incorporates the area's existing natural, historical and built features. These features include West Nose Creek, Beddington Creek, the Reverend George McDougall Cairn, the John A. Lewis rock quarry and a large glacial erratic. The existing water reservoir and the 112 Avenue right-of-way also offer open space opportunities and views of the downtown core. The Country Hills Golf Course also adds to the variety of recreational opportunities within the community.
5. **Integrate the undeveloped portions of the planning area with the developing areas of Panorama Hills and Hidden Valley (Hanson Ranch)** by providing road and pedestrian connections and by considering the edge conditions between existing and future development areas.
6. **Design the road system to provide direct routing for transit** and to minimize transit travel time.
7. **Provide a network of interconnecting streets** that link shops, services, parks, schools and other community facilities in a direct manner, and which accommodate anticipated traffic levels while discouraging shortcutting and speeding.
8. **Provide a network of multiple access/egress points to the community** to effectively distribute traffic and minimize downstream impacts.
9. **Ensure that residents have direct access to bus stops**, mostly by street sidewalks, and that bus stops are comfortable places to wait for a bus.
10. **Design streets and pathways to be pedestrian and cyclist friendly** so that walking and cycling to community facilities is safe, interesting and comfortable, not only for recreation, but also as a viable alternative to the car for many trips.

11. **Provide multi-dwelling residential uses near the future Transit Hub/ LRT station, at the community core and neighbourhood nodes** and possibly in the neighbourhood area where they can be integrated with the adjacent development.

Understanding the Planning Criteria

Development proposals will be evaluated in accordance with the planning criteria outlined in Sections 1.4 to 1.10. The planning criteria are described under headings that have the following meanings:

Intent	The intended role and function of a land use area or planning element within the plan.
Required Uses, Features and Actions	Uses, features and actions that are essential to achieving the Intent .
Desirable Uses, Features and Actions	Uses, features and actions that are desirable, but not essential, to achieving the Intent . A selection of them or others providing an equivalent public benefit are recommended to meet the Intent .

(See Section 2.6 - Making Decisions on Planning Applications.)

1.4 Community Core

Intent

The community core is intended to be the heart of the community — an attractive, vibrant “people place”. Key features include a community centre site, a joint use site, retail and other services to meet the daily needs of residents, together with a mix of housing types. To give the core a distinct character and sense of place, prominent buildings or features mark its location.

To ensure good accessibility for residents, collector roads and pathways converge on the core. To enhance walkability and to minimize opportunities for vehicular shortcutting through the community, the streets within the core area are designed to slow vehicles. The core also serves as a transit hub, where residents are able to access a number of transit routes. Comfortable and attractive bus stops are provided at key locations and, where feasible, are integrated with adjacent shops or community facilities.

Required Uses, Features and Actions

1. Location of community core as generally shown on the Land Use Concept Map (Map 2).
2. A community centre site of approximately 1.6 hectares (4 acres). (See Section 1.7 for details.)
3. A 4.9 hectare (12 acre) public junior high school site. (See Section 1.7 for details.)
4. A commercial site to ultimately accommodate approximately 13,000 square metres (140,000 sq. ft.) of local retail (including a food store), personal services and office uses.
5. A mix of dwelling units with higher densities adjacent to and integrated with the core. While some single family residential uses may be permitted, the objective is to establish a residential density in the core that is higher than the community average.
6. One or more bus stops, located strategically within the core to maximize accessibility.
7. Multiple direct connections (sidewalks or pathways) converging on the community core from the surrounding residential area.
8. Proposed concept plan that demonstrates how the commercial development integrates with residential uses and contributes towards a pedestrian-oriented setting.

Desirable Uses, Features and Actions

The following are not mandatory but they meet the **Intent** and should be considered.

1. Institutional uses, recreational uses and innovative housing options, such as secondary residential units.
2. A grid or modified grid pattern around the core that provides multiple and direct connections to community facilities for motorists, cyclists and pedestrians.
3. Pedestrian-friendly street design features such as narrower roads, wider sidewalks, street trees, pedestrian scale lighting, signage and street furniture.
4. A building, structure or feature serving as a landmark or focal point for the community core.

1.5 Neighbourhood Area

Intent

All residents relate to one of the neighbourhoods, or to the community core. Although the predominant form of housing is single family, the community offers a variety of housing types. People of different household types, lifestyles and income levels can find a home that meets their present needs somewhere within the community. Moreover, they will not be obliged to leave the community should those needs or circumstances change.

Required Uses, Features and Actions

1. Single detached, with or without secondary residential units, and/or multi-dwelling residential.
2. Multi-dwelling residential located adjacent to the future Transit Hub/ LRT Station on Harvest Hills Boulevard.
3. Demonstration that the portion of the planning area north of the 112 Avenue right-of-way, when fully developed, will achieve an overall density of 15-20 units per gross residential hectare (6-8 units per gross residential acre) over time.
4. At least 20 percent of all dwelling units to be other than single family for the portion of the planning area north of the 112 Avenue right-of-way.

Desirable Uses, Features and Actions

The following are not mandatory, but they meet the **Intent** and should be considered.

1. The streetscape planned and designed so that garages do not dominate.

1.6 Neighbourhood Node

Intent

The neighbourhood node is a key gathering place where a variety of activities occur. The node contains transit facilities, public open space and a mix of housing types, with residential densities higher here, compared with the surrounding neighbourhood area. Daycare, recreational uses and small-scale commercial uses may also be appropriate at some nodes. Any buildings, structures or open spaces located at the node are designed and arranged such that the node is clearly the focus of the neighbourhood.

Pathways and walkways, as well as some local roads, converge on the node. To encourage transit ridership, a bus stop is located at the node and is within a comfortable five-minute walk of most homes in the surrounding neighbourhood area.

Required Uses, Features and Actions

1. Pedestrian connections (sidewalks and/or pathways) that provide access and visibility to the neighbourhood node.
2. Direct road and pedestrian connections to other neighbourhood nodes.
3. Multi-dwelling residential uses.
4. A neighbourhood node park or joint use site.
5. A bus stop, serving a catchment area defined by a five-minute (400 metre) walk for most residents in the surrounding neighbourhood area.

Desirable Uses, Features and Actions

The following are not mandatory, but they meet the **Intent** and should be considered.

1. Public and/or private institutional and recreational uses, single-detached residential with secondary residential units.
2. Where a neighbourhood node is significantly separated from the community core, consideration should be given to the provision of small-scale commercial uses.
3. A public or private building, structure or feature serving as a landmark or focal point for the neighbourhood.
4. Roads adjacent to, but not necessarily surrounding the park, providing public access to the park.
5. Super mailbox located at the node, where possible.

1.7 Open Space and Joint Use Sites

Intent

The community's open space system consists of a variety of landscaped parks, a golf course, joint use sites and natural areas connected by pathways and/or roads. Parks are designed and located to help meet the active and passive recreational needs of people of all ages, interests and abilities.



Country Hills Golf Course

The regional pathway and local pathways are designed so that residents enjoy a direct, safe and interesting walk to key destinations. The regional pathway also provides access to other communities and open space systems.

The number and type of joint use sites reflect local school and recreational needs. Joint use sites are designed to facilitate car and bus drop-off, but are located to encourage students to walk, cycle or use public transit to get to school. School buildings serve as important focal points at many neighbourhood nodes.



School's Out!

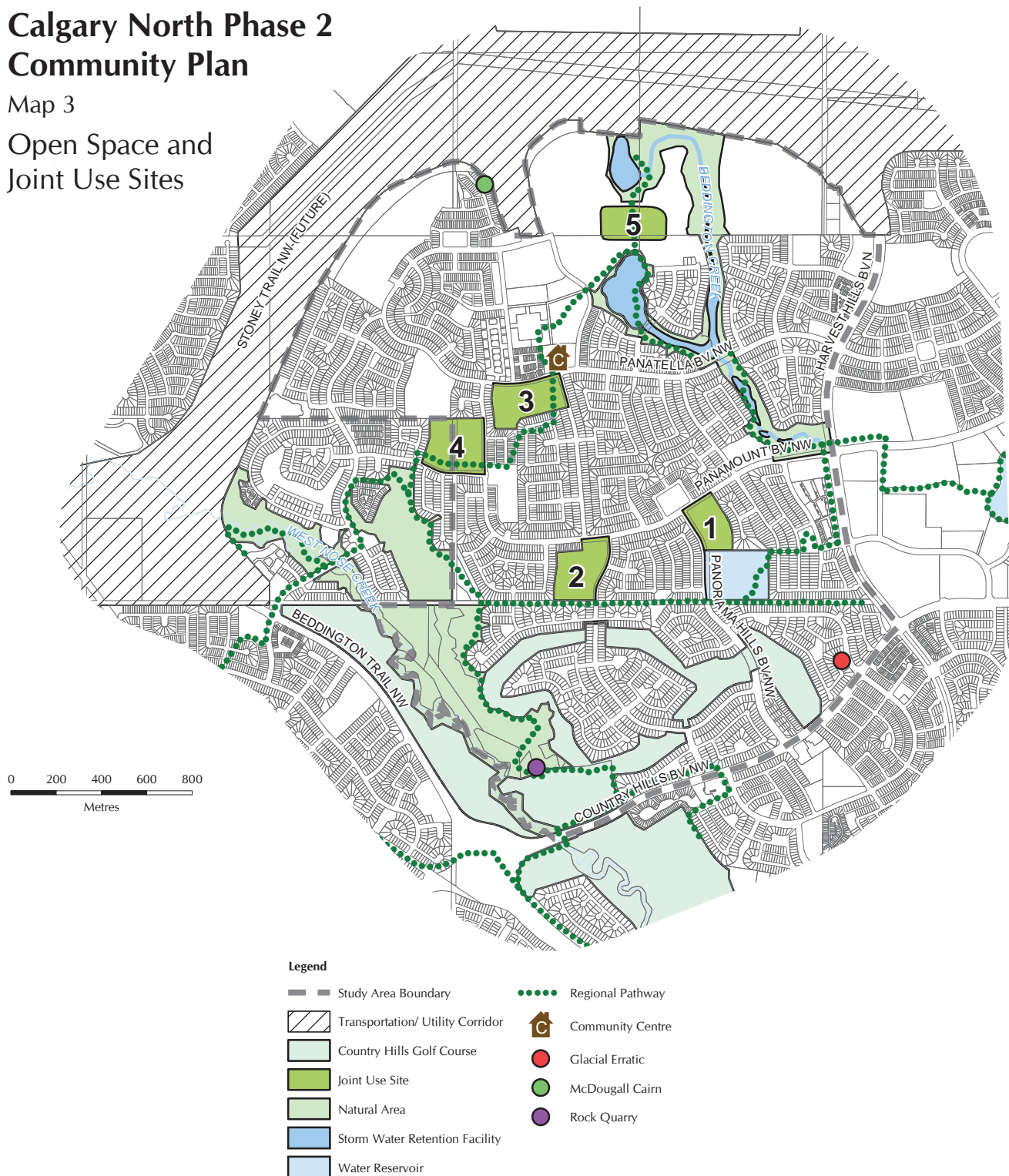
Environmentally significant areas, such as West Nose Creek and portions of Beddington Creek, are either protected or restored. The Reverend George McDougall Cairn, the John A. Lewis rock quarry, and a large glacial erratic are preserved and integrated into the community's open space system. Efforts are made to

maximize public access to these sites and interpretive features assist residents and visitors to learn about the community's important natural and unique historical features.

Calgary North Phase 2 Community Plan

Map 3

Open Space and Joint Use Sites



This map is conceptual only. No measurements of distances or areas should be taken from this map.



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Required Uses, Features and Actions

1. Joint use sites, as shown in the following table and on Map 3.

Table 1

Joint Use Site Requirements			
Site No. (See Map 3)	School Type	School Board	Size* Ha. (Acres)
1	Elementary	Separate School Board	2.8 (7**)
2	Elementary	Calgary Board of Education	4.1 (10)
3	Junior High	Calgary Board of Education	4.9 (12)
4	Junior High	Separate School Board	4.9 (12)
5	Swing Site***	To be determined	4.9 (12)
Total			21.6 (53)

* the exact size and location of the joint use site will be determined at the outline plan stage.

** size of site contingent upon the ability of the school to utilize 2 ac (.8 ha) of the adjacent reservoir site for recreational activities (see Section 1.9).

*** size of site permits future use as an elementary or junior high school by either of the two school boards. Specific use and size to be determined at future date.

2. Use of the water reservoir site for recreational purposes, in conjunction with the regional pathway and adjacent separate elementary school. (See Sections 1.9 and 8.1 for details.)
3. A community centre site of approximately 1.6 hectares (4 acres) located at the community core. If the community centre site is not combined with a joint use site, then shared parking facilities should be explored with surrounding uses such as commercial.
4. Sub-neighbourhood parks, each a minimum of 0.2 hectares (.5 acres) in size, distributed throughout the community, some in neighbourhood nodes and some elsewhere, regardless of ownership boundaries, to maximize the service catchment area.
5. Neighbourhood parks strategically located in order to maximize the service catchment area.

6. The provision of municipal reserve and environmental reserve for the West Nose Creek Community Park.
7. West Nose Creek Community Park will have:
 - a. road access from the park to a collector road to the northeast;
 - b. opportunities for public surveillance of the park from neighbouring residential areas;
 - c. design elements that integrate the park with adjacent residential areas;
 - d. pedestrian/bicycle access to and within the park, with bicycle facilities within the park; and
 - f. vehicle parking (40-60 stalls).(See Section 9.1 for details.)
8. A regional pathway providing:
 - a. a continuous system which connects the community core, some neighbourhood nodes and joint use sites, and which provides public access to West Nose Creek Park, Beddington Creek and other natural areas and features; and
 - b. external linkages to adjacent existing and future communities, the future Transit Hub/LRT Station, and the Country Hills Town Centre (See Map 3).
9. Pathways located in linear parks. Where this is not practical, a pathway is to be located within a road right-of-way in the form of a separate off-street pathway, which may be constructed in place of a sidewalk.
10. The integration of the Reverend George McDougall Cairn, the John A. Lewis quarry site and the glacial erratic into the community open space system. Interpretive signage, public access and visibility are key components of these sites.
11. Environmentally significant, but developable areas, protected wherever possible in their natural state through dedication as municipal reserve, development guidelines (e.g., clustered development), voluntary preservation, or other methods as approved by City Council, in accordance with Provincial regulations.

Portions of Beddington Creek are important from an environmental perspective and should be protected in their natural state, with the exception of stormwater management facilities that may be permitted in areas where there is a higher level of disturbance.

Desirable Uses, Features and Actions

The following are not mandatory but they meet the **Intent** and should be considered.

1. Joint use sites and buildings oriented toward neighbourhood nodes and the community core.
2. Large open spaces (e.g., neighbourhood parks, joint use sites) designed to accommodate a variety of recreation areas, creating a more comfortable “human scale” environment, and providing a range of recreational opportunities (See Figure 1).
3. Explore opportunities to promote shared use of resources between the school boards and the community association (e.g. daycare program, after school activities, etc.).
4. Consider Crime Prevention Through Environmental Design (CPTED) principles in the planning and design of joint use sites, pathways and parks. (See Section 9.3.)
5. The developers, Calgary Parks & Recreation and Alberta Community Development are encouraged to develop an “interpretive walk”, along the regional and/or local pathway systems, highlighting the community’s special natural and historic features and encouraging greater use of the pathway system.



Figure 1 - A Neighbourhood Park can appear smaller by incorporating plantings, topographic variation, pathways and various recreational features.

1.8 Transportation

Intent

The primary intent of the transportation network is to provide residents with access to, from and within the community as effectively and safely as possible. The system is planned and designed to accommodate all modes of travel, including walking, cycling, public transit and private vehicles.

Road access into the community is provided at several locations. Multiple access points help to limit the traffic volume on any one road and therefore reduce the length and number of major standard roads within the community. Multiple routes also provide more options for emergency services, improve public transit routing and school bus coverage and help to reduce travel time and distance. In planning the road system, efforts have also been made to ensure that road alignments minimize impacts on significant natural open spaces such as Beddington Creek.

The community is designed with pedestrians and cyclists in mind. A network of direct pedestrian connections helps to reduce the time it takes to walk or cycle to key destinations. The regional pathway serves both recreational users and commuters by connecting major activity areas, including the Country Hills Town Centre. Streetscapes and pathways are designed to be pedestrian and cyclist-friendly, and efforts have been made to minimize possible conflicts between different modes of travel.

Transit service provides residents with a practical alternative to driving. Higher residential densities are encouraged close to transit facilities. The guideline is to attempt to locate 85% of the area population within 300 metres street walking distance of a bus zone or LRT station. Transit stops have direct pedestrian connections to the surrounding neighbourhood and are designed as comfortable places to wait for a bus. In the short-term, feeder bus routes through the community connect with the future Transit Hub/LRT Station, which offers direct downtown express bus service. Downtown express buses use the Centre Street Transit Corridor, which may include transit priority measures such as transit signal priority, geometric improvements, bus only lanes and/or high occupancy vehicle lanes. In the long-term, transit service plans include an LRT station on Harvest Hills Boulevard N.W.

Required Uses, Features and Actions

1. Accommodate the surrounding arterial road network including the future Stoney Trail, Harvest Hills Boulevard N.W. and Country Hills Boulevard N.W.
2. Accommodate future LRT track and stations along Harvest Hills Boulevard N.W.

3. Noise attenuation along Harvest Hills Boulevard N.W. and Country Hills Boulevard N.W., where required under the provisions of the Council-approved Surface Transportation Noise Policy.

Noise and/or visual attenuation along Stoney Trail, within the Transportation/Utility Corridor, is subject to the Alberta Environmental Protection/Alberta Public Works Supply Services berm and swale policy.

4. An internal road network comprised of:
 - a. Roads designed to City-approved road standards at the time of development.
 - b. Multiple internal road links to key destinations such as the community core, neighbourhood nodes and joint use sites.

In planning and designing the internal road network:

- c. Design roads to discourage speeding.
- d. Apply road standards so that land is used efficiently.
- e. Design the internal collector road network to minimize future requirements for traffic signals.
- f. Align and design roads to minimize impacts on significant natural open spaces. Residential standard road crossings of Beddington Creek are not permitted.

5. An internal pedestrian/cyclist network comprised of:
 - a. Multiple sidewalk and pathway connections to key destinations such as bus stops, neighbourhood nodes, the community core, joint use sites, the future Transit Hub/LRT station.
 - b. Connections to future crossings of Stoney Trail.

In planning and designing the pedestrian/cyclist network:

- c. Pedestrian/cycle routes should be reasonably direct where providing access to non-recreational destinations.
- d. Avoid mid-block crossings of collector and major standard roadways. Mid-block crossings may be allowed at selected locations to facilitate the connection of open space elements. Street design features (e.g., bump-outs, bollards, signage) may be required to increase the visibility and safety of such crossings.
- e. Align and design pathway within and across the Beddington Creek Valley to minimize impacts on the creek system.

6. Of the pedestrian/cyclist network (referred to in 5 above), those connections which, in the opinion of the City are essential to afford residents year-round access to transit stops and the community core, should be paved, lit and plowed as necessary to ensure safe and pleasant use, comparable to a street sidewalk.*
7. Within the community core, private or public roadways designed to accommodate vehicles, while providing comfortable areas for pedestrians and cyclists. The streets should be designed to slow traffic and discourage short-cutting through the community.
8. Within the community core, provide an adequate supply and variety of parking to support and encourage the success of the commercial development. This can be achieved, for example, by providing conveniently located short-term parking close to the entrance of businesses, while locating employee parking elsewhere. Reduced on-site parking requirements may be considered where it can be shown that peak parking demand can be accommodated by alternative parking strategies (e.g., shared parking, on-street parking, etc.).
9. Developer provides visual screening of 4.0 metre high vehicles on the future Stoney Trail, from an observers eye level at 1.5 metres above main floor elevation in accordance with recommendations resulting from the Northwest Truck Route Study.

Desired Uses, Features and Actions

The following are not mandatory but they meet the **Intent** and should be considered.

1. Some roads with vistas terminated by buildings, features or structures that provide a focal point, particularly at the community core and neighbourhood nodes.
2. Traffic calming measures incorporated in the road design where such features are demonstrated to effectively slow traffic, do not detract from the aesthetic appearance of the roadway, can be removed or modified should operational problems arise, and are safe.
3. Calgary Transit to identify areas within the community where transit shelters, designed to encourage transit use, with heating and lighting and related amenities such as route maps, bicycle storage facilities and passenger drop off-areas, are most appropriate.

* *The mechanism to achieve this will be subject to further studies and negotiations between the Urban Development Institute and the City.*

1.9 Servicing

Intent

The intent of this section is to ensure that water, sanitary sewer, storm sewer, telephone, electrical, natural gas and cable utilities are provided in a safe, logical and efficient manner and are designed to minimize impacts on Environmentally Significant Areas and important physical features such as creek beds, ravines and escarpments.

Required Uses, Features and Actions

1. Extension of the existing water feeder mains and the construction of a pump station at the reservoir site to service land north of the 112 Avenue N.W. right-of-way. Feeder main extensions are proposed to run northwest from the reservoir site, and then south, along the future Stoney Trail, to connect with an existing feeder main in Hidden Valley (See Map 9). Utility installations within the Transportation/Utility Corridor will require Ministerial Consent from Alberta Environmental Protection.
2. Two water mains exist within the 112 Avenue N.W. right-of-way and feed the City of Airdrie. These shall be maintained through a Public Utility Lot designation along this right-of-way.
3. Develop two additional water reservoir cells and a pump station at the existing reservoir site, in response to future water demand.
4. Opportunities for public recreation at the reservoir site have been identified, in conjunction with the Separate Elementary School site. Until the two remaining reservoir cells are developed, recreational features will only be permitted above the existing reservoir cell. Following the completion of the additional reservoir cells, the reservoir grounds can be considered for further recreational development.

To ensure that the integrity of the water reservoir is maintained, proposed recreation plans must address:

- maintenance vehicle access;
- protection of the existing building;
- public safety;
- maintenance of reservoir grades;

- adherence to development restrictions (e.g., no pesticide use, above ground development only); and
- conformance to the City Design Guidelines for Subdivisions - Joint Use Reservoir Sites.

(See Sections 1.7 and 8.0 for details.)

5. Maintain continuous access to the reservoir site.
6. Stormwater flows conveyed to West Nose Creek and Nose Creek through trunk extensions and stormwater management facilities, in accordance with Provincial and Municipal standards.
7. Portions of Beddington Creek may be suitable for one or more stormwater retention facilities. Efforts must be made to ensure that the biological integrity of the existing creek system is maintained, in accordance with Provincial and Municipal standards. Opportunities for innovative stormwater management within the open space system should be considered.
8. For the majority of the planning area, sanitary sewer servicing will occur through the extension of existing sewer mains from Harvest Hills and the developed portion of Panorama Hills. The northwest corner of the planning area will be serviced by a trunk extension from Hidden Valley (Hanson Ranch).

1.10 Environmental Issues

Intent

Protecting the environment by reducing the impact of urban development is a major public goal of this plan and one of the reasons for its strong focus on encouraging transit, walking and cycling as viable alternatives to private vehicles. But there are other ways that communities can be planned and built to help protect the environment.

The Sustainable Suburbs Study contains a number of policies aimed at reducing waste and pollution and encouraging recycling. Several of these policies are set out below. Protection of the environment is of concern to many potential home buyers and this concern is expected to increase during the build-out period of the Calgary North Phase 2 planning area. Although most of the following criteria are not mandatory, developers and builders are encouraged to pursue them.

Required Performance, Features and Actions

1. A Potential Site Contamination Acknowledgement and Disclosure Statement must be provided as part of the Outline Plan/Land Use Amendment application. An Environmental Site Assessment report(s) may be required, as determined from a review of the Acknowledgement and Disclosure Statement and civic databases (See Section 2.4 - Soil and Groundwater Assessments).
2. If required, remediation or risk management must be carried out to the satisfaction of Alberta Environmental Protection and Calgary Regional Health Authority, during the Outline Plan/Land Use Amendment application stage.
3. A site for a City-owned and operated recycling depot at the community core.

Desirable Performance, Features and Actions

The following are not mandatory, but they meet the **Intent** and should be considered.

1. Builders to audit all new buildings for construction waste.
2. Builders to use and/or promote recycled materials in the construction of new buildings when supplies are available, existing standards allow and the cost of materials is reasonable.
3. Builders to equip all buildings with bins for sorting recyclable dry waste (paper, plastic, metal and glass) and to locate permanent composters on lots.
4. Include water metres and manufactured water-saving fixtures in all buildings.
5. Builders to use their show homes as a venue for displaying the benefits of energy and water-saving devices.



2.0 IMPLEMENTING THE PLAN

2.1 Phasing of Development

1. Subject to 2.1.2, the phasing of subdivision within the community, through the Outline Plan/Land Use Amendment approval process, should occur in a contiguous and logical manner, given servicing and landownership constraints.
2. Where, due to landownership patterns or other factors, the phasing of subdivision will result in isolated or discontinuous phases, these phases will be allowed where:
 - a. roadways and utilities can be extended to the area (with the cost of the extension borne by the developer, subject to standard City cost recovery procedures),
 - b. transit service and other essential public services can be reasonably delivered to the area,
 - c. on-site parks to serve the immediate resident population are provided, and
 - d. access to schools and recreational and community facilities is provided.
3. The existing interchange at Country Hills Boulevard and Deerfoot Trail cannot accommodate any additional traffic, other than that which is projected from the development currently approved in the overall catchment area, as of 1999 July.

In order for new units to be brought on stream north of Country Hills Boulevard, west of Deerfoot Trail, east of Beddington Trail and south of the future Stoney Trail, interim improvements must be made to the interchange. These improvements will be undertaken through a cost share arrangement between the City and Genstar Development Company, and will be completed in the year 2000.

The improvements are expected to improve capacity in the short term, thus allowing an additional 1,000 units to be built/occupied. However, this is an interim measure only and should not be considered as the solution.

In order for the Calgary North Phase 2 planning area to fully develop, and for the remaining lands in the community of Coventry Hills to develop out, additional improvements must be made.

2.2 Comprehensive Planning

1. An Outline Plan/Land Use Amendment should, wherever possible or practical, comprise an entire neighbourhood or community core.
2. Where item 2.2.1 is not achieved, the developer may be required to demonstrate, through a conceptual design for the residual portion of the neighbourhood or community core, that the residual area can be developed in a logical and comprehensive manner.

2.3 Applying the Density and Housing Mix Requirements

1. The portion of the planning area north of the 112 Avenue N.W. right-of-way shall, when fully developed, achieve an overall density of 15-20 units per gross residential hectare (6-8 units per gross residential acre).
2. The lands south of the 112 Avenue N.W. right-of-way shall, when fully developed, achieve an overall density of 12.5-17.5 units per gross residential hectare (5-7 units per gross residential acre).
3. Provision shall be made for at least 20 percent of the dwelling units north of the 112 Avenue N.W. right-of-way to be other than single family residential.

2.4 Information Requirements of Applicants

Other information required of applicants and referred to in Section 2.6 of this plan, must be provided at the time of Outline Plan/Land Use Amendment submission and may be circulated with these applications.

In accordance with standard City procedures, as part of an Outline Plan/Land Use Amendment submission, an applicant will be required to submit any or all of the following, to the satisfaction of the Approving Authority:

Context Plan

A plan for lands outside of the Outline Plan/Land Use Amendment area, which demonstrates the relationship of the site with the community core, neighbourhood nodes, joint use sites, regional pathways, major or collector standard roads, or other relevant components of the community plan, as appropriate.

Special Land Use Area Concept Plans

A special concept plan for the community core and neighbourhood nodes, showing compliance with the requirements of this community plan, when these components are included in an Outline Plan/Land Use Amendment application.

Density Phasing Plan

A plan showing

- a. the intended phasing of subdivision within the Outline Plan/Land Use Amendment area,
- b. the proposed number and type of dwelling units within each phase, and
- c. compliance with Section 2.3, relating to residential density.

Commercial Development Plan

An applicant proposing a significant change to the size or location of any of the commercial components of this plan will be required to submit a market analysis to the satisfaction of the Approving Authority and other information supporting the proposed change (See also Section 2.6).

Open Space Plans

When submitting outline plans, developers shall demonstrate how they will achieve the integrated system of open spaces and pathways referred to in Section 1.7.

When a change to the location, number or size of joint use sites within the community is proposed by the developer, the developer will be required to submit an **Open Space Allocation Plan** showing, among other matters, a reserve analysis, on an ownership basis, for the community.

Where an Outline Plan/Land Use Amendment submission includes a joint use site, a **Site Layout Plan** for the site is required.

Where a joint use site is proposed to be located within two or more ownership areas, developers shall demonstrate that the site can be designed to accommodate educational and recreational facilities and associated play fields.

Historical Resources Impact Assessment

Prior to development occurring, an Historical Overview shall be conducted. This overview may result in the need for an Historical Resources Impact Assessment and any work resulting from this assessment shall be conducted in accordance with Provincial requirements.

Transit Service Statement

A **Transit Routing Plan**, prepared in accordance with the Transit Friendly Design Guide, and containing, among other matters:

- a. bus stop locations;
- b. transit routes;
- c. transit catchment areas; and
- d. residential unit distribution in relation to walking distances from bus stops.

Roadway and Pathway Network Plan

As part of an Outline Plan/Land Use Amendment submission, a **Roadway and Pathway Network Plan** shall be prepared describing, among other matters, the proposed roadway phasing, road and pathway types and special features of the internal road and pathway network.

Pathways used to directly connect residents to transit stops, the community core, joint use sites or other important community facilities are to be identified in the **Roadway and Pathway Network Plan**.

Stormwater Management Plan

As part of an Outline Plan/Land Use Amendment submission, a Stormwater Management Plan shall be submitted by the developer to determine the need, location and capacity of any required stormwater management facilities.

Soil and Groundwater Assessments

When submitting Outline Plan/Land Use Amendment applications, developers shall demonstrate that the site is suitable for the intended use. This may require environmental site assessments, slope stability, and/or geotechnical analysis.

The applicant shall submit a Potential Site Contamination Acknowledgement and Disclosure Statement identifying any soil or groundwater contamination concerns. A Phase I Environmental Site Assessment (E.S.A.) may be required, as determined from a review of the Acknowledgement and Disclosure Statement and civic databases, to identify actual or potential soil and groundwater contamination. Further environmental reports may be required based on the findings of the Phase 1 E.S.A., including a Phase 2 E.S.A.

(soil/groundwater sampling and analysis) and possibly a Phase 3 E.S.A. (Remediation/Risk Management Plan). Phase 2 and Phase 3 E.S.A. reports are reviewed by Alberta Environmental Protection and the Calgary Regional Health Authority.

2.5 Special Land Use Regulations

Subject to future amendments to the Land Use Bylaw that will have the same effect, areas may be designated Direct Control District (DC) in order that land use requirements can be customized to the specific needs of this community plan.

2.6 Making Decisions on Planning Applications

1. An applicant submitting a land use or outline plan or development permit application shall demonstrate, to the satisfaction of the Approving Authority, that the application:
 - a. complies with the plan **Goals and Objectives**, the **Design Concept and Organizing Principles** and the **Intent** of all applicable plan components,
 - b. provides the **Required Uses, Features and Actions**, and
 - c. addresses the **Desirable Uses, Features and Actions** or other features that are of an equivalent benefit to the public.
2. In making a recommendation or decision on an application, some flexibility in interpreting the plan will be needed and some trade-offs may have to be made.
3. Any change to the location of, or to the key elements within, the community core or neighbourhood nodes, or other aspects of the plan that would, in the opinion of the City, significantly change the **Design Concept**, require a formal amendment to this plan from Calgary City Council following a non-statutory public hearing.

2.7 The Timing of Public Improvements

Although it is intended that the publicly funded improvements and services necessary to implement the Calgary North Phase 2 Community Plan will be provided, no commitment is made as to timing because that is subject to the annual capital budget process.

3.0 MONITORING THE NEW COMMUNITIES

This plan is intended to bring about certain fiscal, social and environmental benefits, not just to the residents of the community, but to the citizens of Calgary generally. As a result, it is critical that the planning area be monitored by the City of Calgary, as it develops, in order that future development plans may benefit from this analysis. Both the **Calgary Transportation Plan** and the **Sustainable Suburbs Study** call for the development of a set of indicators for monitoring community plans.

The two key pieces of information that will be needed are: were the planning criteria met in the implementation of the plan and, if they were, did they achieve the hoped for results? For example, the plan contains a host of provisions aimed at reducing the use of private vehicles. It is important to know if they were all implemented and, if they were, do residents use their vehicles less than in comparable communities where these provisions did not apply. It would also be useful to know specifically which of these provisions was most effective, which could be improved, and which seem to have little effect and might be discarded if they serve no other purpose. The Sustainability Indicators Study does, of course, recognize that, in the above example, there are many factors external to the plan (such as the price of gasoline or availability of parking) that might influence the use of cars by community residents. Accordingly, the Study recommends using both quantitative data and resident surveys in making evaluations.



PART II: SUPPORTING INFORMATION

4.0 POLICIES AFFECTING THE PLAN

4.1 Municipal Development Plan

The **Calgary Plan** was adopted by City Council in 1998 July. The document is the municipal development plan for The City of Calgary, as required by the **Municipal Government Act, 1995**, and as such, replaces the General Municipal Plan. The plan addresses future land use, development and transportation, relationships with municipal neighbours, provision of municipal services and facilities, and the type and location of land uses adjacent to sour gas facilities. It also includes policies regarding the dedication of reserve land and provides the basis for actions and decisions regarding the environmental, social and economic health of the city.

The **Calgary Plan** provides the strategic, city-wide framework for more detailed plans and policies.

4.2 Calgary Transportation Plan

In 1995 May, the **Calgary Transportation Plan** was adopted by City Council. The plan portrays a vision of Calgary in the year 2024 when the city's population is expected to reach 1.25 million. It sets out a strategy for avoiding expensive and contentious river crossings and road improvements, and problems of air pollution, downstream traffic impacts and loss of natural areas, experienced by other cities undergoing substantial growth. It emphasizes the link between transportation and land use planning and establishes policies, to be used in the planning of new residential communities, to reduce the need for vehicle trips and encourage transit and other modes of transportation.

4.3 Sustainable Suburbs Study

In 1995 July, City Council adopted the **Sustainable Suburbs Study: Creating More Fiscally, Socially and Environmentally Sustainable Communities**. The Study is aimed, not only at implementing the objectives of the Calgary Transportation Plan as they relate to the development of new communities, but seeks to encourage developers, City departments and others to find new ways of designing more sustainable communities. It describes many of the long-term fiscal, social and environmental problems facing the City, and sets out a comprehensive package of planning policies, requirements and guidelines that respond to these issues. The Calgary North Phase 2 Community Plan is largely based on the recommendations of this study.*

* On 1998 June 22, City Council approved the terms of reference, work program and time table for a review of the Sustainable Suburbs Study and the Transit Friendly Design Guide. An interim policy for the preparation of community plans was also approved (Report E98-20).

4.4 Transit Friendly Design Guide

The **Transit Friendly Design Guide** was approved by City Council in 1995 December and describes techniques for improved integration of transit into residential and non-residential areas to achieve the vision described in the Calgary Transportation Plan. It explains, and gives examples of, the physical requirements necessary to encourage transit use.*

4.5 Natural Area Management Plan

The Natural Area Management Plan was approved by City Council in 1994. Its primary role is to ensure the long-term viability of Calgary's natural environment and to support its appropriate use by the public. The Plan highlights the need for continuous public input, education and interpretation of ecological data and expert management of natural areas.

4.6 Calgary Restricted Development Area and Transportation/Utility Corridor

A Restricted Development Area (RDA) around The City of Calgary was established in 1976. Land within the RDA was designated for Transportation/Utility Corridor (TUC) use in order to provide for long-term alignments for future ring roads and major linear utilities needed to serve the expanding urban area.

The TUC provides components, which are specific areas dedicated to designated primary uses. Primary uses are the linear transportation and utility facilities including ring roads, petroleum pipelines, powerlines and municipal services. Other uses permitted within the TUC are secondary or interim and include a variety of agricultural, commercial, recreational and storage activities.

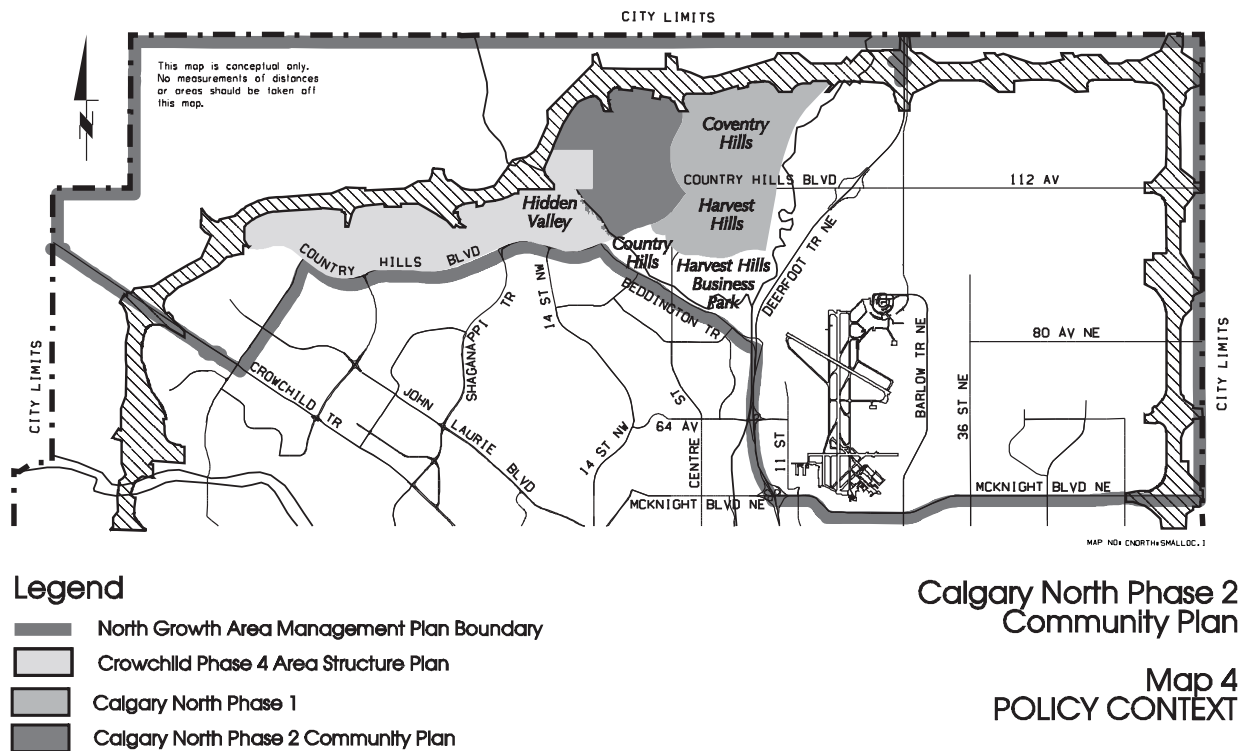
Provincial RDA Regulations protect the land needed for the Calgary TUC. Some lands may eventually be disposed of and allocated to other uses. However, while these lands are still owned by the Province, proposals for land use changes, subdivision, development and surface disturbing activities must be sent to Alberta Environmental Protection for a review of requirements under the RDA Regulations. Ministerial Consent is required prior to any development occurring in order to ensure that proposed activities are consistent with TUC activities.

4.7 Urban Park Master Plan

The Urban Park Master Plan was approved by City Council in 1994 March and reflects the public's vision for the river corridors within Calgary. It deals with important issues regarding the protection of environmentally sensitive areas, maintenance of valuable landscape features and the provision of public access.

4.8 Planning for Adjacent Areas

The community of Hidden Valley, including the Hanson Ranch development, is located directly southwest and west of the planning area. Development in Hidden Valley is governed by the Crowchild Phase 4 Area Structure Plan and this plan has been recently amended to include the Hanson Ranch development. The Calgary North Phase 1 Area Structure Plan, approved by City Council in 1980, encompasses land east of Harvest Hills Boulevard N.W. The Panorama Hills Concept Plan was approved by City Council in 1994 and encompasses that portion of the planning area south of the 112 Avenue N.W. right-of-way, east of West Nose Creek, north of Country Hills Boulevard N.W. and west of the Panorama Hills Boulevard alignment. This concept plan is not a statutory plan but was intended to provide a general guideline for the planning and development of the area until such time as a more comprehensive plan is prepared.



It is anticipated that the North Growth Area Management Plan (GRAMP) will be presented to Council in 1999. Among other things, the GRAMP will identify a generalized land use plan and assist in determining the location, timing and infrastructure requirements for new development.

4.9 M.D. of Rocky View/City of Calgary Intermunicipal Development Plan

The Intermunicipal Development Plan was approved by the Councils of the M.D. of Rocky View and the City of Calgary in 1998 October.

The purpose of the Intermunicipal Development Plan is to identify an area of mutual intermunicipal interest and establish policy direction and processes to address intermunicipal issues that may arise within that area.

The land within the planning area that falls within the Intermunicipal Development Plan boundaries is located between the Transportation/Utility Corridor and the northern boundary of Sections 27, 28 and 29, Township 25 Range 1, West 5th Meridian, in the extreme northern portion of the planning area.

5.0 PLANNING AREA

5.1 Land Area

The Calgary North Phase 2 planning area is located in the northwest quadrant of the city, as shown on the Community Location Map (Map 1), and lies northeast of the Hidden Valley community and west of the Country Hills Town Centre.

The planning area is bounded on the north and northwest by the Transportation/Utility Corridor (future Stoney Trail right-of-way), on the south by Country Hills Boulevard, on the west by the Hidden Valley community and West Nose Creek and on the east by Harvest Hills Boulevard.

The planning area is 557± hectares (1,377± acres) in size.

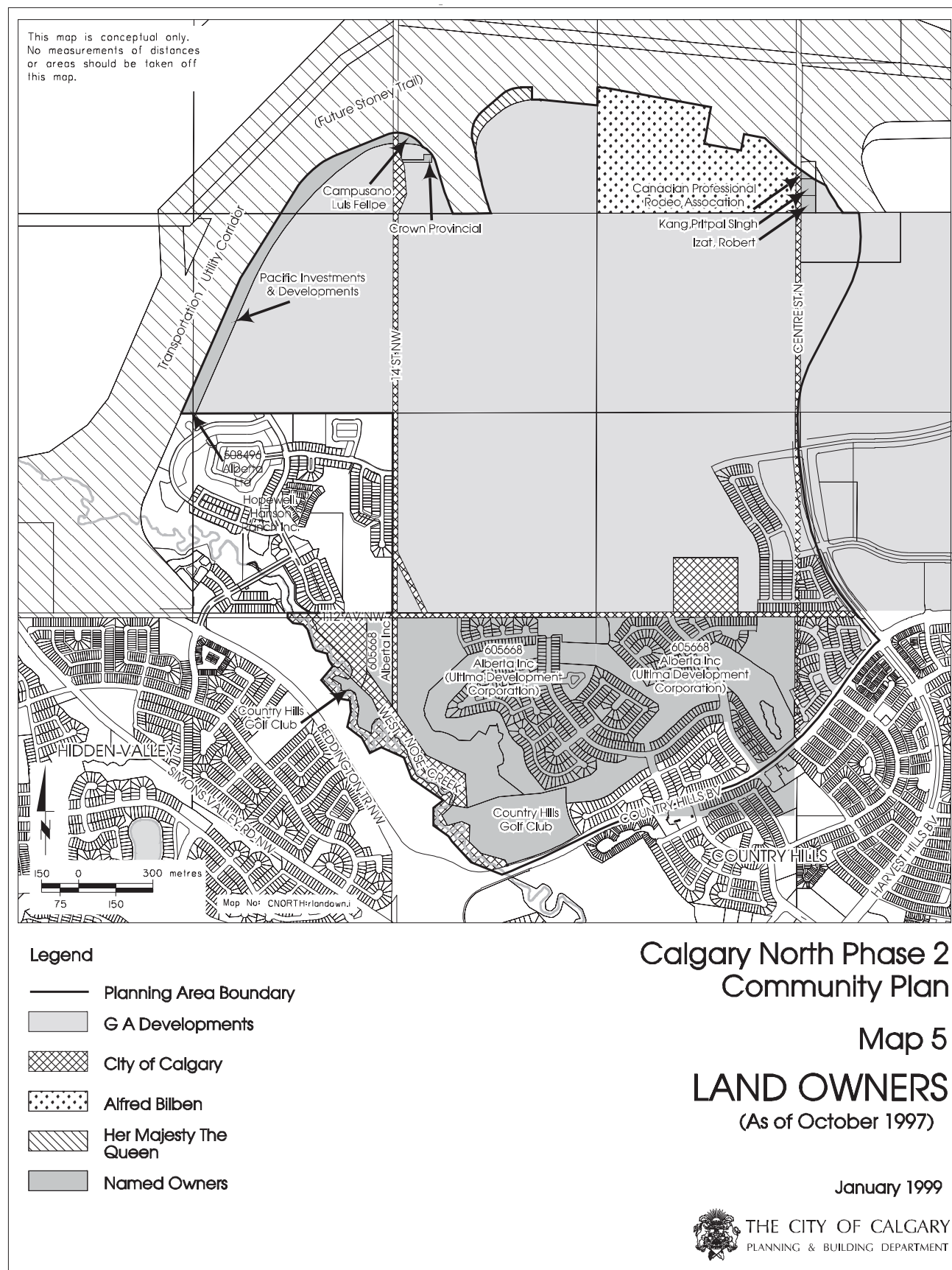
5.2 Land Ownership

Genstar Development Company is the largest single landowner in the planning area with 357± hectares (882± acres). Ultima Development Corporation is the next largest landowner with 86± hectares (212± acres). Alfred Bilben owns 31± hectares (77± acres) and the remaining 55± hectares are privately owned by a variety of individuals, the City of Calgary and the Province.

Table 2

Calgary North Phase 2 - Ownership by Area			
Owner	Land Area		
	Ha*	Acres*	% of Total
Genstar Development Company	357.1	882.0	67.20%
Ultima Development Corporation	85.8	212.0	16.10%
Bilben, Alfred	31.1	76.9	5.90%
Existing Development			
- Panorama Hills (various owners)	26.3	65.0	4.90%
City of Calgary (roads)	15.9	39.3	3.00%
City of Calgary (escarpment)	15.1	37.3	2.80%
Country Hills Golf Club	11.6	28.6	2.20%
Pacific Investments	7.2	17.8	1.40%
City of Calgary (reservoir)	5.7	14.1	1.10%
Canadian Professional Rodeo Association	0.4	1.0	0.10%
Izat, Robert	0.4	1.0	0.10%
Kang, Pritpal Singh	0.4	1.0	0.10%
Campusano, Luis Felipe	0.3	0.7	0.10%
508496 Alberta Limited	0.3	0.6	0.05%
Province of Alberta	0.2	0.5	0.04%
Total	557.7	1,377.9	100.00%
Source: Planning & Building Department - October 1997			

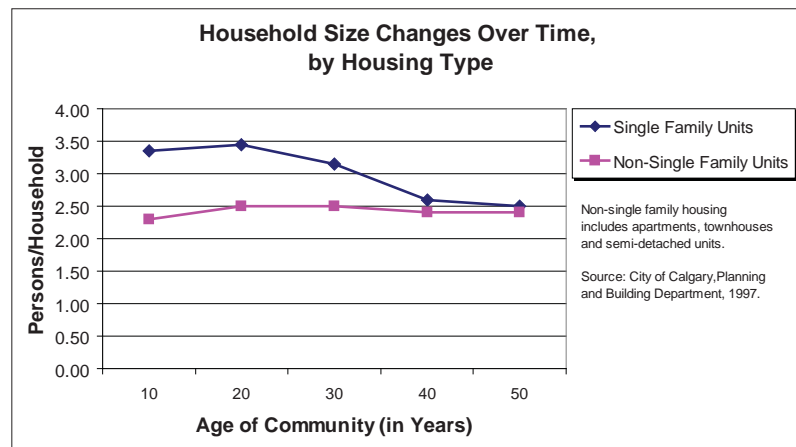
* approximate areas only.



5.3 Population Projections

Population and housing forecasts are an important consideration in planning for the needs of a new community. Three key components of the Calgary North Phase 2 Community Plan which were influenced by these projections are:

- the number and type of roads within the community;
- the number and type of school sites; and
- the amount of commercial retail.



Recent City of Calgary studies have shown that in the natural lifecycle of a new community, population steadily rises until the community is first built out. As the community ages, children tend to leave home and units begin

to be converted or replaced. As demographics and housing mix changes, the population of the community tends to decline slightly (See Figure 2).

While the infrastructure and school requirements for the Calgary North Phase 2 Community Plan have been identified on the basis of peak population and housing projections, it is important to recognize that, over time, the size of the population will likely decline slightly, and resident needs will change. Community plans should recognize these long-term changes and incorporate, wherever possible, the flexibility for change and adaptation to occur.

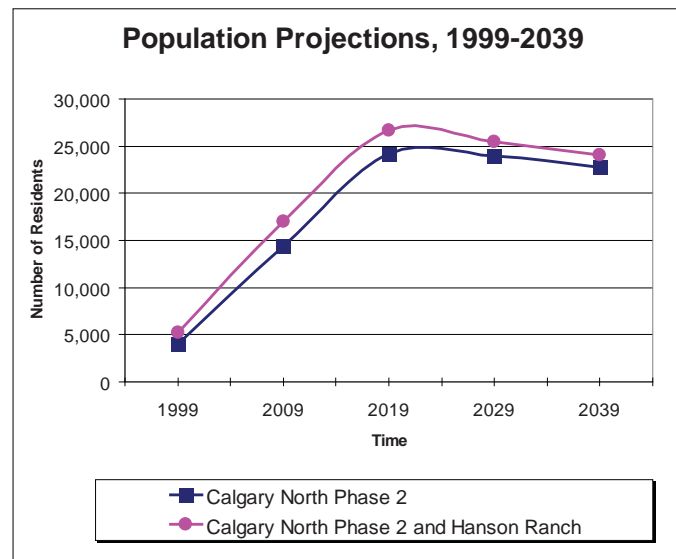


Figure 3

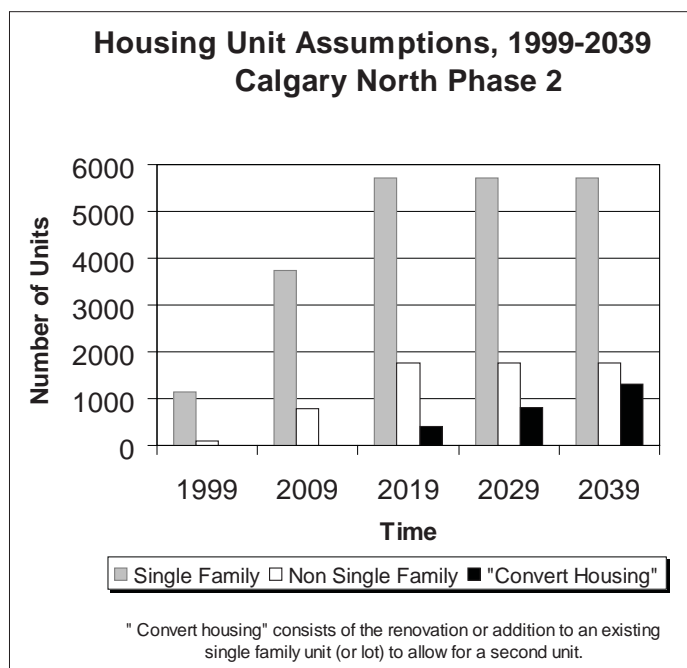


Figure 4

It is estimated that by the year 2019 the Calgary North Phase 2 area should be built out, and over 24,000 persons will reside in the area. For school planning purposes, Hanson Ranch population estimates were also considered. (Figure 3). Based on the assumption that household size in a new community tends to decrease over time, a slight decline in population is anticipated in the longer term (+30 years).

The Calgary North Phase 2 Community Plan is the first plan to consider housing projections beyond the initial build-out of the community and recognize changing household sizes and housing types over time. Table 3 illustrates the

calculations for the Calgary North Phase 2 planning area. For school planning purposes, calculations were also done including the Hanson Ranch portion of Hidden Valley and these are illustrated on Table 4.

The following **assumptions** formed the basis for these calculations:

1. 42 gross developable acres absorbed per year until built-out.
2. Composition of unit type (as of 1997 December 31) based on approximately 80 percent single family and 20 percent non-single family*
3. Persons per unit (City of Calgary, Planning & Building Department)

10-Year Old Community	Single Family	Non-SF*
Persons Per Unit	3.35	2.30**
20-Year Old Community	Single Family	Non-SF
Persons Per Unit	3.44	2.50**
30-Year Old Community	Single Family	Non-SF
Persons Per Unit	3.15	2.5**
40-Year Old Community	Single Family	Non-SF
Persons Per Unit	2.6	2.4**
50-Year Old Community	Single Family	Non-SF
Persons Per Unit	2.5	2.4**

Notes

- * Non-Single Family includes semi-detached townhouse/row housing and apartments.
 ** Persons per unit for non-single family based on a mix of apartments, townhouses, semi-detached.

TABLE 3. PLANNING AREA (EXCLUDES HANSON RANCH)

		NUMBER OF UNITS							PERSONS PER UNIT					POPULATION						
SNAPSHOT YEAR**	HOUSING TYPE	UNIT AGE					TOTAL	PERCENT	UNIT AGE					UNIT AGE						
		0-10	11-20	21-30	31-40	41-50			0-10	11-20	21-30	31-40	41-50	0-10	11-20	21-30	31-40	41-50	TOTAL	
1999	SF	1147					1147	92%	3.35						3842					3842
	Non-SF	99					99	8%	2.30						228					228
	Total	1248					1246								4070					4070
2009	SF	2585	1147				3732	83%	3.35	3.44					8660	3946				12605
	Non-SF	676	99				775	17%	2.30	2.50					1555	248				1802
	Total	3261	1246				4507								10215	4193				14408
2019	SF	1974	2585	1147			5706	72%	3.35	3.44	3.15				6613	8892	3613			19118
	Non-SF	991	676	99			1766	22%	2.30	2.50	2.50				2279	1690	248			4217
	Convert	400	0	0			400	5%	2.00	0.00	0.00				800	0	0			800
	Total	3365	3261	1246			7872								9692	10582	3861			24135
2029	SF	0	1974	2585	147		5706	69%	3.35	3.44	3.15	2.60			0	6791	8143	2982		17916
	Non-SF	0	991	676	99		1766	21%	2.30	2.50	2.50	2.40			0	2478	1690	238		4405
	Convert	400	400	0	0		800	10%	2.00	2.00	0.00	0.00			800	800	0	0		1600
	Total	400	3365	3261	1246		8272								800	10068	9833	3220		23921
2039	SF	0	0	1974	2585	1147	5706	65%	3.35	3.44	3.15	2.60	2.50		0	0	6218	6721	2868	15807
	Non-SF	0	0	991	676	99	1766	20%	2.30	2.50	2.50	2.40	2.40		0	0	2478	1622	238	4338
	Convert	500	400	400	0	0	1300	15%	2.00	2.00	2.00	0.00	0.00		1000	800	800	0	0	2600
	Total	500	400	3365	3261	1246	8772								1000	800	9496	8343	3105	22744

*BUILT-OUT YEAR 2018

TABLE 4. PLANNING AREA (INCLUDES HANSON RANCH FOR SCHOOL/PARKS SERVICES)

		NUMBER OF UNITS							PERSONS PER UNIT					POPULATION					
SNAPSHOT YEAR**	HOUSING TYPE	UNIT AGE					TOTAL	PERCENT	UNIT AGE					UNIT AGE					
		0-10	11-20	21-30	31-40	41-50			0-10	11-20	21-30	31-40	41-50	0-10	11-20	21-30	31-40	41-50	TOTAL
1999	SF	1385					1385	84%	3.35					4640					4640
	Non-SF	256					259	16%	2.30					596				596	
	Total	1644					1644						5235					5235	
2009	SF	2882	1385				4267	80%	3.35	3.44				9655	4764			14419	
	Non-SF	827	259				1086	20%	2.30	2.50				1902	648			2550	
	Total	3709	1644				5353						11557	5412			16969		
2019	SF	1974	2882	1385			6241	72%	3.35	3.44	3.15			6613	9914	4363		20890	
	Non-SF	991	827	259			2077	24%	2.30	2.50	2.50			2279	2068	648		4994	
	Convert	400	0	0			400	5%	2.00	0.00	0.00			800	0	0		800	
	Total	3365	3709	1644			8718						9692	11982	5010		26684		
2029	SF	0	1974	2882	1385		6241	71%	3.35	3.44	3.15	2.60		0	6791	9078	3601	19470	
	Non-SF	0	691	827	259		1777	20%	2.30	2.50	2.50	2.40		0	1728	2068	622	4417	
	Convert	400	400	0	0		800	9%	2.00	2.00	0.00	0.00		800	800	0	0	1600	
	Total	400	3065	3709	1644		8818						800	9318	11146	4223	25486		
2039	SF	0	0	1974	2882	1385	6241	67%	3.35	3.44	3.15	2.60	2.50	0	0	6218	7493	3463	17174
	Non-SF	0	0	691	827	259	1777	19%	2.30	2.50	2.50	2.40	2.40	0	0	1728	1985	622	4334
	Convert	500	400	400	0	0	1300	14%	2.00	2.00	2.00	0.00	0.00	1000	800	800	0	0	2600
	Total	500	400	3365	3709	1644	9318							1000	800	8746	9478	4084	24108

*BUILT-OUT YEAR 2018

6.0 NATURAL AND HISTORICAL FEATURES

6.1 Topography and Drainage¹

The planning area is part of the Delacour Plain physiographic unit and is characterized by undulating to gently undulating topography. The relief represents glacial features such as meltwater channels and washboard moraine. The area generally slopes from north and west to south and east. West Nose Creek borders the southwest portion of the study area. A shallow ravine occurs in the northern portion of the study area. Surface drainage occurs via West Nose Creek and Beddington Creek.

6.2 Soils and Geology²

Flat-lying, Tertiary-age sedimentary rocks of the Porcupine Formation underlie the planning area. Glacial deposits overlying the bedrock are of aeolian and lacustrine origin. Well-drained Black Chernozemic soils predominate but poor, undifferentiated soils associated with erosional zones occur along West Nose Creek and Beddington Creek.

6.3 Vegetation and Wildlife

The area is situated in the Foothills Fescue ecoregion¹ and characterized by a dry, cool climate. Extensive native grasslands remain along West Nose Creek and Beddington Creek. Grasses include blue gramma grass, needle and thread grass, and wheat grasses. Forbs include pasque flower, milk vetches, and asters. Pockets of aspen and shrub exist along the escarpment above West Nose Creek. Small wetlands exist along the bottom of the Beddington Creek ravine. West Nose Creek is an important north/south wildlife corridor, allowing movement of wildlife in and out of Calgary. Wildlife species include mule deer, coyote and badger. Bird species include waterfowl, raptors, and songbirds.

¹ MacMillan, R.A., "Soil survey of the Calgary urban perimeter", Alberta Soil Survey Report No. 45, Bulletin No. 54, Terrain Sciences Department, Alberta Research Council, Edmonton, Alberta, Canada 1987, pp. 4-8.

² MacMillan, R.A., "Soil survey of the Calgary urban perimeter", Alberta Soil Survey Report No. 45, Bulletin No. 54, Terrain Sciences Department, Alberta Research Council, Edmonton, Alberta, Canada 1987, pp. 32-74.

6.4 Environmentally Significant Areas

Calgary Parks & Recreation has conducted biophysical assessments of the planning area. West Nose Creek and portions of the Beddington Creek ravine are considered to be environmentally significant. For an inventory and description of the natural characteristics of the planning area, refer to Map #6.



Beddington Creek

6.5 Archaeological and Historical Features

The Reverend George McDougall (1821-1876) Cairn

Located in the northwest portion of the planning area, the Rev. George McDougall Cairn is a Provincial Historical Site that marks the place where Rev. McDougall died in 1876.



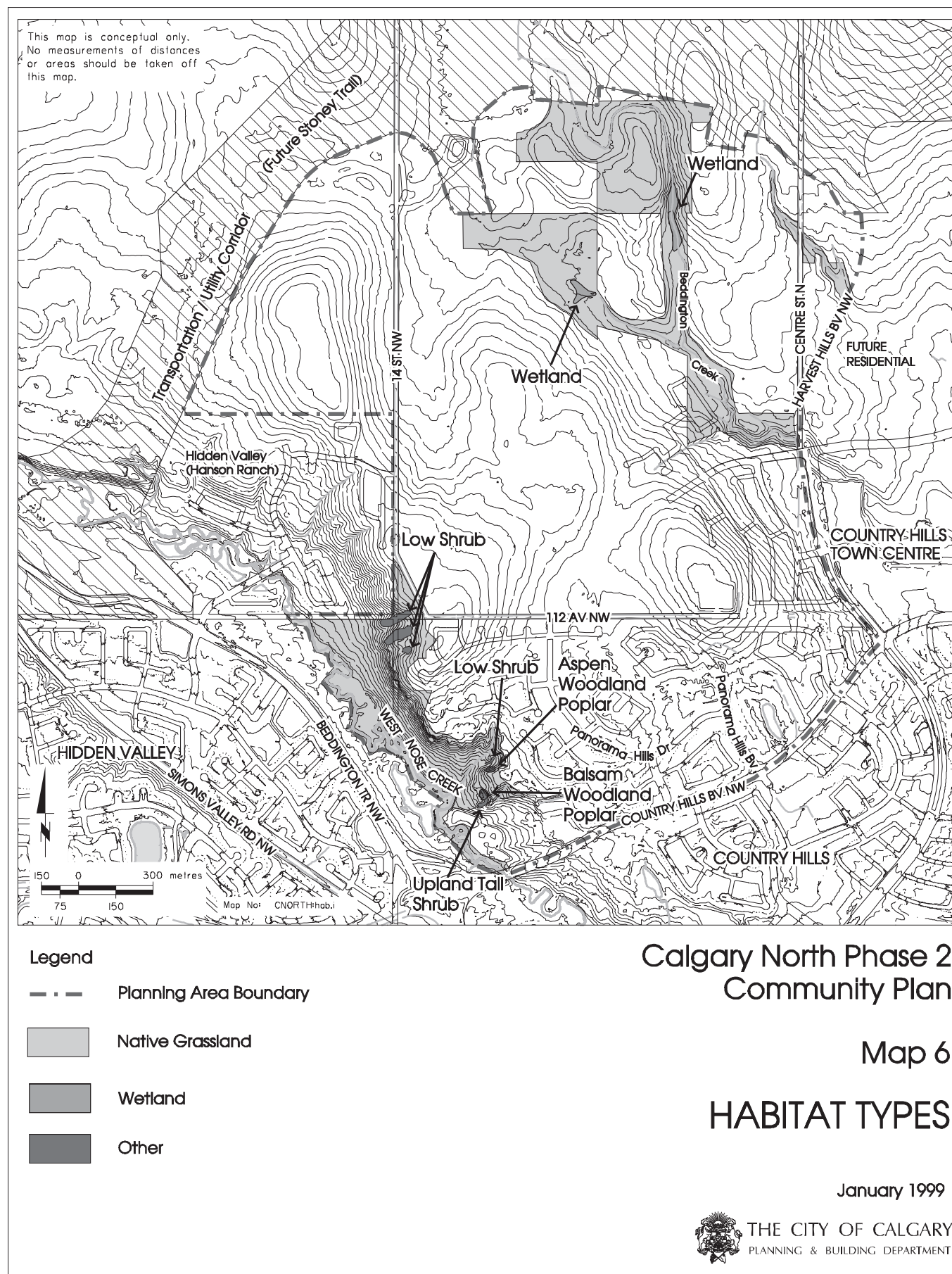
Rev. George McDougall Cairn

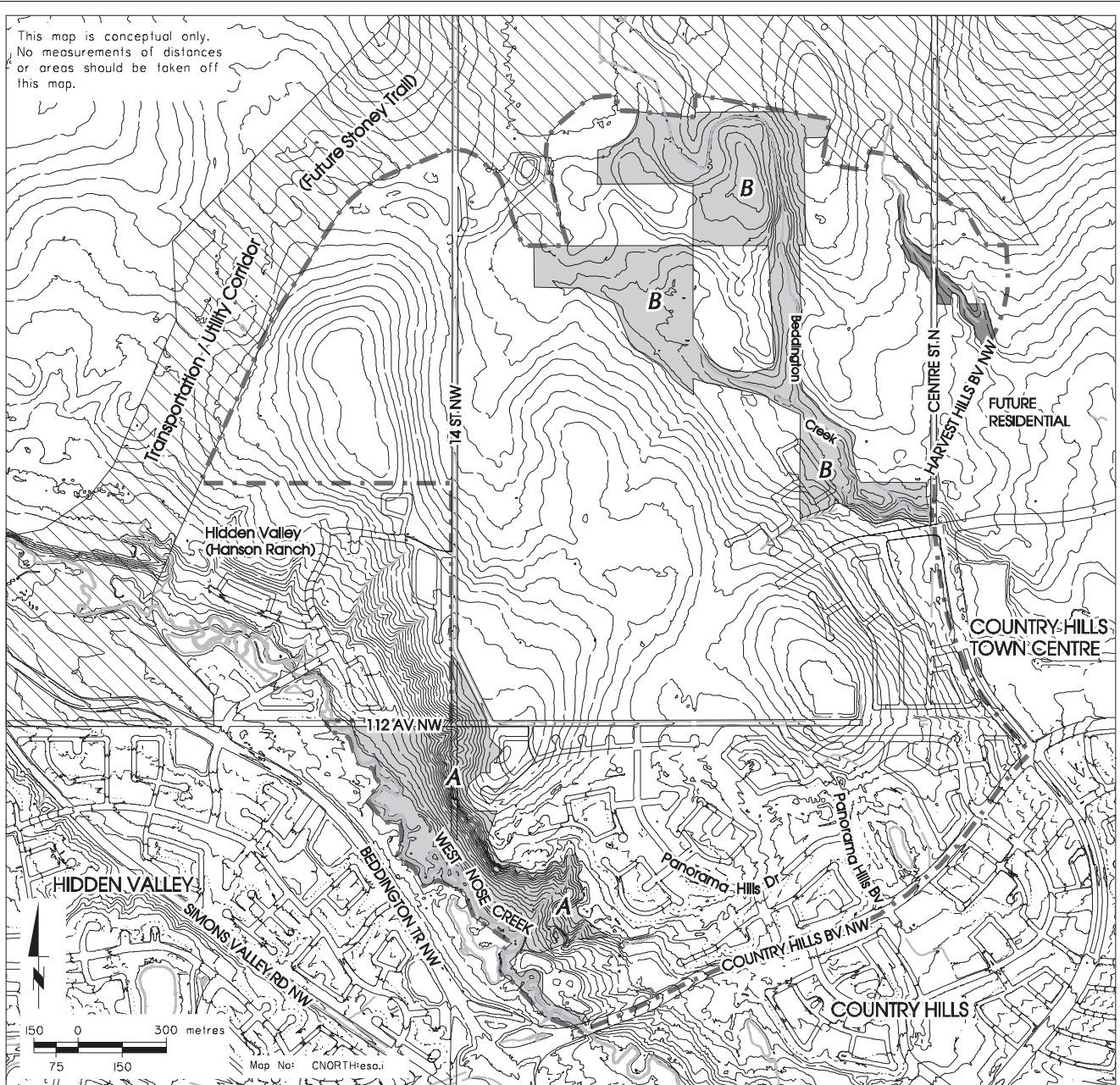
*"Rev. George Millward McDougall, Pioneer Methodist Missionary, died here on January 24, 1876. He had been buffalo hunting, apparently lost his way on the prairie, and did not return to camp. Coming west in 1860, he had devoted himself to evangelizing the Indians. Fur trader and Indian alike mourned his passing."
(cairn inscription)*

Rev. McDougall worked with his son John and others to establish a number of missions throughout the prairies, including the Mission at Morley in 1873³.

The Rev. McDougall Cairn was erected in 1976 on provincially-owned land.

³ Humber Donna Mae, "Whats in a Name...Calgary?," The City of Calgary, Public Information Department, 1995.





Legend

- Community Plan Boundary
- Environmentally Significant Areas
 - A High Level Of Significance
 - B Moderate Level Of Significance
- Natural Areas

Calgary North Phase 2 Community Plan

Map 7

ENVIRONMENTALLY SIGNIFICANT AREAS

January 1999



THE CITY OF CALGARY
PLANNING & BUILDING DEPARTMENT

The West Nose Creek Escarpment and John A. Lewis Quarry

The Historical Impact Assessment for the existing Panorama Hills development revealed that the West Nose Creek escarpment and an existing quarry site have historical significance.

Historical research indicates that aboriginal hunters, and explorers and traders used trails near the escarpment⁴. While archeological artifacts in the area are as old as 8250 years, it is estimated that modern aboriginals arrived in the area about 1700 years ago. Much later, explorers such as David Thompson (1787-8), Peter Fidler (1789-90), John Palliser and James Hector (1858) travelled through these lands.

Also, when buildings on Calgary's mainstreet were destroyed by a fire in 1886, builders began to use sandstone. A quarry located along the West Nose Creek escarpment provided the sandstone that was used to construct the entrance of the Imperial Bank, a part of old City Hall, the James Short School and the Court House. The quarry site was referred to by settlers as the John A. Lewis Quarry, named after the Lewis family who farmed in Simon's Valley.

In conjunction with the approved Panorama Hills development, the quarry site and escarpment lands will be protected and interpretive features will be provided at a viewpoint along the regional pathway, overlooking the quarry.

Glacial Erratic

A large glacial erratic is located in the southeast part of the planning area (N.W. 1/4, Section 22). This impressive rock, made of quartz sandstone, is part of the Foothills Erratic Train, and was used by buffalo as a rubbing stone.

"The Foothills Erratic Train is a long series of erratics of many sizes, stretching in a narrow belt for about 400 miles from the Athabasca River Valley to southwestern Alberta. The rock type of the erratics is different to the underlying bedrock in the places where they are now found and indicates that they were probably derived from a rock outcrop in the Mount Edith Cavell area of Jasper National Park."

(Source: The Province Museum of Alberta, Website: http://www.pma.edmonton.ab.ca/natural/geology/research/_erratic.htm; 1998 May)



Glacial Erratic

⁴ Stephen Wilk, "The Sandstone Quarry", 1997, Privately commissioned.

Historical Resources Act Requirements

According to Alberta Community Development, while most of the planning area has undergone an Historical Overview and an Historical Resources Impact Assessment, and has been cleared in accordance with Research Permits 80-125 and 89-031, a small portion of the planning area must still be reviewed. Of particular importance are those lands located within the south half of Section 33, Township 25, Range 1, West 5th Meridian, where an archaeological site (EgPm-20-- campsite) has been identified.

7.0 TRANSPORTATION

The following section describes the transportation system within and around the Calgary North Phase 2 Community Plan area. The transportation system is comprised of roadways, pathways, sidewalks and bus stops, as well as the pedestrian overpass at the future Transit Hub/LRT Station on Harvest Hills Boulevard.

In planning the network, it is important to consider all types of users and the unique needs of each. The majority of travel will continue to be via private vehicles. However, in the future, a larger share of these trips, particularly for downtown commuting, will be made via public transportation. There will also be a group of users walking and cycling.

7.1 External Road System

The Calgary North Phase 2 Community Plan area is bounded on all sides by arterial roads.

The future **Stoney Trail** bounds the planning area on the north and northwest. It will be located within the Transportation/Utility Corridor and will eventually become a six lane freeway with grade separated interchanges at the major road crossings. A functional design study of Stoney Trail was completed in 1996⁵. The design study identified the land requirements for the roadway. A new access from the study area to Stoney Trail is proposed as part of this report and is dealt with in more detail later in this Section.

Beddington Trail runs along the south and southwest boundary to the Hanson Ranch portion of the Hidden Valley community, to the west of the planning area. Beddington Trail is planned as a major standard road. It is currently two lanes but is tentatively planned to be widened to four lanes in 2002.

Country Hills Boulevard runs along the south boundary of the planning area. It is a major standard road and currently has the south two lanes constructed. Completion of the north two lanes and the associated bridge over West Nose Creek is scheduled for 2000.

⁵ Delcan Westran - Stoney Trail Design Report.

Harvest Hills Boulevard forms the east boundary of the planning area and is critical to the community's transportation network. Harvest Hills Boulevard will be a major standard road. Additional right-of-way will be provided in the median to accommodate the future LRT. Harvest Hills Boulevard will have an at-grade intersection at Stoney Trail in the short to medium term, with an interchange to be constructed ultimately.

7.2 Internal Roads

One of the key objectives of the internal road network plan is to eliminate, wherever possible, major standard roads within the community. Major roads form artificial barriers within the community, are more costly to construct and generally use more land.

Panorama Hills Boulevard will form the southern spine of the community. It runs north-south through the south half of the planning area. Panorama Hills Boulevard has been intentionally terminated to discourage its use as a through route for motorists from outside the community. The most southern section of Panorama Hills Boulevard (access off of Country Hills Boulevard) will be a major standard road which downgrades to a local major standard road near the 112 Avenue N.W. right-of-way. At the north end of the planning area, a major standard stub road will connect to Stoney Trail.

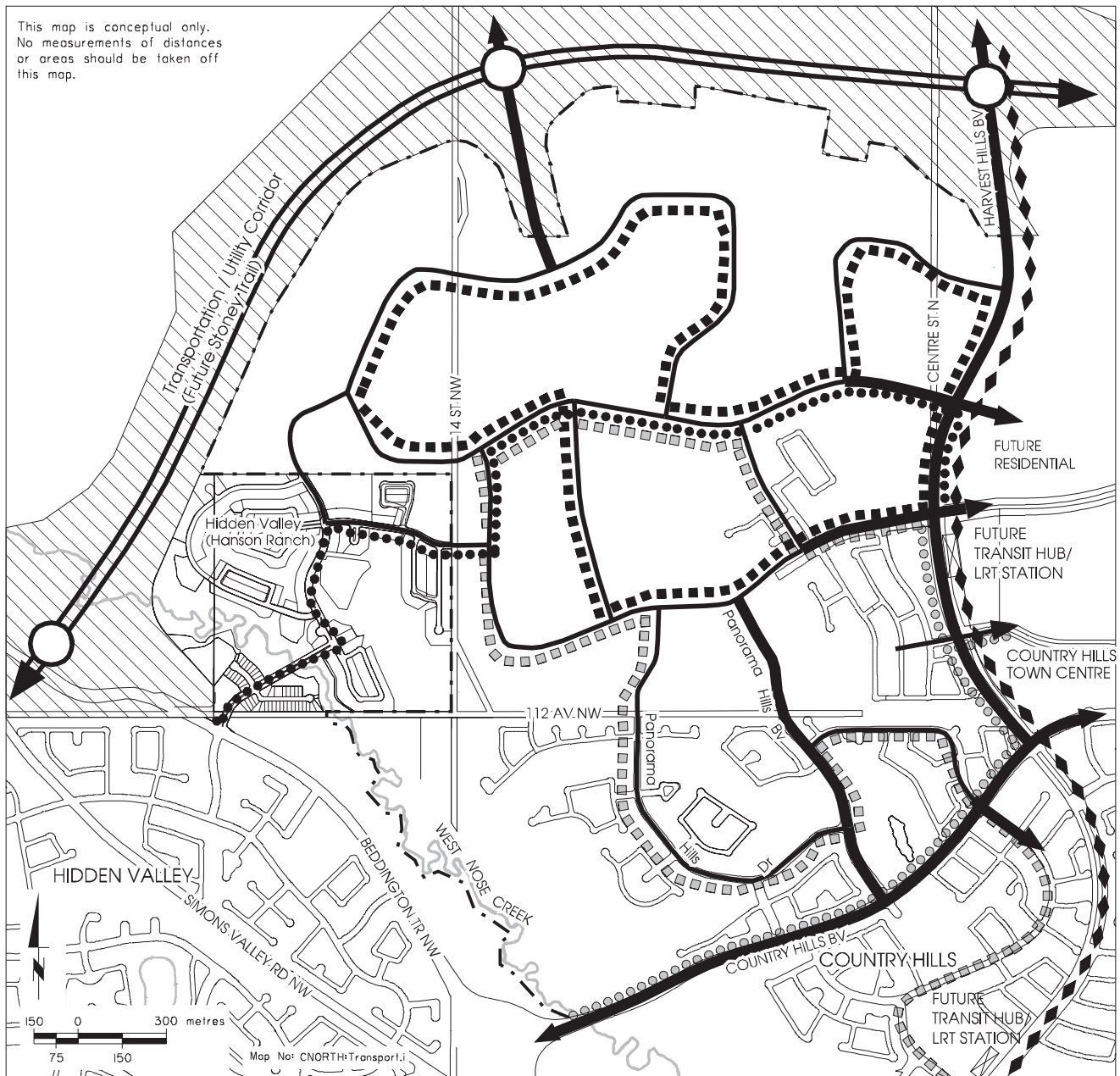
The existing 14 Street N.W. will ultimately be closed as the planning area develops. However, as 14 Street N.W. currently links the planning area to the area north of the Transportation/Utility Corridor (future Stoney Trail), the physical closure of 14 Street N.W. will only occur when Stoney Trail is constructed and/or other alternative connections are provided.

Within the planning area, a series of collector standard roads run through the community and connect to the external arterial road network. The proposed road network has been tested against a traffic simulation model to determine the necessary road standards. The ultimate extent of primary collector and collector standard roads within the community will be determined at the outline plan stage.

The layout of the internal road network takes into consideration the ultimate travel desire pattern in the community. Commuter traffic will be predominately to/from the south. The community core and all joint use sites are located along one or more collector standard roads. A collector standard road also connects the community to the Country Hills Towne Centre and future Transit Hub/LRT Station on Harvest Hills Boulevard.

The collector road network will also serve as the transit circulation route for the community.

This map is conceptual only.
No measurements of distances
or areas should be taken off
this map.



Legend

- Planning Area Boundary
- === Expressway/ Freeway
- == Major or Local Major Road *
- Major Collector or Collector Road *
- ◆◆◆ Proposed LRT/Express Bus Route
- Busroute A
- Busroute B
- ■ ■ ■ ■ Busroute C
- ● ● ● ● Busroute D
- Intersection

* Specific road standards
to be determined during
outline plan review

Calgary North Phase 2 Community Plan

Map 8

TRANSPORTATION NETWORK AND TRANSIT ROUTES

January 1999



THE CITY OF CALGARY
PLANNING & BUILDING DEPARTMENT

7.3 Transit

Transit route planning is based on the design principles and policies outlined in the Transit Friendly Design Guide. The goal is to promote transit usage by minimizing walking distances to transit services, creating a pedestrian-friendly environment at transit stops and reducing transit travel time to be competitive with auto travel.

Long-term transit service plans for this area include a LRT station and park'n ride facility on Harvest Hills Boulevard N.W.

Prior to the construction of the LRT, the community will be served by direct downtown express bus service. This downtown express bus service will utilize Centre Street, which may include transit priority measures such as transit signal priority, geometric improvements, bus only lanes and/or high occupancy vehicle (HOV) lanes.

8.0 SERVICING AND UTILITIES

8.1 Water Supply

There are two water pressure zones within the planning area. The North Hill Pressure Zone services land between the elevations of 1,067 metres and 1,107 metres. Land within 1,108 metres to 1,148 metres elevation is located within the Spyhill Pressure Zone.

An existing feeder main, located on Harvest Hills Boulevard N.W., currently terminates at the water reservoir site on the 112 Avenue N.W. right-of-way. A second feeder main system is located within the old Simon's Valley Road right-of-way in Hidden Valley, southwest of the planning area.

Extension of the existing feeder mains and the development of a pump station at the reservoir site will be required in order to service land north of the 112 Avenue N.W. right-of-way. Feedermain extensions are proposed to run northwest of the reservoir site, and then south, along the Transportation/Utility Corridor to connect with the existing feeder main on the old Simon's Valley Road.

Water Reservoir Site

The existing reservoir site is intended to service the north and northwest quadrants of the city, including the North Hill and Spyhill Pressure Zones. Two additional reservoir cells and a pump station will be constructed in response to future water demands. Given that the reservoir is located below ground, opportunities for public recreation on top of the reservoir have been identified, including use of the reservoir site for nearby school activities. Possible recreational features for the reservoir site include mini soccer fields pathways and benches.



Valve House for Reservoir #120

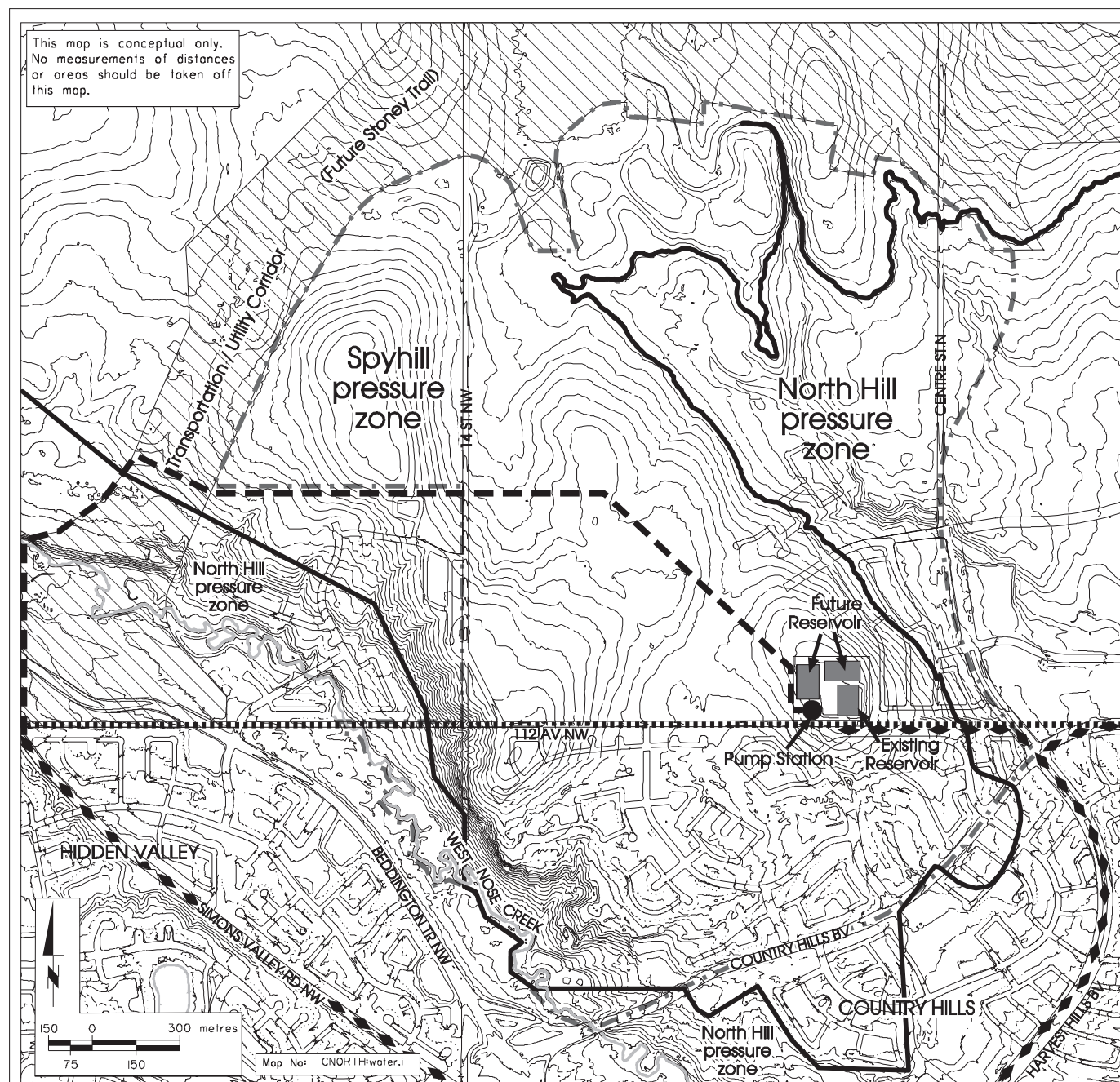
To ensure that the integrity of the reservoir is maintained, proposed plans for recreational features must address:

- maintenance vehicle access;
- protection of the existing building on-site;
- public safety;
- grading; and
- adherence to development restrictions (e.g., pesticides prohibited, above ground development only).

Until the two additional reservoir cells and the pump station are developed, recreational features will only be permitted above the existing reservoir cell. Following the completion of the additional reservoir facilities, the developed portions of the reservoir site can be considered for recreation development in accordance with the above guidelines.

Airdrie Watermain

A 350 mm watermain belonging to, and servicing the Town of Airdrie, is located within the 112 Avenue N.W. right-of-way. While discussions regarding the future use of this watermain are underway, it is anticipated that in the long-term, the 112 Avenue N.W. right-of-way, within the planning area, will remain a public utility lot.



Legend

- Planning Area Boundary
- Pressure zone boundary
- ◆◆ Existing watermains
- Aldrie Watermain (along 112 Av NW)
- Future Watermains
- Future pump station
- Water reservoir

Calgary North Phase 2 Community Plan

Map 9

WATER SUPPLY

January 1999



THE CITY OF CALGARY
PLANNING & BUILDING DEPARTMENT

8.2 Sanitary Sewerage

The majority of the planning area is located within the North Beddington Acreage Assessment Area and will be serviced by extending the existing 900 mm sanitary trunk northwest from the Harvest Hills community.

A small portion of the planning area is part of the Beddington Creek Phase 2 Acreage Assessment Area and will be serviced by a sanitary sewer extension from the Hidden Valley community (Hanson Ranch).

8.3 Stormwater Management

There are four stormwater catchment areas in the Calgary North Phase 2 planning area. Through a combination of storm sewer extensions and retention facilities, stormwater is proposed to drain into either West Nose Creek or Nose Creek, as described below.

Catchment Area 1 will be serviced by a trunk extending southwest into the Hidden Valley community (Hanson Ranch). Stormwater will be discharged into a series of retention ponds, before being released into West Nose Creek.

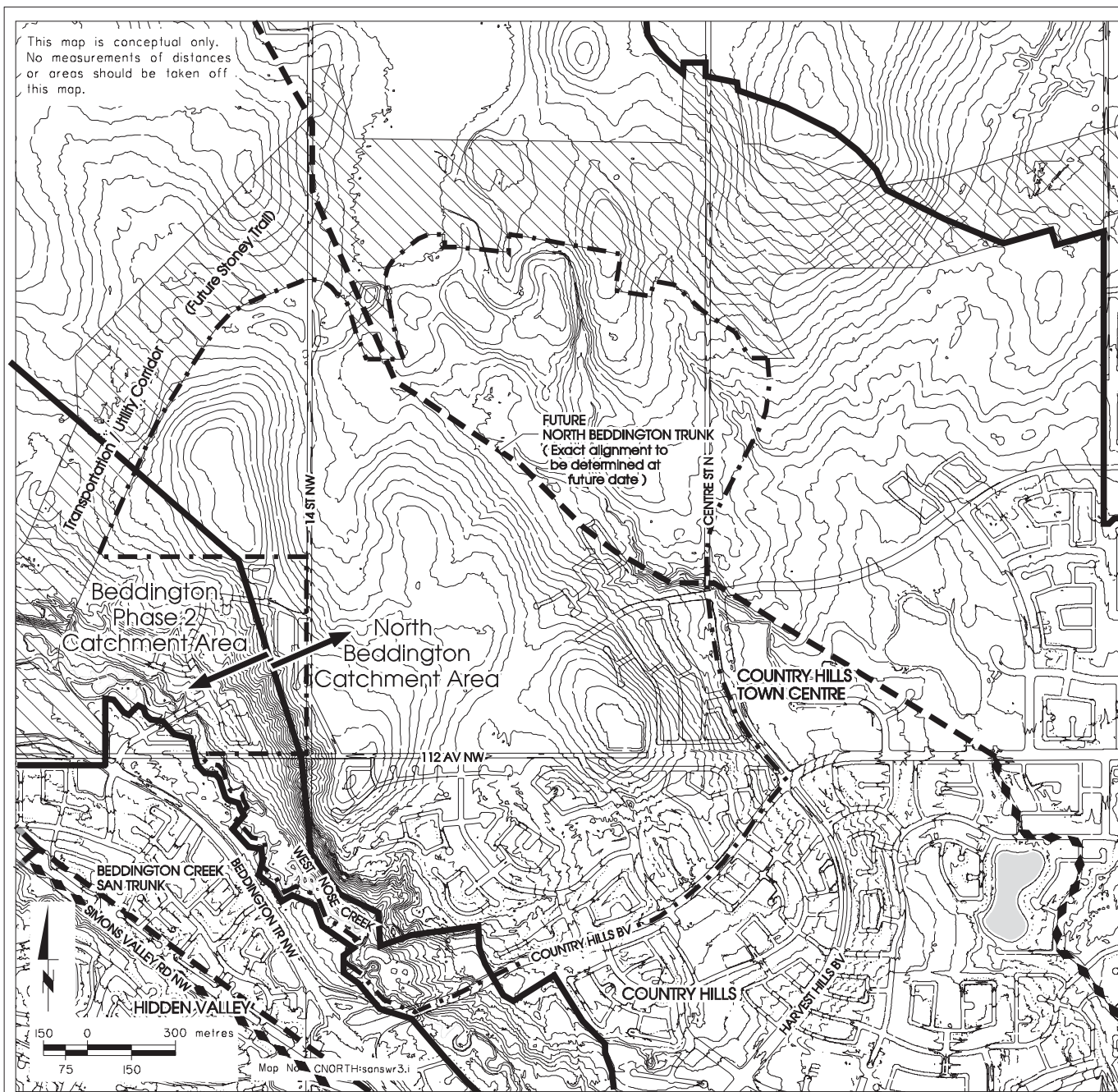
A nominal amount of developable land within the planning area is situated within **Catchment Area 2**. Stormwater management for this area is intended to direct water southwesterly to West Nose Creek.

Stormwater from the **North Beddington Creek Catchment Area** is proposed to drain southwesterly through existing trunk systems and retention facilities before being released into West Nose Creek.

Most of the undeveloped land in the planning area is located within the **Calgary North Catchment Area**. The majority of the stormwater in this catchment area will drain southeasterly and be discharged into one or more retention facilities before being diverted to the Country Hills Towne Centre storm pond. From this storm pond, stormwater flows to the Harvest Hills storm pond and is then released through a piped system into Nose Creek. Outfall upgrading at this location is required.

Stormwater management facilities for water quality and quantity control may be required in each of the catchment areas. The number and location of these facilities will be determined at the outline plan stage.

Stormwater management studies are to determine how the drainage of the Transportation/Utility Corridor (TUC) will be accommodated, including the drainage requirements for all future interchanges in this area.



Legend

- Planning Area Boundary
- Catchment area
- ◆◆◆ Existing sewer main
- Proposed sewer main

Calgary North Phase 2 Community Plan

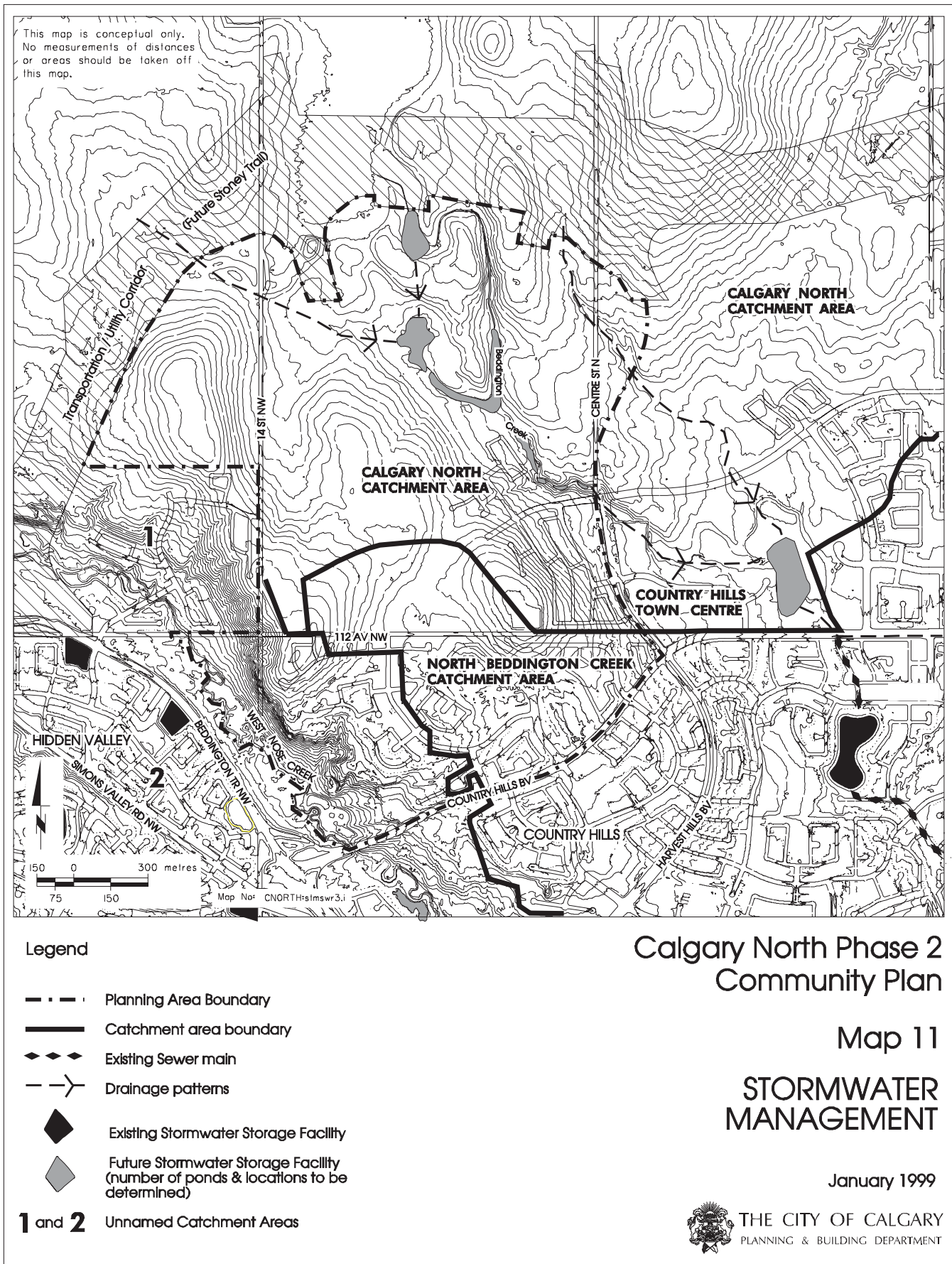
Map 10

SANITARY SEWER

January 1999



THE CITY OF CALGARY
PLANNING & BUILDING DEPARTMENT



Beddington Creek currently serves as a natural drainage course for the northeast portion of the planning area. The creek has been identified as an environmentally significant area. While portions of the creek may be suitable for one or more stormwater retention facilities, stormwater management plans will need to address, among other things, the following engineering and environmental concerns:

- long-term operational and maintenance costs; and
- possible environmental impacts of stormwater facilities on the creek.

8.4 Electrical Service

Development will be serviced initially from existing 25kV feedermains within and surrounding the community. If required to accommodate development, existing facilities will be relocated at the developer's expense.

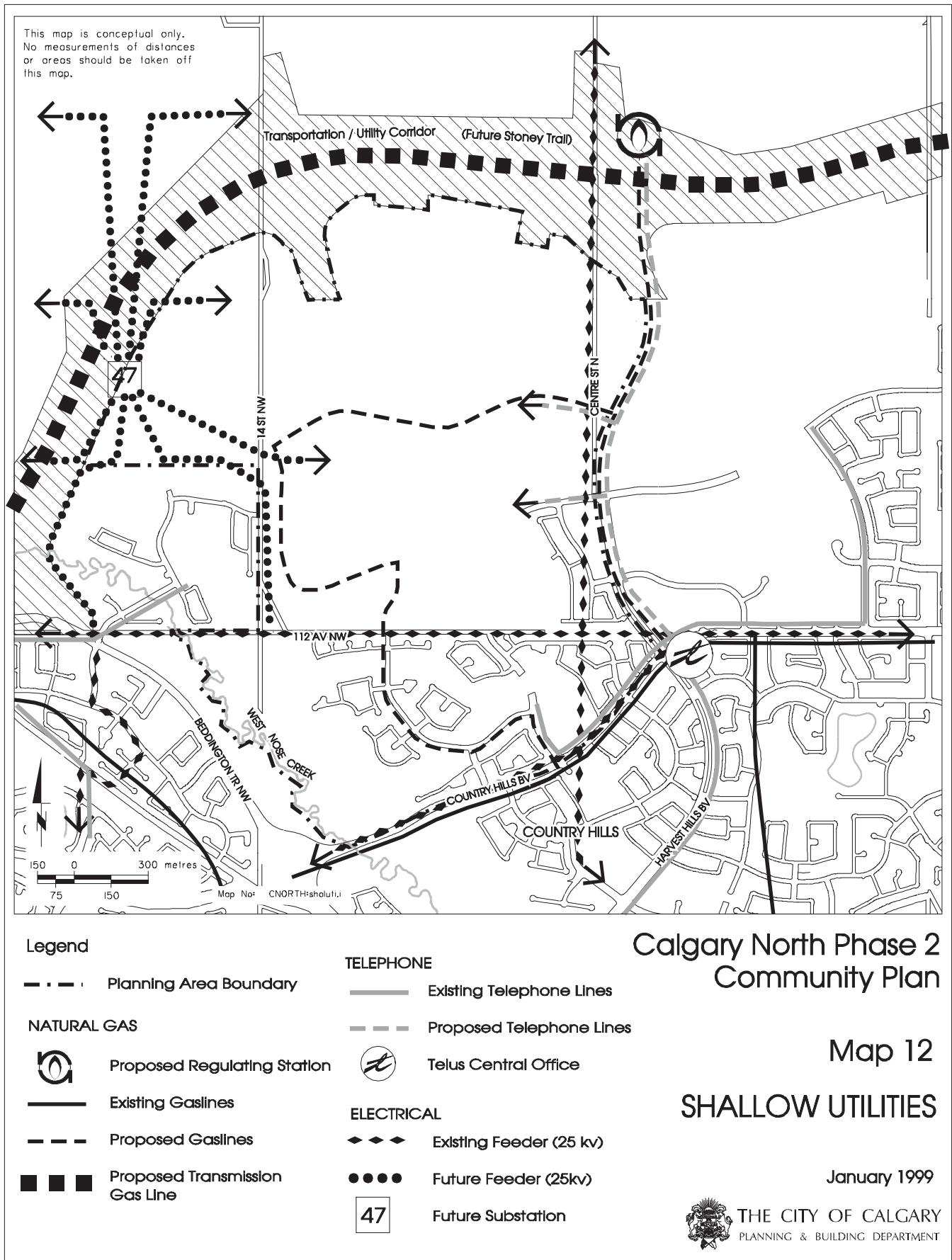
As demand warrants, a substation is proposed within the Transportation/Utility Corridor in the SE 1/4 Section 33, Township 25 Range 1, West 5th Meridian in the northwest part of the planning area and a number of new feedermains will be required. The exact location of the proposed substation and future feeders will be determined in conjunction with future outline plan applications.

8.5 Natural Gas

Natural gas service will be provided by extending lines into the planning area from existing and future lines on Country Hills Boulevard N.W. and Harvest Hills Boulevard N.W. respectively. A transmission line is proposed within the Transportation/Utility Corridor, along with a future regulating station near the future Stoney Trail and Harvest Hills Boulevard N.W. interchange.

8.6 Telephone and Cable

Telephone service will be provided by extending lines into the planning area from existing and future lines on Country Hills Boulevard N.W. and Harvest Hills Boulevard N.W. respectively.



9.2 Beddington Creek

Beddington Creek has been identified as an environmentally significant area. While some portions of the creek are disturbed, natural features include existing wetlands and some native vegetation. The creek offers the potential for linear open space features such as pathways and passive recreational areas. Portions of the creek may also be suitable for one or more stormwater retention facilities. Where stormwater facilities are proposed along Beddington Creek, efforts must be made to ensure that the biological integrity of the creek is maintained or enhanced.

9.3 Crime Prevention Through Environmental Design (CPTED)

While the underlying reasons for crime are complicated and not easy to resolve, it is nonetheless important to consider how the design of our public spaces can either encourage or reduce opportunities for crime. It is also important to recognize that the perception that a place is unsafe can discourage users from participating in activities in the space. For these reasons, the following CPTED principles are suggested to encourage the design of open spaces that are user-friendly and safe.

1. **Create opportunities for natural surveillance or “eyes on the space”** . This might involve orientating housing (and windows) to face an open space, ensuring that fences and landscaping do not completely block sight lines into parks, providing multi-purpose park features that help to maximize park use; encouraging adopt-a-park or similar programs which encourage citizen ownership in the design and upkeep of open spaces.
2. **Consider where the boundaries of public, semi-public and private spaces are located.** When these boundaries are more clearly defined, residents and visitors have a better understanding of which spaces are for public use, and which spaces are not theirs to encroach upon.
3. **Minimize opportunities for entrapment.** Consider where opportunities for entrapment may occur. Multiple accesses to open spaces may be one way of providing opportunities to avoid or bypass a threatening area or situation. Clear sight lines can also enhance perceived and actual safety.
4. **Consider features that will help to direct and orient users.** For example, signage indicating distances to destination points, hours of operation, or locations of nearby public facilities or emergency assistance can help the user know where they are, and how to get to a desired destination.

5. **Consider how spaces are used at night.** If the goal is to legitimize use of a public space during the evening, then safety features, including lighting, should be considered to enhance natural surveillance and to respond to problems created by topography or vegetation.
6. **Maintain spaces.** Graffiti, vandalism, litter and broken furniture/tree branches indicate that a space is unwatched and uncared for, and is therefore possibly unsafe.

The purpose of the above principles is not to prescribe any one design detail, but rather to highlight safety considerations. Design solutions should be responsive to the details of each particular site, such as topography and adjacent land uses.

Where possible, City staff are encouraged to consider CPTED principles when reviewing development plans for public spaces such as parks, pathways, walkways and transit stops.

10.0 COMMUNITY SERVICES

A shared-use facility between Police, Fire and Emergency Medical Services (EMS) is proposed to be located at the Country Hills Town Centre and operational by the end of 1998.

10.1 Police Service

Currently, the planning area is serviced from District #3, at 4303 - 14 Street N.W.

10.2 Fire Protection

Currently, the closest fire station to the planning area is Fire Station #28, located on Edgemont Boulevard N.W.

10.3 Emergency Medical Services

The planning area is currently serviced by two Geoposts at Centre Street North and 64 Avenue and at McKnight Boulevard and 4 Street. As well, two Paramedic Response Units are located at Fire Station #28, on Edgemont Boulevard N.W. and at the Calgary International Airport.

10.4 Library Service

The closest library to the planning area is currently the Thornhill Branch, located on Centre Street North at 64 Avenue N.E. Options for a site for a future library are being explored at the Nose Hill Regional Recreation Centre near Country Hills Boulevard and Centre Street North.

10.5 Community and Social Development Services

Services such as youth probation, community development and out-of-school care subsidy will be provided to residents in the planning area from the Thornhill Area Office, located at 6617 Centre Street North.

10.6 Calgary Regional Health Authority

It should be anticipated that the provision of services to new communities will evolve as the community grows in response to resident and community needs.

A wide range of services may be delivered in the client's home - be that a single family residence or communal living arrangement (e.g., senior lodges). Some services such as health clinics (e.g., well-baby clinics) are widely distributed to provide easy consumer access. Such clinics generally locate within communities, provide basic core services but may not necessarily be staffed on a full time basis. They provide support to schools and day care centres and are intended to be educational resources to the community as well. Services which are more complex and require special equipment or staff with special expertise will be provided in more centralized or regional facilities.

The closest existing facility to the planning area is the Thornhill District Area Office, located at 6617 Centre Street North.

11.0 COMMERCIAL DEMAND STUDY¹

11.1 Commercial Floor Area and Land Requirements in the Community Core

In total, approximately 140,000 square feet of retail, service commercial and office commercial floor area is recommended for the community core. Major tenants might include a supermarket of approximately 34,000 square feet, a drug store of approximately 8,600 square feet, and approximately 40,000 square feet of smaller speciality stores. The first phase of the supermarket might be planned for completion in the 2006-2008 period, with an expansion to the store's ultimate build-out of approximately 34,000 square feet by the year 2015.

1 Maxam Design International Inc. and Harris Hudema Consulting Group Limited, Commercial Demand Study, July 1998.

11.2 Location

Given the proximity of the Country Hills Town Centre, commercial uses should locate in the north-central part of the plan area. Access to the future Stoney Trail, as shown on May 2, is considered critical to the success of the community core's commercial components.

11.3 Employment Implications

Based upon standard employment measures for commercial uses, it is estimated that approximately 403 full time jobs would be created as a result of the Calgary North Phase 2 commercial development.

11.4 Retail Planning Principles

The following planning and design principles are suggested for the community core:

1. Create a **critical mass** of commercial in one location in order to create a commercial hub, with high level of activity;
2. Development should begin with strong **anchor stores** such as supermarkets, drugstores, financial institutions and restaurants, and then grow organically as demand warrants;
3. Integrate a **mix of uses** in addition to the commercial component (e.g. civic, institutional and recreational land uses);
4. Ensure that the commercial area is very **accessible and visible** to residents. Provide strong road and pathway connections between the commercial area and outlying neighbourhoods. Access to the future Stoney Trail is a key design factor;
5. Streets through or around the commercial area, though allowing for cars and buses, should be designed to **slow traffic through key districts or intersections**. On-street parking, boulevards, featured crosswalks and plazas both around and on the commercial site are encouraged;
6. To help establish a pedestrian-oriented centre, consider **reduced on-site parking** requirements, particularly when it can be shown that peak parking demand is lessened as a result of tenant mix (e.g. shared parking, short-stay parking), or the addition of on-street parking.

The study recommends a reduction from 5.0-5.5 stalls/1,000 square feet of retail/service commercial space to 4.0 stalls/1,000 square feet. A reduction from 2.0 stalls/1,000 square feet of office space to 1.5 stalls/1,000 square feet is also suggested;

7. Develop a **way-finding program** within the community, the core and on-site so residents can easily locate the commercial area and identify the uses within the area easily;
8. Develop a **theme** for the community core, using common design elements such as street furniture/lighting, public art, street and sidewalk paving, etc.;
9. Commercial areas should maintain a **human character and strong pedestrian orientation**. Buildings oriented toward the street and surrounding residences should be considered. Building scale should be relevant to the street, and tenant signage should promote a street presence and scale. Large blank walls facing the fronts of residences or adjacent streets should be avoided;
10. **Capitalize on sun-angles** for key plaza meeting areas and restaurant locations; and
11. Commercial **lot sizes** should be large enough to attract a wide array of potential developers and builders. **Smaller tenant spaces and narrow frontages** assist in creating a greater number of stores. This will appeal to local merchants as well as regional and national commercial chains.

GLOSSARY

Approving Authority means the Subdivision Authority, Development Authority or Subdivision and Development Appeal Board of The City of Calgary, as the case may be.

Calgary Planning Commission means the Calgary Municipal Planning Commission constituted pursuant to the Municipal Planning Commission Bylaw.

Community means, when referring to land, a logical physical and social planning area which is predominantly residential in character, defined by significant natural or man-made features.

Community Boundary means the boundary of a community as defined in a community plan, and is to be distinguished from a community name boundary which may be different and is based on the Community and Street Name Guidelines.

Community Centre Site means a site, comprised of reserve land, which is owned by the City but used and developed by a community association under the terms of a license of occupation, and accommodates a community centre building and related recreational facilities and amenities.

Community Commercial Use means a small to moderate scale retail or personal service use which serves the community and may include a medical clinic, a personal service business, a retail store, an office, an entertainment establishment, a recycling depot, a financial institution, a food store, a private club, an automotive service, a restaurant and an outdoor café.

Council means the City Council of The City of Calgary.

Duplex means a single building containing two dwelling units, one above the other, each having a separate entrance.

Environmentally Significant Area means a natural area which, because of its features or characteristics, is significant from an environmental perspective to Calgary, and has the potential to remain viable within an urban environment.

Gross Area means the total area of land contained within the property lines of a site.

Gross Residential Density means the following are included in the density calculation:

- all residential land uses,
- neighbourhood shopping centres,
- Municipal Reserve,
- church sites,
- day care centres,
- community halls,
- all roads except expressways/freeways,
- all lanes,

- commercial centres less than 2.4 hectares (5.9 acres),
- elementary schools and junior high schools, and
- small site fire and police stations.

The following are excluded in the density calculations:

- Environmental Reserve,
- expressways/freeways and interchange lands,
- regional and sector shopping centres,
- major institutional centres,
- land reserved by the Province (e.g. Transportation/Utility Corridor),
- senior high school sites,
- lands purchased with reserve funds,
- commercial centres greater than 2.4 hectares (5.9 acres),
- industrial uses,
- regional land uses (e.g. regional parks, riverways).

Institutional Use means a public, quasi-public or private use that serves the educational, social, cultural or religious needs of the residents in a community and may include a church, a post office or postal kiosk, a library, a public or private school, a child-care facility and a private club.

Joint Use Site means a site comprised of reserve land which is jointly owned by The City of Calgary and a school board for the purpose of accommodating a school, sports fields and related recreational uses.

Linear Park means a park, comprised of reserve land, that accommodates the regional or local pathway and passive and active recreational activities and creates continuity for the open space system. A linear park may also include private land that accommodates local pathway connections.

Mobile Home Use means a single wide or a double wide mobile home located on an individual lot, or within a comprehensively-designed mobile home park.

Multi-dwelling Residential Use means a residential building containing two or more dwelling units and includes a semi-detached dwelling, a duplex, a townhouse and an apartment.

Natural Area means an undisturbed, or relatively undisturbed, area of land or water, or both, which has existing characteristics of a natural/native plant or animal community and/or portions of a natural ecological and/or geographic system.

Neighbourhood means a portion of a community and is generally defined by a 400-metre radius or five minute walk from a central bus stop located within a neighbourhood node.

Neighbourhood Commercial Use means a small-scale convenience retail or personal service use serving the surrounding residential area and may include a professional office, a barbershop or beauty salon, a restaurant and an outdoor café.

Neighbourhood Node Park means a neighbourhood park, a sub-neighbourhood park or a private park.

Neighbourhood Park means a park, comprised of about 0.8 ha of reserve land located in an area located relatively distant from a joint use site, which is designed to accommodate a mix of recreational activities, including informal sports, passive recreation and neighbourhood events, and may contain creative play equipment and decorative elements.

Pedestrian-oriented means an area that is planned and designed to cater to the needs of pedestrians who are travelling to, from and within the area. Characteristics of a pedestrian-oriented setting may include, but are not limited to:

- a) a variety of land uses and activities located closely to one another;
- b) sidewalk and/or pathway connections from surrounding neighbourhoods to the area;
- c) streetscapes and other public spaces that are designed to make walking both easy and enjoyable, and encourage social interaction;
- d) building design and massing, and signage that relate to a human scale and contribute to a comfortable walking environment;
- e) orientation and integration of building facades with a public sidewalk or pedestrian way, permitting direct pedestrian access to building entrances; and
- f) parking and vehicular circulation areas designed to minimize conflicts between pedestrians and vehicles.

Private Park means a park owned and maintained by a residents' association.

Recreational Use means a public or private athletic or recreational facility or amenity, a joint use site or a park or playground which serves the surrounding neighbourhood or community.

Restored means the efforts to restore a disturbed site to near its natural and native condition.

Secondary Residential Use means a small-scale detached residential unit developed on the same lot as a single detached dwelling, and may include a studio suite.

Semi-detached means a single building designed and built to contain two side-by-side dwelling units, separated from each other by a party-wall extending from foundation to roof.

Single-Detached Residential Use means a single residential building containing one dwelling unit only, but does not include a mobile home.

Special Commercial Use means a small-scale office or personal service use that does not generate a high volume of vehicular traffic or customers, is generally compatible with residential development and may include a travel agency or a professional office.

Streetscape means all the elements that make-up the physical environment of a street and define its character including the road, boulevard, sidewalk, building setback, height and style. It also includes pavement treatment, trees, lighting, pedestrian amenities and street furniture.

Sub-Neighbourhood Park means a small-scale park, comprised of a minimum of 0.2 ha reserve land with about a 500 m walking distance service area, which is designed to accommodate neighbourhood socialization and passive recreation.

Transit-oriented or Transit-friendly means the elements of urban form and design that make transit more accessible and efficient. These range from land use elements (e.g., locating higher density housing and commercial uses along transit routes) to design (e.g., provision of direct routes to transit facilities). It also encompasses pedestrian-friendly features as most transit riders begin and end their rides as pedestrians.