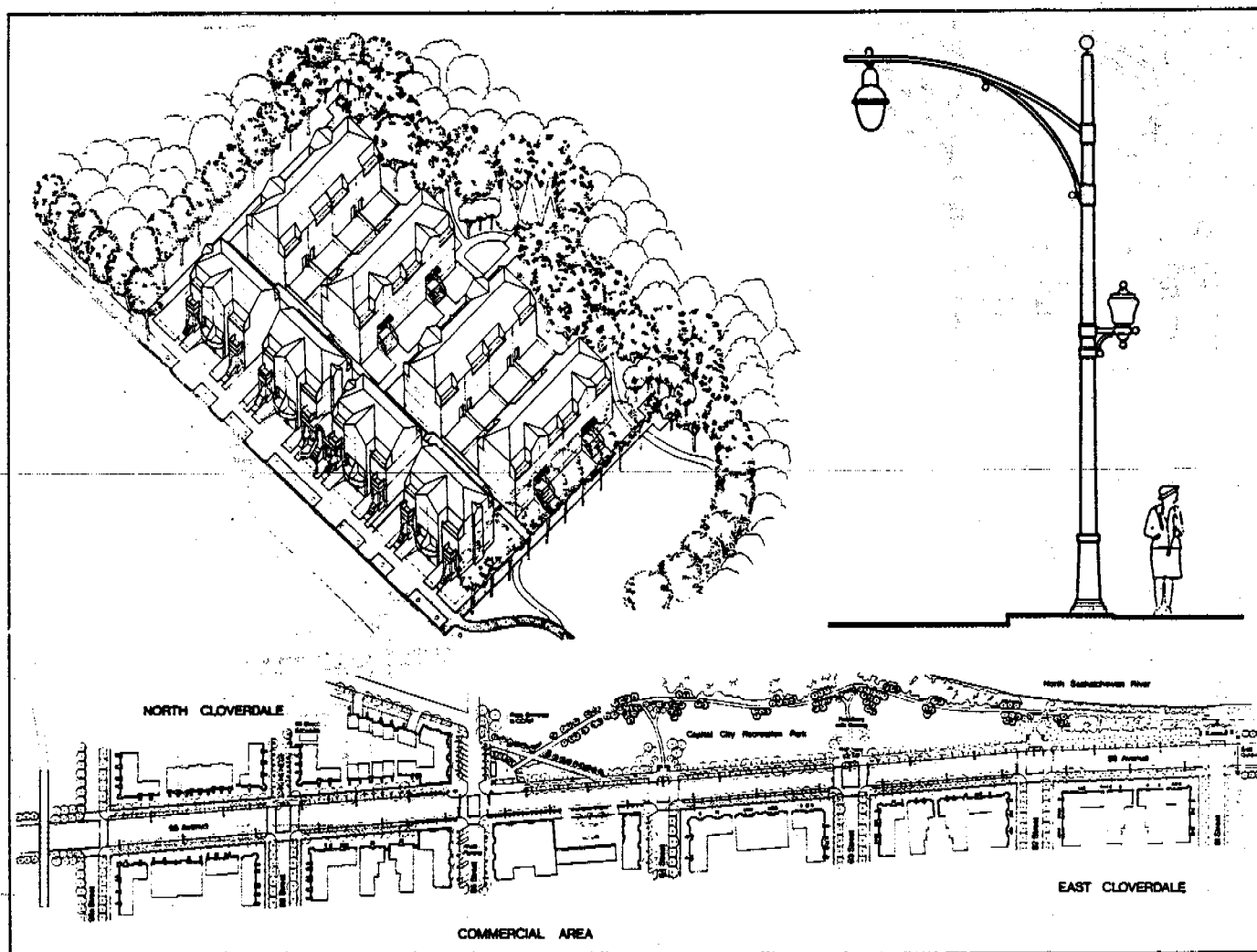
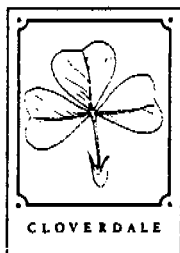


AN URBAN DESIGN STRATEGY FOR CLOVERDALE





AN URBAN DESIGN STRATEGY FOR CLOVERDALE

This report was prepared for the City of Edmonton Planning and Building Department for the development of urban design guidelines for medium density housing and for the concept design of streetscape improvements for the two major streets 98 Avenue and 97 Avenue, in Cloverdale.

The contents of this report both complement and enhance the Area Redevelopment Plan for Cloverdale as prepared by the City of Edmonton Planning and Building Department. The purpose of the report is to establish the context for the physical expression of built form, ensuring that Cloverdale's village-in-the-valley image is strengthened and maintained within a coherent public network.

The streetscape improvements support the public network of streets, parks and plazas, as the basic ordering system of the neighbourhood. The urban design guidelines are directed to public and private developments as they affect the public network.

Study direction was provided by the City of Edmonton Planning and Building Department: Bill Dolman, Director; Ken Johnson, Project leader; Roland Nogue, Community Planner; Scott Pragnell, Planner; Paul Walsh, Planner.

The consultants' project team consisted of Douglas M. Carlyle, David Murray and Richard Isaac assisted by E. Keith Orlesky, Robert N. Allsopp, Cory Cunningham and Gary Dewhurst.

January 6, 1986.

PREPARED FOR: THE CITY OF EDMONTON
PLANNING AND BUILDING DEPT.

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BACKGROUND TO THE STUDY

PLANNING HISTORY

"Since the early 1900's, the City has gradually acquired land in the communities of Rossdale and Cloverdale on an opportunity purchase basis for eventual development of the areas for parkland and open space. At present, the City is a major landowner in the two communities, with approximately \$15-\$18 million worth of vacant and developed residential land holdings.

On December 14, 1983, City Council changed its long standing policy toward these two communities and directed the Planning Department to prepare community plans for Rossdale and Cloverdale. In reversing its policy, Council has initiated a positive process of rejuvenation and renewal in the communities. The resultant community plans will contain an action program for the implementation of civic improvements and the disposition and marketing of the City's significant land holdings in the communities."*

The Urban Design Strategy for Cloverdale forms a background document to the Area Redevelopment Plan and Implementation Report developed by the River Valley Project Team of the Planning and Building Department. The work of the project team and the urban design consultant was undertaken concurrently and considers views which were expressed in the submissions to the Ideas Competition of 1984-85 and at meetings with the community, City departments, the Steering Committee and the development consultant.

STUDY PURPOSE

The purpose of this study is to clarify the community structure, to give direction to major public improvements in the form of streetscape concept designs, and to set forth a strategy for directing the form of medium density housing by means of urban design guidelines and area objectives.

The strategy of the study both complements and enhances the A.R.P.'s basic land use districts, regulations and development criteria, as well as transportation and open space requirements. The underlying objective is to establish the context for physical expression to ensure that Cloverdale's village-in-the-valley image is strengthened and maintained within a coherent public network. The network of streets, parks and plazas is the ordering system of the neighbourhood. They are a basic tool of urban design and at the same time, an obvious result. The urban design strategy is directed to the public network in so far as it is affected by public and private developments.

* River Valley Community Design Competition Terms of Reference, 1984.

The streetscape concepts and urban design guidelines are to offer a vision of what the medium density housing areas of Cloverdale could become as a place in its mature state. It is a basis for formulating the detailed vision among all the participants in the planning process including residents, city planners, developers, architects and financiers. It should be an on-going **Terms of Reference** during the process of change and revitalization.

STUDY ORGANIZATION

The study is organized into four basic components as illustrated in Figure 1. It begins by outlining the community structure. The structure is based on the development of a public network that is described by the streetscape and urban design components. The streetscape public improvements are directed to the City, the steward of the public domain and the urban design guidelines are directed to proponents of medium density housing developments addressing the streets, parks and plazas. The utility of a co-ordinated urban design approach with defined street roles and proposed improvements and built form guidelines is demonstrated in the sub-area urban design section.

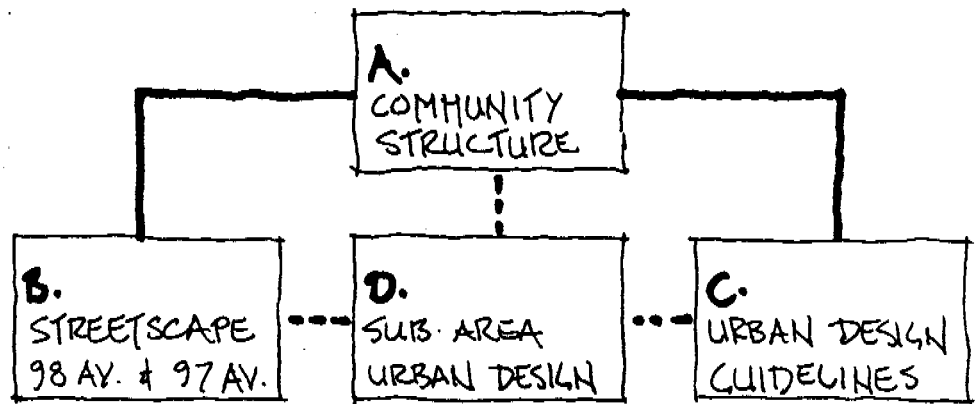


Fig. 1 Study Organization.

EXECUTIVE SUMMARY

COMMUNITY STRUCTURE

The community structure is premised on a number of principles. They include:

VILLAGE-IN-THE-VALLEY

The urban design strategy envisions Cloverdale as a village-in-the-valley. It works with what is in place and proposes both the village and valley images be strengthened in the neighbourhood's revitalization. The village structure of streets, parks, plazas, pedestrian ways and transportation routes should be developed and made clearly evident. The valley park quality should be extended into the neighbourhood so that it is known as a 'green oasis'.

PLACES

Cloverdale should be characterized by its variety of public places: both a variety of Places to go to as destinations and a variety of Places to live in. All are to be closely integrated through the street network.

STREETS

The role for each street should be defined. It is the shared understanding about the ambience or tone of a place (street) among all of those who participate in the building of streets and their components including residents, developers, builders, planners, architects, politicians, and investors. By establishing an agreed upon role and using simple conventions in the configuration of public elements and buildings, the individual pieces developed over time will be assembled into something greater than a collection of buildings: Streets of remarkable cohesion can be created.

Each street has specific roles derived from the immediate and surrounding contexts. 97 Avenue and 98 Avenue are the two principal streets in the neighbourhood. The role of 98 Avenue is that of Cloverdale's Main Street and 97 Avenue is that of Cloverdale's Community Street.

GATEWAYS

Gateways at either end of 98 Avenue are to form distinct points of entry to the neighbourhood.

VEHICLE TRAFFIC

Regional and local traffic is to be managed to ensure a safe pedestrian environment throughout Cloverdale, that is to make the streets livable.

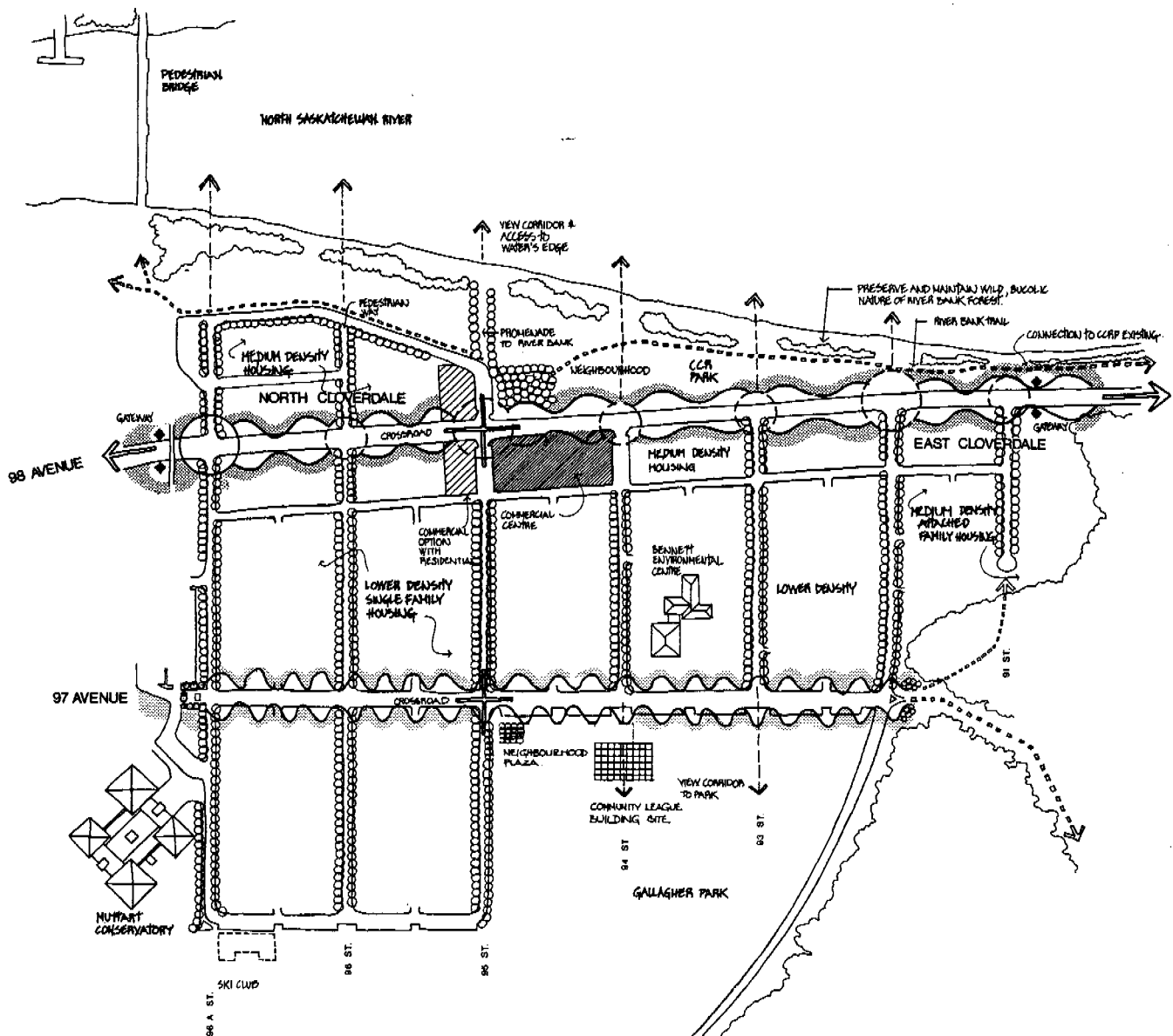
PUBLIC NETWORK EXTENSIONS

Two additional public right-of-ways are proposed, an extension of 96 Street in North Cloverdale and the development of a pedestrian way and park, Woodlands Way, from 97 Avenue to East Cloverdale. They offer additional point of access to these parts of the neighbourhood and an increased variety of public places.

APPROPRIATE MEDIUM DENSITY HOUSING

The medium density housing development is advantageous to the neighbourhood as a whole in that it increases the overall population; adds to the variety of household types, and diversifies the neighbourhood fabric.

Three sites are selected for medium density housing: 98 Avenue, East Cloverdale, and North Cloverdale. All of them are to be integrated with the low density housing.



Community structure diagram.

STREETSCAPE IMPROVEMENTS

The approach to the streetscapes is to develop improvements that will be "character builders"; that is to ensure "places will happen regardless of what gets built." In general they are to set the tone for the street's role by offering pedestrian amenity, lending the street distinction, and reinforcing the overall village-in-the-valley image.

Public improvements are directed at the two principal streets in the neighbourhood: 98 Avenue and 97 Avenue. These two streets are to continue to have the most public roles and uses. A streetscape vocabulary of tree planting, lamp poles, seating, paving surfaces, and traffic signage for these two streets is to be of continual and engaging interest to the pedestrian. The co-ordination of elements is to offer an overall consistency but with changes in patterns, spacing, and element combinations is to enhance the separate identity of each street.

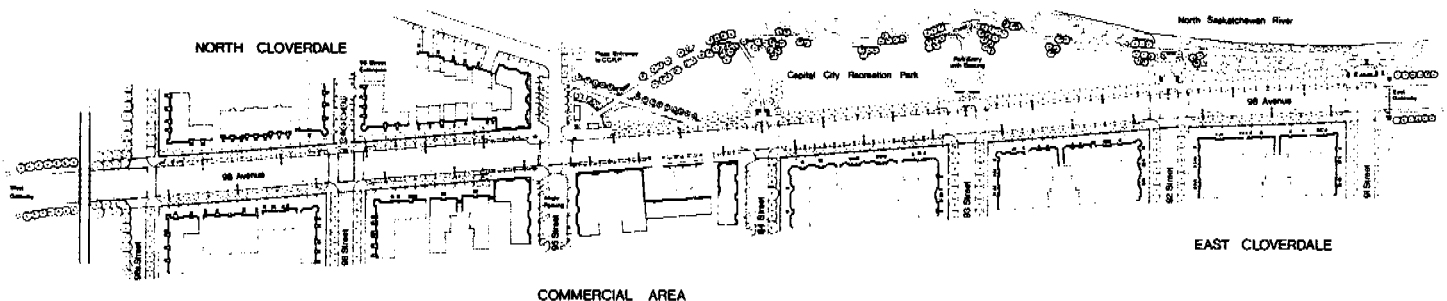
The concept for 98 Avenue is for a double arcade of closely spaced tree planting along both sides of the street from one end of Cloverdale to another.

The concept for 97 Avenue is to strengthen its boulevards with more intensive street tree planting from 92 Street to 96A Street.

The implementation of public improvements is appropriate at an early stage in the overall development, occurring prior to or simultaneous with private development because:

- * It demonstrates the City's real commitment to the revitalization of the neighbourhood in a highly visible manner that is both symbolic and functional.
- * It sets forward changes that indicate the character of public environment (the setting) the private developments are to address.

It is proposed the improvements occur within a three year time span. Spending of just under \$1 million is required for each of the first two years and approximately \$300,000.00 in the third year.



98 Avenue Streetscape Concept Plan.

URBAN DESIGN GUIDELINES

The purpose of the guidelines is to influence and direct the bulk, scale, mass, and articulation of medium density housing forms in so far as they affect the public network. They are to ensure that:

- * Spaces between buildings are "positive" and that they invite and promote use.
- * Each building incrementally adds to the streetscape.
- * Buildings front streets and give them a continuous sense of address.

The following is a summary of the guidelines:

BUILDING FRONTS

- 1) All streets are to be addressed by a continuity of front doors.

Dwellings at the first floor are to have individual entrances oriented to the street.

Front entrances to dwellings not directly abutting the street are to be directly accessible from the street.

- 2) The fronts of residential buildings should include such architectural features as porches, stoops, canopies, bay windows, hedges, low fences or other similar devices which will reinforce a sense of occupancy along the street.

BUILDING HEIGHTS

- 3) The maximum building height is to be three storeys.
- 4) The majority of building faces along streets and lanes are to be two storeys in height. The third storey is to be predominantly setback from the building face to maintain the two storey appearance.

BUILDING SETBACKS

- 5) New buildings are to be setback from the front property line by:
 - 8.0 m along 98 Avenue
 - 4.5 m along other streets
 - 3.0 where the front property line abutts a park
- 6) The rearward setback can be 1.0 m if the building does not comprise more than 50% of the site width at this line. Otherwise, the minimum setback is 7.5 m.
- 7) Buildings can be constructed to the side property line.

PROJECT OPEN SPACES

- 8) Open spaces within the site and around the building(s) should be attractive for use by the site's residents.
- 9) Front yards are not to provide private outdoor amenity space for dwelling units.

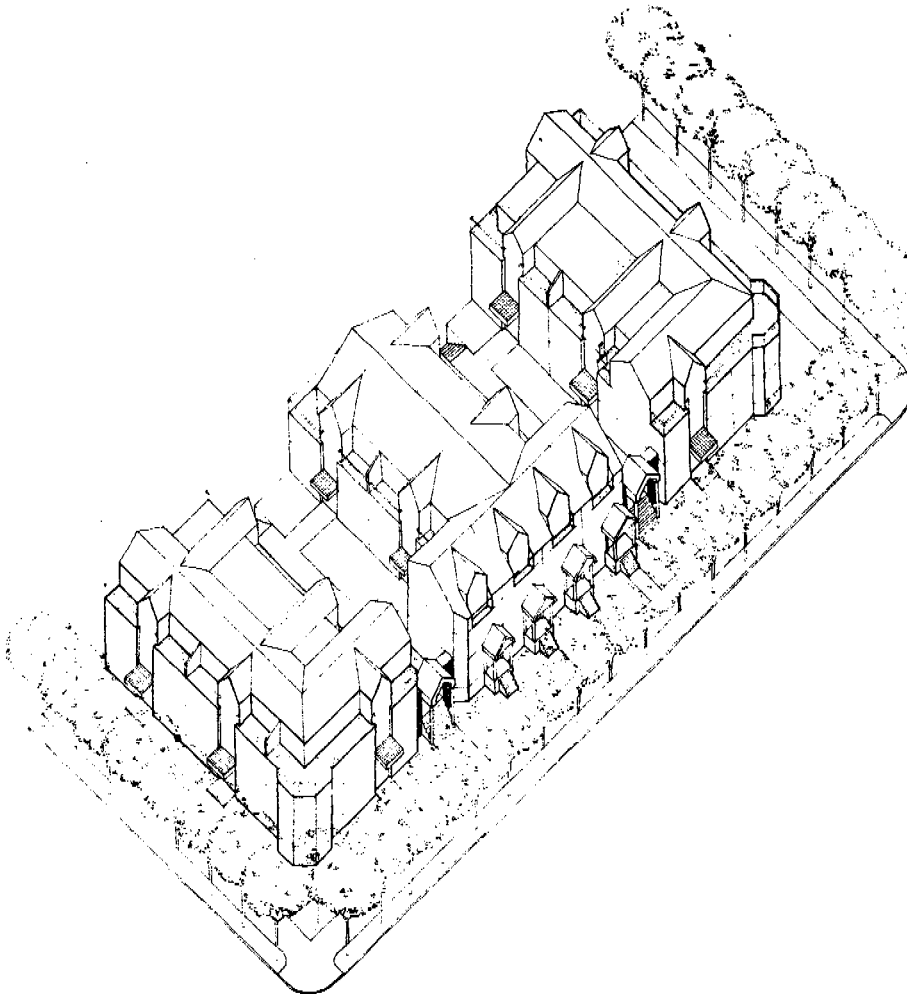
BUILDING TYPES

- 10) A variety of appropriate residential building types is encouraged throughout the medium density areas.

PARKING AND SERVICE ACCESS

- 11) Access to on-site parking is to be from the lane wherever possible. Casual and visitor parking is to be available primarily along local streets.

The urban design guidelines are to form part of the terms of reference for redevelopment in Cloverdale. They are to be used in conjunction with the Development Criteria of the Area Redevelopment Plan, which summarizes the guidelines in point form. They provide the background for and an understanding of the mature neighbourhood envisioned and how any project is to contribute to the making a PLACE.



Demonstration built form applying the guidelines.

SUB AREA URBAN DESIGN

The preliminary study of each sub-area illustrates the potential they have as special Places if a coordinated urban design approach is adopted.

NORTH CLOVERDALE

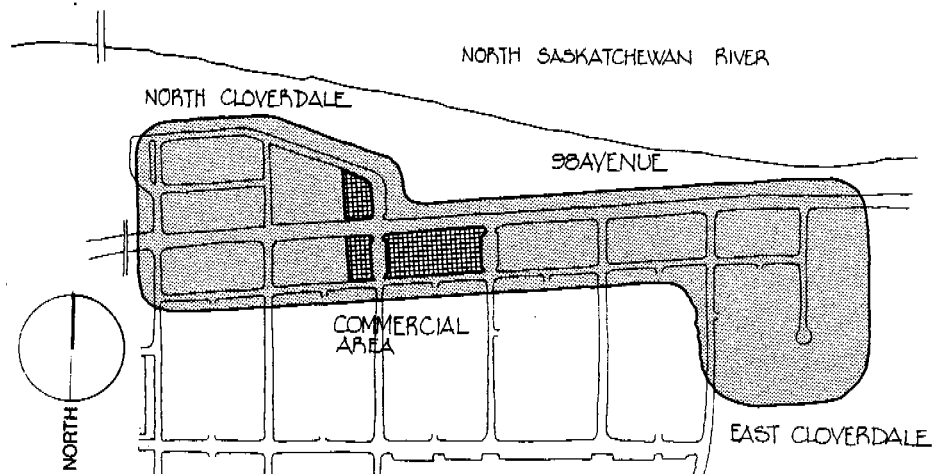
- * The area should be pedestrian in scale and character to enhance Cloverdale's village-in-the-valley image.
- * A rich and varied public network of pedestrian oriented streets to South Cloverdale should be developed, including an extension of 96 Street.
- * Street level commercial is to be permitted at North Cloverdale's east end to strengthen the 95 Street and 98 Avenue intersection, Cloverdale's most public place.

EAST CLOVERDALE

- * New development should take advantage of the adjacent parkland for housing frontage.
- * Pedestrian connections, which are integrated with the nature preserve, are to be made between 97 Avenue and East Cloverdale.
- * The potential for development of East Cloverdale should be enhanced by creating more building lots, to the approximate edge of the slope of the nature preserve.
- * The nature preserve should be protected and enhanced as an amenity to the housing and the neighbourhood.

98 AVENUE

- * It is to have a character of a compact and peopled street that is an inherent part of the neighbourhood and so strongly residential.
- * There is to be an ease of access from either side of the street to take advantage of the C.C.R. Park.
- * The massing of housing is to reflect the small scale village character.



Medium density areas.

SECTION A

COMMUNITY STRUCTURE



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A.1 A VILLAGE IN THE VALLEY

Cloverdale is a conventional gridded street neighbourhood that is special because it is located in the river valley and surrounded by parkland.



Fig.2 Cloverdale surrounded by river valley parkland.

It has the perceived image of being a **"village in the valley"** separated from other city communities by the verdant river valley. An essential concept for its revitalization is to strengthen this image and make the neighbourhood special in and of itself, not just because of its location. The approach for developing this image is twofold: The **village structure** of streets, parks, plazas, pedestrian ways, and transportation routes should be enhanced and made clearly evident. It is to be known for its ease of movement, accessibility, and identifiable character resulting in a rich pedestrian experience. The existing pattern of streets addressed continuously by house fronts is fundamental to the neighbourhood's pedestrian orientation and is to be reinforced through future redevelopment. The perceived **valley park** quality is to be extended into the neighbourhood so that it is characterized as a "green oasis", greener and more verdant than the surrounding parks. Together these two qualities are to offer a coherent and discrete place that has a sense of refuge or sanctuary from the surrounding city.

The bucolic surroundings cover an expansive area and include a number of parks each with its own assets: The Muttart Conservatory with its climate controlled exotic indoor plant habitats; the Capital City Recreation Park with its extensive valley trail network; the "camel humps", a major hillside preserve of woodland; and Gallagher Park

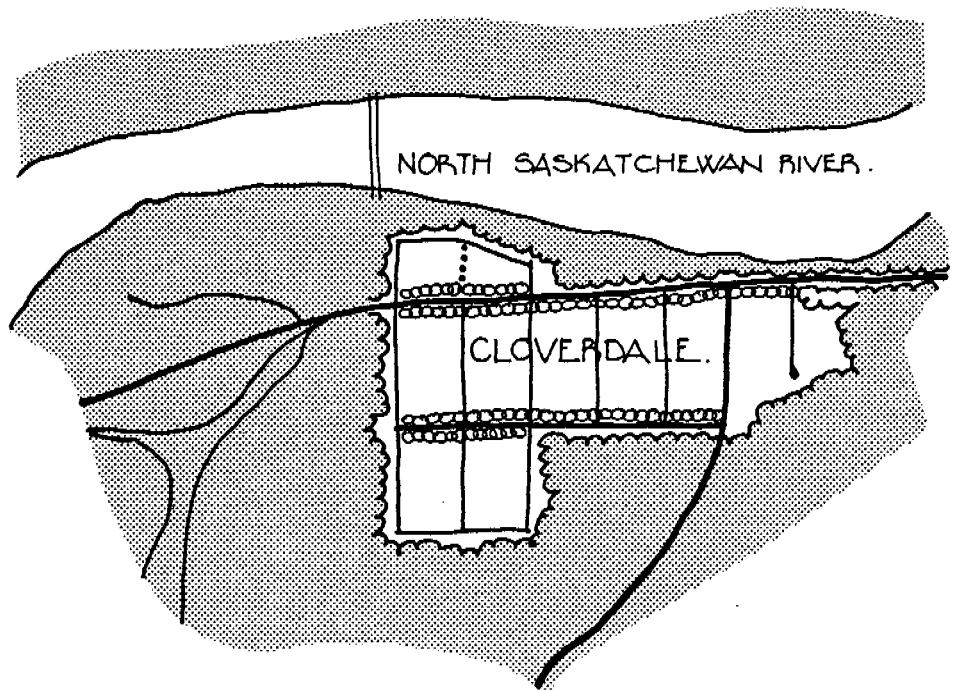


Fig. 3 Cloverdale surrounded by parkland.

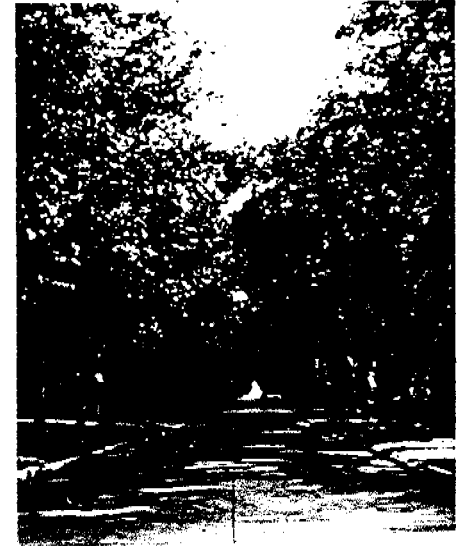


Fig. 4 Images of the Village in the Valley Concept.

with its sweeping open fields. The recreational advantages offered by these facilities should be exploited and pedestrian access from the neighbourhood should be made with ease.

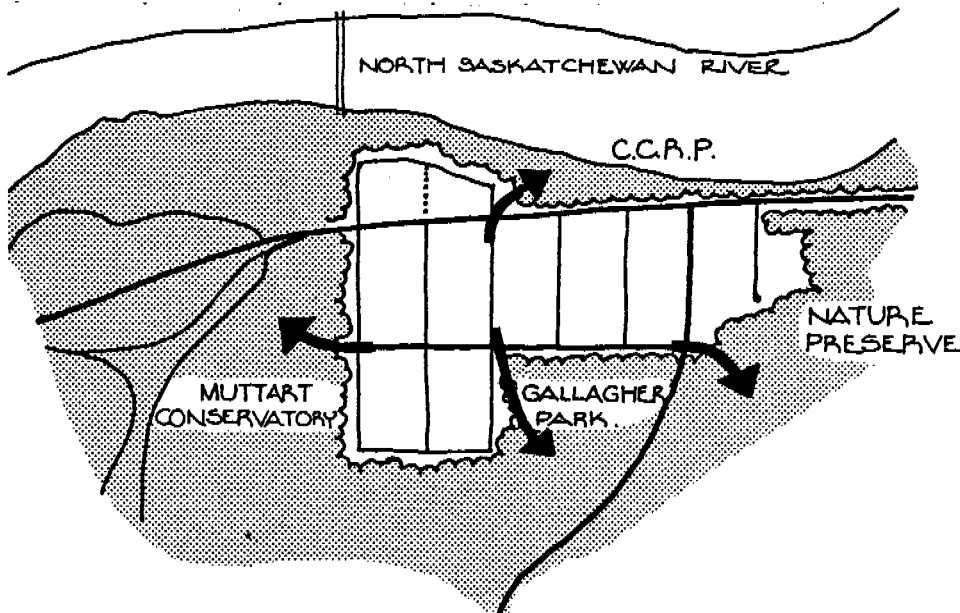


Fig. 5 Access from Cloverdale to surrounding parkland.

A.2 PLACES

Cloverdale should have a sense of Place at a progression of scale from large to small where bigger places hold smaller places: The valley contains the neighbourhood, the neighbourhood contains the public network of streets, parks and plazas, which in turn are the addresses for the houses. At the overall scale the approach is to strengthen the identity of the neighbourhood-in-a-park character.

Cloverdale should be known for its diversity of small scale Places, each having its own specific role. Special places such as parks and plazas should be memorable. Two street intersections, or 'crossroads', both offer opportunities for symbolic and functional foci in the community (98 Avenue at 95 Street and 97 Avenue at 95 Street). In each case parkland is defined by private development on the three other corners. At each crossroads a park entrance or plaza is to be located to take advantage of the points where people inevitably meet. They are to be perceived as destinations in and of themselves. These park entrances define these intersections as Places.

Smaller scaled places are to be established along the north side of 98 Avenue on axis with the north-south streets. They form a foot-of-the-street and partially close the long view and reinforce the small scale character of the neighbourhood. 97 Avenue also has "foot-of-the-street" seating and planted areas visually terminating the ends of the Avenue, and offer places to sit and relax.

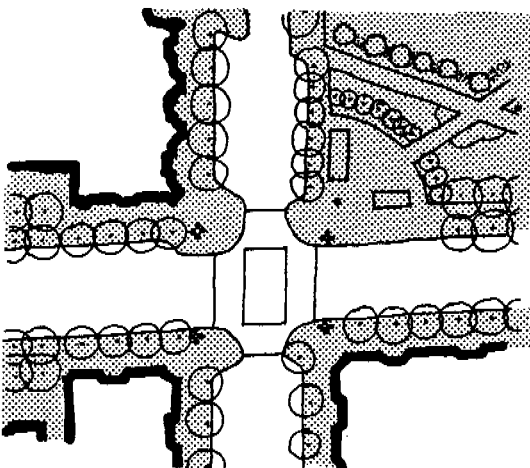
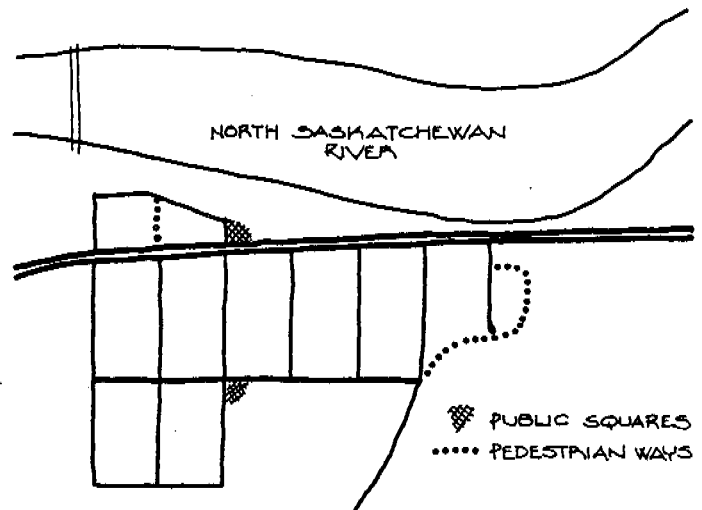
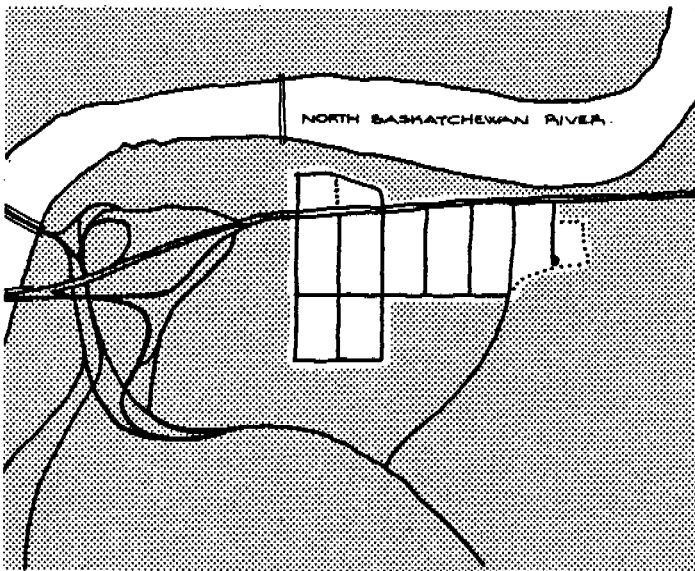


Fig. 6 Places in Cloverdale in a progression of scale.

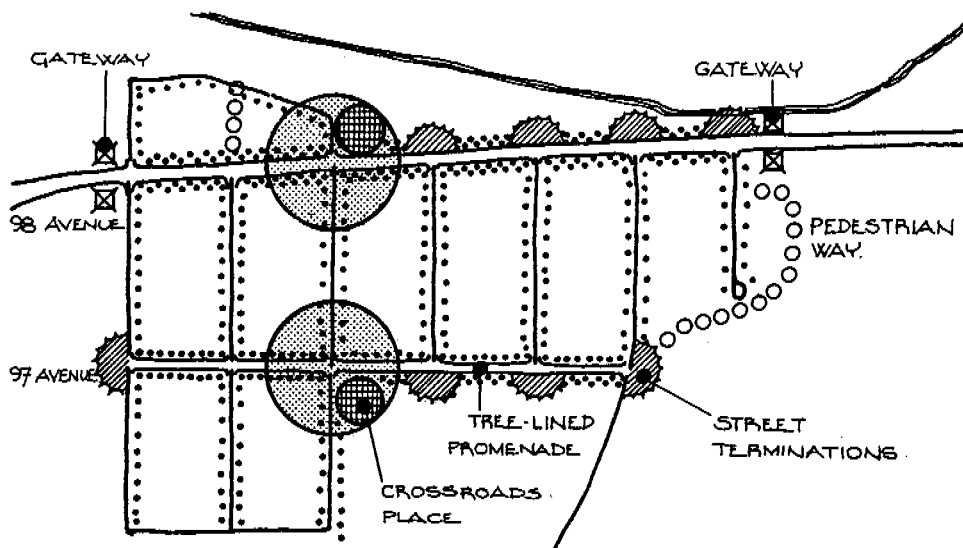


Fig. 7 Concept Plan: Places.



Fig. 8 Established Places in other cities

A.3 STREETS

The existing street grid is already largely in place but the role for each street should be clearly defined. A street role offers a qualitative direction for the development of streets and their components. It is a shared understanding about the ambience or tone of a place (street) among all those who participate in the building of streets including residents, developers, planners, architects, politicians, and investors. By establishing an agreed upon role and using simple conventions in the configuration of public elements and buildings, the individual pieces developed over time will be assembled into something greater than a collection of buildings: Streets of remarkable cohesion can be created.



Fig. 9 In older cities medium density housing was build incrementally and followed a clear set of conventions adding-up to streets and neighbourhoods of remarkable cohesion.

Each street has specific roles derived from its purpose in the immediate and surrounding contexts. In this neighbourhood the context is the historical and existing land use patterns, physical characteristics and built form, and public objectives.

In addition, the defined role for each street allows the comparison of new projects in Cloverdale against other more mature neighbourhoods here and in other cities. The role, therefore, assists in the determination of the appropriateness of each proposed development project. Buildings that do not contribute to the street should not be allowed for development.



Fig. 10 A housing renovation in Vancouver where the fronts are no longer accessible from the street and so they have turned into backs, that offer little privacy.



Fig. 11 Contemporary housing in London which follows a simple set of conventions is an example of appropriate characteristics for medium density in Cloverdale.



Fig. 12 98 Avenue as is.



Fig. 13 97 Avenue as is.

98 Avenue and 97 Avenue are the two principal streets of the neighbourhood.

98 AVENUE ROLES

The role of 98 Avenue is that of Cloverdale's Main Street.

- * It is to be the address for local public facilities - the Capital City Recreation Park, commercial uses such as shopping and small scale offices.
- * It is to be a balanced street that functions as a regional roadway and is also known for its pedestrian character.
- * It is to be the address of medium density housing, which is particularly appropriate with the development of a pedestrian environment close at hand.

97 AVENUE ROLES

The role of 97 Avenue is that of Cloverdale's Community Street:

- * The street's fundamental role as a connector to several destinations is already established. It should continue to link the Muttart Conservatory to the future community league facilities; Gallagher Park, "Camel Humps" (nature preserve), Bennett Environmental Centre, and local streets to one another.
- * It is to be an address for low density housing, the Community League, and Gallagher Park.
- * Like 98 Avenue, it is to be a balanced street that functions both as a local roadway and pedestrian connector.



Fig. 14 Local Street as is.

LOCAL STREET ROLES

- * The local streets are to remain quiet niches with a pedestrian orientation.
- * They are to be an address for predominantly single family houses.

A.4 GATEWAYS

98 Avenue is the single route through Cloverdale that connects the neighbourhood with the rest of the city. The roadway is a major traffic arterial and so it is by this route that most people are aware of the neighbourhood.

Gateways at either end of 98 Avenue are to form distinct points of entry to the community. They are to contribute to neighbourhood identity and offer a clue to its residential and pedestrian nature.

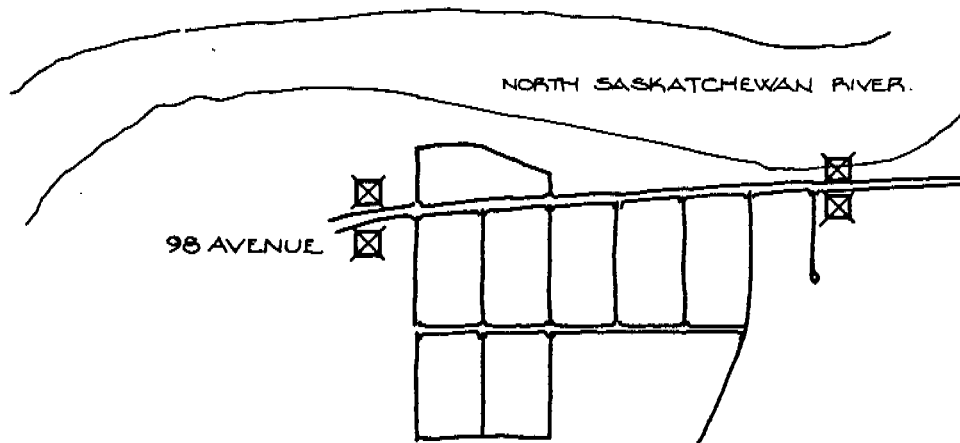


Fig. 15 Concept Plan: Gateways.

A.5 VEHICLE TRAFFIC

Regional and local traffic is to be managed to ensure a safe pedestrian environment throughout Cloverdale; that is to make the streets livable.

98 Avenue serves as a regional arterial connecting Downtown with the eastern part of the city. It is heavily trafficked (approximately 23,000 vehicles per day) particularly during weekday rush hours. To heighten awareness of pedestrians

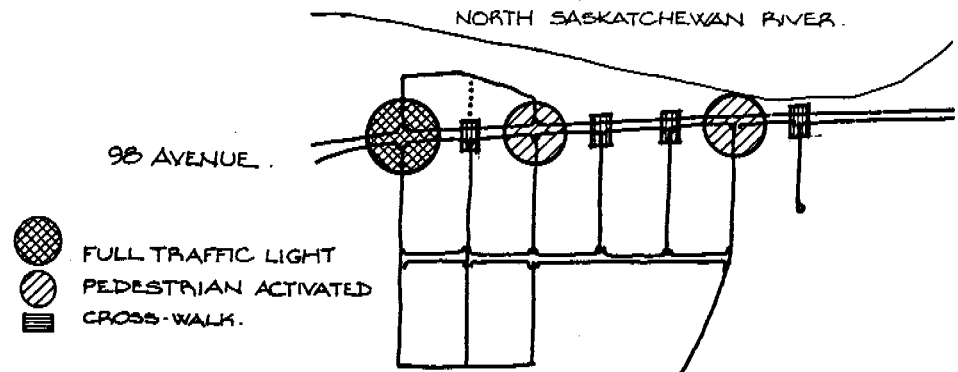


Fig. 16 Proposed traffic controls along 98 Avenue.

and create a less harsh pedestrian environment a number of traffic controls are required. Traffic speed should be reduced from 60 kmh to 50 kmh. A full traffic light should be installed at 96A Street to control access to the Muttart and Ski Club and signal the beginning of the reduced speed. A pedestrian controlled light should be located at 95 Street to ensure an ease of access to North Cloverdale, the neighbourhood plaza and the C.C.R.P. The light at 92 Street adds to signalling the beginning of the neighbourhood from the east, and offers a connection from the proposed Cloverdale Road bike route and East Cloverdale to the C.C.R.P. Together the three sets of lights would ensure an intermittancy of flow along 98 Avenue for vehicle access into the neighbourhood and safe pedestrian crossings.

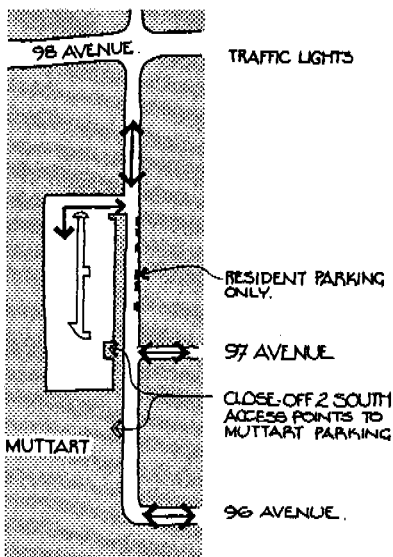


Fig. 17 Proposed Muttart and Ski-Club access.

A.6 ACCESS TO MUTTART AND SKI-CLUB PARKING

Regional traffic should be managed for direct access to city-wide facilities (The Muttart and Ski Club) with limited impact on the community.

It is suggested 96A Street should be a two-way street from 98 Avenue to 96 Avenue to facilitate ease of access to both facilities from the signalled intersection.

Furthermore, it is suggested that parking lot access for the Muttart should be reorganized so exit and entry are from the northern most point only. Well-signed limited access enables Muttart traffic movements between the stop light and parking entry.

A.7 PUBLIC NETWORK EXTENSION

Two additional public right-of-ways are proposed; one each in North and East Cloverdale to offer additional points of access for these parts of the neighbourhood and an increased variety of public places available to this neighbourhood.

In North Cloverdale it is proposed that 96 Street, as a predominantly pedestrian street, be extended north to the C.C.R.P. In East Cloverdale pedestrian access is extended from 97 Avenue to 91 Street with the development of a park forming a useable public edge between the housing and the nature preserve.

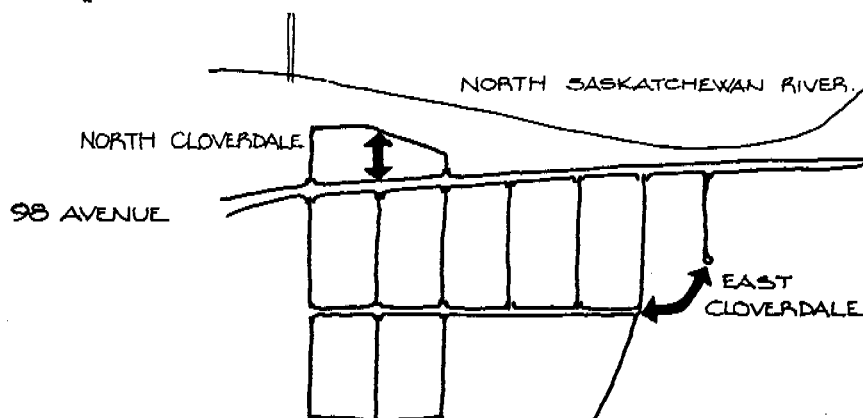


Fig. 18 Proposed Extensions to the Public Network.

A.8 APPROPRIATE MEDIUM DENSITY HOUSING

The medium density housing development is advantageous to the neighbourhood as a whole in that it increases the overall population, adds to the variety of household types, and diversifies the neighbourhood fabric. There is thus a potential for a wider range of community services such as shopping and recreation.

The concept of redeveloping the 98 Avenue portion of Cloverdale (98 Avenue, East Cloverdale, North Cloverdale) is for the medium density housing to be integrated with the low density by incorporating the fundamental qualities found in South Cloverdale, qualities which have helped make it a satisfying place to live:

These are the qualities essential to appropriate housing:

*1. IDENTITY

- "street address" - a clearly identifiable door on the street.
- individual entrances.
- opportunities for personal expression by occupants.

2. TERRITORIALITY

- clearly defined front yards and private outdoor space for each dwelling.
- distinction between public and private open space.

3. CAR CONVENIENCE

- direct access from car to dwelling.

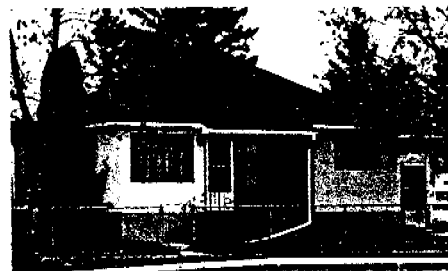


Fig. 19 South Cloverdale housing.



Fig. 20 Appropriate medium density housing example.

4. RELATION TO GRADE
 - direct access to grade.
 - audial and visual connection to children's play areas, both private and group play.
5. ORIENTATION
 - dual aspect (through ventilation).
 - adequate sun orientation (both aspects on an east-west axis or one with south exposure).
6. ACOUSTIC PRIVACY
 - high standard of privacy between units.

A prevalent form of medium density housing in Edmonton is the walk-up apartment. This form of housing is inappropriate in Cloverdale because:

- a) Individual units do not have identifiable street address, a front door onto the street or other public space.
- b) There is little feeling of personal identity and personal expression.
- c) The fronts seldom display a sense of occupant propriety.

* from "Alternatives to High-Rise", Barton Myers, 1979.



Fig. 21 Typical walk-up apartment in Edmonton.

Neighbourhoods are created where housing is desirable, tenure is stable and people have some control over their environment. This power must be reflected in the dwelling unit, its identity, flexibility, and the manner in which it relates to the neighbourhood. The house unit must be capable of individualization.

Appropriate medium density housing, conforming to the urban design guidelines, (see Section C), is advantageous to Cloverdale and the city in that it encourages a range of housing types in the central area, which do not currently exist and which offer an alternative to either high-rise or walk-up apartments.

A.9 SITING OF MEDIUM DENSITY AREAS

MEDIUM DENSITY HOUSING

The siting of the medium density housing in Cloverdale (see diagram) is in immediate proximity to the C.C.R.P., public transit, and shopping along 98 Avenue. These amenities compensate for the obviously lesser amount of private open space in the medium density areas relative to that in the low density area. In addition the siting recognizes this street is suitable for non-family housing because of the great traffic volume. It should nonetheless have a pedestrian orientation because of its role and context in the neighbourhood.

Each of the sites selected has its own unique advantages for medium density and the overall neighbourhood. These are:

98 AVENUE

- screens direct traffic noise from the single family area.
- offers views to the park and the river.

EAST CLOVERDALE

- offers the amenities of the nature preserve and ease of access to C.C.R. Park.
- is relatively discreet from the South Cloverdale single family housing.

NORTH CLOVERDALE

- offers immediate access to the public amenity of the C.C.R. Park and neighbourhood commercial centre.

COMMERCIAL AND MIXED USE

The existing commercial land use is diversified with the encouragement of more street related commercial (shopping) with residential or office uses above.

Two sites west of 95 Street along 98 Avenue are identified for street level commercial shopping uses. They are to be zoned for commercial with residential and/or office uses above. The siting is to reinforce the importance of the 95 Street intersection as the crossroads focus for the neighbourhood.

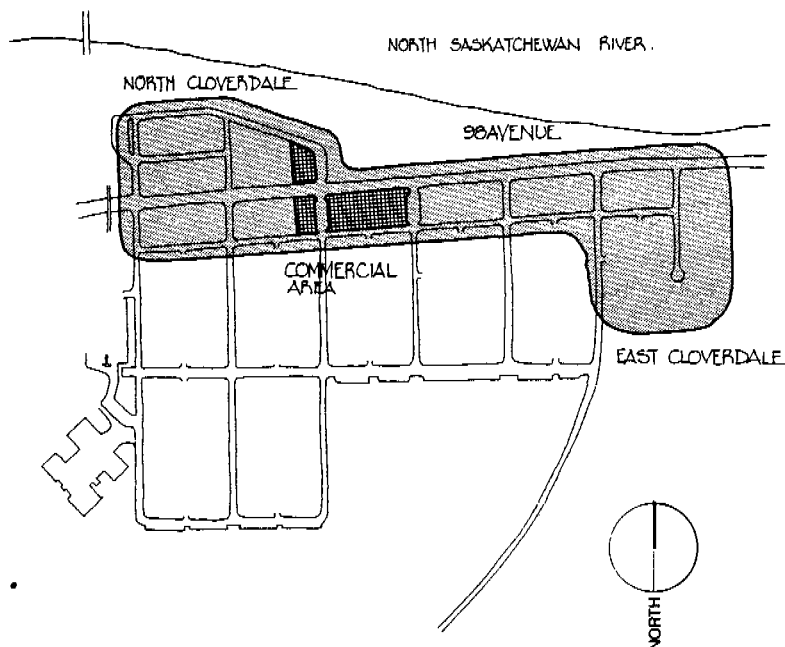


Fig. 22 Medium density area.

A.10 COMMUNITY STRUCTURE DIAGRAM

The accompanying diagram illustrates the strategies discussed in this section. It includes:

- * the prominent roles of 98 Avenue and 97 Avenue as Cloverdale's Main Street and Community Street respectively;
- * the community foci of neighbourhood plazas at 98 Avenue and 95 Street and 97 Avenue and 95 Street;
- * "gateways" at either end of 98 Avenue;
- * traffic controls along 98 Avenue;
- * the extension of 96 Street in North Cloverdale;
- * the development of 'Woodlands Way' pedestrian access to East Cloverdale;
- * the siting of the street related medium density housing and commercial uses; and
- * all focussed on creating a "village in the valley" with a clearly evident public network of streets, parks, plazas, pedestrian ways, and transportation routes within the confines of the surrounding park.

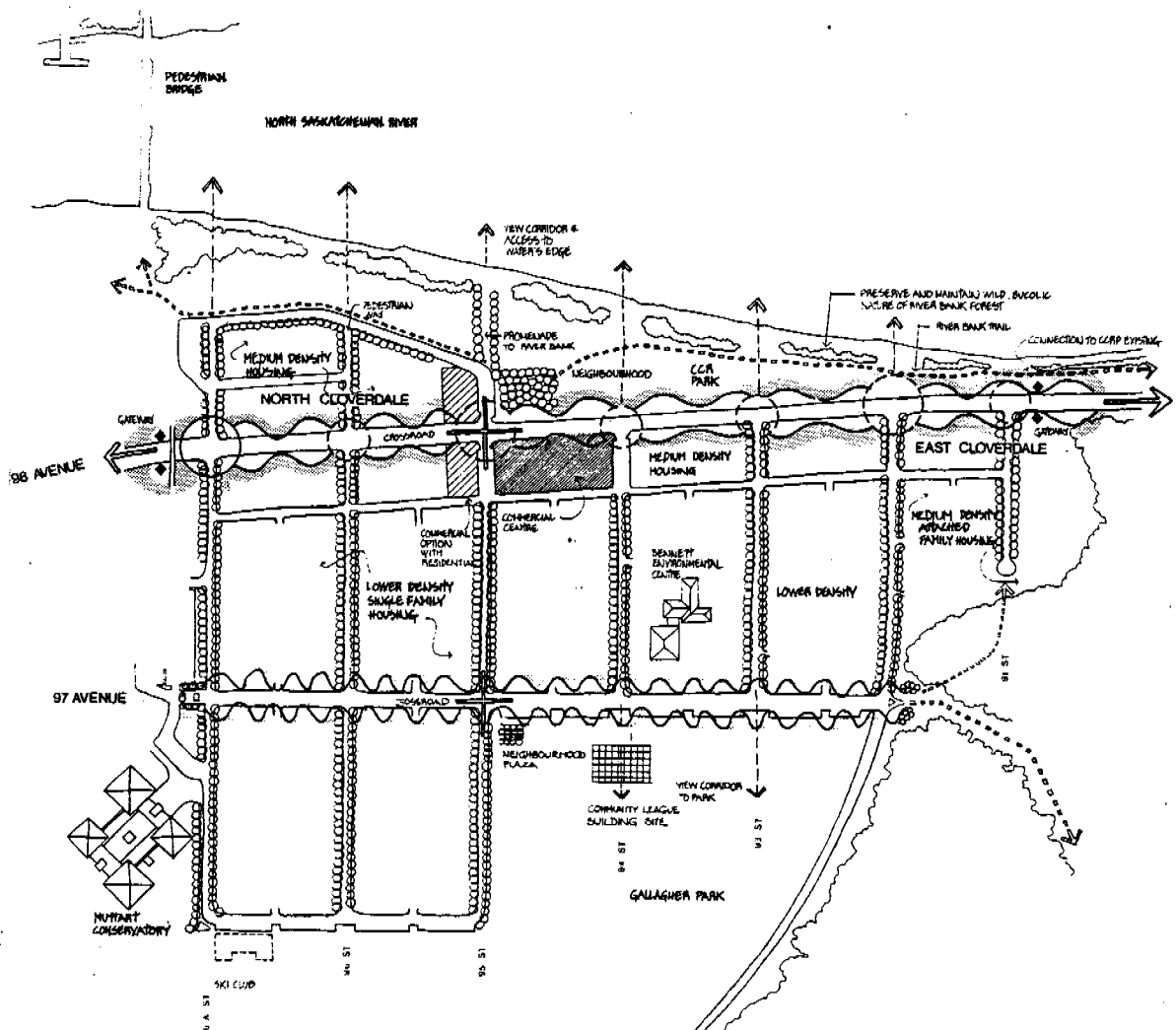


Fig. 23 Summary diagram of community structure.

SECTION B

STREETSCAPE IMPROVEMENTS

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B.1 STREETSCAPE APPROACH

The approach to the streetscapes is defined as the public improvements that serve as "character builders"; that is to ensure "Places will happen regardless of what gets built."* In general they are to set the tone for the street's role by offering pedestrian amenity, lending the street distinction, and reinforcing the overall village-in-the-valley image.

Public improvements are directed at the two principal streets in the neighbourhood: 98 Avenue and 97 Avenue. These two streets are to continue to have the most public roles and uses. A streetscape vocabulary of tree planting, lamp poles, seating, paving surfaces, and traffic signage for these two streets is to be of continual and engaging interest to the pedestrian. The co-ordination of elements is to offer an overall consistency, with changes in patterns, spacing, and element combinations to enhance the separate identity of each street.

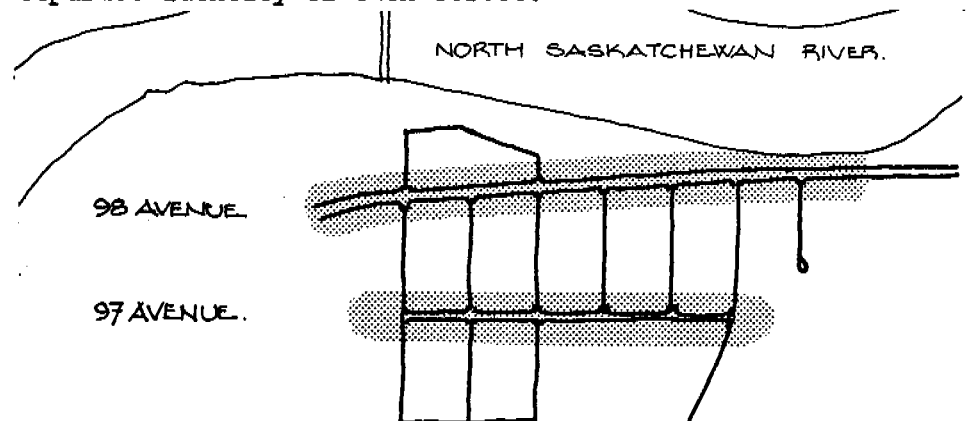


Fig. 24 Plan - Streetscape Improvement Areas.

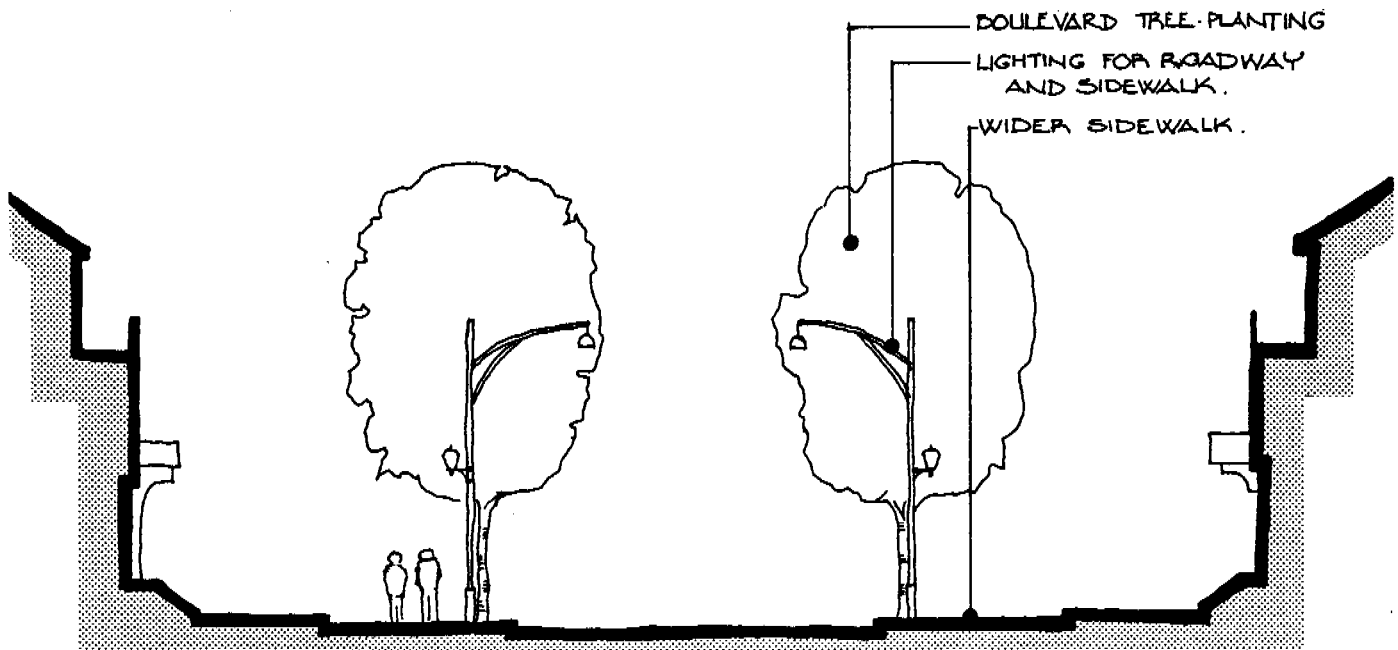


Fig. 25 Typical Streetscape Improvements.

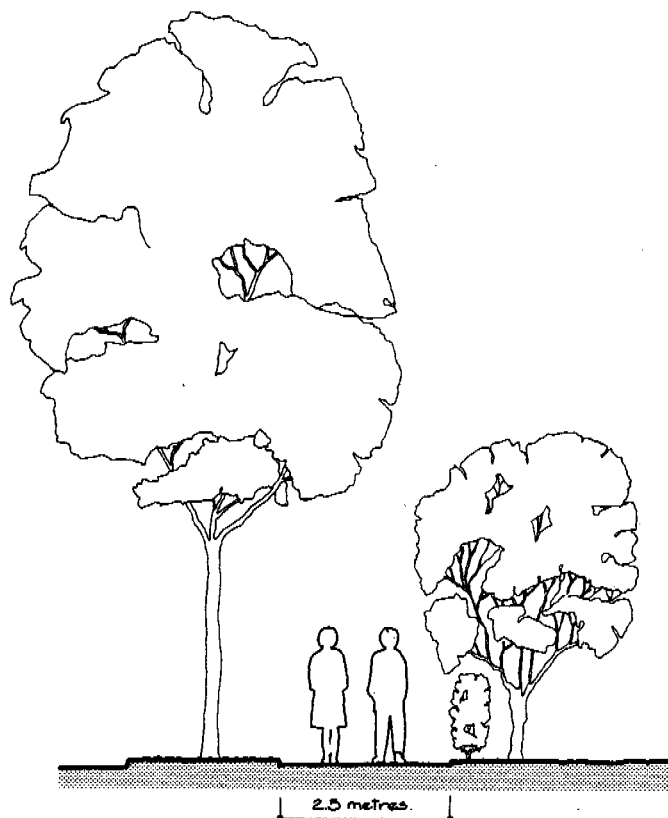
* from Battery Park City Master Plan and Guidelines, New York, Cooper Eckstut Associates, 1983.

B.2 WALKWAYS

Sidewalks are to be constructed with durable non-slip surfaces that are easy to both walk on and maintain. A broom finished concrete surface is proposed which will be utilized throughout the neighbourhood. This offers a consistency with existing sidewalks but the pattern of scoring is to change with the street type (98 Avenue, 97 Avenue, local streets) to contribute to each special identity. The identity is to be reinforced most strongly by the edge treatment for both 97 Avenue and 98 Avenue. It is the edge that defines the walking surface.

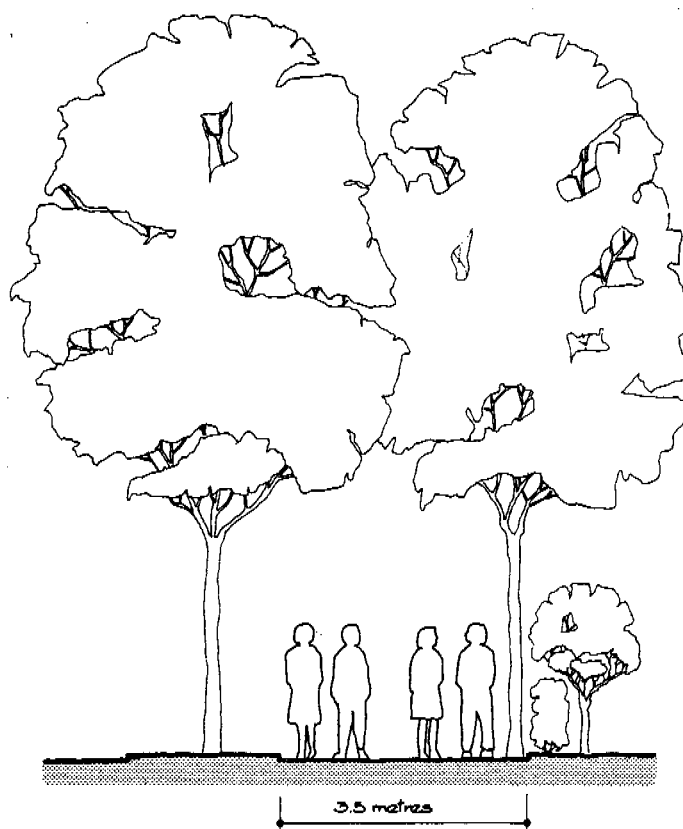
Sidewalk widths are to be generous relative to their anticipated role and use; a fundamental characteristic of an inviting pedestrian environment. Local street sidewalks are proposed to be at least 1.5 m wide (sufficient for 2 people to pass each other).

97 Avenue is likely to be more active as the community street and connector than the local streets. Wider sidewalks of 2.0 m or 2.5 m are proposed with the latter along the north side to take advantage of its sunny aspect. 98 Avenue, the busiest street, is to have sidewalks ranging up to 3.5 m wide, sufficient for 2 couples to pass one another.



Typical Section: North Side 97 Avenue.

Fig. 27 Sidewalk widths proposed.



Typical Section: 98 Avenue

B.3 STREET TREE PLANTING

Street tree planting is to strengthen and reinforce the verdant park qualities that distinguish Cloverdale and contribute to a reasonable pedestrian environment.

Along both 98 Avenue and 97 Avenue arcades of closely spaced boulevard tree planting are proposed along each side of the street offering both an overall park quality and spatial enclosure. The leafy canopy shelters the sidewalk and screens or filters the views to building masses. It is suggested gaps in tree planting on local streets are to be filled in.

Viewed from higher elevations, the valley will appear to be a continuous mass of trees throughout the neighbourhood which shroud the view to buildings and roof tops and offers the allusion to a heavily treed woodland. South Rossdale offers an example of this type of planting.



Fig. 28 A street of mature boulevard tree planting.



Fig. 29 View to Rossdale

The predominant street tree proposed is Green Ash or Patmore Green Ash for its broad upright branching and hardiness to conditions along roadways. A minimum 100mm caliper is recommended to ensure the immediate impact of the arcade image when planted and to withstand the abuse common to street trees.

For its winter greenness and sheltering qualities coniferous planting is useful especially when planted in groups in open areas. However, when planted in masses next to walkways, surveillance is impeded. It is, therefore, suggested for use in parks for strong year round edge definition where security does not pose a problem.

B.4 STREET LIGHTING

Every winter is remembered for its long nights when travel to and from home is often in the dark. Lighting is therefore an important amenity.

Street lighting is to satisfy both lighting of the roadways and the sidewalks. While roadway lighting may follow the existing spacing along each street, pedestrian lighting at intermediate intervals is to reinforce the special attention given to the pedestrian.

The lamp poles should be designed and co-ordinated to offer a detail and scale making the poles interesting in themselves. As vertical elements they are as important during the day as they are at night, especially to define the sidewalk edge when the trees are bare of leaves.

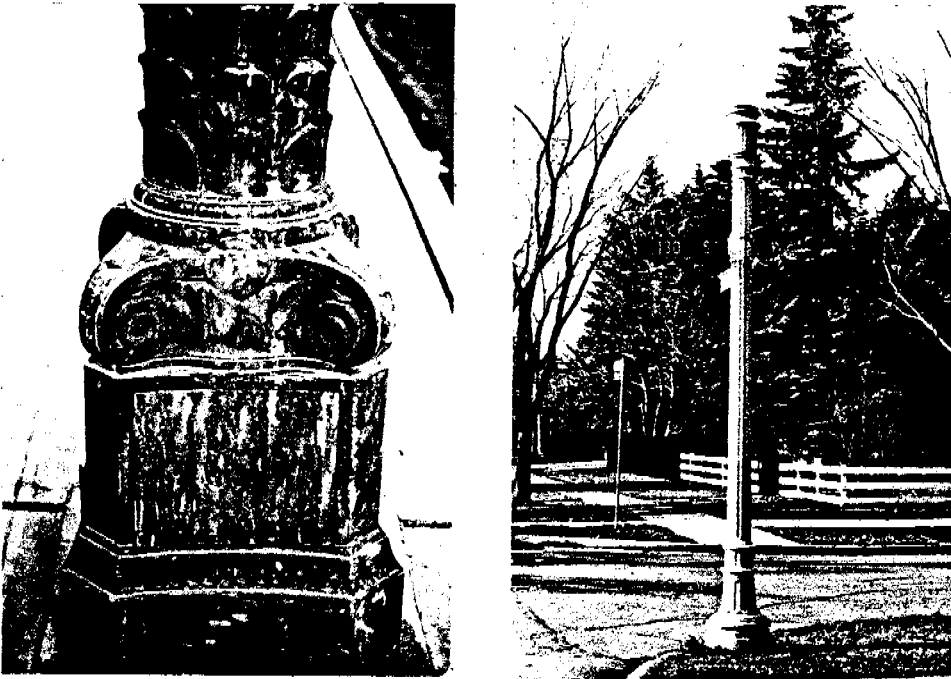


Fig. 30 Detailing found on older lamp poles.



Fig. 31 Lamp poles defining sidewalk edge.

The pole spacing shown in the streetscape concept designs follows the pattern of locating roadway poles in or close to existing locations with pedestrian poles alternating between them at equal spacing. Pedestrian lighting is then spaced at approximately 15 to 17 meters on centre to generously light the walks and create a strong, highly visible line of light at night. Special multiple luminaires are proposed at each corner of 98 Avenue and 95 Street to highlight the intersection's importance.

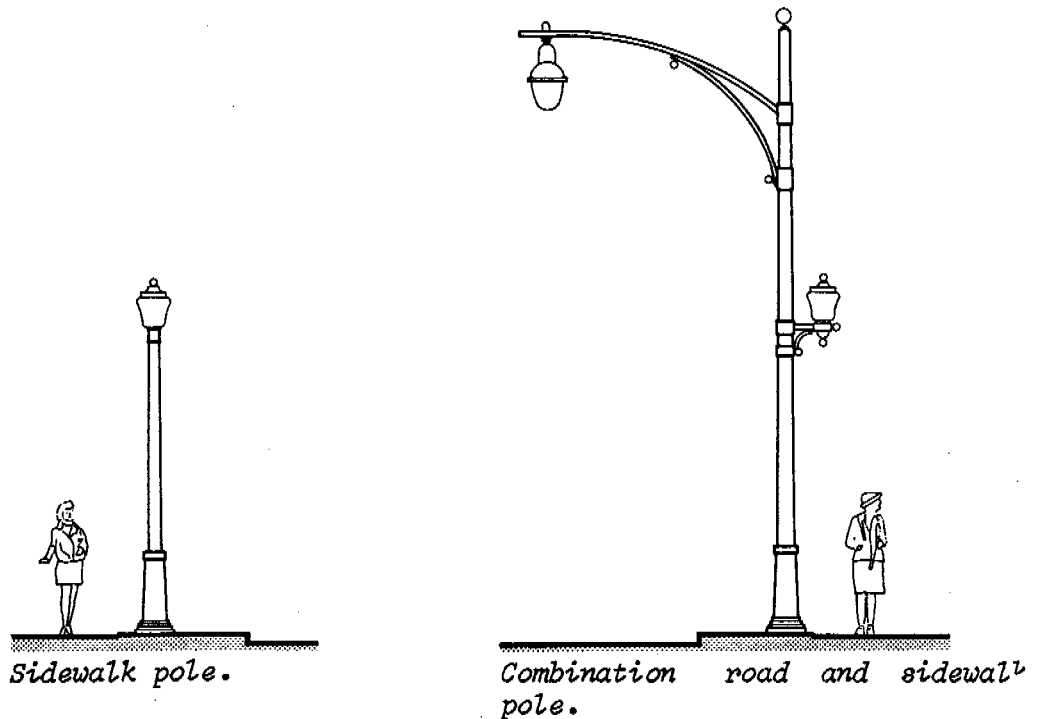


Fig. 32 Basic lamp pole types.

Two basic types of poles are required along each street: one for sidewalk lighting, the other a combination for both roadway and sidewalk lighting. Each type is diagrammatically illustrated below. A precedent for this type of system is now being established with improvement projects such as Whyte Avenue and The Heritage Trail Promenade. It meets a variety of conditions with a pedestrian orientation by utilizing the Old Glenora pole style. It should be investigated for its adaptation to the Cloverdale streetscape areas.

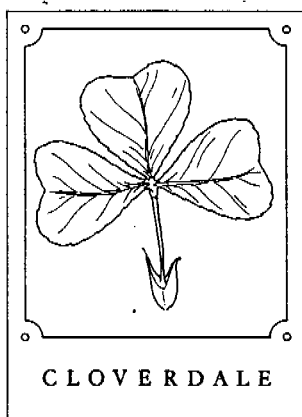


Fig. 33 The Cloverdale Emblem.

B.5 THE CLOVERLEAF

To lend character and identity to the Cloverdale streetscape and overall neighbourhood it is proposed the emblem of Cloverleaf be adopted. It is universally known and yet special to the valley neighbourhood that bears its name. It is coincidentally appropriate to the verdant park character. Considered as the neighbourhood's signature, the Cloverleaf should be incorporated on street signs, street lighting, tree gates and other streetscape elements throughout the neighbourhood.

B.6 98 AVENUE

B.6.1 GOALS

The goals for the street are:

- * It is to have a character of a compact and peopled street that is an inherent part of the neighbourhood and so strongly residential.
- * There is to be an ease of access from either side of the street to take advantage of the C.C.R. Park.
- * The massing of housing is to reflect the small scale village character.

B.6.2 CONCEPT DESIGN

The streetscape concept for 98 Avenue is for a double arcade of closely spaced tree planting along both sides of the street from one end of Cloverdale to another. The arcade of trees along the road screens the pedestrian from the busy traffic with the inside planting reinforcing the sense of enclosure. Together the two double arcades along each side of the street enclose the roadway and lend it an overall cohesion.

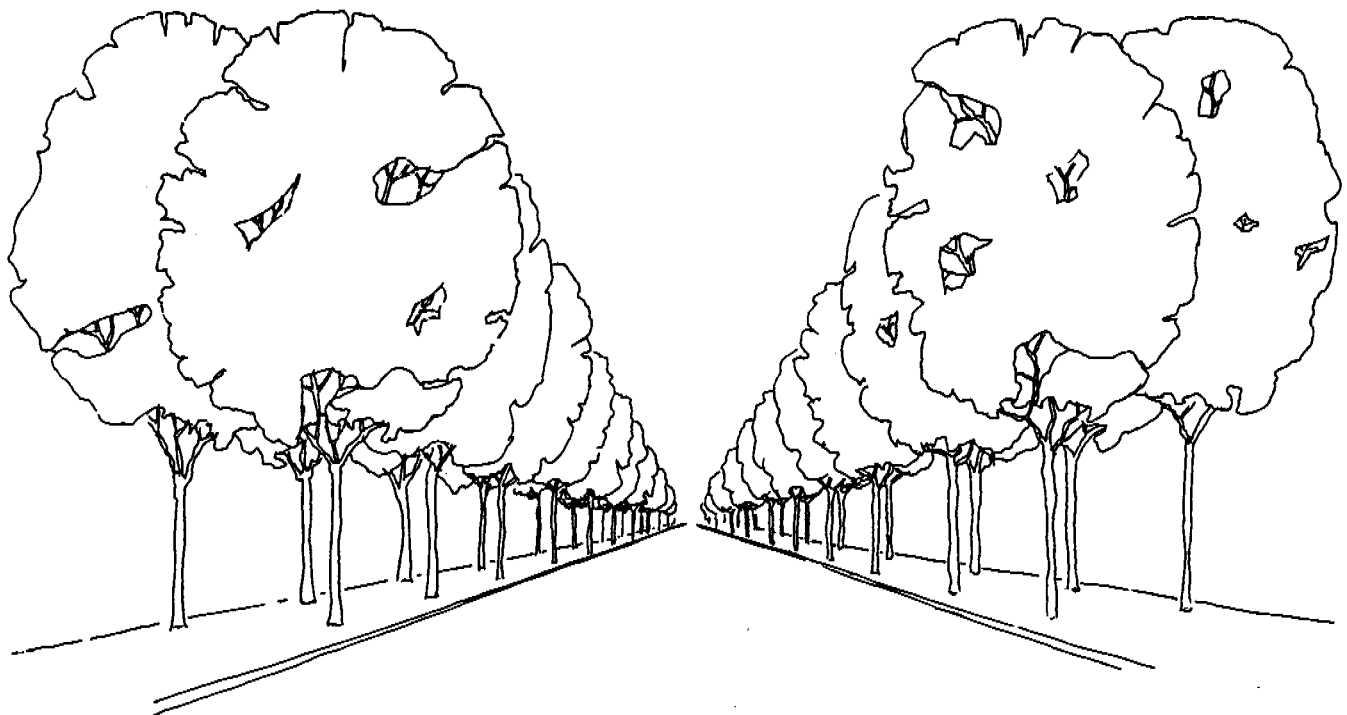


Fig. 34 98 Avenue Concept for a colonnade of boulevard trees along each side of the street.

There are three general conditions, determined primarily by land use, that vary the design of the arcaded walkway along its length:

- in front of the medium density housing.
- in front of the commercial.
- edging the C.C.R. Park.



The Esplanade, Toronto, Winter.



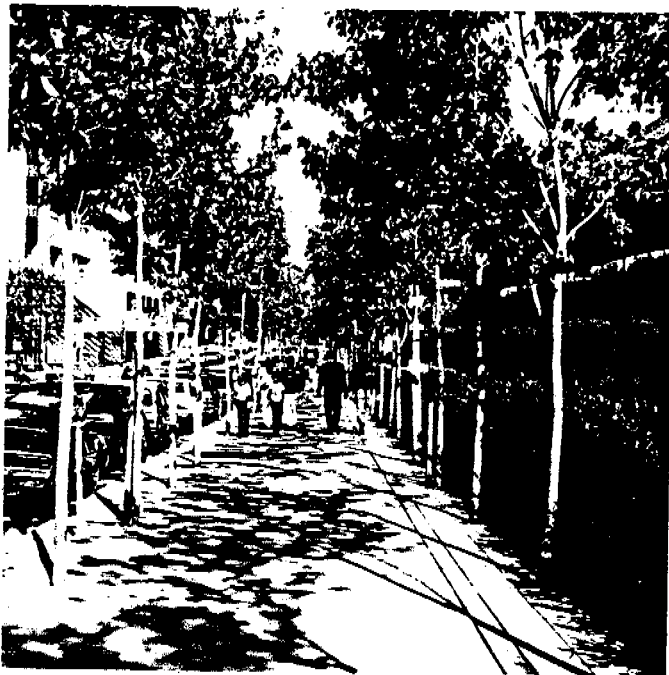
The Esplanade, Toronto, Summer.



A colonnaded walk, Winnipeg, Winter.



A colonnaded walk, Winnipeg, Summer.



Robson Square, Vancouver.



102 Avenue, Edmonton - A closely spaced arcade of green ashes at 4.0m spacing.

Fig. 35 Precedents of closely spaced tree planting.

B.6.3 PROMENADE IN FRONT OF HOUSING

The tree planting along 98 Avenue housing is intense with 5.0 m spacing of tree planting on both sides of the walk to ensure a strong buffer between the housing and the road that has an immediate impact. Trees at the curb are set in a grassed verge 1.5 m wide to enhance the park character of the street and establish a place for signage, lamp poles, waste receptacles and other street elements.

Trees at the back of the walk are set in half round surrounds to create a clear rhythm of planting and set a basic line between public and private zones.

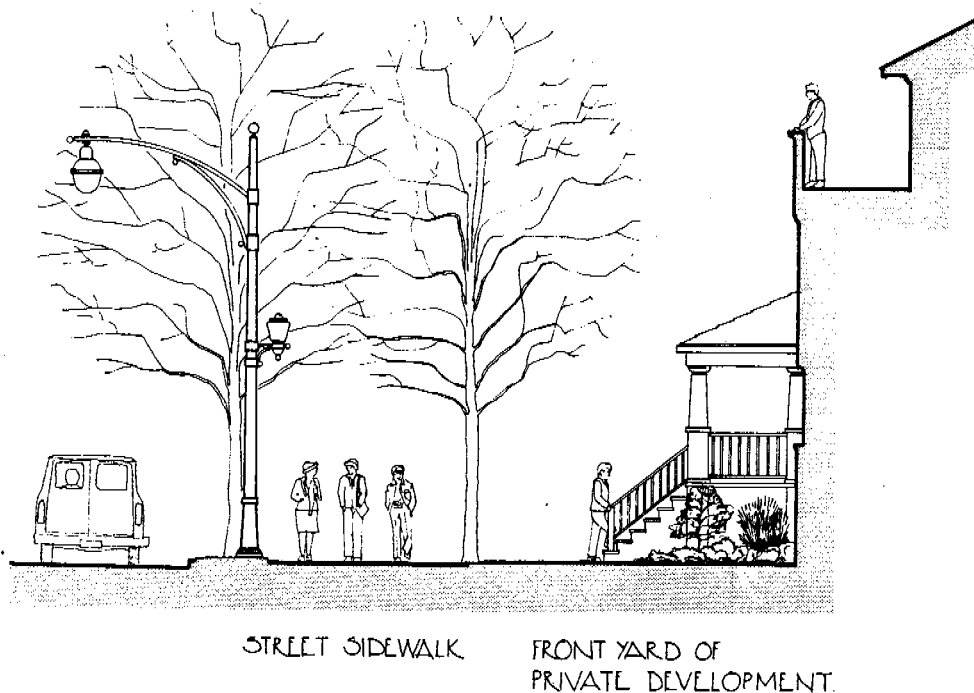
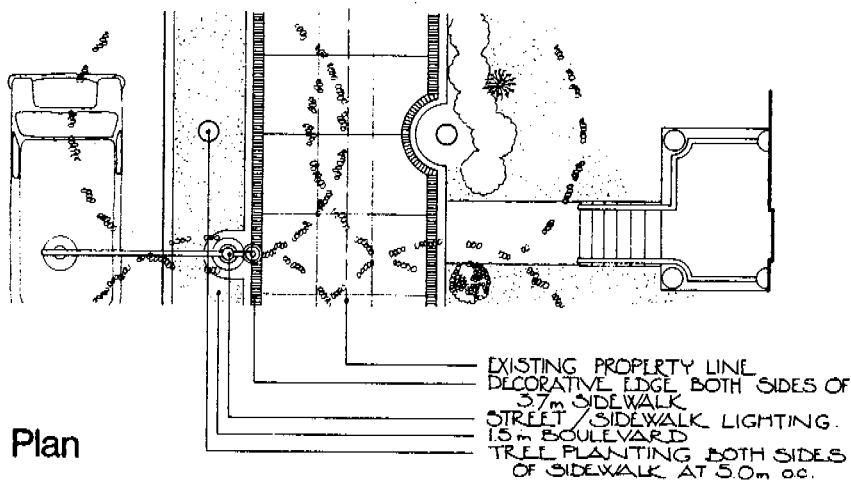


Fig. 36 Section: Promenade in front of Housing.

B.6.4 ARCADE IN FRONT OF COMMERCIAL

In front of commercial properties (ie. the shopping precinct from 94 Street to 95 Street) a single arcade of tree planting is to define the edge of walk against the curb with spacing remaining at 5.0 meters. This arrangement offers unimpeded views from the road to the buildings.

The sidewalk is to extend for a width from building fronts for an 5.2 meters to accommodate the greater intensity of pedestrian traffic typical to shopping streets. It offers a place to stand, to talk or window browse, while also leaving space for walking.



Fig. 37 An arcaded and generous sidewalk along a shopping street.

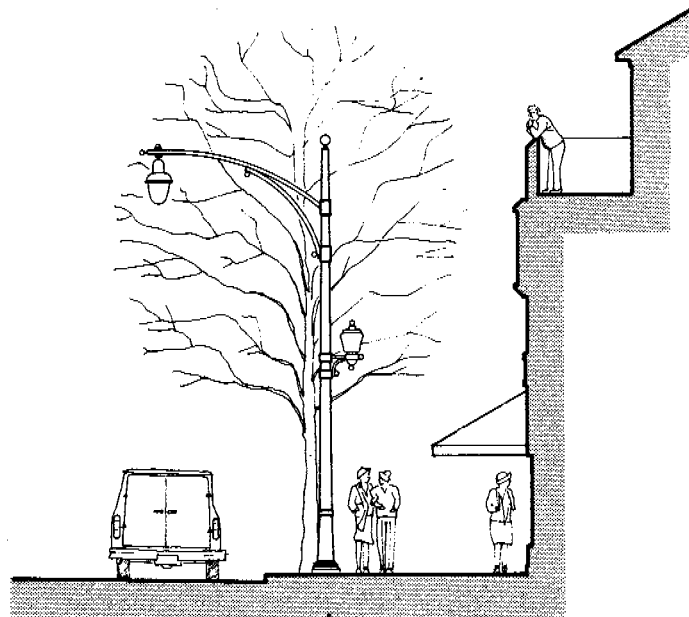


Fig. 38 Typical Section of sidewalk between 94 Street and 95 Street.

At the curb a 900 mm wide verge is to accommodate planting, lighting, and traffic signage. Its paving is to be hard surface for the relatively heavy use it will receive. A different surface treatment is suggested, perhaps exposed aggregate or large pavers to distinguish it from the walking surface.

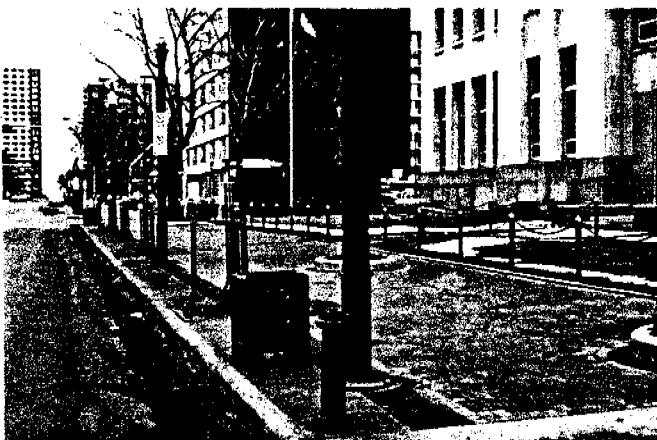


Fig. 39 Examples of verges along the curb.

B.6.5 COLONNADE EDGING THE C.C.R. PARK

A colonnade of trees is to continuously line the park along 98 Avenue from 91 Street to 95 Street to strongly define the park edge and formally separate it from the busy roadway. The 2.0 m sidewalk is separated from the road by at least 2.0 m of grassed boulevard to locate the walk in the park as much as the street.

Trees are planted at 6.0 m spacing along both sides of the walk to form a strong edge to the park but allow into it views from the street. At street ends small seating areas are set off with ornamental flowering trees and shrubs to offer logical and inviting park entrances.

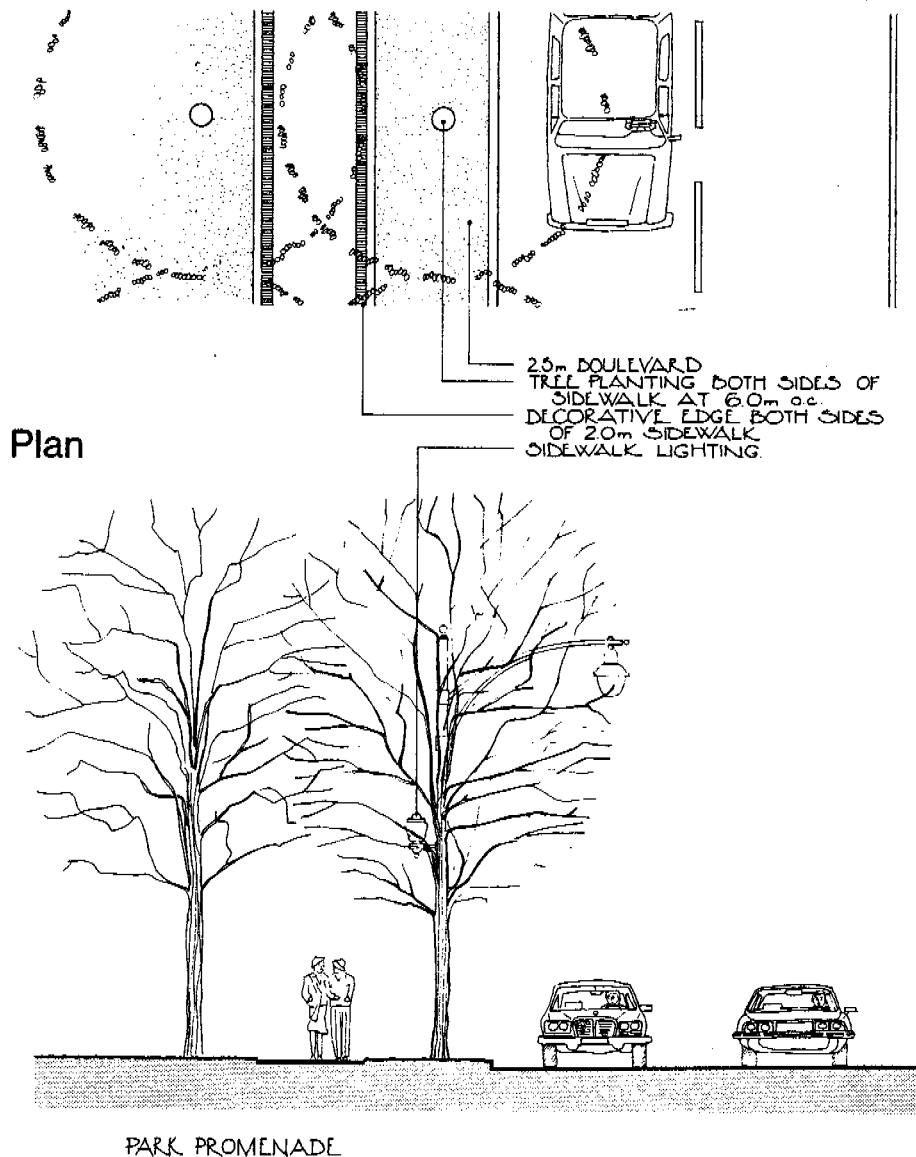


Fig. 40 Colonnade edging the C.C.R. Park.

B.6.6 PAVING DETAILS

The 98 Avenue sidewalks are to be consistent in detail along their length to reinforce an overall identity for the pedestrian environment of the street. The broad concrete surface is scored in a 1 X 1 meter grid and edged with both a soldier course of red clay brick pavers and an exposed aggregate header.

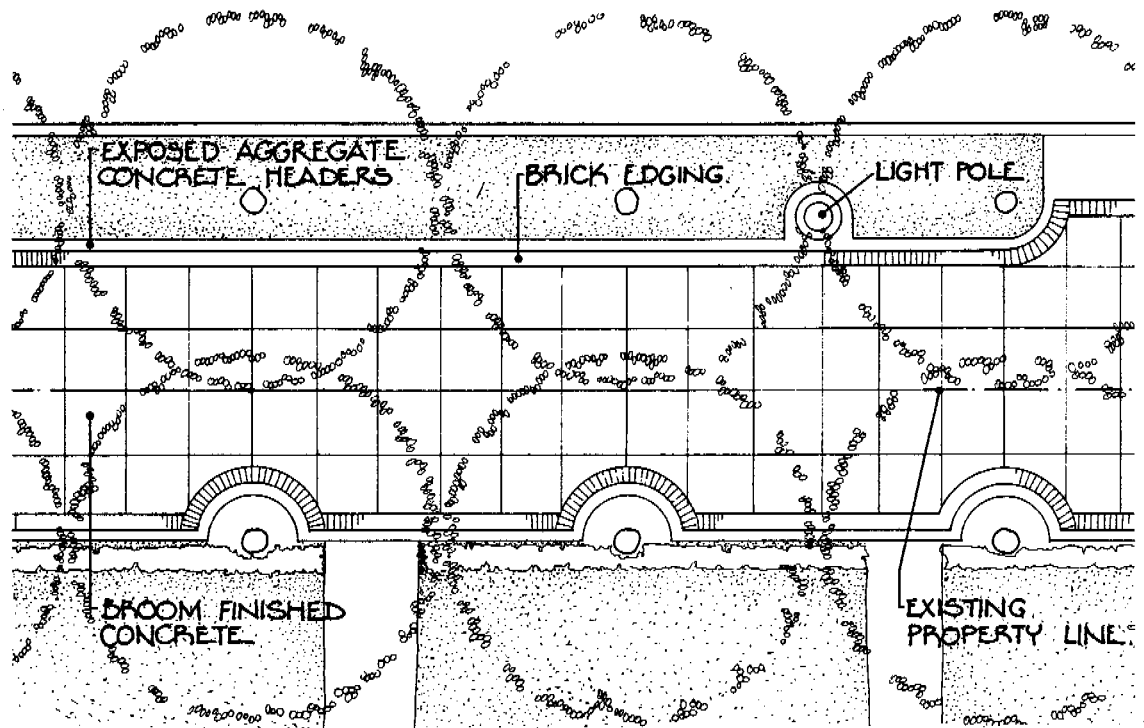


Fig. 41 Concept Design - Paving in front of Housing.

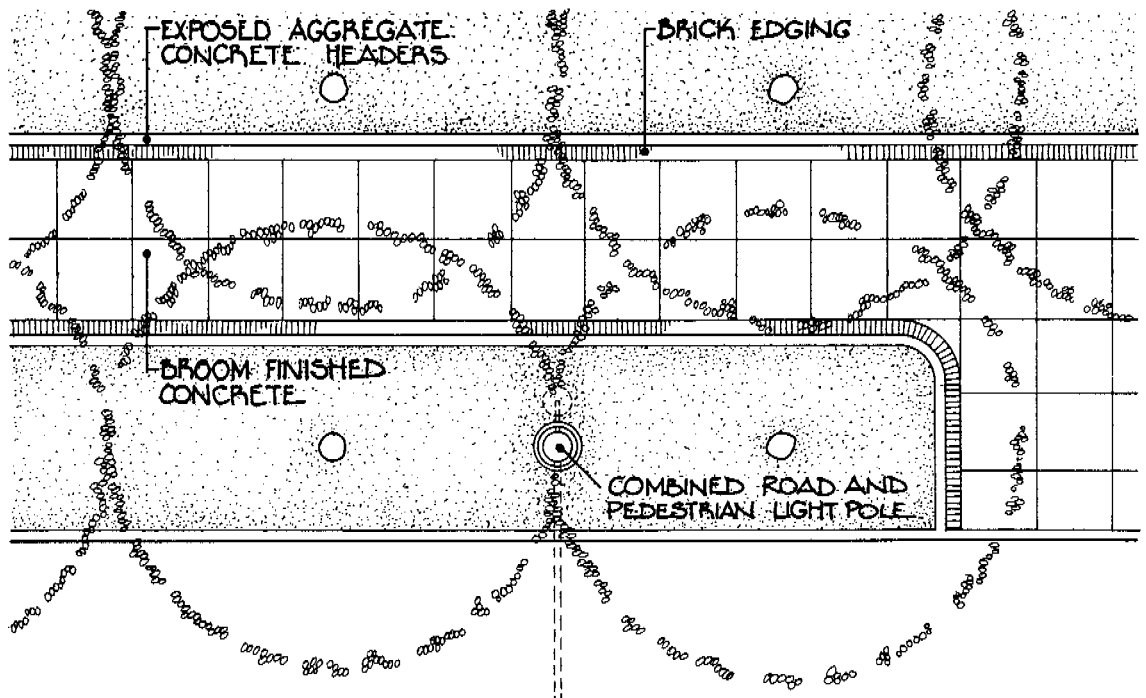


Fig. 42 Concept Design - Paving at edge of C.C.R. Park.

B.6.7 PARKING

This study recommends on-street parking along 98 Avenue during off-peak hours. If, however, no parking is to be permitted at any time, approximately 30 stalls of on-street angle parking along 94 Street and 95 Street could be developed for commercial users as shown on the streetscape concept plan. Residential visitors are to park along the local streets. It is both convenient and easily perceived. Tenant and employee parking is to be handled on site.

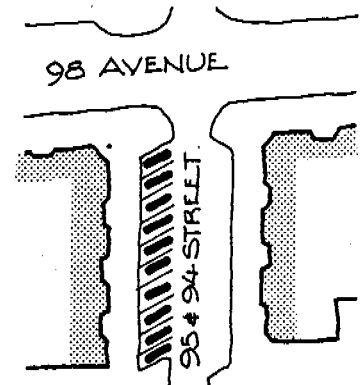


Fig. 43 98 Avenue angle parking.

B.6.8 98 AVENUE GATEWAY CONCEPTS

WEST GATEWAY

The pedestrian C.C.R.P. bridge just west of 96A Street already signals the beginning of Cloverdale with its span over the road. Its form, however, has little to do with the proposed residential scale and pedestrian nature of Cloverdale.

The proposed concept illustrated in figure 44 consists of three components that add up to a gateway making the opening into the neighbourhood: the C.C.R.P. bridge, formal coniferous tree planting, and distinctive gateway lights.

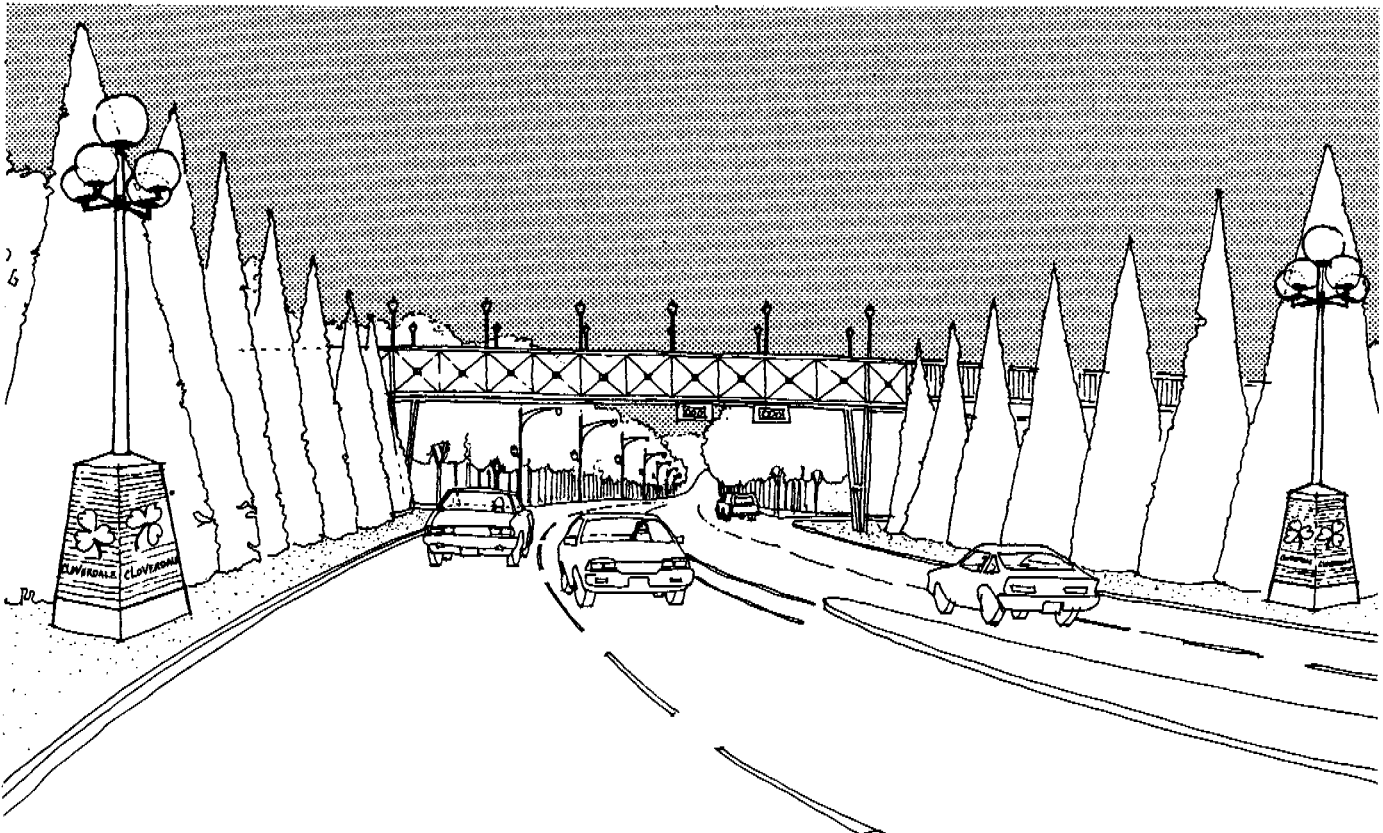


Fig. 44 Concept Design - West Gateway.

It is suggested a pattern of colourful decorative panels be added to the bridge frame to lend it prominence and so make it more effective as a gateway element. The 96A Street traffic signals would be integrated into the bridge additions. Formal rows of tree planting edge each side of the road and frame the view to the bridge and the neighbourhood beyond in both winter and summer. A pair of gateway lamp posts terminate the planting. Their detailing incorporates the neighbourhood cloverleaf emblem and the globes help ensure recognition of the sequence of 'coming home' through the gateway both day and night.

EAST GATEWAY

The concept shown below illustrates an alternative form from the west end. An open frame spans the road from a pair of towers. They are distinctively lit at their peak and sit on a base similar to west gateway lights and incorporate the cloverleaf.

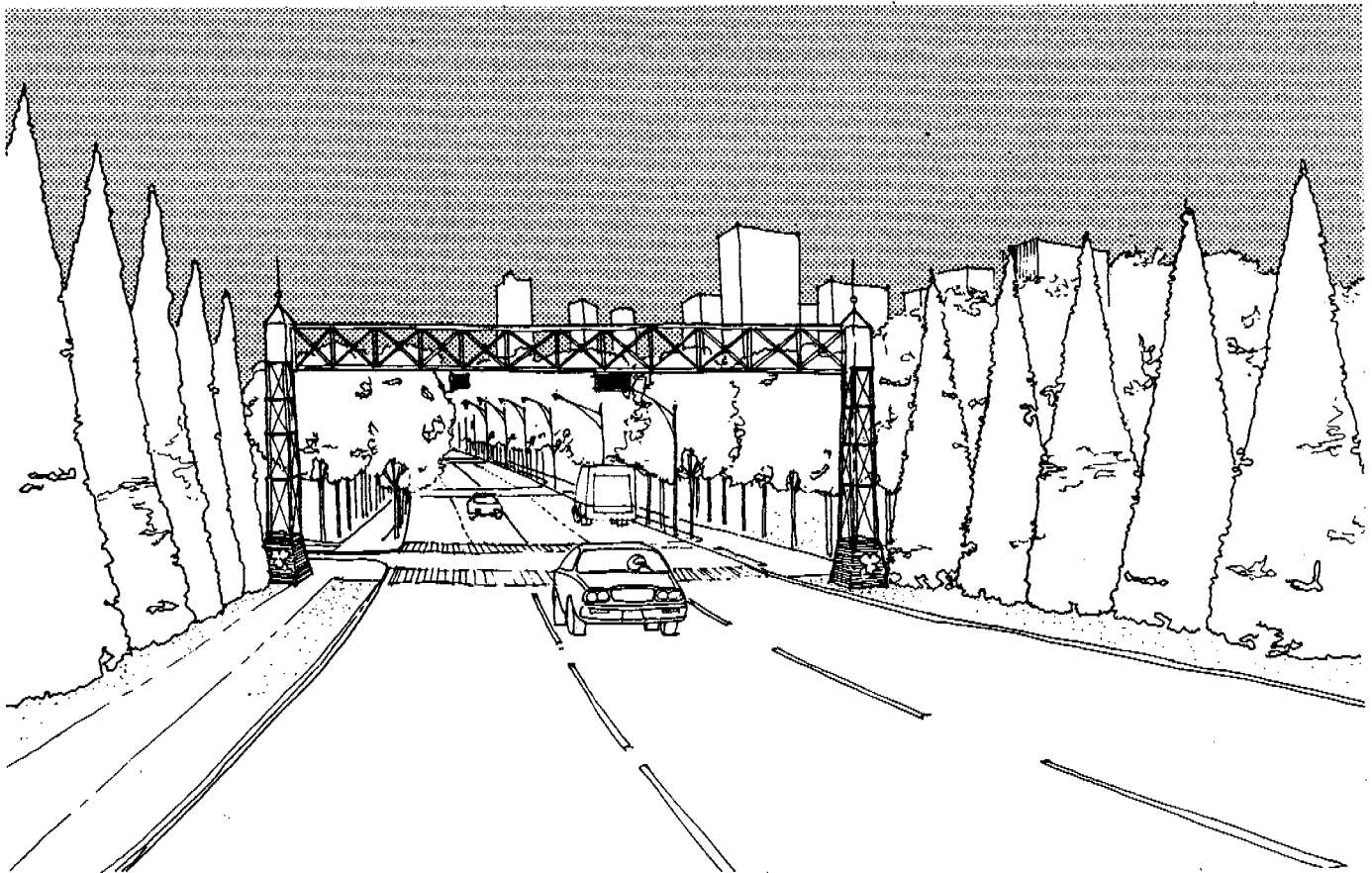


Fig. 45 Concept Design - East Gateway.

B.6.9 C.C.R. PARK NEIGHBOURHOOD PLAZA

98 Avenue and 95 Street offers a location where the shop fronts of three corner commercial properties are to focus on a small but memorable neighbourhood plaza. It is to be the neighbourhood's most public place.

In its key location it is to serve both neighbourhood and city-wide functions offering opportunities for a range of activities. It is to include facilities such as:

- * a major transit shelter that is heated and lit to serve downtown bound transit riders, especially on cold winter mornings. There is already a high level of transit usage into town from this neighbourhood.
- * a major entrance to the C.C.R.P. It is one of the few locations where the park meets a busy street corner.
- * a drinking fountain; always a welcome amenity on a hot sunny day to park joggers, cyclists and other users.
- * an interpretive exhibit depicting Cloverdale's rich past.
- * a bicycle stand for trail users.

In the concept illustrated in figure 46 the plaza is defined and enclosed by a unique element along each side. The transit shelter and colonnade along the street necessarily serve to distinguish the plaza from the street although accessible from both. They also define the street corner with the fountain at the apex and the view to the C.C.R.P. Along the park side the plaza is bounded by closely spaced fruit trees that open at the walk into the park. The plaza paving should be distinctive from other streetscape areas. It is the location for interpretive exhibits and so may have a plan of Cloverdale cast into the paving for orienting the exhibits.

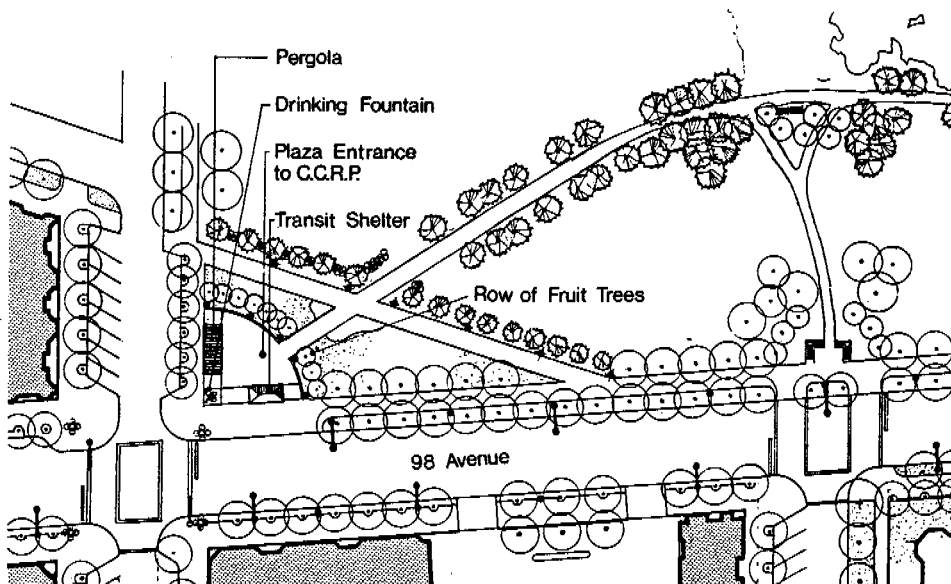


Fig. 46 Site Plan - Concept Design of C.C.R.P. Plaza.

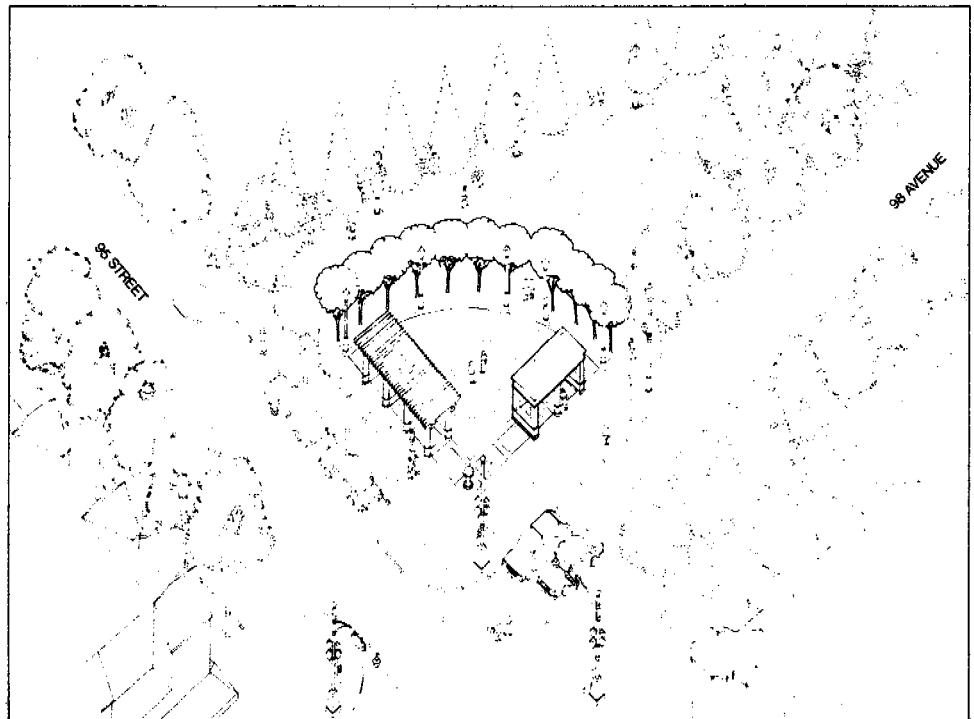


Fig. 47 Axonometric Sketch - C.C.R.P. Neighbourhood Plaza.

B.6.10 CAPITAL CITY RECREATION PARK

The C.C.R. Park, paralleling much of the river and 98 Avenue and 98A Avenue, is a great asset to the neighbourhood. It should retain its small, more enclosed aspect to complement the open greensward of Gallagher Park. It is proposed that it be further developed to better serve both the neighbourhood along with its city wide functions. It is a park that should have a character that sets the stage for Cloverdale as a village in a valley park setting. For both residents and other users it should be known as a place to stroll, cycle, ski, and to relax and enjoy a variety of park settings.

The suggested concept design illustrated in figure 49 is to develop the park as an open lawn which is spatially defined along the two sides by planting and walks of two complementary types: a formal colonnade of street tree planting along 98 Avenue and the pastoral clipped landscape and meandering trail for pedestrians and cyclists in the park.

Additional planting at the edge of the terrace is to add to the park's verdant quality. Masses of coniferous tree planting are proposed as a year round 'green' backdrop for the park and a framing device for views to the river. Openings to views and seating areas at the edge are highlighted with ornamental tree and shrub planting. In each of these areas plant species could be identified to incorporate the idea of the park as an arboretum.

The third type of park planting is found on the lower terrace near the river. It is a wild landscape of trees and shrubs that has remained largely undisturbed. It should remain as it is, including the slope to the upper terrace, to protect it from erosion and to maintain the integrity of the river bank seen from the side.



Fig. 48 The Existing C.C.R.P. Trail system.

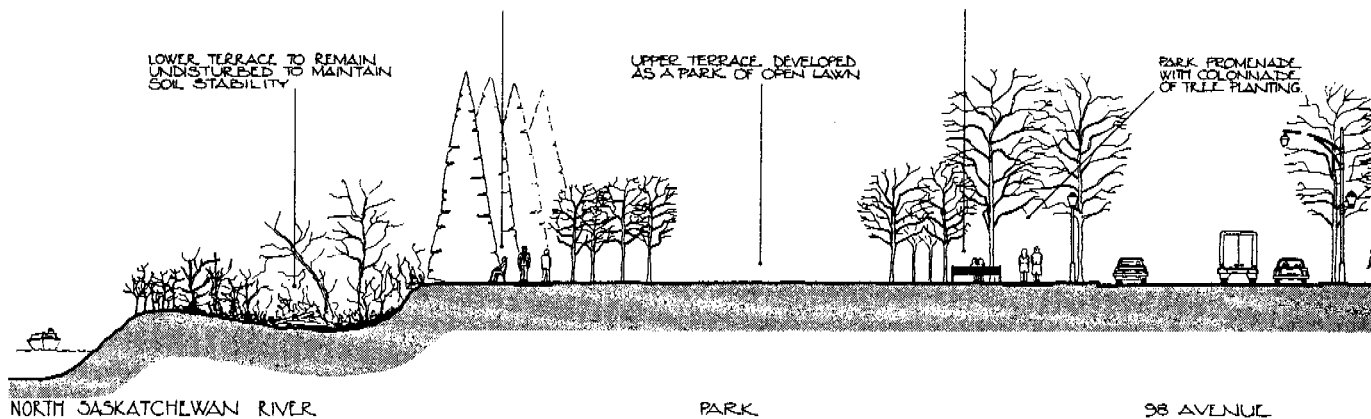


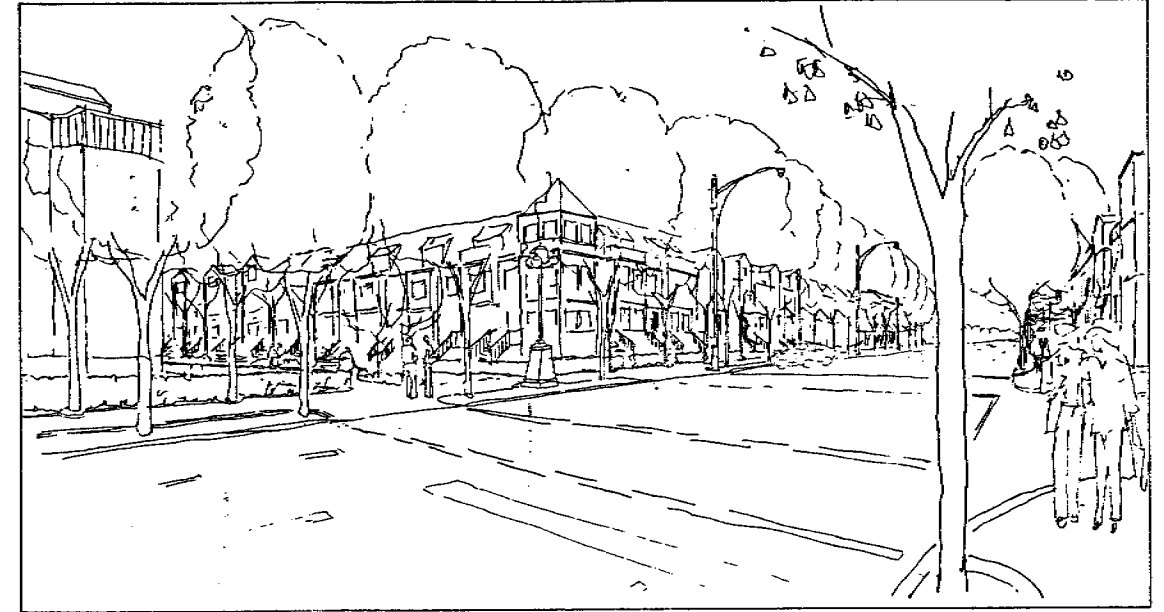
Fig. 49 Section - Concept Design for C.C.R.P.

B.6.11 STREETScape CONCEPT SUMMARY

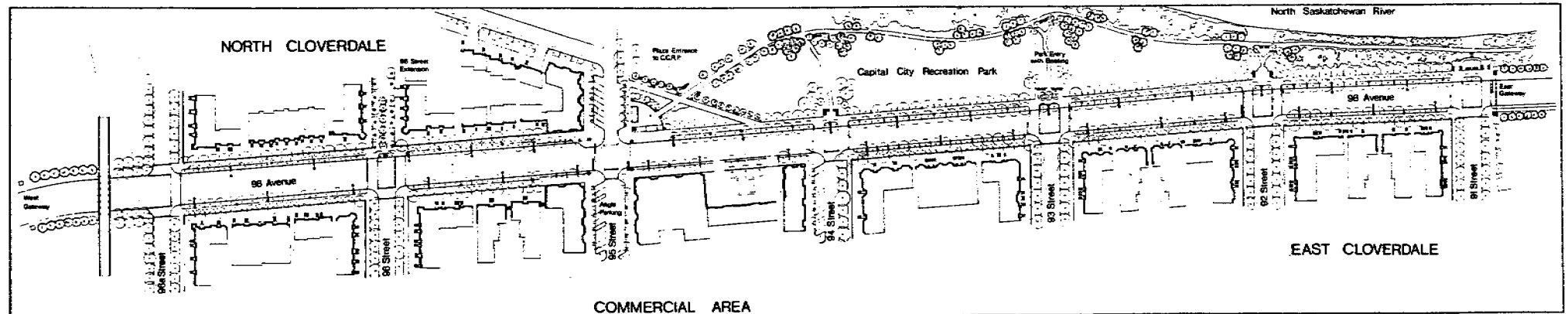
The following site plan and sketches illustrate a vision of 98 Avenue as Cloverdale's Main State if the recommendations for public improvements are implemented and urban design guidelines and criteria established.



EAST AT 92 STREET



EAST FROM 96 STREET



98 AVENUE CONCEPT PLAN · CLOVERDALE'S MAIN STREET

Fig. 50 98 Avenue Streetscape Concept.

B.7 97 AVENUE

B.7.1 GOALS

The goals for the street are:

- * The street is to have a greater pedestrian orientation.
- * The street is to offer a greater sense of neighbourhood propriety and a sense of continuity with the local streets.
- * The street should be the address for adjacent housing and community facilities.
- * The massing of housing is to reflect the small scale village character.

B.7.2 CONCEPT DESIGN

The streetscape concept is to strengthen 97 Avenue's boulevards with more intensive street tree planting from one end to another (92 Street to 96A Street). The treed boulevards along either side are to offer a well-defined canopy over the street and a sense of shelter. The street then is to be a distinct complement to the open sweeping field of Gallagher Park and the Muttart grounds.

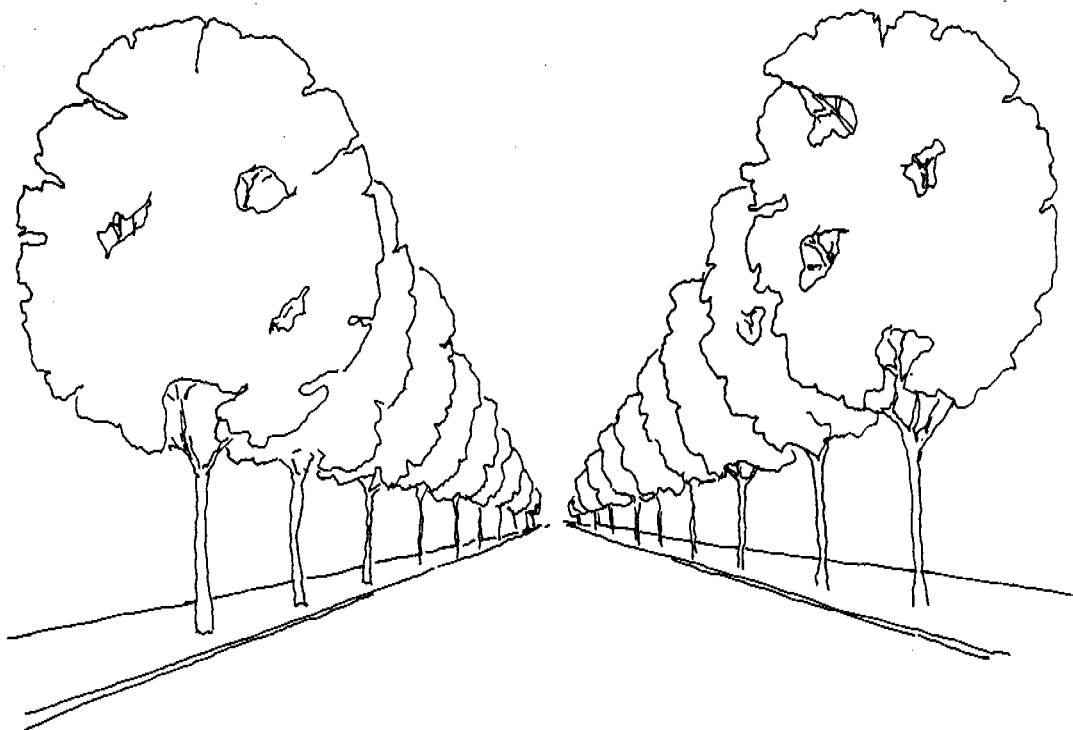


Fig. 51 97 Avenue Concept for an arcade of trees along each side of the street.

There are a number of changing conditions along the street's length:

- boulevarded walk in front of housing
- edging Gallagher Park
- Gallagher Park entrance
- street terminations

B.7.3 BOULEVARDED WALK IN FRONT OF HOUSING

The boulevards and tree planting in front of the housing are to be maintained and the tree planting is to be infilled and intensified for an average spacing of 5.0 meters.

Sidewalks along both sides of the street are to be widened toward the private property lines preserving the generous and verdant character of the boulevards. The sidewalk along the south side is to be 2.0 m to offer a more comfortable width for the travel of two people. On the north side a more generous width of 2.5 meters is proposed recognizing its sunnier orientation, an especially valuable asset on cold winter days.

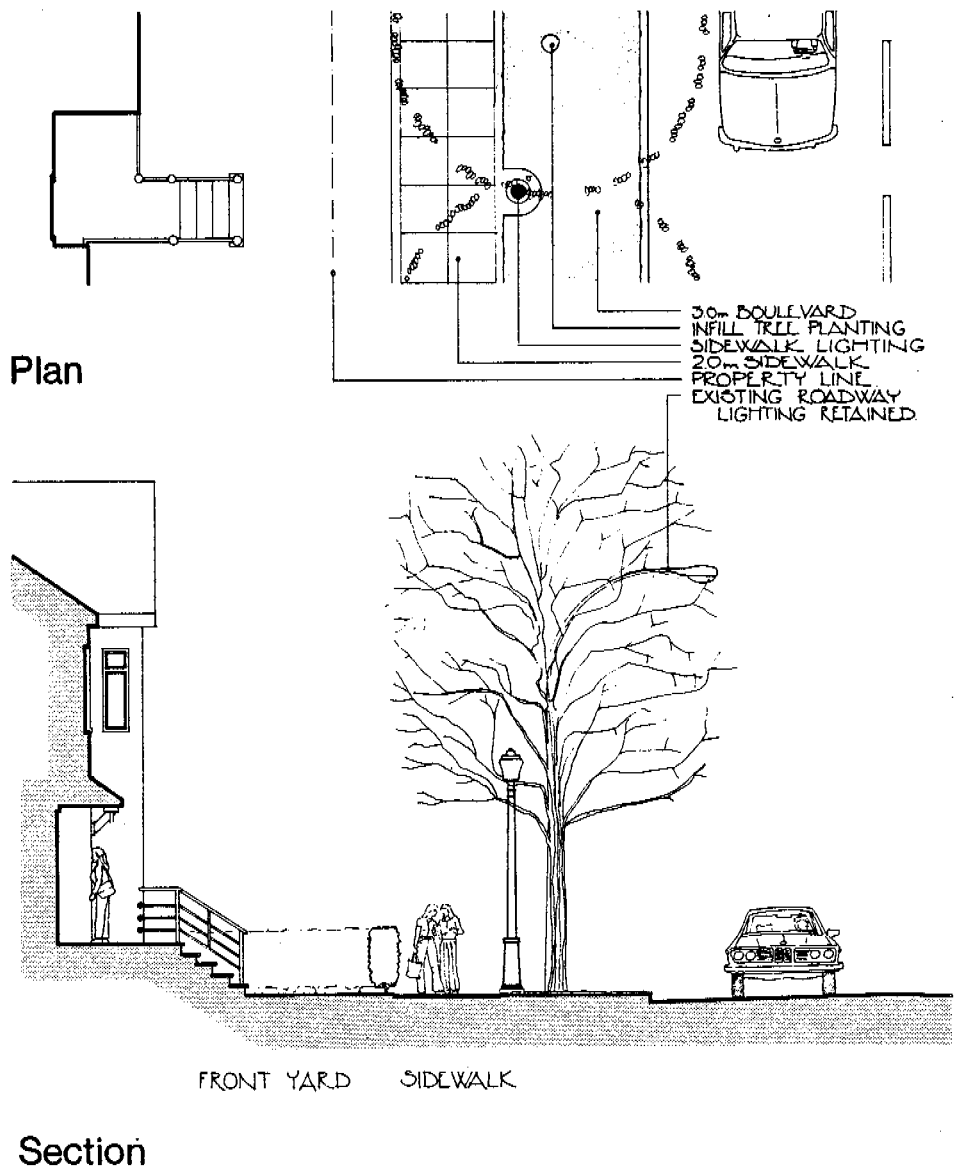


Fig. 52 Section: Boulevard walk in front of housing.

B.7.4 EDGING GALLAGHER PARK

The community league building and other proposed facilities for Gallagher Park should both reinforce the role of 97 Avenue as Cloverdale's Community Street and preserve Gallagher Park's sweeping greensward character. The park's vast open parkland should continue to be a unique recreational asset and visual relief for a neighbourhood that is relatively small scale and plentifully treed. The community building and associated facilities should, therefore, be sited to minimize disruption to the park and ensure ease of access from the neighbourhood. On-street angle parking is, therefore, proposed to satisfy community league requirements. This parking arrangement can be phased block by block over a number of years.

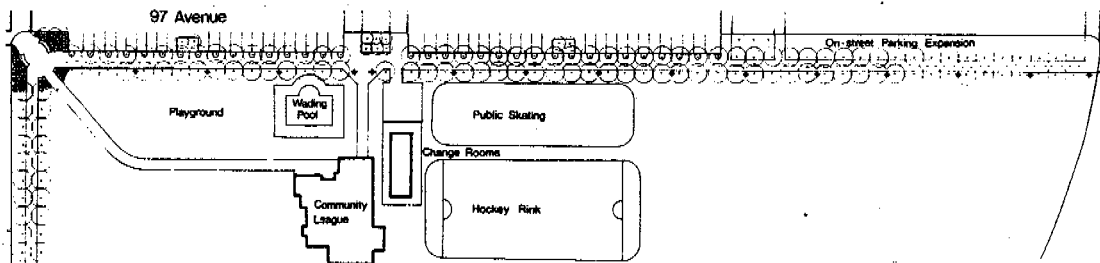


Fig. 53 Plan of double arcade of trees between 92 Street and 95 Street.

An arcade of tree planting from 92 Street to 95 Street is to form an edge for both the street and the park. It defines the limits of the park, shelters the edging walkway, and separates the suggested angle street parking from the park to assure the park's overall pastoral quality. It also offers a distinct setting for the community league and its facilities.

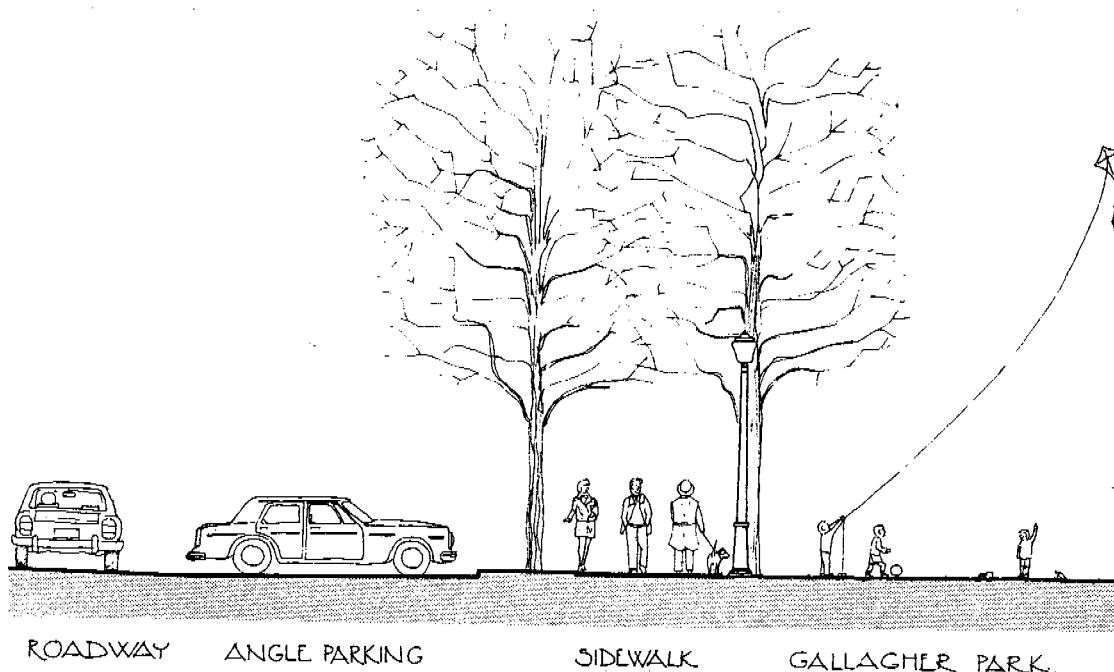


Fig. 54 Section: Edging Gallagher Park.

B.7.5 GALLAGHER PARK ENTRANCE

A formal entrance to Gallagher Park is proposed at 95 Street and 97 Avenue, the park's most visible corner. The illustrated concept consists of an open colonnade forming a faceted semi-circle with surrounding seating and decorative paving.

The colonnade is located so that it is seen from down both 97 Avenue and 95 Street. As a vertical element it offers a highly visible clue and invitation to the park and its facilities including the community league building.

It is suggested the colonnade be colourful to lend the entrance prominence in both summer and winter. Decorative lighting would be incorporated into the structure to make the structure effective at night. Seating flanks either side of the entrance offering a place to see and meet people. Paving is decorative with a cloverleaf emblem placed in the centre.

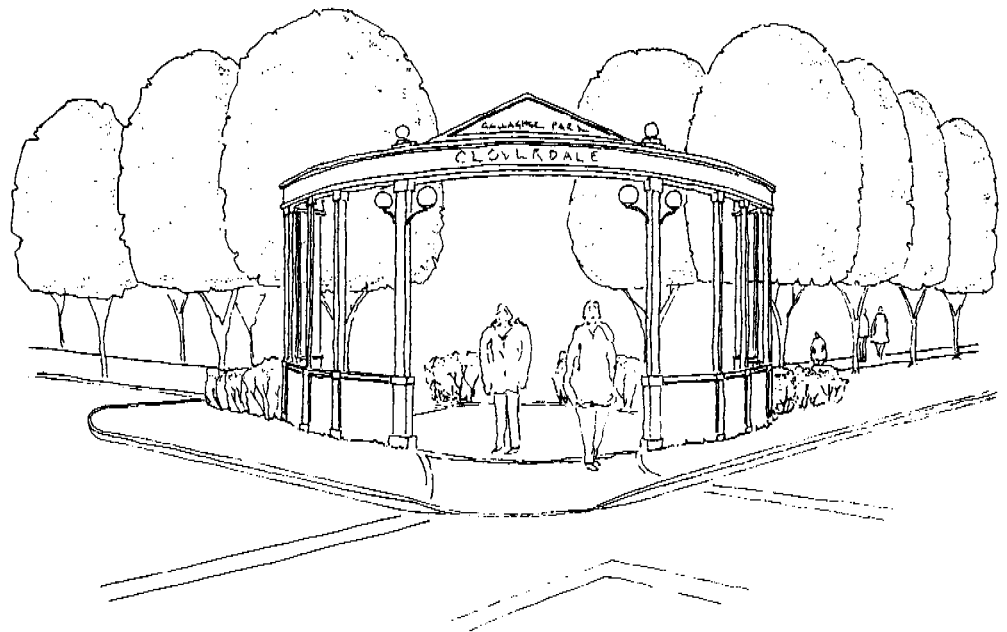


Fig. 55 Concept Design for Gallagher Park entrance.

B.7.6 STREET TERMINATIONS

At either end of the street, 92 Street and 96A Street, small parks are to be developed to visually terminate and spatially contain the street within the neighbourhood. The street's overall enclosure reinforces its role as Cloverdale's Community Street.

The small park at the east end of the street not only terminates the street but introduces the suggested stairway up to Strathearn Heights. It is an important connection since it leads to school facilities at the top of the hill. The park is also the beginning of Woodlands Way, the walkway and park leading to 91 Street and East Cloverdale.

The suggested design concept includes a foil of coniferous trees which cups an area of flowering shrubs and seating. The seating offers a unique view down along the entire length of the street.

The 96A Street seating and ornamental planting at the west end replaces a parking lot access to the Muttart (discussed in Community Structure) with direct pedestrian access from the Muttart to 97 Avenue and the Community League.

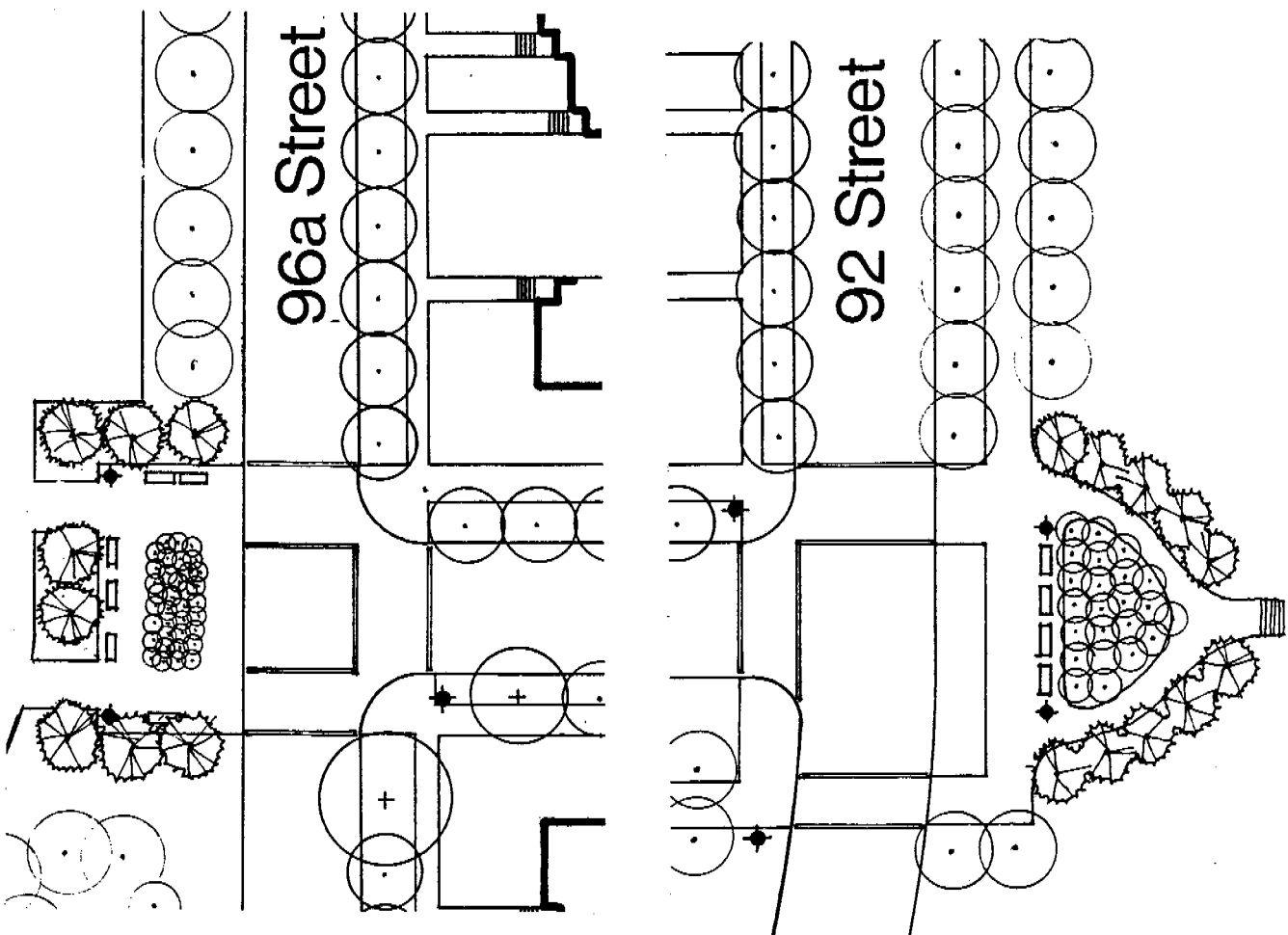


Fig. 56 Concept Plans for street terminations.

B.7.7 97 AVENUE STREETSCAPE CONCEPT SUMMARY

The following site plan and sketches illustrate a vision of 97 Avenue as Cloverdale's Community Street if the recommendations for public improvements are implemented and urban design guidelines and criteria established.

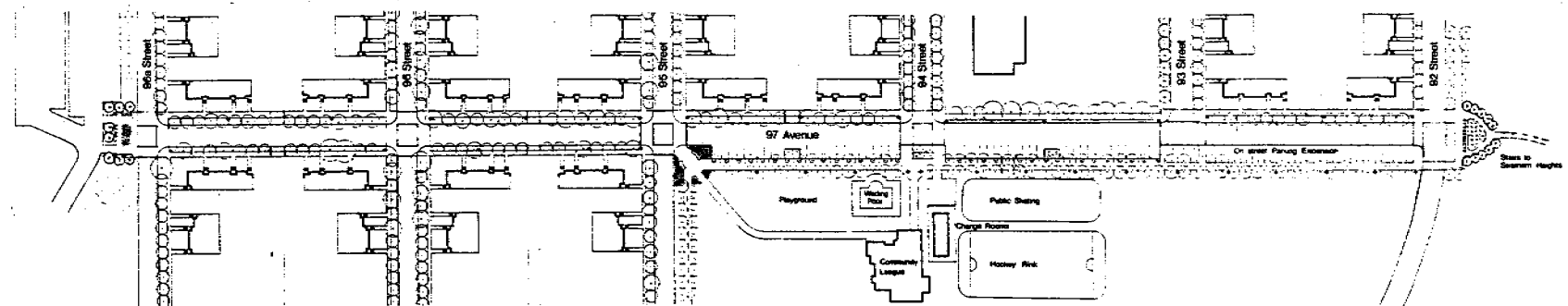


Fig. 52 97 Avenue Streetscape Concept.

B.8 PHASING AND COST ESTIMATES

B.8.1 PHASING

The implementation of public improvements is appropriate at an early stage in the overall development, occurring prior to or simultaneous with private development because:

- * It demonstrates the City's real commitment to the revitalization of the neighbourhood in a highly visible manner that is both symbolic and functional.
- * It sets forward changes that indicate the character of public environment (the setting) the private developments are to address.

PHASE ONE DEVELOPMENT (1986)

First phase improvements are to offer a clear indication of neighbourhood revitalization gestures at both the scale and momentum of change anticipated. 98 Avenue improvements are the first phase in a process of developing it as Cloverdale's Main Street. They are:

- * Gateways at 96A Street and 91 Street.
- * Traffic light installations and speed reductions.
- * Streetscape along three residential blocks.
- * Streetscape along three blocks of the C.C.R.P.
- * 98 Avenue and 95 Street corner park.

It is assumed the last two items will be funded by the Province.

97 Avenue improvements focus on the provision of on-street angle parking for Gallagher Park and community league requirements.

- * 30 parking stalls between 93 Street and 95 Street.

For the development of the south side promenade along 98 Avenue the City is to acquire, by easement, purchase or other means, several meters depth of adjacent properties: 3.0 metres between 96A Street and 95 Street and 2.0 meters between 94 Street and 92 Street.

Acquisition could occur at several stages of development:

1. prior to assembly of lots, City owned and private.
2. upon completion of lot assemblies.
3. after assembly.

Total estimated cost: \$ 950,475.00 (including 15% contingency).

PHASE TWO DEVELOPMENT (1987)

Second Phase improvements are directed to completing the transformation of 98 Avenue to a livable street. Work primarily involves the installation of generous sidewalks and colonnades of tree planting. On 97 Avenue improvements focus on creating a more pedestrian environment.

98 Avenue improvements are:

- * Streetscape along four residential blocks
- * Streetscape along one commercial block

97 Avenue improvements are:

- * Corner entrance to Gallagher Park
- * End of Avenue Plazas (street terminations)
- * Streetscape along Gallagher Park (92 Street to 95 Street)

Total estimated cost: \$ 989,000.00 (including 15% contingency).

PHASE THREE DEVELOPMENT (1988)

Third Phase improvements are directed at completing 97 Avenue walkway widening and infill tree planting.

- * North side streetscape (92 Street-96A Street)
- * South side streetscape (95 Street-96A Street)

Total estimated cost: \$305,500.00 (including 15% contingency).

OTHER IMPROVEMENTS

At the time of private development in North Cloverdale and East Cloverdale 96 Street is to be extended and Woodlands Way established. Tree planting and sidewalk improvements along local streets are to be made once a pattern of redevelopment is established for each one.

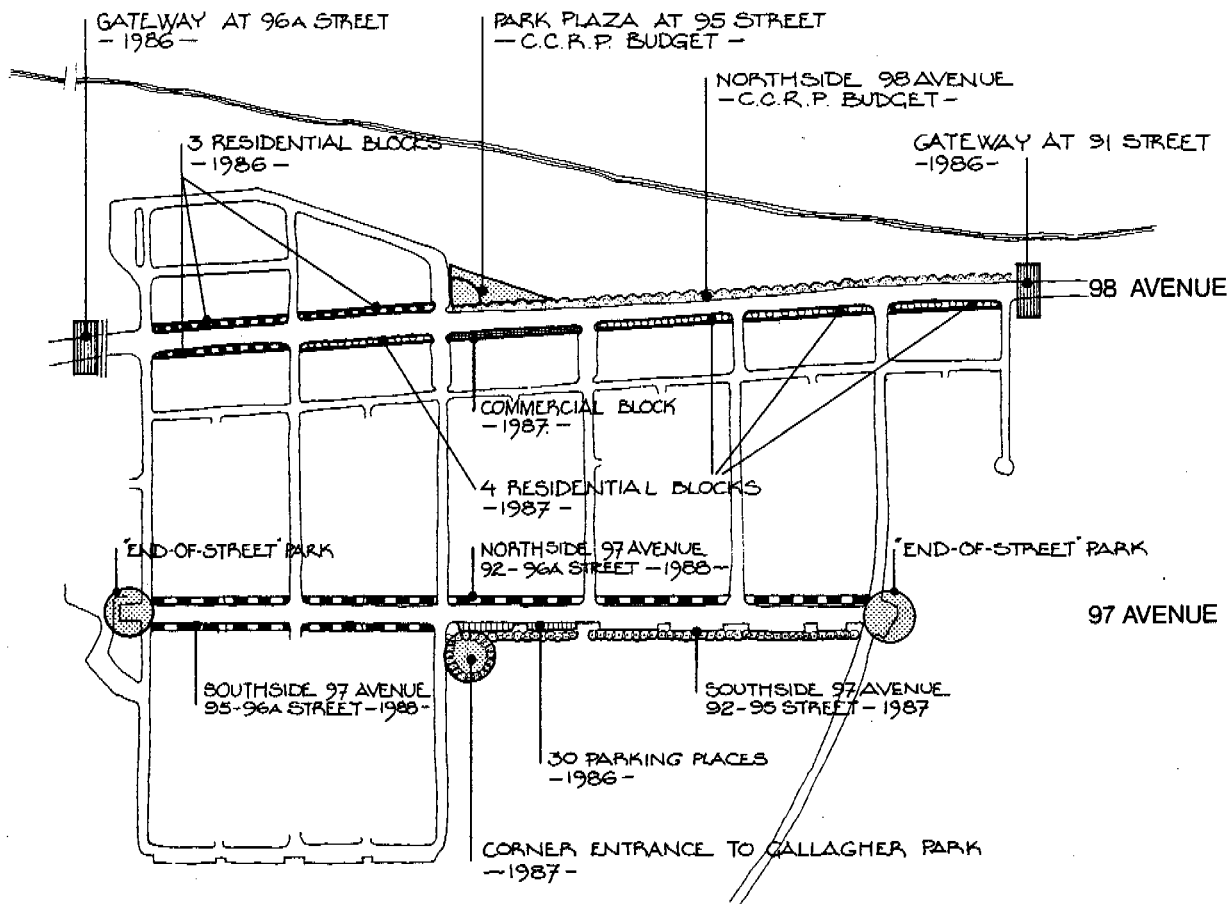


Fig. 58 Phasing diagram.

B.8.2 COST ESTIMATES

The Cloverdale Implementation Report by the Planning and Building Department recommends that City Council approve a three year capital budget and schedule along with the approval of the Area Redevelopment Plan. The special budget for the project will enable a co-ordinated implementation program to be undertaken which will not be dependant upon Departments' annual scheduling and budgeting priorities. The project budget will be reviewed annually over the duration of the implementation programme.

The capital budget is directed predominatly to work on 98 Avenue and 97 Avenue as described by the conceptual streetscape designs presented in this report. The purpose of this estimate is to serve only as an indicator of magnitude of investment for Council and as a guide for consultants retained to prepare the project working drawings. It should not be construed as a fixed or accurate amount necessary to realize the project.

Costs shown are exclusive of necessary easements, surveys, facilities in Gallagher Park, future 97 Avenue parking beyond 30 stalls, angle parking off 98 Avenue, professional fees, and City administration.

The estimate is described in sections by phase and costs of typical streetscape items installed (1985 dollars).

98 AVENUE

AREA REDEVELOPMENT PLAN BUDGET

Gateway at 96A Street (West)	\$ 80,000.00	
Gateway at 91 Street (East)	48,500.00	
Streetscape Improvements		
\$ 90,000.00/Res. Block X 7	630,000.00	
\$160,000.00/Comm. Block X 1	160,000.00	
	<u>\$918,500.00</u>	
Plus 15% contingency	137,800.00	
		<u>\$1,056,300.00</u>
		=====

CAPITAL CITY RECREATION PARK BUDGET

Park Plaza at 95 Street (Pagoda, Transit Shelter, Paving, Lighting, Planting)	\$197,653.00	
Streetscape Northside of 98 Ave. along C.C.R.P.		
\$66,000.00/Block X 3	198,000.00	
	<u>\$395,653.00</u>	
Plus 15% contingency	59,347.00	
		<u>\$455,000.00</u>
		=====
		\$1,511,300.00

BREAKDOWN BY YEAR - A.R.P. BUDGET

1986	Gateway at 96A Street and at 91 Street	\$ 80,000.00 48,500.00	
	Streetscape Along 3 Residential Block Faces		
		<u>270,000.00</u>	
			<u>\$398,500.00</u>
1987	Streetscape 4 Residential Block Faces	\$360,000.00	
	1 Commercial Block Face	160,000.00	
		<u>\$ 520,000.00</u>	
			<u>\$ 918,500.00</u>
	Plus 15% contingency	137,800.00	
			<u>\$1,056,300.00</u>
			=====

97 AVENUE

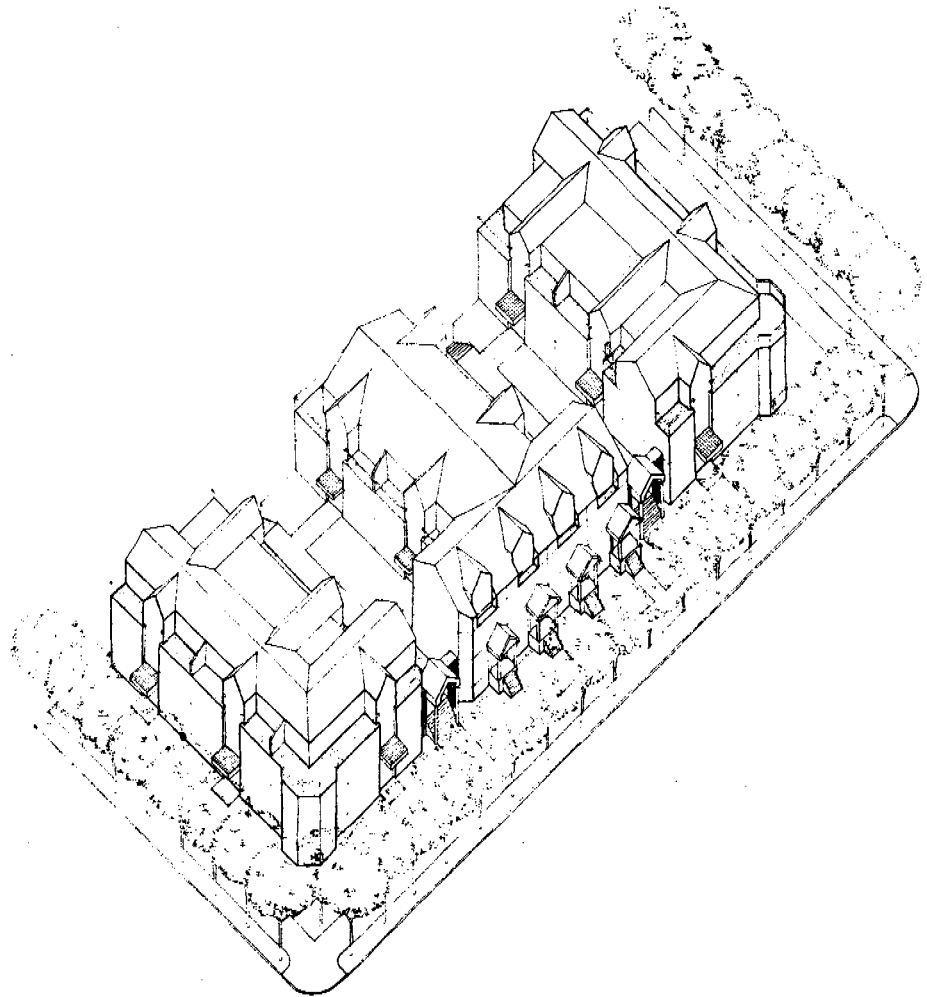
30 Angle Parking Stalls	
30 X \$1,000.00	\$ 30,000.00
Corner - Park entrance to Gallagher Park	50,000.00
End of Avenue Plaza-96A Street	29,000.00
End of Avenue Plaza-92 Street	34,000.00
Streetscape improvements	
Southside - 92-95 Street	
\$75,666.00 per block	227,000.00
Northside - 92-96A	
Southside - 95-96A	
\$37,950.00 per block	265,650.00
	<u>\$635,650.00</u>
plus 15% contingency	\$ 95,350.00
	<u>\$731,000.00</u>
	=====

BREAKDOWN BY YEAR

1986	30 Parking Places	\$ 30,000.00	
			<u>1986 - \$ 30,000.00</u>
1987	Corner Entrance to Gallagher Park	50,000.00	
	End of Avenue Plazas (Both 92 and 96A St.)	63,000.00	
	97 Avenue Streetscape Improvements - Southside-92 St. to 95 St.	\$227,000.00	
			<u>1987 - \$340,000.00</u>
1988	97 Avenue Streetscape Improvements - Northside-92 St. to 96A St. Southside-95 St. to 96A St.	\$265,650.00	
			<u>1988 - \$265,650.00</u>
	Total	\$635,650.00	
	Plus 15% contingency	\$ 95,350.00	
		<u>\$731,000.00</u>	
		=====	

SECTION C

URBAN DESIGN GUIDELINES



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C.1 ESTABLISHING URBAN DESIGN GUIDELINES

The purpose of the guidelines as described in Section C.2 is to influence and direct the bulk, mass, scale and articulation of medium density housing forms so far as they affect the public network. They are to ensure that:

- * Spaces between buildings are "positive" and that they invite and promote use.
- * Each building incrementally adds to the streetscape.
- * Buildings front streets and give them a continuous sense of address.

The goal of the Guidelines is to contribute to the creation of a community with a strong public network and thus a SENSE OF PLACE. The guidelines must ensure that an immense variety of private developments is possible, incrementally and positively adding to and addressing this network. They are to direct the form of housing through a series of broad categories:

- * Building Fronts
- * Building Heights
- * Building Setbacks
- * Project Open Spaces
- * Appropriate Building Types
- * Parking and Service Access

Each category presents one or more building design guidelines with illustrations and discussions to explain the intent.

The Urban Design Guidelines are to form part of the terms of reference for redevelopment in Cloverdale, to be used in conjunction with the Development Criteria for medium density housing as described in the Area Redevelopment Plan, which is the regulatory basis for new development. The Guidelines are an essential component of the redevelopment process. They provide the background for and an understanding of the mature neighbourhood that is envisioned and how any single project is to contribute to the making of a PLACE that is, in its entirety, greater than the sum of the individual parts. In consequence, the Guidelines are an important instrument for both the City and the Community to evaluate private development proposals as they come forward.

C.2 URBAN DESIGN GUIDELINES

C.2.1 BUILDING FRONTS

GUIDELINE

ALL STREETS ARE TO BE ADDRESSED BY A CONTINUITY OF FRONT DOORS.

DISCUSSION

Urban residential environments must be legible and comprehensible, which means that the public network of streets, parks and pedestrian ways is to be addressed continuously by the FRONTS of housing.

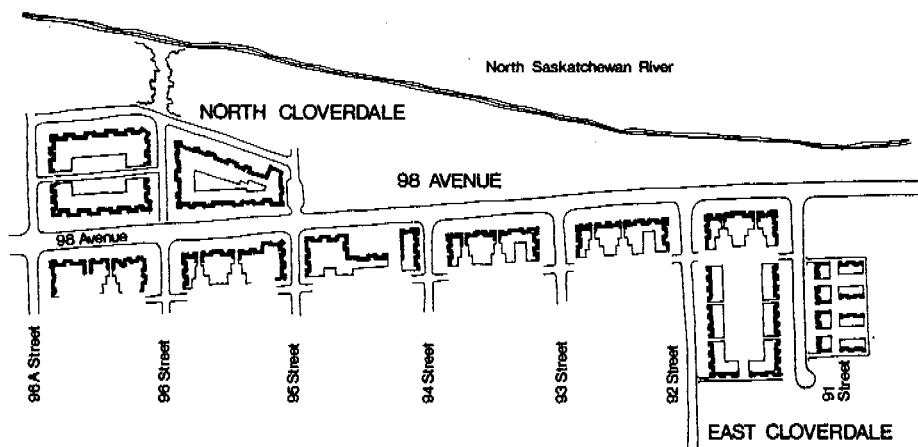


Fig. 59 Frontage diagram for medium density development.



Fig. 60 Continuity of front entrances along the street.

A continuity of FRONT DOORS will contribute to the compatibility of medium density housing forms with those of the low density areas. Visible front doors, yards, stoops and porches are encouraged.



Fig. 61 A highly visible front door to an apartment building.



Fig. 62 Medium density apartments with individualized front entrances.



Fig. 63 A strong pedestrian street character is created by the continuity of entrances and associated architectural features.

When the personalization of FRONT ENTRANCES and the visibility of FRONT DOORS is ignored, a sterile alienating street character is created.



Fig. 64 This apartment building exhibits little sense of habitation along the street.



Fig. 65 Front entrances are difficult to identify along this street.

GUIDELINE

DESIGN OF THE FRONTS OF RESIDENTIAL BUILDINGS SHOULD INCLUDE SUCH ARCHITECTURAL FEATURES AS PORCHES, STOOPS, CANOPIES, BAY WINDOWS, HEDGES, LOW FENCES OR OTHER SIMILAR DEVICES WHICH WILL REINFORCE A SENSE OF OCCUPANCY ALONG THE STREET.

DISCUSSION

These features help to express the sense that buildings are occupied by and are homes for individuals. They serve to articulate the public aspect of the building reinforcing a sense of personal identity.



Fig. 68 Well-designed steps and front door.



Fig. 67 Canopied entrance to an apartment block.



Fig. 66 A trellis entrance to a front yard.



Fig. 69 Bay windows along the street.



Fig. 71 A successful example of a building front which incorporates many worthwhile features: delightful stair and handrails, porch, balcony overlooking the street, bay windows and a feature tree.



Fig. 70 Modestly articulated front entrances with a low fence.



Fig. 73 This example illustrates a building which does not follow the pattern of entrances and special articulation along the street. The result is an erosion of the sense of occupancy and confusion in the comprehensibility of the street.



Fig. 72 An articulated entrance feature into a building courtyard off the street.

The continuity of front doors and those architectural features which reinforce the sense of occupancy along the street, offer the opportunity for increased street surveillance and thereby contribute to a greater sense of security. Features should be designed so that they are likely to be used. The usefulness of the features by the residents is what contributes to the surveillance.

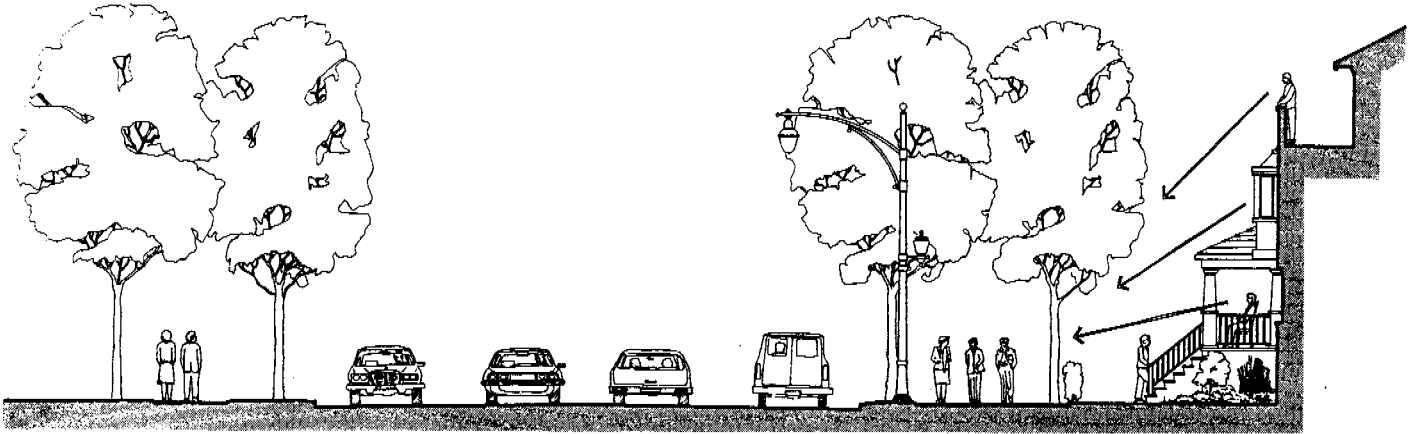


Fig. 74 Section through the proposed 98 Avenue streetscape demonstrates how useable architectural features can contribute to surveillance.

GUIDELINE

BUILDINGS ON CORNER SITES SHOULD ADDRESS BOTH STREETS WITH A CONTINUITY OF FRONT ENTRANCES AND SIMILAR BUILDING MATERIALS.

DISCUSSION

Corner sites offer the opportunity for a continuity of fronts along the side streets and for the building fronts to reflect a change in street role and character.



Fig. 75 This older corner house addresses both streets and treats the corner as a special feature.



Fig. 77 Buildings should not expose blank end walls to a corner condition.

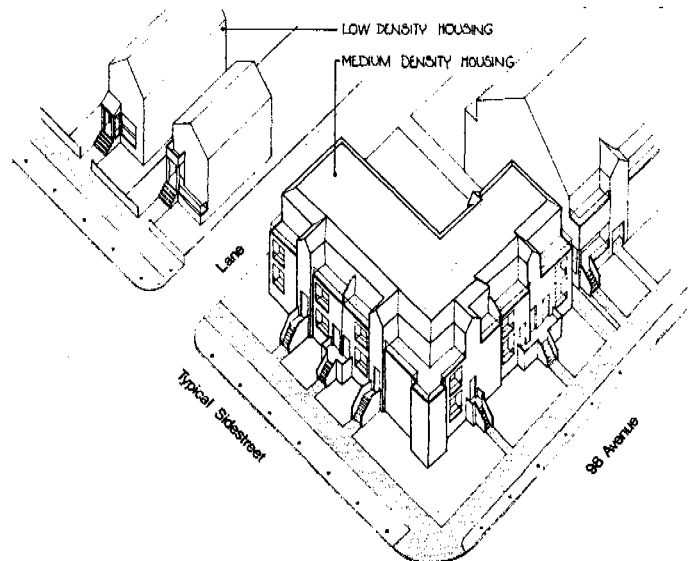


Fig. 76 Corner sites offer the opportunity for a continuity of fronts along the side streets and for the building fronts to reflect a change in the street role and character.

C.2.2 BUILDING HEIGHTS

GUIDELINE

THE MAXIMUM BUILDING HEIGHT IS TO BE THREE STOREYS.

DISCUSSION

As an objective for redevelopment, Cloverdale should retain its verdant quality. Building heights are to be restricted so that they do not predominate the view of the valley. The building height is limited so that it doesn't exceed the height of the mature trees.

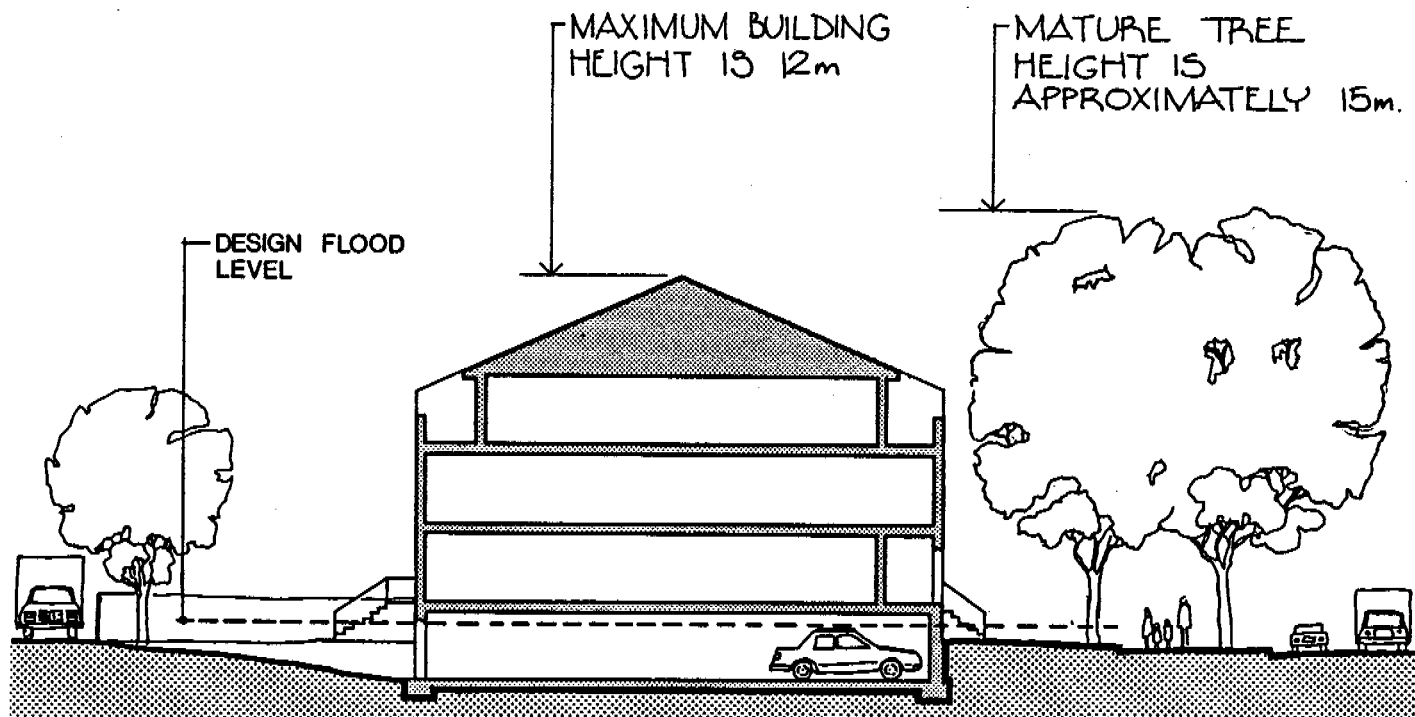


Fig. 78 Section through typical medium density housing showing the relationship of building height to the height of mature trees.

Medium density housing should not overshadow the adjacent low density areas.

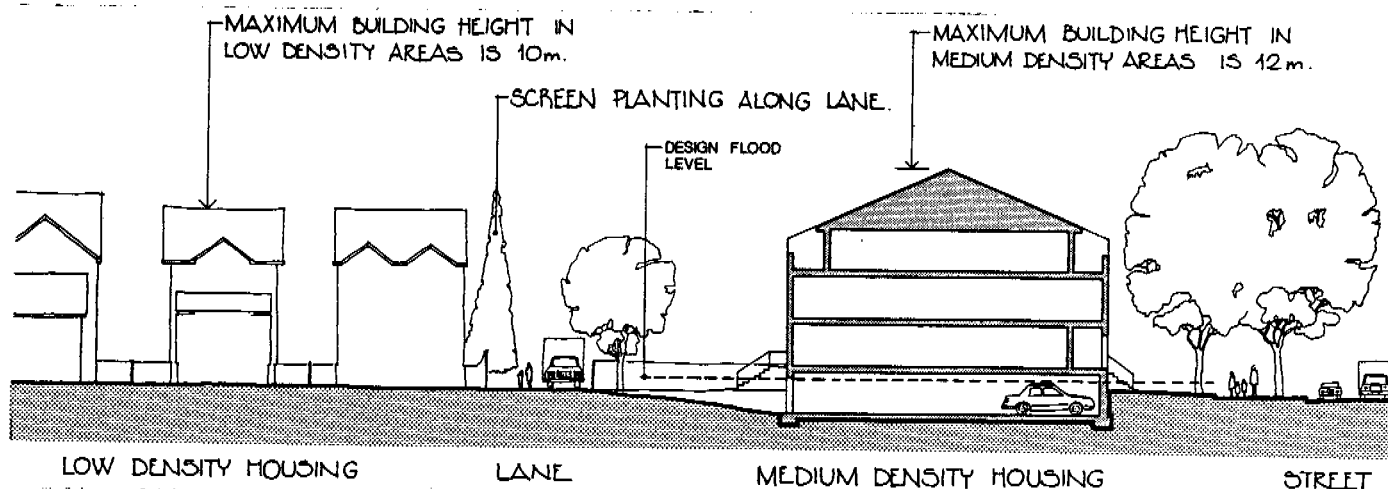


Fig. 79 Section showing the relationship of the medium density housing form to that of the low density areas.

GUIDELINE

THE MAJORITY OF THE BUILDING FRONTS ALONG STREETS AND LANES ARE TO BE TWO STOREYS IN HEIGHT. THE THIRD STOREY WILL BE PREDOMINANTLY SETBACK FROM THE BUILDING FACE TO MAINTAIN THE TWO STOREY APPEARANCE.

DISCUSSION

Medium density housing should be similar in scale and character to the low density areas in South Cloverdale. Like the low density areas, medium density areas are to have a predominantly two-storey appearance. Two-storey building fronts offer very pleasant, pedestrian-scaled streets.

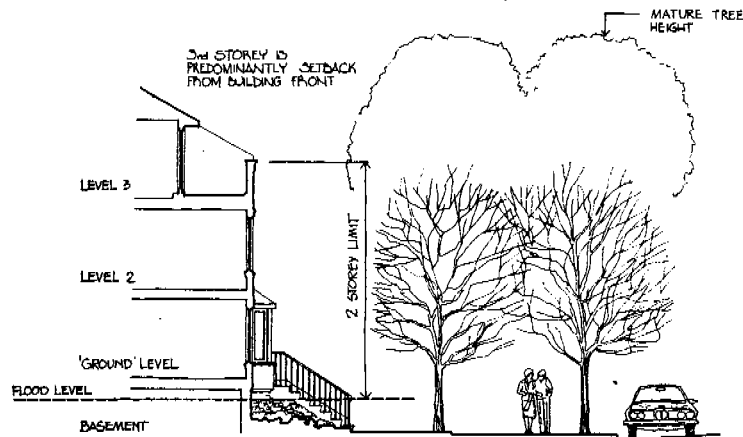


Fig. 80 Section through a typical building front and street.

The two storey appearance should be enhanced by strong horizontal features at the top of the second storey such as cornices, eaves, handrails, sloping roofs or other similar devices.



Fig. 81 An excellent example of the anticipated scale and character of the building front and street.

Although the building faces are to be predominantly two storeys in appearance, projections above the top of the second storey, such as gable roof ends, can provide a welcome addition to streetscape.



Fig. 82 This articulated building front, with varying roof configurations is an appropriate example for Cloverdale.



Fig. 84 This apartment building creates a rich and varied street presence.



Fig. 83 An example of a well-articulated roof line.

C.2.3 BUILDING SETBACKS

GUIDELINE

NEW BUILDINGS ARE TO BE SETBACK FROM THE FRONT PROPERTY LINE BY:

8.0 M ALONG 98 AVENUE.

4.5 M ALONG OTHER STREETS.

3.0 M WHERE THE FRONT PROPERTY LINE ABUTS A PARK.

THE MAJORITY OF THE BUILDING FRONT IS TO BE CONSTRUCTED ALONG THIS LINE.

DISCUSSION

The existing building setbacks along 98 Avenue vary considerably. A consistent 8m setback offers a strong street edge to the busy arterial and the Capital City Recreation Park. This setback allows a generous sidewalk, an arcade of tree planting and a reasonable front yard, all of which contribute to a comfortable pedestrian-oriented character.

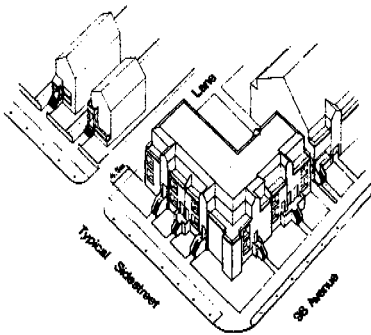


Fig. 85 Diagram showing a 4.5m setback along a side street.

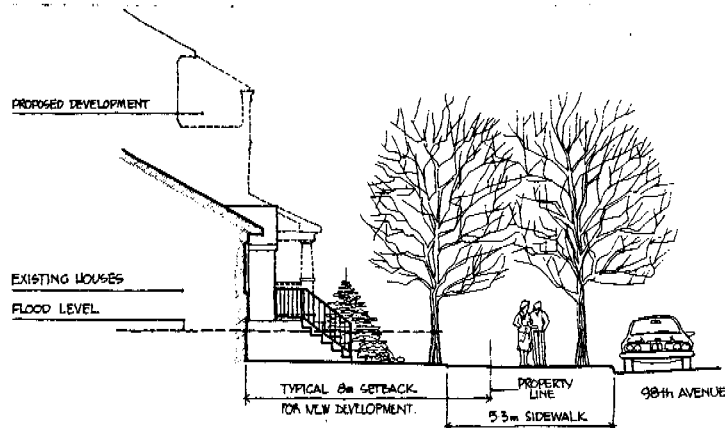


Fig. 87 Section through the 98 Avenue streetscape.

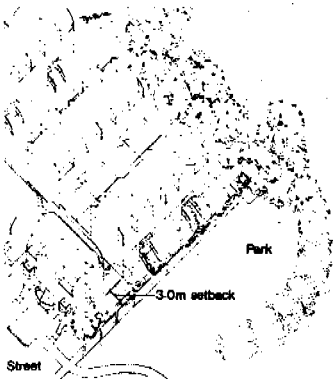


Fig. 86 Diagram showing a 3.0m setback fronting a park.

The 4.5m setback along other streets matches the minimum front yard setback in the adjacent low density areas. The less busy streets don't require as much buffering distance.

When housing fronts directly onto a park, there is less requirement for setback which is normally required to buffer the street traffic. 3.0m will be sufficient for a front yard or garden and allows more of the site to be developed.

GUIDELINE

THE REARYARD SETBACK CAN BE 1.0M IF THE BUILDING DOES NOT COMPRISE MORE THAN 50% OF THE SITE WIDTH AT THIS LINE OTHERWISE THE MINIMUM SETBACK IS 7.5M.

DISCUSSION

The 7.5m setback requirement is the same as that required in the Landuse Bylaw for RF5, RF6 and RA7 medium density development.

When a courtyard is incorporated into the design, the setback is reduced to 1.0 m. This is to allow greater flexibility in the development of the site. The maximum building width requirement of 50% of the site width at the 1.0 m setback line is to reduce the effect of the building on nearby properties across the lane.

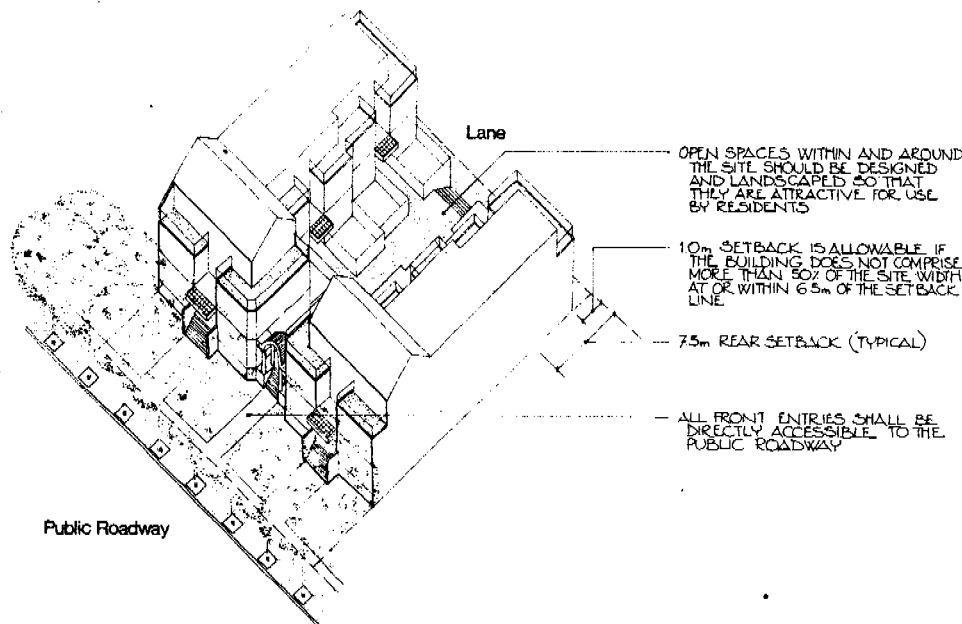


Fig. 88 Diagram illustrating rearyard requirements.

GUIDELINE

BUILDINGS CAN BE CONSTRUCTED TO THE SIDE PROPERTY LINE.

DISCUSSION

This guideline, in addition to the rearyard setback guidelines, is to allow more site coverage and flexibility of building configuration.

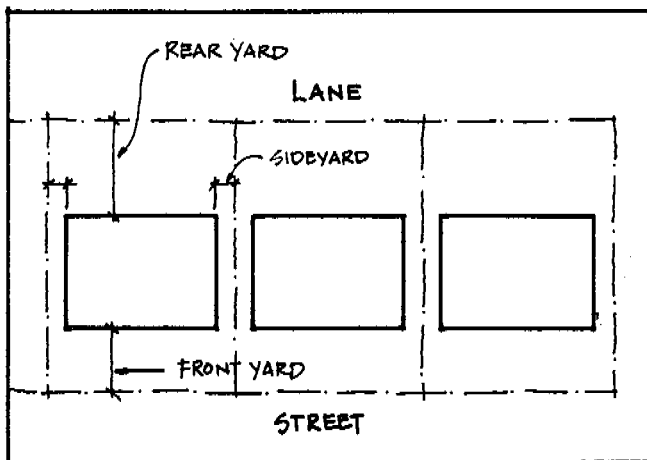


Fig. 89 Diagram illustrating a pattern of buildings as governed by traditional setback regulations.

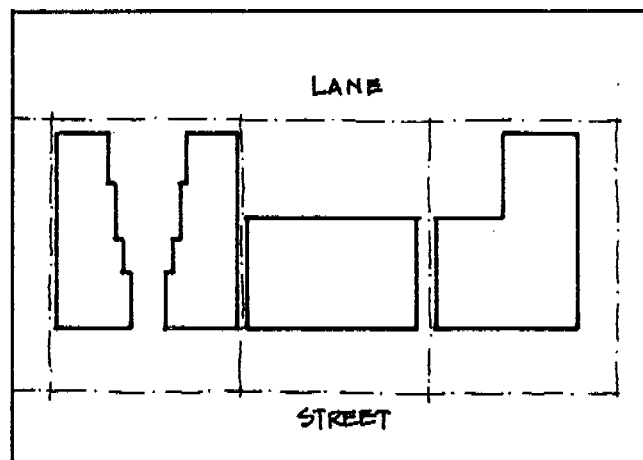


Fig. 90 Diagram illustrating the flexibility within the guidelines for building layout.

The absense of a sideyard requirement allows for a more continuous sense of street edge, eliminating open spaces between buildings which serve little utility.



West from 93 Street

Fig. 91 This drawing illustrates the sense of continuous street edge along 98 Avenue.

The profile of building walls and roofs is to be, within reason, compatible with adjacent buildings and roof lines.

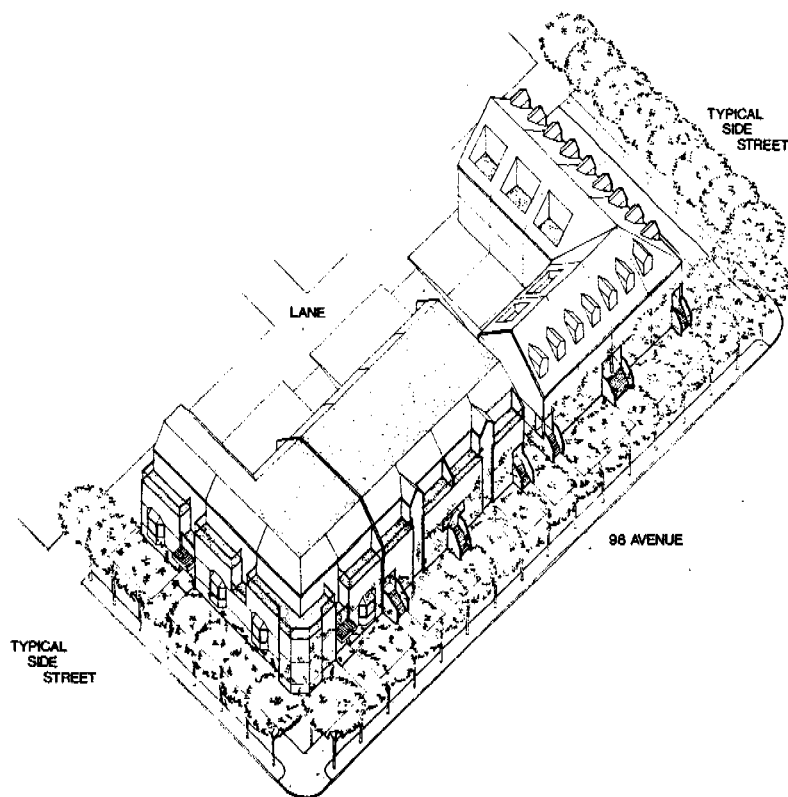


Fig. 92 Diagram illustrating the desired compatability of adjacent buildings which have been separately developed.

C.2.4 OPEN SPACES

GUIDELINE

OPEN SPACES WITHIN THE SITE AND AROUND THE BUILDING SHOULD BE ATTRACTIVE FOR USE BY THE SITE'S RESIDENTS.

DISCUSSION

This guideline is primarily concerned with open space which relates to and is affected by the public realm of streets, sidewalks and parks. Relevant categories of open space include front yards and open space between buildings.

Front yards, as open space, play a special role on the street. They represent the private gesture to the public domain, contributing a sense of propriety and occupancy to the street. They offer the opportunity for a display of landscaping, whether soft planting or hard surfaced, extravagant or simple. This display is a reflection of the occupant(s) and a statement as to how they wish to be recognized by the public.



Fig. 93 A clear sense of propriety is obtained by the use of a low fence.



Fig. 94 An example of intense personalized frontyard landscaping.

When there is no attempt to express the character of the occupants, through thoughtful landscaping along the street, the front yards become a barren, non-contributory space in the street.

FRONT YARDS should appear to be purposefully designed and should have the function of establishing occupant propriety along the street.



Fig. 95 This front yard does not contribute to a sense of occupancy along the street.

Front yards can be incorporated into courtyards of projects allowing more units direct accessibility to the street. The same criteria for thoughtful landscaping apply here.



Fig. 97 This example illustrates the potential of a courtyard off the street to provide excellent frontyards.



Fig. 96 A dramatic entrance to a courtyard off the street.

When open spaces in and around the project are used by the residents, if only for access to the entrance of the dwelling, and when fenestration is oriented to those spaces, they are more meaningful to the resident and visitor and provide a measure of security.



Fig. 98 This courtyard is a delightful amenity for both the residents and pedestrians along the street.



Fig. 99 This open space between two buildings has been imaginatively used as a walkway access.

Where open spaces are not useful, such as illustrated below, they do not contribute to the comprehensibility of the street.



Fig. 100 Non-utilitarian spaces between buildings.

GUIDELINE

FRONT YARDS ARE NOT TO PROVIDE PRIVATE OUTDOOR AMENITY SPACE FOR DWELLING UNITS.

DISCUSSION

Front yards cannot provide the privacy requirements for individual unit outdoor amenity space. When this space is provided in a front yard, along the street at ground level, there is confusion in the comprehensibility of the street, as well as a serious erosion of the unit's privacy.



Fig. 101 These yards along the street are not suitable as private outdoor space for the residents.

Private outdoor amenity space should be provided where it will not conflict with the use of the front yards.



Fig. 102 These row houses have roof gardens as private outdoor space.



Fig. 103 This apartment project provides ground-related private amenity space at the rear, adjacent to the lane, where privacy requirements can be met.

C.2.5 BUILDING TYPES

GUIDELINE

A VARIETY OF APPROPRIATE RESIDENTIAL BUILDING TYPES IS ENCOURAGED THROUGHOUT THE MEDIUM DENSITY AREAS.

DISCUSSION

ROW HOUSING maintains very high dwelling amenity and is efficient in its use of land. Density ranges from approximate 20-40 units per acre. This building type is appropriate because it supports the objective for a continuity of front doors and a sense of propriety along the street.*

FRONT YARDS UNITS REAR YARDS.

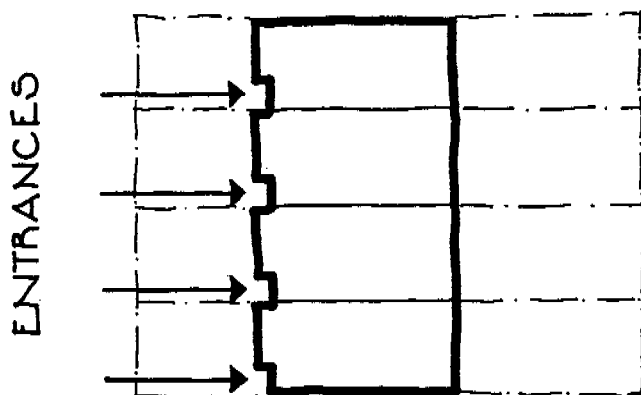


Fig. 104 Row Housing.

STACKED ROW HOUSING includes all combinations of two or more dwelling units stacked vertically and having direct stair access to grade from the upper units. Densities for three storey buildings range from 30-44 units per acre. This building type is appropriate because it supports the objective for a continuity of front doors along the street. All units are directly accessible from the street.

FRONT YARDS UNITS REAR YARDS.

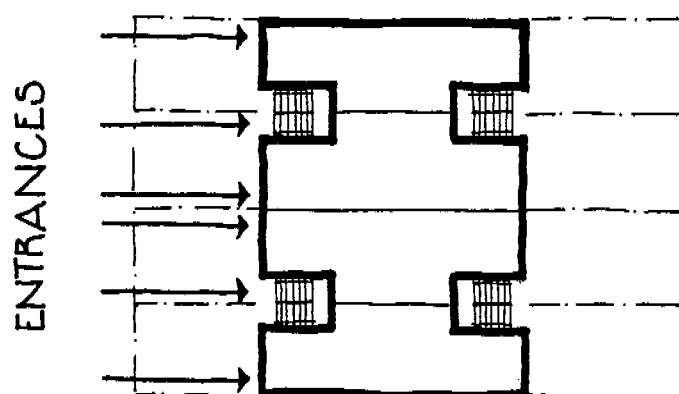


Fig. 105 Stacked Row Housing.

THROUGH APARTMENTS, at least at the ground floor, at best at all levels, are appropriate since this type provides more entrances from the street than the normal walk-up, which provides only one entrance per building block. This type is ideal when there are only two units accessing a stairwell per floor.

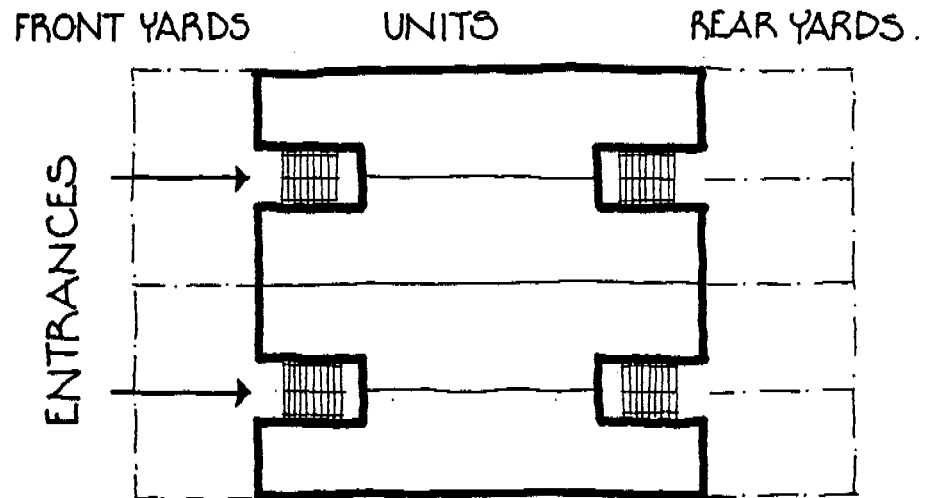


Fig. 106 Through apartments.

COURTYARD HOUSING takes best advantage of the absence of a sideyard requirement, orienting some of the units toward an internal courtyard. Units fronting the courtyard are to have direct access via the courtyard to the street.

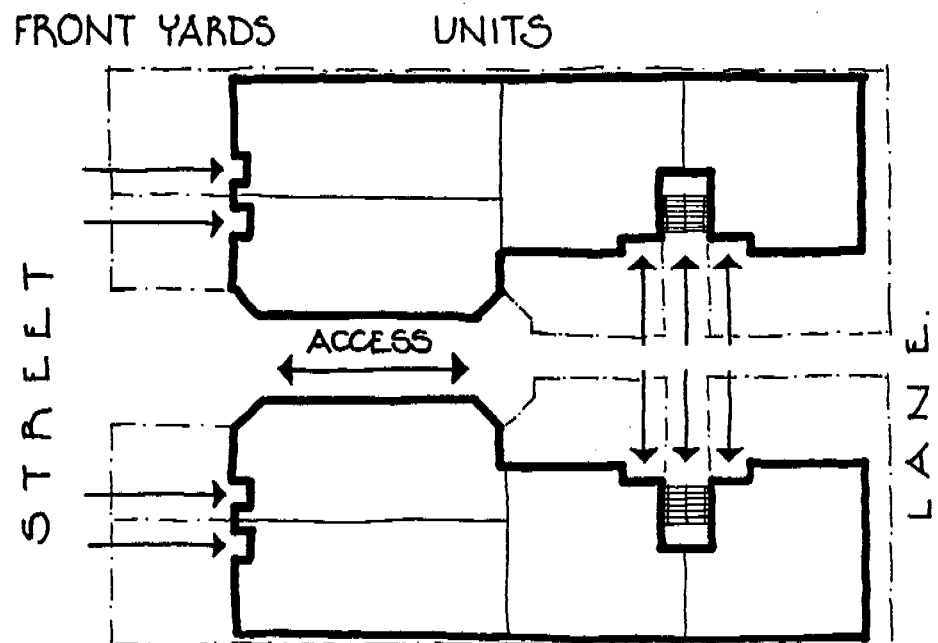


Fig. 107 Courtyard Housing.

Densities in this section have been selected from the report "Alternatives to High Rise" by Barton Myers Associates.

C.2.6 PARKING AND SERVICE ACCESS

GUIDELINE

ACCESS TO ONSITE PARKING IS TO BE FROM THE LANE WHEREVER POSSIBLE. CASUAL AND VISITOR PARKING IS TO BE AVAILABLE PRIMARILY ALONG LOCAL STREETS.

DISCUSSION

A consistent and legible pattern of resident and casual parking is required. Access to onsite parking should continue to follow the traditional pattern which is from the lane. This pattern avoids unnecessary curb cuts and interruption to traffic flows.

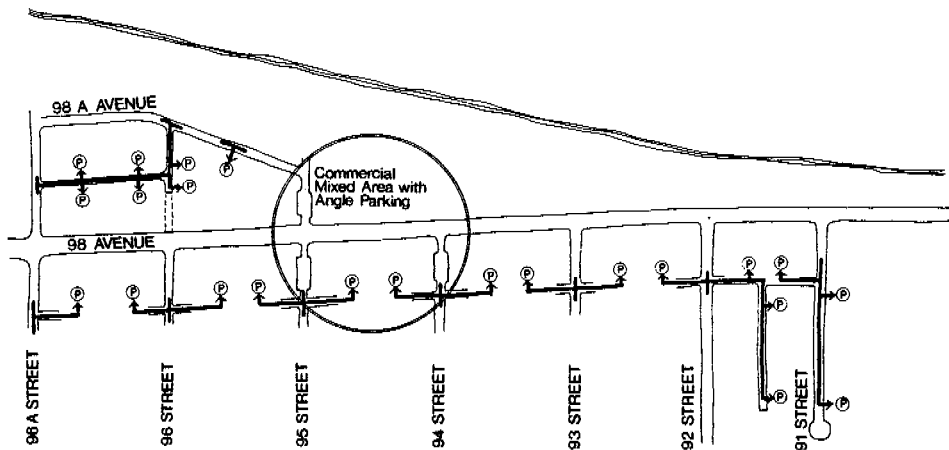


Fig. 108 Diagram illustrating on-site parking access and commercial street parking.

Underground parking is encouraged to be provided wherever possible. Where flood plain standards apply, the development of underground parking can occur in the uninhabitable space below the main ground level.

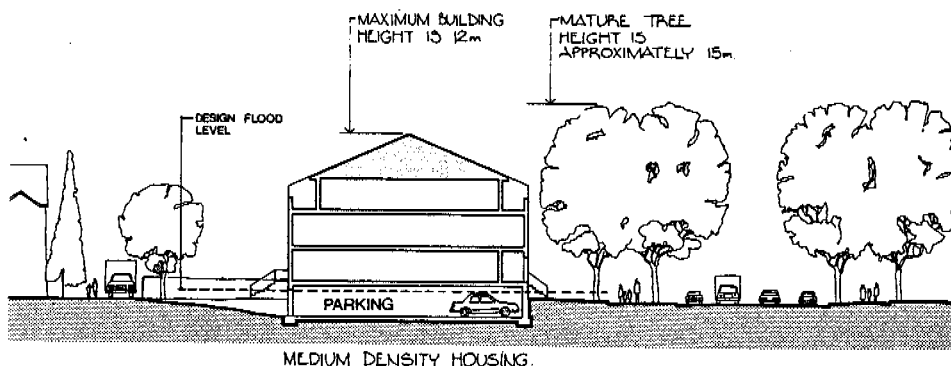


Fig. 109 Section through typical housing development illustrating the potential for underground parking.

Where parking is provided at ground level, outside the building, it should maximize the amount of open space available to the residents as outdoor amenity and be screened to alleviate its visual prominence.

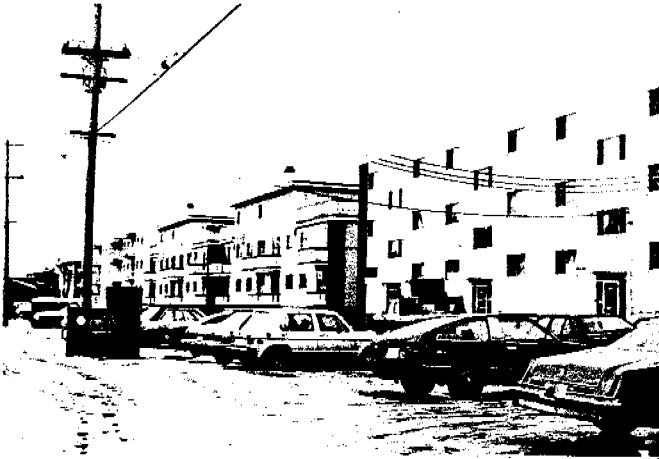


Fig. 110 Rearyards that are entirely devoted to parking are to be avoided where possible.

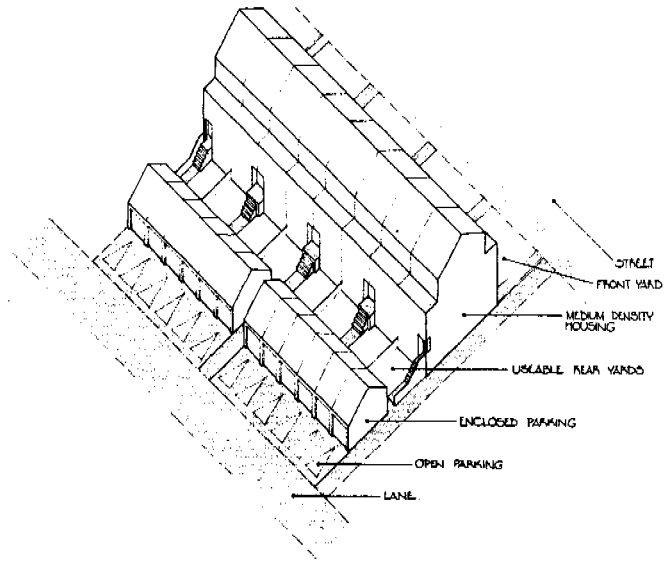


Fig. 111 This illustration of surface parking allows open space for the residents.

Access to parking along 98A Avenue, east of 96 Street and along the east side of 91 Street will be from the street, since these areas are not serviced by a lane. Care should be taken to minimize the disruption to pedestrian flow along the street.



Fig. 112 An example of off-street parking.

C.2.7 URBAN DESIGN GUIDELINE SUMMARY

This section presents summary diagrams which indicate collectively the urban design guidelines for medium density housing as discussed individually in Section C.2. These diagrams are for illustrative purposes only and are applied to various building types and site conditions. They illustrate only a portion of the full range of built-form possibilities.

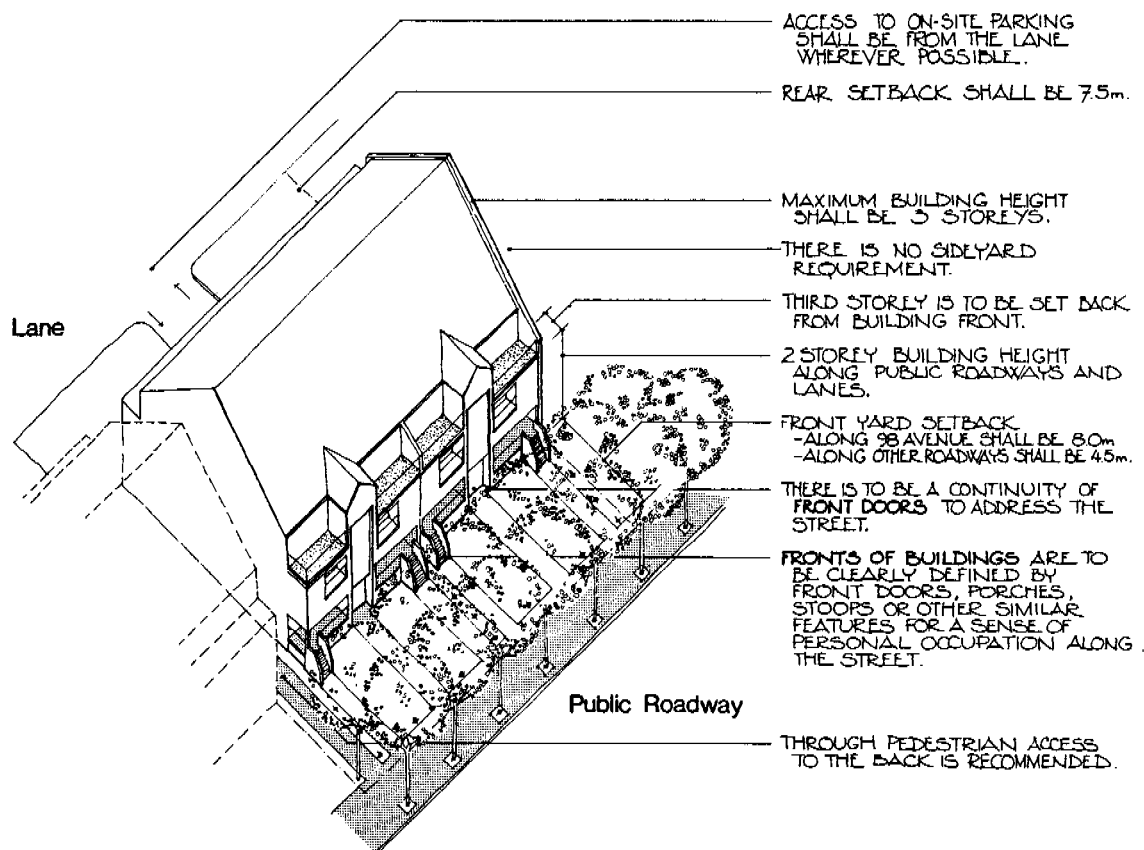


Fig. 113 Example 1 - Summary illustration showing the Urban Design Guidelines as they affect through-apartment type medium density housing.

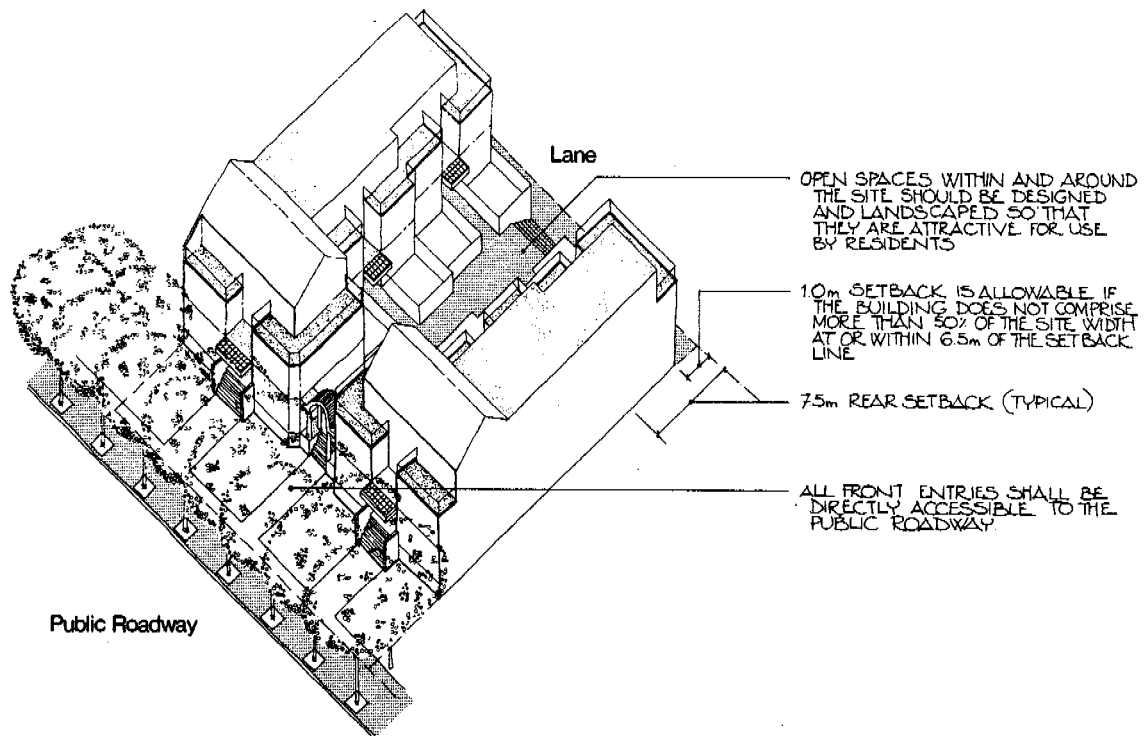


Fig. 114 Example 2 - Summary illustration showing the Urban Design Guidelines as they affect courtyard type medium density housing.

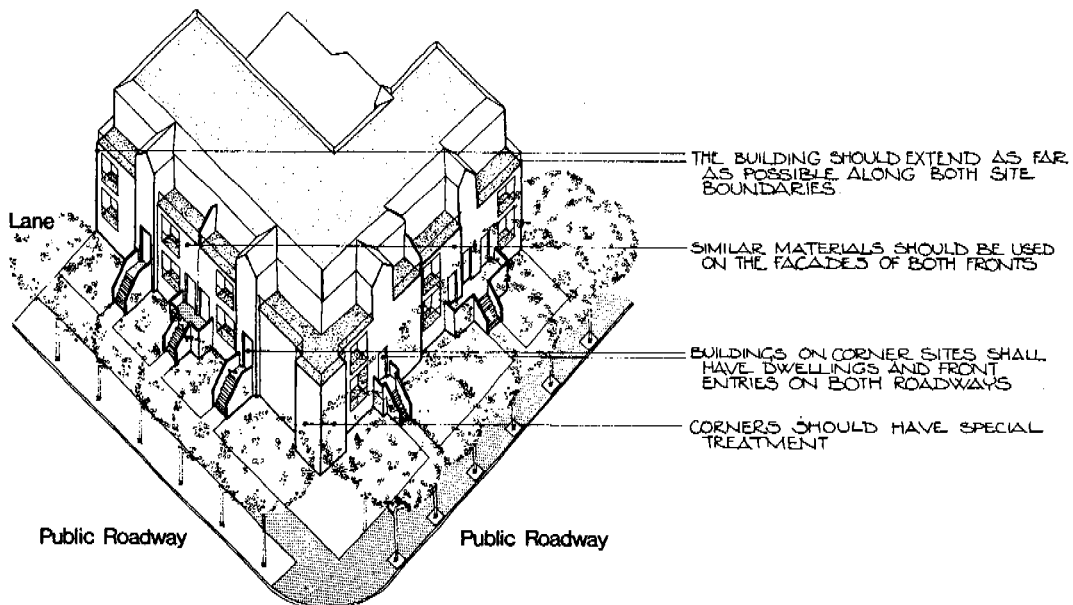
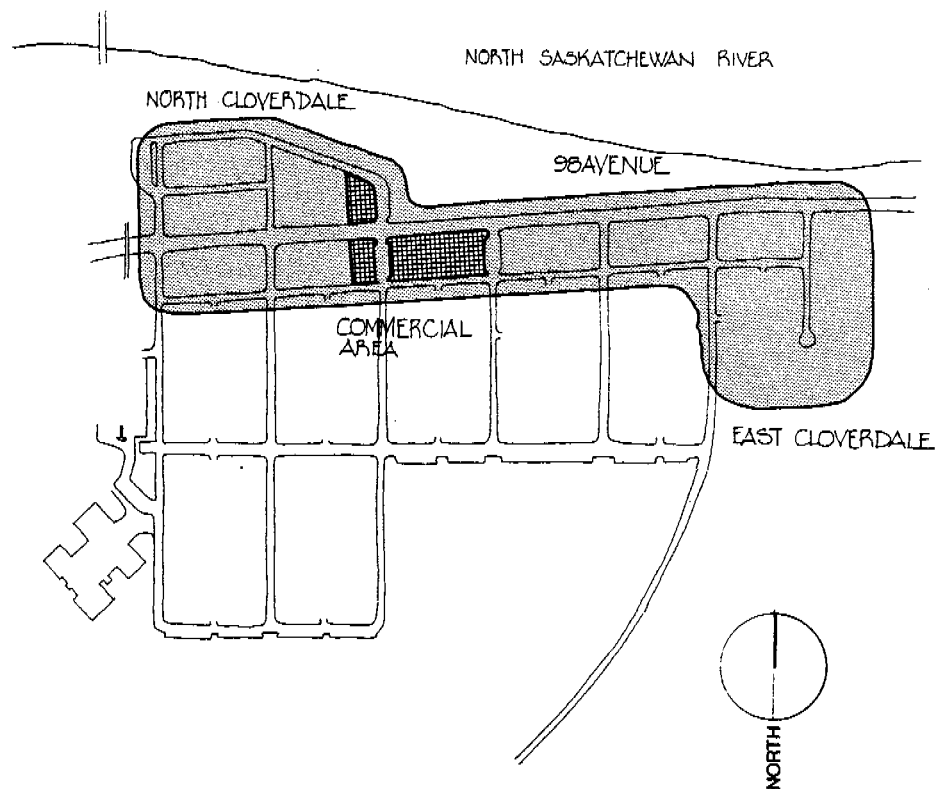


Fig. 115 Example 3 - Summary illustration showing the Urban Design Guidelines as they affect medium density housing which is built on a corner site.

SECTION D

SUB-AREA URBAN DESIGN



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D.1 INTRODUCTION TO SUB-AREA URBAN DESIGN

The medium density area of Cloverdale is discussed as four sub-areas, each having its own site specific characteristics and form determinants:

- * North Cloverdale
- * East Cloverdale
- * 98 Avenue
- * Commercial Area

The preliminary study of each sub-area illustrates the potential they have as special places if a coordinated urban design approach is adopted. Roles are proposed for each of the on-site and surrounding streets to direct the nature of public improvements and indicate the nature of place to which the housing is to contribute in its addressing. The built form for each specific site follows the guidelines of section C and illustrates their potential and flexibility in unique conditions.

The urban design issues are presented and arranged so that the transition from the existing neighbourhood character to the envisioned character is illustrated for each sub-area, the format being:

EXISTING SUB-AREA STRUCTURE

The sub-area is presented as it exists, covering concerns such as proximity to public amenities, relationship to the community as a whole, orientation of lots, land ownership, parking.

EXISTING CHARACTER OF THE SUB-AREA

The existing nature of the sub-area is described along with its potential for redevelopment, its opportunities and its constraints.

OBJECTIVES FOR SUB-AREA REDEVELOPMENT

This section generally describes the role of the sub-areas in the context of the neighbourhood as well as outlining the desired urban design qualities for the sub-area.

PROPOSED SUB-AREA STRUCTURE

The proposed public network of streets and pedestrian ways and the proposed land uses are graphically illustrated.

THE STREETS - THEIR ROLES AND GOALS

This section describes the role of each street in the context of the sub-area as well as outlining for each the desired urban design qualities.

THE URBAN DESIGN GUIDELINES IN THE CONTEXT OF THE SUB-AREA

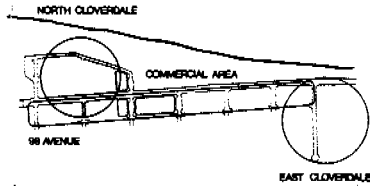
The building guidelines as presented in Section C are diagrammatically illustrated in the context of each sub-area.

IMPLEMENTATION STRATEGY

A step by step strategy is proposed for each sub-area to achieve the quality of place described in the previous sections.

D.2 NORTH CLOVERDALE URBAN DESIGN

EXISTING SUB-AREA STRUCTURE



North Cloverdale is a clearly defined sub-area with a distinct character due to its relative separateness from the rest of Cloverdale. The orientation of lots and buildings is north-south, largely ignoring 96A Street and 95 Street.

The present use of the land is for low density housing. Sixty percent of the lots are currently vacant and the City owns approximately eighty percent of the land.

The area is serviced by a lane which creates some odd-sized lots along 98A Avenue.

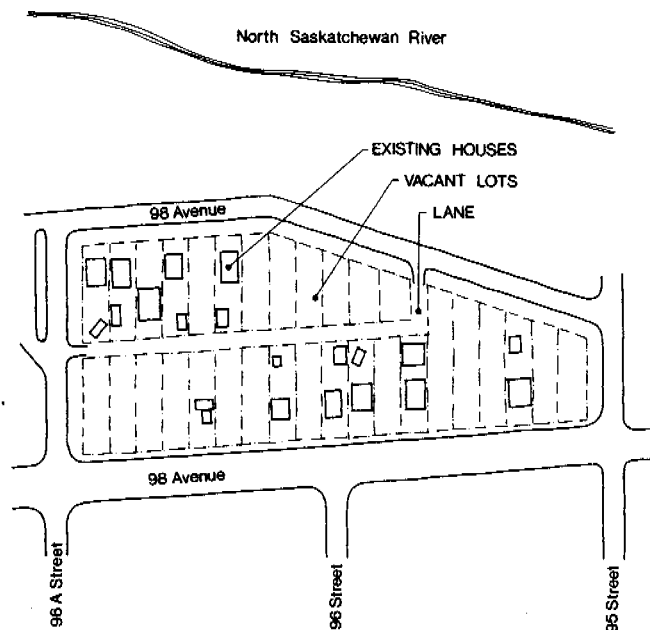


Fig. 116 The existing structure of North Cloverdale.

EXISTING CHARACTER OF THE SUB-AREA

North Cloverdale's proximity to the river valley parkland is its greatest asset. It is a peninsula in the park with excellent orientation in three directions. The south orientation is to 98 Avenue. The entire area is well-treed and has a very pleasant atmosphere.

North Cloverdale's special character, and hence its identity within the neighbourhood, is created by its relative isolation from the remainder of the community and its discrete boundaries. It is identified with the C.R.R. Park more than any other sub-area in Cloverdale.

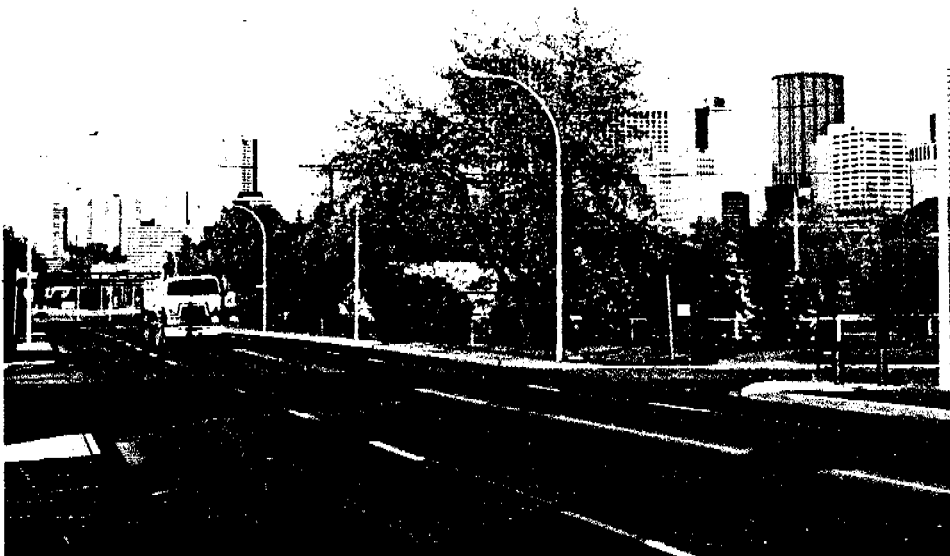


Fig. 117 North Cloverdale as it presently looks.

OBJECTIVES FOR SUB-AREA REDEVELOPMENT

- * New development will consist primarily of appropriate medium density housing.
- * Development should take advantage of the extensive adjacent parks, so as to provide uniquely-oriented dwellings.
- * To enhance Cloverdale's village in the valley character, North Cloverdale should be developed to be pedestrian in scale and character.
- * A rich and varied public network of pedestrian-oriented streets and connections to South Cloverdale should be developed.
- * The potential for development in North Cloverdale should be enhanced by replotting the pattern of lots to allow convenient consolidations for larger developments.
- * Offer additional points of access into and through North Cloverdale by the development of a new through pedestrian street, as an extension of 96 Street.
- * Contribute to the strengthening of the intersection of 95 Street and 98 Avenue, which is the most public Place in Cloverdale, by allowing street level commercial to be developed at North Cloverdale's east end.
- * Retain as many of the existing mature trees as possible, both on private and public lands. Enhance the existing treed character of the area with an infill tree planting program.

PROPOSED SUB-AREA STRUCTURE

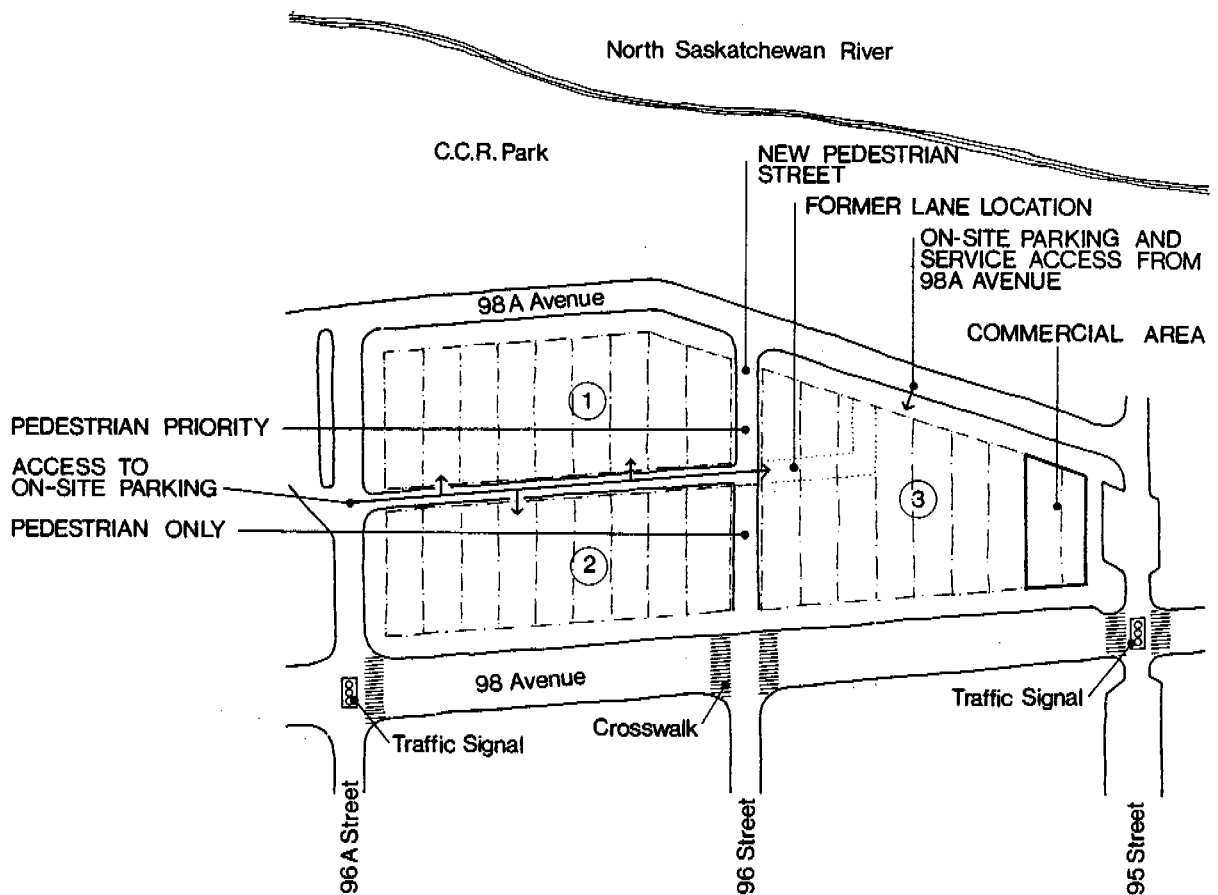


Fig. 118 Proposed structure of streets, lot patterns and parking access in North Cloverdale.

THE STREETS - THEIR ROLES AND GOALS

98A AVENUE

ROLES:

- * It is to serve as a quiet pedestrian-oriented street that forms an edge to the C.C.R.P. and offers a park address for housing.
- * It is to provide casual parking for visitors.
- * It is to provide secondary frontage for the commercial development at 95 Street.

GOALS:

- * It should have an intimately-scaled pedestrian character with generous accommodation for promenading.

96A STREET

ROLES:

- * It is to be a pedestrian-oriented street which acts as a major connector between South Cloverdale and the C.C.R.P., due to the proposed traffic light at 98 Avenue.
- * It is to provide an address for housing fronting the park.
- * It is to provide casual parking for visitors.

GOALS:

- * The street should generously accommodate the pedestrians who are walking to and from South Cloverdale.
- * The street should screen the view from the housing toward the C.C.R.P. parking lot.

96 STREET EXTENSION

ROLES:

- * It is to be a small scale pedestrian way that is an address in North Cloverdale not unlike the surrounding streets.
- * It is to serve, partially, as a route for vehicular on-site access.
- * It is to act as a new pedestrian connector street between South Cloverdale and the C.C.R.P.

GOALS:

- * The street should act as a unique place in the area - an address for housing, a place to stroll, a place to sit and watch the street activity, a place for special street planting.
- * The design of the relationship between pedestrians and cars (both parked and moving) is to be one where the pedestrian feels secure and takes priority.
- * A sense of invitation from 98 Avenue is to be ensured by definition of the intersection with clearly visible tree planting and lighting.

95 STREET

ROLES:

- * It is to serve as part of the 95 Street and 98 Avenue crossroads intersection, a major pedestrian connection from South Cloverdale to the C.C.R.P.
- * It is to be an address for ground floor shops and housing above.
- * It is to provide angle parking for the commercial uses.

GOALS:

- * It should offer a generous pedestrian character defined by the building edges at the sidewalk, sidewalks extending from curb to building edge and the use of such features as trees and tree grates in the sidewalk paving.
- * It should be an inviting streetscape for the shop frontage.
- * It is to reflect, through appropriate design, its role as the most public Place in Cloverdale.

THE URBAN DESIGN GUIDELINES IN THE CONTEXT OF NORTH CLOVERDALE

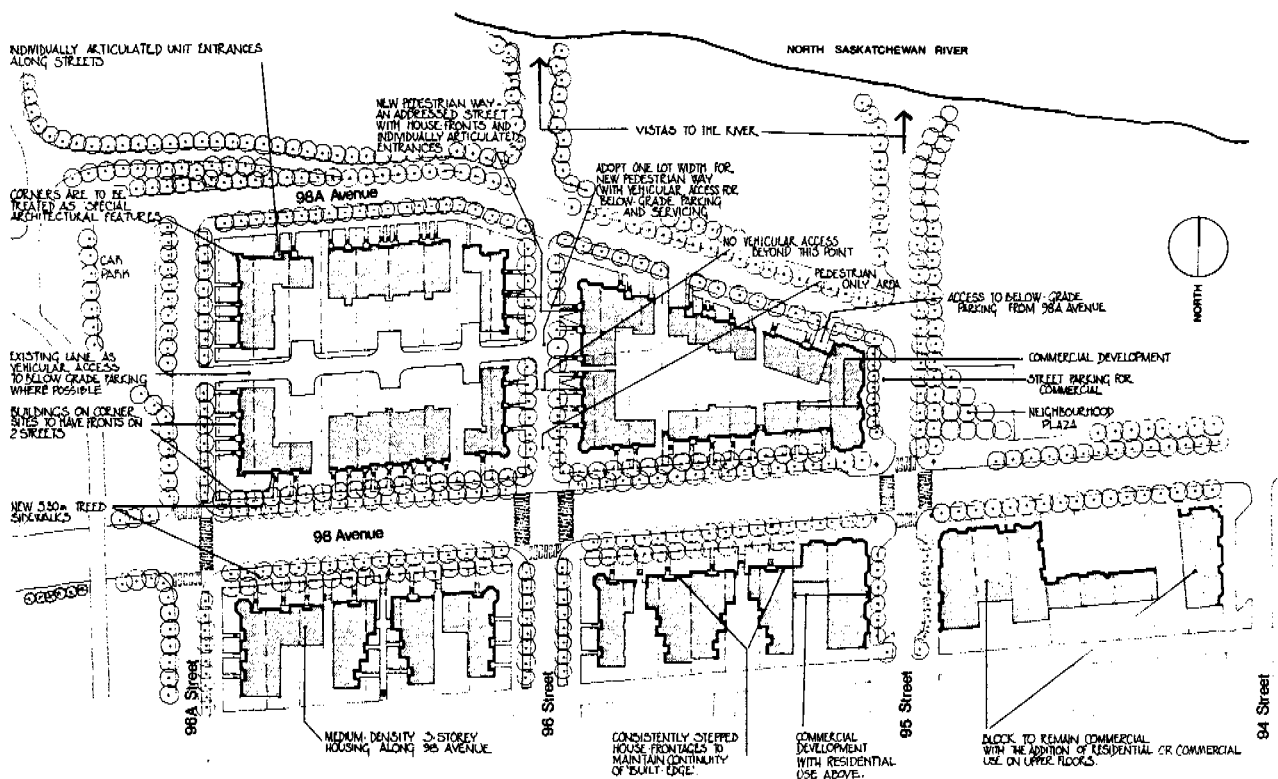


Fig. 119 The Urban Design Guidelines in the context of North Cloverdale.

IMPLEMENTATION STRATEGY

- * A market and construction feasibility study is required to determine the feasibility of the various proposed building types.
- * When the market and land values have been established, the City should offer to purchase privately held properties, so that the new lot pattern and realignment of the lane can be established.
- * The City should investigate the possibility of selling or optioning the entire North Cloverdale area to one development group, which would establish the pedestrian street and the new utilities locations as required within the scope of the project.

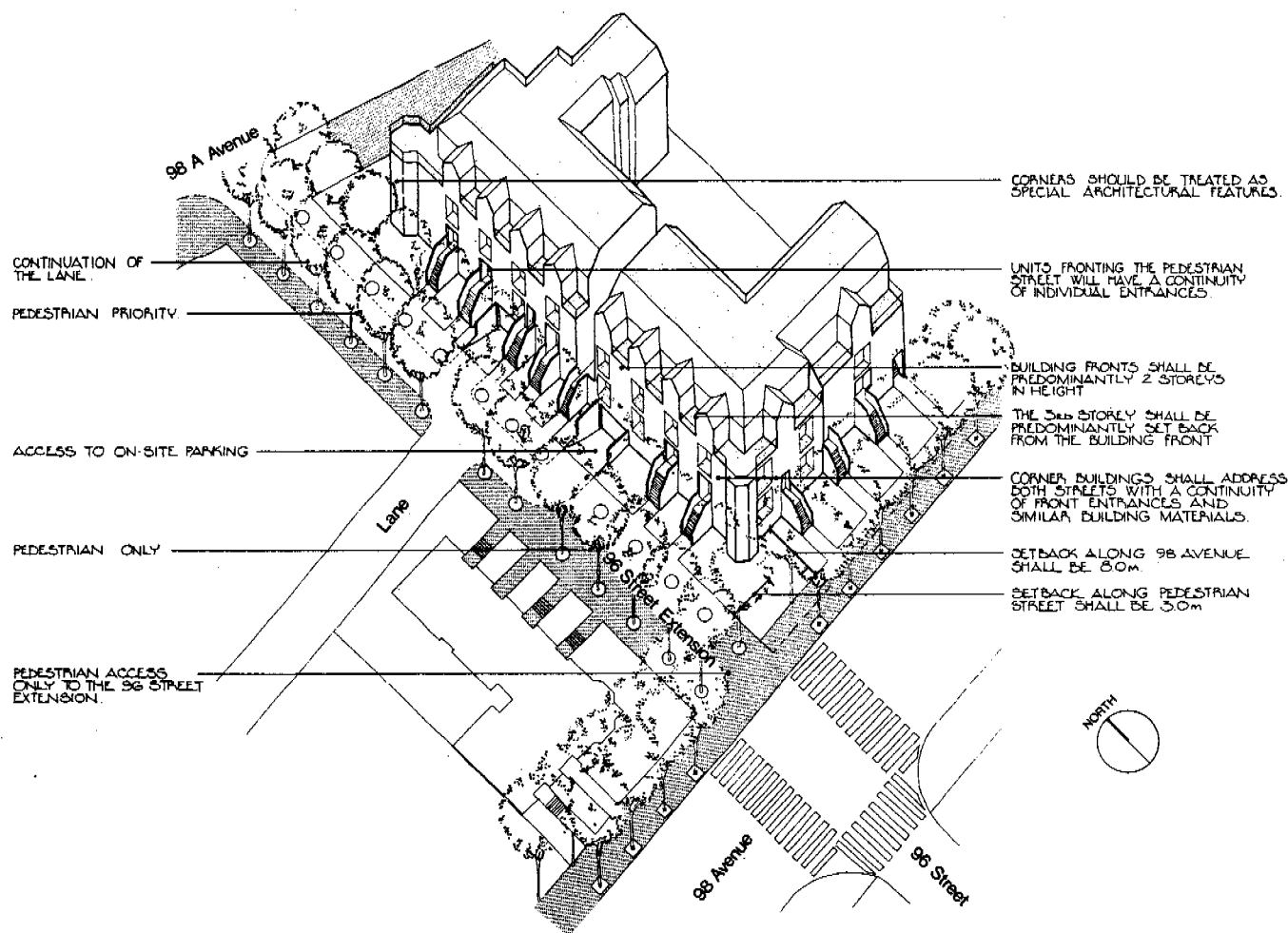


Fig. 120 The Urban Design Guidelines illustrated along the 96 Street extension.

- * If the development market favours development of smaller parcels, the lane and utilities realignment, as well as the construction of the pedestrian street should be initiated by the City. The new area structure creates three relatively equal development parcels which can be seen in the illustration below.
- * The land is then to be offered for development.
- * Public improvements to other streets in the area, following the roles and goals as previously outlined, should be initiated at this time.
- * Concurrent with development in North Cloverdale, the streetscape program for 98 Avenue should be implemented, so that the character of the 98 Avenue frontage is altered to reflect the remainder of the area.



Fig. 121 An example of a pedestrian street.



Fig. 122 Illustration of the entrance to the 96 Street extension from 98 Avenue.

D.3 EAST CLOVERDALE URBAN DESIGN

EXISTING SUB-AREA STRUCTURE

East Cloverdale, like North Cloverdale, is also a clearly defined sub-area, with a distinct character due to its relative separateness from the rest of Cloverdale.

With the exception of 98 Avenue frontage, the orientation of the lots and buildings is East/West. The orientation of the existing pattern of lots takes little advantage of the nature preserve amenity, with no frontage directly to the park.

The present use of the land is for low density housing. Fifty percent of the lots are vacant and the City owns approximately seventy percent of the land.

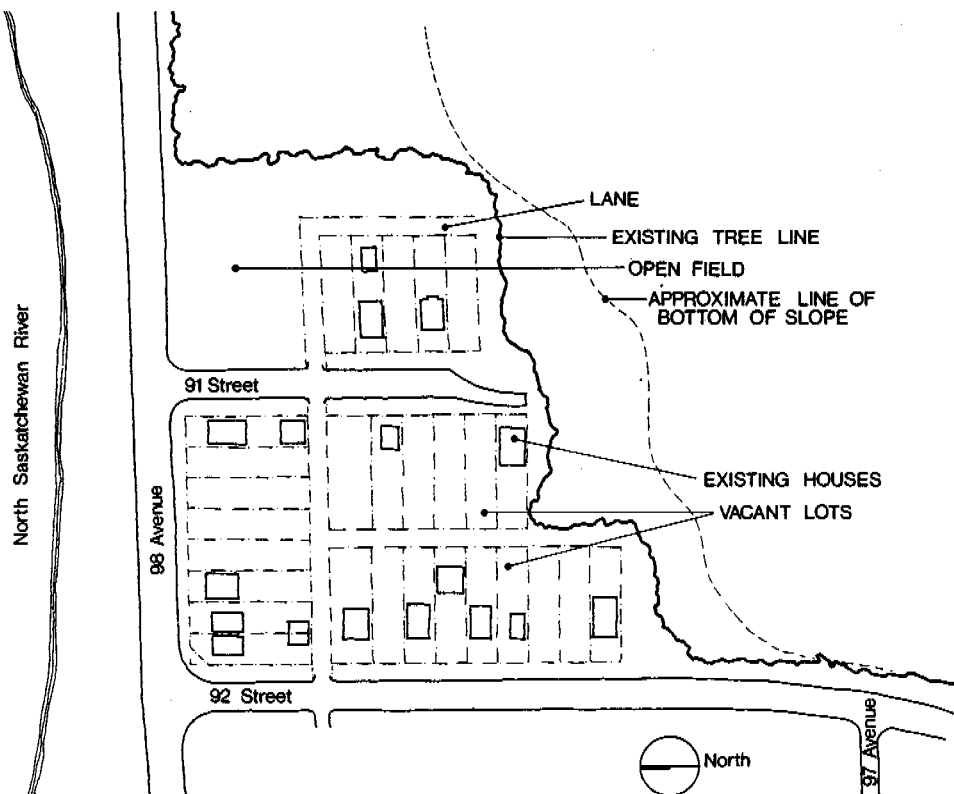
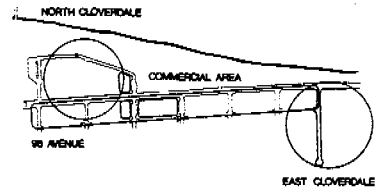


Fig. 123 The existing structure of East Cloverdale.

CHARACTER OF THE SUB-AREA

It is a very special area in terms of its potential development. East Cloverdale contains a substantial number of lots which are immediately adjacent to the park. It has a much more secluded character than North Cloverdale and a sense of tranquility and isolation in the middle of the City. The nature preserve edges this sub-area and limits the development of more lots.



Fig. 124 East Cloverdale, along 91 Street, as it presently looks.

OBJECTIVES FOR SUB-AREA REDEVELOPMENT

- * New development will consist of appropriate medium density housing.
- * New development should take advantage of the adjacent parkland for housing frontage.
- * The entire area should be designed with the pedestrian in mind. Good pedestrian connections are to be made to South Cloverdale and especially 97 Avenue.
- * The potential for development of East Cloverdale should be enhanced by creating more building lots, to the approximate edge of the slope of the nature preserve.
- * The nature preserve should be protected and enhanced as an amenity to the housing and the neighbourhood.

PROPOSED SUB-AREA STRUCTURE

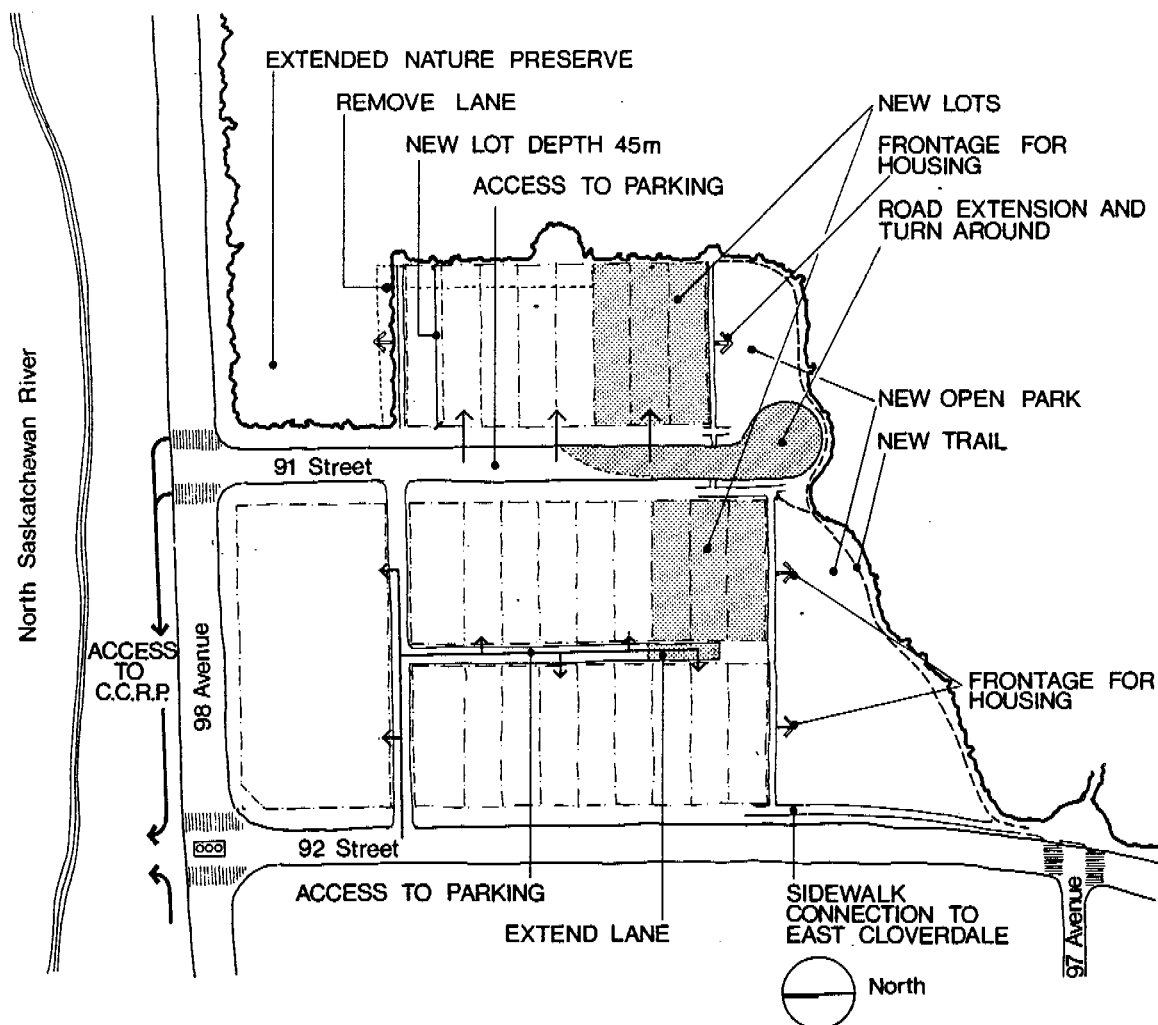


Fig. 125 Proposed structure of streets, lot patterns and parking access in East Cloverdale.

THE STREETS - THEIR ROLES AND GOALS

92 STREET

ROLES:

- * It is to provide an address for housing.
- * It is to serve as the edge transition from the low density South Cloverdale (west of 92 Street) to the medium density (east of 92 Street).
- * It is a major connector from South Cloverdale to the C.C.R.P. It is to serve vehicular traffic using Cloverdale Road to access 98 Avenue from Conner's Hill and is also to be a special route for bicycles.
- * It is to provide casual visitor parking.
- * It is, in part, to form a major pedestrian connection from East Cloverdale to Cloverdale's community street, 97 Avenue.

GOALS:

- * It requires upgrading to improve the pedestrian character, including generous sidewalks and infill tree planting.

91 STREET

ROLES:

- * It is to serve as a quiet pedestrian-oriented street that ends in a cul-de-sac and offers a special address for housing.
- * It is to serve as a connector from the "Woodlands Way" trail to the C.C.R.P.
- * It is to provide casual visitor parking.
- * It is to provide access to on-site parking for housing east of 91 Street.

GOALS:

- * This street offers a wonderful opportunity for special street character. It is to remain secluded and quiet. The street should be intensely treed.
- * Sidewalks are to take priority over driveway crossings, for the pedestrians.

WOODLANDS WAY PARK

ROLES:

- * It is to form a useable public edge between the neighbourhood and the nature preserve.
- * It is to serve as a pedestrian only access connecting East Cloverdale with 97 Avenue, the community's main street.
- * It is to serve as an address for housing in East Cloverdale, facing the nature preserve.

GOALS:

- * It is to offer a unique pedestrian priority address for housing fronting onto the park and is to enrich the public network with a new type of street in the neighbourhood.
- * It is to encourage identity with and recreational use of the nature preserve as an integral part of the public network.
- * Housing which fronts the park is to offer surveillance and security to the park and sidewalks.
- * Housing is to have ground-related access to the park.
- * Small parks between the preserve and the housing should be developed as "oases" from which to enjoy the surrounding woods.

THE URBAN DESIGN GUIDELINES IN THE CONTEXT OF EAST CLOVERDALE

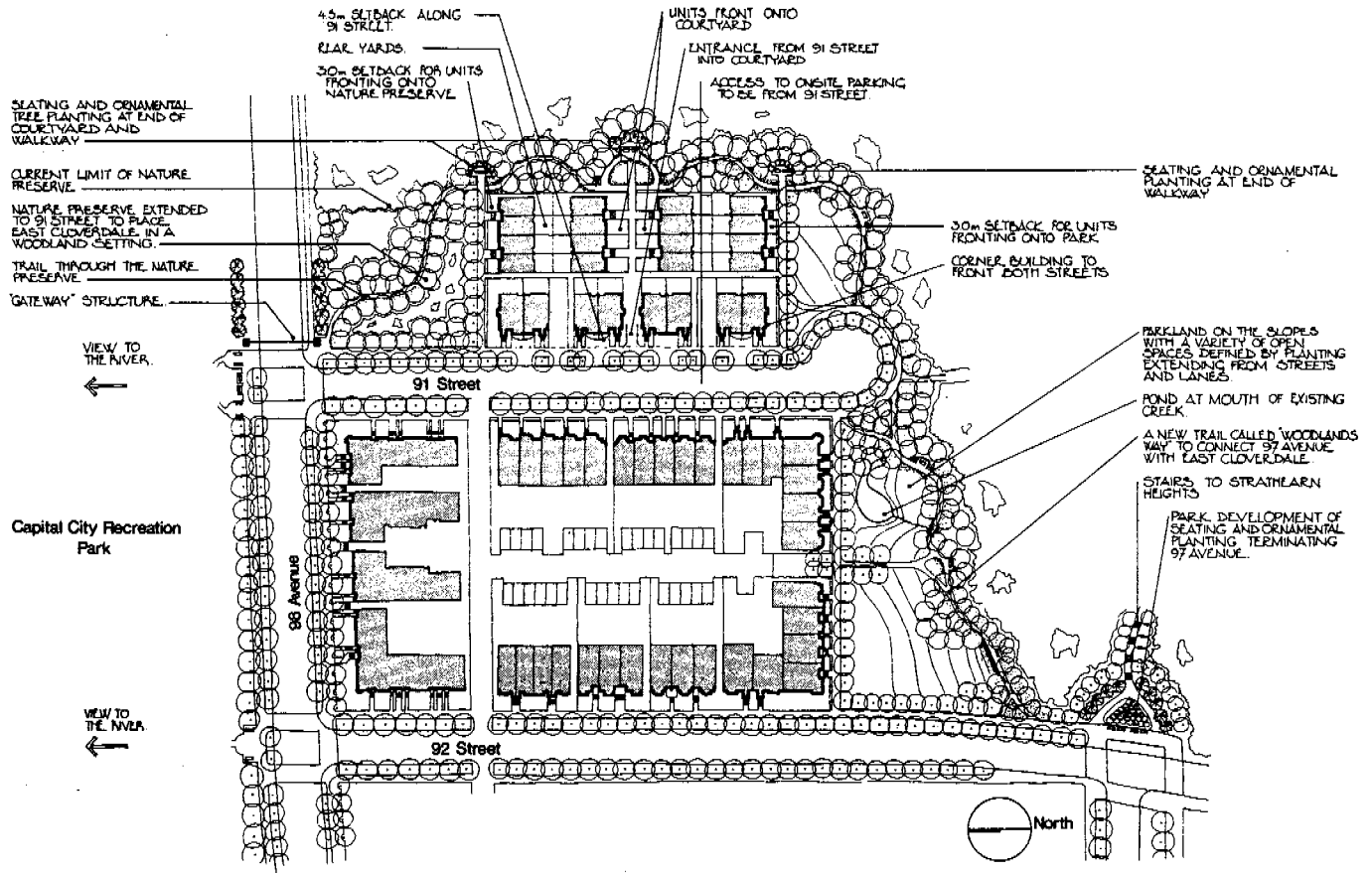


Fig. 126 The Urban Design Guidelines in the context of East Cloverdale.

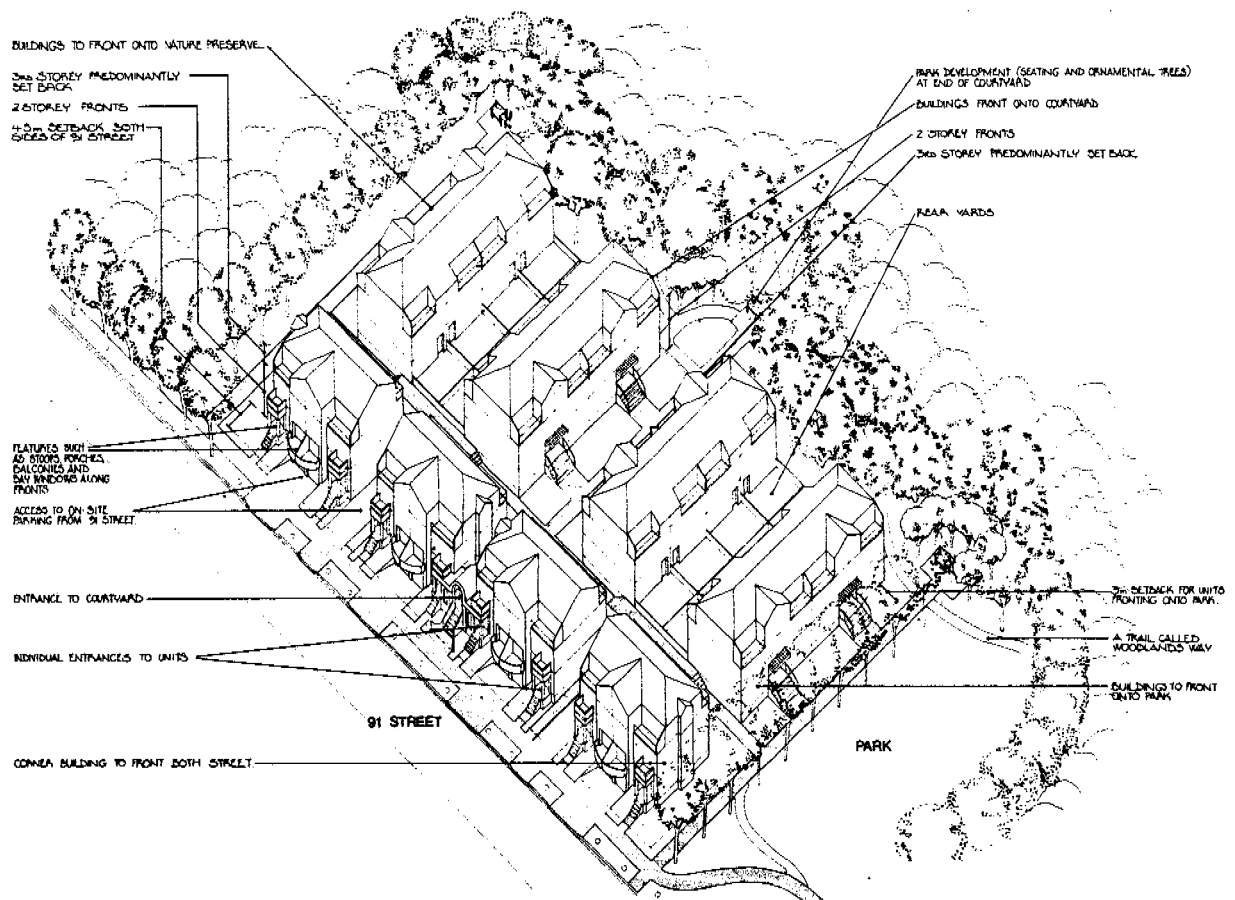


Fig. 127 The Urban Design Guidelines illustrated for the site east of 91 Street.

IMPLEMENTATION STRATEGY

- * A market and construction feasibility study is required to determine the feasibility of the various proposed building types.
- * When the market and land values have been established, the City should offer to purchase privately held properties so that a new plotting of the lands east of 91 Street can be accomplished and that large parcels can be offered for development.
- * The feasibility of expanding the building lots to the bottom of the slope must be carefully analyzed to determine cost, environmental impact and soil stability.
- * The feasibility of constructing the Woodlands Way trail must also be carefully examined.
- * The extension of 91 Street as far south as required, as well as the provision of a vehicular turn-around should be completed. The provision for fire truck access to this area should be examined.
- * The Woodlands Way trail and accompanying parks should be complete to provide an address for new housing.
- * The 98 Avenue streetscape program should be implemented at the same time to complete the connections from East Cloverdale to the C.C.R.P.

D.4 98 AVENUE URBAN DESIGN

The urban design issues for this area are thoroughly discussed and presented in **SECTION B, STREETSCAPE**.

It is relevant to present in this section only the proposed changes to the sub-area structure and the urban design guidelines in the context of 98 Avenue.

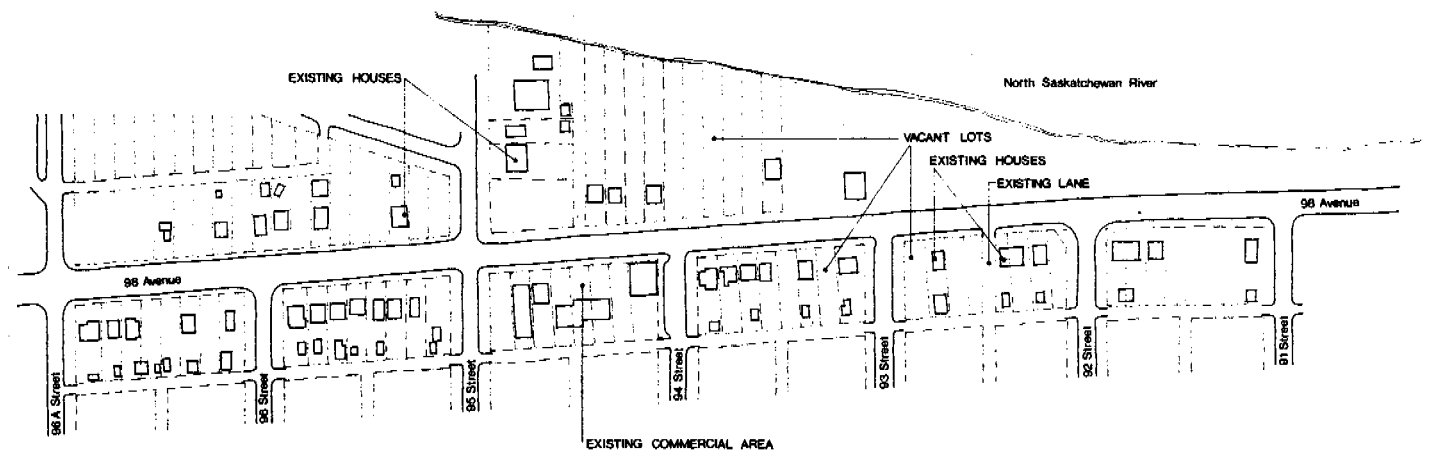
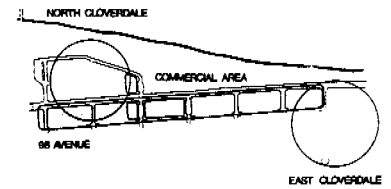


Fig. 128 The existing structure of the 98 Avenue sub-area.

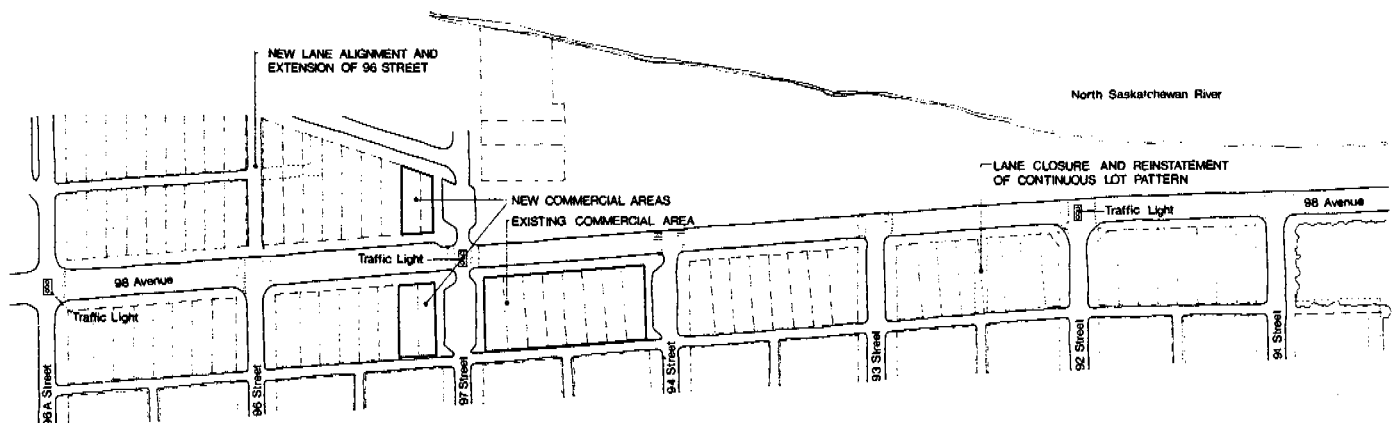


Fig. 129 Proposed changes to the structure of the 98 Avenue sub-area.

THE URBAN DESIGN GUIDELINES IN THE CONTEXT OF
98 AVENUE

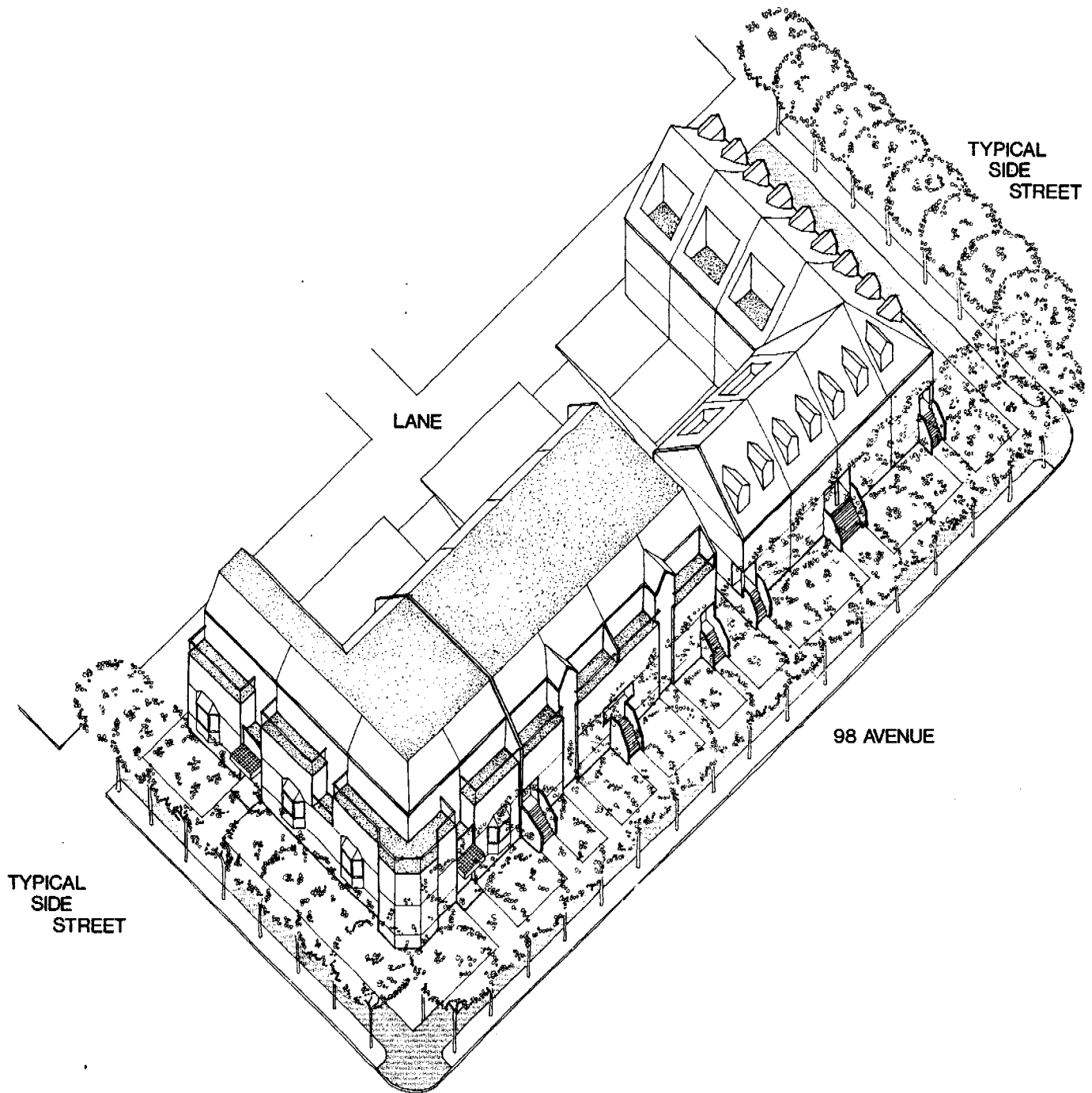


Fig. 130 A diagrammatic illustration of a typical 98 Avenue block as it might be developed by three separate developers, following the Urban Design Guidelines.

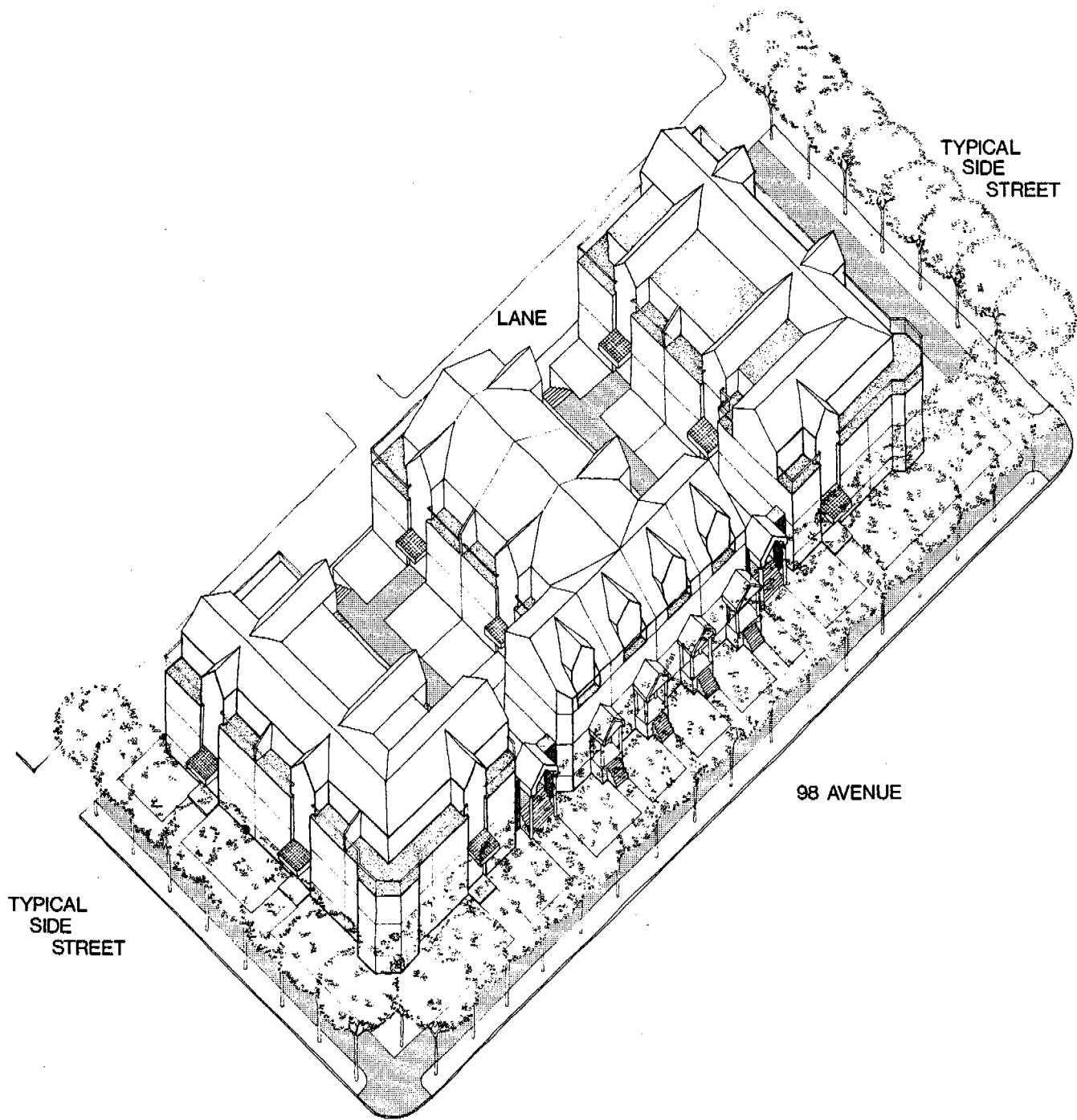
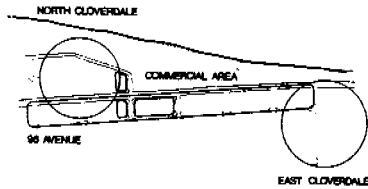


Fig. 131 A diagrammatic illustration of a typical 98 Avenue block as it might be developed by a single developer, following the Urban Design Guidelines.

D.5 COMMERCIAL AREA URBAN DESIGN



This sub-area is discussed to some extent in **SECTION B**, in connection with **STREETSCAPE, 98 AVENUE**. This section will present only the urban design guidelines for commercial development.

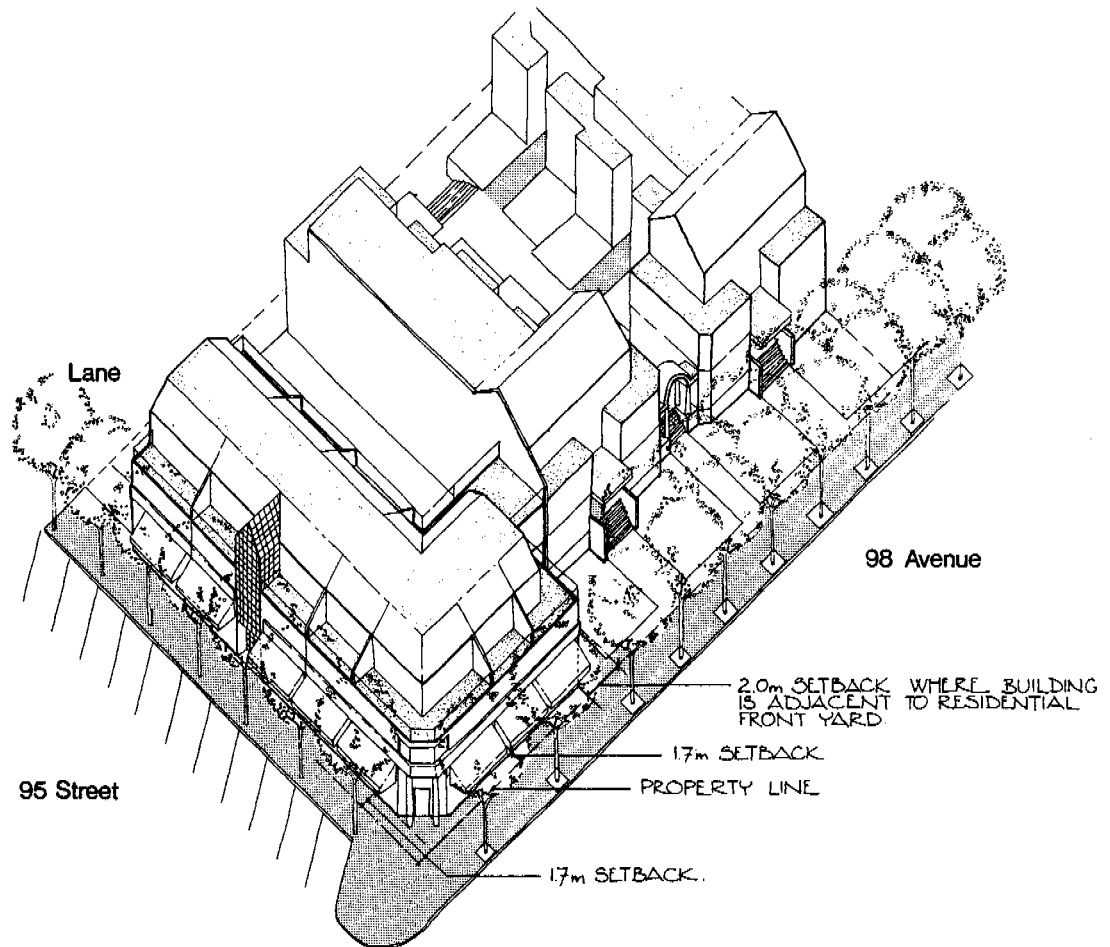


Fig. 132 A diagrammatic illustration of commercial development as it might occur at the corner of 98 Avenue and 95 Street.

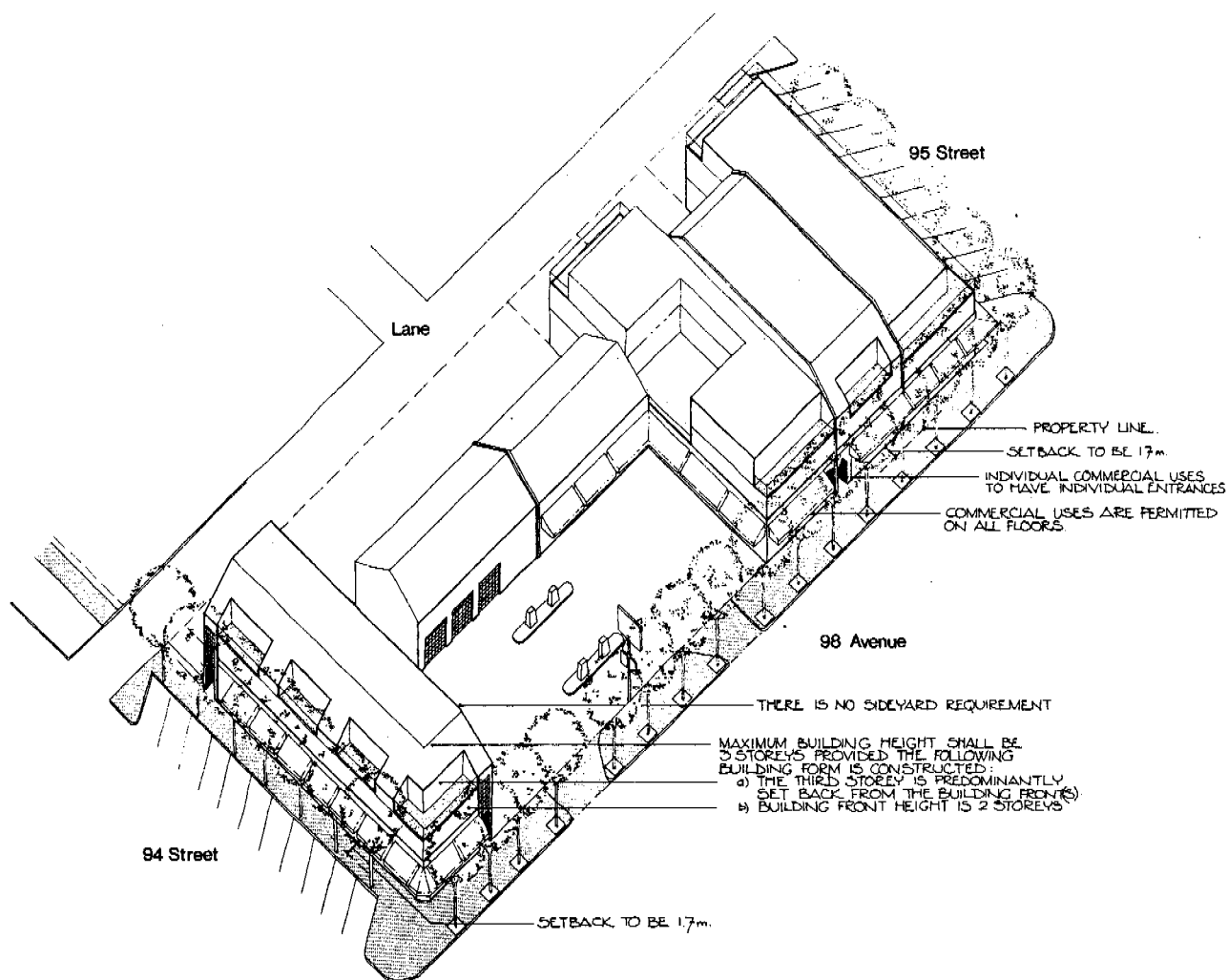


Fig. 133 A diagrammatic illustration of commercial development as it might occur in the block between 94 and 95 Streets.



Fig. 134 A busy small scale shopping street as an example for Cloverdale.



Fig. 135 This example illustrates a new small scale commercial development with underground parking.

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