

To: Development Services Committee

From: Warren Munro, HBA, RPP, Commissioner,  
Development Services Department

Report Number: DS-22-27

Date of Report: February 2, 2022

Date of Meeting: February 7, 2022

Subject: One-Way to Two-Way Conversion Feasibility Study for Albert  
Street, Celina Street, Brock Street East, and Colborne Street

Ward: Ward 4

File: 03-05

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## **1.0 Purpose**

On September 27, 2021, City Council considered DS-21-144, One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street and authorized staff to advance a virtual public engagement process to receive input on the preferred alternative and report back to Development Services Committee on the results of the public input and to present a preliminary design for the preferred alternative.

The purpose of this Report is to:

1. Provide an overview of the input received pursuant to the first virtual public engagement held from October 25, 2021 to November 4, 2021; where the preliminary findings, three design concept alternatives, and the preferred design concept alternative for each corridor were presented for feedback and comments;
2. Present the preliminary design for the preferred alternative for each one-way corridor; and,
3. Obtain Council's authorization to hold a second virtual public engagement for the purpose of presenting the preliminary design for the preferred alternative for the conversion of the one-way corridors for comments and feedback.

A copy of Report DS-21-144, dated September 8, 2021 can be found at the following link:  
[http://app.oshawa.ca/agendas/development\\_services/2021/09-13/report\\_ds-21-144.pdf](http://app.oshawa.ca/agendas/development_services/2021/09-13/report_ds-21-144.pdf)

Attachment 1 shows the location of the streets assessed.

Attachments 2 and 3 illustrate the preliminary design for the preferred alternative for Albert Street and Celina Street (Interim).

Attachments 4 and 5 illustrate the preliminary design for the preferred alternative for Albert Street and Celina Street (Ultimate).

Attachments 6 and 7 illustrate the preliminary design for the preferred alternative for Brock Street East and Colborne Street.

## **2.0 Recommendation**

That the Development Services Committee recommend to City Council that pursuant to Report DS-22-27 dated February 2, 2022 concerning the One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street, staff be authorized to advance a second virtual public engagement process owing to the COVID-19 pandemic, in the early second Quarter of 2022 to receive input on the preliminary design for the preferred alternative and report back to Development Services Committee on the results of the public input.

## **3.0 Executive Summary**

Not Applicable.

## **4.0 Input From Other Sources**

The following have been consulted in the preparation of this Report:

- Community Services
- Oshawa Accessibility Advisory Committee
- Oshawa Active Transportation Advisory Committee
- Oshawa Central Ambulance Communications Centre
- Oshawa Fire Services
- Region of Durham Works Department

Staff will be circulating the preliminary design for the preferred alternative to various external agencies and various City Advisory Committees, in addition to the general public during the virtual public engagement.

## **5.0 Analysis**

### **5.1 Background**

In 2014, Council approved the 20Twenty Plan, which recommended the investigation of enhancements to the neighbourhoods of Celina and Albert Streets adjacent to the Downtown through enlarged boulevards, narrow streets, and the conversion of Celina and Albert Streets from one-way to two-way.

In 2015, Council approved the City's Integrated Transportation Master Plan, which recommended the undertaking of a study to assess the conversion of one-way streets within the downtown.

On September 30, 2019, the Development Services Committee adopted DS-19-173, Notice of Motion – Study to Investigate and Analyse the Conversion of Celina Street and Albert Street to Two-way Traffic Operations and directed that, for consideration of the 2020 budget, staff include a study to investigate and analyze the conversion of Albert Street and Celina Street to two-way traffic operations.

As part of the 2020 budget, Council approved funding for the One-Way to Two-Way Conversion Feasibility Study for Albert Street and Celina Street.

In October 2020, the Development Services Committee approved DS-20-117, Notice of Motion – Study to Investigate and Analyse the Conversion of Brock Street and Colborne Street to Two-way Traffic Operations.

As part of the 2021 budget, Council approved funding for the One-Way to Two-Way Conversion Feasibility Study for Brock Street and Colborne Street.

In February 2021, the City of Oshawa retained the services of CIMA+ to undertake the One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East and Colborne Street.

On September 27, 2021, City Council considered DS-21-144, One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street and approved the following recommendation:

“It is recommended that Development Services Committee recommend to City Council that, pursuant to Report DS-21-144 dated September 8, 2021 concerning the One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street staff be authorized to advance a virtual public engagement form owing to the COVID-19 pandemic, in the fall of 2021 to receive input on the preferred alternative and report back to Development Services Committee on the results of the public input and present a preliminary design for the preferred alternative.”

As part of the analysis presented in DS-21-144, the following three design concepts alternatives were developed for the four one-way corridors:

- Alternative 1: Do-Nothing and maintaining the existing one-way operations;
- Alternative 2: Convert to two-way operations (with no road widening), and;
- Alternative 3: Convert to two-way operations with roadway improvements (with road widening).

For Albert Street and Celina Street, a phased approach was recommended. For the short term or interim condition, Alternative 2 was recommended (see Attachment 8 of DS-21-144), where the conversion to two-way traffic operations can occur without the need for widening while maintaining on-street parking. As these corridors are developed,

appropriate right-of-way would be obtained. In the long term, once sufficient right-of-way is obtained, Alternative 3 (see Attachment 9 to DS-21-144) can be advanced subject to further public input and Council direction.

For Brock Street East and Colborne Street, Alternative 2 (see Attachment 8 to DS-21-144) was recommended due to both of the streets being designated as local roads and having little to no opportunities to widen the streets to accommodate enhanced landscape features. However, on-street parking can be maintained and cyclists would share the road with vehicles.

## **5.2 Public Engagement Number 1**

Public Engagement Number 1 was held from October 25, 2021 to November 4, 2021 in a virtual form owing to the COVID-19 pandemic. The preliminary findings, alternatives considered, and the preferred alternative for each corridor were posted on the City's website for feedback and comments.

Notification for Public Engagement Number 1 was provided in the following ways:

- Newspaper ad was placed in the Oshawa This Week newspaper, as well as on the City's website and social media accounts (e.g. Facebook and Twitter).
- Notice was posted on the Study's website which can be found at the following link: <https://oshawa.ca/conversionstudy>.
- Notice was mailed to over 900 addresses for property owners and businesses within 200 metres (656 ft.) of the four one-way corridors.

## **5.3 Comments Received During Public Engagement Number 1**

In total, 37 members of the public provided comments during the comment period. The comments and concerns documented related to the following themes:

- Concerns regarding increased traffic, noise, and speeding resulting from the two-way conversion;
- Concerns with illegal on-street parking along Brock Street;
- Desire to not lose existing on-street parking;
- Desire to improve existing traffic operations from a safety and geometric perspective;
- Desire for traffic calming;
- Support for increased active transportation; and,
- Concerns regarding and opposition to the need for widening.

## **5.4 Preliminary Design of Preferred Alternative for Albert Street and Celina Street**

The recommended improvements for the preferred alternative for Albert Street and Celina Street were split into two phases: Interim Improvements, where the conversion to two-way operations has no impacts to the existing curbs/boulevards and ultimate improvements, where the right-of-way is widened to a minimum of 20 metres (65.6 ft.) from the existing 15.1 metres (49.5 ft.) width.

#### **5.4.1 Recommended Interim Improvements**

Attachments 2 and 3 illustrate the preliminary design for the preferred alternative for Albert Street and Celina Street for the interim phase.

The intent of the interim phase is to implement the conversion to two-way operations within the existing roadway width to have the least impact to existing residents and businesses. While the existing boulevard and sidewalk widths are not to desirable standards, given the existing narrow right-of-way, this approach would reduce property impacts and construction costs.

For active transportation, separate/buffered cycling facilities are desired, but are not feasible within the existing roadway width. Therefore, cyclists would have to share the road with vehicles as is the case on most municipal roads.

On-street parking has been accommodated similarly to existing conditions, with the exception of segments of Celina Street north of Bruce Street. It should be noted that the conversion to two-way operations may present an opportunity to revisit which side of the street to locate the on-street parking to maximize the number of available spaces.

For the most part, it appears that the conversion to two-way operations could be implemented with relatively small modifications to lane markings, corner curb radii, paid on-street parking stalls, and signals/intersection modifications and would not trigger the need to undertake an Environmental Assessment.

It should be noted that as a result of the recommended improvements, possibly five on-street paid parking spaces may require removal along Celina Street, north of Bruce Street. The paved portion along this segment of road is approximately 9.85 metres (32.3 ft.) wide, which is narrower than the 10.7 metres (35.1 ft.) width that is present elsewhere along Albert and Celina Streets. As a result, the cross-section width remaining after the inclusion of an on-street parking limits the ability for including a bike lane/route. A further detailed review is required to confirm the cross-section at this location and if the on-street parking could be retained.

The recommended modifications (see Attachments 2 and 3) for the following intersections are:

##### **Albert Street and Bruce Street**

- New southbound stop sign required.

##### **Albert Street and Elm Street**

- New stop-controlled intersection recommended at this intersection due to sightline obstructions presented by the residential building in the northwest corner (22 Elm Street).

### **Albert Street and Wilkinson Avenue**

- Recommended to be converted to a right-in/right-out only due to its proximity to the Elm Street intersection. It should be noted that this intersection effectively functions as a right-in/right-out in existing conditions due to the one-way operations along Albert Street.

### **Albert Street and Olive Avenue**

- Potential curb radii improvements required at the northwest quadrant;
- New southbound traffic signals required; and,
- Sightlines are obstructed, and property may be required to establish 'daylight' triangles. Further study, possibly through detailed design, is required to identify all impacts. The building located in the immediate northwest quadrant (340 Albert Street) is situated on the property line and may restrict any curb improvements and may obstruct sightlines.

### **Celina Street and Athol Street East**

- New northbound traffic signals required.

### **Celina Street and John Street**

- New northbound stop sign required;
- Improving the curb radii of the northeast quadrant; and,
- There appears to be sufficient right-of-way to accommodate the recommended improvements and sightlines. Further study, possibly through detailed design, is required to identify all impacts.

### **Celina Street and Elm Street**

- New northbound stop sign required.

### **Celina Street and Olive Avenue**

- Improving the curb radii of the northwest and northeast quadrants; and,
- Sightlines are obstructed, and property may be required to establish 'daylight' triangles. Further study, possibly through detailed design, is required to identify all impacts.

## **5.4.2 Cost Estimate for Interim Improvements**

The recommended modifications for the interim phase of the conversion of Albert Street and Celina Street to two-way operations is expected to cost in the range of approximately \$500,000. This cost estimate excludes any potential property acquisition costs and should be further refined and confirmed in subsequent planning and design phases.

### **5.4.3 Recommended Ultimate Improvements**

Attachments 4 and 5 illustrate the preliminary design for the preferred alternative for Albert Street and Celina Street for the ultimate phase.

The recommended ultimate improvements considers a future widening of the right-of-way to a minimum of 20 metres (65.6 ft.) and the cross-section was developed using the following assumptions:

- 0.6 metres (2 ft.) off-set from property line to the sidewalk as per city standards;
- Addition of a 2.75 metres (9 ft.) parking lane for the majority of roadway south of John Street;
- 3.5 metres (11.5 ft.) traffic lanes;
- Bike lane widths between 1.65 metres (5.4 ft.) to 1.8 metres (5.9 ft.) depending on the presence of on-street parking; and,
- Sidewalk and boulevard widths as per city standards.

As illustrated in Attachments 4 and 5, significant property requirements are needed to implement a minimum of a 20 metre (65.6 ft.) right-of-way. A high-level assessment of property impacts identified approximately 65 residential properties being impacted along both Albert Street and Celina Street. If pursued, either complete reconstruction or large modifications of existing roadways and intersections would be required. The widening and conceptual lane markings illustrated in Attachments 4 and 5 are to be confirmed in subsequent planning and design phases. It should be noted that the widening of the roadway would trigger the need to undertake an Environmental Assessment study.

### **5.4.4 Cost Estimate for Ultimate Improvements**

The implementation of the ultimate phase for the conversion of Albert and Celina Streets to two-way operations is expected to cost in the range of approximately \$5 million. This cost estimate assumes removal and replacement of existing curbs and boulevards, assumes a reconstruction of the existing roadways, and includes high-level utility estimates (i.e., relocated hydro poles). However, the estimate excludes property acquisition costs and should be further refined and confirmed in subsequent planning and design phases.

## **5.5 Preliminary Design for Preferred Alternative for Brock Street East and Colborne Street**

The recommended improvements for the preferred alternative to Brock Street East and Colborne Street are similar to the recommended improvements for the interim phase for Albert Street and Celina Street and extend from Centre Street North to Division Street. The recommended improvements allow for the conversion of the roadways to two-way operations without the need for widening while maintaining the existing curbs.

### **5.5.1 Recommended Improvements**

Attachments 6 and 7 illustrate the preliminary design for the preferred alternative for Brock Street East and Colborne Street.

Both Brock Street East and Colborne Street appear to have an existing pavement width of approximately 8.5 metres (27.9 ft.) to 9.0 metres (29.5 ft.), which is consistent with City standards for local roads. However, similar to Albert Street and Celina Street, the existing right-of-way is narrower at approximately 15.1 m (49.5 ft.) compared to the typical 20 metres (65.6 ft.) for local roads. As a result, the recommended improvements contemplate converting both roads to two-way operations while maintaining the existing curbs/boulevards. This will have minimal property impacts and maintain the existing curbs/boulevards to minimize natural environment/landscape impacts as there are existing mature trees along the roadways, particularly along Brock Street East.

It should be noted that the existing pavement width of 8.5 metres (27.9 ft.) only accommodates on-street parking and two traffic lanes at their minimum widths of 3.0 metres (9.8 ft.). The provision of enhanced separated cycling facilities would not be feasible. Therefore, cyclists would have to share the road with vehicles as is the case on most municipal roads.

The recommended modifications (see Attachments 6 and 7) for the following intersections are:

#### **Brock Street East and Division Street**

- New eastbound stop sign;
- Improving the curb radii of the northwest and southwest quadrants; and,
- There appears to be sufficient right-of-way to accommodate the recommended improvements.

#### **Brock Street East and Mary Street North**

- New eastbound stop sign;
- Improving the curb radii of the northwest, southeast, and southwest quadrants;
- There appears to be sufficient right-of-way to accommodate the recommended improvements at the southeast and southwest quadrants; and,
- At the northwest quadrant, the improvements may pose a challenge owing to the need for property acquisition and further study, possibly through detailed design, is required to identify all impacts.

#### **Brock Street East and Simcoe Street North**

- Due to Regional works to improve this intersection, there is the possibility of the westbound through movement being restricted.



### **Colborne Street East and Division Street**

- Improving the curb radii of the northwest and southwest quadrants; and,
- There appears to be sufficient right-of-way to accommodate the recommended improvements.

### **Colborne Street East and Mary Street North**

- New westbound stop sign;
- Improving the curb radii of the northwest, southeast, and southwest quadrants;
- There appears to be sufficient right-of-way to accommodate the recommended improvements at the southeast quadrant; and,
- At the southwest, northwest and northeast quadrants, the improvements may pose a challenge owing to the need for property acquisitions and further study, possibly through detailed design, is required to identify all impacts.

### **Colborne Street and Simcoe Street North**

- New westbound stop sign;
- Improving the curb radii of the northeast, northwest, and southwest quadrants; and,
- The improvements may pose to be a challenge and further study, possibly through detailed design, is required to identify all impacts.

### **Colborne Street West and Centre Street North**

- New westbound stop sign;
- Improving the curb radii of the northeast and southeast quadrants; and,
- The improvements require further study, possibly through detailed design to identify all impacts.

## **5.5.2 Cost Estimate for Improvements**

The recommended modifications for the conversion of Brock Street East and Colborne Street to two-way operations is expected to cost in the range of approximately \$200,000. This cost estimate excludes any potential property acquisition costs and should be further refined and confirmed in subsequent planning and design phases.

## **5.6 Next Steps**

It is recommended that staff be authorized to hold a second public engagement to receive input on the preliminary designs of the preferred alternatives for the conversion of the one-way corridors. The second public engagement will be held in the early second Quarter of

2022. Notification for the second public engagement will be provided via mail to all property owners within 200 metres (656 ft.) of the four one-way roadways. In addition, notice will be provided to individuals who provided comments at the first public engagement. The notice will also be published in the Oshawa This Week newspaper and posted on the City's website and social media accounts.

Staff will then report back to the Development Services Committee on the input received, including input from the public and other stakeholders such as the Region of Durham and present a draft report that documents all the findings of the study.

## **6.0 Financial Implications**

Although there are no immediate financial implications resulting from the recommendation of this Report, however, any recommendation approved by Council resulting in financial implications will be included for approval in the applicable City capital budget and forecast submission to Council.

## **7.0 Relationship to the Oshawa Strategic Plan**

This project aligns to the following goals of Oshawa's Strategic Plan: Economic Prosperity and Financial Stewardship; Accountable Leadership; Social Equity; and Environmental Responsibility.



Anthony Ambra, P.Eng., Director,  
Engineering Services



Warren Munro, HBA, RPP, Commissioner,  
Development Services Department

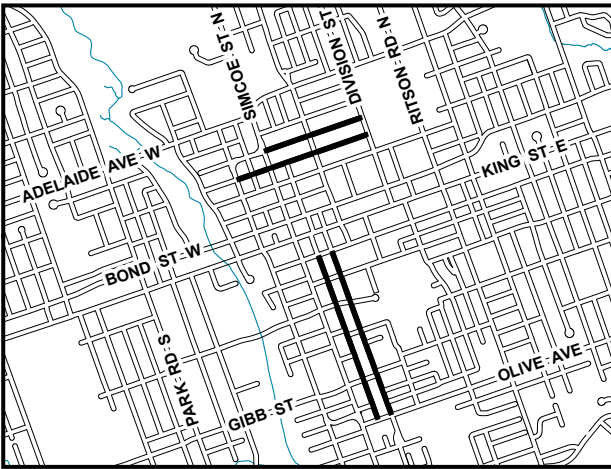


Title: Study Area  
Subject: One-Way to Two-Way Conversion Feasibility Study  
for Albert Street, Celina Street, Brock Street East,  
and Colborne Street  
Ward 4

File: 03-05



Key Corridors 

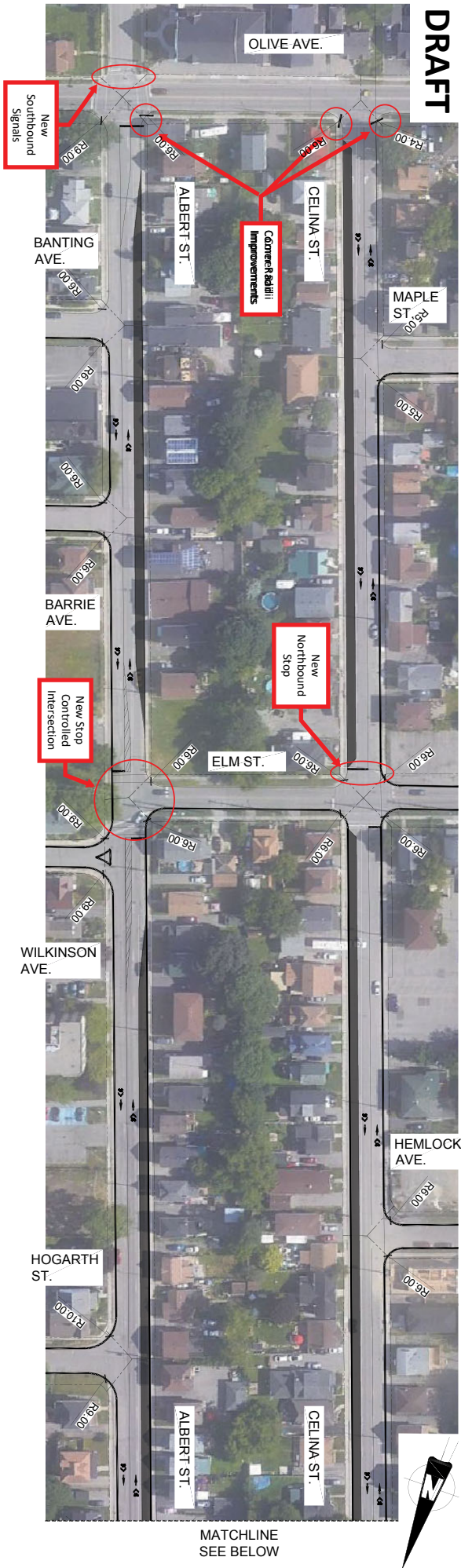




Title: Preliminary Design for the Preferred Alternative for Albert Street and Celina Street (Interim)  
Subject: One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street  
Ward: Ward 4  
File: 03-05



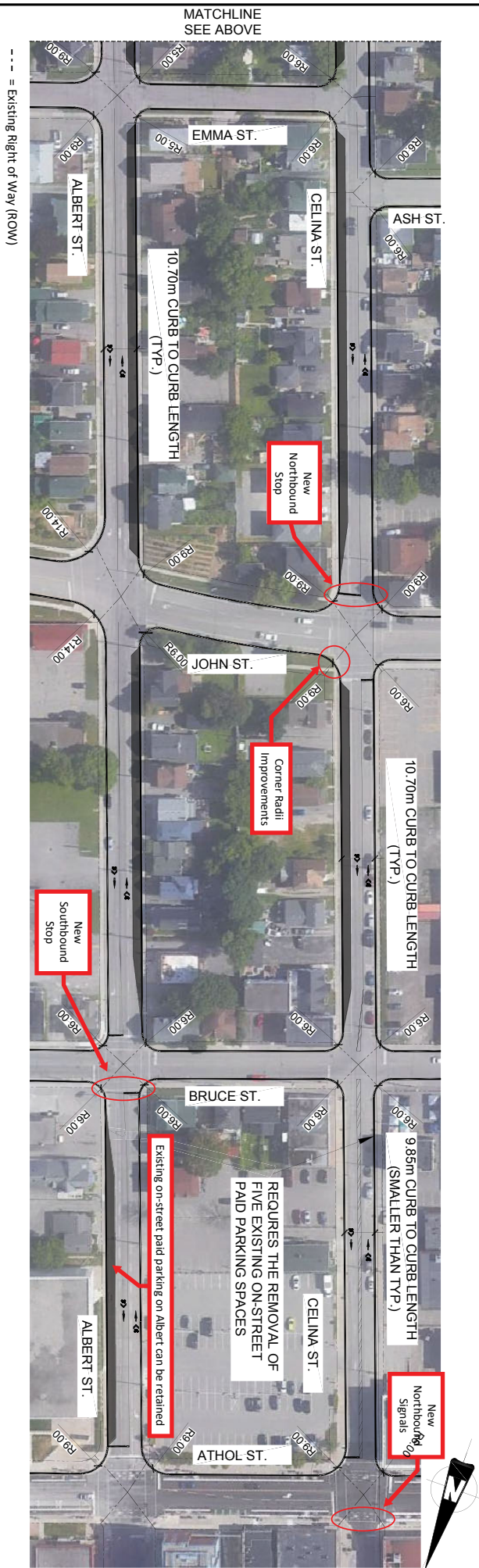
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**Item: DS-22-27**  
**Attachment 3**

**Title:** Preliminary Design for the Preferred Alternative for Albert Street and Celina Street (Interim)  
**Subject:** One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street  
**Ward:** Ward 4  
**File:** 03-05

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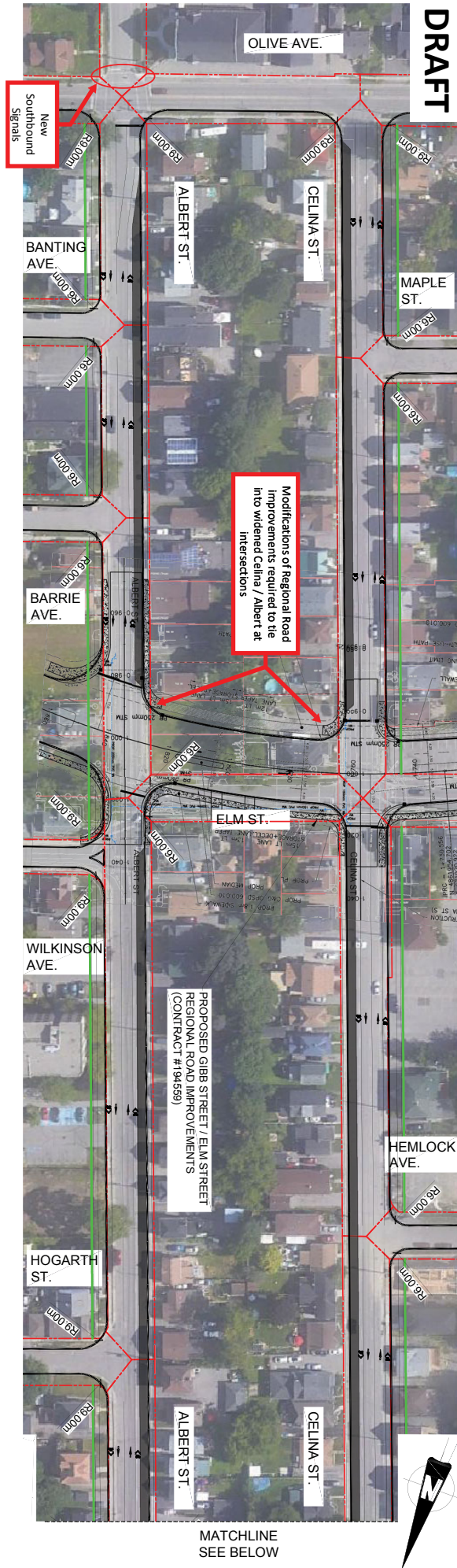


Title: Preliminary Design for the Preferred Alternative for Albert Street and Celina Street (Ultimate)  
Subject: One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street  
Ward: Ward 4  
File: 03-05

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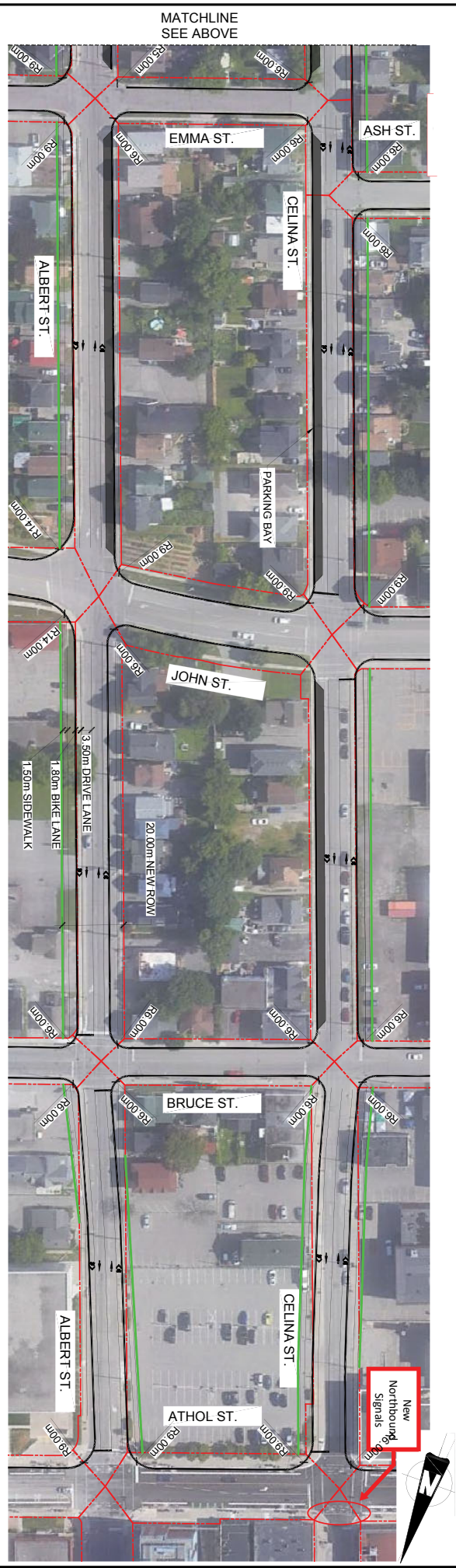


MATCHLINE  
SEE BELOW

Item: DS-22-27  
Attachment 5

Title: Preliminary Design for the Preferred Alternative for Albert Street and Celina Street (Ultimate)  
Subject: One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street  
Ward: Ward 4  
File: 03-05

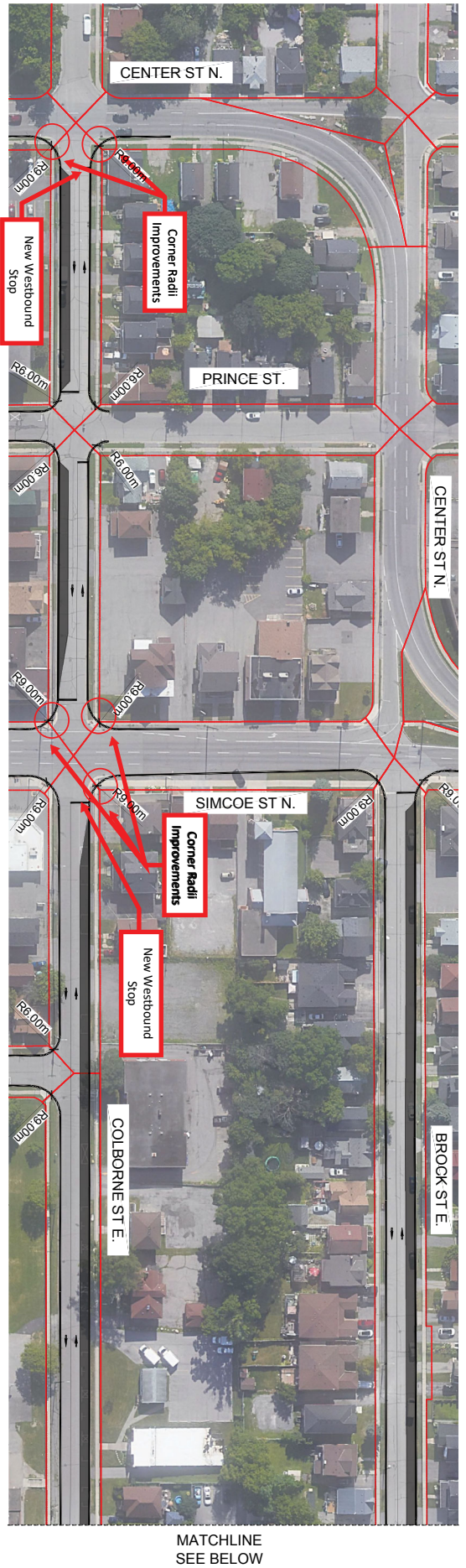
City of Oshawa  
Development Services Department



--- = Existing Right of Way (ROW)  
— = Proposed Right of Way (ROW)  
**CONCEPT DESIGN**



Title: Preliminary Design for the Preferred Alternative for Brock Street East and Colborne Street  
Subject: One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street  
Ward: Ward 4  
File: 03-05



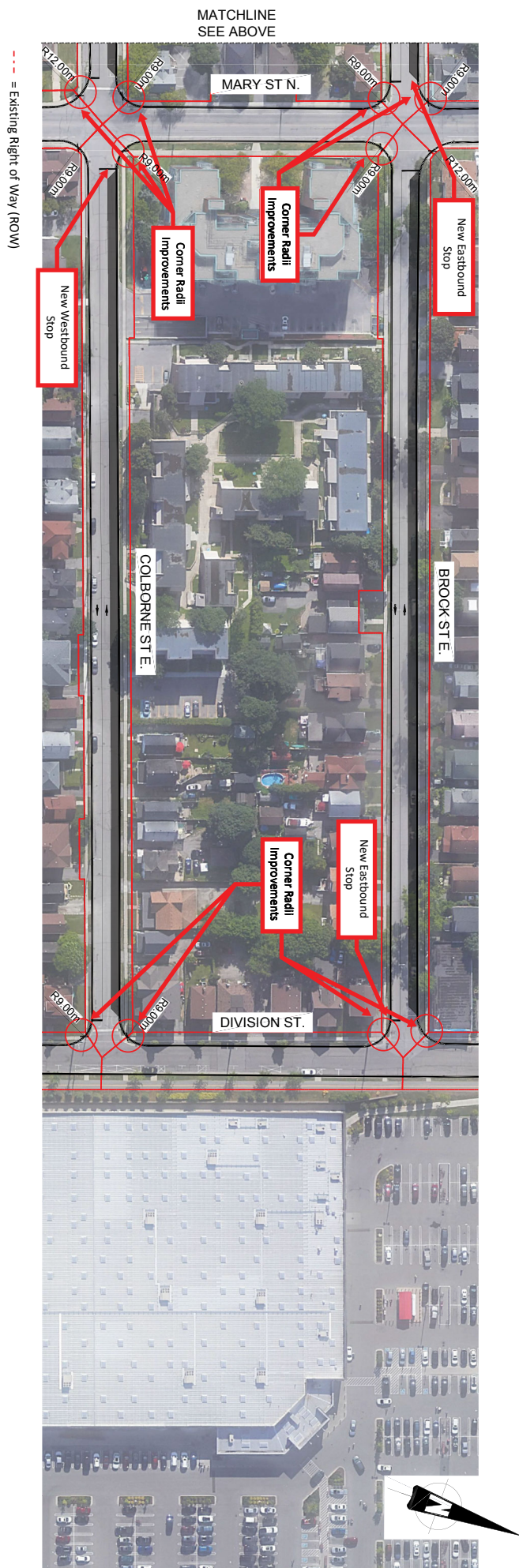
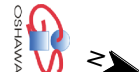
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Item: DS-22-27  
Attachment 7

Title: Preliminary Design for the Preferred Alternative for Brock Street East and Colborne Street  
Subject: One-Way to Two-Way Conversion Feasibility Study for Albert Street, Celina Street, Brock Street East, and Colborne Street  
Ward: Ward 4  
File: 03-05

City of Oshawa  
Development Services Department



CONCEPT DESIGN