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**Altering the Modern Retail Landscape Through Design:
A Closer Look at Retail Parks**

by

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Department of Urban and Rural Planning, Faculty of Architecture,
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DEDICATION

*This thesis is dedicated to the person I admire the most,
my mother, Susann Bambrick, who has taught me
strength and perserverance.*

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GLOSSARY

All glossary entries were taken from *The Penguin Dictionary of Architecture and Developing Power Centers*.

- agora The open space in a Greek or Roman town used as a market-place or general meeting-place, usually surrounded by porticos. (*Fleming 1980, 10*)
- anchor A shopping center's anchor is the retailer(s) around which the center is built. It provides the initial power that draws customers to the center. (*O'Mara 1996, 149*)
- arcade i. A covered passage with shops on one or both sides.
ii. A range of arches carried on piers or columns, either free standing or blind i.e attached to a wall. (*Fleming 1980, 16*)
- berm The level area separating ditch from bank on a hill-fort or barrow. (*Fleming 1980, 37*)
- category killer A retail chain, typically a national chain, that is the dominant retailer within the trade area for a particular category of merchandise is a category killer. An example in the home improvement category is Home Depot. (*O'Mara 1996, 149*)

facade	The front or face of a building, emphasized architecturally. <i>(Fleming 1980, 114)</i>
fenestration	The arrangement of windows in a building. <i>(Fleming 1980, 114)</i>
forum	In Roman architecture, a central open space usually surrounded by public buildings and colonnades: it corresponds to the Greek agora. <i>(Fleming 1980, 119)</i>
pediment	Not a Greek or Roman term but signifying in classical architecture a low-pitched gable above a portico, formed by running the top member of the entablature along the sides of the gable; also a similar feature above doors, windows etc. It may be straight sided or curved segmentally. <i>(Fleming 1980, 239)</i>
portico	A roofed space, open or partially enclosed, forming the entrance and center piece of the facade of a temple, house, church, often with detached or attached columns and a pediment. <i>(Fleming 1980, 250)</i>
power center	A power center is a type of super community center containing multiple anchors that sell staple products, hard goods, and discount merchandise. It can range in size from

250,000 square feet to 1 million square feet [23,225 - 92,900 square metres], with 450,000 square feet [41,805 square metres] being the average size of new power centers. Comprising 80 percent to 90 percent anchor space, compared with 55 percent to 65 percent in regional and super regional malls, a power center attracts big box retailers such as Wal-Mart, Home Depot, CompUSA, and Office Depot. It often attracts consumers from a trade area that is similar in size to that of a regional shopping center. *(O'Mara 1996, 149)*

stoa

In Greek architecture, a covered colonnade, sometimes detached. In Byzantine architecture, a covered hall, its roof supported by one or more rows of columns parallel to the rear wall; in Latin, porticus. *(Fleming 1980, 311)*

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ABSTRACT

Wholesale and value oriented superstores, in the form of retail parks, have become the most popular shopping trend in the past decade. Despite the economic success of the retail park, it becomes questionable whether retail parks are an important increment of our retail history or just a passing phase. The solidification of the retail park as a prominent retail type for our future lies in planning and design.

Consumed by the convenience for the automobile, the physical manifestation of these new commercial centers has evolved into a suburban landscape that ignores the presence of the individual. Retail parks support conspicuous consumption and lack amenities that would permit leisure, recreational, or cultural activities that have always been present in historic retail forms.

Design initiatives can range from basic configuration patterns that facilitate unobstructed pedestrian and automobile movement to elaborate architectural store designs. Guidelines should be established by planners to enforce basic design issues such as accessibility, scale reduction, landscaping, environmental considerations, and areas for social interaction. Without the implementation of design guidelines to new retail park development, municipalities will be unprepared for future retailing trends and the impacts they will have on the urban form and society.

1.0 INTRODUCTION

Superstore dominated retail centers have been the most successful trend in retailing over the past decade. The current economic climate has created value conscious consumers who flock to these new centers looking for bargains in one stop shopping. The result has been an explosion of big box retail development across North America in the form of retail parks.

The planning profession has responded inadequately to this rapid growth in the retail sector. Municipalities have allowed retail parks to be developed under the discretion of profit seeking retailers. Quality control such as architecture, layout, circulation routes, landscaping, and other urban design issues have been put aside to accommodate this fast track development. Planning needs to take a pro-active rather than reactive role in retail development to ensure a safe, accessible, and an aesthetically inviting shopping environment for the public.

The lack of quality control has permitted developers to ignore the retail landscape and this has resulted in an inhospitable environment for the less mobile consumer. Developers have focused strategically on the motoring consumer and endorsed the car as the determining factor in the layout and design of these centers. These new shopping formats are blatantly discriminatory. Historically, the activity of shopping has provided the public with not only the availability of products but with social engagement, community interaction, and a relief from the drudgery of household life. Current retail park development ignore this public component in modern retailing by failing to provide a clearly defined human domain within the center.

A flurry of other social and economic issues surrounding large scale development have been hot topics of debate in both the public and professional world in recent years. Issues such as superstores negatively affecting smaller retailers and contributing to the urban sprawl crisis have prompted my further investigation into the impact this development form has on individuals and the city. Shopping districts help to shape the identity of a city. Retail parks are frequently located on the outskirts of most metropolitan areas and are exempted from the same level of design scrutiny and compliance encountered by downtown development projects. These centers offer the same physical environment across all regions and lack a sense of identification and connection to the area in which they are situated.

The economic success of power centers cannot be denied but the future of this new retail format is questionable. Problems in retail park development identified in this thesis, such as layout, architecture, landscaping, and accessibility can be addressed through design to offer a better quality shopping experience and retail center any city can be proud of. With a plethora of retail parks being built across North America, municipalities will need to acquire a competitive retailing edge. New and remodelled shopping centers should offer the patron quality design in an accessible pedestrian environment, and a regional flavour to maintain this edge. Planning should enforce stricter design control over future retail development to ensure the longevity, adaptability, and contextual significance of retail parks.

This thesis will focus on the physical aspects of this retail form and propose design recommendations to address issues of accessibility and scale. It will argue for the

application of design standards to retail park development. The benefits of better design and planning of retail parks will be assessed in terms of the individual and the city. For the individual, design can provide a comfortable human scale and accessibility to all in an aesthetically rich setting that allows for social interaction. By doing this, the city acquires a competitive shopping asset that can outlive its tenants.

Many would argue that the key to value retailing is keeping the capital costs to a minimum and that design advantages would be too costly. In most cases, the design of retail parks can be improved simply through the configuration of the plan and attention given to circulation patterns. Municipalities can demand that 'big box' architecture be sympathetic to the vicinity as many American cities are enforcing. Enhanced accessibility, amenities, and aesthetics can add to the economic success of retail parks by creating a civic asset. An early investment in the site will be an investment for the future.

Investigation into retail park development in Atlantic Canada has prompted this thesis topic. Although considered a successful business venture, the retail section of the Bayer's Lake Business Park in Halifax, Nova Scotia, is facing serious accessibility and traffic problems due to a lack of initial planning and design. The 'bare bones' nature of retail park design provides a bland landscape that is harshened when topographic and climactic conditions are not accounted for. A closer assessment of these and other physical obstacles will result in design recommendations that can be applied to future developments to ensure better retail environments.

2.0 THE EVOLUTION OF RETAIL FORMS

2.1 THE SOCIAL ASPECT OF HISTORICAL RETAIL FORMS

Shopping has historically offered social interaction and opportunities for congregation. Activities such as eating, strolling, and watching make up the total shopping experience and create a stimulating leisure pastime (*Loxton 1991,46*). Prevailing retail forms have provided society with an environment that was accessible on foot and a setting that was in proportion to our human scale. Modern retail park development has ignored the basic components of scale and accessibility that have given our historical retailing forms longevity. This chapter will give an overview of historical retail forms and show the connection between the physical form and shopping as a social activity.

2.1.1 The Ancient Form

Throughout the course of history, the act of retailing appears very early as a method of exchanging goods. The act of shopping has been recorded as an aspect of everyday activities and evolved from a pedestrian oriented culture (*Rubenstein 1992, 1*). The formation of a shopping area or center dates back to ancient Greece and Rome.

The Greek *agora* (see Glossary) consisted of a square or rectangular open space surrounded by arcaded *stoas* (see Glossary) and *porticos* (see Glossary) that provided shelter (*Rubenstein 1992, 1*). The agora was a busy public center where

trading, business, and civic assemblies occurred. In designing the agora and other buildings, the Greeks focused on the human scale using the proportion 1.618:1 so people could relate to the sizes of the structures (*Rubenstein 1992, 1*).

The Roman Forum began to develop around 500 BC and soon became the focus of communal life (*McCabe 1979, 193*). The layout of the *forum* (see Glossary) usually consisted of a main open square with five to six levels of shops interconnected by the stairs and by the system of streets (*McCabe 1979, 195*). The birth of our present day shopping configurations can be observed in ancient Rome. "It has also been seen that large scale planned, complex and fully integrated shopping centers had emerged as early as the 3rd century B.C." (*McCabe 1979, 197*).

The open air forms of the agora and the forum provided a comfortable outdoor commercial setting. Here we see the beginning of shopping forms that focused on human activity and community life. This social aspect of retail continues into the Middle Ages.

2.1.2 The Medieval Form

In the middle ages, retail took the form of town markets which were usually held on one day during a week and the trade that occurred was primarily on the exchange of products, staple goods, and food (*Davis 1966, 4*). (see Figure 2.1) The organization of the market focused on a number of narrow streets. The houses of the streets had open front shops or workrooms on ground level and temporary stalls or trestles were set up to display goods in front of the shops. (*Davis 1966, 20*).



Figure 2.1 A Medieval etching of a merchant showing his wares.
(Gruen 1973, 14)

The growth of the markets and the expanded range of produce and goods gave rise to annual fairs. These medieval fairs were bigger and better versions of the weekly town markets. The fair became one of the social events of the year for the tradesmen and mercantile class. Consumer demand and purchasing power increased as well. Retailing began to come of age and the importance of attracting customers was realized. The display of goods in shops and in market stalls was essential for competition. Shopping as we know it today was born (Davis 1966, 55).

2.1.3 The Industrial Forms

The onset of the Industrial Revolution introduced powered machinery and the factory system to textile production and changed the way retail was organized and conducted (Hollinshead 1996, 13). Mill and factory workers lived and worked in over crowded, dirty cities (Hollinshead 1996, 13). Wealthy merchants and factory owners moved away from the centers of the cities to the new suburbs.

The predominant retail form in the urban areas was the ground floor shop in a multilevelled structure along a main road, thus main street shopping was invented. This roadway became a hub of activity as people strolled along store fronts, purchased necessary goods, and conversed with their fellow citizens. The development of steam power, which led to rail and steamship transportation systems, provided shopkeepers with an abundant supply of goods and wares from a variety of locations. The high concentration of workers in the city center could not afford transportation so the prime location for a store to service the vast majority of shoppers on foot was at the intersection of two roads. The corner store was the result. (Hollinshead 1996, 14).

These main street forms of retail became the heart of city and the center for social activity. The streets became busy, crowded, and dirty.

2.1.4 The Nineteenth Century Forms

In the nineteenth century, the covered *arcade* (see Glossary) (see Figure 2.2) as a new retail building type made its appearance (Gruen 1973, 14). This form developed due to the deplorable and unsanitary conditions of streets. The arcade was designed exclusively for pedestrians and provided weather protected shopping that connected major streets (Gruen 1973, 14).



Figure 2.2 A 19th century arcade.
(Gruen 1973,15)

Towards the end of the nineteenth century a new retail form emerged due to expanding global markets, increased mobility of the working classes, and the development of cheaper and stronger building materials such as steel. The multi-story department store, an 1860s, French invention, covering entire blocks in city centers (see Figure 2.3) (Davis 1966, 288). The department stores of this time began as small shops and grew larger as the enterprising owner added more departments or areas of retail distribution. The department stores carried an extensive variety of goods usually at cheaper prices because they were purchased from the manufacturer in large quantities. Clothes, fashion items, and household goods were sold. (Davis 1966, 294). Department store popularity soared because the customers could find many items in the one store.



Figure 2.3 One of the earliest department stores, Marshall and Snelgrove's in London. (Hollinshead 1996, 14)

Widespread prosperity and an explosion of consumer goods that became available led to the invention of the weekend where people were given Saturday to shop (Hollinshead 1996, 14). Shopping was an important aspect of a workers weekly routine and soon became a favourite leisure activity.

Downtowns and city centers became the place to shop as multiple department stores went up in the same areas. The department stores were located on major roads with access to street traffic such as pedestrians and street car users. The

main street form of shopping prevailed and large department stores initiated the internalization of shopping. Customers could interact with the community while meandering in and out of a protected shopping environment.

The main street form of retailing changed with the increase of private car ownership. The combination of a move to the suburbs and the internalization of the main street lead to the development of the modern shopping mall in the latter half of the twentieth century. Once again the social theme is carried into our modern retailing forms but human interaction was moved inside.

2.1.5 The Auto Influenced Form - The Shopping Mall

After World War II, automobile ownership exploded and people moved to the suburbs creating a new motoring public. With this migration, shopping establishments also migrated from the downtown urban centers. The new shopping type that evolved in suburbia was the enclosed shopping mall. (see Figure 2.4) Jim Simmons defines a mall as "... a large, planned shopping center providing shopping-type goods for an extensive area of a metropolitan region. It is identified by the presence of one or more full-sized department stores, plus a variety of fashion stores and other shopping goods



Figure 2.4 An aerial photo of a regional shopping mall.
(Siegel 1996, 58)

activities that serve a similar market" (*Simmons 1991, 232*). Malls have been the dominant element in retail over the past 30 to 40 years in North America (*Jones 1987, 192*). Mall sizes can range anywhere from about 100,000 square feet [9,290 square meters] to upwards of 750,000 square feet [69,675 square meters]. Canada saw its largest spurt of shopping mall development in the mid 1970s where an average of four or five a year were built with as many as ten in 1973. Since then, construction has declined steadily (see Figure 2.5) (*Simmons 1991, 233*).

The most obvious difference between the shopping mall and previous retail forms is its internalized scheme as shops opened onto a pedestrian corridor. Access into the mall is through a number of main entrances. The exterior of malls have a low maintenance look due to a fairly standardized design and outside landscaping is

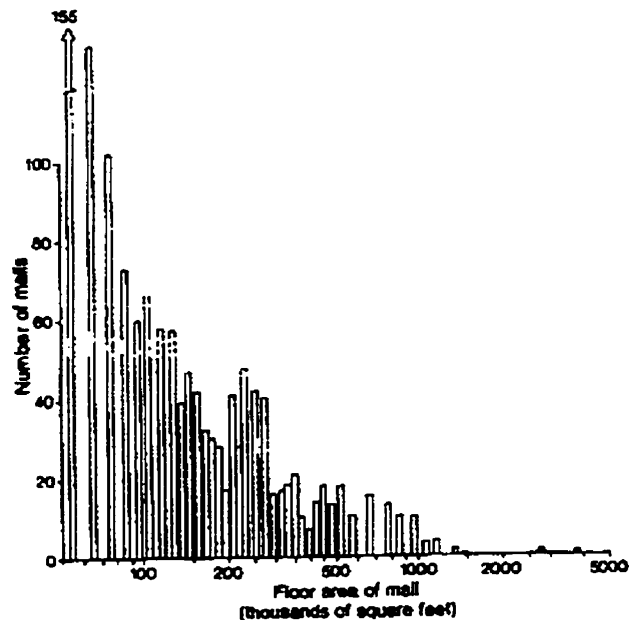


Figure 2.5 Mall sizes and numbers in Canada.

(*Simmons 1991, 232*)

rarely a concern (*Jacobs 1984, 7*). Malls are situated in the centre of large parking lots which are accessed from major arterial roads. The suburban mall has a clear definition between automobile space and pedestrian space.

The development of the shopping mall has provided one of the better shopping forms in terms of a safe pedestrian domain which provides common areas for interaction. "Research into consumer behavior has established that the physical setting in which retail activities and shopping takes place is often the most influential aspect of any buying process" (*Loxton 1991, 46*). Unlike the other forms, malls provide a safe haven, a clean, weather protected environment for shoppers and even non-shoppers. Malls attract non-shoppers because they offer non-shopping related activities such as promotional events like arts and craft shows, car shows, music performances, food courts, banks, libraries, rest rooms, and movie theatres (*Jacobs 1984, 12*). Due to the multifunctional nature of shopping malls, many households frequent these centers two or more times each week making it a regular activity of weekly life (*Jones 1987, 198*). Malls generate from 50,000 to 500,000 customer visits per week and provide parking for 1,500 to 10,000 cars (*Simmons 1991, 236*). Visiting malls is clearly an integral aspect of our daily lives. Will shopping malls be the last vestige of retail centers that encourage social interaction?

This overview of historical retail forms has demonstrated how the design of these centers provided accessible shopping opportunities in a comfortably scaled setting. The following section will look at our modern retail choices in the 1990s.

2.2 SHOPPING OPTIONS IN THE 1990s

Shopping is a significant factor in modern urban travel patterns and can account for a fair portion of a person's time. It is estimated that 10% of all urban trips are for shopping and today's shopper spends on average 15% of non-work time out of the home on shopping (*Jones 1990, 105*).

A significant amount of a person's time is spent shopping. Modern retail forms should continue to play a role in fostering a sense of kinship and providing a place for social interaction. Human scale and pedestrian accessibility, the key design components that encourage socializing as stated in this thesis, will be the continued focus of this section. Although downtown shopping, regional malls, and markets still play a role in retailing in the 1990s, this section will look at other alternatives we have today.

2.2.1 Community Strip Centers

Neighborhood and community strip centers, or strip malls, are one of our modern commercial centers and defined by their trade area and size. These neighborhood strip plazas are located in residential areas and are accessible to the pedestrian. The format is usually a linear configuration of stores that open onto a parking lot which separates the plaza from the main road. Usually between 30,000 square feet [2,787 square meters] to 100,000 square feet [9,290 square meters] these centers consist of drugstores, banks, hair salons, restaurants, and are sometimes anchored by supermarkets, department stores or even cinemas (*O'Mara 1996, 3*).

Neighborhood strip centers are accessible on foot and by vehicle to the surrounding residences. The linear configuration provides a continuous frontage of shops. The size of the complex correspond to the human scale and are places where people can meet their neighbors. Essentially, these centers carry over the urban design elements of a suitable human scale and pedestrian accessibility from the historical precedents. The significant difference is the parking lot, provided for vehicular accessibility.

2.2.2 Megamalls

The biggest distinguishing factor between malls of the 1960s and 1970s and the megamalls of the 1980s is scale. Megamalls are defined as being over 750,000 square feet with anywhere from 160 stores to upwards of 550 (*Jones 1991, 241*). The characteristics of megamalls are quite similar to other malls with many of the same retail outlets such as fashion, footwear, jewellery, etc. including a number of anchor department stores. The megamall phenomenon can be considered bigger and better versions of suburban shopping malls but haven't been as successful as some developers had hoped.

Two of the largest megamalls in North America are the West Edmonton Mall in Edmonton, Alberta and the Mall of America in Bloomington, Minnesota. These malls offer more than just retail.

Opened in the early 1990s, the Mall of America consists of 2.5 million square feet of

retail with 4 anchor department stores, 7 junior department stores, and 350 specialty shops. In addition to retail outlets, the structure houses a number of night clubs, restaurants, bars, theatres, a LEGO Imagination Center, an 18 hole miniature golf course and a 9,000 square foot high school. The mall was opened in 1992 and has hosted a variety of events including presidential elections (*Rhees 1993, 18*). Access to the mall is primarily by private auto with two seven level parking structures and two surface lots that hold 12,750 cars. The mall is served by 13 public bus routes and hotel and airport shuttle service (*Rhees 1993, 18*).

The West Edmonton Mall, opened in 1986, is the largest megamall in North America consisting of 3.5 million square feet of retail space (see Figure 2.6) (*Jones 1990, 224*). The mall has 5 major department stores and over 530 stores in total (*Jones 1991, 241*). In addition to retail, the mall boasts three theatre complexes, a hotel, a 5 acre beach and water park, an amusement park, bars, restaurants, an aquarium, an ice rink, a mini golf course, and a full-scale replica of the ship, the Santa Maria

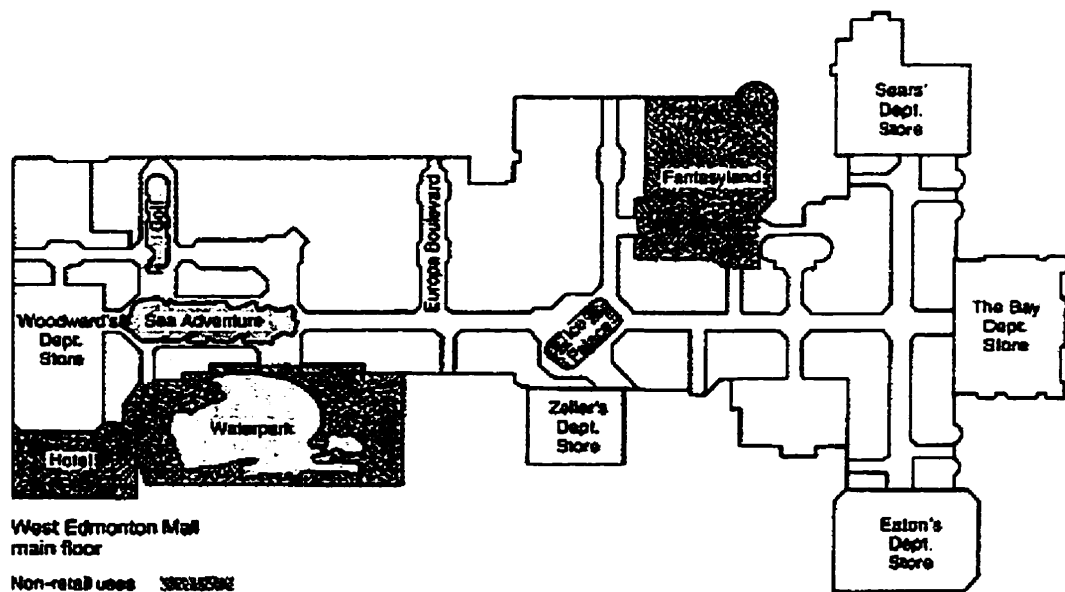


Figure 2.6 The floor plan of a megamall, the West Edmonton Mall in Edmonton, Alberta. (*Jones 1990, 225*)

(Hollinshead 1996, 15).

Megamalls, like that of smaller mall complexes, have a clear separation between space for vehicles and space for pedestrians. Megamalls can be considered accessible but scale affects the perception of this accessibility. With structures of this size, parking lots are large and walking distances are long both inside and outside. Vehicular congestion around malls and on highways can occur when the area cannot handle the traffic created by the new centre. Because these structures are so large, over and above 1 million square feet, scale also affects the orientation of megamall customers *(Rhees 1993, 18).*

2.2.3 Outlet Centers

“Outlet centers are a response to the price motivated shopping behaviour that has become a growing part of consumer behaviour during the late 1980s and 1990s, *(Faludi 1992, 33).* Outlet stores provide goods directly from the manufacturer to the consumer and the marked up prices are generally lower than traditional retailers *(Faludi 1992, 33).* Merchandise that is difficult to sell in malls and specialty shops such as defective products, out of season stock, and overrun items, end up in outlet stores. Many of the products in outlet centers are name brand items such as Levi, Benetton, and Ralph Lauren *(Morgan 1996).* The outlet center concept seems to have begun in Reading, Pennsylvania in the later 1970s where the first factory outlets sold irregulars *(Spink 1983, 32).*

Outlet centers have become tourist attractions and a major source of cross border

shopping, especially for Canadians. The Canadian manufacturing sector is much smaller compared to American manufacturing, and therefore, outlet centers are not as popular (*Faludi 1992, 33*). With these centers as major attractions in their own right, developers have in some areas added hotels, restaurants, movie theatres, sports and recreation facilities to entice visitors to stay longer (*Maynard 1996, 46*). Most outlet centers are not located near other shopping facilities due to the so called sensitivity issue of the products being sold. Outlets sell the same products as malls and downtown stores except at lower prices so it is common for outlets to be at least 20 miles from other shopping centers (*Maynard 1996, 46*).

Outlet centers are one of our modern shopping options. Many are designed as mini town centers and are sensitive to scale and accessibility issues. As tourist attractions, they offer a variety of other amenities and pedestrian infrastructure. Outlet centers can also be designed around a theme with the physical environment reflecting this theme such as the design of the stores reflecting colonial or mid-western architecture for example.

2.2.4 On-Line Shopping

In recent years, with the introduction of internet access through personal home computers, a new shopping trend has emerged. Viewing products and ordering them through the computer has offered new conveniences for customers. The first Virtual Emporium complex opened in Santa Monica, California in a pedestrian mall in 1996. Shoppers can visit 80 on-line retailing stores that offer nearly two million products in addition to the 325 stores in the mall (*The New York Times 1996*). It is

estimated that only 15 percent of homes have access to the internet, so with Virtual Emporium more people can take part in internet shopping in an atmosphere modelled on designer cafes and cinema houses. Help from employers is available if computer assistance is required by the patron (*The New York Times 1996*). Shopping on-line through the internet and from cable television home shopping networks may have a big impact on traditional shopping methods because leaving the home will no longer be required.

Shopping through the use of electronic media cannot be addressed in terms of urban design issues because it lacks the physical form of a 'place'. However, accessibility in terms of internet users is increasing. This modern shopping alternative is included in this section because it is a fast growing shopping alternative and may threaten the future of our existing shopping forms.

3.0 RETAIL PARKS - THE NEXT PHASE IN MODERN RETAILING?

The proceeding two chapters will acquaint the reader with one of the newest retail formats - the retail park. The first section of this chapter will introduce the basic characteristics of the retail park and give an outline of the types of tenants that distinguish retail parks from other developments. This will be followed up by an overview of their fast paced development in North America during the past decade and the location requirements of the sites. Finally, the basic physical characteristics common in most retail park developments will be explored to set up questions of designs to be addressed in later chapters.

3.1 WHAT ARE RETAIL PARKS?

The retail park concept first appeared on the retail scene in the early 1980s in Southern California. (see Figure 3.1) The retail park is an agglomeration of big box stores called *anchors* (see Glossary) in an open air configuration and usually managed as a unified complex (*O'Mara 1996, 14*). A big box store is a store contained within one large, usually single story building that is surrounded by several acres of parking. A typical big box store ranges in size from 100,000 square feet to 200,000 square feet [9,290 - 18,580 square meters]. (*O'Mara 1996, 149*) This new retailing experience has aroused the shopping center industry and put pressure on regional malls and community shopping complexes. The gross leasable area (GLA) of retail parks can range between 200,000 to upwards of 900,000 square feet [18,580 - 83,610 square meters] in size (*Peterson 1989, 62*). In the United States, many

have surpassed the 1 million square foot [92,900 square meter] mark (*Faludi 1992, 32*). Retail parks, though value oriented, sell mostly hard goods and staple products (*O'Mara 1996, 19*). Fashion merchandising is a recent addition to these centers. Anchor tenants such as Price/Costco and Sam's Club, superstores or 'category

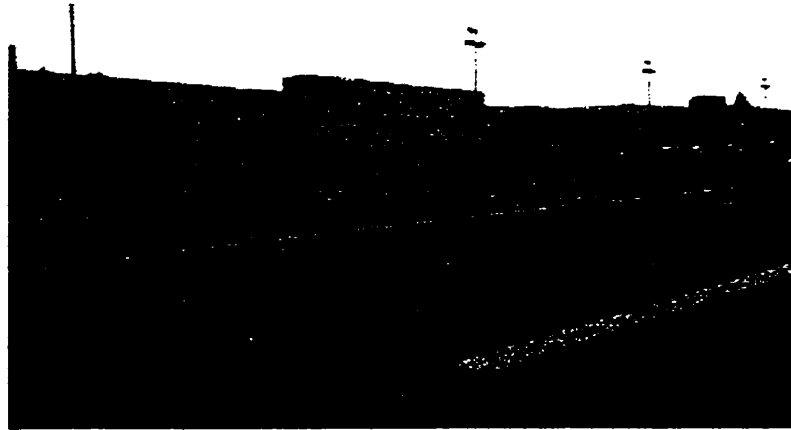


Figure 3.1 Typical retail park structure.
(*Beaumont 1997, 4*)

killers' (see Glossary) such as Toys "R" Us and Office Depot, and value retailers such as Wal-Mart and Kmart usually comprise between 60 to 85 percent of the total gross leasable area (*Faludi 1992, 32*). Fast food chains, supermarkets, outlet stores, and strip plazas with smaller tenants complete the tenant mix.

A component of the retail park is the '*power center*', (see Glossary) a name invented by Terranomics, a San-Francisco retail services company, in 1986 (*Solomon 1993, 51*). The power center takes the form of a super sized strip center within a retail park and houses a number of anchor tenants. These anchor tenants are what give the power center it's power. Terranomics developed the first power center in the United States known as 280 Metro Center located in Colma, California 15



Figure 3.2 The first power center, 280 Metro Center in Colma, California.
(O'Mara 1996, 18)

minutes south of San Francisco. (see Figure 3.2) This first power center consisted of approximately 352,000 square feet [32,701 square meters] of gross leasable area with five anchors (Doocey 1992, 76). The market area exceeded 1 million people in the San Francisco area with an average household income beyond \$52,000 (O'Mara 1996, 18).

3.2 RETAIL PARK TENANTS

Retail parks are composed of a tenant mix which includes warehouse clubs, superstores or 'category killers', value retailing stores, strip centers, and other small, usually local tenants.

3.2.1 Warehouse Clubs

This type of retailing takes the form of big box stores and has experienced tremendous growth over the past decade. "The industry has grown astronomically since the concept (warehouse club) was launched by Price Club in 1976, to over 600 stores currently and 1,100 expected by 1996" (*Schwanke 1993, 39*).

The warehouse club offers a wide range of products including groceries, hardware, electronics, clothing and jewellery at wholesale prices, but with very little depth of selection for each product (*Schwanke 1993, 39*). Warehouse clubs require shoppers to purchase annual memberships in order to use the facility. Warehouse club customers have an above average income level because shopping is usually done in large quantities that exceeds over \$100.00 expenditure per trip (*Faludi 1992, 31*). The dominant warehouse club businesses are the recently merged Price/Costco, Sam's Club, owned by Wal-Mart, and Kmart, owned by Kmart.

3.2.2 Superstores

Superstores or 'category killers' as they are often called are also large big box format stores, but offer specialty retail at low prices (*Schwanke 1993, 38*). Such stores include Toys"R"Us, Home Depot, Office Depot, and Bed, Bath and Beyond, and all offer huge variety of specific products. These category killers can operate in many types of locations including power centers, freestanding locations, downtowns, and regional malls (*Schwanke 1993, 39*). Superstores often complement other retail rather than compete because of their speciality nature. The mega chain toystore

Toys“R”Us pioneered the superstore concept by offering a ‘killer’ assortment (*Hartnett 1997, 26*). Recently, Toys“R”Us decided to offer shoppers more than the usual warehouse type of environment that superstores have become known for. Concept 2000 is a new store design that has a bright and open feeling, with larger signage, a race track layout, gondolas replacing the usual shelving, and an overall more festive atmosphere (*Hartnett 1997, 26*). Superstore popularity and growth rate are expanding. Presently, Toys“R”Us has 680 stores in the United States, 396 elsewhere in the world and 212 Kids “R” Us, their clothing spin-off store (*Hartnett 1997, 27*).

3.2.3 Value Retailing

Value retail stores are other big box structures that are usually located in retail parks and sometimes in downtowns in old department store buildings. Value retailers include Kmart, Wal-Mart, and Target and offer a variety of products similar to department stores, but at discount prices (*Schwanke 1993, 38*).

Wal-Mart’s humble beginnings started in 1945 in Bentonville, Arkansas. The founder, Sam Walton, learned the meaning of thrift growing up during the Depression and



Figure 3.3 “She’s a little traumatized
- its her first Wal-Mart!”

(*The New Yorker*)

opened Walton's Five and Dime. The Kmart format was developed in 1962 on which Sam Walton modelled his first Wal-Mart store (*Brent 1994, S36*). These retailers have since been leading the pack in the new discount retailing trend. Wal-Mart currently has more than 2,000 stores in the United States alone (see Figure 3.3) (*Gillespie 1998, 2*).

3.2.4 Small Tenants

Many smaller tenants of retail parks can be found within the strip configurations but can also be stand alone stores. Fast food chains, coffee shops, and local tenants are included in the small tenant percentage of a retail park. During the past 10 years of retail park development, the number of large anchor tenants has increased while the number of small tenants per center has been reduced. Initially, when retail parks were the 'new kids' on the retailing scene, it was not uncommon to see 30% -40% of the total gross leasable area devoted to small scale, usually local tenants. In the early 1990s this percentage dropped to below 10% small tenant make-up (*Doocey 1992, 76*). The difficulty of small tenant staying power is trying to establish an identity. Small tenant stores, usually between 1,500 and 2,000 square feet [139-186 square meters], can be overpowered by the plethora of large anchor tenants in the retail park environment (*Peterson 1989, 63*).

3.3 SIZE AND GROWTH

Retail parks and power centers have experienced rapid growth in number and in size over the past 10 years. In 1995, it was estimated that there were approxi-

mately 504 power centers in the United States, a 53% increase from 1994 (*O'Mara 1996, 16*). Between 1985 and 1993, power centers were being built at a rate of 30 per year. This figure jumped to 96 centers in 1994 and 175 in 1995 (*O'Mara 1996, 16*). A possible reason for the growth in number could be due to the initial acceptance of this new retailing format within the lending community. In the late 1980s and early 1990s, many companies considered the retail park a safer retail investment than shopping malls.

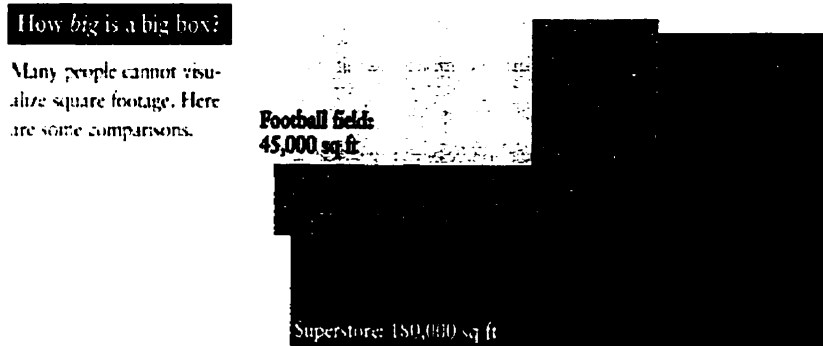


Figure 3.4 Comparative size of superstores.
(*Beaumont 1997, 3*)

The growth in size of these complexes may be due to the increasing standard store sizes such as the superstore formats of Kmart and Wal-Mart that can exceed 100,000 square feet [9,290 square meters] (*Doocey 1992, 76*). (see Figure 3.4) Many believe that in order to draw customers from regional malls the new concepts need to be larger.

The reason for the popularity of these new retailing centers is due to perceived

value and convenience. With less discretionary income available, customers are looking to save money. Stagnant personal income levels and the fear of unemployment have become realities of the 1990s “Upward mobility and the double income of the 1980s ‘yuppie’ have become a lost legacy of the shattered American dream as consumers struggle with escalating costs, declining incomes, fear of unemployment, debt, and expenses that often exceed current disposable income” (*Tash 1993, 15*).

The tenant mix emphasises value and low retailer markups. The discount department store, dominated by Wal-Mart and Kmart, leads value retailing (*Schwanke 1993, 38*). The warehouse clubs offer volume purchasing at wholesale prices and outlet stores, off-price apparel stores, and deep discount drug stores also entice bargain shoppers. These stores can offer lower prices because cost cutting is done at the distribution stage. The retailers deal directly with the manufacturers and eliminate the middle man. Operating costs can be kept to a minimum due to the ‘no frills’ attitude, as service is reduced (*Weiler 1995*). The perceived convenience aspect of retail parks by the public is attributed to the enormous parking lots. The parking ratio for such centers is 7 or 8 parking spaces per 1,000 square feet [93 square metres] of gross leasable area, which is about 50 percent higher than that of most suburban malls (*Faludi 1992, 31*). The notion of one stop shopping allows customers to purchase a variety of needed products with one stop at a retail park.

Recently the retail park and power center development boom has begun to slow down. (see Figure 3.5 and 3.6) With 10 years of fast paced development behind them, retail park development is on a decline. “There is just too much retail chasing

too few customers”, says Leah Lhayer of Hines, a Houston based developer (*Templin 1997*). The concern that arises is overbuilding of these retail parks and a lack of

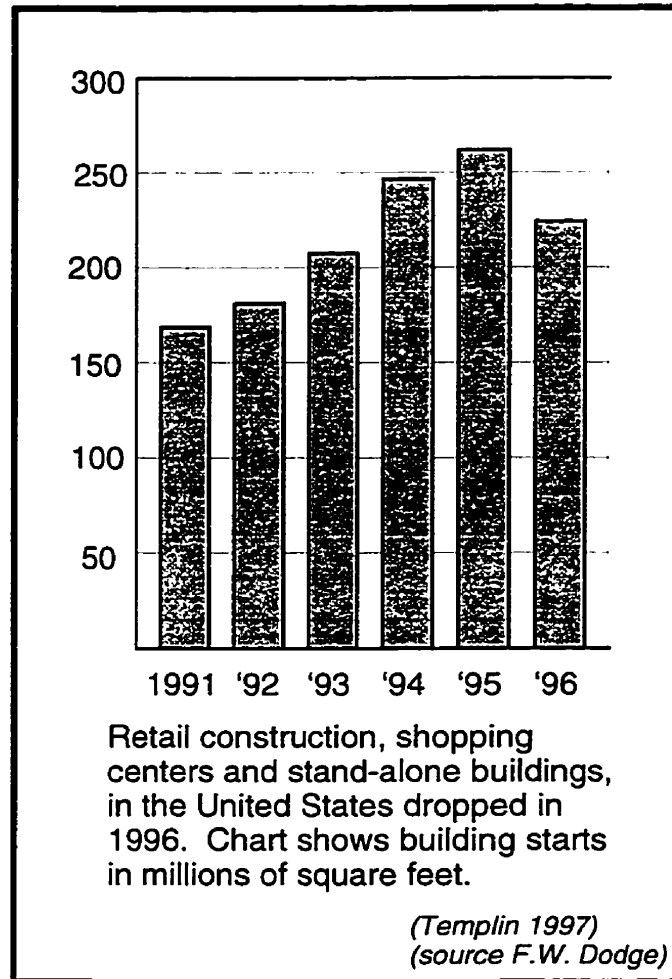


Figure 3.5 Table-Decline of retail construction in the United States.

tenants to fill them. Pre-leasing space, pre-selling land or built to suit development appear as safeguards against overbuilding. As Dean Schwanke states, “it (overbuilding) likely will be due to the expansion of overzealous retailers than to overzealous developers” (*Schwanke 1993, 40*).

Even the retailers themselves are beginning to feel the pressure. The reality of

cannibalizing other retailers as well as themselves has led many companies into consolidation. In 1993, Price Club and Costco, two of the leaders in warehouse club retailing, merged their operations when future decisions of expansion emerged. This merger leaves Sam's Club and Price/Costco as the two remaining major players in the warehouse club wars (Heinzl 1993, B8). Corporate takeovers are also assisting to dissolve retail competitors. Wal-Mart acquired the Woolco chain which has allowed Wal-Mart to expand exponentially in Canada in the past 5 years. Also, Home Depot, the hardware giant, acquired the Aikenhead chain in 1994 increasing

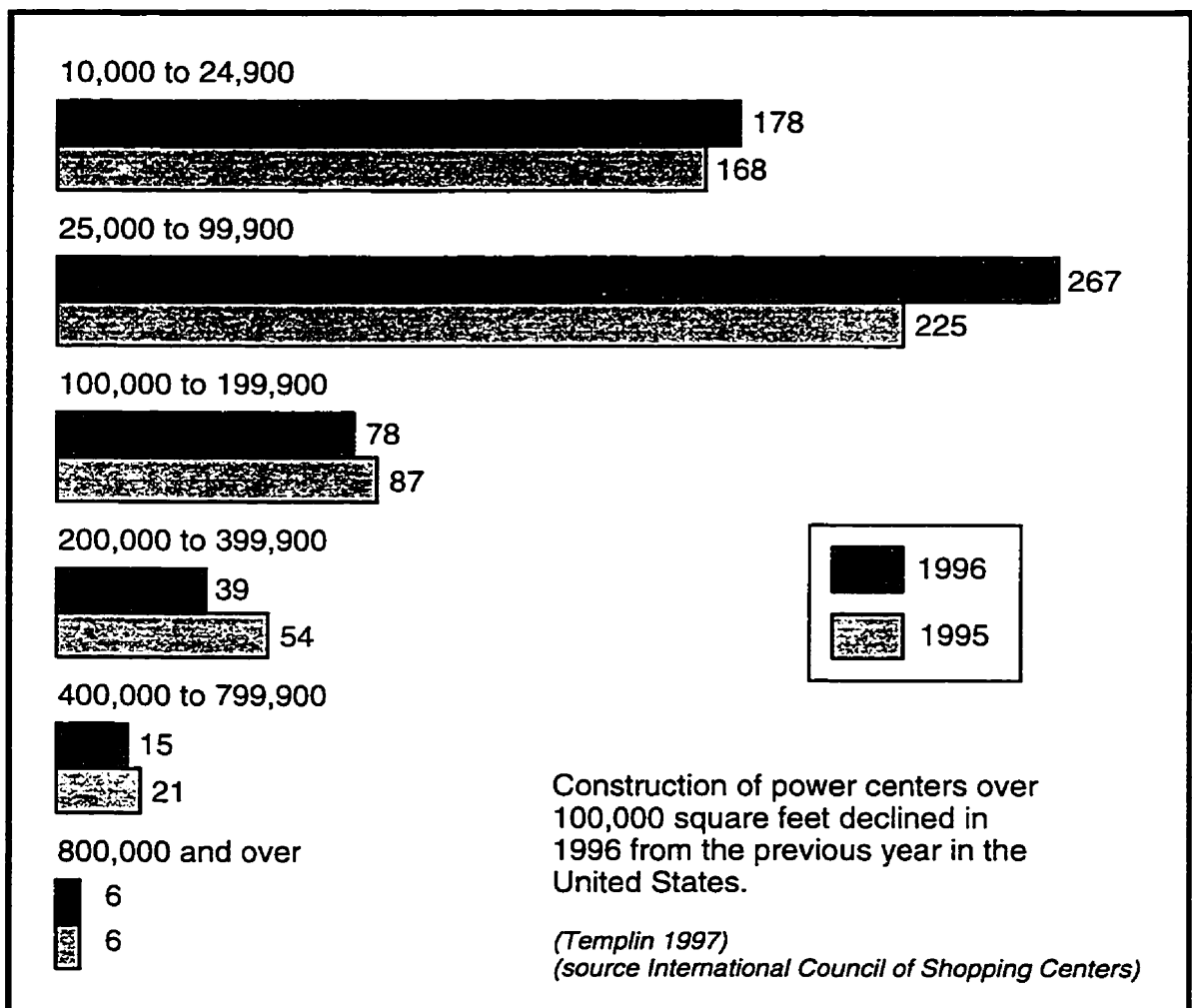


Figure 3.6 Table-Because power centers are usually located within retail parks, a decline in retail park construction can be inferred.

the influence of this Atlanta-based company (*Vaughan 1994, A10*). The most recent retail merger in Canada, announced in February 1998, was the take over by the Hudson's Bay Company of all the Canadian Kmart stores. Many of the Kmart stores will be converted into a Zellers format, owned by the Hudson's Bay Company, and the stores generating lower profit margins will be closed.

3.4 LOCATION OF RETAIL PARKS

"In the end, it still comes down to location, location, location." states Michael Miller, Senior V.P. for Paramus, New Jersey (*Solomon 1993, 53*). When a big box retailer chooses a new site, certain criteria have to be met. A number of characteristics need to be studied in order to ensure some kind of success. The demographics of the area are examined to ensure a larger population base for the store. The population is looked at in terms of actual numbers, average household income, age, job growth, etc. The retail park developments prefer to locate in an area that has a population of over 250,000 people within a 13.2 mile [20 kilometer] radius (*Waldie 1993, 49*).

The choice of a location for any retail unit or complex is considered by developers one of the determining factors in the success or failure of a store. Many developers agree that the key to a successful retail venture is a good location which is dependent upon the target market of the store. Retail parks act as regional attractions in the retail hierarchy and therefore locations are chosen on the edge of large cities along major highway routes and quite often the intersection of two highways. The consumer travels an average of 22 minutes by car to get to a super discount store

or warehouse club (*Reda 1995, 20*). With store sizes over 150,000 square feet [13,935 square meters] and retail park layouts consuming up to 1 million square feet [92,900 square meters] of land, large sites are required. Finding enough land to build these amplified formats can be difficult and most often its availability is on the perimeters of a populated metropolis (*Doocey 1992, 76*).

Proximity to other retail developments also plays a role in site selection. Locating a retail park near a regional shopping mall can create an even larger retail hub and is looked upon favourably by developers. In fact, sites near existing shopping malls are sometimes sought by retail park developers because shoppers are used to the existing traffic pattern (*Solomon 1993, 53*). "We build power centers in fairly close proximity to major malls. We find a lot of cross shopping between the two" says Billie Scott of the Indianapolis based developer Melvin Simon and Associates (*Solomon 1993, 53*). Cross shopping between stores is the retailing spin off many developers are trying to encourage.

Sites are quite often chosen in industrial parks which are normally located at the edges of cities. These locations provide vast areas of developable land required for retail park development. As well, most industrial parks are located on major access routes in and out of cities including highways and rail access.

3.5 PHYSICAL FORM

The general and most common layout of a retail park is a linear configuration along one major access route. Anchor tenant stores consume quite often over 150,000

square feet [13,935 square meters] of space each and are aligned in a row. This scenario can result in an long strip of roadway. Retail parks quite often have no more than two public vehicular entrances given the strip nature of the layout, one at either end.

The stores are setback from the roadway to allow for vast seas of asphalt to accommodate the parking requirements for such a complex. The parking lots can consume three times the floor area of a store which is an upwards of 7 acres of asphalt per 100,000 square foot [9,290 square meter] store (*Faludi 1992, 31*). Often parking lots abut each other doubling the distance between store entrances. Parking lots are one of the dominant visual features of retail park design.

The most obvious feature in the retail park landscape is of course, the 'big boxes' themselves. These immense stores appear as large boxes that have very few architectural features. The structures resemble warehouses of only one level and ceiling heights of 24 feet [7.3 meters] and over (*Waldie 1993, 49*). With four blank, unfenestrated walls, the only articulation of the structures occurs at the single entrance. Large doors and bold signs mark the entrance to the box.

Visibility is a prime concern for retailers. Most often situated along highways, the stores need to be seen from a distance. Large signs, both free standing pylon signs and those wall mounted, are in abundance in the retail parks. Most signs are lit for evening visibility and are displayed in vibrant colours.

Retail parks generally lack significant vegetation. Minor landscaping is done such




as sodded berms (see Glossary) which separate parking areas. The lack of trees is readily apparent against the backdrop of acres of parking lots and blank clad walls. Developers are only required to provide minimal landscaping according to a municipalities zoning and by-law regulations. This occurs because retail parks are relatively new developments and they are categorized into existing zoning, usually an industrial designation when situated in an industrial park. Where landscaping demands are insignificant in industrial parks they then become insignificant in retail parks.

The dominance of the car in such an environment is obvious from the amount of land given over to parking lots. Accessibility for pedestrians and transit are usually not considered in retail park development. Tenants and developers fail to consider the less mobile shoppers in the physical form of retail parks. Consideration is made for car owners because the retail park market is targeted towards them. Developers fail to see that pedestrians include shoppers who leave their cars, employees, transit users, and those within a walking radius of the development. Individuals are ignored in the physical form as they dodge between cars in massive parking lots.

Summary

The following table (Figure 3.7) and timeline (Figure 3.8) are summaries of the information provided in Chapters 2 and 3. This information is put into these formats for easy comparisons between retail forms. The following chapter will continue to discuss retail park development in the 1990s.

LEGEND

 pedestrian movement
 parking lots
 buildings


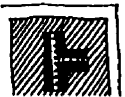

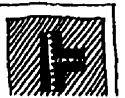


Shopping Alternatives in 1998	General Characteristics					
	Physical Form	Size	Location	Tenants	Peak Use Period	Area Served
department store (downtown)		multiple street blocks	city center	small scale retail speciality stores department stores	most popular mid-1800s to 1930s	city wide
regional malls		100,000-750,000 square feet	suburbs	small scale retail speciality stores department stores grocery stores	most popular 1950s to 1970s	city wide
neighbourhood strip centers		30,000-100,000 square feet	suburbs	small scale retail grocery stores convenience	most popular 1960s to 1990s	neighbourhood
megamalls		over 750,000 square feet	near highways (edge of city)	small scale retail department stores entertainment	most popular 1980s	regional
outlet centers		mini towns	near highways (edge of city)	outlet stores	most popular mid-1970s to 1980s	regional
electronic shopping	computers television		homes, offices		most popular 1990s	global
retail parks		200,000 - over 1,000,000 square feet	near highways (edge of city)	superstores small scale retail grocery stores entertainment outlets	most popular 1980s to 1990s	regional

Figure 3.7

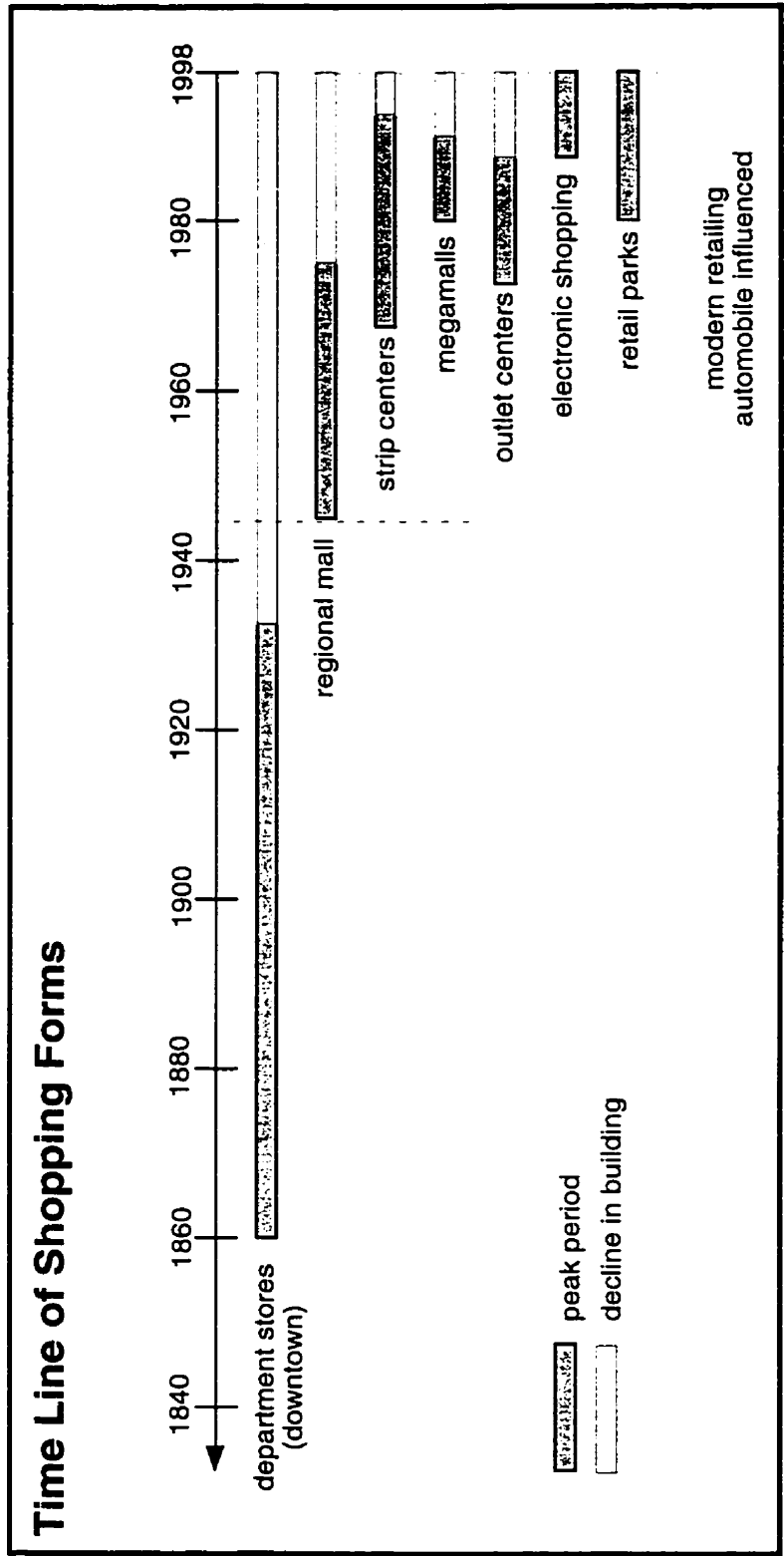


Figure 3.8

4.0 A DECADE OF RETAIL PARKS

This chapter is intended to familiarize the reader with controversial social and economic issues surrounding retail park development in recent years and to provide an overview of new directions in retail park development.

4.1 SOCIAL AND ECONOMIC CONCERNS

Large scale retail development has evoked many social and economic concerns for the public during the past decade. This section will introduce the reader to serious concerns retail park development has evoked and to provide a backdrop for the design critique in following chapters.

4.1.1 Impact on Other Forms of Retail

One of the biggest concerns for communities with big box development is the effect it will have on the current retail situation. Suburban shopping malls, neighbourhood strip centers, as well as traditional downtown shopping cores are being threatened by retail parks being built on the edges of cities. None of these forms of retail alone can offer what retail parks offer. Downtown shopping lacks the convenience of parking, suburban malls lack value, and neighbourhood strip centers lack the selection that can be found in retail parks. As a result the traditional forms of shopping suffer.

The eradication of traditional retailers results in the loss of local profit for communi-

ties. Valuable spending dollars are lost to the distant locations of the big box headquarters, such as Wal-Mart in Bentonville, Arkansas. As a result, customer dollars leave the local economy.

Many municipalities will try to attract big box tenants by offering them tax abatements. This is an unfair advantage to local tenants. The development of these retail parks may also drive up taxes because they are costly to service with municipal water, sewer, roads, and policing (*Weiler 1995*). The tax dollars gained by the big boxes may not compensate for the losses.

Many communities have taken action against the big box invasion to prevent them from setting up in their communities. The New England states have put up the fiercest fight by using a combination of lawsuits and grassroots protest to battle the giants (*Barber 1993*). The most publicized case took place in 1992 in Greenfield, Massachusetts where the town of about 19,000 people successfully prevented a Wal-Mart store from entering (*Beaumont 1994, 57*). The people of Greenfield fought big box development because they feared sprawl, traffic problems, and the effects it would have on the downtown economy.

4.1.2 Sprawl

Retail park development contributes to the urban sprawl problem. The overwhelming growth on the edge of cities is challenging the traditional role of the downtown and creating unprecedented urban frontiers. Rick Gillespie describes sprawl as, "inherently bad because it is out of control and wasteful of 'social resources'; it

escapes containment and direction by definition" (*Gillespie 1998, 2*).

Sprawl is low density development that consumes valuable agricultural land on the edge of cities. (see Figure 4.1) It rapidly increases the physical boundaries of cities and contributes to their auto dependent nature, thus retail parks add to the waste of valuable resources such as land and fuel. Planners are concerned with the effects of sprawl because it destroys the countryside and alters the character of a city. Many see sprawl as growth, but unplanned, uncontrollable expansion can lead to many serious implications such as the increased dependency on fuel. Activists against urban sprawl have dubbed these big box giants as 'sprawl-marts' (*Gillespie 1998, 2*).

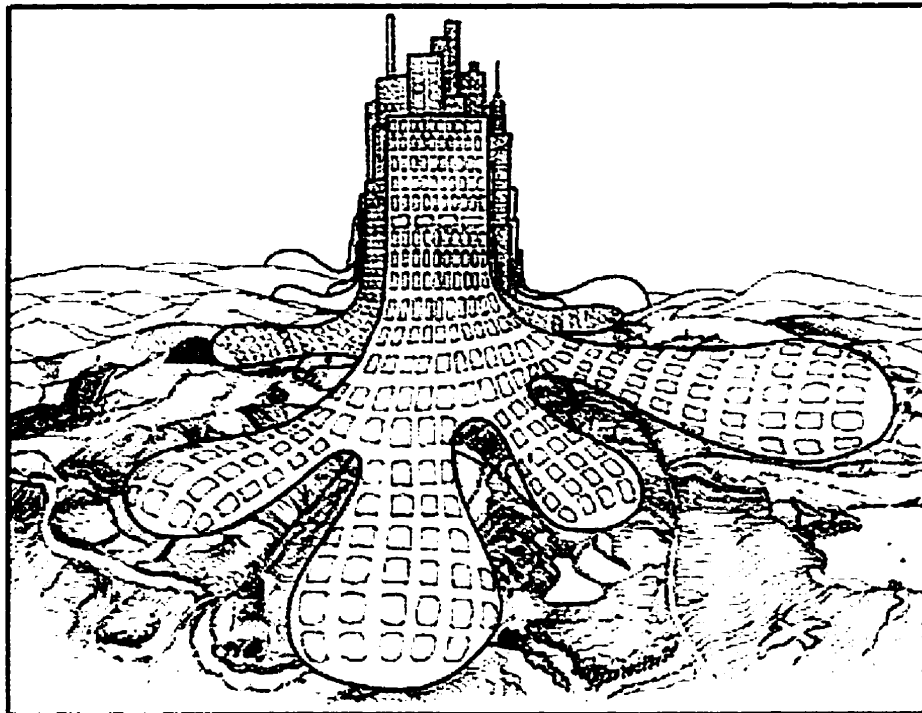


Figure 4.1 Sprawl - The city devours the countryside.
(*Gruen 1973, 170*)

Automobile dependency caused by sprawl not only has environmental implications in terms of air and noise pollution, but also has a cultural impact. Many individuals, such as those with low incomes, the elderly, and children, lack auto mobility. Being unable to get around in a car dominated society creates social isolation and decreases personal independence (see Figure 4.2) (*Beaumont 1994, 10*).

Problems with Sprawl-Type Superstores

DESIGN

- one-story, fortress-like, inward-looking building
- no relationship to community
- insensitivity to community's desire to preserve distinctive local identity
- sea of asphalt for parking, almost always located in front
- massive signs mounted on tall poles
- no trees, no landscaping, no amenities (e.g., benches, bus shelters)

ENVIRONMENTAL

- unnecessary destruction of farmland, forests, meadows
- unnecessary bulldozing of trees
- air pollution
- non-point source water pollution
- degradation of water supplies
- stormwater run-off
- impervious asphalt and heat islands
- disruption of nearby neighborhoods by huge volumes of traffic

EXCESSIVELY AUTO-DOMINANT

- Design sends this message: "You can't walk here"
- no access for people who can't afford cars or who can't drive (many elderly, low-income, young people)
- no sidewalks for pedestrians
- no crosswalks or traffic signals to help people cross streets safely
- no access for users of public transit
- lack of pedestrian facilities forces people to drive just across the street
- up to 10,000 car trips a day are generated due to lack of alternative means of access for customers; thus stores disrupt quality of life in nearby neighborhoods
- pressures to widen more roads, cut down trees, degrade the livability of nearby neighborhoods

FISCAL AND ECONOMIC

- large volumes of traffic require taxpayer-subsidized roads
- stand-apart locations require taxpayer-subsidized water and sewer line extensions
- retail glut if local economy not growing fast enough
- displacement of existing businesses, especially small, locally owned stores
- drain the vitality out of older downtowns
- stimulate disinvestment in existing buildings downtown

Figure 4.2 (*Beaumont 1997, 9*)

Big box stores aesthetically have no relation to their surroundings (*Weiler 1995*). Quickly erected as fast track development, these large boxes are unsympathetic to their, quite often rural, surroundings and bear no resemblance to anything in the city. Situated in acres of cleared out, levelled landscape, these superstore clusters create a harsh environment resembling nothing like the complex intricacies of urban life or the natural surroundings.

4.1.3 Security and Crime

In the United States, parking lot crimes are on the rise. Fast growing retail parks, many that contain super grocery stores open 24 hours, have parking lots that usually hold up to 1,000 cars and are becoming prime areas for crime. A Wal-Mart site in Tampa, Florida for one year reported 226 car thefts, 25 purse snatchings, 32 burglaries and 14 armed robberies (*Lee 1997, 1*). A study found that 80% of the non-shoplifting crimes at its stores occurred outside the buildings. Wal-Mart began putting uniformed employees in golf carts to patrol the parking lot and this cut the crime in the lots down to zero.

In many states, judges and courts are holding stores liable for crimes committed on their property. Parking lot crimes fall under the legal field known as 'premises liability' and many victims of such crimes are being compensated. In Memphis, Tennessee, a man filed a negligence suit against Wal-Mart, whose wife was abducted at gunpoint from a Wal-Mart parking lot in 1990, raped and murdered. This site was the scene of many crimes (*Lee 1997, 1*). Stores are slow to take action against crime on their premises. One police lieutenant stated that, "They (the stores) put

dollars over safety” (*Lee 1997, 1*). Many stores feel that a crime on their premises is not a concern of retail but a problem of society and parking lot safety issues go beyond store customer service requirements (*Lee 1997, 1*). Safety and feeling secure while shopping are issues that will affect shopping habits, especially for women.

4.1.4 Overbuilding

The seemingly overnight popularity of retail parks now has the retail world questioning if there is enough demand to balance the supply of stores. Overbuilding is a concern for both developers, the retail industry, and especially investors who believe there is simply too much retail space available and not enough retail. Difficulty in controlling power retail development is where the problem lies and may be beyond the ability of either retailers or developers to control (*Hazel 1994, 52*).

What can be done with the large volume of vacant big box space once a tenant has moved out? Tenant leases are usually for no more than 20 year periods and if not renewed the owner is left with quite a large space to fill. When one of the big box tenants closes its doors, it can leave a vacancy space of about 50,000 square feet [4,645 square metres] or more that needs to be filled (*Hazel 1994, 51*). Re-use options can include a funeral home, a flea market, used-car dealership, rental storage space, micro brewery, roller blade rinks, basketball courts, bingo halls, or bowling alleys (*Knitter 1998, 1*).

The Chicago market was studied in a big box vacancy survey and it was discovered

that the Chicago area has 175 retail big box spaces sitting vacant that encompass 9,489,000 square feet [881,528 square meters] (*Knitter 1998, 2*). Between the years 1993 and 1996, 85% of the total retail space built consisted of big box stores of over 20,000 square feet [1,858 square meters] (*Knitter 1998, 2*). In Chicago and other American cities, retail vacancy rates have become an important concern.

4.2 HOW RETAIL PARKS ARE CHANGING

Developers are looking for new methods to maintain retail park success and to continue consumer interests. With a decline in development being seen in the later half of the 1990s, retail parks will have to change to keep their status in the retail hierarchy. This section will offer new directions for retail parks but the solution may simply be through better design which this thesis will argue in following chapters.

4.2.1 Larger Formats Versus Smaller Formats

The future of the size of retail parks seems to be in two camps. Many critics say that smaller formats will be the key to future success while others claim that bigger is better. Both smaller and larger retail park formats are being built. Retail parks have already surpassed the one million square foot [92,900 square meter] mark, but some developers feel that at this size, stores are too far apart (*Doocey 1992, 76*).

The future of retail park development may benefit from re-examining traditionally successful shopping areas, such as main street shopping, and re-using key ele-

ments. In Vancouver, a recent trend towards smaller neighbourhood centers as an alternative to retail park shopping has surfaced. Mom-and-pop stores as well as street front shops are making a come back (*Chain Store Age 1996, 184*). According to the 1996 Greater Vancouver Retail Report by Collier's International, street front locations have become a hot retail property type. It states that people want stimulating and engaging shopping experiences that includes luxury coffee and food outlets, bookstores with bistros for example, what Colliers is calling "lifestyle retailers" (*Journal of Commerce 1996, 85*). Can retail parks take clues from this 'store front' retailing trend?

4.2.2 Entertainment

The addition of entertainment venues in shopping plazas, as well as retail parks, is becoming a deciding factor as to where people shop. "Shopping and entertainment are becoming one and the same..... shoppertainment" (*Pearson 1993, 74*). The lure of other activities besides shopping helps to enhance the center as a destination place. In 1993, the International Council of Shopping Centers (ICSC) conducted a survey of desired anchor tenants in strip centers. Of the top twenty-nine tenants listed, movie cinemas ranked as the fifth most popular anchor choice with 20% of those surveyed choosing it (*Dwyer 1994, 2*).

Entertainment oriented retail gives shoppers, who have less money and time, alternative reasons to visit the centers. Previously we have seen movie theatres and bowling alleys added to regional malls during the late 1970s and 1980s. Video arcade rooms were a popular attraction to malls for teenagers in the 1980s and

many malls offer community events and organized performances for all ages in their common areas. Today, virtual reality video games and recreational activities are examples of interactive entertainment which are frequently seen in unconventional shopping areas.

“People have less leisure time than in the past and shopping is perceived as drudgery. Yet despite time constraints, people are still going to the movies, still eating out and still seeking out new forms of entertainment” (*Reda 1997, 107*). Both retail parks and megamalls are incorporating such entertainment features as multiplex cinemas, IMAX 3D theatres, video game shops, high-tech adult playgrounds, wilderness experiences, country line dancing dinner clubs, night clubs, bookstores with coffee bars, art galleries, and theme restaurants (*Reda 1997, 107*).

Bringing food vendors to shopping plazas and retail parks has become an important element for a successful tenant mix. For a retail park project, fast food venues are quick and easily recognizable by the visitor, but sit-in restaurants require an evening draw such as a movie theatre to be successful.

4.2.3 De-Malling

With the fast paced development of retail parks and the decline of regional mall construction, many mall owners are entering a de-constructing phase. Some older enclosed malls have been converted into retail park formats. This metamorphosis from mall to retail park, or ‘de-malling’ as it is often referred to, sacrifices common area space of a mall to satisfy the square footage needs of the larger tenants and

parking requirements. Roofs and walls are torn away exposing the store fronts to the open air. This conversion can often be more expensive than building a retail park from the ground up, but it is sometimes easier to get financing for rehabilitation projects (*Doocey 1993, 34*). A Canadian example of a de-malling project is that of the Mayfield Common, formerly known as the Centennial Village Mall in Edmonton, Alberta. This mall was first opened in 1981 and had dropped to a 55% lease rate. In 1991, it was de-enclosed and is now a 370,000 square foot [34,373 square meter] retail park which is over 97% leased (*Doocey 1993, 34*).

4.2.4 Coupling With Other Forms of Retail

Location is a key factor in the success of any retail center. Retail parks offering value oriented major anchors, locating close to a mall can turn an area into a regional shopping hub (*Solomon 1993, 53*). Cross shopping between both centers creates a synergy between the two and is a means of generating more revenue for both parties. Merrit Sher of Terranomics Retail Services stated that, "If a center is dominant, everyone will get used to going in that direction to do their shopping. Once consumers get used to a particular traffic pattern, they go on automatic pilot" (*Solomon 1993, 53*). Coupling retail parks with alternative forms of retailing has proven to be successful providing that a complementary tenant mix is in place.

Locally, in the Halifax Regional Municipality, a site near the regional Mic Mac Mall has added a big box tenant. Other free standing big box tenants are expected to be built in the same location. This combination of regional mall and big box tenants will create a large regional shopping destination for not only the residents of the city but

for those in more distant locations. The desired effect of cross shopping is expected to benefit all the retail tenants.

4.2.5 Themes

Many shopping center developers are opting for alternative methods for attracting customers. One is building and designing retail centers around a theme. For example an outlet center in Texas called The Sports Court offers entertainment in a retail and athletic combination. The Sports Court features 100,000 square feet [9,290 square meters] of retail space and 70,000 square feet [6,503 square meters] of outdoor sports playgrounds that include basket ball courts, in-line skating track, and a driving range (*Stores 1996, 64*). The ever increasing competition for retailers to entertain shoppers has lead to the introduction of retail themes to compete with virtual reality, cinemas, and interactive displays (*Stores 1996, 64*). Sports Courts have opened in Florida and Colorado which offer a man made lake for fly fishing, windsurfing, a climbing wall, and a mountain bike course (*Stores 1996, 65*). The 'theme-ing' of retail centers is catching onto a variety of retail formats.

Summary

Alternative methods to ensure longevity of the retail park shopping format exist. In the preceding changes in retail park development, developers may be dismissing quality design as a key element in the success of retail parks. The following chapters will focus on design issues as an alternative method for longevity.

5.0 CASE STUDIES - RETAIL PARKS IN ATLANTIC CANADA

This chapter will introduce two emerging retail parks in the Atlantic provinces, Clovelly Park in St. John's, Newfoundland and Bayer's Lake Business Park in Halifax, Nova Scotia. A general overview of the projects and their context will be provided to introduce the reader with the developments that will be critiqued in the following chapter.

5.1 AN INTRODUCTION TO CLOVELLY PARK, ST. JOHN'S, NEWFOUNDLAND

Clovelly Park is presently the only retail development in Newfoundland to have big box tenants such as Price/Costco. This development is located in the capital city, St. John's, and is being developed by the Cabot Development Corporation. Clovelly currently consists of four big box tenants and five smaller tenants and is still in a premature stage of development.

5.1.1 Origin of Project

Clovelly Park is a 91 acre [37 hectare] site that consists of commercial and industrial land uses. The land was acquired in 1980 and consisted of over 338 acres

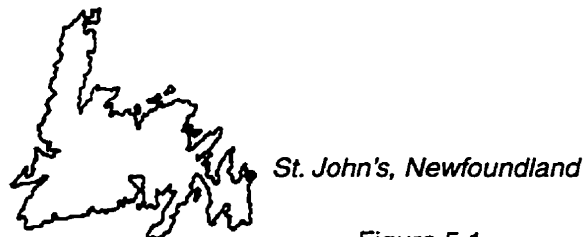


Figure 5.1

[137 hectares] in total. Originally, the zoning for the site was GI (General Industrial) and was intended for industrial uses. The Hibernia project, an \$8 billion gravity based oil platform, was anticipated to generate a demand for industrial land. Once a survey of industrial land in St. John's was conducted, it was found that the city actually had an over supply with the list of industrial parks including Donovans, St. Ann's, Octagon Pond, White Hills Industrial Park and land near the St. John's airport. Following this survey and with the realization that servicing and infrastructure costs would be too high, the Cabot Development Corporation decided on an alternative proposal. The development company applied to have the zoning for the site changed to include commercial and residential uses. The concept plan for Clovelly Park included a large residential subdivision, a commercial center, and 36 acres [15 hectares] for recreational and open space including the Clovelly Golf course.

5.1.2 Location and Urban Context

Clovelly Park is located in the north-east area of St. John's, Newfoundland and is within the city limits. (see Figure 5.2) St. John's is the political and business capital of Newfoundland and is situated on the eastern Avalon peninsula, the most affluent region in the province. The metropolitan area is a frequent destination for approximately 275,000 people who live within a one hour drive of the city. The city of just over 105,000 people boasts a modern transportation system which includes a high volume sea port, an international airport, and a growing system of interlinking highways, including the new multi-million dollar Outer Ring Road.

The placement of the Outer Ring Road was the deciding factor for the location of



Figure 5.2 Locational Map - Clovelly Park in relation to the City of St. John's

the retail park. Presently under construction, the Outer Ring Road will extend behind the development and abut an existing residential subdivision. The Outer Ring Road was designed to encircle the city and connect outlying areas.

Clovelly Park is minutes away from the St. John's airport and along Torbay Road which leads to the downtown core. It is bounded to the south by the proposed Outer Ring Road, to the east by Torbay Road, to the north by undeveloped land assigned as the golf course development, and to the east by the Clovelly Trails subdivision. This commercial site is situated in close proximity to numerous residential developments including Oakridge, King William Estates, and the thirty year old subdivision of Wedgewood Park. Immediately adjacent and within a 5 minute walking distance is the Clovelly Trails subdivision and the Ann Jeannette mobile home park. Along Torbay Road there are residences and small commercial premises. Within minutes of the retail park there are many neighbourhood commercial strip complexes and the nearest regional mall, the Avalon Mall, is located approximately 4 miles [7 kilometers] from the Clovelly site.

5.1.3 General Layout and Development

The Clovelly Park retail park currently consists of the anchor tenants, Price/Costco, Zellars, Kent Building Supplies, and Staples Office Products. The smaller tenants include two strip plazas that are only partially leased. An Irving Mainway gas station, Select Windows and Cabinets, Agriculture Canada, Cantel, and Tubecraft make up the current tenant mix.

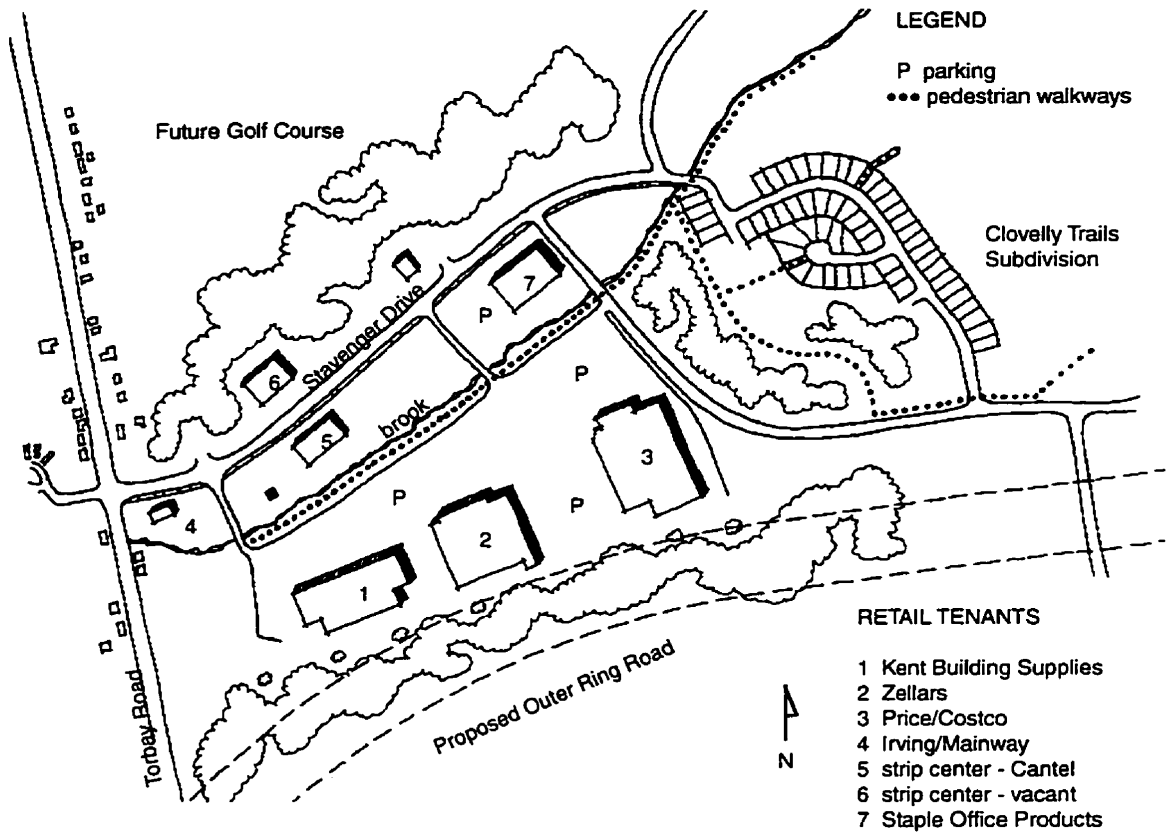


Figure 5.3 Layout Clovelly Park.

Although, still in the development stage, the Clovelly retail park is an internally focused development situated alongside a minor artery in the city, Torbay Road. The project is focused on Stavenger Drive which leads into a residential development. The project is barely visible from Torbay Road and extends in from the road less than half a mile [1 kilometer]. The entire development is dissected by a stream which runs parallel to Stavenger Drive. The development has one major entrance off Torbay Road and a secondary access through the Clovelly Trails subdivision. The three main anchor tenants can be accessed from Stavenger Drive and the development is along a linear configuration. (see Figure 5.3)

5.1.4 Future Plans

Clovelly Park is still in its initial stages of development. A telephone interview with Mr. Basil Dobbin of Cabot Development Corporation in January 1998 confirmed further retail development on the site. Mr. Dobbin stated that local tenants will be introduced in the form of strip malls and entertainment amenities are being planned for the area. Aside from the retail component of Clovelly, the golf course and residential subdivision are taking top priority.



Figure 5.4 The entrance to Clovelly Park.



Figure 5.5 Clovelly Park, St. John's, Newfoundland.



Figure 5.6 Entrance view of Clovelly Park.

5.2 AN INTRODUCTION TO BAYER'S LAKE BUSINESS PARK, HALIFAX, NOVA SCOTIA

This thesis will focus on the retail component of the Bayer's Lake Business Park in Halifax, Nova Scotia. This retail development consists of over eight big box tenants, two of which are located within the Trinity Power Center, located on the northern side of Chain Lake Drive. The Bayer's Lake Business Park contained the first big box tenants for the Atlantic Provinces.

5.2.1 Origin of Project

The retail segment of the Bayer's Lake Business Park originated with the opening of Price Club in 1992. This retail park has rapidly grown and encompasses over 1.3 million square feet [120,770 square metres] of retail space. The anchor tenants include Price/Costco, Kent Building Supplies, Wall-Mart, K-Mart, Real Atlantic Superstore, Empire Cinemas, Business Depot, Future Shop, and Sport Chek. The retail park includes a number of strip plazas holding smaller tenants such as Cleve's Sporting Goods, Roots Canada, Pets Unlimited, Value Village, The Shoe Company,



Figure 5.7

Winners, etc. Restaurants and fast food stores such as Honey Garlic Buffet, Burger King, Tim Horton's Donuts, and Harvey's, can also be found at Bayer's Lake. There are over 120 retail outlets in the entire business park that offer a variety of services which include security services, recycling, collision center, marketing, self-storage, government agencies, computer services, electrical, mechanical and construction services, and a day care center.

The Bayer's Lake Business Park is the largest retail/wholesale development in Atlantic Canada and is surrounded by the Ragged Lake, Lakeside, and Bayer's Lake industrial parks. The retail aspect of the business park developed from the opening of the Price Club on Chain Lake Drive near the exit from the Bicentennial Highway. The municipality divided up the lots and began selling them to interested tenants. The 1,800 acre [728 hectare] site is owned and operated by the Halifax Regional Municipality.

5.2.2 Location and Urban Context

The Bayer's Lake Business Park is located on the western edge of metropolitan Halifax. (see Figure 5.8) The port of Halifax is the third largest in Canada and boasts the largest population base in Atlantic Canada. The recently amalgamated municipality is the home of more than 300,000 people.

The Bayer's Lake Business Park is located within a short driving distance from the Halifax International Airport, waterfront shopping and the downtown core. The development backs onto the Bicentennial Highway (102) that leads to the Trans Canada

Highway and alongside Highway 103 to where access to Nova Scotia's South Shore is gained at the southern border of the Business Park. The Canadian National Railway transportation link runs through the development.

To the north and west of the Bayer's Lake Business Park exists a large expanse of undeveloped land which includes several lakes. The Bicentennial Highway (102) is immediately to the east and land is set aside beyond the highway for a future office campus submerged in the rapidly growing residential subdivision of Clayton Park West and the established suburbs of Clayton Park and Fairview. The southern border, just beyond Highway 103, is the Ragged Lake Industrial Park and the sur-

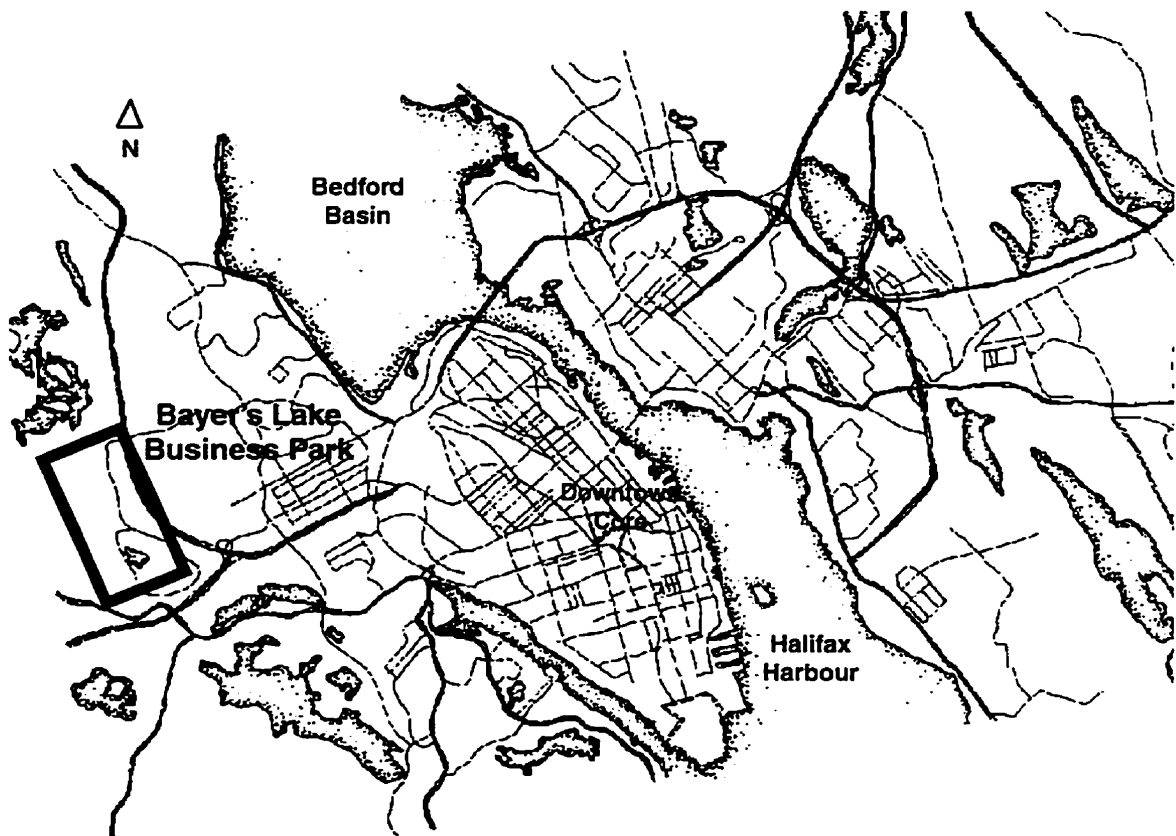


Figure 5.8 Locational Map-Bayer's Lake Business Park in relation to Halifax.

rounding watershed lands. The nearest retail center is located approximately 1.2 miles [2 kilometers] from the retail park and is in the form of neighbourhood strip complexes in Clayton Park. Three regional shopping malls, the Bayer's Road Shopping Center, the Halifax Shopping Center, and the West End Mall, are located within a 3 mile [5 kilometer] radius of the Bayer's Lake Business Park.

5.2.3 General Layout and Development

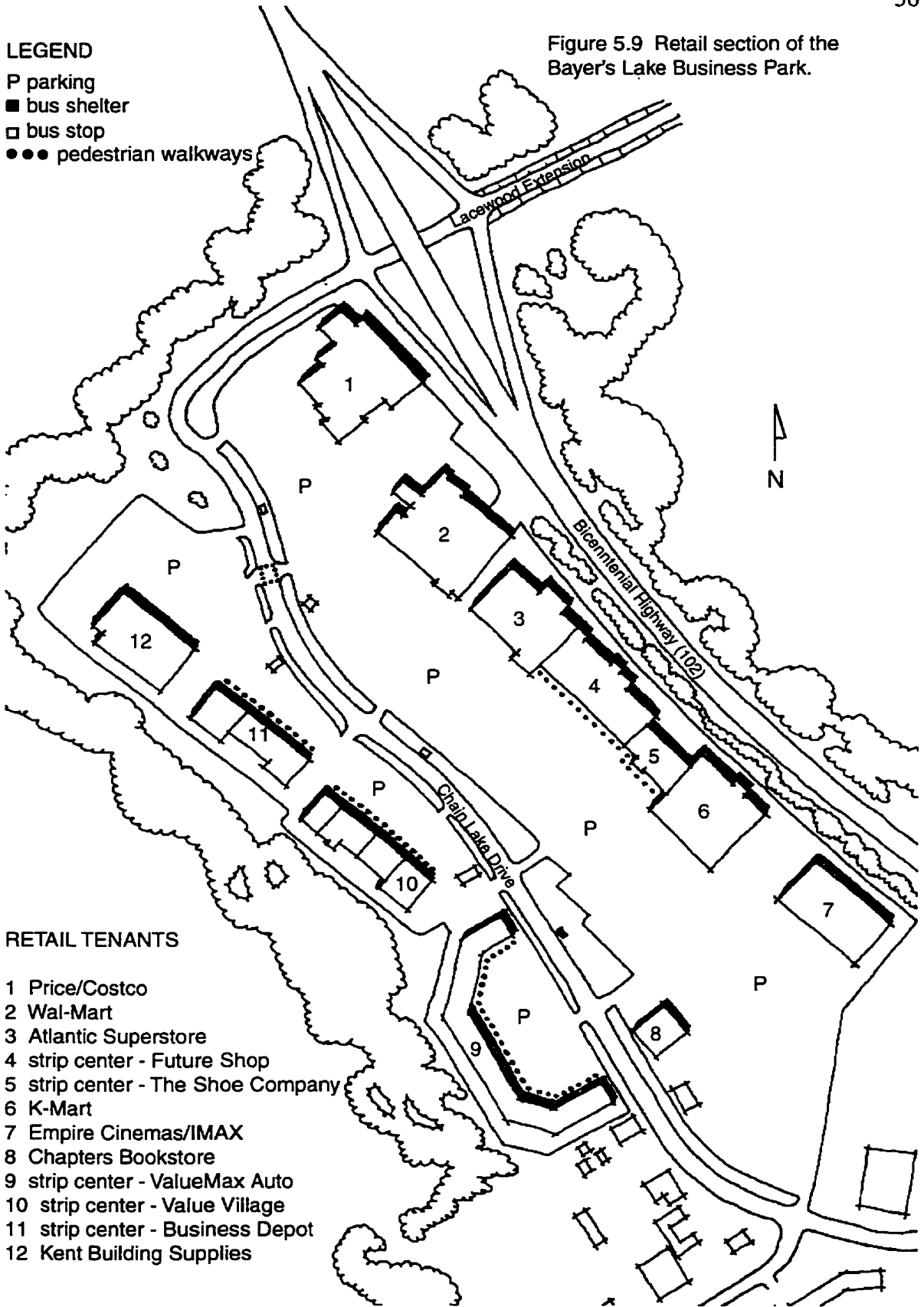
Bayer's Lake Business Park takes the form of a linear development pattern, similar to that of Clovelly Park. (see Figure 5.9) The main road, Chain Lake Drive, parallels the Bicentennial Highway, and connects to it. The road system within the retail park is similar to that of modern day subdivisions, with crescents and cul-de-sacs from the main curvilinear roadway. The concentration of retail development is near the beginning of Chain Lake Drive just off the Lacewood extension which connects the development to Clayton Park.

The development is internally focused with its back to the highway. Proximity to the highway and large building-mounted signs make the retail park visible, however, the passer-by primarily sees the rooftops of the big boxes due to severe topographic conditions of the site. There are only two vehicular accesses into the retail park, the first from the Lacewood Drive Extension which allows access to the Bicentennial Highway (102) and the second, located a mile [1.6 kilometers] from the retail development is accessed from Lakelands Boulevard which leads to Highway 103. These two accesses create a throughway for vehicles which, at busy traffic periods, cause congestion.

LEGEND

- P parking
- bus shelter
- bus stop
- pedestrian walkways

Figure 5.9 Retail section of the Bayer's Lake Business Park.



RETAIL TENANTS

- 1 Price/Costco
- 2 Wal-Mart
- 3 Atlantic Superstore
- 4 strip center - Future Shop
- 5 strip center - The Shoe Company
- 6 K-Mart
- 7 Empire Cinemas/IMAX
- 8 Chapters Bookstore
- 9 strip center - ValueMax Auto
- 10 strip center - Value Village
- 11 strip center - Business Depot
- 12 Kent Building Supplies

Located in the center of the business park is Bayer's Lake, the only significant natural feature of the site. A buffer zone exists around the lake as well as walking trails. To the east of the development is the Mainland Commons, an evolving major recreational and cultural amenity for the city.

5.2.4 Future Plans

Bayer's Lake Business Park is still maturing. Few lots are available and the newest additions to the Park are the Empire Theatres, Chapter's Bookstore, and the East Side Mario's Family Restaurant. With the opening of these evening and holiday attractions, more off-peak hour shops and amenities may bring more people to the park for alternative activities than shopping.

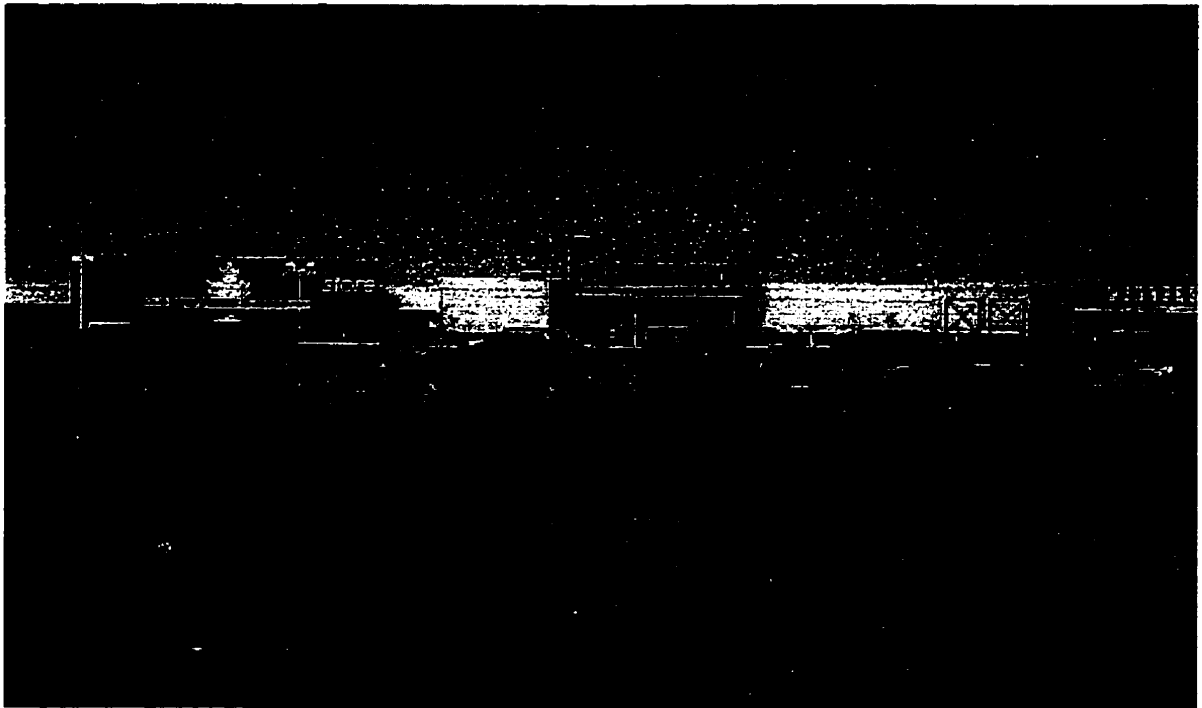


Figure 5.10 Bayer's Lake Business Park, Halifax, Nova Scotia.

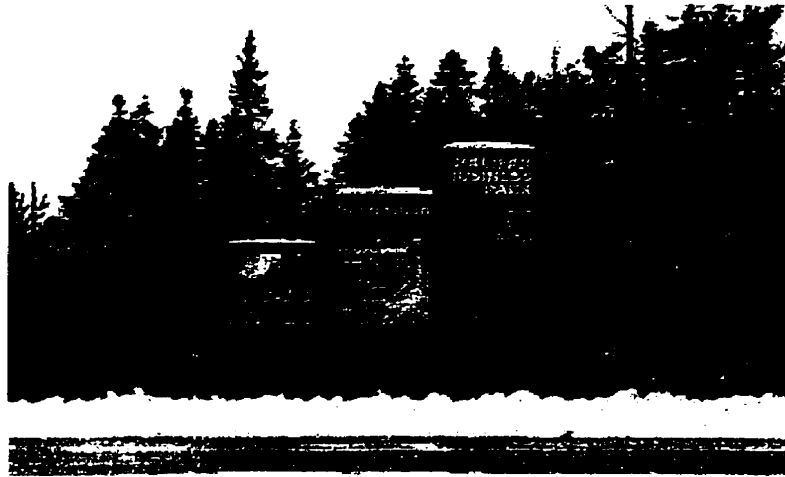


Figure 5.11 Entrance and information sign at the Bayer's Lake Business Park.

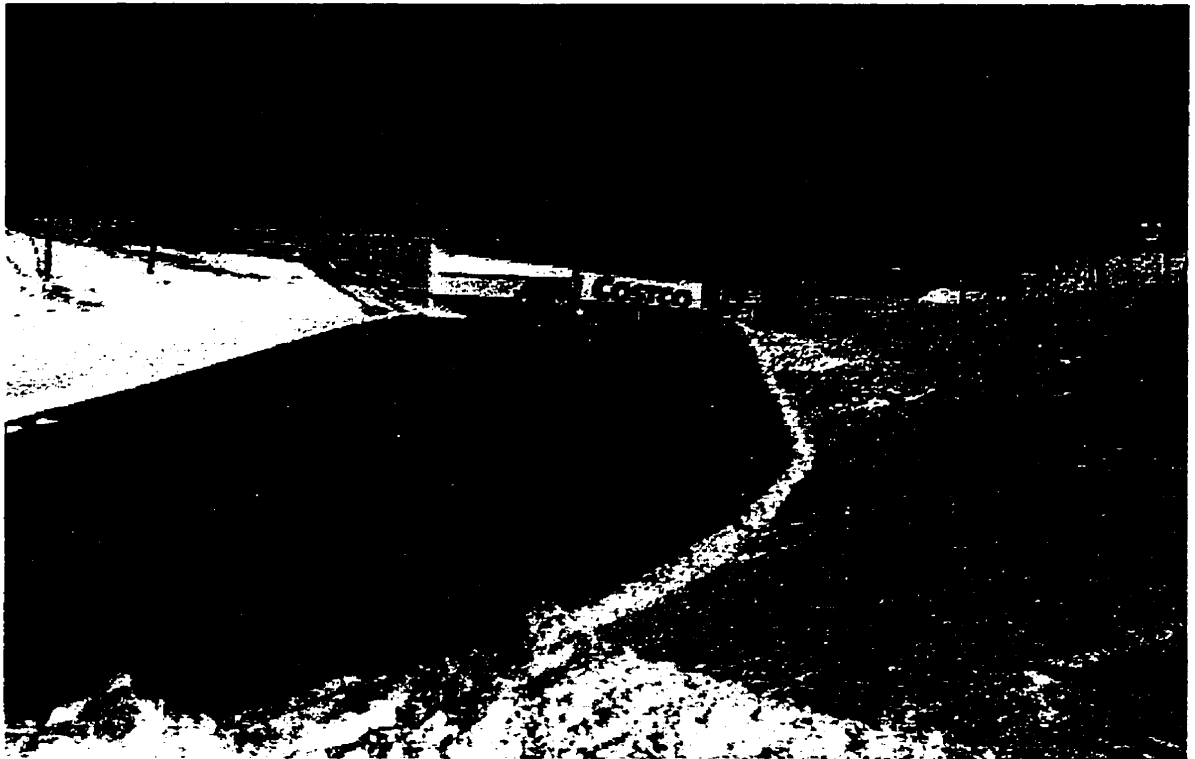


Figure 5.12 View to Price/Costco in the Bayer's Lake Business Park.

6.0 DESIGN CRITIQUE OF THE RETAIL PARKS IN ATLANTIC CANADA

“A well-designed environment often resonates in people; their physical, social/cultural, visual, emotional, and spiritual needs seem to find satisfaction. A well-designed environment should give people using it a sense of comfort, identity, and joy and must be accessible to all”.

Manjett K. Tangri (*Tangri 1998, 1*)

This chapter is a continuation of the previous introduction of the case study sites, Clovelly Park in St. John’s, Newfoundland and Bayer’s Lake Business Park in Halifax, Nova Scotia. This chapter will describe the perceived design deficiencies of these two retail parks in Atlantic Canada. Each design issue will be identified and analyzed individually. The design issues that will be identified all resonate problems of scale and accessibility of these new retail hubs. To conclude this chapter, a summary of the design problems will be listed. This list of design concerns will prompt design recommendations in a following chapter and become the tools to develop a schematic design for a new retail park site in Halifax.

6.1 DESIGN ISSUES

6.1.1 Physical Layout

The general layout of retail parks generate design issues of scale and accessibility. The main concerns are of connectivity to the surrounding land use and compact configurations.

The layout of retail parks are focused internally on large parking lots. The shops open onto these parking lots that abut each other and turn their backs to surrounding land uses and arterial roads. This scenario isolates the development and, in a sense, it becomes an island with no connections to its context. Major highways and arteries on the perimeter of these developments also add to the isolation of the retail park to its surroundings.

In the case studies examined in this thesis, the retail parks were internally focused. The anchor stores in the Bayer's Lake Business Park and Clovelly Park were organized along a main road and all focus on the large parking lots that separate them from the roadway. The stores turn their backs to the highway and neighbourhood beyond. The only link that exists is through the Lacewood Extension that passes below the Bicentennial Highway (102).

The internal focus of the stores can allow for a tighter spatial configuration. The configuration of the retail park is crucial for movement and accessibility. While many retailers want to encourage cross-shopping within the retail park, they often rely on the tenant mix rather than the spatial characteristics. A study conducted in Wales observed the shopping linkages within two retail parks that had different spatial distributions of stores. The Swansea Enterprise Zone retail park offered a wider variety of stores but at further distances apart and the Fforestfach retail park had fewer stores but in closer proximity. Both parks were predominantly car oriented. The results from the study indicated that reducing the space between buildings can be linked to increased cross-shopping. Bromley states, "...the evidence is

sufficiently strong to suggest that the more spatially integrated the retail park, the stronger the inter-store linkages are likely to be" (*Bromley 1989, 62*). Proximity alone does not constitute increased shopping linkages, but should not be overlooked as a significant factor.

Both retail parks in Atlantic Canada examined in this thesis have primarily free standing stores in a linear configuration with spaces of up to 165-330 feet [50-100 meters] between them. (see Figure 6.1) Free standing stores in linear configurations with large spaces between them give shoppers longer walking distances and

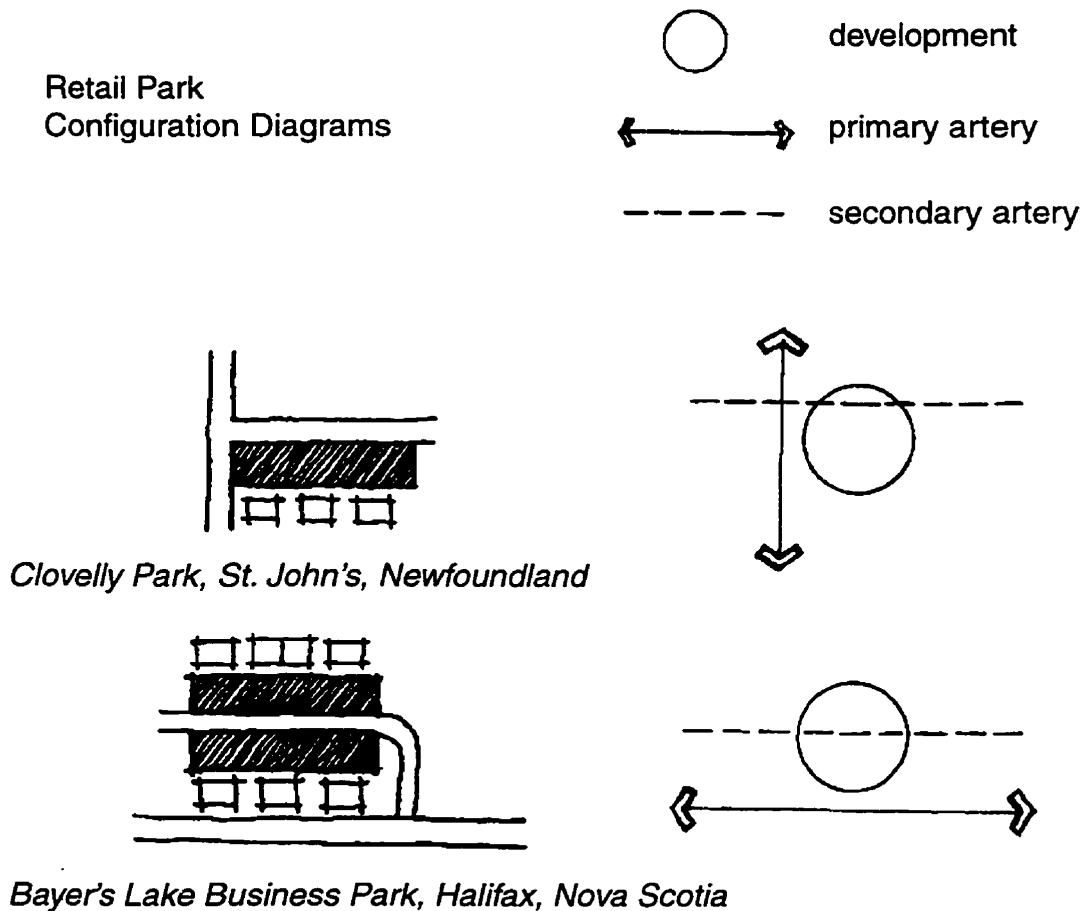


Figure 6.1

pedestrian movement is interrupted.

Retail park configurations can also have a development impact on the land. Retail parks are usually developed on raw land because of their spatial requirements. Wet lands are infilled, land is graded, and forests are plowed over. Land consumption is the most important environmental concern with this type of sprawling development. The stores are large and the land used to accommodate the car can be up to four times as much. The surrounding land of such a large development also suffers. Large surfaces of nonpermeable materials result in runoff and silting problems in surrounding land and lakes. Through planning and design, developments can use less land and reduce the environmental impact on the surrounding land.

6.1.2 Parking

Parking lots are one of the most visible elements in retail park developments and cannot be ignored. (see Figure 6.2) The parking lots, which can consume over 50 acres of land in a retail park, contribute to the overwhelming sense of scale.

In the case studies examined, the majority of parking areas were found between the front of the stores and the roadways. Both the Clovelly Park and the Bayer's Lake Business Park have large parking lots that separate the stores from the main access roads and separate some of the stores from each other.

In 1982, an Urban Land Institute report, *The Parking Requirements for Shopping Centers: Summary of Recommendations and Research Study Report*, found that



Figure 6.2 Vast parking lots in the Bayer's Lake Business Park.

parking lots are only half full for forty percent of the year (*Beaumont 1997, 33*). If the parking lots of retail parks are not fully used during eleven months of the year, then why are they a dominant feature in the retail park landscape.

Large parking lots, sizes that are found in retail parks, make a person feel overwhelmed in such an immense open space especially during non-peak shopping times when parking lots are largely empty. Aside from this issue of scale, large parking lots result in larger walking distances for customers and employees.

6.1.3 Architecture

Architectural design issues of retail parks for this section will deal with the exterior

of the structures in terms of scale and aesthetics. The architecture of retail parks is generally warehouse type, large, single story structures that are inexpensively erected. These warehouse structures of concrete block or corrugated metal panel shells are adorned with prefabricated plastic and Styrofoam forms that spell out the names of the various retailers. This method of only treating the front of the building is generally referred to as facade architecture (*O'Mara 1996, 37*). (see Figure 6.3) When only the facades are considered, three blank walls remain. Typically retail park architecture is of a monumental scale and large boxes are the most significant landmark features. People standing near these structures experience an exaggerated sense of height because of the blank walls that rise up to over 24 feet [7.3 meters] high.

Clovelly Park and Bayer's Lake Business Park have these type of blank cladded structures. Both retail parks offer little in the way of scale adjustment features. Select stores provide a structural canopy only over the entrances and leave bare walls elsewhere.

The architecture of retail parks lacks character and a sense of place. Architectural standards are lower than those of other commercial areas resulting in a shopping area that is out of scale with the shopper and unattractive in its urban context. Unfenestrated and unarticulated warehouse structures have become the frequent destination of many shoppers and tourists.

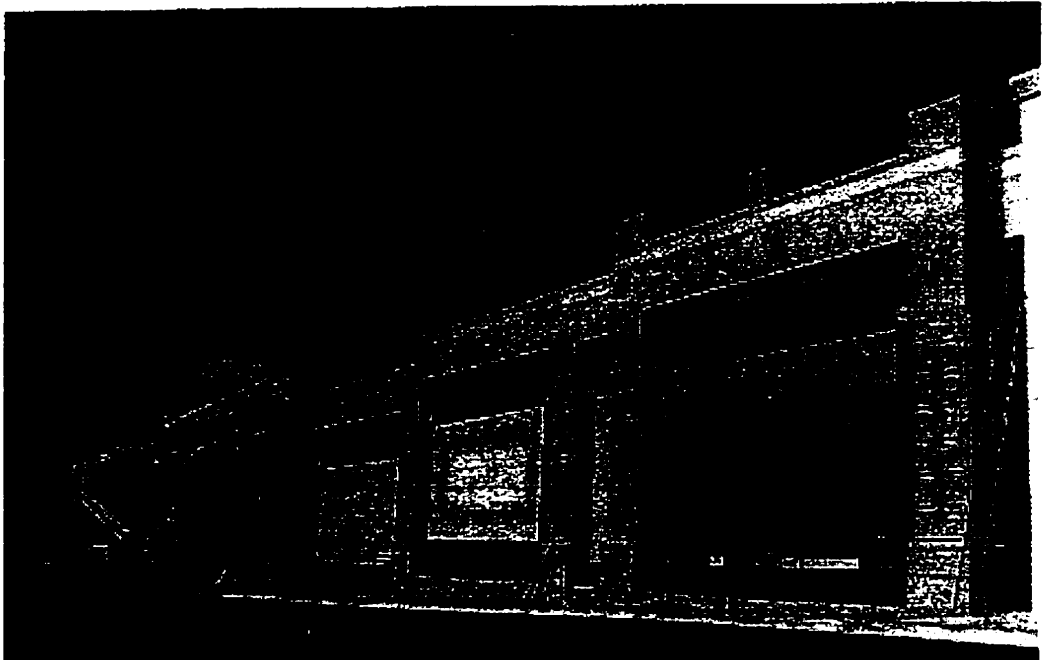


Figure 6.3 The architecture in power centers tends to be facade architecture. In the top photo, walls are being erected for a superstore at the Spectrum in Reston, Virginia. A store is almost complete in the bottom photo.

(O'Mara 1996, 37)

6.1.4 Signage

Visibility is important to retailers, especially in retail parks. Oversized signs compete for visibility and become ineffective when overcrowded. Random signs do not unite the commercial area as a whole. The scale of these signs resemble the large structures in the retail park landscape and reiterate the openness.

Currently, Clovelly Park in St. John's has few free standing signs possibly due to its early development stage. A single wooden sign marks the entrance to the residential component of the development and one anchor tenant has a large pylon sign. The Bayer's Lake development is overrun with large pylon signs, portable 'bright' signs, and wall mounted signage. An attractive and modest sign marks the entrance to the development and provides an information map. Most of the signs are crowded along the sides of the Chain Lake Drive. (see Figure 6.5)

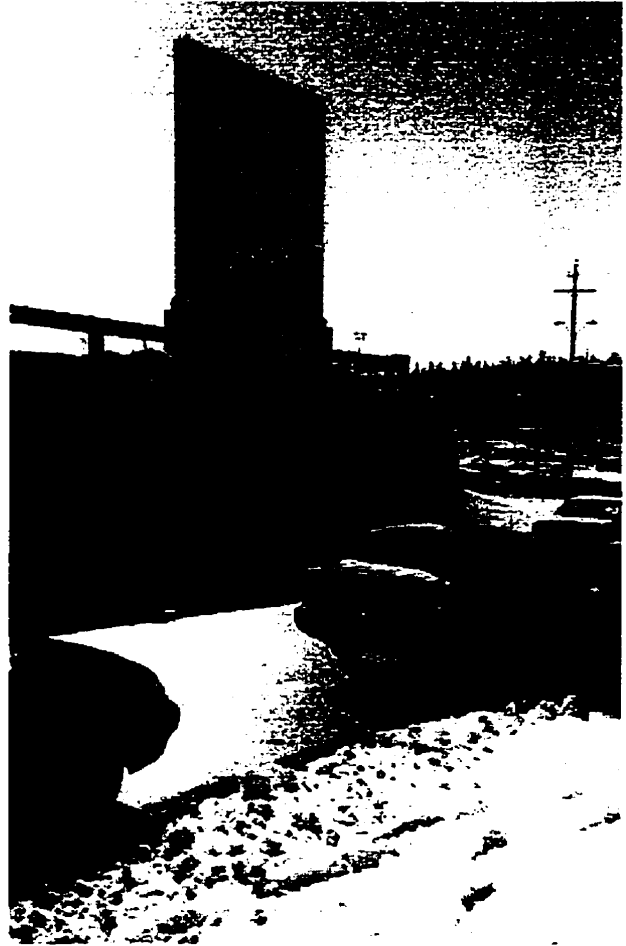


Figure 6.5 A typical pylon sign in the Bayer's Lake Business Park.

Signage is an urban design feature that can be affect a persons understanding of

an area. The size of signs also do not ensure visibility of both the driver and the pedestrian and too many unrelated signs can cause confusion.

6.1.5 Topography

When developing any site, topographical conditions have to be accounted for. This design issue can seriously affect the development and use of the retail park if not considered when choosing a location. Many developers look at common retail park issues such as the access of the site to main highways, the land price and availability, and the surrounding population base. Topography can be overlooked.

In the Bayer's Lake Business Park, several changes in elevation were dealt with by extensive blasting, levelling, and site grading. (see Figure 6.6) A cross section of



Figure 6.6 Extensive blasting and site grading has resulted in drastic elevation changes in the Bayer's Lake Business Park. This photo was taken behind Wal-Mart on Chain Lake Drive.

the Bayer's Lake Business Park reveals over a two story drop in elevation between the Bicentennial Highway (102) to the stores on the south side of Chain Lake Drive. In the context of the overall scale of the development, this change in elevation seems insignificant but in relation to the human scale it is severe.

Topographical conditions affect pedestrian movement. In Bayer's Lake, a steep elevation change puts the stores on one side of the street a story lower than the other. Topography affects the way the retail park is used. Difficulty getting from store to store due to steep inclines can discourage cross shopping by pedestrians. Visibility is also affected because stores cannot be viewed from the road, such as the case with Chain Lake Drive, where only the rooftops can be seen from the highway. Topography can affect the configuration of the development and the customer's understanding of the layout if stores cannot be seen.

Topographic conditions can also increase construction costs when extensive blasting and grading are involved. This disruption of the natural landscape harms the surrounding land by runoff and silting when natural drainage patterns are disturbed.

6.1.6 Landscaping

Landscaping, even though minimal requirements are in place, is sadly underemphasized in retail park developments. Due to the openness of a site, minimal landscaping goes unnoticed. Asphalt, grass, and minimal foreign shrub and tree species are the typical retail park landscaping features. Landscaping can provide both environmental and aesthetic benefits to retail sites.

Both Clovelly Park and the Bayer's Lake Business Park offer minimal landscaping. Areas along the edge of the roadways and between parking lots are sodded and a small number of hedges and pine trees are planted in both of these retail parks. In Clovelly Park, a stream right-of-way cuts through the development providing a band of indigenous planting though the development. An attempt was made to preserve Stick Pond Brook. The stream right of way is 100 feet [30 meters] in width which includes a trail that connects to other trails throughout the residential area. Massive parking lots abut the right of way that provides a narrow band of indigenous balsam firs, however, due to the openness of the development, many of the trees have fallen and uprooted from wind conditions. (see Figure 6.7) Minimal standards may not be sufficient to protect an attractive natural amenity.



Figure 6.7 Trees have been blown over along the trail in Clovelly Park.

6.1.7 Climate

When shopping areas require walking outside, the climate may have a significant

impact on when and how the area is used. Retail park developments, with large open parking lots, are especially susceptible to wind and rain conditions.

Nova Scotia and Newfoundland's climates reflect damp marine conditions with moderate temperatures. The Atlantic Canadian case studies do not address these climate conditions in their big box retail developments.

Every driver becomes a pedestrian at some point and in inclement weather the customer has to sprint across parking lots that can span over 500 feet in retail parks. Especially in climates where being outside may be undesirable at certain times during the year and it becomes important to consider climate protection for activities such as shopping.

6.1.8 Automobile Accessibility

Provision for the motoring consumer is top priority in retail parks and the size of the parking lots and the widths of the roads are the evidence. Because of such large concentration of shops, traffic problems can arise.

Clovelly Park for the present time is exempted from these traffic problems due to the early development stage of the project and the delay in construction of the Outer Ring Road. Bayer's Lake Business Park is now facing serious traffic problems because the current retail center was not anticipated and only two entrances exist into the development. The main commercial concentration is along Chain Lake Drive where 12 parking lot entrances branch off of the 0.6 mile [1 kilometer] roadway. These 12 exits onto one road, Chain Lake Drive, are the only exits from

the parking lots and result in frustration for drivers turning onto this busy roadway. This four lane boulevard, Chain Lake Drive, is the main throughway in the development making it the busiest road. One traffic light exists along this roadway and does little to relieve congestion problems. During peak Christmas shopping days in 1997, a traffic officer was positioned on Chain Lake Drive to aid in directing traffic and pedestrians.

A random customer interview at the Bayer's Lake Business Park was conducted in early February, 1998. Approximately 20 people were asked their opinions on the accessibility of the retail park. The results seemed to indicate, that those who travelled for more than 19 miles [30 kilometers] to the retail park felt that the location was not preferred in terms of distance travelled, but that the shopping center was accessible to them because it is immediately off the highway. Those customers who travelled within a 3 mile [5 kilometer] distance seemed to indicate that the location for them was good, but the retail park was moderately accessible or not accessible at all due to the traffic congestion and few entrances to the development. Reasons for these conditions varied and definitions of accessibility seem to be divided depending on the distances people travelled from. Those who travelled long distances to visit this area felt that because it was on the highway that it was accessible whereas those who live near the center felt that it had internal accessibility problems. Any location of a regional shopping center will not be ideal for every customer, however, the internal accessibility of the center is a design issue that can be addressed. Since only one eighth of those interviewed did not use a car to get there, accessibility in this question can be assumed with vehicular means. Those travelling by transit dealt with other accessibility issues and felt that the area was

extremely inaccessible by bus. (see Appendix A)

Retail parks attract shoppers with vehicles. At busy shopping times throughout the year parking lots as well as roads may experience congestion. Both Clovelly Park and Bayer's Lake Business Park have only two vehicular entrances into the developments, one access from the parking lots to the road and no alternative routes for large truck traffic for deliveries. These cases may be exceptions but the traffic problems stated in Bayer's Lake Business Park emphasize the importance of vehicular movement to and within retail park developments.

6.1.9 Transit

Transit accessibility in retail parks is largely ignored. Volume purchasing by their customers is the hope of many retailers and this is assumed to be done by car. By making it difficult for non-car owners to shop there, retail park tenants are excluding a segment of the population. This segment may be considered very low if transit accessibility is not made easy. Other shopping areas such as malls and downtowns are accessible by transit.

The Clovelly Park is without any form of transit access and with no plans for providing it, states St. John's Metro Transit. The Bayer's Lake Business Park does have transit accessibility but access is limited to Chain Lake Drive and a frequency of once an hour in both directions on route to Timberlea. This route has approximately 7 stops along both sides Chain Lake Drive, the area with the highest commercial concentration. (see Figure 6.8)



Figure 6.8 Customers waiting in a bus shelter along Chain Lake Drive.

The locations of the bus stops and shelters are in difficult locations for its users. Long walking distances between the bus stops on the roadside to the store fronts add to the transit users travelling time and distances. These customers have to cross large, busy parking lots to reach their final destinations. Not only are the distances long and the walk difficult in winter conditions, the topography of Bayer's Lake Business Park also sets up further obstacles. Individuals leaving bus stops are required to walk up steep inclines. (see Figure 6.9)

Bayer's Lake Business Park makes few provisions for transit users. Many stores are value oriented such as Wal-Mart, Value Village, and the Salvation Arm Thrift shop. These stores cater to lower income families who may not have vehicular

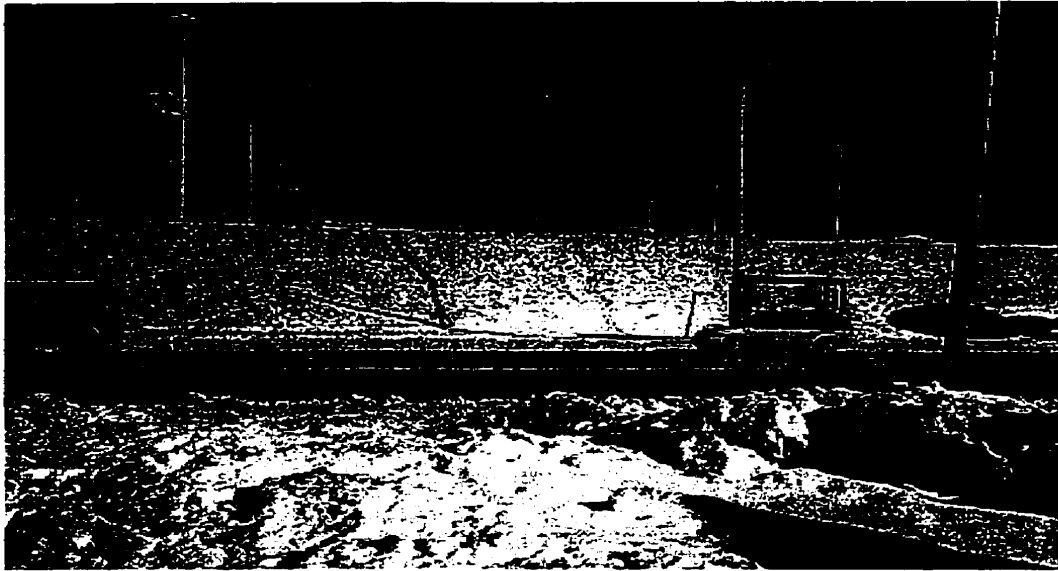


Figure 6.9 Pedestrian footpaths in the snow lead up the incline from the bus stop to the stores in the Bayer's Lake Business Park.

means of getting there and transit may be their only method. People do use transit to get to the retail park. On one bus ride 24 people got off in the retail park.

Being made aware of the transit problems in the Bayer's Lake Business Park, Halifax Metro Transit has recently approved a route modification that will locate bus stops closer to the store fronts along Chain Lake Drive. Not only the importance of vehicular access to retail parks but the ease of access by transit is important accessibility concern that can be addressed through design.

6.1.10 Pedestrians

“Even after a customer drives to a superstore project, the developments design and layout discourage walking from one store to another. The distances are short enough to walk, but there are few, if any, pedestrian amenities such as sidewalks, crosswalks, and favorable

traffic signals. Curb cuts with cars darting in and out make pedestrians feel like hounded rabbits. With trees levelled from the site, minimal landscaping, huge parking lots, and long blank walls with nothing interesting for people to look at, walking is not only dangerous but tedious. Often four, six, or even eight lanes of busy traffic separate stores, so that walking from a Kmart to Burger King across the highway is unpleasant at best and hazardous at worst”

(Beaumont 1994, 11).

Pedestrian accessibility to the retail park and internal circulation is rarely considered in the construction of retail parks. Pedestrian circulation within the shopping complex is a design concern for people who use transit, come on foot, and for those drivers who become pedestrians once they park their cars.

The retail parks in St. John's and Halifax are located in close proximity to residential areas and walking to these destinations is attempted by customers. Clovelly Park has provided a sidewalk along Stavenger Drive and walking trails that lead to the park. In Bayer's Lake, sidewalks follow along Lacewood Drive until the overpass of the Bicentennial Highway (102) is encountered. The sidewalks stop at this point and do not extend into the development. (see Figure 6.10) The Bayer's Lake Business Park is presently without sidewalks but this design issue will be addressed in the 1998-1999 capital budget for the Halifax Regional Municipality. Pedestrian connectivity will now be recognized as an important design issue of this retail park.

Walking distances in retail parks can be long but through design, distances can be shortened or appear shorter. How far will customers walk in shopping complexes and how far will they walk from their parked cars? The author of *Pedestrian Plan-*

ning and Design, John J. Friun explains "There are indications that the tolerable limit of human walking distance is more situation-related than energy-driven" (*Urban Land 1994, 9*). He goes on to say that the tolerable walking distance for "a given design situation is related to such factors as the trip purpose of the individual, the available time, and the walking environment" which can include the amount of weather protection provided, security, visual amenities along the route, and the familiarity of the center (*Urban Land 1994, 9*). Walking distances of parking lots to stores are usually within 600 feet [183 metres]

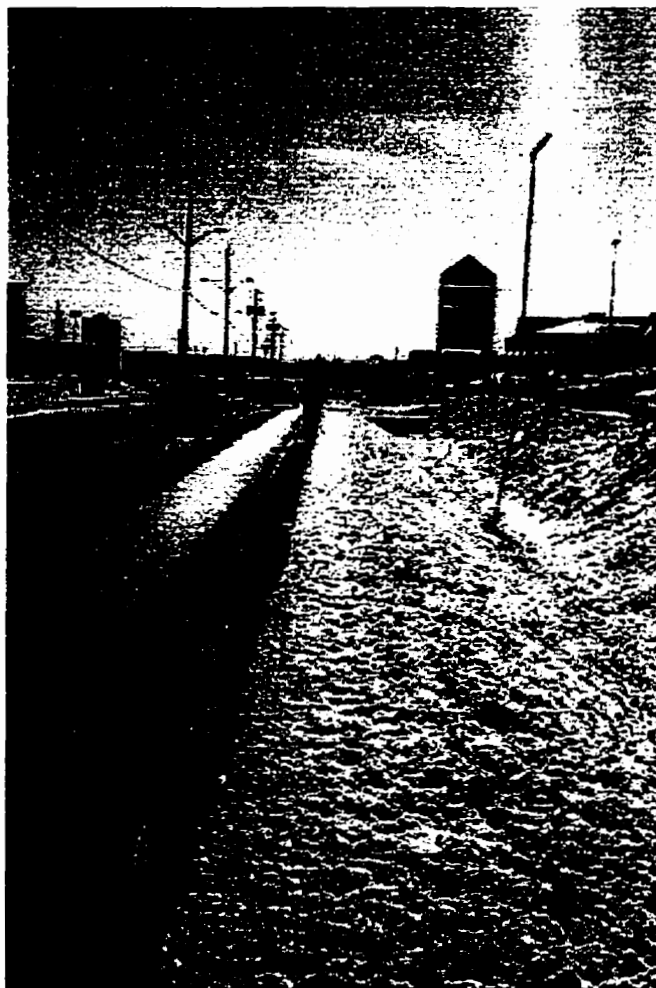


Figure 6.10 Pedestrians have to walk along the street edge because of the lack of sidewalks in the Bayer's Lake Business Park.

for employees and upwards of 2,000 feet [610 metres] for visitors of theme parks and arenas (*Urban Land 1994, 9*). Walking distances between stores in the Bayer's Lake Business Park can be over 800 feet [244 metres] and often customers cross Chain Lake Drive without cross walks and sidewalks to get to other stores.

Walking between stores can also be improved through better design and layout. In

a survey, *The Impact of Shop Type and Spatial Structure on Shopping Linkages in Retail Parks*, conducted by Rosemary Bromley and Colin Thomas in Great Britain, two retail parks of differing spatial distribution are compared. The Swansea Enterprise Zone retail park offered more stores, but at further distances apart and the Fforestfach retail park had a closer spatial distribution with fewer stores. The results of the mode of travel between the stores indicated that in the larger center only 18.1% walked and 57.5% drove and in the smaller center, the Fforestfach, 73.5% walked between stores and 32.5% drove. (see Figure 6.11) The results imply that the physical agglomeration of the retail park can affect walking. Bromley states that, "In fact, the pedestrian linkages are almost entirely confined to adjacently located stores. Clearly the distances between many of the stores, the landscaping barriers, the minimal number of safe pedestrian walkways and the lack of many shared parking facilities, combine to explain the dominance of car-borne linkages" (Bromley 1989, 64). The author goes on to state that in the survey 88% of the customers in the retail parks favored the opportunity to walk whereas driving was

Table 5 Mode of travel between stores: Swansea EZ retail park and the Fforestfach retail park

Mode of travel	Respondents visiting more than one store	
	Swansea EZ %	Fforestfach %
Walked between stores	18.1	57.5
Drove between stores	73.5	32.5
Walked between some, drove between others	8.4	10.0
	n = 725	n = 468

Figure 6.11 Results from the 'Impact of Shop Type and Spatial Structure on Shopping Linkages in Retail Parks' study conducted in Great Britain.

(Bromley 1989, 64)

considered to be more inconvenient.

A random interview conducted in Bayer's Lake Business Park in February, 1998 also questioned the mode of transportation within the center and the shopping linkages. (see Appendix A) Shoppers questioned in front of Wal-Mart in the retail park who visited more than one store claimed to have walked to the stores, but did not shop at stores across Chain Lake Drive. Those customers questioned on the opposite side who visited more than one store claimed that they drove between stores and did shop across the street. The interviewing process was random and conducted on one day, therefore definite facts cannot be ascertained. However, it may be assumed that there are deterrents for shoppers crossing Chain Lake Drive on foot. Other observations can support this statement. One traffic light is installed along Chain Lake Drive on the Price Club/Costco entrance. This traffic light provides the only crossing point for pedestrians. Sidewalks do not exist along the busy four lane boulevard. Individuals attempting to cross the road, risk their own safety while dodging cars. Steep topographic and weather conditions make travelling between both sides of the retail park hazardous. The power center consists of a row of stores, Future Shop, Winners, Cleves, Roots, Danier Leather and The Shoe Company which are connected by a continuous wide sidewalk. This linkage is a safe, but a bland walking experience that lacks pedestrian amenities.

Land use in retail parks is changing. A variety of other amenities can be found in retail parks. Clovelly Park was developed to include a residential subdivision and a golf course as well as the commercial aspect of the project. The Bayer's Lake Business Park has recently introduced a 12 screen multiplex theatre with Imax

theatre as a new entertainment feature for the centre. Aside from the industrial and commercial uses, there is a daycare center within the retail park. Alternative uses also bring a wider variety of visitors to this center, such as children, teenagers, and sports enthusiasts. Design factors need to be addressed for these groups of people, for example, children in a daycare centre should not be confined entirely indoors. Safe playgrounds, park areas, and sidewalks should be considered. Teenagers, living within walking distance from the cinemas in Bayer's Lake Business Park, may lack vehicular transportation. Employees of the retail park who would need a car to work there would also benefit from better transit and walking linkages as well as outdoor amenities. Transit and safe walking areas would be important to these groups.

Long walking distances, the lack of pedestrian infrastructure, and a lack of pedestrian linkages within and to the developments are common problems of retail parks that affect pedestrian safety, movement, and shopping habits.



Figure 6.12 Strolling from store to store is not encouraged at this power center, which is one- half a mile from end to end.

(O'Mara 1996, 21)

6.2 A SUMMARY OF THE DESIGN PROBLEMS

This section will highlight the main design problems of retail parks that have been derived from the study of the Clovelly Park in St. John's, Newfoundland and the Bayer's Lake Business Park in Halifax, Nova Scotia. Some of the problems identified are generic to most retail park developments whereas others are site specific to the case studies examined. All, however, identify real concerns that affect the use, aesthetics, scale, accessibility, and most importantly the longevity of the retail park as a strong retail form. These design issues prohibit the natural process of social interaction, which has been described in Chapter 2 as the key element for the success of the retail forms we have today.

General Layout

- isolation from surroundings
- long walking distances between stores that are free standing
- large developments have larger environmental impacts

Parking

- large parking lots mean longer walking distances
- large lots that are usually empty add to wide open space and large sense of scale

Architecture

- lacks a sense of place and identification
- fail to provide weather protection and scale reduction for pedestrians

Signage

- lack of a coherent signage scheme which leads to disorientation
- large signs disregard the human scale

Topography

- lack of integration of topography and layout
- topographic conditions can affect use, visibility, and cause confusion of the layout of the retail park
- topographic conditions can result in extensive environmental impact

Landscaping

- retail parks generally have poor landscaping features
- lack of landscaping can increase climatic impacts and environmental impacts

Climate

- weather conditions can affect pedestrian accessibility

Automobile Accessibility

- poor access within and to retail parks can cause traffic congestion during peak shopping periods

Transit

- usually a lack of transit access to retail parks
- long walking distances from transit stops to stores

Pedestrians

- lack of pedestrian connectivity to retail parks
- lack of pedestrian connectivity between stores
- lack of pedestrian infrastructure and resting places

The following chapter will further address these design concerns through an examination of two retail parks in the United States that will be used as precedents for the design recommendations that will follow. Recommendations that evolved from these American examples will follow to establish guidelines to design a new retail park for the Halifax Regional Municipality.

7.0 RETAIL PARKS IN THE UNITED STATES

The following case studies in the United States are examples of retail parks that are carefully designed for the user. The developments chosen, the Fountains on the Lake in Texas and The Scottsdale Pavilions in Arizona, are looked at in this thesis as examples of successful endeavors in retail park design and used as precedents for the design recommendations set out in this thesis. They provide an agreeable environment in which the stores are easily accessible for all shoppers. Outdoor pedestrian amenities redefine these retail parks as not only commercial centers but also social centers. The developers of both retail parks consider design an important factor in a successful shopping area that can outshine the competitors. This chapter will examine the urban design elements that distinguish these retail parks from all others and begin to set up the design recommendations to be adopted to future retail park development.

7.1 Fountains on the Lake, Houston, Texas

Retail park development is entering a new era. Development cannot keep the same pace as it has in the early 1990s and many factors including store consolidation play a large role in this slow down (*Chain Store Age 1996, 94*). Developers are looking for a competitive edge for the construction of new centers. "The centers that will be built and succeed will offer something unique, giving use to some creativity" (*Chain Store Age 1996, 94*). The Fountains on the Lake retail park developed by the Houston based Gorcap, L.L.C. is an innovative and creative retail park concept that offers shoppers more public amenities with a heightened sense of place. This

retail park concept attempts to provide an environment for people through design.

The Fountains on the Lake retail park is located in Stafford, a southwest Houston suburb in the Fort Bend County. (see Figure 7.2) Aron Gordon, the founder of Gorcap L.L.C., acquired a 220 acre [89 hectare] cotton farm southwest of Houston, Texas in 1943 and in 1995 decided to build a 162 acre

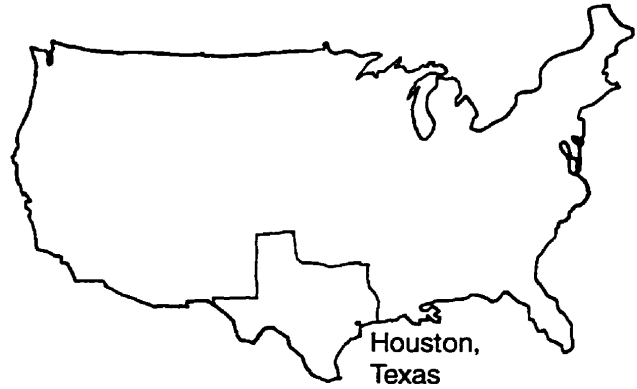


Figure 7.1

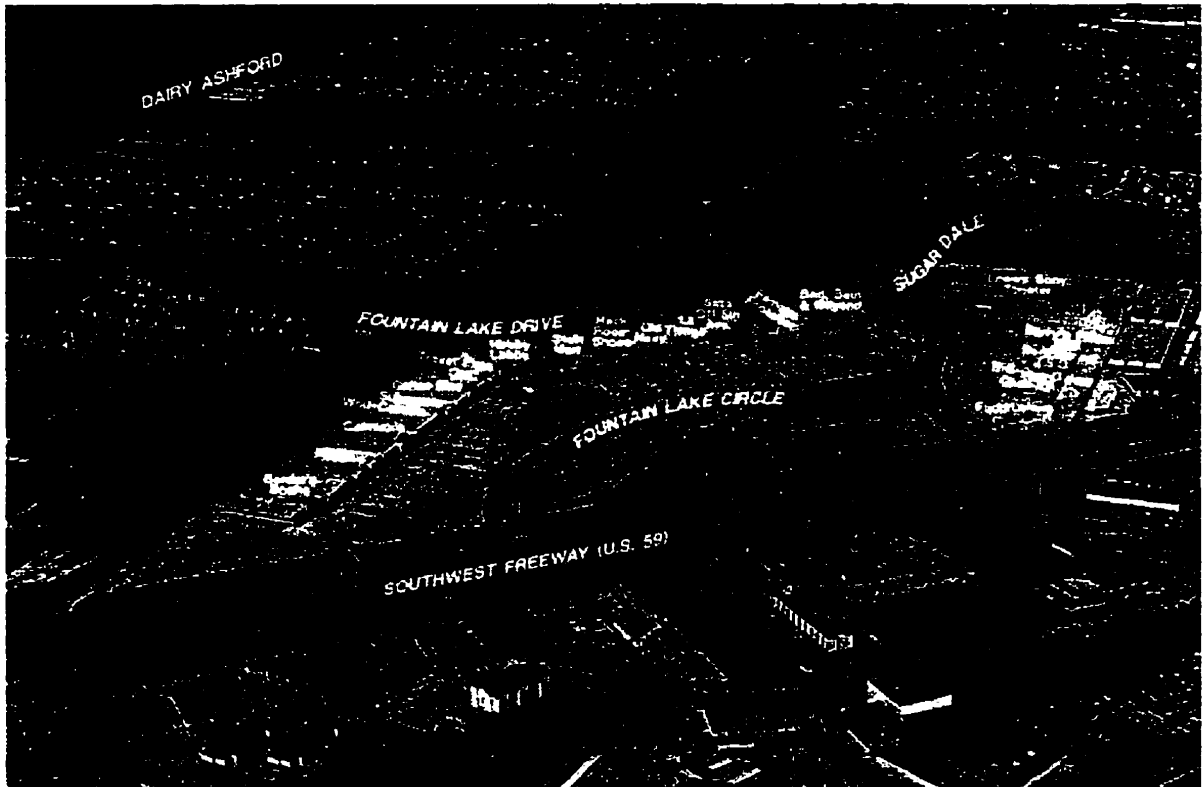


Figure 7.2 Aerial plan of Fountains on the Lake in Texas.
(pamphlet)

[66 hectare] development off the Southwest Freeway (*Bivins 1995, 2D*). The Fountains on the Lake retail park is composed of an 18 screen cinemark theatre complex, a 500,000 square foot [46,450 square metre] retail center, more than 900 apartments, and 5 restaurants around a 3 acre [1.2 hectare] lake accented by 3 fountains spraying water up to 40 feet [12 metres] into the air (*Bivins 1995, 2D*). The list of stores in the retail park included Borders Books and Music, Bed, Bath and Beyond, Office Max, Stein Mart Clothiers, Hobby Lobby, Chair King, L'il Things, Old Navy Clothing Company, Oshman's Sporting Goods, a state of the art Sony Theatre, Barbecues Galore, and Rack Room Shoes (*Demangin 1996, 58*). Along side of the apartments, a 10 acre [4 hectare] park was donated to the city of Stafford (*Bivins 1996*). Prior to its opening, the \$100 million center was 100% leased (*Chain Store Age 1996, 94*).

7.1.1 The Design

This section will examine the design features of this development.

Physical Layout and Parking

The theme for the Fountains on the Lake project is the artificial lake. (see Figure 7.3 and 7.4) This lake runs along the Southwest Freeway (U.S. 59) and spans 3 acres [1.2 hectares]. The development expands out from the lake in a concentric pattern. Five restaurants look onto the lake and are accessed by Fountain Lake Circle, the road that provides main accessibility to the parking lots. Acres of parking lots separate this road from the L-shaped row of big box stores. A service road behind the

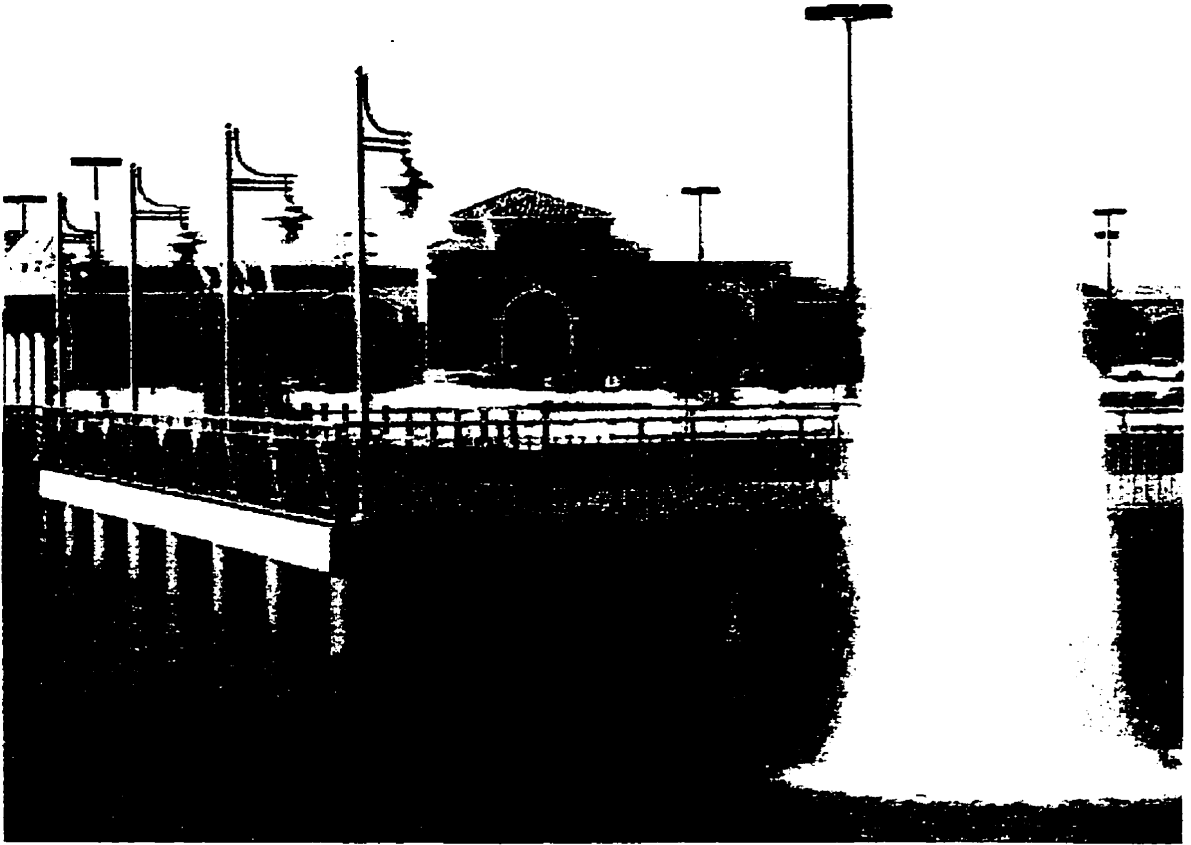


Figure 7.3 Fountains on the Lake, the artificial lake and the pedestrian boardwalk.



Figure 7.4 Fountains on the Lake, an artists rendering.

stores is accessed by Fountain Lake Drive and the northern border of the site is bounded by the Sony Theatre.

The commercially developed area of the 162 acre [66 hectare] site includes approximately 73 acres [30 hectares]. For every one acre [0.4 hectares] of building, there is 4.6 acres [1.9 hectares] devoted to parking. The retail park has parking for over 4,200 cars. Very little area is devoted to green space within the commercial development, however, a 10 acre [4 hectare] park is located near the apartment complex to the west of the retail center.

Aside from the retail component of the site, this retail park has 5 restaurants immediately on the lake, a multiplex theatre, an entertainment center, a 950 unit apartment complex and a park to the rear of the big box development.

The surrounding land use for the Fountains on the Lake development is a mixture of residential areas including high rise apartment complexes and single family dwellings, subdivisions to the west and far south of the project. Developed around a number of intersecting six lane highways the landscape immediately surrounding the site to the south is dotted with light industrial and retail uses such as car dealerships, Chevrolet and Mazda, valve and electronics manufacturers, Texas Instruments. The landscape can be described as a typical sprawling suburb divided by the major arteries that lead into the city of Houston.

The stores of this development are aligned side by side, eliminating the spaces and walking distances between them. The L-shaped row of stores results in a long walk

for customers but counteracts this with facade features to make the walk enjoyable.

Architecture

The architecture of this development has made an attempt at offering a variation on the typical big box style. The stores sizes range from the smallest of 1,125 square feet to over 50,000 square feet [105 square meters-4,645 square meters]. The facades have clearly marked entrances usually boasting a protruding portico or variations of a *pediment* (see Glossary). The style includes classical elements, but moulded in the typical southern stucco cladding of pastel colours, earth tones and terra cotta tiled roof gables. Many of the exteriors have large *fenestration* (see Glossary) allowing light to enter the structures, customers to window shop, and visitors to see the outside. The buildings have the typical flat roof of the warehouse style, but from the front the roof line is articulated with various heights, triangular pediments, and a few glass turret towers.

The heights of the buildings remain mostly at one level as the superstore format dictates. The structures have a large set back from Fountain Lake Circle and this set back accounts for the large parking lots in front of the buildings.

The building *facades* (see Glossary) are lined up alongside each other on a bent axis. This allows shoppers to pass from one store to the next without having to cross roads or parking lots. Because of this configuration, the spaces between the stores do not have to be designed and this avoids unattractive and uninviting side alleys between the buildings. Many of the stores offer a covered *arcade* (see Glos-

sary) integrated into the facades where shoppers can linger protected from inclement weather and the sun. This mostly continuous arcade follows along a broad sidewalk that connects all the stores with a total distance of 2,282 feet [696 meters].

Signage

The stores have large signs above their entrances which are legible from the roadside. In front of this lake is an ornate, sculptural sign announcing the name of the complex. Typical pylon signs are not used in this development and in keeping with the architectural style, the store signs are tasteful and considerate to their surroundings. The lake and restaurants are clearly visible from the freeway, but the retail shops are set back at a distance of up to 900 feet [274 meters] from the freeway.

Topography

The site topography and the surrounding landscape appear relatively flat. Other than the addition of the lake, very little ground work, clearing, and blasting may have been required. The flat site allows for the ease of pedestrian movement.

Landscaping

To enhance the attractiveness of the site, landscaping elements have been incorporated. The artificial lake is the most dominant landscaping feature that draws attention with its numerous fountains.

Planting has been added to the curbs that separate parking areas. Grass, berms, shrubs and deciduous trees decorate the parking lots.

Climate

Situated in Texas, it can be assumed that the area experiences a favorable climate throughout most of the year. The configuration of the buildings face a south easterly direction and can benefit from solar gain. The scattering of small trees and shrubs throughout the site offer very little in the way of wind protection. The arcades store fronts offer shelter from the rain and sun for shoppers.

Automobile and Pedestrian Accessibility

In terms of automobile circulation, there are two main entrances to the Fountains on the Lake retail park and more than three minor accesses including delivery and loading areas. Accessibility to the retail center is mostly by way of private automobile. Located in close proximity of residential subdivisions and apartment blocks, people can use alternate means to get to the site, such as walking.

Designated parking spaces are located near the stores and curb cuts are made in the sidewalk in front of the store entrances to make getting around easier for shoppers who are handicapped.

In terms of pedestrian circulation, visitors to the retail park can have walking dis-

tances up to 600 feet [183 meters] from the store fronts to parking spaces. Along the sidewalk in front of the stores, the walking distance can reach 2,282 feet [696 meters]. These walking distance are comparable to other retail park developments but an attractive, articulated shopping walkway makes these distances appear shorter.

A major feature of the Fountains on the Lake is the boardwalk that surrounds the lake and connects the restaurants. Trellised covered walkways and seating areas along the boardwalk create a pleasant enjoyable environment for pedestrians. The areas around the lake and immediately in front of the stores were obviously designed with the pedestrian in mind but are separated by a parking lot depth of 600 feet [183 meters]. The store area and the restaurant area are divided by the parking lots and customers still have to drive to different activities within the retail park such as the theatre, the restaurants and the commercial strip.

The commercial strip and the boardwalk provide some urban furniture and walkable paving surfaces. Lighting along the boardwalk creates an evening life for customers.

Conclusion

The Fountains on the Lake retail park retains the typical retail park elements of large parking lots and big boxes. Walking distances throughout the complex are still quite long but the project offers articulated facades with covered arcades and canopies to adjust the sense of scale for the visitor and make walking more pleas-

urable. Planting within the parking lot also help to reduce the sense of a vast open space. The trellises and boardwalks also emphasize the human scale of the place. The designers and developers of this project have made an attempt at humanizing this large retail concept.

The design of the Fountains on the Lake is progressive in terms of present day retail park design. This shopping complex is sensitive to the pedestrian. The arcaded walk along the store fronts and areas along the boardwalk allow for interaction amongst people which add to the richness of the shopping experience.

The concluding remarks of this chapter will bring together the unique features and benefits of both the Fountains on the Lake and the Scottsdale Pavilions retail parks.

7.2 THE SCOTTSDALE PAVILIONS, PHOENIX, ARIZONA

The Scottsdale Pavilions retail park is built on a 146 acre [59 hectare] site on previously undeveloped desert land in Arizona. This innovative retail park concept is located on the Salt River Pima-Maricopa Indian Community (SRP-MIC) and is the largest multi-tenant project located on any Indian reservation in the United States (*Urban Land Institute 1994*). The project has over 1 million square feet [92,900 square meters] of retail space that includes 16 anchor tenants and 69 shops. Other amenities include 13 acres [5 hectares] of landscaping, two lakes with water sculptures, a series of courtyards and plazas and both day and evening entertainment use (*Urban Land Institute 1994*). Major anchor tenants include Target, Home Depot, United Artists Theatre, Ross, Cost Plus Imports, Miller's Outport, Phar-Mor,

Circuit City, ZCMI II, Marshalls, and Michaels Arts and Crafts.

The \$90 million project was opened in 1989 and is located to the north-east of metro Phoenix. It is situated between the north-south Pima Freeway and Pima Road with Indian Bend Road dissecting the project into two halves. The neighbouring community of Scottsdale and the Paradise Valley area have a cumulative population of about 190,000 people within the five mile trade area.



Figure 7.5

The Vestar Development Company encountered a number of unusual obstacles in obtaining the land and correct approvals for the development because it was situated on the Indian reservation. The negotiations took three and a half years and through the mediation of all parties involved agreements were made. The company initiated an affirmative action plan for hiring Native Americans to work in the retail stores, a percentage of the gross income went to community employment, a one time contribution to a museum, and materials for the projects concrete were purchased from Native American sources (*Urban Land Institute 1994*). Unlike a traditional market radius of 360 degrees surrounding the commercial area, the Pavilions has only a 270 degree radius due to the undeveloped reserve land to one side of the project (*Urban Land Institute 1994*).

the central space on either side of the road pushing back the setback of the stores. Pima Road, which runs parallel to the development, intersects Indian Bend Road and marks the entrance to the complex with two lakes. Two delivery roads which circle the backs of the stores are accessed by Pima Road.

The land use of the site allots 24 acres [10 hectares], 16% of the total site to the built form, 60 acres [24 hectares] to parking and paved surfaces which encompasses 41%, the landscaped areas take 28 acres [11 hectares], 19% of the total site and the remaining 34 acres [14 hectares] are devoted to non-retail areas (*Urban Land Institute 1994*). For every one acre [0.4 hectares] of building there is 2.5 acres [1 hectare] devoted to parking. The Pavilions site has 6,227 surface parking spaces.

The site encompasses 112 acres [45 hectares] of retail space. The remaining 34 acres [14 hectares] make up the entertainment component of the project which includes a 11- screen multiplex theatre, a food court, a McDonald's Leaps and Bounds, and a family entertainment center called Fiddlesticks which includes miniature golf, go-carts, bumper boats/cars, batting cages, arcades, and a children's play area for birthday parties. Interspersed throughout the power center are many restaurants, cafes, coffee shops and fast food shops.

To the west of the site is the residential suburb of Scottsdale. To the south east, the land is mostly untouched desert and to the north of the development is the Pavilion Lakes Golf Course.



Figure 7.7 An aerial view of the Scottsdale Pavilions.

Architecture

Many of the retailers allowed the designers of the center flexibility with the storefronts in order to achieve a cohesive overall design. The finishes are in a collage of pastel colours, typical of southwestern architecture, mainly in stucco, Canterra stone tile and perforated metal panels. The facades are articulated by arcades, plazas, and windows, and are lined up in an arc shape on either side of the dissecting road. (see Figure 7.7) This eliminates side alley's between buildings.

The heights of the buildings are the typical one level big box heights. The buildings are set back over 500 feet [152 meters] from the road to accommodate the large parking lots.

The arcaded facades of the stores provide a continuous shelter for shoppers and linkages to outdoor plazas. The facades have clean, straight line edges and unadorned columns.

Signage

The announced entrance to the Scottsdale Pavilions is off Pima Road, but no formal face is shown to the Pima Freeway. The entrance sign is in the form of a sculptural fountain at the entrance off Pima Road. From Indian Bend Road all stores are visible even with their setbacks of over 500 feet [152 meters] because the store front signage is very large. The store front signs complement the architectural style of the buildings.

Topography

The natural landscape and topography of the site appears mostly flat and desert like conditions with artificial lakes dotting the area. Site improvement costs included excavation, grading, sewer, water, paving, sidewalks, landscaping, irrigation, and fees which totalled less than 10% of the entire development costs.

Landscaping

Landscaping was an important element in the Scottsdale Pavilions development. The Vestar Development Company wanted to “create a high-quality environment that would be attractive to the upscale Scottsdale population” (*Urban Land Institute 1995*). As the visitor enters the development from Pima Road, there is a 500 foot [152 metre] wide swath of greenery with two lakes. The entrance signage is sculp-

tural fountain which looks like a wall of water. Parking lot landscaping of palm trees, shrubs, and grass provides an agreeable environment (*Urban Land Institute 1994*). Other sculptural fountains can be found throughout the project.

Climate

Situated in Arizona, an arid climate for the site can be assumed. Parking lot landscaping can offer minimal wind protection because the trees are tall palm trees. The circular format of the plaza sits on a north-south axis with one arc of stores having southern exposure to reap benefits of solar gain. Arcade walkways and plazas offer protection from the sun.

Automobile and Pedestrian Accessibility

From Indian Bend Road, there are two formal boulevard accesses to the property, one on either side, and six smaller entrances along the same road. Neighboring a large residential community, pedestrian access to the complex is important. Cross walks are at the signalled intersection of Pima and Indian Bend Roads.

Within the 1.2 million foot [111,480 square meter] shopping center walking distances are long. The developers of the Scottsdale Pavilions have introduced a free 'Roadrunner Trolley'. This trolley transports shoppers throughout the power center with 12 stops with benches. This trolley runs every 15 minutes and brings customers back to their cars. The trolley is also wheelchair accessible and handicapped parking spaces are available.

Pedestrian amenities at the Scottsdale Pavilion makes this retail park competitive with regional malls (*Urban Land Institute 1994*). Along the continuous walkways in front of the retailers, the designers bumped out the sidewalk in places to create small pedestrian plazas. These plazas are articulated with geometrically shaped surrounding colonnades, trees and vegetation, benches, fountains and other focal points (*Urban Land Institute 1994*). The retail park provides wide smooth paved walkways surrounded by landscaping.

Benches, tables, and chairs for the sidewalk cafes add to the pedestrian friendly environment. Shoppers can walk comfortably from store to store in the arc-like configuration within arcades and along a designated walking area. Due to the scale of the development, shoppers may walk along one side of the plaza and drive across the street where they can walk in another pleasant shopping environment. The trolley can also transport pedestrians.

Conclusion

The Scottsdale Pavilions retail park is an anomaly in retail park design. The circular configuration provides a continuous link in an agreeable pedestrian environment. The colonnaded plazas, arcaded walkways, and the trees interspersed in the parking lots help to reduce the overwhelming sense of scale for the shopper. The outdoor plazas provide areas for pedestrians to meet and rest (*Urban Land Institute 1994*). The family entertainment area and the outdoor cafes allow for people to congregate. The Scottsdale Pavilions retail park also promotes monthly and weekly

activities such as bicycle air shows, radio controlled car races, and a variety of music, recreation and community events. The Vestar Development Company attempts to develop projects that are “sensitive to the community, responsive to the needs of the consumer, attentive to the goals of the tenant and designed to have consequences in the future” (*Monitor Advertising Supplement 1990, 72*).

Walking distanced to the furthest parking spaces are still long. Also, crossing Indian Bend Road, as a shopper, may be difficult. The Roadrunner Trolley helps to elevate this difficulty.

Summary

This chapter explored two American retail parks which deal with scale and accessibility issues successfully. They retain traditional retail park features such as large parking lots and superstore tenants but address circulation and size concerns that appeared in Chapter 6.

Unique features that address scale and accessibility in The Fountains on the Lake retail park are:

- Layout - linear; stores facades are lined up side by side like street frontage
- Pedestrian Amenities - trellised walkways and seating areas
 - arcaded store fronts
- Landscaping - artificial lake, fountains, and vegetation

Unique features that address scale and accessibility in The Scottsdale Pavilions retail park are:

- Layout - circular; store facades are lined up side by side like street frontage
- Pedestrian Amenities - pedestrian plazas along walkway
 - arcaded store fronts
 - Trolley
- Landscaping - artificial lakes, vegetation dispersed throughout parking lots

The following chapter will provide design recommendations for future retail park development based on innovative design solutions addressed in the Fountains on the Lake and the Scottsdale Pavilions retail parks.

CHAPTER 8 DESIGN RECOMMENDATIONS

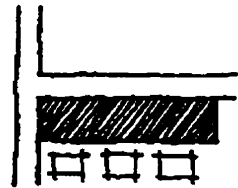
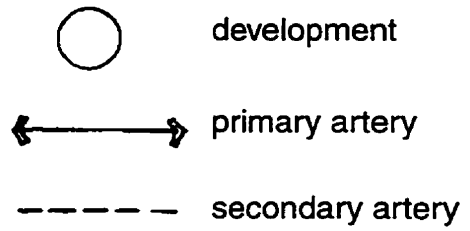
This chapter will provide design recommendations for future retail park development. These recommendations will be in response to the design problems analyzed in Chapter 6 and will be based on the innovative designs of the Fountains on the Lake and the Scottsdale Pavilions retail parks.

8.1 Physical Layout

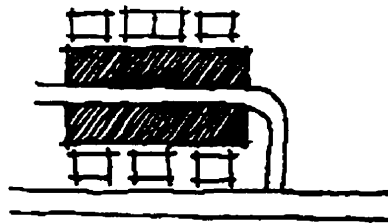
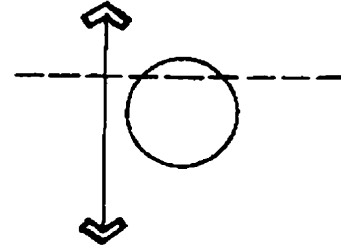
The Fountains on the Lake retail park is in an arc configuration and the orientation of the stores are centrally focused. The layout of the stores in the Scottsdale Pavilion project are in a circular pattern. The array of stores in the American case studies have a continuous row of facades side by side. "Some (retail parks) have adopted a U-shaped design to make the distance between the various stores from the center seem less" (*Doocey 1992, 76*). (see Figure 8.1) This type of arrangement allows for easier access to all the store fronts for pedestrians but isolates these developments from the communities in which they are situated.

Connections between the retail parks and their surrounding land uses, residential and commercial, will aid in strengthening the integration of the retail park with surrounding activity. These connections can be made through pedestrian paths, stores along the connector roads, and more entrances to the retail park. Kevin Lynch states that paths can be used for 'sewing' two areas together and that motion penetration can break the barriers between the edges of regions. (*Lynch 1960, 100*). Stores that have long distances between them, such as the Bayer's Lake Business

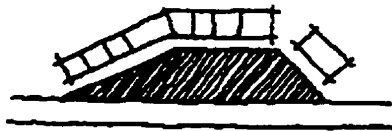
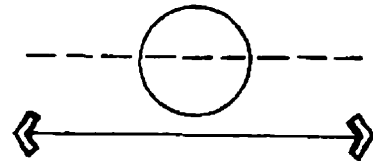
Retail Park
Configuration Diagrams



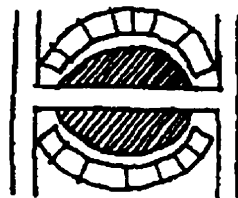
Clovelly Park, St. John's, Newfoundland



Bayer's Lake Business Park, Halifax, Nova Scotia



Fountains on the Lake, Houston, Texas



Scottsdale Pavilions, Phoenix, Arizona

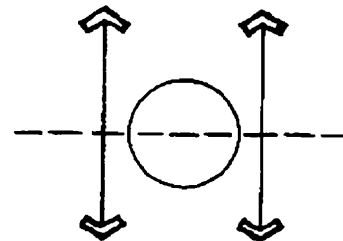


Figure 8.1

Park, discourage cross shopping, especially by pedestrians. The arrangement of store fronts side by side allow for easier pedestrian movement. A spatially compact layout allows for an unfaltering flow of pedestrian movement, shorter walking distances, and reduces the amount of land consumed.

A design goal of retail park development should be to limit the environmental impact as much as possible. This can be done through compact layouts, reduction of large nonpermeable surfaces, and by including more vegetation and natural areas throughout the site to aid in water absorption.

Recommendation: *A retail park should have a compact layout and connections to the surroundings.*

8.2 Parking

Although innovative designs, the American case studies still have large parking lots that separate the stores from the roads and result in long walking distances.

The recommended changes to parking lots relate to scale and accessibility for the shoppers. The proximity of parking spaces to the entrances of stores is important to maintain. Shorter walking distances from vehicles and the shopper's perceived feeling of convenient parking are important to the tenants of the retail parks. Since parking lot usage is maximized only during peak shopping periods, such as Christmas, alternative parking arrangements should be made. Parking lots can be divided into smaller lots or tiered and have adequate planting mass, such as large

trees and other landscaping features, to reduce walking distances and the open space. Kiosks or mini shops along circulation routes could not only help the scale adjustment, but also add flavour to a retail park design.

Stacked parking, although often considered unsightly, is less land consumptive and a more expensive approach. One retail park, the Pentagon Center in Arlington Virginia, provides roof top parking for its customers. (see Figure 8.2) This parking alternative is less land consumptive but requires redesigning the structures to accommodate the new loads.

Recommendation: *Parking requirements should be divided or tiered to create smaller lots.*



Figure 8.2 Roof top parking, Pentagon Center in Arlington, Virginia.
(pamphlet)

8.3 Architecture

The Fountains on the Lake retail park has an articulated roofline, earth tone and pastel coloured cladding, and glass turret towers. The Scottsdale Pavilions retail park has a southwestern appearance with stone tiles and pastel colours. The architecture of these American developments provides uncharacteristic aesthetics of retail parks but reflect local architectural style.

The Fountains on the Lake and the Scottsdale Pavilions have fewer blank walls because stores are side by side and the facades have continuous canopies and arcades that provide weather protection and scale adjustment. (see Figures 8.3 and 8.4) The architecture of these retail parks offer interesting features that address functional as well as aesthetic issues.

Architectural recommendations can range from minor alterations to major costly changes. For the purpose of this thesis, minor changes, such as glazing and overhangs, will be stressed. Requirements should be set for the facade design and any other visible areas as bare minimums. Simply adding more windows could aid in the adaptability for future uses. Glazing on facades exposes internal action to add to a shopping centers vibrancy. Wall treatments and overhangs on structures can help reduce an overwhelming sense of scale. Overhangs, awnings, and canopies are inexpensive methods to decorate blank walls and provide a customer with sense of comfort and climate protection. Also, municipal guidelines should promote local character in commercial areas and the use of local materials in any new retail construction.

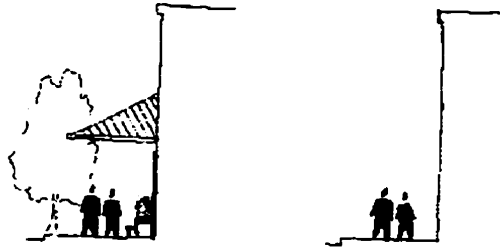


Figure 8.3 Scale adjustment treatments on superstore walls to reduce sense of height.

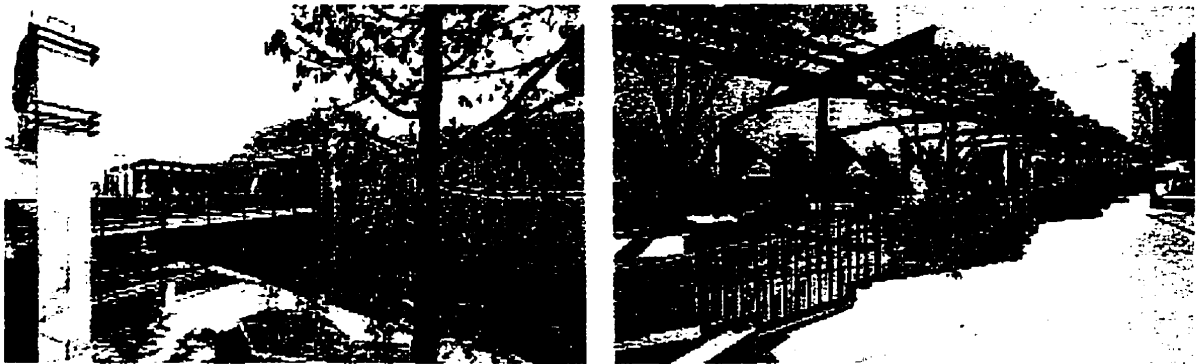


Figure 8.4 Scale adjustment treatments on the rear of a Target store in Pasadena, California provides interesting walkways.

(Beaumont 1997, 14)



Figure 8.5 The focal point of Woodfield Village Green power center is a 60-foot clock tower (rear

(O'Mara 1996, 63)

Where funding, design standards, and interest exist, anomalies can be found. The Woodfield Village Green retail park in Schaumburg, Illinois, displays high architectural standards for retail parks. (see Figure 8.5) The design concept resembles an old midwestern village street that features articulated roof lines and setbacks, colourful state and masonry facades, dormer windows and a 60 foot [18.2 meter] clock tower (O'Mara 1996, 65).

Recommendation: *Minimal architectural features should include facade treatment for scale reduction and weather protection. These features should reflect local character.*

8.4 Signage

The American case studies have attractive entrance signs marking the presence of the development and all other signs are confined to the facades of the stores. These developments have a modest sign schemes which are visible from a distance but do not overwhelm the shopper.

Visibility and legibility are both important issues of signage in retail parks. The observer must be able to see signs from a distance and be able to clearly understand where stores are located and how to get to them. The shopper needs a clear and direct understanding of how the development is organized which can be accomplished through an overall signage scheme.

The human scale is important to maintain through the use of signs and an overall signage scheme for the retail park should be developed to orientate and direct the customer. Signs should clearly mark entrance and exit points to the development and unify the shopping area as a whole.

Recommendation: *Signs should be smaller and similar in design to unify the complex.*

8.5 Topography

If possible, planning a complex within the constraints of the topography should be the goal, hence disturbing the least amount of land possible. The topographic conditions should play a significant role early in the development stage when a site is being chosen. By doing this, other design and construction problems can be avoided. The topography of the site and the design of the retail park should be integrated. This will result in a less costly development and one that is sensitive to the natural landscape.

Recommendation: *Topographic conditions should be integrated with the design.*

8.6 Landscaping

The Fountains on the Lake and Scottsdale Pavilions retail parks use landscaping as an aesthetic asset. Fountains, artificial lakes, palm trees, sculpture, flowers and hedges adorn these retail areas.

Landscaping should be more widely used in retail parks for environmental and aesthetic reasons. In terms of scale, trees and shrubs can have a large impact on sensory perceptions. Landscaping elements such as sculpture and fountains could also enhance the outdoor space. Whatever form of landscaping is chosen, maintenance is important. Landscaping plans that encourage indigenous plant use is another possibility for cooler climates. Indigenous ground cover would reduce main maintenance such as mowing and the use of pesticides and fertilizers should be discouraged. Wherever possible, original planting should be maintained on the site which would require a selective cutting process prior to construction. A retail development landscaped to represent indigenous Nova Scotia, for example, would create an uncharacteristic but unique setting.

As an environmental benefit, a sufficient planting mass can control wind speed by forming buffers or barriers that resist wind flow. Trees and shrubs also act as filters by obstructing debris. Trees reduce the effects of solar radiation and control temperature. Plants need water and can be an asset where precipitation levels and run off volumes from

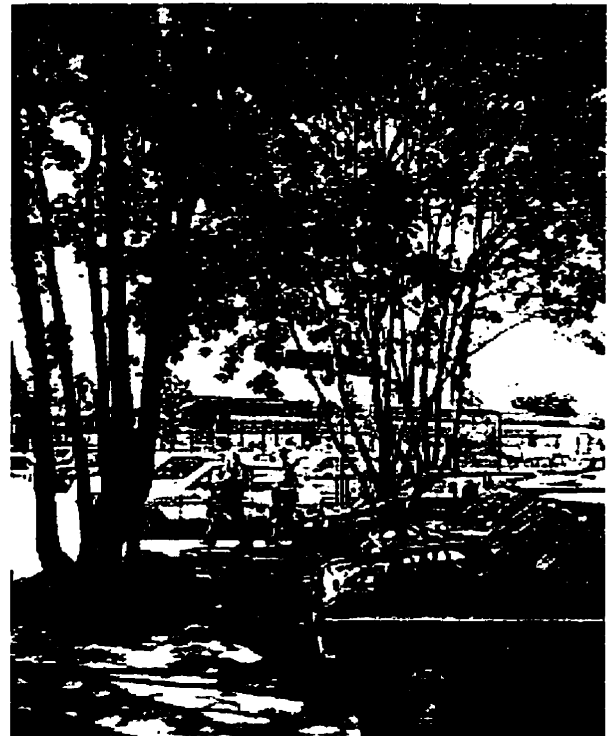


Figure 8.6 New planting and the retention of existing trees are used to make a modern store harmonize with its surroundings at Sainsbury's Green Park Station, Bath. (Mitchell 1989, 26)

large parking lots are high.

Vegetation can also prevent soil erosion. Air purification is another asset of trees and plants because they can filter out up to 75 percent of particulate air pollutants like fumes, pollen, and smoke (*Rubenstein 1992, 98*).

Landscaping in the form of planting can add aesthetic quality to commercial areas. Trees can help define outdoor spaces and relate to the human scale. (see Figure 8.6) Vegetation can hide undesirable views and divide large parking spaces. An overall planting scheme throughout a retail park can enhance the coherence and continuity of the design. Plants also play a significant role in affecting people's moods (*Rubenstein 1992, 102*).

Vegetation and landscaping amenities can add aesthetic and environmental qualities to any commercial area. Planting trees along stores and walkways can help reduce the sense of scale for the pedestrian. An overall planting scheme for a retail park will unify the complex and aid in a general sense of scale reduction throughout the development.

Recommendation: *Retail parks should have more landscaping features for aesthetic and environmental purposes.*

8.7 Climate

The Fountains on the Lake and the Scottsdale Pavilions retail parks provide areas

that are sheltered from the rain and sun.

Precipitation, wind, and snowfall can affect shopping habits. Every driver becomes a pedestrian at some point and in inclement weather the customer has to sprint across parking lots than can span over 500 feet. When landscaping and awnings on buildings are not enough to make shopping pleasant, covered walkways can be placed at important routes. (see Figure 8.7) Climatic considerations should be integrated into the design.



Figure 8.7 Covered walkways along the parking lots protect customers from the climate.

(Town and Country Planning, 1991, 204)

Recommendation: *Architectural details and parking lot structures should be incorporated for weather protection.*

8.8 Automobile Accessibility

“Access is a prerequisite to the usefulness of any block of space. Without the ability to enter, leave, and move within it, to receive and transmit information or goods, space is of no value, however vast or rich in resources” *(Lynch 1971, 118)*. Retail parks have accessibility problems which include access for vehicles, transit, and pedestrians.

Accessibility problems become exaggerated and noticed when traffic congestion occurs. The former maybe a symptom of the latter, but in designing a center that attracts the public, accessibility needs to be considered. Retail park developments should offer more than two entrances and exits into the area. Parking lots should also have more than one access onto more than one road. People perceive accessibility in terms of how many parking spaces there are but accessibility issues include access to and from the highways, access to and from the surrounding neighbourhoods, access in the internal layout of the development, and access for non-vehicle users to be discussed in the following sections. Other alternatives, such as transit accessibility in retail parks may be a possible solution to vehicular accessibility problems.

Recommendation: *Retail parks should have more than two vehicular accesses.*

8.9 Transit

In terms of accessibility, transit should be an integral part of the retail park design. Access to the shopping complex should be important to the tenants of the center. Bus stops should be located closer to store entrances with walkways provided to get to them. Bus lanes should be provided near the stores and bus trips and routes should be adequate, possibly comparable to other regional shopping centers. The American Department Transport's dictum states that for any shopping center access by bus should be at least as good as private car (*Roberts 1991, 205*).

Recommendation: *Retail parks should be accessible by transit and bus stops*

should be located in front of the stores.

8.10 Pedestrians

Many retail parks are located away from residential areas, but some are starting to incorporate residential components in their developments such as Fountains on the Lake in Texas.

Retail parks should be safely accessible on foot if located near residential communities. The most important design consideration is to provide safe and continuous walking linkages between the stores of the retail park. Walking instead of driving between stores should be encouraged through carefully designed configuration of the retail park with strong pedestrian connections. Space designation for cars and pedestrians should be separated to ensure safety and easier movement. (see Figure 8.8)



Figure 8.8 The best of all shopping modes?

(Roberts 1991, 205)

Space separation between vehicles and pedestrians is one of the methods to improve internal circulation. Harvey Rubenstein lists the main objectives to improving pedestrian circulation are: safety, security, convenience, continuity, coherence, comfort, and aesthetics *(Rubenstein 1992, 35)*.

Recommendation: *Pedestrian linkages to retail parks and between the stores should be made.*

These recommendations will be applied to a site in the following chapter to aid in designing a new retail park concept that meets these new standards.

9.0 DESIGN PROPOSAL

The focus of this chapter is on implementing results from the analysis from the previous chapters to create a new retail park design for a proposed site. The site that is being proposed by the Business Parks Office of the Halifax Regional Municipality (HRM) is located in the former City of Dartmouth. (see Figure 9.1) The nature of this assignment is to take an existing piece of land, provided by the municipality, and incorporate the design recommendations from the previous chapter. The site will be looked at in terms of the standard design considerations for retail parks and then from the design suggestions made by this thesis. The reader must be aware that this chapter is solely an exercise in applying design criteria to an existing site. If this project were to be implemented, extensive detailed studies, such as traffic impact, environmental assessment, infrastructure assessment, cost/benefit analysis etc. of the site would need to be conducted. For the purpose of this thesis, the design recommendations made in the previous chapter will be taken to the next level of implementation, a schematic design. This is a preliminary design concept that is used to demonstrate the integration of elements of standard retail park design, established by the background information, with the recommendations in this thesis to the existing site conditions.

9.1 SITE DESCRIPTION

The following section will begin to introduce the reader with the proposed site. The site in question is located on Burnside Drive between the City of Lakes Business Park and the Burnside Industrial Park in the northeast quadrant of an area of

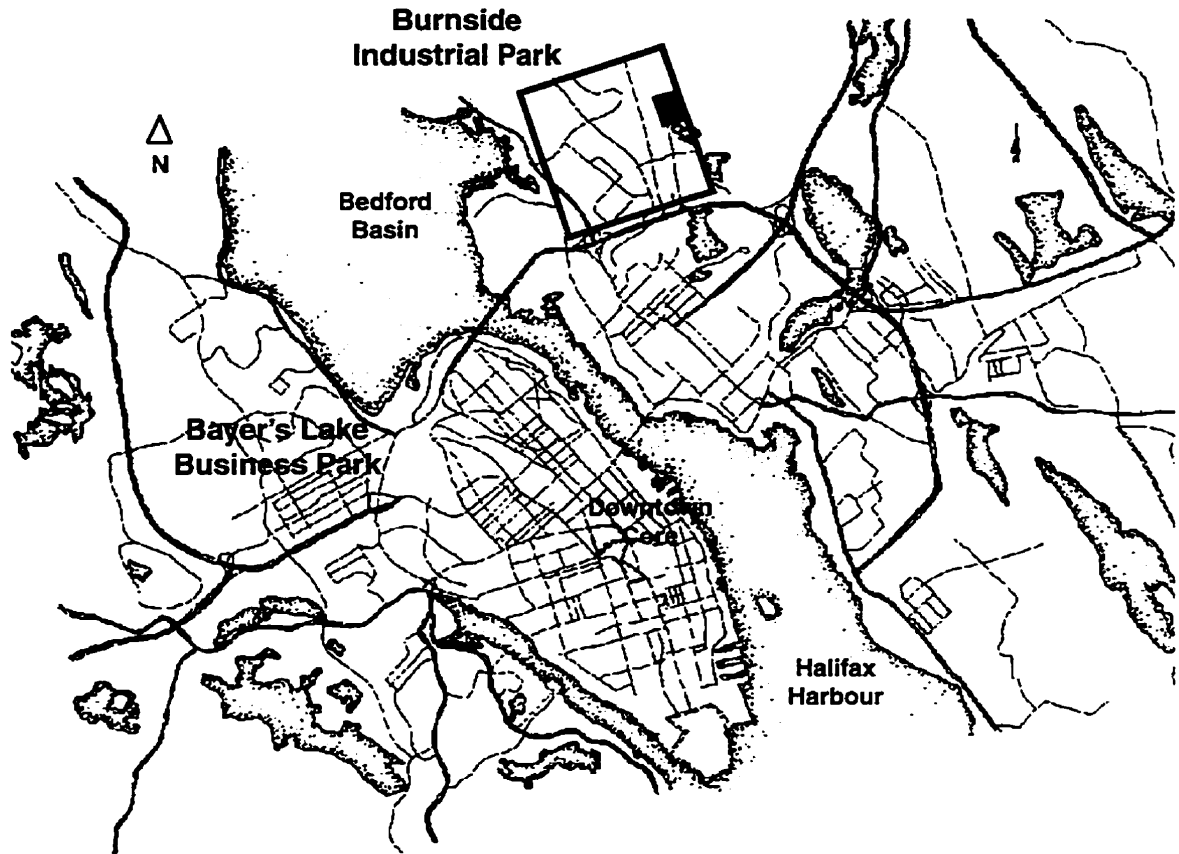


Figure 9.1 Burnside Industrial Park, Halifax, Nova Scotia.

approximately 3,500 acres [1,416.5 hectares] owned by the Halifax Regional Municipality. The four divisions of this section will provide a brief overview of the site and its context to establish a backdrop for the design issues and the schematic design proposal that will follow.

9.1.1 History of Burnside

Burnside Industrial Park is located in the former City of Dartmouth which now falls under the jurisdiction of the Halifax Regional Municipality. It is the largest industrial park of its kind in Atlantic Canada (*Côté 1994, 21*). Burnside encompasses over

1,200 acres [485.6 hectares] of land and is situated north of downtown Dartmouth (*Greater Halifax Business Parks Profile 1997*). The industrial park has immediate access to rail and highway linkages and is closely located to the A. Murray MacDonald Bridge that links Dartmouth to the Halifax peninsula and the metropolitan core. At the southern boundary of the Park is the Circumferential Highway (111), to the west is Windmill Road alongside Wright's Cove, and beyond the northern border exists scattered development and undeveloped land. Burnside Industrial Park was initiated in the late 1960s at a time when the Canadian government was encouraging industrial development in the region (*Côté 1994, 21*). Land was purchased from the O'Toole and Lynch estates, divided into 11 phases for the Burnside Industrial Park and 3 phases for the City of Lakes Business Park, and then serviced and prepared for sale (*Côté 1994, 21*). Since the mid-1980s, the development has expanded eastward beyond Burnside Drive encompassing approximately 450 acres [182 hectares] of land which formed the beginnings of the City of Lakes Business Park, an office and commercial development (*City of Lakes Business Park Development Plan 1989*).

The reconfiguring of the municipalities within the former County of Halifax into the Halifax Regional Municipality has left the Burnside Industrial Park and the City of Lakes Business Park under this new jurisdiction. The future of both developments now reside with the Business Parks Office of HRM. This department manages industrial and business park development within the municipality.

9.1.2 Location of the Site

The site is situated east of Burnside Drive, a major access route into the development which stems from the Circumferential Highway. The site consists of approximately 1,990,000 square feet [184,871 square metres] or 45 acres [18 hectares]. (see Figure 9.2 and 9.3) The south of the site is bordered by the Spectacle Lake watershed, to the north are Troop and Williams Avenues, and undeveloped land to the east is possible for expansion.

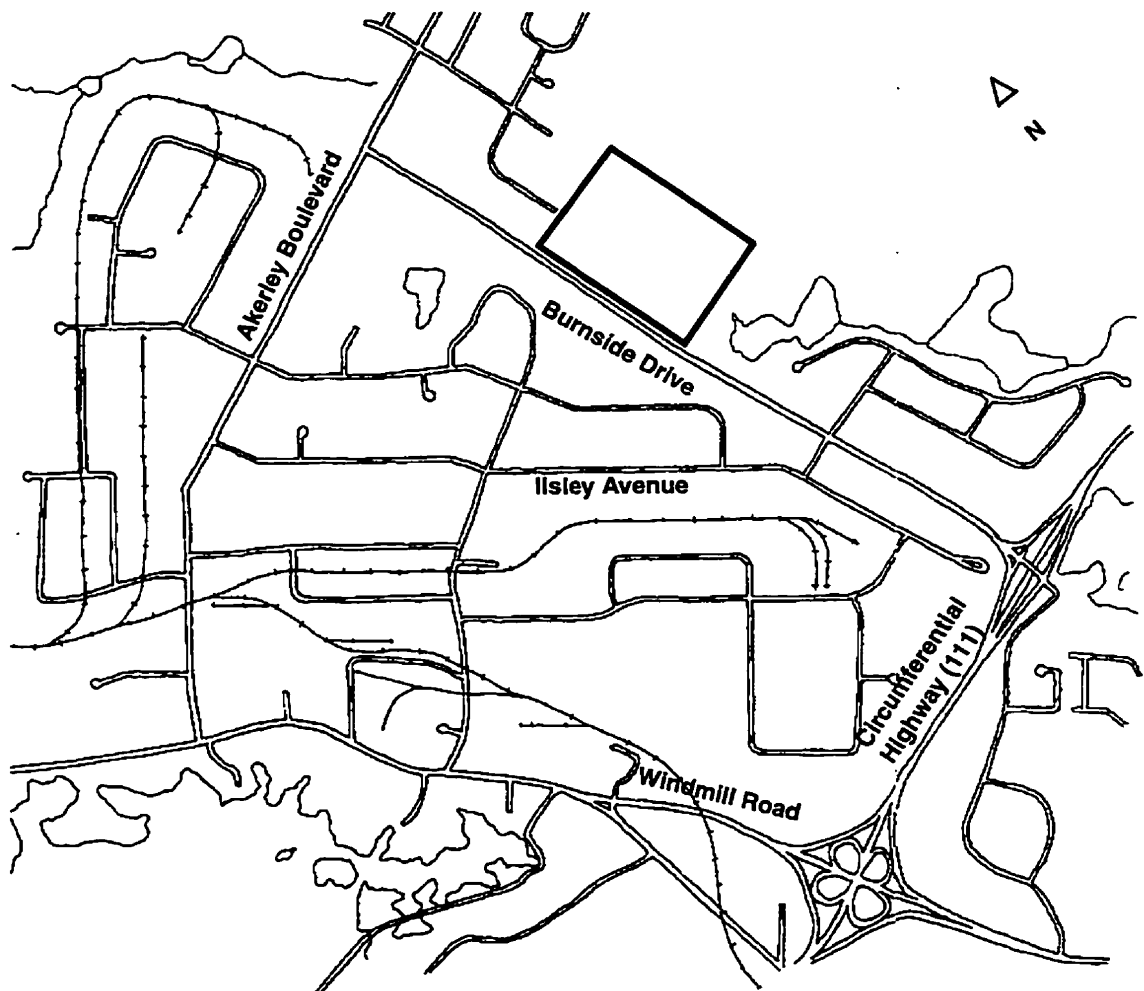


Figure 9.2 The proposed site adjacent to Burnside Industrial Park.

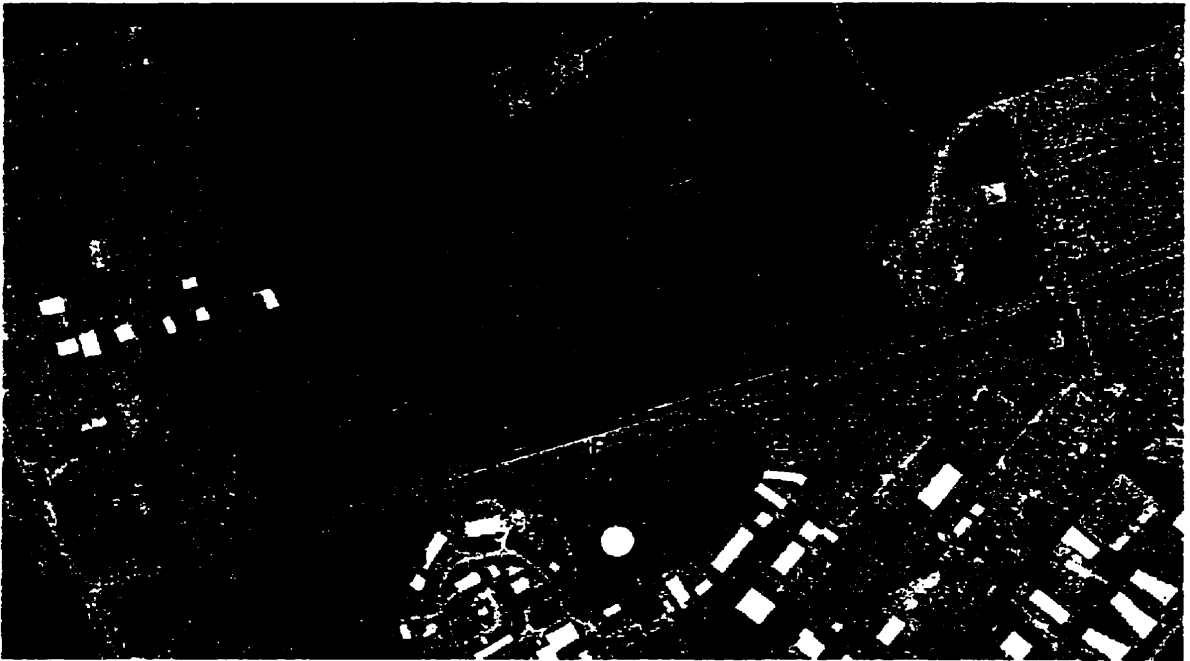


Figure 9.3 The proposed site near the City of Lakes Business Park.



Figure A View of the site from Troop Avenue.



Figure B View from the site across Burnside Drive.



Figure C View towards site across Spectacle Lake.

9.1.3 Environmental Conditions

The orientation of the Burnside Industrial Park is south facing with a gentle slope to the Bedford Basin. The site along Burnside Drive is in a natural state, overgrown relatively level with minor sloping areas. A preliminary assessment of a nearby area was included in the 1994-95 North Dartmouth Study produced by EDM (Environmental Design Management) and the Halifax Regional Municipality. Information obtained by this study can be assumed for the neighboring site. From an environmental assessment it can be assumed that bedrock is close to the surface indicating its suitability for building, the topography is not severe and will not restrict development, some sensitive plants were found, animals such as osprey and black bears have been found in the area, and that the water system in this area is very sensitive. *(North Dartmouth Planning Study 1994)* Unlike the Bayer's Lake Business Park development, acid shale has yet to be discovered in Burnside. Special precautions need to be exercised when developing areas where acid shale occurs to prevent disturbance and exposure to the air. To the south of the site is Spectacle Lake. Both Spectacle Lake and Frenchmans Lake are part of Dartmouth's system of twenty-four freshwater lakes *(City of Lakes Business Park Development Plan 1989)*. As an attempt to preserve the natural condition of the lakes and the marsh area, a buffer zone surrounding them has been set.

9.1.4 Urban Context

Because the site is adjacent to an industrial park, the surrounding land uses include light industrial uses, warehousing, distribution, office and general business

uses. The nearest residential area is Highfield Park directly off the Circumferential Highway. A hotel is located at the intersection of Burnside Drive and the Circumferential Highway. The Burnside Industrial Park is heavily dependent on automobile access due to the land use and distance from residential areas. Walking within the development is primarily focused on the employees and transit users. Metro Transit routes 48, 52, 66, and 64 at peak hours service Burnside. These routes do not proceed past Ronald Smith Avenue at Burnside Drive and provide no access to the site.

The buildings in the Burnside Industrial Park are primarily one or two stories and resemble industrial architecture. The City of Lakes Business Park offer a park-like setting and is currently the only off-campus environment in Atlantic Canada. (*North Dartmouth Planning Study 1994*) Parking lots are surrounded by natural foliage but still remain an important feature. The landscape in Burnside and the City of Lakes Business Park is superior to that in the Bayer's Lake Business Park or the Clovelly Park simply because pockets of natural forest can be found in the form of trails and buffer zones around lakes reducing the perception of scale and climatic effects.

9.1.5 Market Overview

According to the North Dartmouth Planning Study, recent sales in Burnside have indicated a trend towards retail and commercial properties as seen in the fast paced growth of warehouse style retail activity in the Bayer's Lake Business Park. This study indicates that future retail opportunities exist along Burnside Drive because it

has been the focus of retail development in Burnside. (*North Dartmouth Planning Study 1994*) The proposed site is located within close proximity to the Mic Mac Mall, the largest in the Halifax Regional Municipality. Presently, big box development is going up near the Mic Mac Mall. Kent Building Supplies has already been constructed and with others planned for the same area. Further market analysis will have to be conducted to determine the impact of this big box development on the chosen site. The retail development along Burnside may or may not be affected.

9.2 SITE ANALYSIS

This section will give a site analysis in terms of design issues only. The site will be compared against the standard requirements for retail parks described in this thesis, such as visibility, population base, availability of land, etc. The second half of this section will examine unique site features and they will be incorporated into the design scheme in the following section.

9.2.1 Design Criteria

The design criteria in this section are derived from earlier chapters on retail parks. These requirements have been summarized into five basic categories and are discussed in general terms for the purpose of assessing the site in the context of this thesis. Actual requirements that developers look for in assessing a retail park site look at these and other issues in greater detail such as trade area analysis, target market research, demographics, etc and are usually involved in choosing a site.

Because a proposed site was provided, these details will not be addressed. The site assessment is as follows.

Location

REQUIREMENT: Retail parks should be located on the edges of metropolitan areas in order to have access to major vehicular transportation links, highways and arterial roads.

The proposed site is situated on the northern border of the former City of Dartmouth and in close proximity to the Circumferential Highway which links with Highway 103 leading to Truro.

Visibility

REQUIREMENT: Retail parks should be visible from highways and arterial roads.

The proposed site is not visible from the Circumferential Highway. It is visible from Burnside Drive which intersects the highway.

Land Availability

REQUIREMENT: Retail parks should be developed in areas that have enough land to accommodate their size requirements.

The proposed site consists of 45 acres [18 hectares]. To the east of the site is undeveloped land that can accommodate future expansion.

Population Base

REQUIREMENT: Retail parks should be located in an area that has a population of over 250,000 people.

The proposed site has a market area of over 275,000 within the Halifax Regional Municipality which includes metropolitan Halifax, the former City of Dartmouth, the former Town of Bedford, and the community of Sackville.

Proximity to Other Shopping Centers

REQUIREMENT: Retail parks should be located in proximity to other shopping centers, such as regional malls, to strengthen it as a regional shopping hub. Many retail parks can stand alone but proximity to other shopping is a benefit because the retail park can take advantage of existing shopping patterns.

The current big box retail development being constructed near the MicMac Mall may negatively impact a retail park on the given site if an over supply of retail space is provided and could have a detrimental affect on any retail park development in the area. This issue should be considered before further development begins.

9.2.2 Site Considerations

The location of the proposed site has a number of distinct features that will be considered in the schematic design proposal.

Immediately to the south is the natural feature of Spectacle Lake and a wetland area to the east of it.

From Spectacle Lake Road a trail system begins which circles a portion of the lake, runs along Burnside Drive and extends into the site. (see Figure 9.3 and 9.4) The trail features boardwalks, benches, look out decks, and picnic areas for both employees



Figure 9.4 and 9.5 The Spectacle Lake Trail.



of the neighbouring offices and for visitors.

The Donald A. Bayer Sports Field is situated at the intersection of Burnside Drive and Ackerly Drive. This soccer field is within walking distance of the proposed site and could act as a recreational bookend to a retail park.

Still in its natural state, the site offers opportunities to preserve and incorporate natural vegetation into the development.

The site location near an existing industrial park dictates the development's physical distance from residential areas. A retail development on this site would have a heavy reliance on the automobile.

9.3 SCHEMATIC DESIGN

The schematic retail park design for the site has attempted to incorporate the design recommendations set out in this thesis and the existing site features. This section will describe the scheme and how it was derived from the recommendations of this thesis. (see Figure 9.6)

9.3.1 DESIGN ISSUES

Physical Layout

Four configurations were developed based on the two primary physical elements of

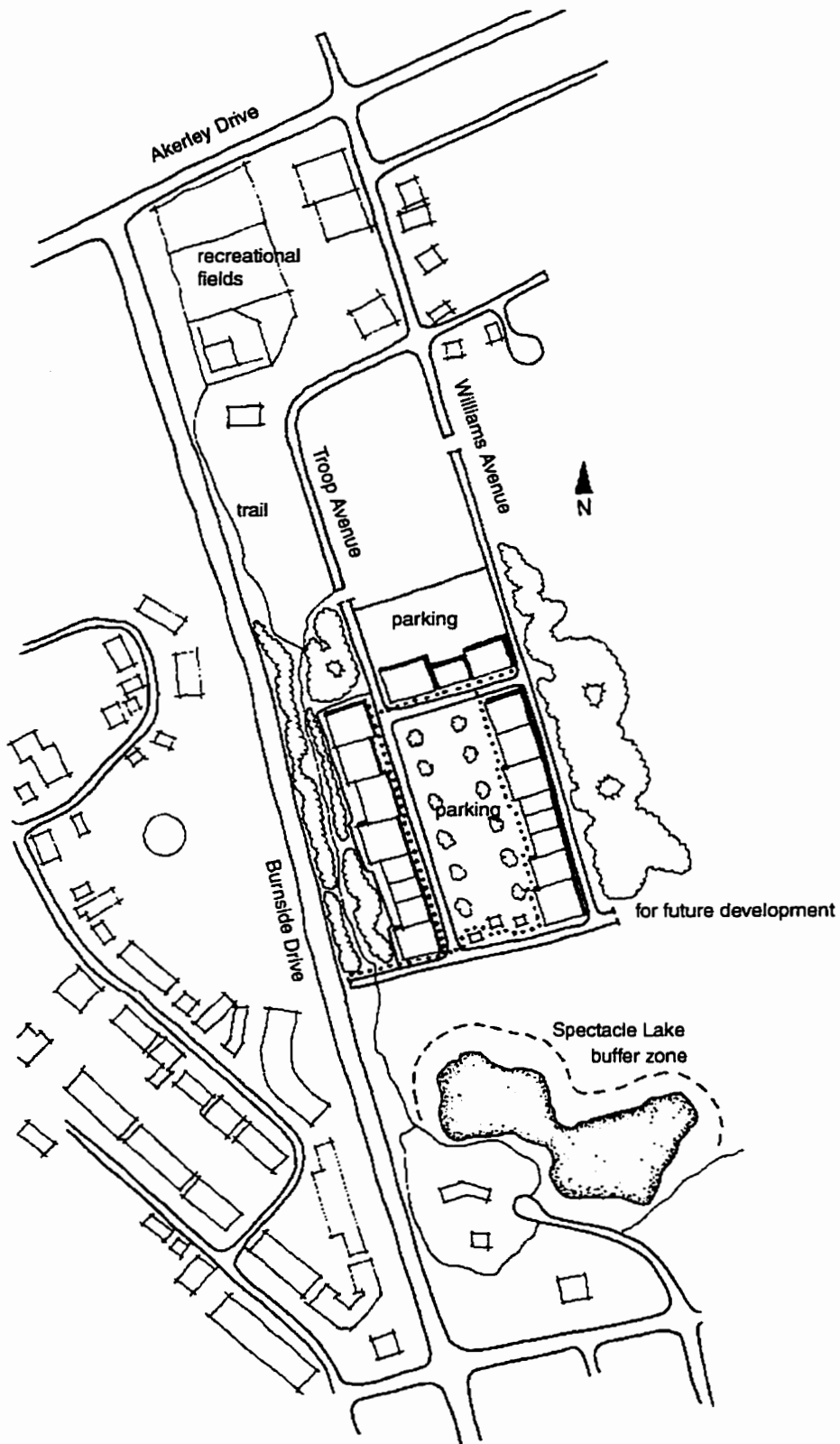
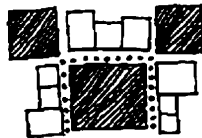
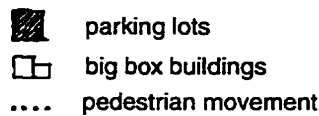


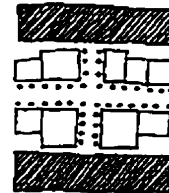
Figure 9.6 Schematic design proposal for the site.

any retail park: the big boxes themselves and the parking lots. These configurations incorporated pedestrian connectivity as the third major element. All of the layouts allow for continuous pedestrian movement. (see Figure 9.7)

The layout for the schematic design was adapted from the first layout option in Figure 9.5. This 'open ended' layout was chosen because it provided the best fit for the proposed site. In consideration of the site, this design is oriented in a southerly direction to take advantage of solar gain and to face Spectacle Lake.



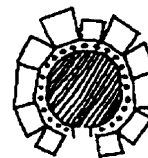
1. Parking lots are divided and hidden. Pedestrian movement is continuous.



2. Parking lots are hidden behind buildings. Pedestrian movement flows in a cross pattern.



3. Parking lots and anchor stores are at the ends of the linear arrangement.



4. Parking lot is at the center of a circular layout. Pedestrian movement is continuous.

Figure 9.7 Various retail park layout options.

The design has a compact configuration with the stores aligned side by side. This layout also reduces the impact on the land and the environment. The layout is internally focused but connections to the surroundings are made where Troop Avenue and Williams Avenue extend into the development and a visual connection is made to the lake.

Parking

Parking areas are necessary in retail parks especially in a development which is removed from residential areas, such as this site. The design provides two main parking lots, one in the center of the layout in front of the stores and one behind a smaller row of stores. Dividing the parking lots make the same parking requirements seem smaller and reduces the walking time and distance from parked cars. It also helps to reduce the openness of the space. The scale is reduced by including trees and planting in the central parking lot. The visibility of this parking lot by all the store fronts can aid in parking lot security. The smaller parking lot in the northern end of the design is for overflow parking.

Architecture

In this schematic design, architectural design of the store fronts was not attempted. Store design is in the hands of the tenants but all attempts should be made to encourage store front features that represent Nova Scotian architecture. This can

be done through the choice of materials, facade proportions, fenestration, and other key features. This design will offer a distinct appearance to other developments in the area making it unique.

Weather protection and scale reduction for the customers can be achieved through store fronts that have awnings, canopies, or arcaded walkways. These elements can be incorporated into the architecture or as an application to the facade.

Signage

Visibility is a problem with this site. To maintain an exiting feature on the site, to be discussed later in this section, the development is set back from Burnside Drive. The facades of the stores are not visible from Burnside Drive but are visible from the new entrance road. An entrance sign, located at the intersection of Burnside Drive and the new road, will announce the development and provide directional information for the visitor.

Topography

The site is relatively flat and will provide a walkable retail environment. Land grading will not be extensive.

Landscaping

Natural vegetation will be maintained around the site. A mixture of conifer and

deciduous trees will offer benefits in the winter and the summer. Conifer trees act as wind and snow barriers and deciduous trees provide shade from the sun. A retail park sensitive to the indigenous Nova Scotian landscape would offer an alternative to the vast openness of current retail park developments. Other landscaping treatments within the design include vegetation near the store entrances and trees throughout the parking lots to reduce the sense of scale. Landscaping will offer aesthetic benefits to this development.

Climate

The climate in Nova Scotia demands weather protection for most seasons of the year. This design will incorporate architectural features on the building facades, such as arcades, awnings, and canopies, to reduce unpleasant walking conditions for customers. With smaller parking lots that have vegetation throughout, the impact of the wind will be reduced.

Automobile Accessibility

Vehicular access to the retail park will be along Burnside Drive as well as Williams and Troop Avenues. This provides three accesses to this small retail park development and the possibility of another at the end of the new entrance road. This unnamed road will allow for future expansion of the retail park to the east.

Transit

Transit is an important link to any shopping area. Bus routes in Burnside should be extended to service the retail park and to include weekend routes. Bus shelters in the design are located close to store fronts to reduce travel distances for customers. Buses can enter the development from Burnside Drive, turn onto Troop Avenue, and continue down Williams Avenue, to provide good transit access to the site.

Pedestrians

Pedestrian movement is addressed in the layout of the retail park. The configuration of stores encourages walking instead of driving within the development. Amenities such as benches and sidewalks will be provided for visitors. Pedestrians within the retail park are ensured a continuous linking walkway.

To integrate the design with the site and provide further pedestrian connectivity, an existing trail system is maintained. The Spectacle Lake Trail System connects Spectacle Lake to Troop Avenue and the recreational fields. The trail cuts through the site and extends along Burnside Drive. This existing walking path is used by employees of the business park as well as weekend visitors for leisure and will be uninterrupted by the proposed design. The connection will be maintained to link the site to the surroundings. A retail park development will inherently change the nature of the trail system but the challenge is to maintain the connection. The trail will link the lake, the retail park, and the soccer field creating a variety of recreational activities for all interests.

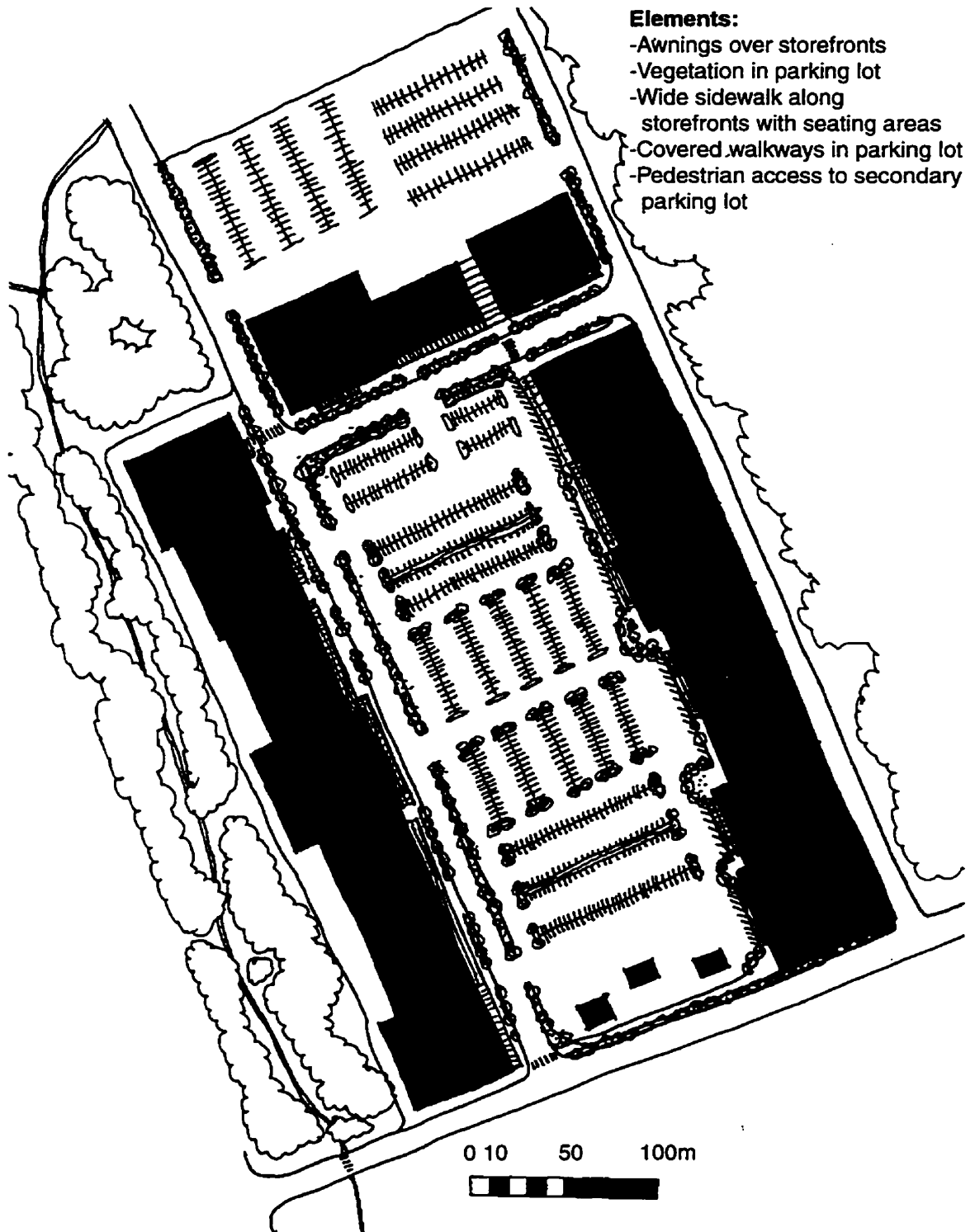


Figure 9.8 Schematic design for the site adjacent to Burnside Industrial Park.

Summary

This design is in a conceptual stage and its purpose is to show the application of criteria established in this thesis to an existing site. This basic design scheme provides a retail park design that addresses the existing conditions of the site and has fulfilled the design requirements I have set up in this thesis. As mentioned earlier, this design is based on a set of simplified retail park criteria and if a development were to stem from this conceptual design, further analysis of the site would be required.

10.0 CONCLUSIONS

10.1 MUNICIPAL REQUIREMENTS

Retail park developments are subject to zoning restrictions and land use by-laws. The inadequacy of existing design standards have resulted in the newest phase of retail development being reduced to simply 'big boxes' on 'big parking lots'. Municipalities must prepare for future retail development by creating and enforcing urban design standards to ensure future retail parks are a competitive asset to the city and designed for the use of all people.

The Town of Markham, Ontario has recently reassessed its policy to accommodate the changes in the retail sector and make the town more "retail ready" (*Stewart 1995, 16*). The traditional policies did not anticipate the appearance of big box retail and power center development on the retail scene. Markham initiated new form-oriented designations that accommodated the new retailing formats and new corresponding zoning (*Toderian 1996, 26*). The changes made in terms of design standards suggested that the zoning of these retail areas be supplemented by urban design guidelines and that greater site plan control be initiated (*Stewart 1995, 18*). Hired consultants drafted the *Urban Design Guidelines for the Business Corridor Area, Retail Warehouse Area, and Commercial Corridor Area Categories*. "The guidelines will address the design elements of commercial proposals to ensure high quality appearance and avoidance of undesirable building forms" (*Stewart 1995, 21*). By recognizing the need for up-to-date policy governing the retail sector and implementing urban design guidelines, the Town of Markham will be guaranteed

quality design of any new retail development.

Clovelly Park in St. John's, Newfoundland was rezoned to permit the retail park development. The new zone applied was a CR (Commercial Regional) zone that permitted large scale retail developments. (see Appendix B) Being the first big box retail development in the municipality, compliance to the land use by-laws were required but design standards and further planning control had not been initiated.

The Bayer's Lake Business Park is managed by the Business Parks Office of the Halifax Regional Municipality. It is subject to I-3 (Industrial) zone. (see Appendix C) Individuals or companies seeking to lease or purchase land within the business parks are encouraged to comply with the *Bayers Lake Business Park Site Development and Building Standards*. These standards consist of 38 Clauses which include guidelines on permitted uses, site excavation, building construction, parking requirements, landscaping standards, signage regulations, and outside storage requirements. The compliance with these standards is not enforced.

The difficulty with the Bayer's Lake Business Park Site Development and Building Standards is that they are too vague and too few. Developers want to make a profit and keeping costs down means meeting the basic regulations. When such regulations do not enforce specific design criteria, an inferior retail park is the result. As Chapter 6 indicated, Bayer's Lake Business Park currently faces the consequences of a lack of initial design.

Burnside Industrial Park, including the proposed site in Chapter 9, is subject to the

restrictions of the I-3 (General Industrial) zone and its permitted land uses which include light industry, general business, warehousing, and distribution. (see Appendix C) Similar to the Bayers Lake Business Park, the municipality has established the *Burnside Industrial Park, Site Development and Building Standards* to deliver guidelines to the developers. These guidelines resemble those of the Bayers Lake development and address issues such as building setback and height requirements, landscaping criteria, and site excavation in a very general sense. Urban design issues are also not addressed in Burnside.

For all of these Atlantic Canadian examples, retail park design standards, such as those suggested in this thesis were not implemented from the onset of these developments. The retail area of the Bayer's Lake Business Park was not anticipated. The municipality sold lots to interested tenants and this busy commercial area was the result. Clovelly Park was planned by the developer but was only required to comply with the basic zoning restrictions. Neither development has design standards in place in the respective municipalities. Part of the difficulty occurs after the development has been built and the design problems are harder to correct, such as the current situation in the Bayer's Lake Business Park. After the fact, sidewalks will be added and bus shelters will be moved.

In the case of the American examples in this thesis, a master plan was established by the developers from the beginning and design issues were addressed. However, it must not be assumed that this will occur in every case. It is the responsibility of the municipality to create and enforce retail park design standards on future big box developments to ensure quality designs for the future.

box developments to ensure quality designs for the future.

For the site chosen by the Halifax Regional Municipality, the Municipality should develop a master plan for this project in an attempt to set an example for future developments, to create a competitive retail park for the area, to integrate this development with the surroundings and to acknowledge the urban context. This master planned retail park could be the basis for developing the design standards.

The current economic climate in North America influenced by a recession in the early 1990s has increased the popularity of value retailing. This acceptance of lower service value retailing has also prompted the acceptance of lower design expectations on our shopping environment. The adoption of the design recommendations in this thesis to future retail park development will raise the standards of the public and ensure quality design in the next millennium.

10.2 REVIEW OF RECOMMENDATIONS

This section will provide a review of the recommendations outlined in this thesis.

Physical Layout

A retail park should have a compact layout and connections to the surroundings.

Parking

Parking requirements should be divided or tiered to create smaller lots.

Architecture

Minimal architectural features should include facade treatment for scale reduction

Signage

Signs should be smaller and similar in design to unify the complex.

Topography

Topographic conditions should be integrated with the design.

Landscaping

Retail parks should have more landscaping features for aesthetic and environmental purposes.

Climate

Architectural details and parking lot structures should be incorporated for weather protection.

Automobile Accessibility

Retail parks should have more than two vehicular accesses.

Transit

Retail parks should be accessible by transit and bus stops should be located in front of the stores.

Pedestrians

Pedestrian linkages to retail parks and between the stores should be made.

Future retail park design must follow these basic suggestions. The recommendations can be adapted to any commercial or retail area with any budget. Projects can be elaborate like the Scottsdale Pavilions or a modest project designed with the basic considerations for accessibility and scale. These recommendations can be adapted to any existing site conditions but must be enforced to promote the longevity of the development.

10.3 CONCLUSION

The future of retail parks as a significant retailing form remains to be seen. The decline of shopping mall construction and ten years of fast paced development of retail parks suggest that we may be entering into a new phase in our retailing history. In terms of design, this new retailing phase has serious deficiencies that may affect their staying power in the retail hierarchy.

A well designed retail park will offer many benefits. Retailers will benefit from successfully designed retail parks and covet retail space in these planned commercial areas. The retailer will also benefit from a better image. Greater accessibility will allow more customers to visit the center and encourage them to return. The public can enjoy the act of shopping in a comfortable, attractive, accessible landscape. Shopping can continue to be an integral aspect of a persons social life, especially for the young and the old. Municipalities will benefit from a well designed retail park. These shopping centers will be a civic asset.

Planning, being responsible for the physical environment, needs to force retail parks to be accountable to their urban environment early in the development process. Municipal guidelines and standards should be created and implemented to ensure this. Municipalities, retailers, and the general public need to evaluate the long term implications retail parks will have on a city as this new retailing trend evolves. Early planning and design will ensure an attractive, adaptable, accessible, and exciting retail hub for any region.

<i>location sex & age</i>	Kmart		Winners		Pets Unlimited								Value VII		bus stop	
	F50	F40	M30	F50	M60	M40	F35	M50	M40	F50	F40	M30	F45	M60	F30	M20
How many stores did you visit or intend to visit on this trip?	2	4	2	5	3	3	2	1	3	3	2	4	2	3	e	1
How did you travel between each store?	d&w	w	w	w	d	d	d	d	d	d	d	d	d	d	w	w
Did you shop across the street?	N	N	N	N	Y	Y	Y	N	Y	Y	Y	Y	N	Y	N	N
Do you consider shopping at this center very accessible, moderately accessible, or not accessible at all?	not	very	mod	very	very	not	mod	mod	not	very	mod	very	very	very	not	not
What is the main reason you chose to shop here?	s.r	loc	loc	stor	stor	loc	loc	s.r	stor	val	stor	stor	stor	stor	work	stor
How did you get here today?	car	car	car	car	car	car	car	car	car	car	car	car	car	car	bus	bus
How many times a month/a year do you visit this center?	1-Y	1-M	10-M	1-M	8-Y	20-M	4-M	3-M	2-M	20-Y	10-M	1-M	2-Y	2-Y	work	4-Y
How far have you travelled today to get here?	30k	5k	3k	60k	100k	3k	2k	3k	30k	35k	6k	10k	100k	100k +	4k	2k
Is this a convenient location for you?	N	Y	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	N	Y	N	Y
Do you visit this shopping center for any other reasons besides shopping?	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	Y	Y	N
Do you usually visit this center in the day or in the evening?	D	D	D&E	D&E	D	D	D	D	D	D	D	D	D	D	D	D

APPENDIX A

APPENDIX A

Located on the previous page are the results of the interviews conducted in the Bayer's Lake Business Park.

The abbreviations on the table correspond as so:

F-50	female with approximate age of 50
M-35	male with approximate age of 35
e	one person interviewed was an employee
d	drove-mode of travelling to each store
w	walked-mode of travelling to each store
very	in the person's opinion, the center is very accessible
mod	in the person's opinion, the center is moderately accessible
not	in the person's opinion, the center is not at all accessible
s.r	this person had a specific reason for being at the center i.e to meet a friend, to return a particular item
loc	the person shops there because of the location
stores	the person shops there because of the selection of stores
val	the person shops there because of a perceived value
1-Y	the person visits the center approximately once a year
3-M	the person visits the center approximately three times a month
Y	yes
N	no
D	the person visits the center usually in the day
E	the person visits the center usually in the night

APPENDIX B

St. John's Development Regulations 1994 and St. John's Municipal Plan 1990

10 - 51

10.20 COMMERCIAL REGIONAL (CR) ZONE

10.20.1 Permitted Uses

Residential:

- (a) Accessory Dwelling Unit

Public:

- (b) Library

Commercial:

- (c) Bakery
- (d) Bank
- (e) Car Washing Establishment
- (f) Church
- (g) Clinic
- (h) Commercial Garage
- (i) Commercial School
- (j) Communications Use
- (k) Custom Workshop
- (l) Department Store
- (m) Drycleaning Establishment
- (n) *Eating Establishment (subject to Section 7.21)* *(1995-09-15)*
- (o) Hotel
- (p) Laundromat
- (q) Office

**CR
1995-09-15**

10 - 52

- (r) Parking Area
 - (s) Printing Establishment
 - (t) Private School
 - (u) *Recycling Depot* (1997-11-21)
 - (v) Retail of Building Supplies
 - (w) Retail Store
 - (x) Retail Warehouse
 - (y) School
 - (z) Service Shop
 - (aa) *Service Station and Gas Bar (subject to Section 7.20)* (1995-06-09)
 - (bb) Shopping Center
 - (cc) Sign Maker's Shop
 - (dd) *Tavern (subject to Section 7.21)* (1995-06-09)
 - (ee) Taxi Business
 - (ff) Veterinary Clinic
- Recreational:
- (gg) Recreational Use
- Other:
- (hh) *Day Care Centre and Nursery School (subject to Section 7.6)* (1996-04-26)
 - (ii) Public Use
 - (jj) Public Utility

CR

1995-06-09
 1995-11-24
 1996-04-26
 1997-11-21

10.20.2 Conditional Uses (subject to Section 5.8)**(a) Place of Amusement****(b) Place of Assembly (1995-11-24)****10.20.3 Zone Requirements****(1) The following requirements shall apply to all Commercial uses, except Service Stations:**

(a) Lot Area (minimum)	1800 m²
(b) Lot Frontage (minimum)	45 m
(c) Lot Coverage (maximum)	50%
(d) Floor Area Ratio (maximum)	1.0
(f) Building Height (maximum)	15 m
(g) Building Line (minimum)	6 m
(h) Side Yards (minimum)	1 m per Storey
(i) Side Yard on Flanking Road (minimum)	6 m
(j) Rear Yard (minimum)	6 m
(k) Landscaping on Lot (minimum)	20%

(2) All other uses:**As determined by Council**

St. John's Municipal Plan, 1990

III - 9

In this District the City shall regulate development subject to the following controls.

1] **Permitted Zones**

Zones are permitted which allow any one or more of the following uses:

- single-detached dwellings;
- semi-detached dwellings;
- duplexes;
- townhouses;
- apartments, not exceeding four units per building.

2] **Conditional Zones**

Subject to Part III, Section 1.1.3(2), the City may permit zones allowing any one or more of the following uses:

- apartments, not exceeding 24 units per building;
- boarding homes.

3] **Maximum Permitted Density**

100 dwelling units per net hectare.

4] **Buildings**

Buildings are limited to three storeys in height and a Floor Area Ratio of 1.5. Subject to a Land

Use Impact Assessment, zones may be permitted allowing a height not exceeding four storeys and a maximum Floor Area Ratio of 3.0, subject to the necessary controls to protect the surrounding District.

1.2.3 **COMMERCIAL**

1.2.3.1 **General**

The Commercial classification means that the predominant use of land in Districts so designated shall be for commerce, which is defined as the buying and selling of goods and services, and the provision of office accommodation. This classification need not prevent the land being used for other purposes provided that they will not hinder or prevent the areas from being used for proper commercial development and that precautions are taken to control how the land may be used in order to protect the areas for commerce. Other uses of land which may be permitted include accessory dwellings and dwellings in a commercial-residential building.

III - 10

1.2.3.2 **Commercial General**

Dominant Land Use: This District provides a wide variety of commercial services to the community at large.

In this District the City shall regulate development subject to the following controls.

1) **Permitted Zones**

Zones are permitted which allow any one or more of the following uses:

- Neighbourhood Shopping Facilities (see Part III, Section 3.1(1));
- offices;
- transient accommodation;
- residential-commercial.

2) **Conditional Zones**

Subject to Part III, Section 1.1.3(2), the City may permit zones allowing any one or more of the following uses:

- *automotive services;*
- *entertainment and assembly;*
- *parking;*
- *schools, churches and parish halls;*
- *recycling depots;*
- *General Commercial Services (see Part III, Section 3.1(2)); and*
- *Regional Shopping Centers (see Part III, Section 3.1(3)), provided a pertinent Land Use Impact Assessment (see Part III, Section 1.1.4) has been approved. (1997-11-21)*

3) **Buildings**

Building heights in this District are limited to two or three storeys and Floor Area Ratios not exceeding 1.0.

However, subject to a Land Use Impact Assessment, zoning could be provided for buildings allowing building heights of up to ten storeys and a maximum Floor Area Ratio of 2.0.

1.2.3.3 **Commercial Downtown**

Dominant Land Use: This District accommodates commercial uses in Downtown - (see Map II-2).

In this District the City shall regulate development subject to the requirements of Part II, Section 8.4.1 and the following controls.

1] **Permitted Zones**

Zones are permitted allowing any one or more of the following uses:

- retail;
- service shops;
- public;
- offices.

2] **Conditional Zones**

Subject to Part III, Section 1.1.3(2) and a Land Use Impact Assessment which shall consider Downtown Balance (see Part II, Section 8.4.1), the City may permit zones allowing any one or more of the following uses:

- *convention center;*
- *transient accommodation;*
- *residential apartments;*
- *entertainment;*
- *cultural facilities;*
- *private parking;*
- *schools, churches and parish halls;*
- *recycling depots.* (1997-11-21)

3] **Buildings**

This District allows buildings not exceeding four (4) storeys in height with a Floor Area Ratio not exceeding 3.0.

Subject to a Land Use Impact Assessment which shall consider Downtown Balance (Part II, Section 8.4.1), additional bulk and height may be permitted as a bonus in the areas outlined on Map III-2 to a maximum of twelve (12) storeys with a Floor Area Ratio of 6.0.

In order to qualify for such bonus, the proposed development shall meet the following requirements:

- a) the lot depth for the proposed building shall not be less than 40 m;
- b) building heights in excess of four (4) storeys shall be controlled by means of light angles (see Map III-2), designed to reduce the physical impact of high buildings on adjoining streets and public open spaces, allowing for adequate sunlight, minimizing building-generated wind velocities, and preserving harbour views from streets and public open spaces;

- c) adequate offstreet parking representing not less than 100% of the parking required by the City shall be made available on site, concealed in a building;
- d) floor space inside the building at or near grade shall be made available for the use and enjoyment of the public.

4] **Buildings in Heritage Areas**

The additional height bonus as provided in the preceding Section is restricted to a maximum of ten (10) storeys, where the building is located in a Heritage Area (see Part III, Section 7). In addition, any height in excess of four (4) storeys in such areas shall be set back no less than eight (8) metres from the street line.

1.2.3.4

Highway-Commercial

Dominant Land Use: These Districts provide for retail and personal services to the public along selected arterial highways (see Part III, Section 3.3.3).

In this District the City shall regulate development subject to the following controls.

1] **Permitted Zones**

Zones are permitted for any one or more of the following uses:

- *retail;*
- *service shops;*
- *automotive services;*
- *offices;*
- *warehouses and recycling depots;*
- *transient accommodation; and*
- *parking. (1997-11-21)*

2] **Conditional Zones**

Subject to Part III, Section 1.1.3(2), the City may permit zones allowing any one or more of the following uses:

- *entertainment and recreational facilities provided such uses are compatible with adjoining commercial usage;*
- *schools, churches and parish halls.*

3] **Buildings**

Building heights in this District shall not exceed a height of 15 metres and a Floor Area Ratio of 1.0.

1997-03-28

1997-11-21

APPENDIX C

Extracted from the Mainland Land Use By-Law April 1998

I-3 ZONE

GENERAL INDUSTRIAL ZONE

- 50A(1) The following uses shall be permitted in any I-3 Zone:
- (a) any industrial/commercial enterprise, except when the operation of same would cause a nuisance or hazard to the public and except:
 - (i) billboards;
 - (ii) adult entertainment uses; and
 - (iii) amusement centres.
 - (b) a public park.
- 50A(2) No person shall in any I-3 Zone carry out, or cause or permit to be carried out, any development for any purpose other than one or more of the uses set out in subsection (1).
- 50A(3) No person shall in any I-3 Zone use or permit to be used any land or building in whole or in part for any purpose other than one or more of the uses set out in subsection (1).

REQUIREMENTS

- 50A(4) No front, side or rear yards are required in an I-3 Zone; however, any development undertaken in an I-3 Zone shall be required to be set back 200 ft. from any lake or watercourse and any use permitted in the I-3 Zone shall be set back a minimum of 30 feet from a collector roadway and 10 feet from all other roadways.

SEWER AND WATER

- 50A(5) Sewage disposal and water services may be provided on site or off site in any manner consistent with the regulations of the Province of Nova Scotia, provided that no on-site sewer and water services shall be permitted on land inside the Development Boundary identified on Map II, Appendix "C" of the Halifax-Dartmouth Metropolitan Regional Development Plan.

I-3 ...

ACCESSORY BUILDINGS

- 50A(6) Notwithstanding the provision of Section 2(a) hereof, an accessory building in the I-3 Zone shall not have a maximum height requirement.

SPECIAL PARKING

- 50A(7) Notwithstanding Section 9(d) where a structure is built on a lot greater than 2 acres:

- (a) parking shall be provided as follows:
 - (i) office structure - 3 spaces per 1,000 square feet of gross floor area;
 - (ii) retail or service structure - 4 spaces per 1,000 square feet of gross floor area;
 - (iii) restaurant - 8 spaces per 1,000 square feet of gross floor area.
- (b) off street loading and unloading shall be provided at the sides and rear of the building on a collector roadway except where a berm or other similar screening a minimum 5 feet in height is provided between the loading area and the street.
- (c) driveways, parking areas, and loading and unloading areas shall be maintained with a stable surface.
- (d) areas not used for parking, driveways, storage or other similar purposes shall be landscaped.

SIGNS

Previous Section 50A(8)(a and b) Deleted and replaced with the following:

- 50A(8) Each I-3 use shall be permitted identification signs, which may be illuminated on the building, and one freestanding identification sign which may be illuminated, provided that it is not located within 100 feet of the street line of Highway 102 and Highway 103 between the interchange with Highway 102 and the City of Halifax pumping station at 120 Chain Lake Drive.

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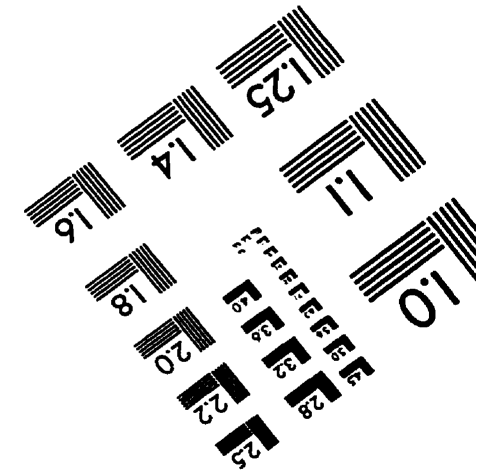
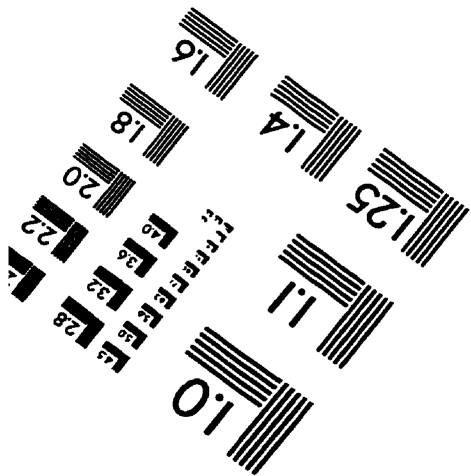
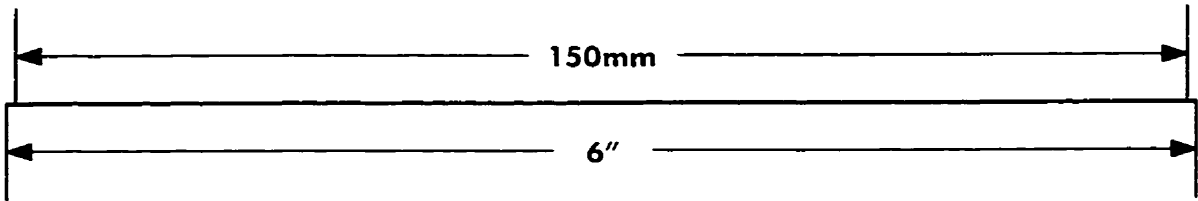
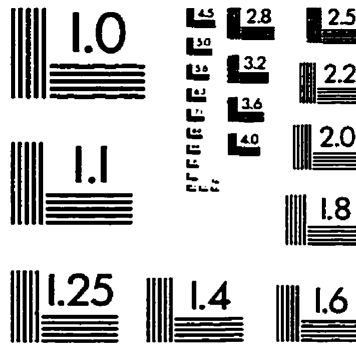
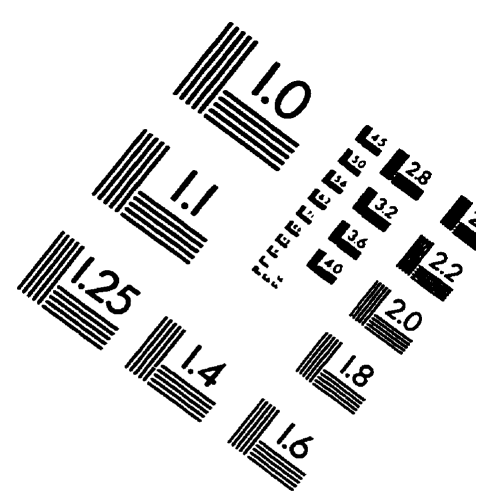
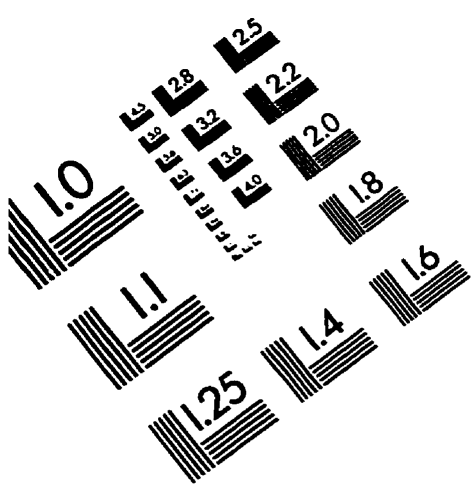
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