



**ZONE THE FUTURE**  
**COLLINGWOOD**  
— NEW ZONING BY-LAW —

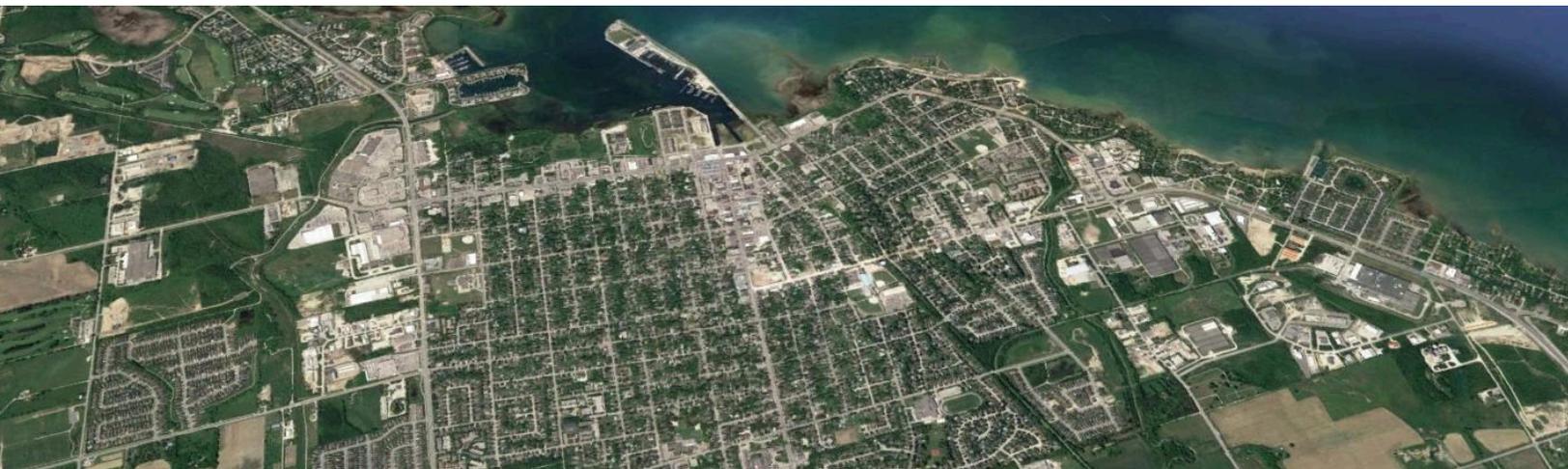
# **By-law and Mapping**

## **Structure and Usability**

Zoning By-law Technical Paper #2

Town of Collingwood

September 2024



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# Zoning By-law Discussion Paper

## By-law and Mapping Structure and Usability

### Executive Summary

This is Technical Paper #2 in a series of papers that will be used to guide the community through its Zoning By-law update. Specifically, the purpose of this paper is to explore required actions to make the document more readable, user-friendly, and clear, through the exploration of options related to layout, organization, and presentation of requirements.

Through a review of good planning practices, recent trends in zoning, and the Town's adopted Official Plan, this paper identifies a series of options and preliminary recommendations for technical updates to the new Zoning By-law and the focus of this paper has been on:

The purpose of this Technical Paper on By-law and Mapping Structure and Usability is to:

1. Identify current design concerns and opportunities surrounding the By-law text and mapping.
2. Address the above by presenting best practices for design with the help of precedents from other municipalities.
3. Recommend a draft Table of Contents.
4. Review potential paper and online layouts for the new Zoning By-law.

Based on that review, the following recommendations are being considered:

- The Town should follow a "Parts" format, with some adjustments from the current By-law's setup (detailed in Section 6 of this paper).
- Both paper and online display formats will be considered, with optimization for screen reading and all in compliance with Accessibility for Ontarians with Disabilities Act requirements.
- While there are options to explore in terms of how the zoning by-law is presented virtually, it is recommended that a master word document be maintained in-house. When making publicly accessible, hyperlinks should be used to make it easier for the user to navigate. As noted, readers should still be reminded that to understand the full zoning content, many sections of the by-law should be read.
- The Town should consider including all exceptions in a separate numbered section, rather than including exceptions in the parent zone section. This will make it easier for readers to locate and review.
- The introductory section to each parent zone should be initiated with a discussion of the intent of the zone, how it implements the official plan, and explanation of all the subzones, to assist readers with an understanding of the zone structure and how it relates to overall land use policy.

# Zoning By-law Discussion Paper

## By-law and Mapping Structure and Usability

- It is recommended that tables be used in the new by-law to organize and present different zone provisions in a user-friendly way and in order to reduce the document length.
- Strategic and focused use of diagrams and illustrations should also be provided to assist users with understanding definitions and zoning terms (but for interpretation only), with an eye toward full implementation over the long term.
- The Town should prepare a user's guide to assist with reading and interpreting the Zoning By-law.

# Zoning By-law Discussion Paper

## By-law and Mapping Structure and Usability

### 1 Introduction

As the Town prepares its new Comprehensive Zoning By-law, it needs to consider how to best present content to the many future users of the By-law, such as landowners, developers, municipal staff, real estate agents, potential buyers, and more. The By-law must balance legislative requirements, opportunities for design and publishing to improve readability and clarity, consistency with other planning documents, and user preferences, such as printed hard copies and online usability. The preparation of a new Zoning By-law is an opportunity to address each of these elements.

This Technical Paper and the options and recommendations identified follow the following key design principles:

- Accessibility is key, both in terms of language and in document structure and presentation and compliance with AODA is required.
- Software decisions need to align with corporate capabilities.
- Reader aids will be included in the document to the extent possible.
- The document will include light interactivity to support navigation (or if using an online by-law, will be included by default).
- The document will be structured in a way to minimize “after-care” or staff requirements.

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## By-law and Mapping Structure and Usability

### 2 Overview of Users

A Zoning By-law serves as the “rule book” for development. This means that it is consulted by a wide range of users and for a variety of purposes including but not limited to:

- Planners and building officials reviewing planning and building permit applications
- Landowners and developers searching for permitted uses and location standards for buildings and structures
- Citizens searching for information about properties and development standards
- Various agencies ensuring that their requirements are captured in zoning provisions and regulations
- Enforcement officers determining whether a use, building, or structure is permitted when handling complaints or non-complying or non-conforming uses
- Lawyers at the Ontario Land Tribunal (OLT) arguing their cases (both for and against the Town)
- Real estate agents advising clients on the possible uses a property for sale or lease may accommodate
- Council ensuring that an Official Plan’s policies are being implemented
- Council reviewing and considering development proposals
- Other Town staff preparing reports

Likewise, zoning information is often communicated through multiple channels:

- In accordance with 34(17) of the Planning Act, a municipality must keep a copy of its zoning by-law and ensure that it is accessible to the public. It outlines the requirements for documentation of the by-law and its amendments to maintain transparency and public access.
- A paper copy is the traditional format of a Zoning By-law. It is typical that the clerk of a municipality will retain an official version for the Town’s records.
- Members of the public and staff both rely upon the online version of Collingwood’s Zoning By-law 2010-040 (for self-service purposes), including GIS web-based mapping, which is the most important part of the by-law to ensure what regulations apply, or do not
- Town Staff (Planning, Economic Development, Building Services, etc.) regularly provide advice through email or at the front counter related to interpretation and explanations.

As with all municipal by-laws, there are minimum requirements that the Town must meet in the layout, structure, and display of the new Zoning By-law:

- Zones are laid out on maps, which pair the written regulations for a particular zone with the mapped properties of that category. Increasingly, new Zoning By-laws in Ontario are using mapping to share details including street classifications, certain classes of regulations, or block-by-block treatments of form-based regulations.

# Zoning By-law Discussion Paper

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- o The Town has a robust, public-facing geographic information system (GIS) that offers opportunities for improving access to information and maintaining a timely, up-to-date zoning document.
- Like all legislation, the content of the new Zoning By-law must be clear and reasonable to be effective. A concise, clear layout is needed to support this goal.
- Online versions of zoning information need to meet accessibility standards and be compatible with technological aids (e.g., screen readers).
- While zoning is “legislation” and a regulatory tool, there is always a desire for “plain language” and clarity around the intent and applicability of regulations to cater to all users of the document.

Zoning information is consumed by various users through various means. Therefore, it is essential for the Town to optimize its new Comprehensive Zoning By-law in paper and digital formats such that the full breadth of its users may easily navigate this important policy tool.

# Zoning By-law Discussion Paper

## By-law and Mapping Structure and Usability

### 3 Current By-Law Layout

Collingwood's current Zoning By-law, Zoning By-law 2010-040 (as amended), is structured in 10 sections, with each section further comprised of subsections detailing all of the By-law's regulations:

1. Administration
2. Zones and Schedules
3. Definitions
4. General provision applying to all zones
5. Parking and loading provisions
6. Provisions specific to Residential Zones (includes zone classifications)
7. Provisions specific to Commercial Zones (includes zone classifications)
8. Provisions specific to Industrial Zones (includes zone classifications)
9. Provisions specific to Community Services, Environmental Protection, Recreation and Rural Zones (includes zone classifications)
10. Maps, also called Schedules

The text of Zoning By-law 2010-040 is about 190 pages in length, plus additional mapping and schedules.

The items in the By-law are categorized well into their sections and subsections. Section lengths range from one subsection in Section 3 (Definitions) to 43 subsections in Section 4 (General Provisions). Sections 6 through 9 are made up of the same 5 subsections, providing users with a predictable structure. Section 4 (General Provisions) presents an opportunity to reorder its topics in a more intuitive sequence. This new sequence may use alphabetical order and/or group topics by category. Likewise, the inclusion of special provisions within each residential zone has the effect of lengthening the overall by-law document (versus placing those in a separate section at the end of the document, which could by choice be left out of production).

Items are numbered chronologically in a multi-level list format, save for the provisions in Sections 6 through 9 relating to exception zones, which are not numbered. Furthermore, the document's page numbering format is contained within each section. For instance, Page 2-7 represents the seventh page in Section 2.

The sections and subsections of the Table of Contents all feature hyperlinks to their respective locations in the document. These hyperlinks are not distinguished through formatting (e.g., underline and/or blue text).

By-law 2010-040 makes use of 38 tables to simplify and exemplify information. It also uses plan view drawings as visual aids for written building envelope requirements and, in one case, an easement. However, these aids are only present in some of the subsections discussing exception zones.

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## By-law and Mapping Structure and Usability

An Interactive Zoning Map (Schedule "A") is posted with the By-law online. Each shape on the Map represents the extent of a zone instance; of note, they do not conform with conventional zoning colour schemes. Shapes of properties denote their area, length, zone classification, and, where applicable, exception zone status. However, the lands zoned Residential are not specified by their density classifications. The Map also contains apparent outliers: vector features which have been placed into the wrong layers, which can cause difficulty when filtering. For example, if a user were trying to search for zoning designations, there may be instances where they would also see some official plan designations that have been placed on the wrong layer and are therefore still visible when filtering. Finally, the Map itself is not easily accessed nor intuitive to use. While it is evident that the Interactive Zoning Map has strong potential to be a user-friendly means for visualizing and accessing zoning information, measures are recommended to improve functionality, clarity, and consistency.

The document is available online as a PDF and is managed using Microsoft Word.

# Zoning By-law Discussion Paper

## By-law and Mapping Structure and Usability

### 4 Current Practices for Accessibility

A number of by-laws were reviewed for ideas regarding by-law and map layout, structure, and display. These were taken from the City of Brantford, the Town of Huntsville, the Municipality of Meaford, the Town of New Tecumseth, the Town of Oakville, the City of Sarnia, and the City of Vancouver.

To support the options identified in Section 5, and the recommendations presented in Section 6, it is to be noted that there are minimum requirements to be met for the online layout and display of the By-law. Specifically, the *Accessibility for Ontarians with Disabilities Act* (AODA) sets out requirements for online documents. Below are several resources conducive to ensuring accessibility requirements for the new By-law.

**Table 1 – References for By-law Accessibility**

Source	Reference
Human Rights Code	“Every person has a right to equal treatment with respect to services, goods and facilities, without discrimination because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, gender identity, gender expression, age, marital status, family status or disability.”
Government of Canada	<ul style="list-style-type: none"> <li>• <a href="#">How to create accessible documents in Microsoft 365 - Digital Accessibility Toolkit (canada.ca)</a></li> <li>• <a href="#">Microsoft Document Compliance Checklist - Digital Accessibility Toolkit (canada.ca)</a></li> <li>• <a href="#">PDF Accessibility Checklist - Digital Accessibility Toolkit (canada.ca)</a></li> <li>• Plain language: <a href="#">Canada.ca Content Style Guide - Canada.ca</a></li> </ul>
Accessibility for Ontarians with Disabilities Act (2005) and aoda.ca	<ul style="list-style-type: none"> <li>• <a href="#">O. Reg. 191/11: INTEGRATED ACCESSIBILITY STANDARDS (ontario.ca)</a> (Part II)</li> <li>• <a href="#">Accessible PDF Files (aoda.ca)</a></li> <li>• Conversion-ready formats:               <ul style="list-style-type: none"> <li>o <a href="#">On-demand Accessible Government Communication (aoda.ca)</a></li> <li>o <a href="#">What are Accessible Formats? (aoda.ca)</a></li> </ul> </li> </ul>
Web Accessibility Initiative	<ul style="list-style-type: none"> <li>• <a href="#">How to Meet WCAG (Quickref Reference) (w3.org)</a> (v2.2, Level A &amp; AA criteria required)</li> </ul>
Adobe	<ul style="list-style-type: none"> <li>• InDesign use: <a href="#">Creating accessible PDFs (adobe.com)</a></li> </ul>
Municipalities	<ul style="list-style-type: none"> <li>• <a href="#">City of Peterborough Guide to Accessible Documents</a></li> <li>• <a href="#">City of Hamilton Clear, Accessible and Large Print Guidelines</a></li> </ul>

# Zoning By-law Discussion Paper

## By-law and Mapping Structure and Usability

### 5 Current Practices for Useability

#### 5.1 Organizing the By-law into “Parts”

The setup of the Zoning By-law into “Parts” remains a best practice for By-laws. The ordering of individual sections within the By-law itself will ultimately be determined by the content required. There are opportunities in the general provisions and parking provisions sections to potentially streamline or group content in a more logical manner.

Along with a “Parts” format, the new Zoning By-law should employ a numbering protocol that makes it simple to cite clauses and rules in communication, integrate updates and additions with minimal conflicts, and prevent the accidental duplication of section numbers. The current Zoning By-law is numbered sequentially from start to finish using a tiered numbering system. In the lowest tier, Roman numerals are used for clauses and Arabic numerals are used for tables. As examples:

- Section 4.0 represents General Provisions.
- Section 4.27 represents Increased Yards abutting Arterial and Collector Roads
- Section 4.27.1 represents a clause concerning Increased Yards abutting Arterial and Collector Roads.
- Table 4.27.1.1 is the first table used as an aid for Section 4.27.1.
- Within the Commercial Zones section, Section 7.2.1.1(i) is the first of several clauses detailing specific provisions under Section 7.2.1.1, a footnote.

The outlier to this numbering system is found in the Exception Zones under each parent zone section, in which Exception-specific provisions are not numbered, but rather all housed under a two-tier section number. This can involve the culmination of many provisions under the same number. For example, there are 127 Residential Exception Zones and 6 Deferred Residential Exception Zones housed together under Section 6.5: Residential Exception Zones.

Numbering should not vary throughout a Zoning By-law to support a consistent citation style in staff and applicant-prepared reports. As a general principle, each regulation within a Zoning By-law should be able to be specifically citable in a report. It is recommended that the new Zoning By-law continues to use a tiered numbering system and further applies more tiers, as appropriate, to clauses in Exception Zones.

#### 5.2 Intent and Overview Explanations

Some municipalities provide text descriptions of the intent of the zone within the by-law, to make linkages to the Official Plan policy directions that they are implementing and provide a description of what the zone is intended to do. The figure below captures what the City of

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## By-law and Mapping Structure and Usability

Vancouver has done with its latest Zoning By-law document, in terms of providing a zone description and overview of intent, which provides value for readers and is recommended.

### **RA-1**

District Schedule

#### **1 INTENT AND OVERVIEW**

##### **1.1 Intent**

The intent of this schedule is to maintain and encourage the semi-rural, equestrian and limited agricultural nature of the area, and to permit single detached houses and, in specific circumstances, infill single detached houses.

Without limitation, applicable Council policies and guidelines for consideration include the [Southlands RA-1 Guidelines](#).

##### **1.2 Overview**

The table below provides an overview of the outright and conditional approval uses in the RA-1 district, categorized by the minimum site area required, where applicable. Applicable density, form and placement regulations in section 3 of this schedule are cross-referenced in the third column.

<b>Minimum Site Area</b>	<b>Use</b>	<b>Density, Form and Placement Regulations</b>
9,100 m <sup>2</sup>	All uses in section 2.1 of this schedule	<a href="#">3.1</a>

Figure 1: City of Vancouver Zoning By-law Screenshot: Intent and Overview of the Zone

### **5.3 Site-Specific Provisions**

Some Zoning By-laws place the Site-Specific Provisions (also called exceptions as per the Town's current Zoning By-law, as well as many additional zoning by-laws across Ontario) alongside the parent zone standards. The effect is that the main standards for all properties within a certain zone can be accessed in the same place, with a distinct numbering protocol for Site-Specific Provisions applied for each zone.

Other by-laws place the Site-Specific Provisions within a separate Part. The effect is that any modified regulations are found elsewhere in the document, away from the parent zone standards. A numerical protocol for Site-Specific Provisions is typically used across all zones, so that a Site-Specific Provision number is never repeated. However, there may be deviations to this approach that could be explored through this project if necessary. Readers should refer to Discussion Paper #5, which explains in further detail what a Site-Specific Provisions is, where

# Zoning By-law Discussion Paper

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and how they currently exist, and ways they might be reviewed and updated in the new Zoning By-law.

### 5.4 Software and Basic Layout

The next major decision is which software platform to use. It is not easy to move the document between software platforms, and so a decision needs to be made earlier.

- If a highly visual “book” layout is desired for online display, the project team recommends using Adobe InDesign or similar software supported by the Town to unlock more document stylization capabilities, which can support the visual clarity of the new Zoning By-law.
- If the focus is to prioritize online display, ease of update and integration with current corporate software solutions, and use of a website to display zoning text, the main by-law can be built in using Microsoft Word.
- If balancing the two, a more lightly designed version of the By-law can be made using Word.

Based on the software decision, the level of additional or supplemental information that can be embedded into the document can be made. A two-column layout may be possible to support embedding additional content into the By-law—such as visual aids, references to relevant policies or other documents, and references to other sections of the By-law.

### 5.5 Digital Interactivity

Housing the Zoning By-law in a digital document presents unique opportunities for improved ease of use. In particular, embedded hyperlinks enable users to jump to particular locations within the document or to external web resources rather than manually scrolling or searching for such destinations. Hyperlinks have several applications useful for consideration in digitizing the new Zoning By-law.

Collingwood’s current Zoning By-law 2010-040, as well as the Town of Huntsville’s Community Planning Permit By-law and the City of Vancouver’s Zoning By-law, use hyperlinks to create interactive Tables of Contents. Their Tables of Contents, which users access within the first few pages of the by-law, function as hubs that transport users to their desired sections at a click. It is recommended that the new Zoning By-law includes an interactive Table of Contents. Furthermore, the Table can be made more intuitive for readers to use if hyperlinked text was distinguished from normal text, such as with the bolded and blue font used by the City of Vancouver, as shown in figure 2. Note: readers should still be reminded that in order to understand the full zoning content, all applicable sections of the by-law should be read.

The City of Vancouver also uses hyperlinks for ease of navigation to specific provisions. A table in each zone features hyperlinks to use-specific clauses, which is helpful in directing users to relevant sections and reducing time costs associated with ensuring that all relevant clauses

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have been accounted for. One tradeoff to consider is that such tables create extra document length—although hyperlinks may potentially streamline the navigation of this extra length.

Uses are listed under their general land use category. Applicable use-specific regulations in section 2.2 of this schedule are cross-referenced in the third column. Cross-references to applicable use-specific regulations are provided for information purposes only and do not form part of this by-law.

Use	Approval	Use-Specific Regulations
<b>Agricultural Uses</b>		
Urban Farm - Class A	Conditional	
<b>Cultural and Recreational Uses</b>		
Bowling Alley	Conditional	<a href="#">2.2.1</a> , <a href="#">2.2.2</a>
Club	Conditional	<a href="#">2.2.1</a> , <a href="#">2.2.3</a>
Community Centre or Neighbourhood House	Conditional	<a href="#">2.2.1</a> , <a href="#">2.2.3</a>
Fitness Centre	Conditional	<a href="#">2.2.1</a> , <a href="#">2.2.3</a>
Library, in combination with Community Centre	Conditional	<a href="#">2.2.1</a>
Museum or Archives	Conditional	<a href="#">2.2.1</a> , <a href="#">2.2.4</a>
Park or Playground	Outright	
Theatre	Conditional	<a href="#">2.2.5</a>
<b>Dwelling Uses</b>		
Mixed-Use Residential Building	Conditional	<a href="#">2.2.6</a> , <a href="#">2.2.7</a>
Multiple Dwelling	Conditional	<a href="#">2.2.7</a>

Figure 2. Excerpt from Zoning By-law 3575 showing a permitted use table with hyperlinks to relevant provisions (Source: City of Vancouver).

When using hyperlinks, an additional measure that may be helpful is the use of “backlinks”: hyperlinks that help a user return to their previous location in the by-law after having followed an original hyperlink elsewhere. It is recommended that backlinks to parent sections and the table of contents be aesthetically located and distinguished in the header or footer of each page. This measure ensures that users have just as much ease navigating to and back from any clause in the by-law. It may also be beneficial to clarify instructions in the user’s guide for opening a hyperlink in a new tab, which would enable a user to work with the by-law and relevant documents side-by-side.

A note that hyperlinks do require work to maintain, especially if tied to online addresses and GIS that can be changed through other updates.

### 5.6 Visual Aids

There are two types of visual aids common in Zoning By-laws—tables and illustrations—and both are recommended for inclusion for different applications in the new By-law. It should be noted that any diagram can only be provided “for illustrative purposes” and cannot be tied to actual regulations. Zoning By-law regulations need to be clear and applicable across multiple contexts. A diagram cannot accurately depict each and every development context in a municipality. A disclaimer in this regard should be included in the new Zoning By-law.

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## By-law and Mapping Structure and Usability

Tables organize information in a compact array that can reduce document length while making provisions easy to find. Zoning By-laws for the Municipality of Meaford, the City of Sarnia, and the City of Brantford all use tables to represent information such as permitted uses, accessory uses, and lot requirements for each Zone; parking provisions; and setbacks. Tables are recommended in the new Zoning By-law for provisions like these, which concern simple quantitative or categorical attributes applicable to multiple subjects (e.g., uses, zones).

**TABLE 1**

Zone	Minimum Exterior Side Yard Setback	Minimum Interior Side Yard Setback	Minimum Rear Yard Setback
R1, R2, SR1	3.0m	1.2m	0.6m
DC	1.0m	1.0m	0.6m
MU1, MU2, NC, I	4.5m	3.0m	0.6m
GE, PE	7.5m	3.0m	0.6m
RR	3.0m	2.0m	0.6m
A, NE, F, POS	10.0m	10.0m	0.6m

Figure 3. Excerpt from the Draft 1 Zoning By-law showing a table (Source: City of Sarnia).

On the other hand, illustrations are helpful in visualizing technical terms and their associated provisions. In the by-laws researched, labeled illustrations were used to depict setbacks, building height calculations for multiple roof types, sight triangles, and the arrangement of residential units within different dwelling types. It is recommended that the new Zoning By-law makes regular use of illustrations, with attention to technical terms regarding building massing and placement; uncommon cases, such as lot frontage calculations for irregular lots; and any new vocabulary, such as angular planes. Further, it may be beneficial for the new Zoning By-law to use photographs to portray the intended character of zones in which intensification and mixed uses are emphasized.

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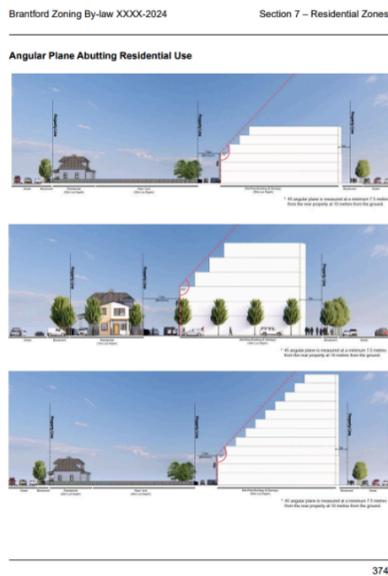


Figure 4. Excerpt from the Draft Zoning By-law showing supportive angular plane provision illustrations (Source: City of Brantford).

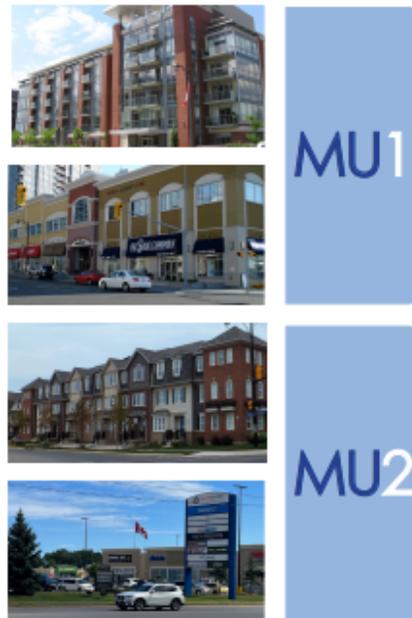


Figure 5. Excerpt from the Draft 1 Zoning By-law showing photographs of intended Zone character (Source: City of Sarnia).

A user's guide should also be introduced as part of this project, which can be a stand-alone document that is more graphic-rich. User's guides are featured in Zoning By-laws such as those in Brantford, Meaford and Oakville are especially assistive in coordinating the use of the Zoning By-law with schedules and/or digital mapping platforms.

### 5.7 Mapping and Geographic Information Systems

Zoning maps take form in static (paper or digital) "Schedules" and interactive web-based GIS software. When developing the new Zoning By-law, key considerations for mapping include legibility, symbology, and, in the case of GIS software, interactive functionality.

There are base requirements appropriate to whatever style of mapping is used:

- Show lots/parcel fabrics and/or building footprints to provide additional visual information which can help users to better locate properties of interest and interpret their zoning.
- Inclusion of typical map design requirements such as a legend, title, scale bar, and borders.

There are examples where colour-coding following conventional land-use palettes is used, alongside zone symbols (e.g., OS for lands zoned Open Space) and leader arrows as needed.

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This gives the effect of tying zoning back to the original land use policy as best as possible. This is exemplified in the Draft 1 Zoning Maps underway in the City of Sarnia. The example below also includes a small overlap to adjacent maps to provide additional context for the reader.



Figure 6. Excerpt from Draft 1 Zoning Maps showing the inclusion of lot parcels atop zones (Source: City of Sarnia).

It is also possible to develop mapping sets specific to a certain regulation. Barrie’s draft 2024 Zoning By-law, as an example, is proposing to use maps to communicate “overlay zones” with adjusted building envelopes and density requirements, and to identify parking standards sets.

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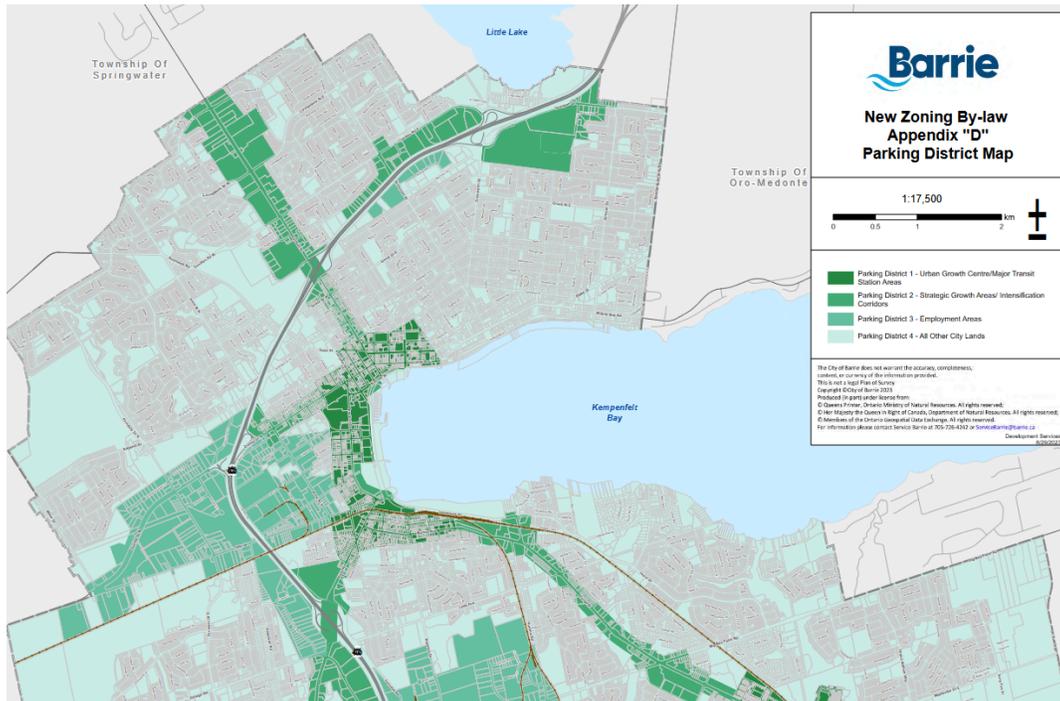


Figure 7. Excerpt from Draft 2 Zoning Maps showing proposed parking districts (Source: City of Barrie).

Best practices for interactive mapping with GIS software revolve around feature attributes and layer management.

In GIS, “features” are objects on a map that can be points, lines, or shapes. Usually, zones are represented by shapes, while roads are represented by lines. Features each have “attributes,” which can be thought of as properties or characteristics associated with a feature. Attributes can be included which tell users about key information about a feature. When a user clicks on a Zone feature, a pop-up can be set to appear, displaying whatever attribute information is appropriate. It is recommended that these attributes include the Zone symbol, Zone description (i.e., full title), Hold number, Site-Specific Zoning By-law Amendment title, and By-law Amendment number. It is also recommended that attribute names are written in sentence case, rather than underscores or camel case, for maximum clarity to lay users. This configuration of attributes would facilitate the coordinated use of the new digital Zoning By-law and its interactive map.

Town staff have noted that zones currently apply or extend to roadways and this approach should be reviewed and corrected through Zoning By-law GIS mapping.

Regarding the online display of maps, there are two options available:

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1. The Town may use one interactive map with layers. Layers are groups of features that can be collectively toggled to be visible or invisible and which share the same attributes. Recommended best practices for layer management include making shape layers translucent and creating separate layers for zoning, overlays, roads (labeled), and other important features, such as Secondary Plan areas. However, the web interface can be difficult for lay users to navigate. The new interactive map should endeavour to, by default, display the layers panel, as well as prioritize zones and/or overlays to be toggled “visible.”
2. The Town can create multiple, separate maps centered around different themes (e.g., zoning, overlay zones, parking standard sets). As these maps are intended to be simpler for users to navigate, they may not contain layers, but should contain other interactive components, such as the ability to obtain more information about the zoning designation and description of parcels.

The Town is already using ArcGIS Web AppBuilder, which can easily incorporate zoning data. An early discussion between the Town’s and consultant team’s GIS groups to address the schema for building a new layer will ensure a smooth incorporation of this data.

# Zoning By-law Discussion Paper

## By-law and Mapping Structure and Usability

### 6 Summary of Recommendations

An intuitive layout and essential functionality are necessary for packaging the new Zoning By-law in a form that is understandable, clear, and easy to navigate for the diverse range of its future uses. This is achieved through a number of different ways—and is highly dependent upon design choices made at outset. The Town must consider these requirements as it prepares the first draft Zoning By-law, depending on format used, to ensure information is accessible to the broadest possible audience. Recommendations are summarized as:

1. The Town should follow a “Parts” format, and a preliminary draft Table of Contents for the new Zoning By-law is provided below:
  - 1.0 Administration
  - 2.0 Establishment of Zones
  - 3.0 Definitions
  - 4.0 General Provisions
  - 5.0 Parking Provisions
  - 6.0 Neighbourhood Zone Standards
  - 7.0 Mixed-Use Corridor Zone Standards
  - 8.0 Downtown Zone Standards
  - 9.0 Regional Commercial District Zone Standards
  - 10.0 Employment Zone Standards
  - 11.0 Public Services Facilities and Institutional Zone Standards
  - 12.0 Environment Zone Standards
  - 13.0 Rural Zone Standards
  - 14.0 All Other Zones
  - 15.0 Site-Specific Provisions
  - 16.0 Enactment
  
2. The following appendices are provided, which will take readers of this report to contemporary By-laws that reflect the above design principles and considerations for the layout. The recommendation at this time is to review and discuss each item to identify preferred design directions that can be used to start building a draft by-law.
  - A. Oakville’s 2014 Zoning By-law, designed for frequent consolidation and online updating of individual PDF Parts of the By-law.
  - B. Sarnia’s Draft 2024 Zoning By-law, designed for optimized online reading.
  - C. New Tecumseth’s 2021 Zoning By-law, designed for enhanced use of colour to support reading.

# Zoning By-law Discussion Paper

## By-law and Mapping Structure and Usability

- D. The Town of Huntsville's 2022 Community Planning Permit By-law, which replaced the Town's Zoning By-law.
- E. The City of Vancouver's Zoning By-law 3575, which underwent a 4-year comprehensive review concluding in 2022 to enhance user-friendliness.

[Mississauga's online version of its 2007 Zoning By-law](#) is also provided as a consideration. Should the desire be to explore detailed online display, as the primary mechanism to support accessing zoning information, this can be considered as starting points to structure the document.

3. Minimum requirements are to be met for the online layout and display of the By-law. Specifically, the Accessibility for Ontarians with Disabilities Act sets out requirements for online documents, which should be used when drafting the new By-law. Anything beyond the minimum requirements would focus on making the day-to-day use of the Zoning By-law be more friendly to a range of audiences, which may include realtors, politicians, and municipal staff, as examples. There are a number of ways that this can be achieved through document design and layout, mapping, diagrams, and illustrations, etc.
4. The Town should consider including all exceptions in a separate numbered section, which could be presented in a table format, rather than including exceptions in the parent zone section. This will make it easier for readers to locate and review.
5. The introductory section to each parent zone should be initiated with a discussion of the intent of the zone, how it implements the official plan, and explanation of all the subzones, to assist readers with an understanding of the zone structure and how it relates to overall land use policy.
6. While there are options to explore in terms of how the zoning by-law is presented virtually, it is recommended that a master word document be maintained in-house. When making publicly accessible, hyperlinks and backlinks should be used to make it easier for the user to navigate. As noted, readers should still be reminded that to understand the full zoning content, many sections of the by-law should be read.
7. It is recommended that tables be used wherever possible in the new by-law to organize and present different zone provisions in a user-friendly way and in order to reduce the document length.
8. Diagrams and illustrations should also be provided to assist users with understanding definitions and zoning terms. However, these would not be included within the legal basis of the by-law and would rather be presented for interpretation only.
9. The By-law should be read in conjunction with a user's guide to assist with reading and interpreting the Zoning By-law.