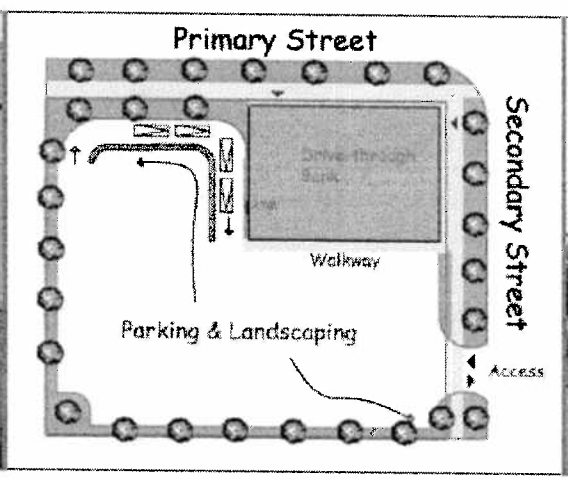
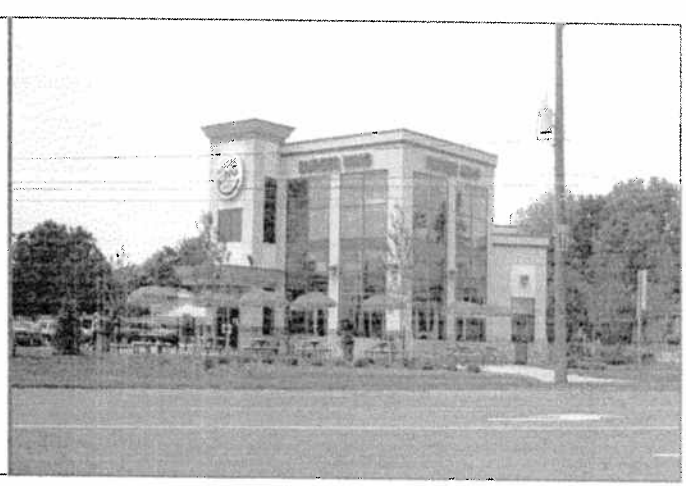
Town of Markham
Drive-through Facilities
Design Guidelines





MARKHAM

MBPD
M. Behar Planning & Design Inc.
40 Vogell Road, Unit 46
Richmond Hill, Ontario L4B 3N6
T:905.292.1064 F:905.292.7633

DRAFT

TABLE OF CONTENTS

LIST OF FIGURES

LIST OF APPENDICES

1.0 INTRODUCTION

1.1 OBJECTIVE AND SCOPE OF THE STUDY

The purpose of this study is to provide design guidelines applicable to drive-through facilities and their associated vehicle stacking and parking areas throughout the Town of Markham. The guidelines will provide direction during the pre-consultation and planning approval process to promote, properly assess and achieve appropriate forms of drive-through development. Furthermore, the guidelines will assist in regulating the layout, built form and appearance of drive-through facilities as well as assist in mitigating any adverse impacts.

In coordination with the Town of Markham, residents and industry representatives, the overall intent of the guidelines is to promote:

- Compatible development that fits in well with the surrounding area and minimizes impacts on adjacent uses
- Functional and safe traffic movement
- Safe stacking lane and site access placement
- Safe and accessible pedestrian connections to the building from both the public and private realms
- A high quality and pedestrian supportive urban streetscape

As part of this study, a detailed inventory of existing drive-through facilities in Markham and applicable policies of other GTA municipalities has been completed. See Appendix 'A' - Background Report for more details. It should be noted that no queuing and utilization studies of drive-through facilities in Markham were conducted as part of this study. Studies conducted by the Region of Durham and the City of Mississauga were reviewed and incorporated into the guidelines as appropriate.

Building Markham's Future Together - Towards a Sustainable Community places the environment first and sustainability at the core of every aspect of Markham's land use policies, practices and service delivery. The Town's goals of a healthy environment, a high quality of life for all, economic prosperity and social and cultural vibrancy are being advanced through strategies aimed at delivering a new form of neighbourhood growth that is denser, transit-supportive and respects the natural and built heritage. The links between the health and longevity of new and existing communities with land use planning and transportation are of key importance as the Town moves towards its goals.

While drive-through facilities comprise a very small proportion of the Town's commercial land uses, they are aimed at automobile users. In an effort to help reduce car dependency, introducing prescriptive design criteria applicable to this type of land use, coupled with emerging Official Plan policies and zoning requirements will ensure that careful attention is given to the function, design, compatibility and potential impacts of these uses.

1.2 POLICY CONTEXT

1.2.1 Provincial Policy Statement

The Provincial Policy Statement provides a set of objectives and policies which provide a high level land use planning framework. Policies within the Building Strong Communities section encourage efficient land use patterns which promote livability, healthy communities and the protection of public health and safety.

1.2.2 Planning By Design: a healthy communities handbook

In Fall 2009, Ontario Professional Planners Institute published this handbook which outlines the links between health and the built environment. In looking at this relationship, a major factor is that of sedentary lifestyles, poor dietary habits and reliance on cars being significant contributors to serious health problems. As the link between health and the built environment is being reconnected, consideration

must be provided for the arrangement and design of the built environment and how this affects people's health and the way they physically and psychologically relate to and interact with their community and the wider world around them.

Growing research points to a number of land-use components that influence human activity, facilitate health and mental well being and promote social interaction and inclusion, including:

- Layout, design, connectivity and maintenance of sidewalks, roads and non-motorized transportation, paths and trails
- Land uses that might include some combination of homes, stores, businesses, institutions, community and cultural facilities and industries
- Compactness, density and accessibility of built areas
- Access to recreational facilities and green spaces
- Connected networks of motorized and non-motorized transport systems
- Safe, comfortable and attractive streets, public spaces, buildings and structures
- Healthy and resilient natural environments and biodiversity

The Drive-through Facilities Guidelines should be viewed as part of a much wider set of policy based initiatives that the Town of Markham is pursuing in an effort to attain a higher level of livability, sustainability and community health.

1.2.3 Markham Moving Forward - recent initiatives

Building Markham's Future Together include community initiatives which are aimed at:

- Attaining sustainable community growth
- Addressing transportation challenges as they relate to: congestion, environment, noise pollution, quality of life, development, land use, travel, demand management, infrastructure, education, parking, cycling, safe streets and environmentally friendly transportation nodes and corridors.
- Improving the environment: Markham's Green Print includes policies to protect air quality, support sustainability and include a comprehensive Climate Action Plan. It goes on to further note that "sustainability should be considered at the forefront of everything we do". This includes the four pillars of sustainability, including maintaining a healthy environment, economic balance, social equity and a vibrant culture.

1.2.4 Town of Markham Official Plan (Office Consolidation July 2005)

The Town of Markham Official Plan emphasizes the importance of maintaining and improving the physical character and appearance of existing communities. Section 2 of the Official Plan requires efforts be made to address the adverse effects of noise, odour, and light and mitigate any compatibility issues between land uses. Furthermore, policies in this section seek to prohibit development which is inappropriate to surrounding land uses.

Section 3 of the Official Plan contains a number of design considerations that must be applied to commercial areas. The Official Plan maintains regard for the affect that these areas have on existing residential neighbourhoods while promoting a high aesthetic standard. Other applicable Town of Markham standards as they pertain to drive-through facilities include:

- Trees For Tomorrow Streetscape Manual
- Engineering Standards
- Parking Control By-law 28-97
- Idling Control By-law 2005-192
- Sign By-law 2002-94
- Applicable planning application processes and fees

1.2.5 Town of Markham Zoning By-laws

By-law 177-96

The Town of Markham Zoning By-law 177-96 applies to New Urban Areas and permits drive-through facilities as-of-right within the Major Commercial Zone.

By-law 2004-196

The Town of Markham Zoning By-law 2004-196 promotes the Smart Growth goals of maintaining strong communities, a strong economy and a clean and healthy environment, including reduced automobile dependency. This By-law applies to Markham Centre and prohibits drive-through facilities on any lot as this land use conflicts with the planned function, tight parcel fabric and walkability of this planning district.

The majority of other parent by-laws, which regulate development in the more established / existing areas permit drive-through facilities as an accessory use. As no specific zoning provisions or standards exist for drive-through facilities, current applications are subject to applicable zoning and Site Plan Control.

1.3 CHARACTERISTICS OF DRIVE-THROUGH FACILITIES*

The two most prevalent forms of drive-through facilities in Markham, and the GTA are as follows:

1.3.1 Restaurants

The fast food restaurant style of drive-through facility is the most common in the GTA and in Markham.

- Take out restaurants: the food is carried and consumed outside the building.
- Combination eat-in and take-out restaurant: food is consumed within the building as well as outside the premises.
- Two restaurants combined: separate drive-through windows are allocated to each restaurant. The restaurants share access and parking.
- Drive-through restaurants located on service station sites: the restaurant structure may be combined with the service station kiosk or may be free standing.
- Coffee / donut shop drive-throughs are generally in the 250m2 to 300m2 building size group.
- Convenience restaurants with drive-throughs are between 300m2 to 500m2 in floor area.
- Restaurants which offer coffee/breakfast foods are busiest between 7:45am – 8:25am, with a peak between 8:15am – 8:30am.
- Less parking is required for drive-through restaurants compared to eat-in restaurants because the majority of customers stay within their vehicles. If the queue for drive-through restaurants reaches 8-10 vehicles, customers have a tendency to park and walk in.
- Restaurants with both sit-in and drive-through components increase the chances of vehicle / pedestrian conflicts.

1.3.2 Financial Institutions

Financial institutions have adopted the drive-through model in a similar manner to restaurants. Drive-through financial institutions have more flexibility over their restaurant counterparts when it comes to building design due to their internal layout not having to necessarily be oriented towards the drive-through lane, the non-existent requirement of an order/voice box, and generally less traffic.

As a function of their use, drive-through financial institutions often have less impact on their surroundings. Characteristics of drive-through financial institutions include:

- The addition of a drive-through results in a 17-27% reduction in traffic flows because visitors instead visit in non-open hours.
- Average service time is 105 seconds.
- 75% of the time there is no more than 3 vehicles in queue.
- There is no order or voice box, minimizing noise impacts, stacking lengths and eliminates the processing time between order and pickup associated with a restaurant format drive-throughs.
- Financial institutions are not conducive to community gathering as customers have a very specific purpose and do not linger after the fact.
- In some instances, there may be a stand-alone bank machine without an associated building.

"Parts of this study are based on Joint Municipal Study for Fast Food Restaurant Drive-through and Parking" SRM Associates Inc, February 2000.

1.3.3 Emerging Sectors

As drive-throughs have become more prevalent for retailers, additional sectors have been emerging; including pharmacies, dry cleaners, convenience stores and other retail stores.

In this regard, it is noted that Markham currently includes one drive-through pharmacy.

1.3.4 Drive-through Formats in Markham

An analysis of existing drive-through facilities throughout Markham has revealed that this type of facility can be broken down into a function of their use, as well as a function of their format or site configuration. Refer to Figure 1.3.4f on page 6 which illustrates the locations of existing drive-through facilities in Markham. Currently, there are approximately 30 drive-through facilities. The majority of drive-through facilities are located in Commercial Amenity / Commercial Corridor Areas. They are usually situated along York Region Arterial and Town of Markham Major Collector roads. These facilities are typically oriented towards intersections for improved visibility and accessibility.

Within Markham, the following drive-through configurations have been identified:

- Stand alone buildings
- Stand alone buildings on pads within a commercial plaza
- Part of an institutional complex
- Part of a gas-bar
- Part of a commercial building
- Attached restaurants with double drive-throughs

Figure 1.3.4a: CIBC at Woodbine and 16th Avenue - a stand alone bank building with a drive-through facility within a commercial plaza.

Figure 1.3.4b: Tim Hortons at Kennedy and Duffield - a drive-through restaurant as part of a commercial building.

Figure 1.3.4c: McDonalds at Kennedy and Lee - a drive-through restaurant as part of a institutional complex.

Figure 1.3.4d: Wendy's and Tim Hortons double drive-through on Woodbine and Apple Creek Boulevard shows an example of a double drive-through restaurant.

Figure 1.3.4e: Gas Bar and restaurant at Bur Oak and McCowan.

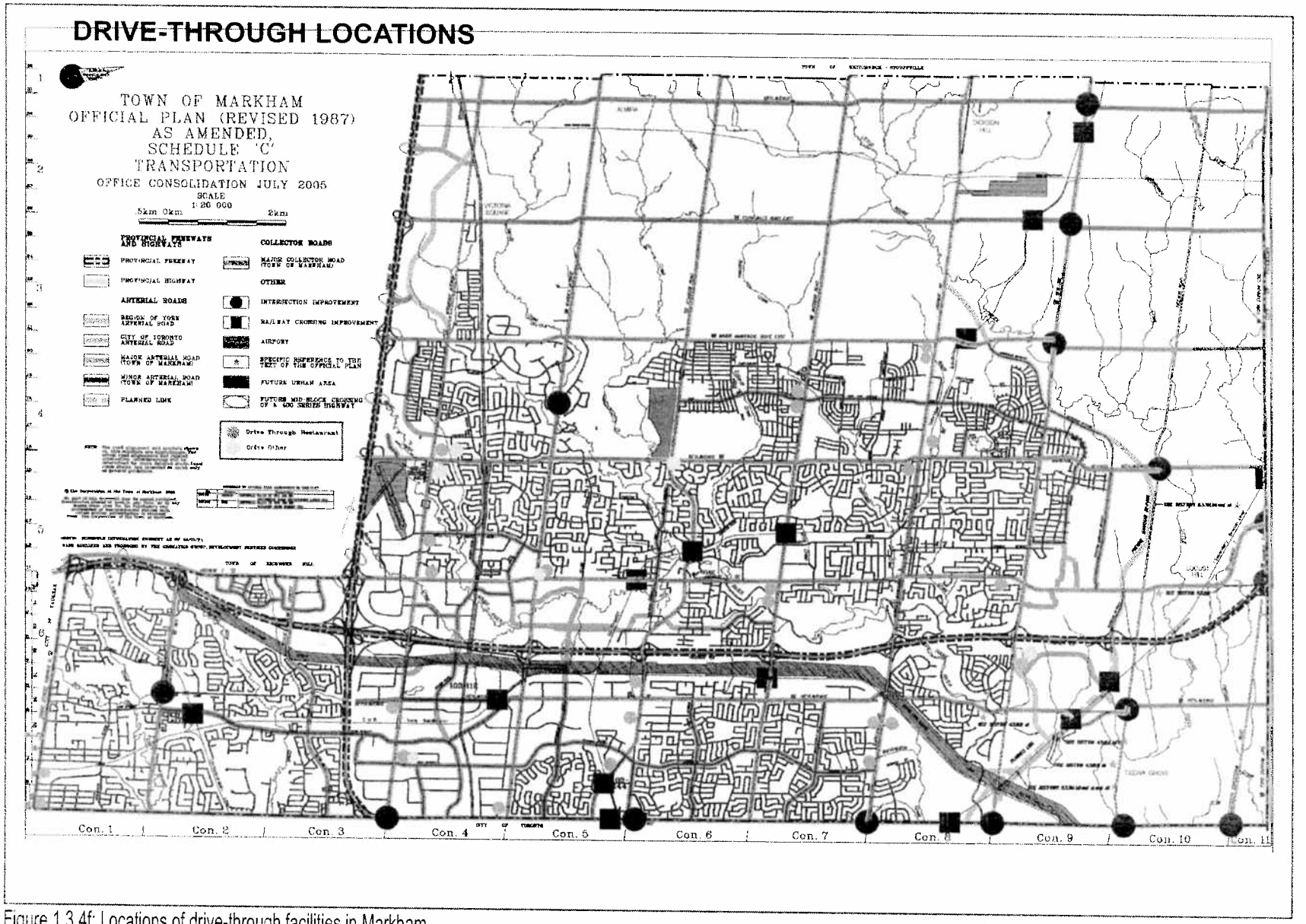


Figure 1.3.4f: Locations of drive-through facilities in Markham

2.0 ISSUES / CHALLENGES

Drive-through facilities are very successful and are well used by the travelling public as evidenced by their popularity. Retailers have responded to this demand by providing the drive-through option for fast food restaurants, and have adopted new types of facilities such as banks, pharmacies and dry cleaners. These facilities provide a convenience to the travelling public and offer additional benefits including, increased safety at night, improved access for persons with disabilities and convenience for the elderly and persons with young children.

While successful and popular, drive through facilities present several environmental, public health, transportation management, planning and urban design challenges.

- Livable Communities - walkability, increasing social contact and quality of life/health.
- Congestion - increased use of the automobile and peak hour congestion at these facilities.
- Climate Change - increases in greenhouse gas emissions. Subsequently, this has impacts on air quality and public health.
- Changing paradigms related to automobile dependency - extensive work (Smart Commute, Metrolinx) is underway to reduce car dependency and move away from auto-oriented development.

As a result of their function, drive-through facilities attract high volumes of automobiles and generate potential impacts which have garnered public concern. These include impacts on:

- Surrounding uses, specifically on residential uses, resulting from noise, light and odour concerns.
- Streetscape such as building separation from adjacent streets, which does not contribute to a pedestrian friendly and transit supportive streetscape.

Figure 2a: This fence for the Burger King drive-through restaurant on Hwy. 7 shows interface with the adjacent residential property.

- Adjacent roads and site access with regard to the location and relationship between the stacking lane and site access points.
- Pedestrian safety resulting from potential traffic and circulation conflicts between the stacking lane, building entrance and parking areas.
- The environment as it relates to litter, air quality and increase in non-permeable surfaces due to the large asphalted areas required for parking and stacking.

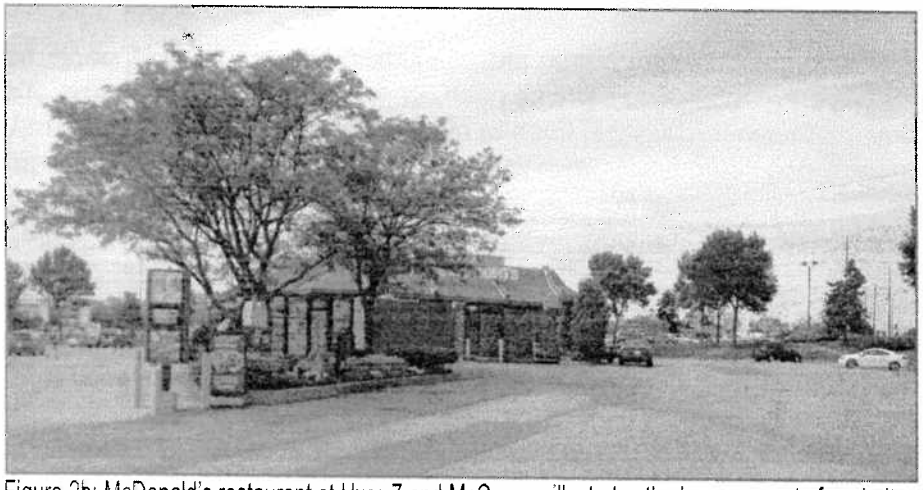


Figure 2b: McDonald's restaurant at Hwy. 7 and McCowan, illustrates the large amount of asphalt often required for such facilities.

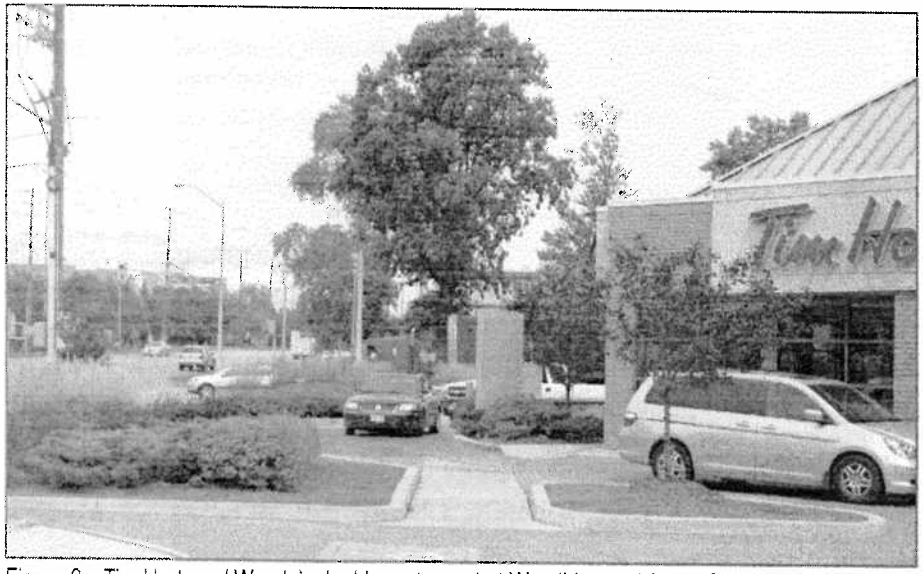


Figure 2c: Tim Hortons / Wendy's double restaurant at Woodbine and Apple Creek provides an example of potential conflicts between vehicles and pedestrians.

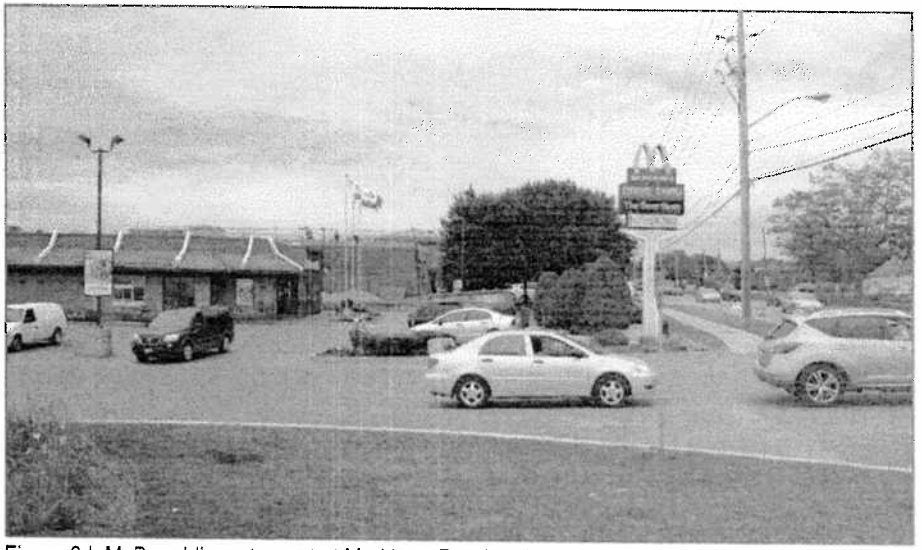


Figure 2d: McDonald's restaurant at Markham Road and 16th Avenue, showing the building setback and separated from the street.

3.0 PUBLIC CONSULTATION

A Workshop was held on October 7, 2009 to identify a community vision and establish guiding principles, industry requirements and acceptable standards related to drive through facilities. Stakeholders representing the broader community and the retail and development industry attended the workshop. Staff from M. Behar Planning & Design Inc. (MBPD) and representatives from the Town of Markham facilitated the workshop. Approximately 30 people attended representing various affiliations and professional expertise.

The workshop followed an agenda, which included:

- Introduction and presentation
- General discussion
- Working groups - Guiding principles and any accompanying sketches
- Summary of findings and next steps

The workshop commenced with a presentation by MBPD Inc. describing drive-through uses and types, associated impacts, experiences and examples from Markham and other GTA municipalities. The general discussion following the presentation dealt with participants' observations and comments on a variety of issues relating to drive-through facilities.

Following the introductory presentations and general discussion, workshop participants were divided into working groups. A facilitator/ urban designer led the discussion at each of the five tables. Two Town of Markham sites were made available to each table representing varying site sizes and contexts, and were used as base drawings. Participants provided input in text and graphic format on the following subjects:

- Building placement
- Pedestrian, bicycle and vehicular access to the site
- Stacking lanes – locations, number of cars
- Order box location
- Landscaping widths and locations
- Buffering features, including landscaping and noise attenuation
- Street frontage treatments
- Building attributes, including facades facing public spaces such as streets, and placement of service areas
- Parking lot locations and treatments
- Signage

Each team presented their findings, recommendations and guiding principles to all participants.

Generally, the Workshop concluded that there are locations within Markham where drive-through facilities should not be permitted to promote and achieve municipal goals relating to livability, pedestrianism and more sustainable forms of development. Within the areas that drive-through facilities are permitted, design guidelines should address a range of environmental, traffic, noise, lighting, safety as well as urbanistic factors. The most common design elements drawn from the workshop relate to orienting the building to the street, containing the stacking lane within the site in a safe manner and providing for strong pedestrian connections to the buildings from both the street and parking areas.

Findings of the workshop have provided context and direction for the design guidelines. See Appendix 'B' - Workshop Summary.

4.0 URBAN DESIGN GUIDELINES

4.1 HOW TO USE THESE GUIDELINES

It is emphasized that these are guidelines, which inherently provide flexibility in interpretation based on site-specific conditions. They will form the basis and feed into the creation of zoning by-law provisions to be prepared by the Town of Markham in order to implement the guidelines.

The guidelines should be used in conjunction with the Town of Markham Official Plan, Zoning By-law provisions, as well as applied standards and procedures of the various departments.

Gas stations with drive-through facilities have not specifically been referenced in this study. While these facilities, including those with car-wash facilities, have particular characteristics and requirements, it is seen that these guidelines will be generally applicable and help eliminate or reduce any negative impacts and provide a high quality urban environment. Some guidelines provide best design practices that the Town could consider applying to all commercial developments.

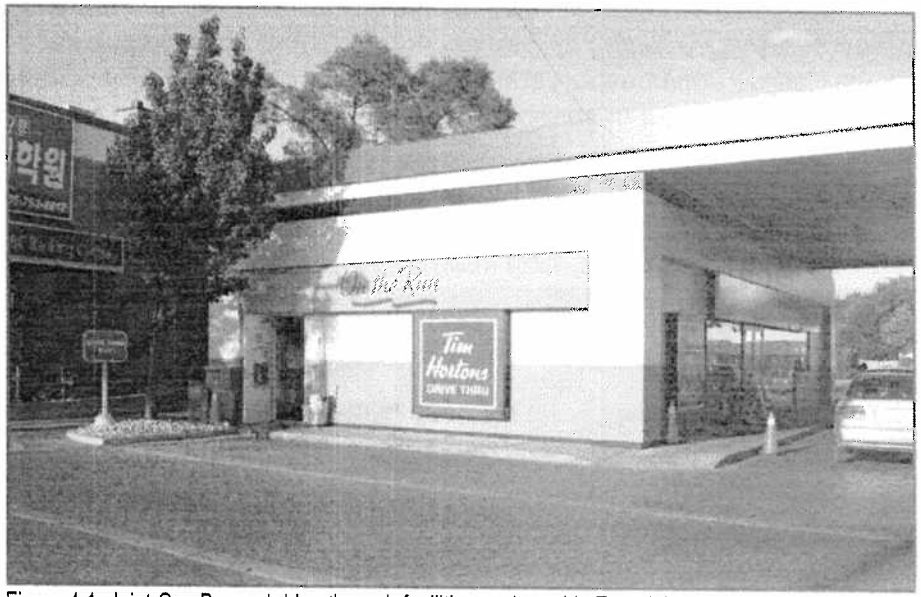


Figure 4.1: Joint Gas Bar and drive-through facilities such as this Esso / Tim Hortons at Yonge and Steeles are subject to the design guidelines.

4.2 LOCATIONAL CRITERIA

As a result of their characteristics and associated impacts, drive-through facilities may not be appropriate in all areas of the Town of Markham. Therefore, these facilities should be discouraged from locating in certain areas of Markham, such as neighbourhoods that are characterized in part by vibrant commercial/mixed use mainstreets, tighter parcel fabric and pedestrian friendly streetscapes and that are prime candidates for denser development that can support public transit. Consequently, it is recommended that for certain areas within Markham which maintain the above characteristics, drive-through uses should be avoided.

The specific locations where currently drive-through facilities are prohibited or should be avoided include: Intensification Areas, such as the Regional Growth Centres of Yonge and Highway 7, Markham Centre as well as Key Development Areas; Regional Rapid Transit Corridors of Yonge Street, Highway 7, Langstaff, Leslie and 9th Line; Heritage Conservation Areas such as Main Street Markham, Main Street Unionville, Thornhill and Buttonville; and Hamlet Areas of Cedar Grove, Locust Hill, Dickson Hill, Almira and Victoria Square.

Furthermore, drive-through facilities should continue to be avoided within newer communities of Markham along areas designated 'Neighbourhood Commercial' and 'Community Amenity Area' under the Official Plan. These areas include parts of:

- Box Grove
- Cornell
- Swan Lake
- Angus Glen
- Wismer Commons
- Berczy Village
- Cathedral Community
- Greensborough

Guideline 1: Ensure that proposed drive-through facilities are compatible with and sensitive to the prevalent urban form, streetscape features, and future development plans of the area.

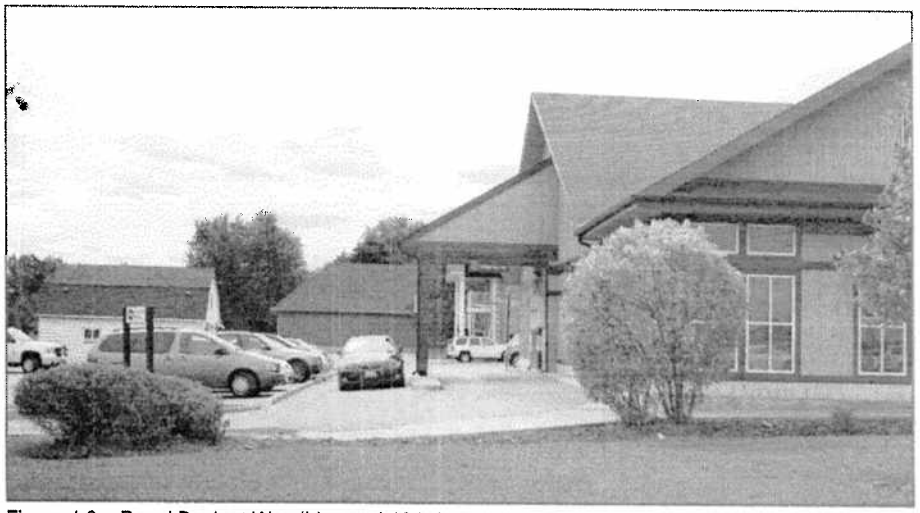


Figure 4.2a: Royal Bank at Woodbine and 16th Avenue appropriately maintains a community architectural theme.

Guideline 2: Avoid drive-through facilities in Intensification Areas, Regional Rapid Transit Corridors; Heritage Conservation Areas; Hamlet Areas and new communities. *Please refer to Figure 4.2b: Areas where drive-through facilities should be avoided.*

TO BE UPDATED

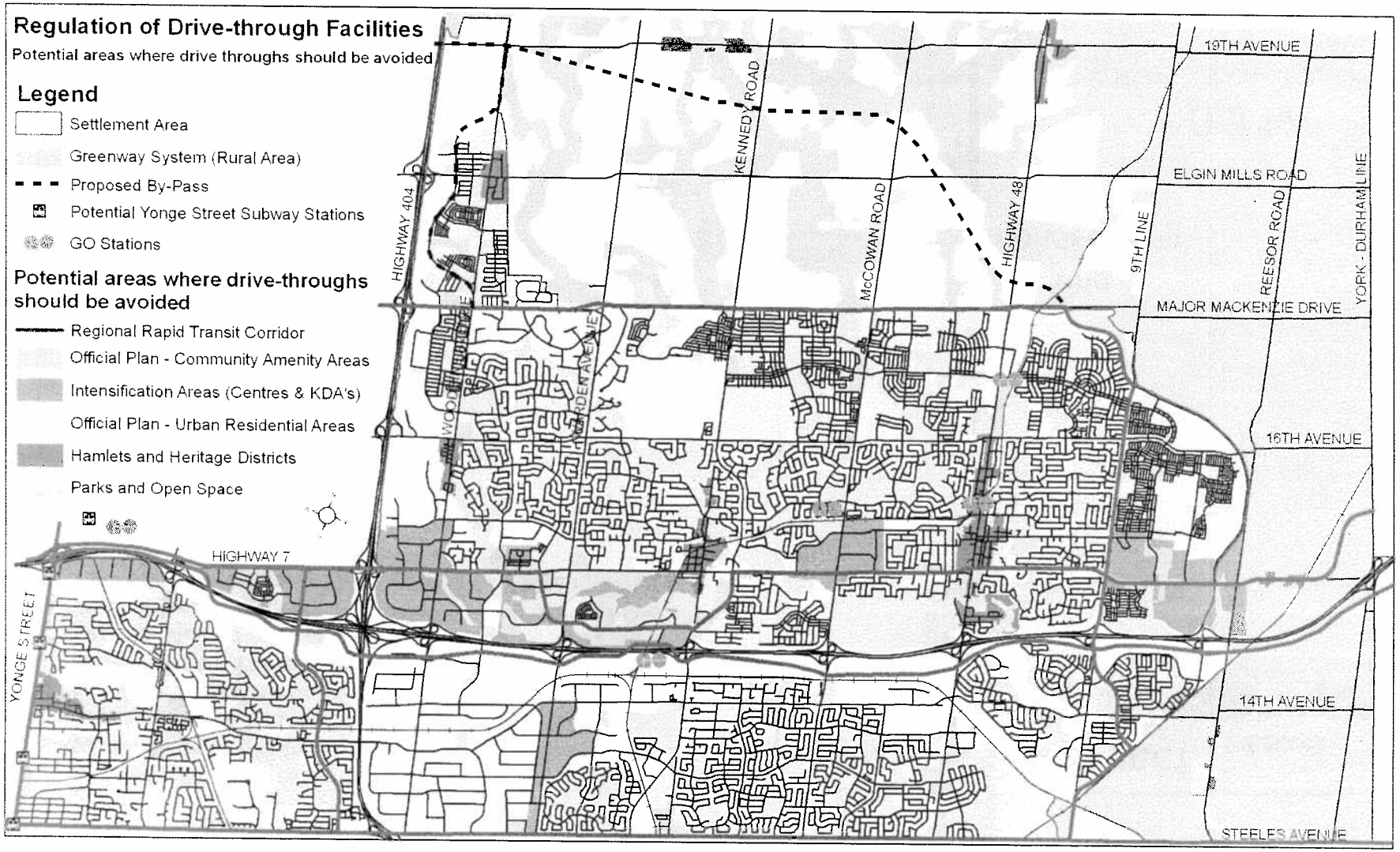


Figure 4.2b: Areas where drive-through facilities should be avoided

4.3 SITE SIZE

The size of a given site is a major determinant of whether it can adequately accommodate a drive-through facility. Smaller sites present specific challenges for drive-through restaurants, including available space to buffer adjacent uses and ability to satisfactorily accommodate the stacking lane on the site. These issues are exacerbated when drive-through facilities are situated adjacent residential uses. Car oriented commercial developments and particularly drive-throughs often require approximately 20% to 25% lot coverage to provide sufficient room for stacking and surface parking areas. Given that larger drive-through facilities are approximately 500 square metres, on average a minimum of 0.3 hectares would be required to properly accommodate this particular use particularly adjacent residential lands.

Double drive-throughs present particular challenges due to increased parking requirements, and the requirement for two stacking lanes addressing one building.

Guideline 3: Avoid drive-through restaurant facilities on sites less than 0.3 hectares in area when located adjacent residential uses.

Guideline 4: Avoid double drive-through facilities.

Guideline 5: Encourage a maximum of one drive-through facility per site. On large sites, in excess of 1 hectare in area, more than one drive-through facility may be considered to a maximum of 3 facilities. Drive-through restaurants should be limited to a maximum of two facilities per site.

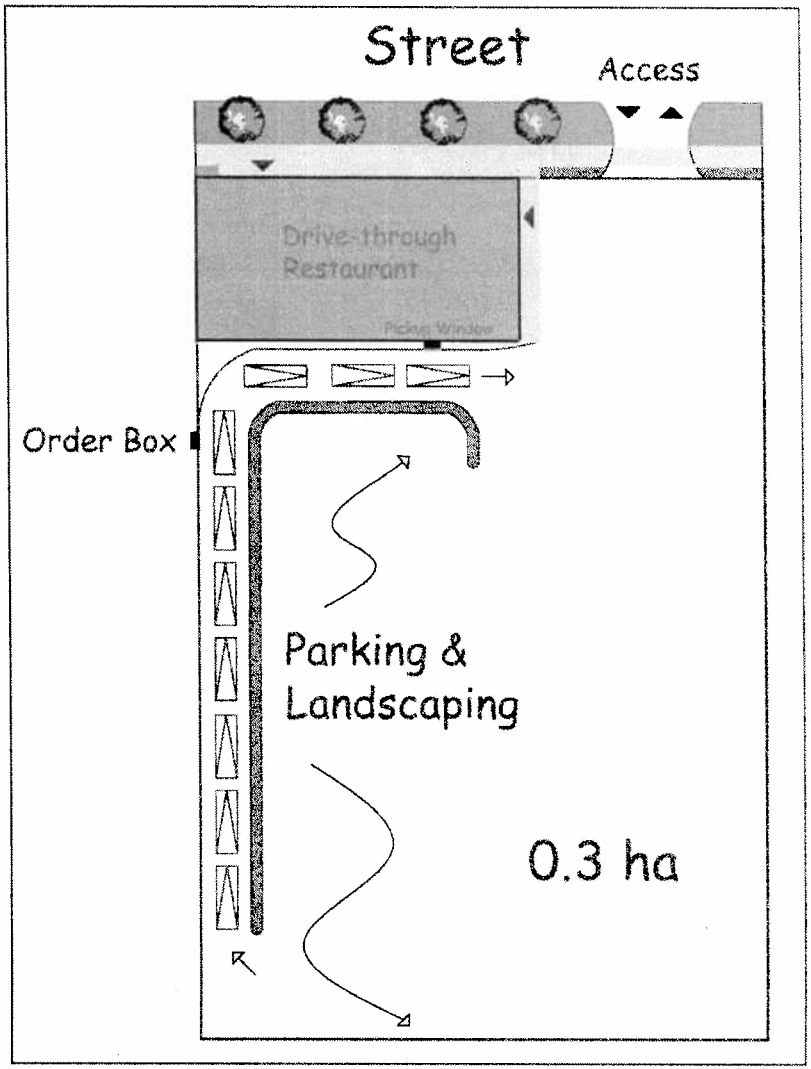


Figure 4.3: This drive-through site allows for sufficient space for a facility to provide appropriate landscaping, buffering and parking.

4.4 RELATIONSHIP TO ADJACENT USES

The existence of adjacent residential and other sensitive land uses creates particular concern with regard to traffic, light, litter, noise and air quality. The main concern adjacent residential uses are the stacking lane, and in the case of a restaurant, the order box. These two elements of a drive-through facility can result in noise emanating from vehicle stereos and the order box, and light emanating from vehicle headlights.

These issues are of particular concern given that some drive-through facilities operate 24 hours a day, with impacts most noticeable at night. Accordingly, stacking lanes and order boxes should maintain a setback distance from residential lands. Additional mitigative measures should include acoustic barriers, perimeter landscaped buffers and landscaped berms. Particularly for restaurants, the Town should require noise studies to be completed which detail any sound attenuation measures and to ascertain that noise levels which will be acceptable for adjacent residential properties.

Guideline 6: Discourage drive-through facilities from locating adjacent residential properties. Where it is clearly demonstrated that this cannot be achieved, the stacking lane and/or order box associated with a drive-through facility shall be setback a minimum distance of 40 metres from the nearest lot line of any adjacent residential use.

Guideline 7: Discourage drive-through facilities within a mixed use building which contain residential uses.

Guideline 8: Provide a landscaped buffer zone, a minimum 7.5m wide, along each yard adjoining residential uses.

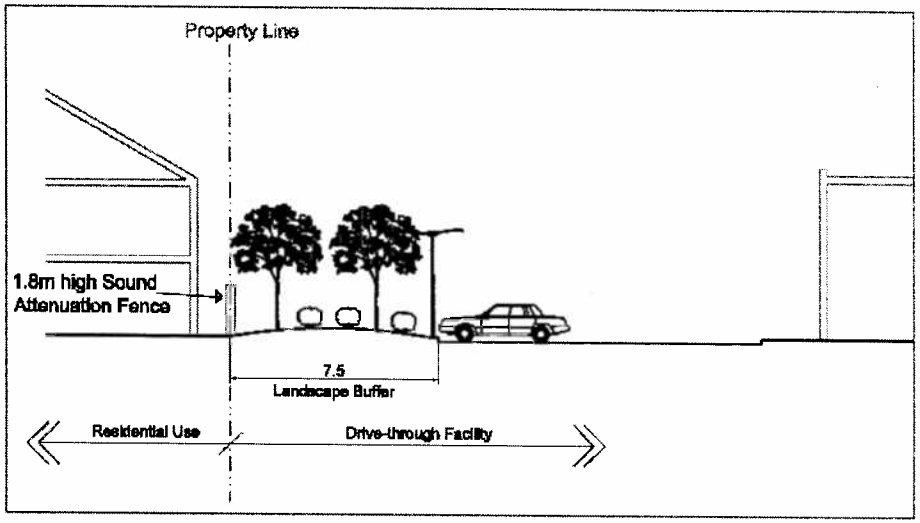


Figure 4.4a: This sketch illustrates a 7.5 meter buffer adjacent a residential use, which utilizes trees, shrubs and berming.

Guideline 9: Provide a 1.8m high noise fence along the property line of adjacent properties where appropriate. Where the adjacent uses are residential, provide a sound attenuation study which recommends measures to minimize noise impacts. Ensure that any boundary or noise fence are compatible with overall site design.

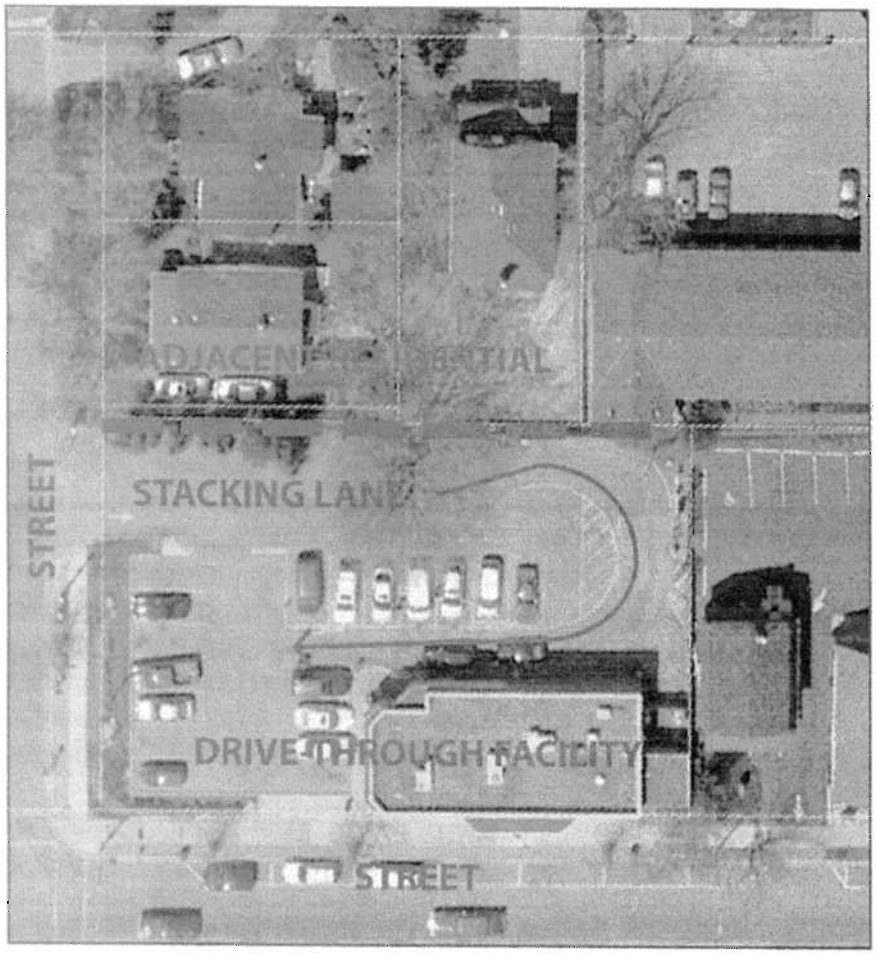


Figure 4.4b: This example illustrates inadequate buffering / separation from the adjacent residential. The red bold line indicates the commercial and residential interface.

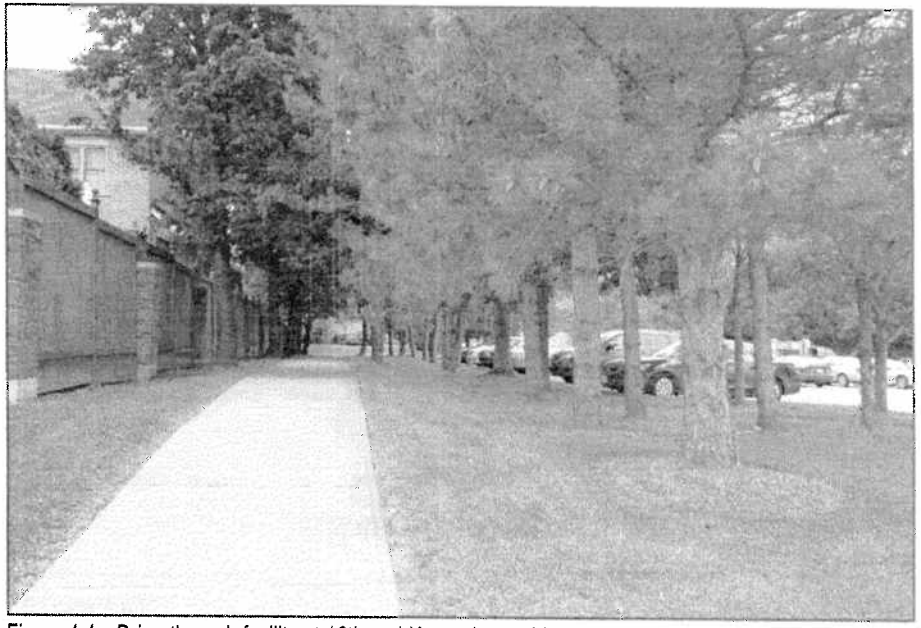


Figure 4.4c: Drive-through facility at 16th and Kennedy provides an adequate buffering area from adjacent residential through noise attenuation and landscaping.

4.5 SITE ACCESS, VEHICULAR AND PEDESTRIAN TRAFFIC

Due to their function, drive-through facilities result in a large amount of vehicles accessing the site and maneuvering within it. This high volume of vehicles actively circulating within the site may lead to vehicular / pedestrian conflicts. To avoid safety concerns and mitigate any potential conflicts, drive-through facilities should provide for safe and efficient pedestrian and vehicular access to the site and the building.

Internal circulation patterns should not negatively impact on and potentially impede safe and convenient pedestrian access into the building, from both the private and public realms. Moreover, vehicular circulation patterns should also consider potential impacts on adjacent roads, particularly the access points into the site.

Figure 4.5a: Starbucks on Trafalgar Rd. in Oakville is an adequate example that avoids traffic and pedestrian conflicts and allows the building to establish a good street relationship.

Guideline 10: Locate access points into the site away from street intersections and minimize the number of potential vehicular movements around the access location.

Guideline 11: Minimize the number and size of vehicular access points to the site from the public street. On corner sites, if feasible provide a vehicle access point from the secondary street.

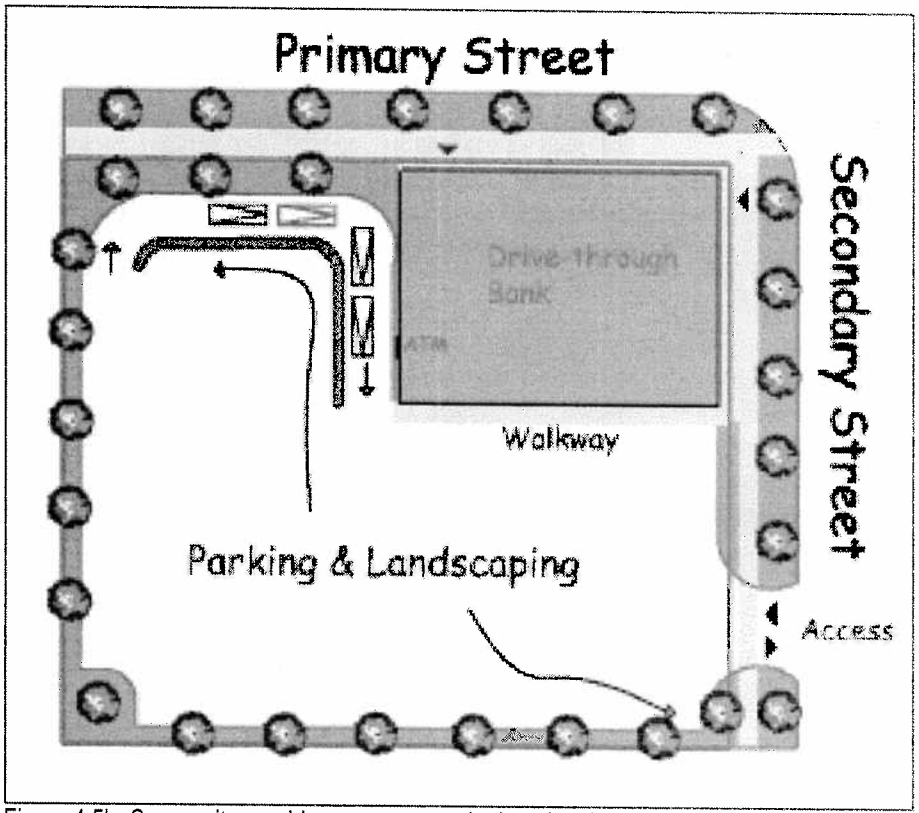


Figure 4.5b: Corner site provides an access point into the site away from the intersection as well as being from a secondary street.

Guideline 12: Wherever feasible, provide raised walkways to curb levels for pedestrians on the sides of buildings. Consider a minimum clear walkway width of 2.0m.

Guideline 13: Provide well articulated pedestrian routes and zones on the site, linking building entrances and parking areas. Connect these routes and zones to the streets where feasible. Use decorative paving, or similar means, complemented by soft landscaping where appropriate to delineate these linkages.

Guideline 14: Provide direct pedestrian access from public streets and sidewalks to the building entrance, and locate building entrances to be directly visible from the public street. In providing such a walkway, avoid crossing driveways, stacking lanes or parking areas.

Guideline 15: Within larger commercial sites, where feasible, locate drive-through facilities at or near the entrances into the site to provide well delineated pedestrian connections to the building. Ensure that there are no conflicts between the entrance to the stacking lane and entrance into the site.

Guideline 16: Divide large parking areas into smaller and well-defined sections where possible on the site and use hard and soft landscaping to avoid large monotonous asphalt surfaces.

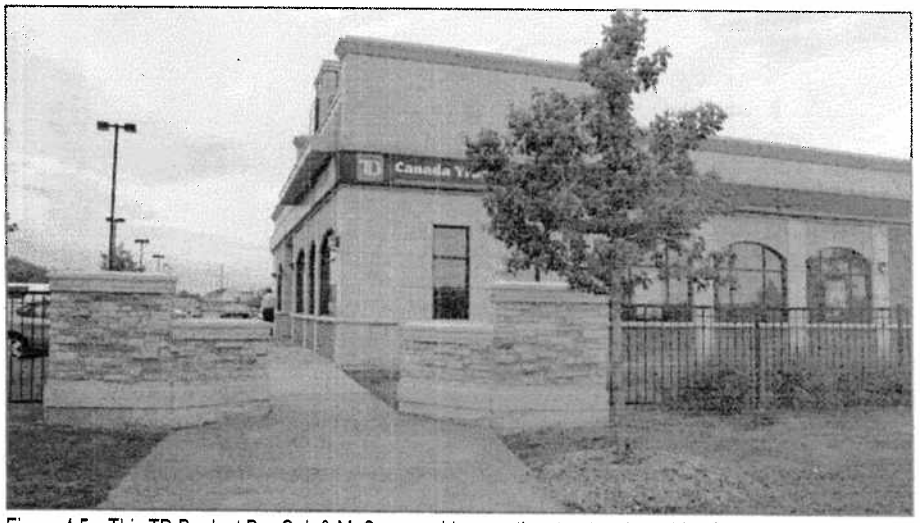


Figure 4.5c: This TD Bank at Bur Oak & McCowan addresses the street and provides for pedestrian linkages. Also, the queuing lane has been placed internally, away from the street edge.

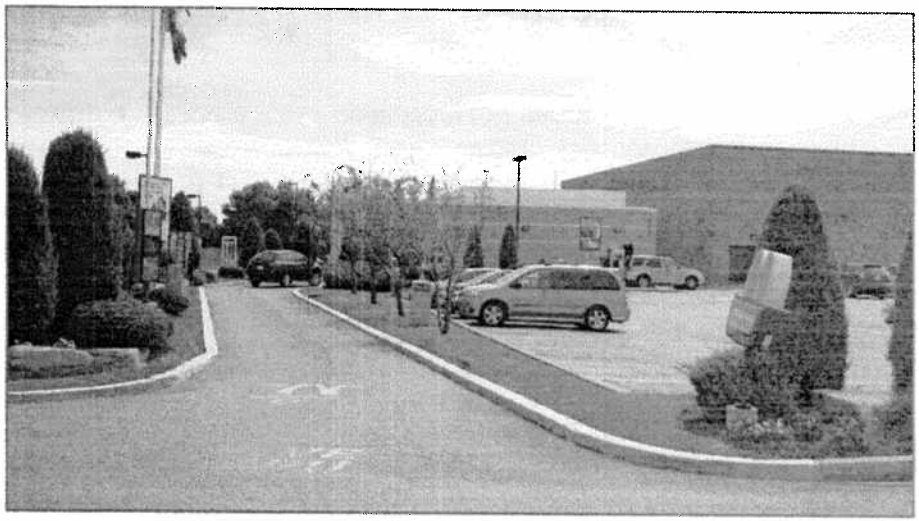


Figure 4.5d: McDonald's on Kennedy and Lee provides adequate landscaping and clearly distinguishes stacking from parking areas.

4.6 STACKING & QUEUING

Providing adequate stacking lanes is a critical element of avoiding on-site circulation and safety issues. Stacking lanes should be designed to achieve maximum efficiency of the functioning of the stacking lane as well as the overall site. In this regard, it is desirable to maintain a mainly linear and straight stacking lane to make them easy to use. Stacking lanes which block access to parking stalls or loading facilities lead to circulation conflicts and significantly decrease the efficiency of their use.

Double drive-through facilities present particular challenges as they require two separate stacking lanes which address one building. To mitigate this an adequate number of vehicle stacking spaces needs to be provided. The queuing areas within stacking lanes are necessary for the functional elements of a stacking lane, which include the order box and the pickup window.

Empirical evidence suggests that stacking space requirements vary upon the type of drive-through facility. Drive-through restaurant facilities require more spaces than others, such as financial institutions. This type of facility does not require an order box and the time spent within the stacking lane is less.

Guideline 17: To the extent feasible, design stacking lanes to be linear and straight, with a minimum amount of curves and turning movements. Where appropriate, provide an escape lane.

Guideline 18: Provide for a minimum distance of 2 - 3 car lengths between the entrance to the stacking lane and the access to the site from a street.

Guideline 19: Place the access point to the stacking lane of a drive-through facility as deeply as possible into the site.

Guideline 20: Avoid stacking lanes within the front or exterior side yards.

Guideline 21: Avoid the stacking lane from wrapping around the building.

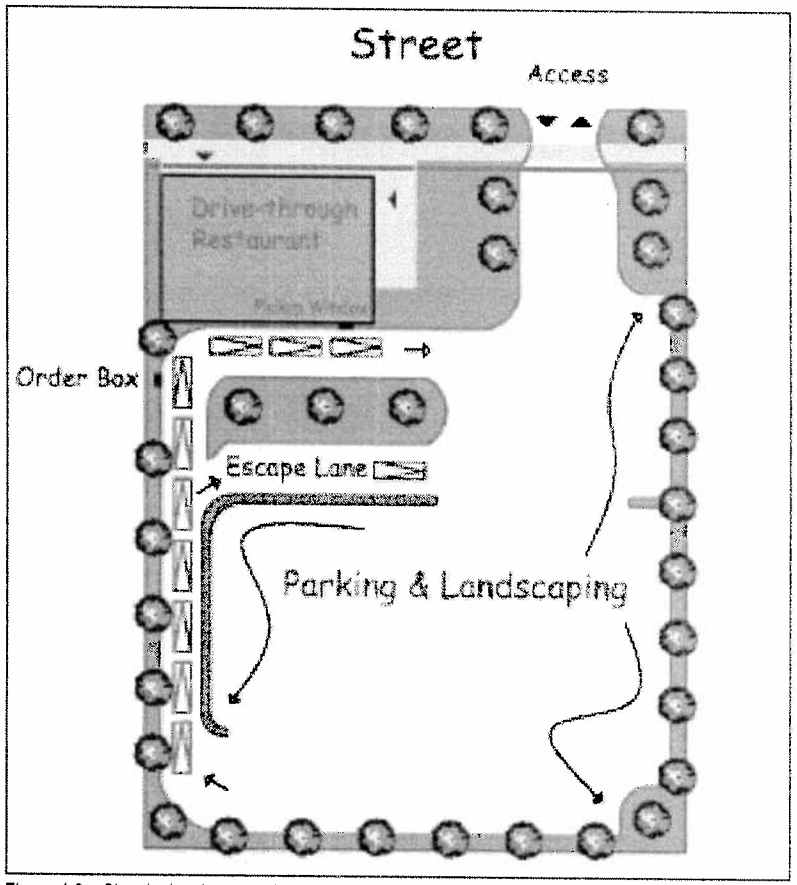


Figure 4.6a: Sketch showing an uninterrupted linear stacking lane and an escape lane that allows vehicles to exit without having to drive by the pickup window.

Guideline 22: For restaurants, provide for a minimum total of 10 vehicle stacking spaces in the drive-through aisle. Unless specific operations mandate otherwise, ensure that a minimum length to accommodate 7 vehicles is available between the entrance to the stacking lane and the order station, and that the aisle is contained within the site and located a good distance from any vehicular entrance. Where required by the Town, provide a queuing study to confirm appropriate length.

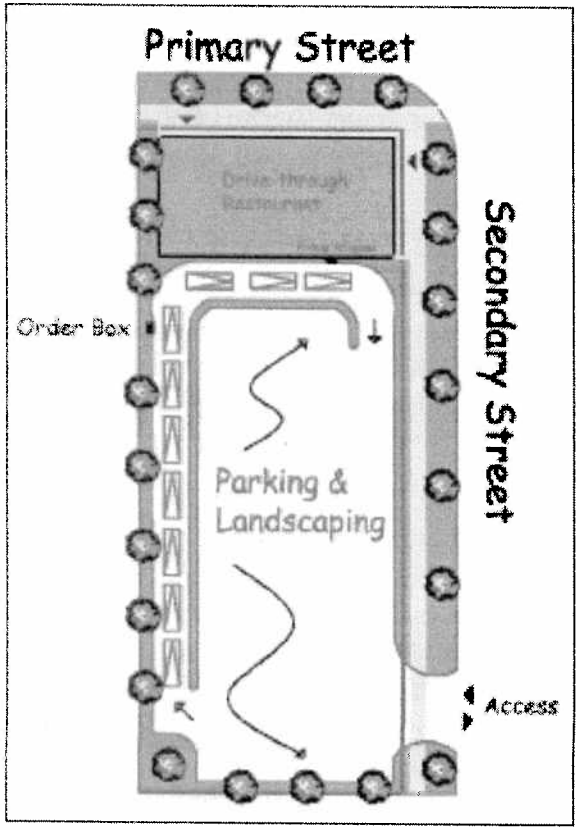


Figure 4.6b: Sketch showing an uninterrupted linear stacking lane which is adequately contained within the site while providing sufficient stacking spaces.

Guideline 23: For financial institutions and pharmacies, provide for a minimum total of 4 vehicle stacking spaces in the drive-through aisle. Where required by the Town, provide a queuing study to confirm appropriate length.

Guideline 24: Use raised islands, or other forms of barriers to separate stacking lanes from main parking areas and driveways. Provide decorative paving treatments and soft landscaping for the barriers where possible.

Guideline 25: In locating the stacking lane, avoid blocking access to parking spaces and loading and service areas.

Guideline 26: Provide clearly visible and appropriately placed directional signage at entrance and exit locations to stacking lanes.

Figure 4.6c: Starbucks at Highway 407 and 9th Line provides for appropriate curbs and landscaping which separates the stacking lane from the parking areas..

4.7 BUILDINGS AND THE STREETSCAPE

When buildings are oriented towards the street, they assists in creating a vibrant, animated streetscape. Buildings located near the street line encourage a pedestrian scale and provide direct pedestrian access into the building from the street. To assist in achieving these urbanistic goals, it is preferable for buildings to be located adjacent the street, without any parking or driveways between the building and the street line.

On corner sites, the building should address both street frontages to emphasize the importance of an urban intersection. Architectural treatment along street facing façades should be provided to ensure appropriate street presence. Stacking lanes should not be situated between the building and the street. When this cannot be avoided due to site specific circumstances, the stacking lane may be allowed between the building and the street as long as appropriate landscaping and architectural elements that maintain a built form presence along the street are provided.

Guideline 27: Place the building at or near the street frontage of the site. Design corner buildings to address both streets directly. Incorporate elements such as increased height at the corner, as well as massing and roof features. Articulate both street facing facades of the building appropriately.

Guideline 28: Locate interiors of buildings such as seating areas, employee rooms, offices, waiting areas, lobbies, which have potential for glass windows along street facing walls.

Figure 4.7a: Royal Bank at Markham Road and 14th Avenue addresses the street corner appropriately and adequately contains the stacking lane within the site.

Guideline 29: Design the building to reflect the existing community theme and/or maintain existing context through massing and materials.

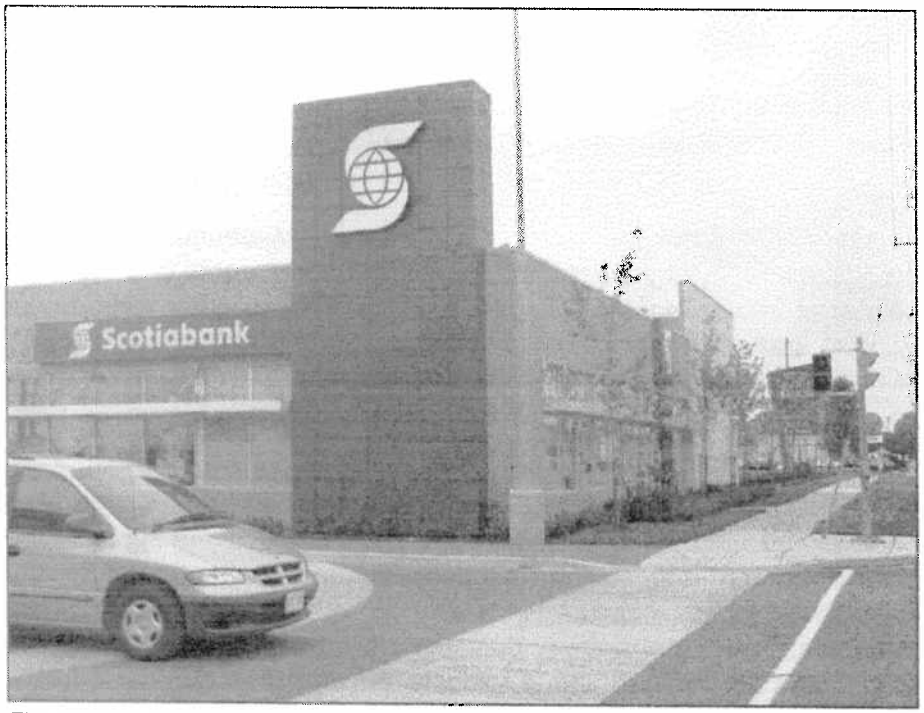


Figure 4.7b: This Scotia Bank building on the Queensway in Toronto provides a proper street frontage, facade treatment and use of windows along street facing walls.

Guideline 30: Treat the facades of the building, particularly the street elevation, with particular care for an aesthetically pleasing presence in the streetscape. Consider the use of appropriate fenestration, well-articulated entrances, roof elements, and façade features, as well as canopies and awnings.

Guideline 31: Encourage minimum buildings heights of 6m - 7.5m to establish a streetscape in scale with street width.

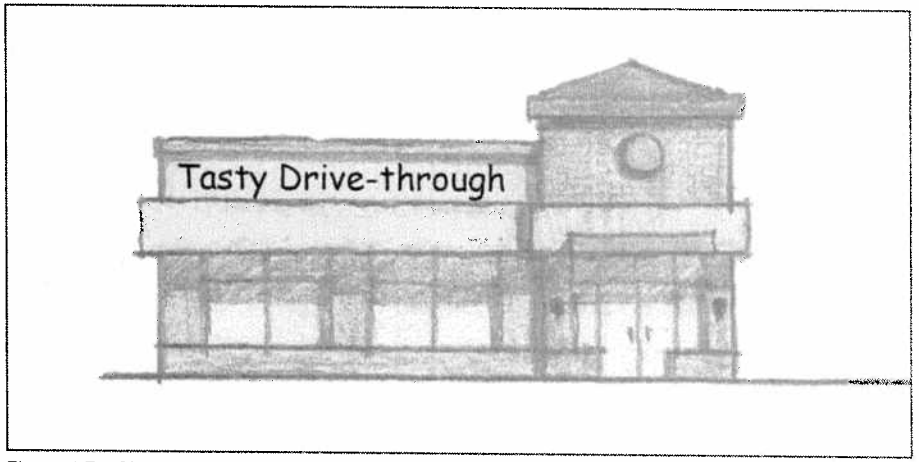


Figure 4.7c: Sketch of the facade of a drive-through facility which provides appropriate fenestration and entrance features.

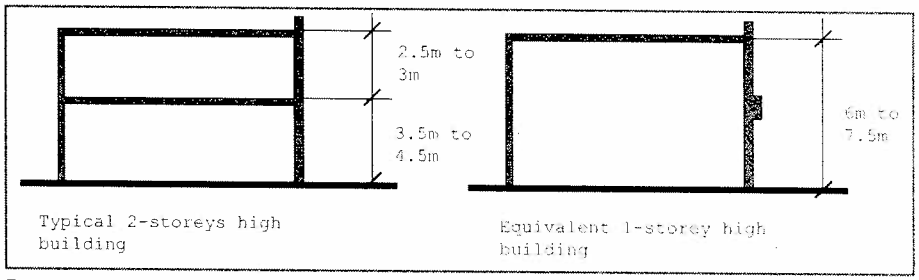


Figure 4.7d: This sketch illustrates the use of increased heights for single storey buildings to match that of two-storey buildings for an appropriate scale along streets.

Guideline 32: Locate main entrance doors to be directly accessible and visible from the sidewalks and public streets. As well, ensure that building entrances are safely and conveniently accessible from the parking lot.

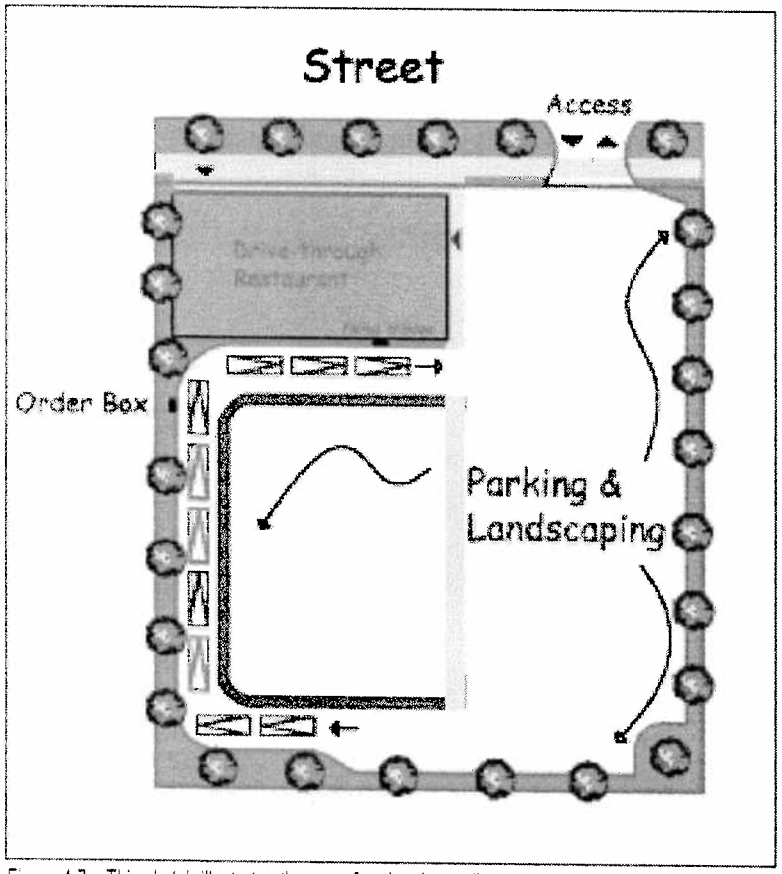


Figure 4.7e: This sketch illustrates the use of pedestrian walkways providing access to the building entrances from within the site and the street.

Guideline 33: At or near entrances, provide canopies, weather protection and bicycle parking areas in a manner that does not impede access.

Guideline 34: Where appropriate, provide amenities, such as outdoor seating spaces and patios adjacent the building and close to the street.

Figure 4.7f: Burger King restaurant on Highway 7 in Markham demonstrates a well massed building which appropriately addresses the street, with the stacking lane located at the side and rear, and an outdoor patio facing the street.

Guideline 35: In multi building developments, encourage the use of complimentary architectural design elements for the buildings and other site features to create a distinctive development.

Guideline 36: Provide consistent projections, recesses, arcades, awnings, colour treatment and texture to eliminate blank or featureless walls along all building facades.

Guideline 37: Notwithstanding Guideline #20, where site conditions demand it, situating the stacking lane in between the building and the street may be considered as long as an appropriate landscaping and an architectural screen that maintains a built form presence along the street is provided.

Figure 4.7g: Gas Bar and drive-through facility at Bur Oak and McCowan utilizes an architectural screen to buffer the stacking lane from the street while maintaining a building edge along the street.

Guideline 38: Discourage the use of back painted or "spandrel glass" along street facing facades.

Guideline 39: Encourage sustainable building and site design practices including the use of certification programs such as LEED.

4.8 LANDSCAPING, SIGNAGE & LIGHTING

Drive-through facilities require a significant amount of asphalt to accommodate parking and stacking areas. To achieve an appropriate balance within these sites it is important to pursue landscape opportunities on all site perimeters and within the site. Opportunities for landscaping include, but are not limited to: separating stacking lanes from parking areas and the street edge, breaking up large surface parking areas, and buffering residential areas by breaking the line of site between the drive-through facility and adjacent residential.

Landscaping is particularly important at corner sites and along building walls. Additional environmental advantages of soft landscaping relate to increasing overall site permeability and reducing heat island effect.

All landscaping and plantings should be in accordance with the guidelines and specifications contained in the Town of Markham's Trees for Tomorrow: Streetscape Manual.

Guideline 40: Where a building is setback from the street, provide ample landscaping in the front yard. Refer to the recommended species list as per the Town's Trees for Tomorrow: Streetscape Manual. Also, use low decorative fences and masonry walls and other landscape features as required.

Guideline 41: Provide a 3m minimum landscaped area where parking or stacking lanes are adjacent a public street.

Figure 4.8a: Wendy's restaurant on Bayly Street in Ajax illustrates a well landscaped forecourt for the building with the stacking lane at the rear.

Figure 4.8b: Scotia Bank on the Queensway and Islington in Toronto illustrates an adequate landscaped screen between the road and the stacking lane.

Guideline 42: Maximize opportunities for on-site landscaping along site perimeters as well as within the site. Use a minimum width of 1.5m for perimeter landscaping.

Guideline 43: Provide landscaping on either side of driveway entrances to a site. Place particular emphasis to landscaping at major access points to the site.

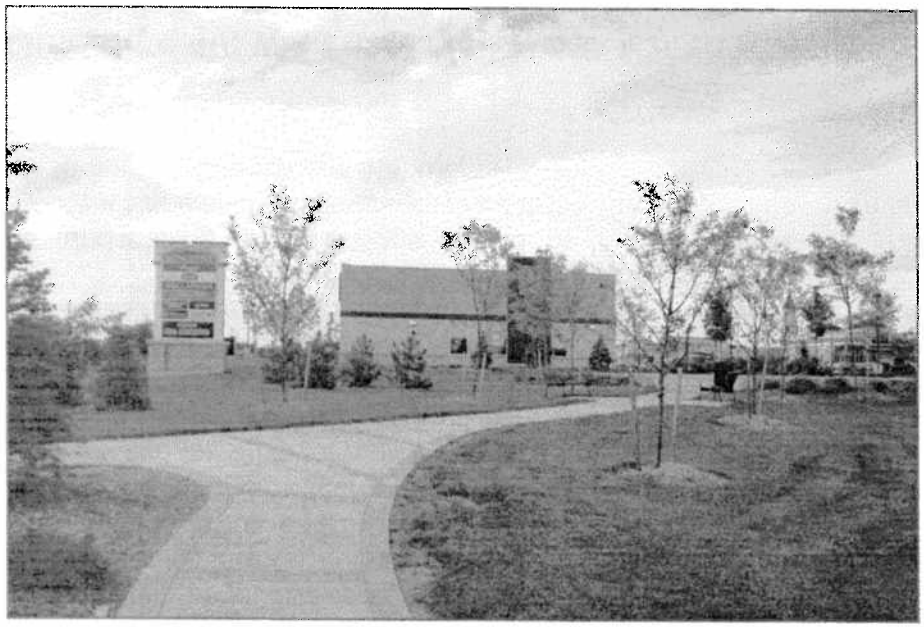


Figure 4.8c: Royal Bank at Hwy 407 and 9th Line provides an example of good landscaping and appropriate pedestrian access into the larger commercial site.

Guideline 44: Provide the minimum allowed number of parking spaces and driveway widths to maximize the amount of landscaping on the site.

Guideline 45: Provide street trees on the public boulevard in keeping with Town of Markham standards.

Guideline 46: Provide a mix of coniferous and deciduous trees and shrubs on the site for year-round vegetation, variety and colour. Use low maintenance and salt tolerant species.

Guideline 47: For landscape buffers adjacent other land uses, and particularly adjacent residential properties, provide ample coniferous and deciduous plant material. Consider berming where additional height for a screen may be warranted for rear or side yards.

Guideline 48: Use sodded areas and shrub beds to collect / store and filter stormwater to improve recharge and increase overall site permeability.

Guideline 49: Incorporate all signage into the design consideration for the buildings and landscaping. Promote the use of fascia signs that are in proportion with the building mass and façade proportions.

Guideline 50: Discourage the use of ground/temporary signs where possible. However, if ground signs are used, incorporate them into the landscape and encourage the maximum height not to exceed the height of the adjacent building.

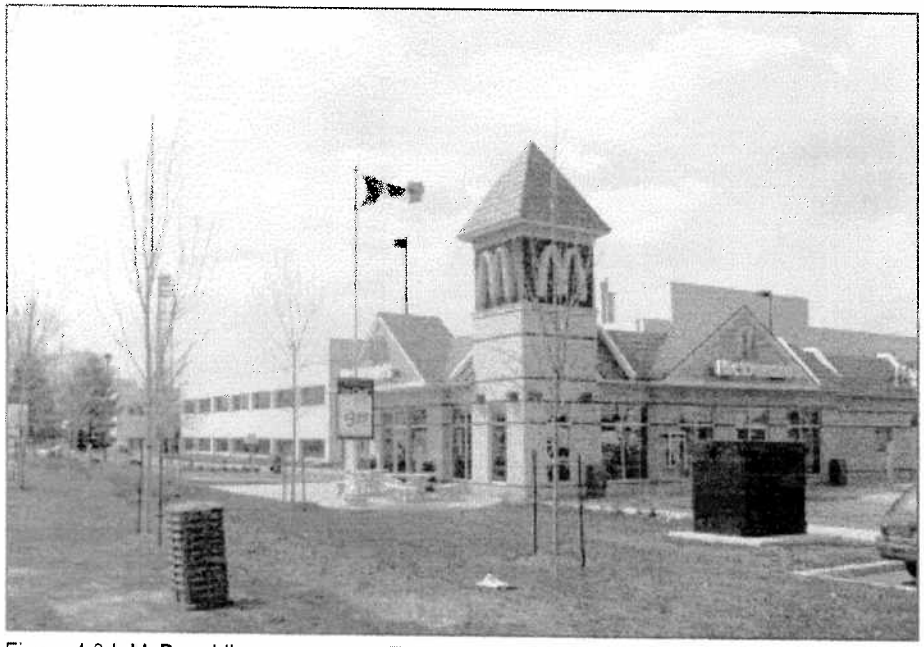


Figure 4.8d: McDonald's restaurant on Eglinton in Scarborough shows a building located to address the street appropriately. Also, the signage has been incorporated into the facades properly in scale with the building.

Guideline 51: Direct lighting sources away from adjacent residential properties and provide screening as necessary. Where required by the Town, supply light distribution information to demonstrate minimal impacts on adjacent properties.

Guideline 52: Provide night-sky friendly lighting to minimize light pollution. Pursue various lighting options such as step lights and facade mounted lights.

Guideline 53: Provide fixtures that distribute an appropriate level of light supply evenly from the man building and the parking area to provide user safety and limit glare.

4.9 SERVICING & UTILITIES

Properly accommodating the necessary operational elements of a drive-through facility, including utility and servicing, will assist in achieving an efficient site design as well as a higher aesthetic quality. In this regard, consideration should be given to enclosing garbage and utility areas within the building as well as allowing the service related areas to function appropriately, including loading/service locations and areas for snow removal.

Guideline 54: Place loading and garbage facilities at the rear of the drive-through building, and provide screening from neighbouring properties and public streets as necessary. Integrate such facilities into the building wherever possible.

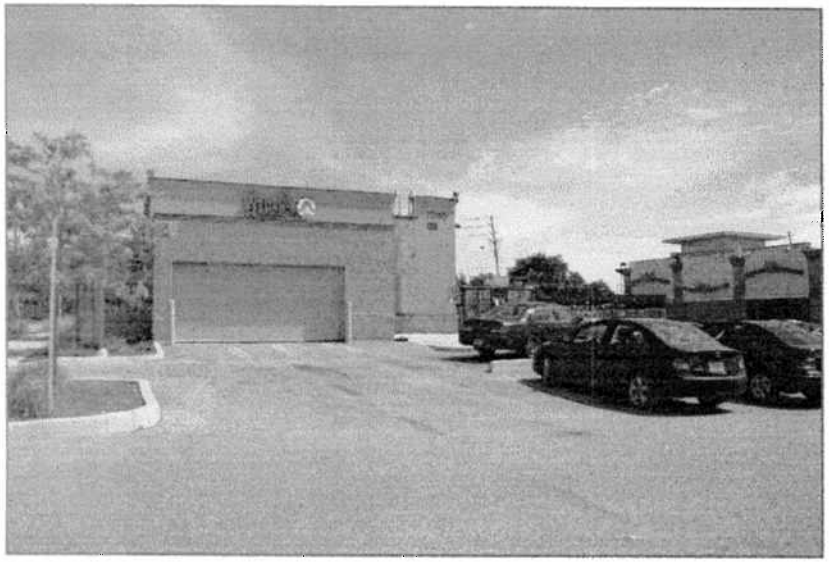


Figure 4.9a: Wendy's restaurant on Steeles and Woodbine demonstrates how to appropriately situate and enclose garbage areas at the rear, and within the building.

Guideline 55: Ensure that all utilities are situated within enclosed areas and limit views from the public street. Place utilities underground where feasible.

Guideline 56: Plan the site to include areas for temporary snow storage without conflicting with site circulation, landscaping and utility boxes.

APPENDICES