This document was developed to establish guidelines for the City of Edmonton's expectations regarding the location of access to their roadway assets.

Care has been taken to confirm the accuracy of the information contained herein. The views expressed herein do not necessarily represent those of any individual contributor. As the design of the assets and systems described herein continually evolves, and practices change and improve over time, so it is necessary to regularly consult relevant technical standards, codes, and other publications rather than relying on this publication exclusively. The City of Edmonton, authors, and members of the review committee, want to convey that this document does not constitute a project specific design. As such, no part of this document alleviates the responsibility of the professionals retained to design and/or construct specific projects from taking full responsibility and authenticating their designs in accordance with APEGA, AALA, AAA, Alberta Building Code, and any other statutory or safety requirements.

Any Standard Drawings, Details, or specifications herein are provided to convey the City’s typically ideal general arrangement and requirements. Representations may not be to scale, they may be substantially schematic in nature and/or require further elaboration and development. As such those documents are not suitable for integration into a specific implementation without review and modification and are only intended for use by a competent designer exercising professional judgment. The designer shall modify and supplement as necessary to provide a complete, properly functioning, design that conforms in all respects to the City’s functional requirements. When actualized in a particular implementation it is the designer’s responsibility to ensure the size, location, and spacing of all elements, and all components/specifications, are suitable and safe for the use and location intended, and any applicable code, legislative, and authority requirements are adhered to. In addition, any accessibility, operational and maintenance requirements must be met. Deviations from the represented nominal design parameters, questions of intent or accuracy, or any other apparent conflicts, shall be reconciled with an appropriate City representative. Finally, when employing any aspect of these documents, the ultimately responsible professional designer shall remove any authentication of the original author(s), note any provenance as appropriate, and apply their own authentication as required.
Access Management Guidelines

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2022 - Feb - 09

Permit to Practice

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<td>2022- Feb - 07</td>
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</table>
Introduction

Access Management Guidelines
INTRODUCTION

Purpose and Scope

This guideline document is intended to assist in the planning of vehicular access for development or redevelopment of land parcels within the City of Edmonton. Guidance is provided on the location, type and configuration of accesses in context with a variety of factors such as safety, convenience, adjoining land use, traffic/transit operation, adjoining roadway classification and roadway character.

These access guidelines provide direction for the planning and approval of most access situations. Adherence to these guidelines should expedite and facilitate approval of most access applications, but may not guarantee approval in some circumstances where context or condition require a unique, site specific approach.

The Access Management Guidelines are intended for use by the City of Edmonton, the land development industry and any party that wishes to create or modify access to a parcel of land.

How the Guidelines Should be Used

Land development proponents should use the guidelines at the earliest stage of site planning. These guidelines provide the minimum criteria for accesses. For sites where the guidelines may not be readily applicable a pre-submission meeting should be held with Transportation Services.

Transportation Services staff will refer to the guidelines when reviewing and evaluating access proposals. Again, it is expected that the minimums within will be exceeded or at least met. Accesses that do not meet these guidelines should be rejected, unless extenuating conditions were identified at a pre-submission meeting.

The information in the guide does not absolve private and public sector planners, architects or engineers from their duty to carry out due diligence when planning a site. This includes checking relevant technical and planning documents, which can include the Transportation Association of Canada’s “Geometric Design Guide for Canadian Roads” (1999), the Transportation Research Board’s “Access Management Manual” (2003), relevant ASPs (Area Structure Plans), NSPs (Neighbourhood Structure Plans) and outline plans, the Mature Neighbourhood Overlay Plan, development permits and approvals from the Subdivision Authority and the Subdivision and Development Appeal Board.

Through the Municipal Government Act and the Highways Development and Protection Act, the City has the authority to permit and regulate access including its location, configuration, type and related construction details. While the City may treat applications for development permits and accesses as one and the same as part of a comprehensive development review, it must be understood that the two applications are separate processes.
Organization of the Guide

This document is divided into three parts:

- Introduction
- Review and Approval Process
- Technical Guidelines

The Review and Approval Process describes how accesses are reviewed by Transportation Services, the submission requirements for a proposed site access, and an appeal process for decisions made.

The Technical Guidelines are presented, with the road classification system first, followed by a number of access spacing guidelines, right-turn and left-turn lanes, access type, access width, access throat length, and other access considerations ending with Redevelopment Sites.

Each Technical Guideline includes three brief sections:

- “What This Guideline Means”—this defines what is meant by the subject area
- “Diagram”—where applicable, a diagram visually represents the guideline
- “Guideline”—this presents the specific guideline information in a tabular or an illustrative format
Review and Approval Process

Access Management Guidelines
Informal Pre-submission Consultation

A pre-submission consultation between the proponent and Transportation Services (780-496-1795) is advisable, particularly for more complex sites and cases where access to an arterial road is being requested. This is a proactive opportunity to discuss freely and frankly the developer's or owner's needs, including the business case for the land parcel and buildings and the consequent need for access, as well as to discuss the City’s perspective on constraints for site access in order to advance the application. Both the proponent and the City need to clearly share their perspectives and make reasonable efforts to find common ground and a solution that will work for both parties.

This could take the form of a meeting. A preliminary site plan is required to focus discussion. City staff should bring forward contextual information about the existing (or planned) road, particularly the classification of the road(s) in question. Other City departments should be invited to the meeting if issues under their jurisdiction are likely to be impacted.

The meeting should be documented, including details of any decisions, common ground (areas of agreement) as well as areas of disagreement. After the meeting, if additional information is needed by one party it should be gathered and transmitted promptly.

Formal Review and Approval Process

The access approval process is under the authority of Transportation Services. It is separate from the development-related application processes managed by Sustainable Development. The development and access approval processes will be completed concurrently to ensure prompt and timely approvals.

Usually, the formal review and approval process starts with a development permit, subdivision, or zoning application to Sustainable Development. In a small number of cases, only changes to existing access are pursued. In all cases, Transportation Services will receive the access application and review it accordingly.

As part of the review process additional input may be sought from agencies/departments with infrastructure in close proximity to the proposed access. The purpose of this is to evaluate potential conflicts associated with trees, utilities, transit and other roadway infrastructure in the vicinity of the proposed access. As part of the conditions of approval the applicant will be responsible for any costs associated with any relocation or removal required to facilitate construction of the proposed access.

The review carried out by Transportation Services may result in one of two basic actions:

- **Approval with Conditions**—Transportation Services approves the access subject to a set of conditions, usually describing key access parameters, and an associated agreement that outlines construction and inspection requirements.
- **Objection**—Transportation Services has substantive concerns with the proposed accesses that were not resolved through dialogue with the applicant, and does not want an approval issued for the development. In such cases Transportation Services should clearly document the concerns.

A schematic of the access review process is shown in Appendix A.
Submission Requirements

The submission requirements shall consist of a scaled site plan showing:

- Legal description of property
- North arrow
- Access location relative to the site and its connecting road, including dimensions from corner pins to an access edge for each access
- Road details including alignments for curb and gutter (urban) or pavement edge (rural) on both sides of road, paint markings, and medians (both existing and future where applicable)
- Other nearby accesses from the site (for divided roads, the nearest all-turns and right-in/right-out accesses; for undivided roads, all accesses within 100m)
- Access type (commercial crossing, curb return, private crossing or culvert crossing)
- Access width
- Access throat length
- Surface and underground utility information (including offset dimensions where applicable)
- On-site buildings, loading bays and stalls, parking stalls and drive aisles
- Any bus stops and associated transit infrastructure on the roads abutting the site
- Boulevard trees
- Existing encroachments on road right-of-way
- Truck turning movement templates (when requested)

An electronic version is preferable, but paper versions are also acceptable. Metric dimensions are preferred. The submission may need to include supporting analysis to address sightlines at the proposed access location at the request of Transportation Services. Sightlines for any access are to meet Transportation Association of Canada (TAC) requirements outlined in the Geometric Design Guide for Canadian Roads (1999).

Legislative Authority Regarding Access Control

Highways Development and Protections Act

The Highways Development and Protection Act (HDPA) provides the authority for the City of Edmonton to make decisions related to access. A provision within the Act allows for a Council of a Municipality to classify controlled streets as well as to regulate and control physical means of access to or from a controlled street.

Within the Act, there are two roadway types identified; Controlled Highways and Controlled Streets.

All Provincial Highways are deemed to be Controlled Highways.

Under the act, a municipality may by Bylaw identify any street as a controlled street. The City of Edmonton has a Bylaw known as the Transportation System Bylaw #15101 that identifies the Controlled Streets. A controlled street in the Edmonton context is better known or identified within this document as an Arterial, Collector or Local Roadway. Unless specifically identified within the City’s Transportation System Bylaw, all streets within Edmonton should be considered to be Controlled Streets.
City Streets Access Bylaw #13521

The City of Edmonton Bylaw that provides authority to Transportation Services to regulate and control access is the City Streets Access Bylaw #13521. This Bylaw provides the foundation by which the Access Management Guidelines have been established. While the Bylaw grants high level approval for the City Manager, or others through delegated authority, to review and approve access, the Guidelines are intended to provide clarity and consistency for how decisions will be made in relation to access type, size, and location along with other considerations that are not identified within the Bylaw.

Access Removal and/or Restrictions

Within the Highways and Development Protection Act, and associated Bylaws listed in the preceding section, there are provisions that allow the City to remove or restrict access by Bylaw to or from a controlled street. The City may remove an access by Bylaw as long as an alternate means of access exists or is provided. This could include provision of access via a service or frontage road, a cross-lot access easement or a joint access easement.

An access may be restricted from an all-turns access to something less than an all-turns access (for example, right-in/right-out) at any time. The only provision is that at least one means of access must exist for each property however indirect or circuitous.
Technical Guidelines
Access Management Guidelines
Road Classification

In Edmonton, as in most jurisdictions, roadways are given functional classifications that classify different roadways by the degree to which they cater to vehicular mobility versus direct land access.

Roads are classified by their level of mobility and access. Roads with higher classifications are intended to provide greater mobility while lower classification roads emphasize access. In most circumstances the user should first confirm the classification of the road being accessed.

Road Classification by Mobility and Access

For the purposes of this guideline, Edmonton's roads are classified as follows:

**Freeway**
Whitemud Drive; Yellowhead Trail, from the east city limit to the westerly interchange with Anthony Henday Drive; Sherwood Park Freeway from the CPR grade separation to the east City limit; Stony Plain Road west of Anthony Henday Drive; Terwillegar Drive and 170 Street south of Whitemud Drive.

**Inner Ring Loop and Highway Connectors**
All inner ring loop and highway connectors shown in Appendix B but not including the “Provincial Highway Connectors” and not including roads classified as freeways.
Road Classification

Divided Arterial
All roads defined as arterial roadways by the Transportation Systems Bylaw (see Appendix C), that have, or are planned to have, a raised curb and gutter median or a depressed ditch median.

Undivided Arterial
All roads defined as arterial roadways by the Transportation Systems Bylaw (see Appendix C), that do not have a median including arterial roads with painted left-turn lanes and two-way left-turn lanes.

Collector
All roads not included in the above definitions that have at least two travel lanes (one in each direction) such that vehicles coming from opposite directions can pass without pulling over toward the side. Collector roads provide neighbourhood travel between local and arterial roads and direct access to adjacent lands. Buses generally operate on collector roads within neighbourhoods.

Local
All other roads not included in the above classifications and not included in the Alley classification.

Alley
All roads at the rear of properties typically wide enough for one travel lane and without parking on the right of way.

Note that roads within the city limits but under provincial jurisdiction are not included.
Separation Distance: To/From Traffic Signals

Separation distances to/from signalized intersections should be relatively generous. This ensures reasonable traffic flow and safety, especially on major roads. Higher classification roads require greater separation distances due to higher traffic speeds and the complexity of driver decision making. A greater separation distance is also needed to allow room for queuing and deceleration.

This guideline must be used when the separation distance in question is between two all-turns accesses or intersections (including right-in/right-out/left-in accesses, and left-in/left-out accesses on one-way roads) and at least one of the accesses or intersections is controlled by traffic signals.

Separation Distance Guideline for a Proposed Signalized Access

<table>
<thead>
<tr>
<th>Classification of Road Being Accessed</th>
<th>Minimum Separation (metres) From Nearest Existing or Planned Traffic Signal</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeway</td>
<td>Access not permitted</td>
</tr>
<tr>
<td>Inner Ring Loop and Highway Connectors</td>
<td>400</td>
</tr>
<tr>
<td>Divided Arterial</td>
<td>250 up to 4 lanes (2 travel lanes in each direction) 400 more than 4 lanes</td>
</tr>
<tr>
<td>Undivided Arterial, access signalized</td>
<td>250 up to 5 lanes (2 travel lanes in each direction and a centre left turn lane) 400 more than 5 lanes</td>
</tr>
<tr>
<td>Undivided Arterial, access non-signalized</td>
<td>100</td>
</tr>
</tbody>
</table>
A non-signalized all-turns access is an access that is, or is planned to be, controlled by stop signs or yield signs on the minor approaches and that allows all possible turning movements: left turns, right turns and through movements. For the purposes of this guideline it also includes non-signalized right-in/right-out/left-in accesses, non-signalized left-in/left-out accesses on one-way roads (treated as undivided roads), and non-signalized roundabouts.

These all-turns accesses are significantly more complex intersections and require a greater separation distance between them and other accesses to ensure reasonable traffic flow and safety, especially on major roads. Higher classification roads require a greater separation distance between accesses and/or intersections due to higher traffic speeds. A greater separation distance is also needed between accesses and traffic signals to allow room for traffic queues.

### Separation Distance Guideline for a Proposed Non-signalized All-Turns Access

<table>
<thead>
<tr>
<th>Classification of Road Being Accessed</th>
<th>Minimum Separation (metres) From Nearest Existing Or Planned Non-Signalized All-Turns Intersection Or Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeway</td>
<td>Access not permitted</td>
</tr>
<tr>
<td>Inner Ring Loop and Highway Connectors</td>
<td>400</td>
</tr>
<tr>
<td>Divided Arterial</td>
<td>250 up to 4 lanes (2 travel lanes in each direction) 400 more than 4 lanes</td>
</tr>
<tr>
<td>Undivided Arterial*</td>
<td>60 except approaching arterial/arterial or arterial/collector intersections where minimum separation is 100m</td>
</tr>
</tbody>
</table>

* See also Guideline 12
A right-in/right-out access only allows right-turning movements for vehicles using the access. This access type usually exists on roads with medians, but can include accesses on the right side of a one-way road. These accesses can be located in an auxiliary lane, provided there is sufficient bay and taper for deceleration upstream of the access.

Compared to all-turns accesses, right-in/right-out accesses are very simple intersections and can therefore tolerate a smaller distance separating them from other accesses. However, a greater separation distance is necessary between the access and a traffic signal than compared to a non-signalized intersection.

### Separation Distance Guideline for a Proposed Right-in/Right-out Access from a Traffic Signal

<table>
<thead>
<tr>
<th>Classification Of Road Being Accessed</th>
<th>Minimum Separation (m) From An Existing Or Future Signalized Intersection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeway</td>
<td>Access not permitted</td>
</tr>
<tr>
<td>Inner Ring Loop and Highway Connectors</td>
<td>200</td>
</tr>
<tr>
<td>Divided Arterial</td>
<td>Downstream of signal and with an auxiliary lane: 50</td>
</tr>
<tr>
<td></td>
<td>Downstream of signal without an auxiliary lane: 110</td>
</tr>
<tr>
<td></td>
<td>Upstream of Signal: upstream of left turn taper¹; if no turn bay then not less than 50m</td>
</tr>
</tbody>
</table>

**NOTES:**

1. See Guideline 8 Right-Turn and Left-Turn Lanes for definition of taper
A right-in/right-out access only allows right-turning movements for vehicles using the access. This access type usually exists on roads with medians, but can include accesses on the right side of a one-way road. These accesses can be located in an auxiliary lane, provided there is sufficient bay and taper for deceleration upstream of the access.

Compared to an all-turns access, the right-in/right-out access is a very simple intersection and can therefore tolerate a smaller separation distance between it and other accesses. The distance required between the right-in/right-out access and a non-signalized all-turns access is smaller than that required for a signalized access but larger than that required between right-in/right-out accesses.

**Separation Distance Guideline for a Proposed Right-in/Right-out Access from a Non-signalized Access**

<table>
<thead>
<tr>
<th>Classification Of Road Being Accessed</th>
<th>Minimum Separation (m) From An Existing Or Future Non-Signalized All-Turns Access Or Intersection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeway</td>
<td>Access not permitted</td>
</tr>
<tr>
<td>Inner Ring Loop and Highway Connectors</td>
<td>200</td>
</tr>
<tr>
<td>Divided Arterial</td>
<td>Downstream of intersection with an auxiliary lane: 50 Downstream of intersection without an auxiliary lane: 110 Upstream of Intersection: upstream of left turn bay¹; if no Turn Bay then not less than 50m</td>
</tr>
</tbody>
</table>

**NOTES:**

1. See Guideline 8 Right-Turn and Left-Turn Lanes for definition of bay
A right-in/right-out access only allows right-turning movements for vehicles using the access. This type of access usually exists on roads with medians, but can include accesses on the right side of a one-way road. These accesses can be located in an auxiliary lane, provided there is sufficient bay and taper for deceleration upstream of the access.

Compared to an all-turns access, the right-in/right-out access is a very simple intersection and can therefore tolerate a smaller separation distance between it and other accesses. The separation distance between right-in/right-out accesses is smaller than that required for both non-signalized all-turns accesses and signalized accesses.

Separation Distance Guideline for a Proposed Right-in/Right-out Access from a Right-in/Right-out Access

<table>
<thead>
<tr>
<th>Classification Of Road Being Accessed</th>
<th>Minimum Separation (m) From A Right-In/Out Access</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freeway</td>
<td>Access not permitted</td>
</tr>
<tr>
<td>Inner Ring Loop and Highway Connectors</td>
<td>200</td>
</tr>
<tr>
<td>Divided Arterial</td>
<td>50</td>
</tr>
</tbody>
</table>
Separation Distances for Alleys, Local Roads, and Collector Roads

Separation distances for alleys, local roads and collector roads can be significantly smaller than that required for other road classifications because access to adjacent land parcels is more important than orderly and efficient traffic flow. Therefore, smaller access separation distances can be tolerated on these minor roads, except near the intersection with major roads (i.e. arterial roads or inner ring loop and highway connectors) and near bus stops in the case of collector roads. For these exceptions Guideline 13 must also be applied in conjunction with this guideline.

Access Separation Distances for Alleys, Local Roads, and Collector Roads

<table>
<thead>
<tr>
<th>Road Classification</th>
<th>1 Separation Distance From Major Road Intersection (m)</th>
<th>2 Separation Distance From Access or Minor Road Intersections (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collector</td>
<td>40</td>
<td>30*</td>
</tr>
<tr>
<td>Local</td>
<td>40</td>
<td>20*</td>
</tr>
<tr>
<td>Alley</td>
<td>20</td>
<td>6*</td>
</tr>
</tbody>
</table>

* Where the separation distance is larger than the lot width, the lot access shall be positioned as far away from the road as possible.

The table shows minimum separation distances from major and minor road intersections. For intersections along bus routes, the requirements of Drawing # 4000 of the Design and Construction Manual must be met.
Right-Turn and Left-Turn Lanes

Right-turn and left-turn lanes are separated from through traffic and are provided to serve a right or left turning vehicle and to prevent turning traffic from blocking or impeding through traffic.

Usually the turning lane is introduced by a taper—a transition that gently introduces the full width of the turning lane, allowing drivers to distinguish the lane and smoothly change lanes into the turn lane. In addition, a right-turn and left-turn lane is usually only for one access; however, in some cases, especially for right turning vehicles, several accesses use the same lane for turning and the lane is termed an auxiliary lane (see Glossary for definition of auxiliary lane). On roads where traffic flow is important a turn bay is usually needed, especially for left-turning traffic. Alleys, local roads and collector roads rarely require right-turn or left-turn lanes.

Right-Turn and Left-Turn Bays

![Diagram of Right-Turn and Left-Turn Bays](image-url)
Right-Turn and Left-Turn Lanes

### Road Classification

<table>
<thead>
<tr>
<th>Road Classification</th>
<th>Right-Turn Lane Needed?</th>
<th>Left-Turn Lane Needed?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Ring Loop and Highway Connectors</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Divided Arterial</td>
<td>Review context(^1)</td>
<td>Yes(^1)</td>
</tr>
<tr>
<td>Undivided Arterial</td>
<td>Review context(^2)</td>
<td>Review context(^2)</td>
</tr>
</tbody>
</table>

**NOTES:**

1. In cases where mature trees are in the median and there are no other left-turn bays, a left-turn bay may not be required.

2. Review context: For these situations, consider adjacent accesses, existing and future arterial road volumes, anticipated access volumes, and submit a proposal for Transportation’s review and approval. A capacity analysis may be required at the direction of Transportation Services.

If a turn lane is warranted, the bay lengths and tapers in the following table should be used.

### Posted Speed Limit (km/hr)

<table>
<thead>
<tr>
<th>Posted Speed Limit (km/hr)</th>
<th>Minimum Taper and Bay Lengths (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Taper</td>
</tr>
<tr>
<td>40</td>
<td>40</td>
</tr>
<tr>
<td>50</td>
<td>50</td>
</tr>
<tr>
<td>60</td>
<td>60</td>
</tr>
<tr>
<td>70</td>
<td>70</td>
</tr>
<tr>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>90</td>
<td>80</td>
</tr>
<tr>
<td>100</td>
<td>80</td>
</tr>
</tbody>
</table>

**NOTES:**

1. “S” is the storage length for the turn bay, determined through a Traffic Analysis.

2. Signals rarely exist on roads with speed limits above 80 km/hr.
In Edmonton there are five types of accesses, described as follows along with how they are typically used:

**Commercial Crossing**
A concrete apron flared in width that connects an urban road to the private land. Used on roads with curb and gutter, usually for commercial, industrial and multi-family properties.

**Private Crossing**
A smaller version of a commercial crossing. Used for single-family homes.

**Curb Return**
A paved asphalt driveway with smooth radius concrete curbs connecting to the curbs of the adjacent road. Used on roads with curb and gutter where grade control is important.

**Culvert Crossing (Rural)**
An asphalt paved driveway with a culvert along the ditch line of a rural road. Used where rural roads (ditch drainage) exist, including crossing a bioswale.

**Alley Access**
A paved connection at the grade of the lane directly to the private property. Used only in alleys.
Access Type

1. Commercial Crossing
2. Private Crossing
3. Curb Return Access
4. Culvert Crossing
5. Alley Access
Access types should be used as follows:

**Alleys**
Use the alley access format.

**Culvert Crossings**
Use with rural roads—in addition, approval from the Drainage Branch is required.

**Private Crossings**
Use only for single-family homes where the curb is not low profile or if the landowner chooses to request a private crossing.

**Commercial Crossings and Curb Returns**
For curb returns and commercial crossings the table below shows the preferred access type depending on the road classification. Commercial crossings are almost always used on collector and local roads. *(See Glossary for definition of commercial crossing.)*

<table>
<thead>
<tr>
<th>Road Classification</th>
<th>Preferred Access Type</th>
<th>With Right-Turning Lane</th>
<th>Without Right-Turning Lane</th>
</tr>
</thead>
<tbody>
<tr>
<td>Inner Ring Loop and Highway Connectors</td>
<td>Curb Return</td>
<td>Curb Return</td>
<td></td>
</tr>
<tr>
<td>Divided Arterial</td>
<td>Commercial Crossing¹</td>
<td>Commercial Crossing²</td>
<td></td>
</tr>
<tr>
<td>Undivided Arterial</td>
<td>Commercial Crossing¹</td>
<td>Commercial Crossing²</td>
<td></td>
</tr>
</tbody>
</table>

**NOTES:**
1. A commercial crossing can be used in a continuous turning lane; if the access is at the end of a turning lane a curb return must be used.
2. A curb return may be required to accommodate design and construction requirements, the applicant’s aesthetic requirement, grade criteria and utility issues. Curb returns are required at signalized accesses.
3. All signalized accesses should be a curb return type.
Access width is the width of the driving surface at the private property line. This width depends on the vehicle types, the number of lanes required, and the access type.

1. Commercial Crossing
2. Private Crossing
3. Curb Return Access
4. Culvert Crossing
5. Alley Access
Access Width

The tables below can be used for commercial crossings and culvert crossings. Commercial crossings, as defined by the City, can be used for residential, industrial or commercial land use. *(See Glossary for definition of commercial crossings.)* For curb return accesses the tables below can be used as a guide, but the width requirement will be determined by an engineer. The widths in the tables below are recommended; operational problems could result if significantly larger or smaller values are used.

### Access Widths for Commercial, Industrial, and Mixed Uses

<table>
<thead>
<tr>
<th>Lane Configuration and Design Vehicle Types</th>
<th>Width (m)¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-way, passenger vehicles</td>
<td>7.5 – 9.0</td>
</tr>
<tr>
<td>Two-way, medium trucks</td>
<td>9.0 – 11.5</td>
</tr>
<tr>
<td>Two-way, large trucks and Edmonton transit buses</td>
<td>11.5 – 13.5</td>
</tr>
<tr>
<td>One-way exit or entry, all vehicles</td>
<td>5.0²</td>
</tr>
<tr>
<td>Multiple lane (as identified by the City’s engineer or through a Traffic Impact Assessment)</td>
<td>3.3 per lane³</td>
</tr>
</tbody>
</table>

### Access Widths (m) for Residential Sites

<table>
<thead>
<tr>
<th>Type of Residence</th>
<th>Width (m)³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Multi-family sites</td>
<td>7.5 – 11.5⁴</td>
</tr>
<tr>
<td>Single family sites</td>
<td>3.5 – 8.0⁵</td>
</tr>
</tbody>
</table>

**NOTES:**

1. Width does not include median; if median is used, it should be between 1.0m and 4.0m wide.
2. 6.0m may be required for entrances that need to accommodate emergency vehicles.
3. If the access uses a median island, each direction should be at least 5.0m wide.
4. Often determined by the size of the on-site drive aisle.
5. For single-family homes, private crossing widths should be no wider than the garage door opening plus 1.5m.
Access Throat Length

Access throat is the length of the access from the public street curb to the first on-site intersecting drive aisle or parking stall. This length depends on the development size, land use and the road classification. For major developments a Traffic Impact Assessment (TIA) may be required to determine access throat lengths.

### Access Throat

![Diagram of Access Throat Length](image)

Access Throat Length

<table>
<thead>
<tr>
<th>Land Use</th>
<th>Site Area (m²)</th>
<th>Minimum Throat Length (m)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Arterial</td>
<td>Inner Ring Loop and Highway Connectors</td>
</tr>
<tr>
<td>Light Industrial</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10,000</td>
<td>15</td>
<td>40</td>
</tr>
<tr>
<td>More than 10,000</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Shopping Centre</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 45,000</td>
<td>30</td>
<td>60</td>
</tr>
<tr>
<td>More than 45,000</td>
<td>45</td>
<td>130</td>
</tr>
<tr>
<td>Office</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 10,000</td>
<td>25</td>
<td>60</td>
</tr>
<tr>
<td>More than 10,000</td>
<td>50</td>
<td>130</td>
</tr>
<tr>
<td>Drive-Through Restaurant</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All sizes</td>
<td>40</td>
<td>70</td>
</tr>
<tr>
<td>Mixed-use</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All sizes</td>
<td>30</td>
<td>70</td>
</tr>
<tr>
<td>Multi-family</td>
<td></td>
<td></td>
</tr>
<tr>
<td>All sizes</td>
<td>20</td>
<td>50</td>
</tr>
</tbody>
</table>

For collector roads at least 12m is required, while 6m is required for local roads and no throat is required for alleys.
On undivided roads, accesses that are on opposite sides of a road could be misaligned. Depending on the misalignment, left-turning traffic from the road could overlap, resulting in a potential traffic conflict.

On lower volume roads—such as alleys, local and collector roads—this conflict is generally acceptable. The exception is for accesses near an intersection with an arterial road; in these cases minimum separation distances must be used (see Guideline 7). On higher volume roads such as undivided arterial roads (including roads with two-way left turning lanes) it is desirable to separate such accesses by a minimum distance.

The minimum offset distance to avoid overlapping left-turns is 60m. This minimum offset only applies if overlapping left-turns are induced; if misaligned accesses do not result in overlapping left-turns then no minimum offset is necessary.
Redevelopment Sites

The development should be treated as a redevelopment site if 1) the existing site is being replaced by a new development or is being renovated to accommodate a different intensity use, and 2) it is also clear that access separation distances for the site cannot be met due to off-site constraints (such as insufficient distance to accesses on adjacent properties).

If access is proposed to arterial or expressway road classes then a pre-submission consultation is necessary (see Section 2 Review and Approval Process). The consultation could take the form of a meeting, or it could be a series of written exchanges between the applicant and Transportation Services. The primary purpose of the consultation is to establish access locations, access type, and the need for right and left turn lanes. To this end the following information should be collected prior to the consultation:

- Existing separation distances, access types and right and left turn lanes at the site and adjacent sites on both sides of the road(s) being accessed—an air photo will be adequate, with each feature labelled (identify distances to the nearest metre, access types and turn lanes).
- Existing location of all boulevard trees, bus stops and utilities that may limit access locations—an air photo with each feature labelled will be adequate. A site investigation and utility searches may be required.
- Any future road plans—contact Transportation Services (780-496-1795).

At least two alternative access strategies should be developed for the site; an access strategy identifies the location of each access and the access format (all-turns, right in/right out). The access strategy should be presented as a conceptual plan on an air-photo base showing the surrounding sites as well as an approximate building layout for the site in question; the conceptual plan could be hand-sketched or computer drafted. The strategy should use the following guiding principles:

- Separation distances from all-turns intersections or accesses should be optimized.
- All-turns access to the site should be oriented to the lower classification road unless the site’s frontage to the minor road is too short or volume thresholds may be exceeded for the minor road. An all-turns access may not be feasible.
- Proposed access locations should have larger separation distances than existing separation distances.
- Sidewalks with larger pedestrian volumes should not be crossed by accesses, but if not possible, the site design and access configuration should render the access as a relatively minor access compared to other site accesses (for example, use a right-in/right-out format instead of an all-turns format and/or design the site circulation to feed into a small portion of the parking area).

Both Transportation Services and the site proponent should list the strengths and weaknesses of each access plan in terms of impacts on the adjoining roads and impacts on the site. Both parties should then work together to arrive at a mutually agreeable access and site plan. Given its responsibility for the safe operation of public roads, Transportation Services may reject a proposed access if deemed necessary.
Appendices
Access Management Guidelines
Access Review Process

1. APPLICANT
   - Submit Application
     (Application Review from Sustainable Development)
   - Review Relevant Statutory Plans
   - Review Access Management Guidelines
   - Hold Pre-application Meeting with Civic Departments if Necessary
   - Create Site Plan

2. CITY OF EDMONTON
   - Meet with Transportation Services
   - Enter into Agreement to Construct Access

3. APPLICANT
   - Contract Access
   - Appendix A
   - City Inspects

   - Approved Access
     - Construct Access
     - City Inspects
     - Enter into Agreement for Access

   - NOT Approved
     - Appeal to Director of Development Planning & Engineering
     - Appeal to Director of Transportation Services
     - Modify Plan

   - TO 1
   - TO 2

   - TO 3
Transportation System Concept – 2040
Transportation Systems Bylaw Map
Terms and Definitions

For the purposes of this guide, the following terms have been defined below.

Access
The junction of a private driveway meeting a public road, including all driving surfaces and curbing between the property line and the curb line edge or asphalt on the public road.

Auxiliary lanes
A lane for either left-turning or right-turning traffic. There may be only one access on the lane. In some cases, especially for right-turns, the lane can include many right-turn access points but it ends at major intersections.

Commercial crossings
An access where the vertical curb is dropped to allow vehicles to pass, but the gutter continues to allow drainage along the curb line, and a flared concrete apron connects the public road to the private land parcel. Commercial crossings may be used for residential, commercial, industrial, institutional and other land uses.

Cross access agreement
A legal agreement registered on the land title of a land parcel, which allows vehicles to cross a portion of the land parcel in order to access an adjoining land parcel.

Downstream
At a right-in/right-out access, the direction of traffic flow of the public road.

Driveway volumes
The amount of traffic using a driveway over a specified time period: usually a peak hour or a typical weekday.

Intersection
The junction of two public streets.

Major Road
A road that falls into one of the following road classifications: freeway, inner ring loop and highway connector, divided arterial or undivided arterial

Minor Road
A road that falls into one of the following road classifications: collector, local or alley.

Redevelopment Site
A site where the buildings will be substantially renovated to accommodate a use of significantly different intensity or where buildings will be substantially demolished, and where the site accesses clearly cannot meet separation distances due to off-site constraints.

Upstream
At a right-in/right-out access, the direction opposite of traffic flow of the public road.