Urban Design Guidelines for Commercial Uses

Drive-Through Facility

Ottawa

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Glossary: See the urban design guideline page on Ottawa.ca for definition of terminologies (search "urban design guidelines glossary").

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INTRODUCTION

This section outlines:

- The objectives of this guideline document
- The applicable Official Plan and By-Law directions
- Key issues related to different context
- Responsibilities related to sustainable design

INTRODUCTION

Definition

A drive-through facility is an establishment that provides or dispenses products or services, through an attendant or an automated machine, to persons remaining in vehicles that are in designated stacking aisles. A drive-through facility may be in combination with other uses, such as a financial institution, personal service shop, retail store, eating establishment or gas stations. In these guidelines, a drive through facility does not include gas bar pump islands.

Use and Application

These guidelines are to be used during the preparation and review of development proposals that include a drive-through to achieve objectives of the Official Plan.

These are general guidelines. They are a tool kit and not intended to be used as a checklist for evaluating a proposal and not all the guidelines are applicable to every site. The context of each development proposal will inform the application of, and the emphasis on, the guidelines that are relevant.

Where specific policies are provided in an area-specific policy document, such as a Secondary Plan or a Community Design Plan (CDP), the area-specific policies will take precedent. Guidelines in this document may augment such area-specific policies. The guidelines will also be a resource for the preparation of CDPs.

Objectives

The objectives of these guidelines are to highlight ways to:

- To promote compatible development that fits well with, and improves, its existing or planned context
- To enhance public streets and contribute to a high quality public space
- To create efficient stacking movements on site
- To create a safe and comfortable pedestrian environment on site
- To minimize impacts on adjacent land uses that could be caused by on-site activities.

Official Plan and By-Law Direction

The Official Plan includes as one of its Cross Cutting Issues, the creation of "Healthy and Inclusive Communities". It encourages development of healthy walkable, 15-minute neighborhoods that feature a range of housing options, supporting services and amenities. The Official Plan does not support new drive-through facilities in the Downtown Core and Inner Urban Transects. However, drive-through facilities may be established in various designations within Outer Urban, Suburban, Greenbelt and Rural Transects. The Official Plan acknowledge the existing automobile-dependent development pattern in Outer Urban and Suburban Transects and encourages taking opportunities to improve the convenience and level of service for walking, cycling and public transit modes so that overtime, these areas can be evolved into 15- minute neigbourhoods. Within the Greenbelt and Rural Transects, the Official Plan recognizes a rural pattern of built form and site design. The intent of the Plan

is to ensure the responsible use of resources for the protection of public health and the environment while supporting rural development. Development in the Greenbelt and Rural Transects should maintain the rural character, image and identity. The Official Plan requires parking and paved area of a development to be located away from road frontage.

Section 4.6 in the Official Plan outlines a few key urban design objectives of the Official Plan that may affect the design of a drive-through facilities. These include promote design excellence in the Design Priority Areas; ensure capital investments enhance the City's streets, sidewalks and other public spaces supporting a healthy lifestyle; ensure effective site planning that supports the objectives of Corridors, Hubs, Neighbourhoods and the character of villages and rural landscapes. It should be noted that there are Design Priority Areas within the Outer Urban, Suburban, and Rural Transects where a drive-through facility may be permitted.

The Zoning By-law provides detailed requirement for drive through design where permitted.

Context and Issues

While automobile-centric uses are not directly supported in the Official Plan, these guidelines are to support the review of current and applicably permitted sites to achieve other policy objectives. The challenge for autocentric uses will be to balance the needs of vehicle users and environmental, climate and health resiliency, into site design.

Drive-through facilities have proven to be very successful as they target the mobile and car-oriented market. Drive-through service has been widely adopted by fast food businesses and car washes; new types of drive-through facilities include banks, dry cleaning, pharmacies, and beer stores. Meanwhile, walk-in service is still an important component for many businesses with drive-through facilities for customers who arrive on foot, bicycles and by vehicles but do not use the drive-though services.

While successful and popular, drive-through facilities present many urban design challenges, including respecting the urban context while designing prototypical drive-through facility sites and buildings; supporting a pedestrian friendly environment along public streets; using landscape areas effectively to improve the overall environmental and visual quality of the area; and designing efficient stacking movements on site.

INTRODUCTION

Sustainable Design

One of the objectives of the Official Plan is to build a city that is energy conscious, reduces emissions and is more resilient to the impacts of climate change. All development should consider opportunities to reduce resource consumption, conserve energy, reduce peak demand and provide resilience to power disruptions. All buildings should consider using efficient mechanical and electrical systems as well as incorporating renewable energy generation features. The design of buildings should prevent thermal bridging and providing appropriate wall thickness and window to wall ratios to insulate the building.

The City of Ottawa encourages proponents of any development to explore and apply best sustainable practices for the full life cycle of the site and buildings. The City encourages the use of sustainable design standards, such as the Canadian Green Building Council (CaGBC) Zero Carbon Building Standards, rating system and the International WELL Building Institute WELL Building Standard in the planning, design, construction and operation stages of a development.

The design of a drive-through facility carries the responsibility to achieve this objective. The design guidelines included in this document support sustainable design by promoting a more inclusive, more pedestrian-friendly, and well-landscaped design, in addition to a building of higher energy efficiency.

1.0 SITE ORGANIZATION

The site organization for a drive-through facility should support the objectives of the Official Plan. In the Outer Urban and Suburban Transects, the site design should facilitate the evolution of these areas into walkable15-minutes neighbourhoods. In the Greenbelt and Rural Transects, the design should respect the local character. The approach to site design should balance the need for vehicular circulation with pedestrian connectivity, and site efficiency with public realm quality. The following guidelines provide design guidance as it relates to Site Design offers direction on:

- Building Placement
- Pedestrians and Cyclists
- Vehicles and Parking
- Services and Utilities

1.1 Building Placement:

1 Respond to the positive elements of the context through such means as building height, setbacks, building orientation and architectural styles. (Figures 1 and 3)

2 Locate buildings close to the street to help define the street edge.

3 Coordinate architectural detail and character within an overall design concept for all building sides and components. (Figure 2)

Figure 1: This drive-through responds to an arterial road context using an appropriate setback and building height.

Figure 2: At the back of this drive-through restaurant, architectural details are consistent with the other sides of the building.

Figure 3: This drive-through development responds to its traditional village context using a compatible building style.

4 Locate interior uses such as seating areas, employee rooms, offices, waiting areas and lobbies, which have the potential for clear windows, along street-facing walls. (Figure 4)

5 Make the majority of the pedestrian level façade facing the street highly transparent with clear glass windows and doors that animate public streets and maximize views in and out of the building.

6 Provide weather protection and heat at the main building entrance, for areas close to public transit stops, bicycle parking, walkways, and in places with pedestrian amenities.

7 Locate public amenities close to the building entrances. (Figure 5)

Figure 4: Employee rooms with glass windows are located facing the public areas in this drive-through bank.

Figure 5: Outdoor patios and bike racks are facing public street.

1.2 Pedestrians and Cyclists:

1 Provide a minimum 2.0 metre wide unobstructed sidewalk in the public right-of-way, across private access driveways. Ensure little or no change in elevation. (Figure 6)

2 Distinguish walkways from driving surfaces by using varied paving treatments and by raising walkways to curb level. (Diagram 1)

3 Use landscaping or similar means to delineate pedestrian walkways and pedestrian access to the buildings.

4 Locate required bicycle parking close to the building entrance in a manner that does not impede.

Figure 6: The continuous public sidewalk across driveways provides a pedestrian zone.

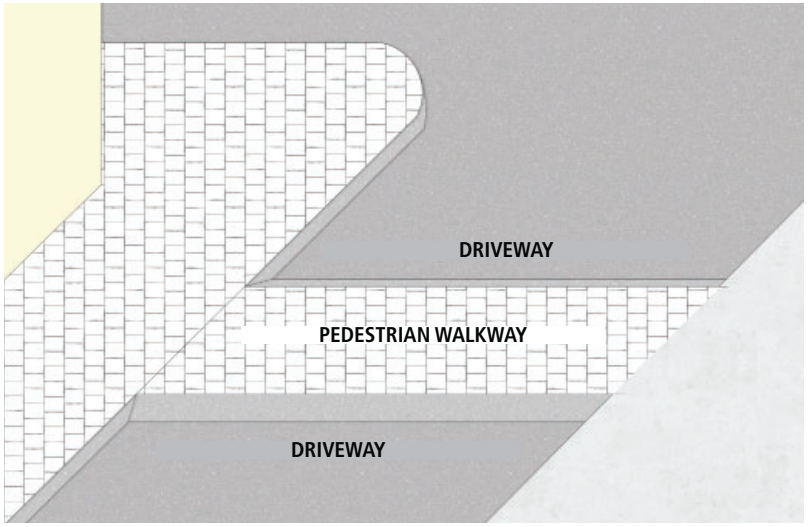


Diagram 1: Raised pedestrian walkways enhance safety for pedestrians crossing driveways.

5 Provide an unobstructed 2.0-metre-wide pedestrian walkway between the public sidewalk (and/or parking areas) and building entrances. (Figure 7)

6 Provide customer entrance doors that are close to parking areas. (Figure 8)

7 Provide customer entrance doors clearly visible from public streets and directly accessible from the public sidewalk. (Figure 8)

8 Pedestrian pathways throughout the site should be direct, clear, and accessible, with signage as required to prioritize pedestrian safety. (Figure 9)

Figure 7: Pedestrian walkway connection from parking to the building entrance.

Figure 8: This drive-through restaurant has a customer entrance directly accessible from both the public sidewalk and the parking area.

Figure 9: Pedestrian walkway with varied pavement is direct and clear in the site.

1.3 Vehicles and Parking:

1 Minimize the number and width of driveways from the public street while ensuring they meet the requirements of the Private Approach By-law. (Diagram 2 and 3)

2 Locate surface parking areas and stacking lanes at the side or rear of buildings. Design surface parking lots to accommodate the provision of electric vehicle charging spaces. (Diagram 4 and 5)

3 Provide only the minimum number of parking spaces required by the Zoning By-law.

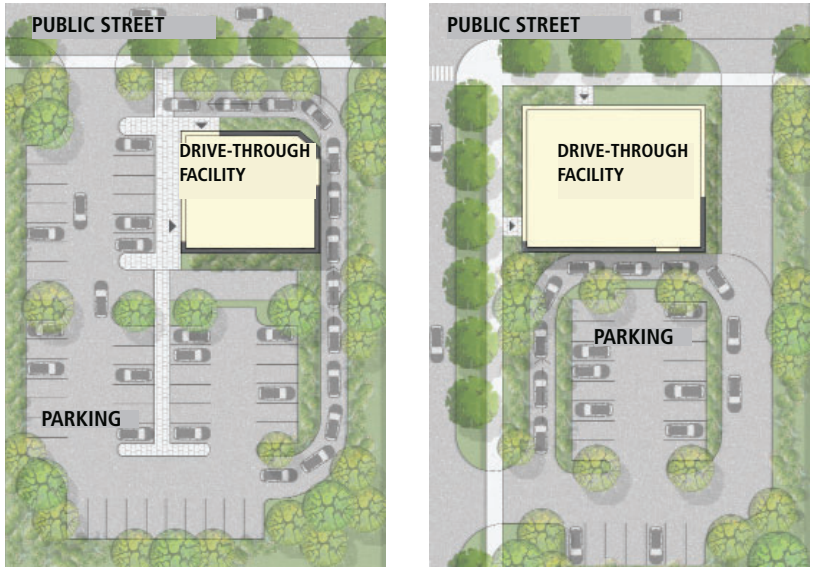


Diagram 2 and 3 Minimizing the number and width of driveways helps reduce interruptions to the public sidewalk.

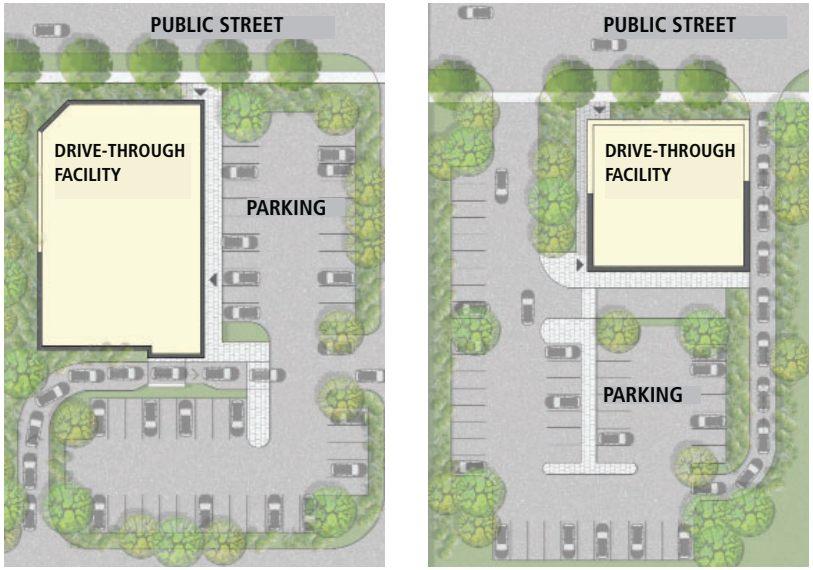


Diagram 4 and 5: Locating parking and driveway areas at the rear of the site provides opportunities to frame the street edge with built structures.

4 Design surface parking lot to encourage the provision of electric vehicle charging spaces and dedicated car share spaces.

5 Locate vehicular access points to the sites as far away as possible from street intersections. Locate vehicle access points to corner sites on the secondary street. (Diagram 6)

6 Divide large parking areas into smaller and well-defined sections using soft and hard landscaping in order minimize the amount of paved area. (Figure 10)

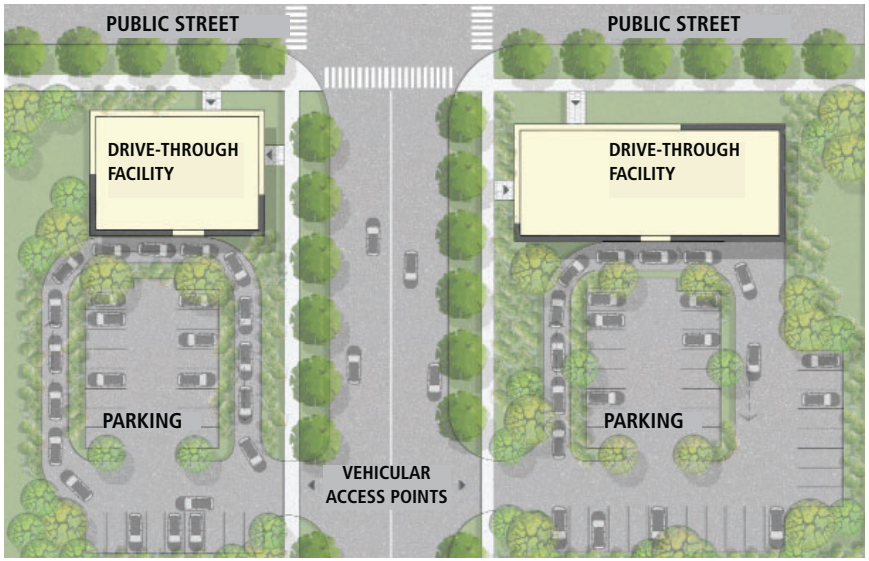


Diagram 6: Locating vehicular access points far from the intersection helps reduce potential impacts on the traffic at the intersection.

Figure 10: Landscaping and walkways divide large parking lots into smaller pieces.

Stacking Lane

7 Provide escape lanes and the appropriate number of queuing spaces as required by the Zoning By-law to create efficient stacking lanes and to minimize on-site conflicts. (Diagram 7)

8 Avoid locating the stacking lane between the building and the public street. Stacking lane locations should avoid close proximity to residential uses and outdoor amenity areas.

9 Locate the start point to the stacking lane at the rear of the site so that queued vehicles do not block traffic along the public streets or the movement of other vehicles on site. (Diagram 8 and 9)

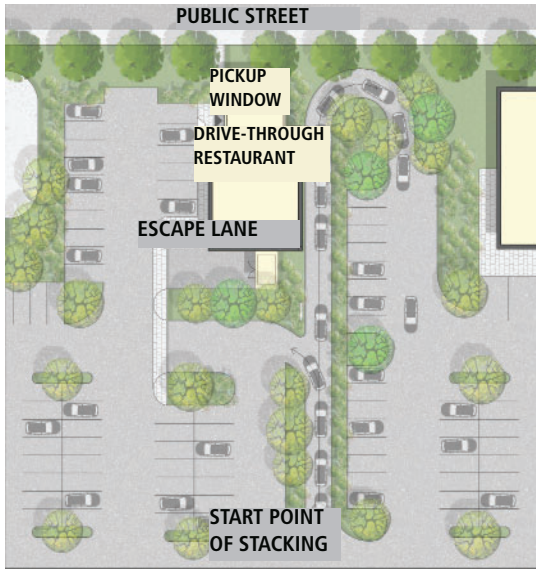
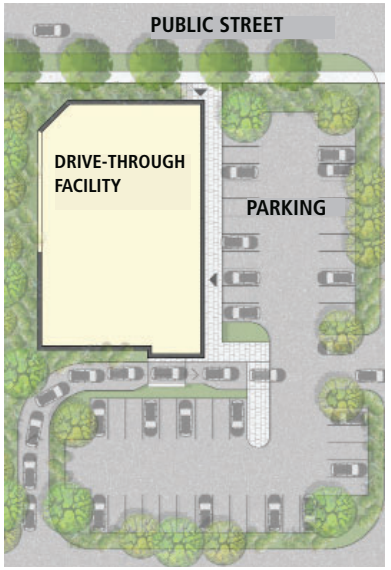


Diagram 7: In this drive-through site, sufficient queuing spaces are provided. The escape lane allows cars to exit from the stacking lane without the pick up window.



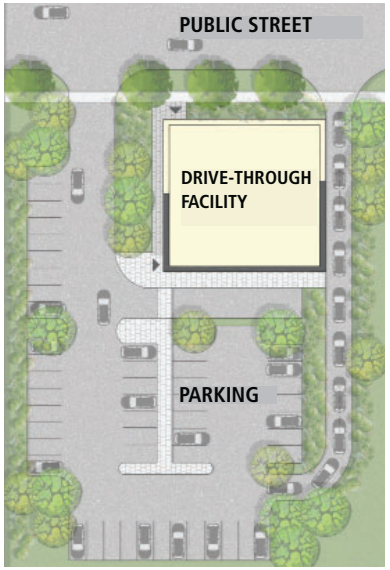


Diagram 8 and 9: In these two drive-through sites, start points are located at the rear of the site to minimize the potential impacts on other traffic that could be caused by stacking cars.

10 Locate stacking lanes away from adjacent sensitive uses, such as residential and outdoor amenity areas, to reduce the impacts of noise and pollution that could be caused by stacking cars on such uses. Use landscaping and fencing to help buffer potential impacts.

11 Separate stacking lanes from parking areas and driveways using landscaped islands, decorative pavement, pervious islands and painted lines. (Figures 11 and Figure 12)

12 Provide separate stacking lanes when two drive-through uses exist on the same site.

Figure 11: A grassed curb separates the stacking lane from parking areas in this drive-through site.

Figure 12: Landscaping that separates stacking lanes from parking areas and driveway is desirable.

1.4 Services and Utilities:

1 Design waste enclosures that are external to the building with the same materials as the building and ensure that the wall height is sufficient to completely conceal waste receptacles dumpsters. Waste enclosures should be located away from public streets and amenities. (Figure 13)

2 Enclose all utility equipment within buildings or screen them from both public streets and private properties to the rear. These include utility boxes, waste storage, loading docks and ramps, and air conditioner compressors. (Figure 14)

3 Locate noise-generating areas, including ordering board speakers, outdoor loading areas and garbage storage, away from sensitive uses such as residential areas and schools.

Figure 13: At this drive-through development, the garbage enclosure structure is visually harmonized with the main building through similar material colour and texture.

Figure 14: The garbage is enclosed within the building in a dedicated garbage room.

4 Provide views and clear sightlines between the site and surrounding uses to ensure sufficient safety and comfort levels. (Figure 15)

5 Buffer potential noise impacts with building structures, landscaped berms or attenuation fencing (minimum 1.8 metre in height) in front with landscaping as a means to reduce noise pollution. (Figure 16)

6 Plan the site to include areas for temporary snow storage without conflicting with site circulation, tree plantings and utility boxes.

Figure 15: The ATM of this drive-through bank is directly visible from the surrounding areas, providing a sense of security for users. .

Figure 16: The landscape buffer reduces noise pollution from the busy street.

1 SITE ORGANIZATION

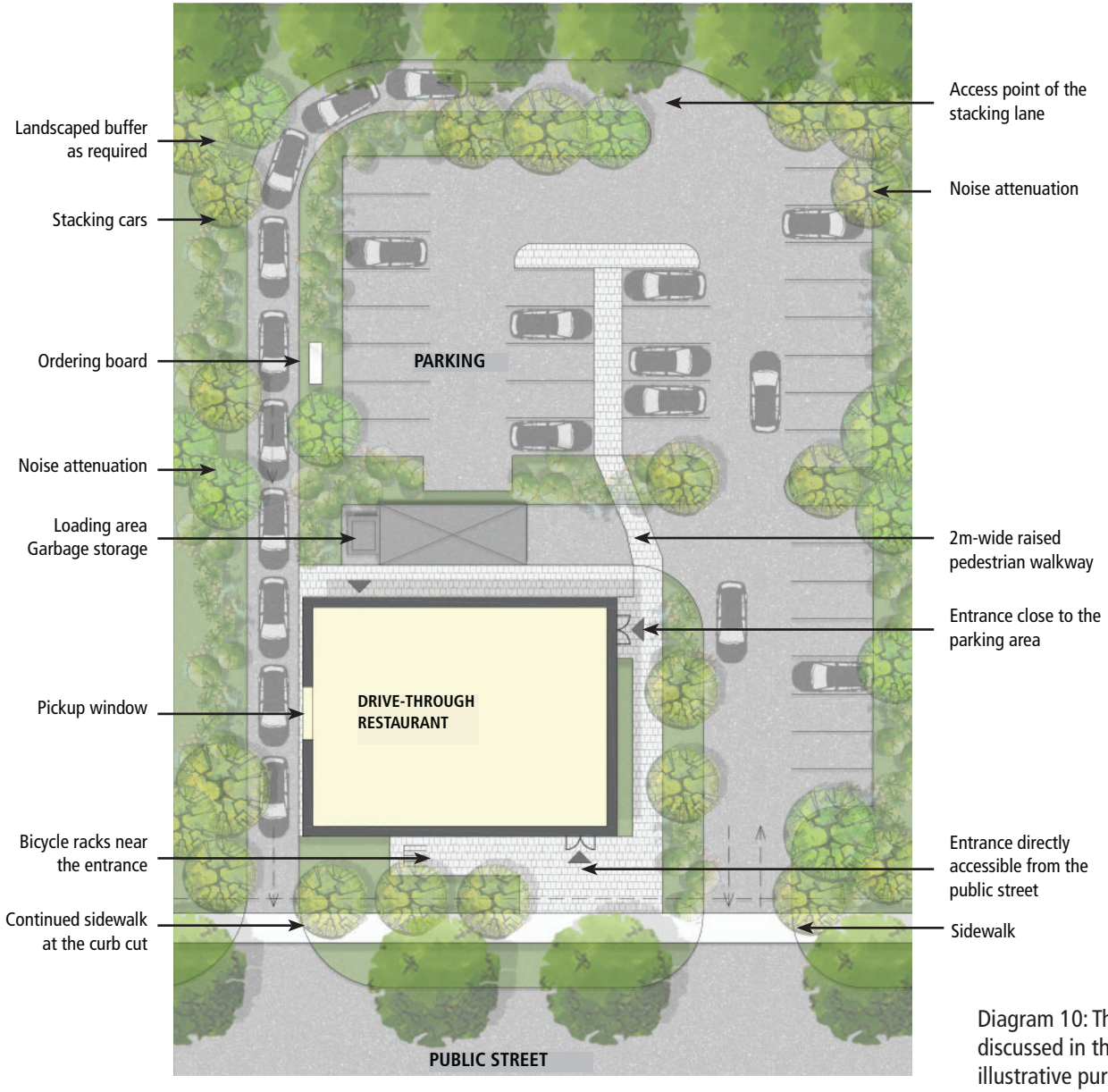


Diagram 10: This figure illustrates many of the elements discussed in the guidelines and defined in the glossary. It is for illustrative purposes.

2.0 LANDSCAPING AND ELEMENTS

The landscaping is important for the environment, site functions, public realm, visual experience, and neighbourhood characters. The Official Plan includes policies relevant to the landscape design of a drive-through facility. These include policies regarding landscaping in public streets, landscaping on private lands and specifically around parking, stormwater management, tree canopy targets, and urban design. The following guidelines emphasize key landscaping elements that affect the public realm and site development, including:

- Landscaping
- Signage
- Lighting
- Sustainability

2.1 Landscaping:

1 Provide shade trees and ample landscaping, in combination with building orientation, to enhance the streetscape and define the street edge when setting buildings back from the street is unavoidable (Figure 17 and Figure 18).

2 Landscape the area in front of blank walls that face public streets and use projections, recesses, arcades, awnings, colour and texture to reduce the visual size of any unglazed walls.

Figure 17: Along this drive-through development, mature trees help define the street edge.

Figure 18: Awnings, foundation plants, trees and different color of the drive through facing the public street adds animation.

3 Plant trees along street frontages in accordance with the tree planting guidelines as per City policies. (Figure 19)

4 Select trees, shrubs and other vegetation considering their tolerance to urban conditions, such as road salt and heat. Give preference to native species of the region that are of equal suitability.

5 Provide a landscape area along the edge of the site of sufficient size to accommodate deciduous or coniferous trees where parking areas, drive lanes or stacking lanes are adjacent to a public street. Use trees, shrubs and low walls to screen cars from view while allowing eye level visibility into the site. A landscape width of approximately 3-5 metres is recommended to accommodate for tree planting. (Figures 20)

Figure 19: Along the front of this drive-through, street trees every 7 to 10 metres enhance the streetscape.

Figure 20: Solid rocks, shrubs and coniferous trees screens parking and stacking lane from public street.

6 Provide a minimum 3-5 metre wide landscape area, which may include a solid wall or fence in addition to planting, at the edges of sites that are adjacent to residential or institutional properties.

7 Provide a sufficient landscape space along the site's side and rear yards to plant trees and landscaping in order to provide screening and enhance site environmental benefits. A landscape width of approximately 3-5 metres is recommended to accommodate for tree planting. (Figure 22)

8 Protect and feature heritage, specimen and mature trees on the site by designing site programming around tree preservation. Minimize grade changes and preserve permeable surfaces.

Figure 21: The overhead pergola and landscape along the edge of the site screens the driveway from street.

Figure 22: The trees provide screening from the public street and enhances environmental benefit.

2.2 Signage:

1 Locate and design ground-mounted and wall-mounted signs to complement the character and scale of the area. Integrate landscape features with ground mounted signs.

2 Use pavement markings and directional signs to enhance clarity of movement patterns on site.

3 Design buildings to include defined spaces to accommodate signs that respect building scale, architectural features, signage uniformity and established streetscape design objectives.

4 Restrict temporary and portable signs. Prohibit billboards, revolving signs and roof signs on private property.

5 Design sign illumination to be task-oriented and avoid glare/light spillover toward adjacent land uses.

Figure 23: Design wall-mounted signs are in proportion with the buildings.

Figure 24: Provide directional signs that provide smooth circulation in the drive through.

2.3 Lighting

1 Design lighting so that there is no uplighting light spillage, glare or light cast over adjacent uses. Direct and/or shield lighting sources away from adjacent residential properties and provide screening as necessary. (Figure 25 and 26)

2 Use DarkSky compliant and efficient white light sources to reduce energy costs and to create a natural colour balance for safety and security.

Figure 25: Lighting does not affect the surrounding and provide enough light for the service.

Figure 26: There is no uplighting light spillage and light is away from the adjacent residential properties.

2.4 Sustainability

1 Use green building technologies such as the installation of rooftop photovoltaic panels, using cool or reflective roofing materials, and other approaches recognized by green building certification programs.

2 Use sodded areas and planting beds to collect, store and filter stormwater in order to reduce storm runoff. Minimize paved areas, such as parking and driveways and maximize water permeable surface to contribute to the appearance and environmental sustainability of the site and its larger context by increasing water penetration into the water table, reducing pollution of local water features and runoff demand on local infrastructure. (Figures 27)

Figure 27: The planting area collects and stores stormwater.

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IMAGE CREDIT

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