



BURNSIDE

[THE DIFFERENCE IS OUR PEOPLE]

Appendix H Landscape and Gateway Features Memo

***If technical reports are required in an alternative format for accessibility needs, please contact:**

Maged Elmadhoon, M.Eng., P.Eng.

Manager, Transportation Planning Public Works, Niagara Region

Phone: 905-980-6000 ext. 3583

Email: Maged.Elmadhoon@niagararegion.ca

Memorandum: Landscape Design Elements

Date: February 6, 2022 **Project No.:** 300051307
Project Name: Regional Road 43 (Bridge Street) and Adjacent Municipal Roads
Client Name: Niagara Region
To: Maged Elmadhoon, P.Eng
From: H.T. Lam, OALA
Reviewed: Ray Bacquie, P.Eng, M.B.A.

1.0 Introduction

The Niagara Falls GO Transit Station Secondary Plan provides policy guidance for enhancing the character of the area, including both the private and public realm. The policies are intended to provide “a degree of flexibility, allowing for a range of design styles and expressions which will contribute to creating a unique sense of place”.

The following sections provide an overview of the urban design improvements being recommended as part of this plan, present the urban design guidelines for the public realm, outline the urban design guidelines for the private realm and describe the design integration policies.

The public realm improvement strategy is intended to enhance the attractiveness and functionality of the Secondary Plan Area. The planned Public Realm Improvement Plan considers the following:

- Major Gateway Improvement areas;
- Minor Gateway Improvement areas;
- Major Streetscape Improvement areas;
- Minor Streetscape Improvement areas;
- Potential Street Grid Refinement;
- Potential New Public Spaces;
- Potential Public Space Improvements; and,
- Active Transportation Connections.

The landscape elements will be developed in detail design that has regard for these elements within the context of the preferred design.

2.0 Secondary Plan Urban Design Guidelines

Key elements of the public realm identified in the Secondary Plan. Guidelines related to the boulevard design include the following:

Market Zone:

- Elements that may be located within this zone include private seating areas, planters, signage, and temporary retail displays.

Pedestrian Through Zone:

- May include demarcated areas along sidewalks where vehicles may encounter pedestrians including the use of accent paving

Planting and Furnishing Zone:

- The planting and furnishing zone will contain street furniture, street trees, street lighting and other fixed objects
- Tree plantings and landscaping should be optimized to provide sun protection and reduce heat islands
- The planting and furnishing zone can be hardscaped or softscaped or include a mix of both types of landscaping

The design of Bridge Street and Park Street will include the following key policies:

- High quality treatments, such as granite edges, should be considered for the pedestrian clearway. The pedestrian clearway should be coordinated with the design of feature paving across boulevards, intersections, crosswalks and driveways.
- Feature paving should be used to delineate areas of pedestrian priority e.g., Bridge Street / Erie Avenue intersection.

The design of Erie Avenue should consider the following guidelines:

- Surface treatments will include varied materials to provide visual and textural cues to users across the width of the right-of-way.
- Gateway or entry points should be well defined by a change in paving and signs to indicate a change in road behaviour expectations.
- Incorporate changes in texture, bollards or other property demarcation elements to define parking spaces.

3.0 Design Requirements

Based on the Secondary Plan guidelines, Niagara Region Complete Streets Guidelines and constraints and opportunities of the corridor we recommend that the detail design include the following elements.

3.1 Bridge Street

Incorporate the following into the design along Bridge Street:

- Large canopy deciduous trees at 10 m to 15 m spacing on the north and south sides of the roadway.
- Bridge Street and Erie Avenue T-intersection may receive “central node” treatment with a central textured and coloured pavement design – for examples, image of the Horseshoe Falls, City logo or a compass impression centrally located.
- Special pavement treatment at crossing points to identify areas of caution for increased pedestrian safety.
- Use decorative/themed LED streetlights to define the urban design of the study area – include opportunities for hanging baskets and event banners.
- Strategic locations of site furniture.

3.2 Transit Station Site Improvements (VIA Rail Canada Station)

Consider the following opportunities for the redevelopment of the Transit Station site:

- Use augmented pavement design to punctuate entrance and egress to the Station building.
- Develop coherent and AODA compliant signage and wayfinding.
- Manage existing shrub areas to increase visibility and public safety through the application of CPTED principles.
- Utilize proposed retaining wall space along the west side of the bus loop for large signage with lighting – for example, a laser-cut “Niagara Falls” lettering with backlighting.

3.3 Bridge Street and River Road / Niagara Parkway Intersection / Node

Consult with the Niagara Parks Commission to assess the merits of the following treatments:

- Decorative pavement design at this intersection to punctuate transition between the Niagara Parkway and Bridge Street using pavement designs/types and colour. Inclusive of roadways, sidewalks and AT.
- Use the north retaining wall as public art canvas or “gateway” feature.
- Update signage and wayfinding theme and messaging.
- Restore “Lions International” feature to include opportunity for public art and seasonal horticulture display at the “island”.
- Update to decorative/themed LED lighting – combined roadway lighting with pedestrian level lighting, including hanging baskets and event banners.

3.4 Zimmerman Avenue

Integrate into the preliminary design the following design elements:

- Create street tree planting opportunity along the west side of the street and remove on street parking.
- Create tree planting bump-outs along parallel parking lanes on the east side of the street for canopy trees.
- Augmented pedestrian pavement treatment at intersection with Bridge Street and Park Street.

3.5 Erie Avenue

Integrate into the preliminary and detail design the following elements:

- Develop a market zone on the east side of Erie Avenue north of Park Street
- Create street tree planting opportunities with a planting zone.
- Decorative/themed LED streetlights.
- Augmented corner sidewalk treatment at intersections to Bridge Street and Park Street.

3.6 Park Street

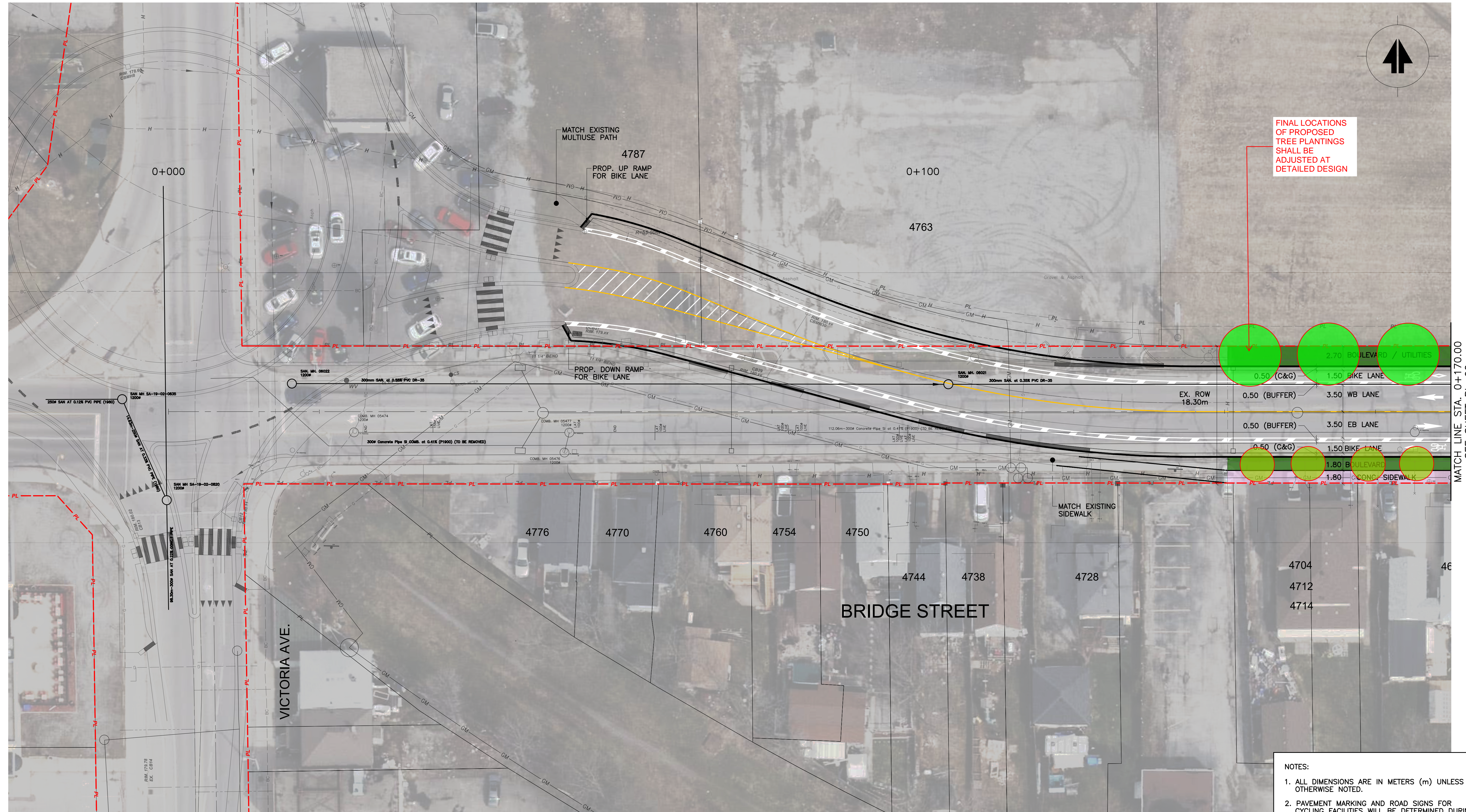
Integrate into the preliminary and detail design the following elements:

- Create street tree planting opportunities along the north side of Park Street.
- Decorative/themed LED streetlights.
- Augmented corner sidewalk treatment at intersections to north-bound streets.

H.T. Lam

Enclosure(s)

App_I 211119 Landscape Concepts
5/9/2022 5:41 PM



FINAL LOCATIONS OF PROPOSED TREE PLANTINGS SHALL BE ADJUSTED AT DETAILED DESIGN

MATCH LINE STA. 0+170.00
SEE SHEET PL-02

- NOTES:
1. ALL DIMENSIONS ARE IN METERS (m) UNLESS OTHERWISE NOTED.
 2. PAVEMENT MARKING AND ROAD SIGNS FOR CYCLING FACILITIES WILL BE DETERMINED DURING THE DETAILED DESIGN STAGE.
 3. WAYFINDING SIGNAGE PLAN WILL BE DETERMINED DURING THE DETAILED DESIGN STAGE.

NOT FOR CONSTRUCTION

No.	Issue / Revision	Date	Auth.
1	30% DETAILED DESIGN	22/06/15	A.I.

No.	Issue / Revision	Date	Auth.

LEGENDS:

	BOULEVARD		BIKE ZONE
	SIDE WALK		GO TRANSIT
	MULTI-USE PATHWAY		PRIVATE CARRIER
	BOULEVARD / UTILITIES		WEGO BUS
	CITY BUS		EX. PROPERTY LINE

BURNSIDE

R.J. Burnside & Associates Limited
6900 Creditview Road, Unit 2
Mississauga, Ontario, L5N 8R9
Telephone (905) 821-1800
Fax (905) 821-1829
web www.rjburnside.com

Client:
NIAGARA REGION
1815 Sir Isaac Brock Way,
Thorold, ON

Drawing Title:
**BRIDGE STREET AND ADJACENT ROADS
EA ASSESSMENT**
BRIDGE STREET
PREFERRED DESIGN ALTERNATIVE - INTERIM
STA. 0+000.00 TO STA. 0+170.00

Drawn M.A.	Checked A.I.	Designed R.B.	Date 22/03/30	Drawing No.
Project No. 300051307	Contract No.	Revision No. 1		ES-2.1

Scale: 1:250



FINAL LOCATIONS OF PROPOSED TREE PLANTINGS SHALL BE ADJUSTED AT DETAILED DESIGN

MATCH LINE STA. 0+170.00
SEE SHEET PL-01

MATCH LINE STA. 0+361.50
SEE SHEET PL-03

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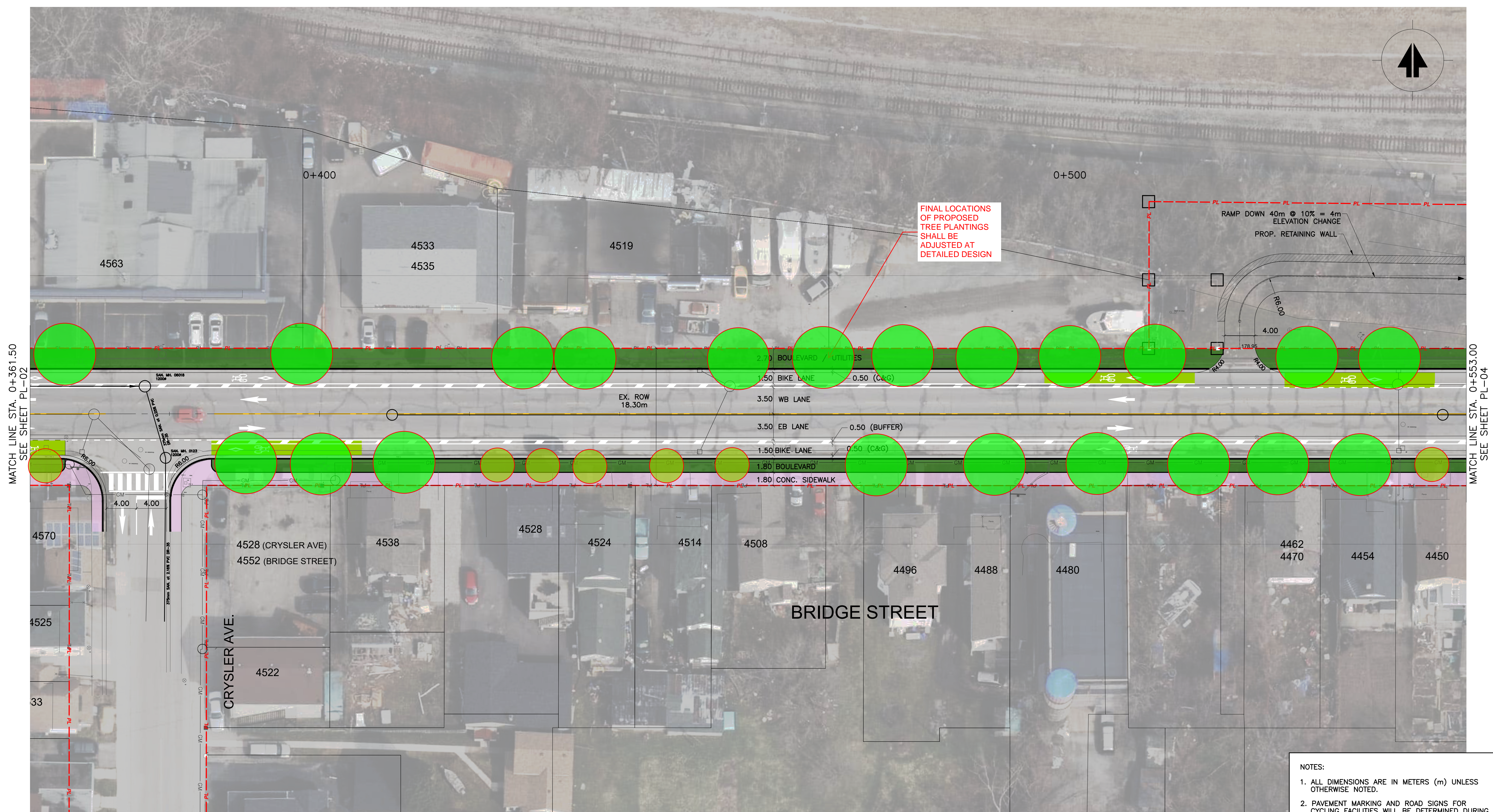
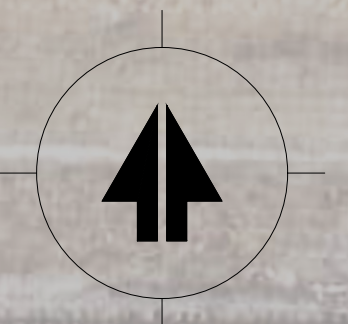
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PREFERRED DESIGN ALTERNATIVE - INTERIM
STA. 0+170.00 TO SAT. 0+361.5

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Project No. 300051307	Contract No.	Revision No. 1	Scale 1:250	



MATCH LINE STA. 0+361.50
SEE SHEET PL-02

MATCH LINE STA. 0+553.00
SEE SHEET PL-04

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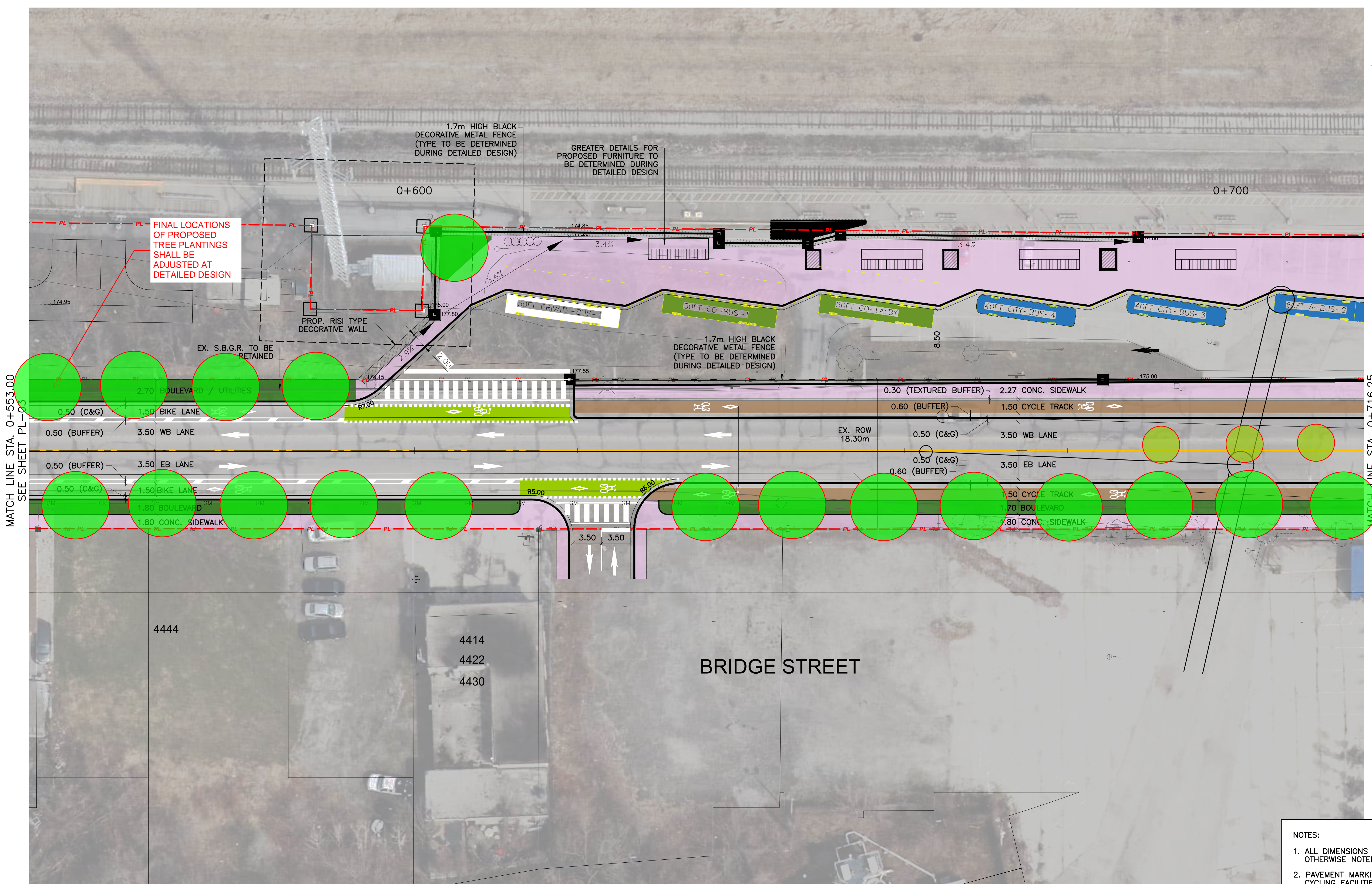
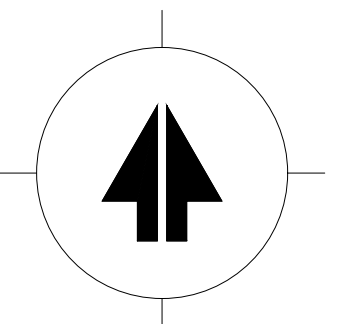
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EA ASSESSMENT**
BRIDGE STREET
PREFERRED DESIGN ALTERNATIVE - INTERIM
STA. 0+361.50 TO STA. 0+553.00

Drawn	Checked	Designed	Checked	Date	Revision No.	Drawing No.
M.A.	A.I.	A.I.	R.B.	22/03/30	1	ES-2.3
Project No.	Contract No.	Revision No.				
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Scale	0 5.0 10.0 15.0m					
1:250						



MATCH LINE STA. 0+553.00
SEE SHEET PL-04

MATCH LINE STA. 0+716.25
SEE SHEET PL-05

FINAL LOCATIONS OF PROPOSED TREE PLANTINGS SHALL BE ADJUSTED AT DETAILED DESIGN

1.7m HIGH BLACK DECORATIVE METAL FENCE (TYPE TO BE DETERMINED DURING DETAILED DESIGN)

GREATER DETAILS FOR PROPOSED FURNITURE TO BE DETERMINED DURING DETAILED DESIGN

PROP. RISI TYPE DECORATIVE WALL

EX. S.B.G.R. TO BE RETAINED

1.7m HIGH BLACK DECORATIVE METAL FENCE (TYPE TO BE DETERMINED DURING DETAILED DESIGN)

4444

4414
4422
4430

BRIDGE STREET

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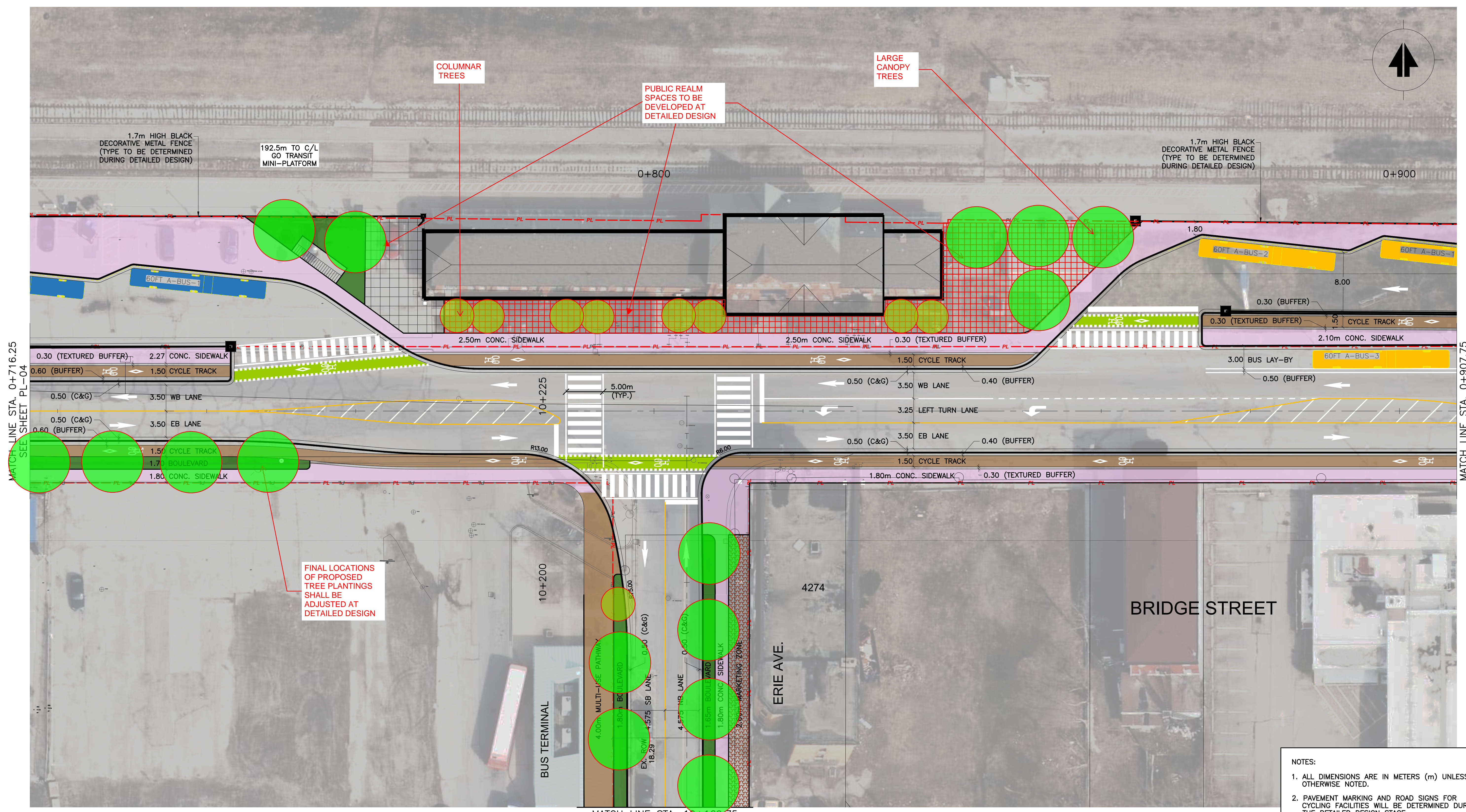
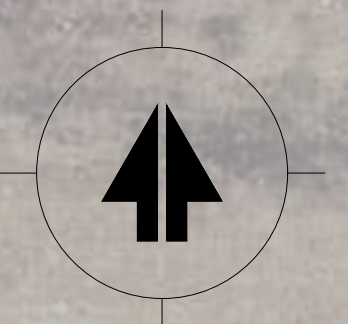
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STA. 0+553.00 TO STA. 0+716.25

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Project No. 300051307	Contract No.				

Scale: 1:250

ES-2.4



MATCH LINE STA. 0+716.25
SEE SHEET PL-04

MATCH LINE STA. 0+907.75
SEE SHEET PL-06

FINAL LOCATIONS
OF PROPOSED
TREE PLANTINGS
SHALL BE
ADJUSTED AT
DETAILED DESIGN

MATCH LINE STA. 10+169.75
SEE SHEET PL-07

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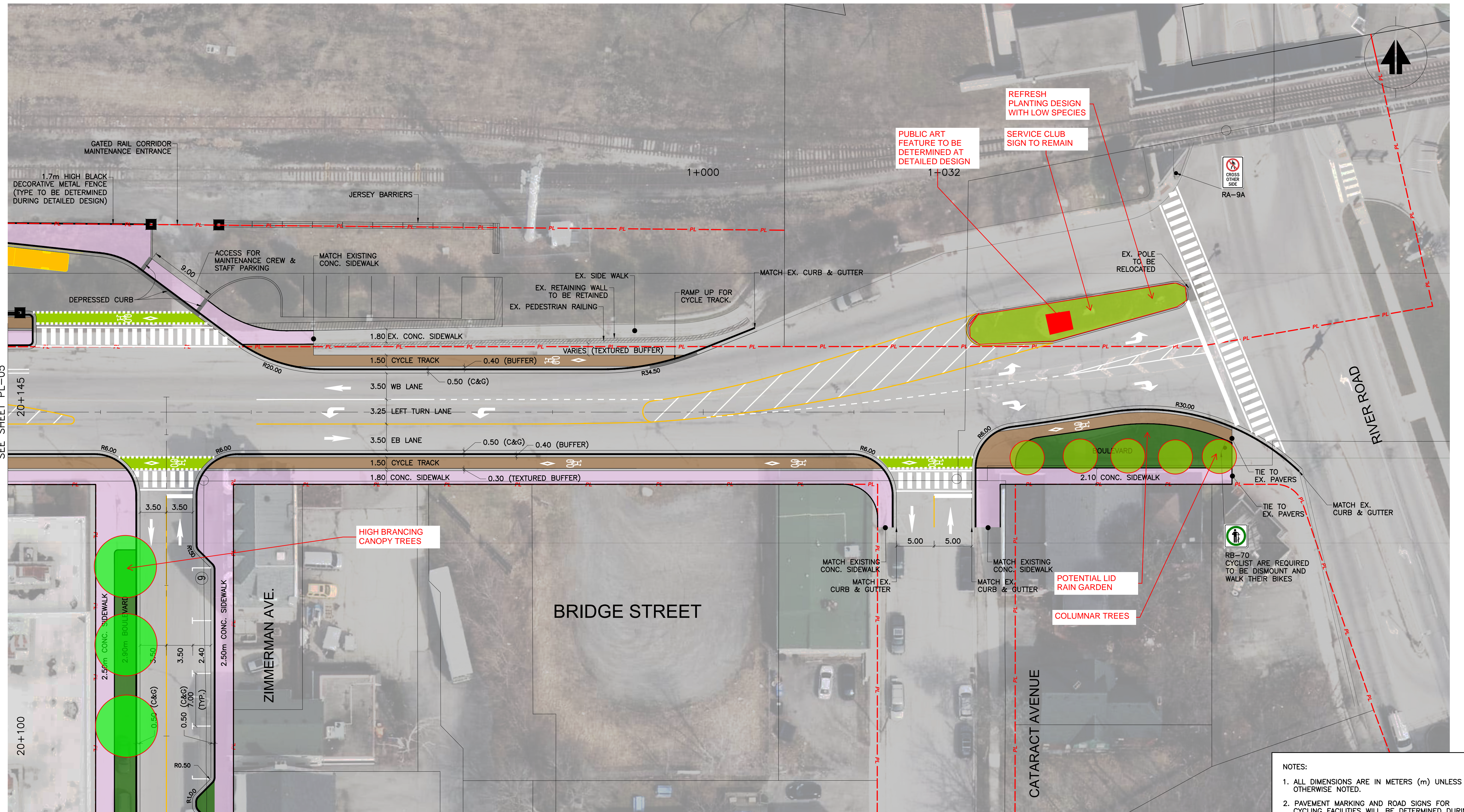
Drawing Title
BRIDGE STREET AND ADJACENT ROADS
EA ASSESSMENT
BRIDGE STREET / ERIE AVENUE
PREFERRED DESIGN ALTERNATIVE - INTERIM
STA. 0+716.25 TO STA. 0+907.75 / STA. 10+169.75 TO STA. 10+225.00

Drawn M.A.	Checked A.I.	Designed A.I.	Checked R.B.	Date 22/03/30	Drawing No.
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Scale
1:250

ES-2.5

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MATCH LINE STA. 0+907.75
SEE SHEET PL-05

MATCH LINE STA. 20+089.75
SEE SHEET PL-09

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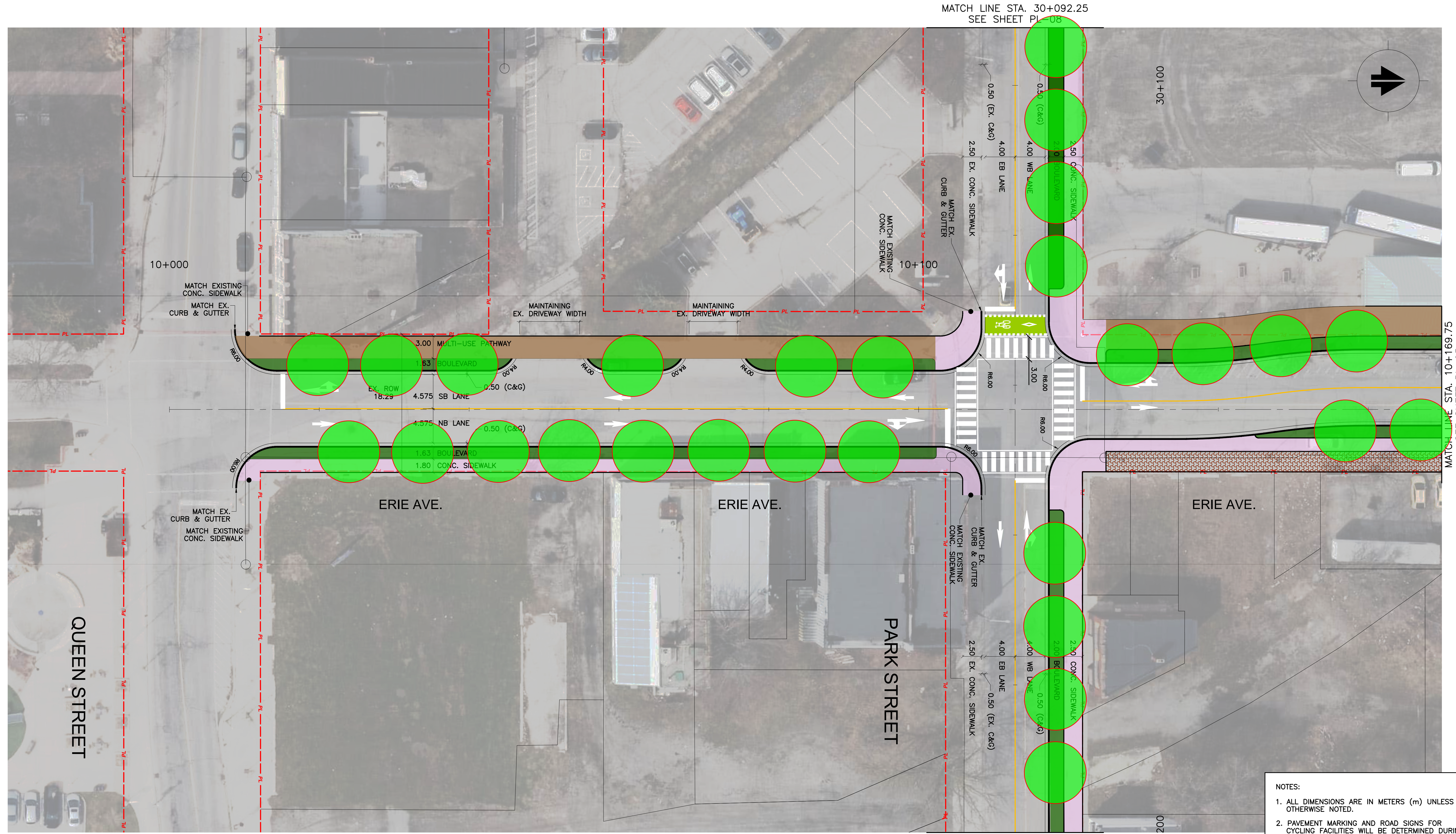
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EA ASSESSMENT
BRIDGE STREET / ZIMMERMAN AVENUE
PREFERRED DESIGN ALTERNATIVE - INTERIM
STA. 0+907.75 TO STA. 1+032.00 / STA. 20+089.75 TO STA. 20+145.00

Drawn	Checked	Designed	Checked	Date	Revision No.
M.A.	A.I.	A.I.	R.B.	22/03/30	1
Project No.	Contract No.	Revision No.			
300051307		1			

Scale: 1:250

ES-2.6



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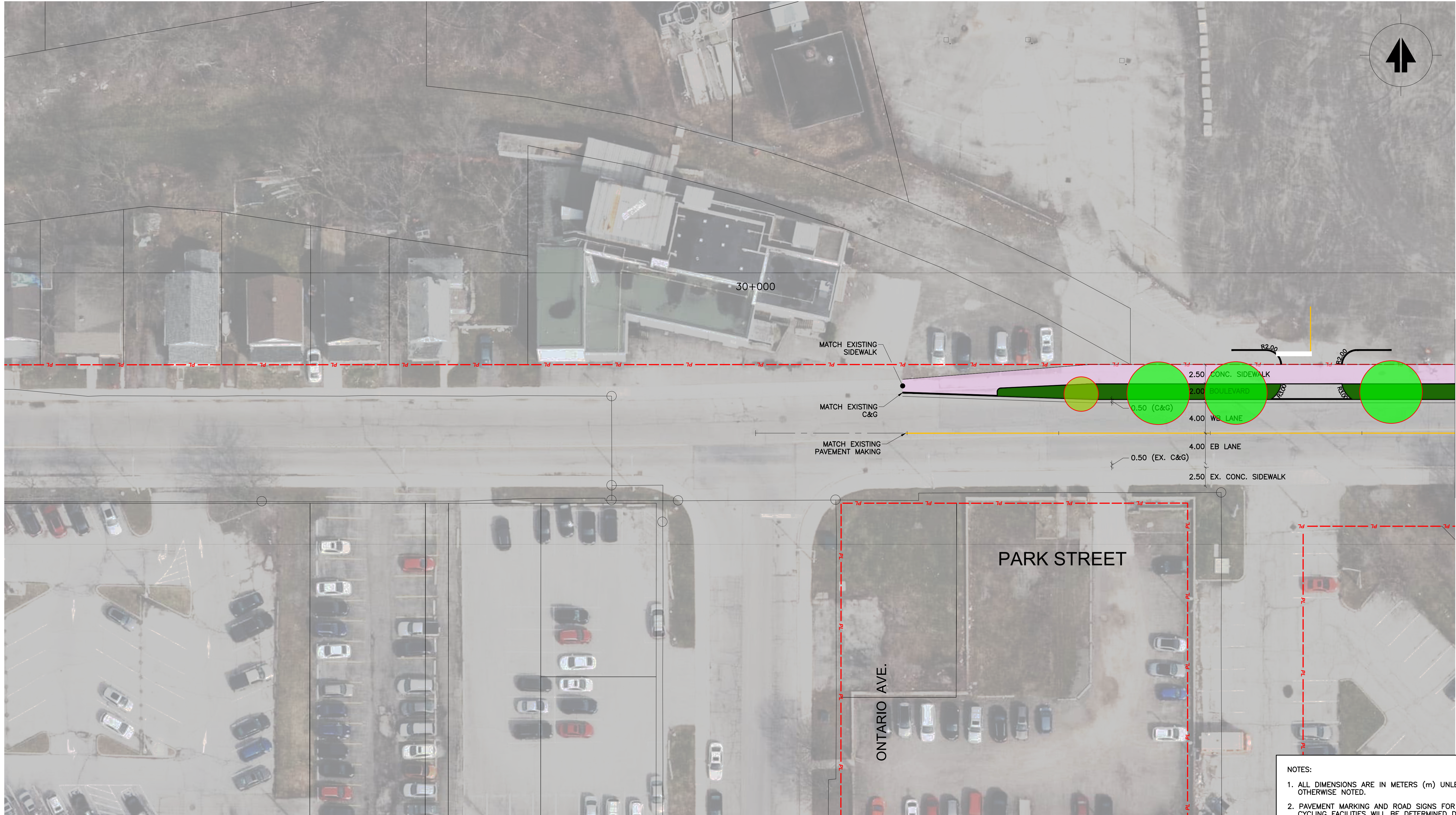
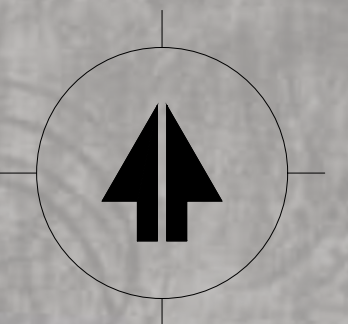
**BRIDGE STREET AND ADJACENT ROADS
 EA ASSESSMENT**

BRIDGE STREET / ERI AVENUE / PARK STREET
 PREFERRED DESIGN ALTERNATIVE - INTERIM
 STA. 10+000.00 TO STA. 10+169.75 / STA. 30+199.75 TO STA. 30+092.25

Drawn	Checked	Designed	Checked	Date	Revision No.
M.A.	A.I.	R.B.	R.B.	22/03/30	1
Project No.	Contract No.	Revision No.			
300051307		1			

Scale: 1:250

ES-3.1



MATCH LINE STA. 30+092.25
SEE SHEET PL-07

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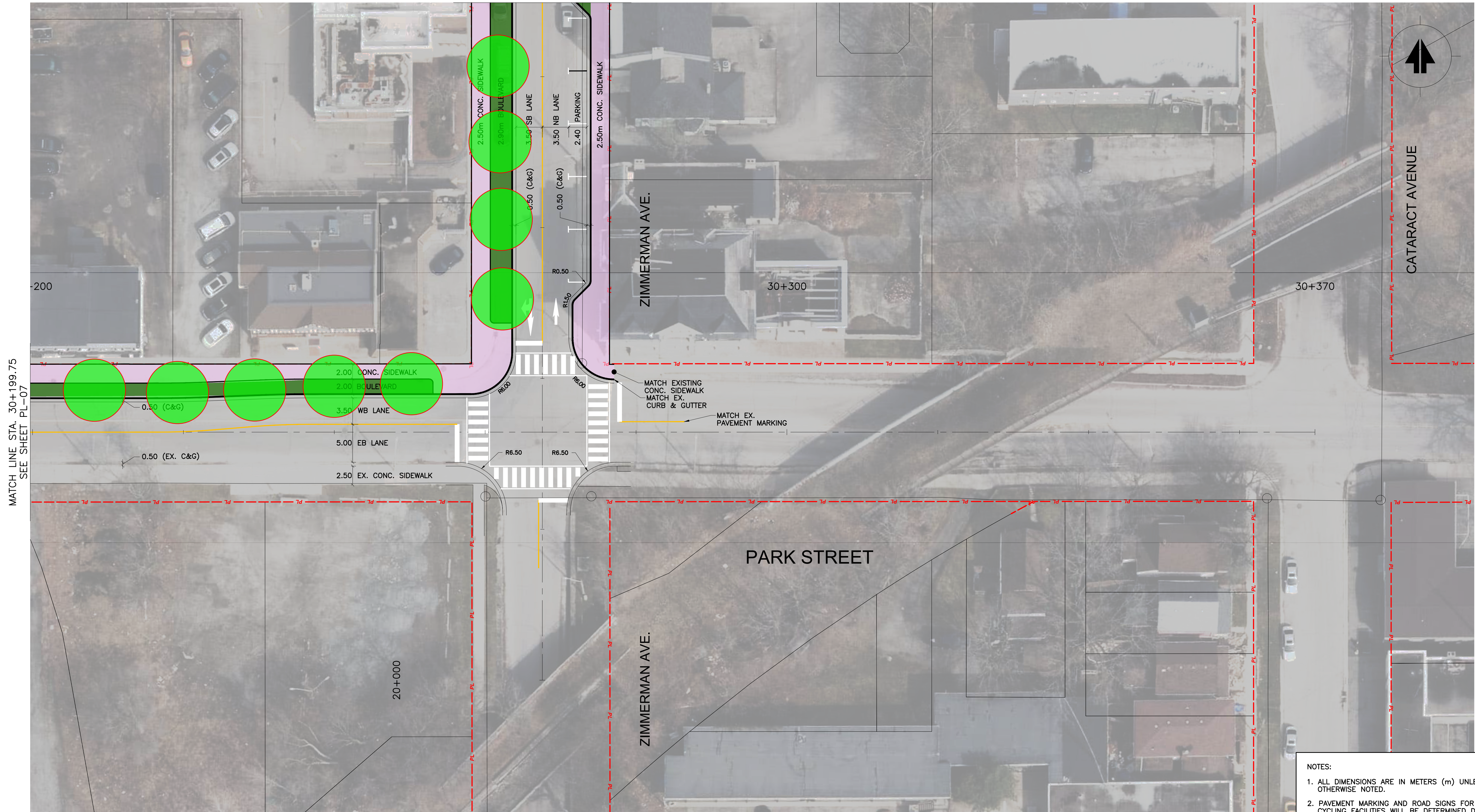
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PARK STREET
PREFERRED DESIGN ALTERNATIVE - INTERIM
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Drawn M.A.	Checked A.I.	Designed A.I.	Checked R.B.	Date 22/03/30	Drawing No. ES-3.2
Project No. 300051307	Contract No.	Revision No. 1			
Scale 1:250	0 5.0 10.0 15.0m				

MATCH LINE STA. 20+089.75
SEE SHEET PL-06



CATARACT AVENUE

ZIMMERMAN AVE.

PARK STREET

ZIMMERMAN AVE.

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ES-3.3