

University Drive Bridge Class Environmental Assessment (EA)

Public Information Centre No. 2

May 13, 2026

Land Acknowledgement

We acknowledge that Western University is located on the traditional territories of the Anishinaabek, Haudenosaunee, and Lūnaapéewak on lands connected with the London Township and Sombra Treaties of 1796 and the Dish with One Spoon Covenant Wampum. This land continues to be home to diverse Indigenous Peoples (First Nations, Métis and Inuit) whom we recognize as contemporary stewards of the land and vital contributors of our society.



Welcome

- Thank you for participating in the second Public Information Centre (PIC) for Western University's Class Environmental Assessment (EA) Study for the University Drive Bridge
- The existing bridge is near the end of its service life for vehicular traffic and this EA Study will help define a plan for the Thames River crossing
- There is an opportunity at any time during the EA process for interested persons to provide written input. Any comments received will be collected under the *Environmental Assessment Act* and, with the exception of personal information, will become part of the public record
- PIC No. 2 comments can be submitted by emailing westernubridge@uwo.ca by May 27, 2026

PIC No. 2 Purpose

- Project Introduction
- Overview of the Municipal Class Environmental Assessment (MCEA) process
- Summary of work completed to date
- Problem and Opportunity Statement
- Preliminary design alternatives
- Effects and mitigation
- Technically Preferred Plan
- Feedback



Background

- A Class Environmental Assessment (EA) Study is being completed to develop a bridge management plan for the University Drive Bridge across the North Thames River
- This study considers how to provide a structure that can address the active and vehicular transportation requirements of a growing campus, while respecting the 100-year-old landmark character of the bridge framing the view that is synonymous with Western University
- The project is completing all phases of the approved Municipal Class EA process and alternatives have been considered by involving the public in developing a recommended plan for improvements

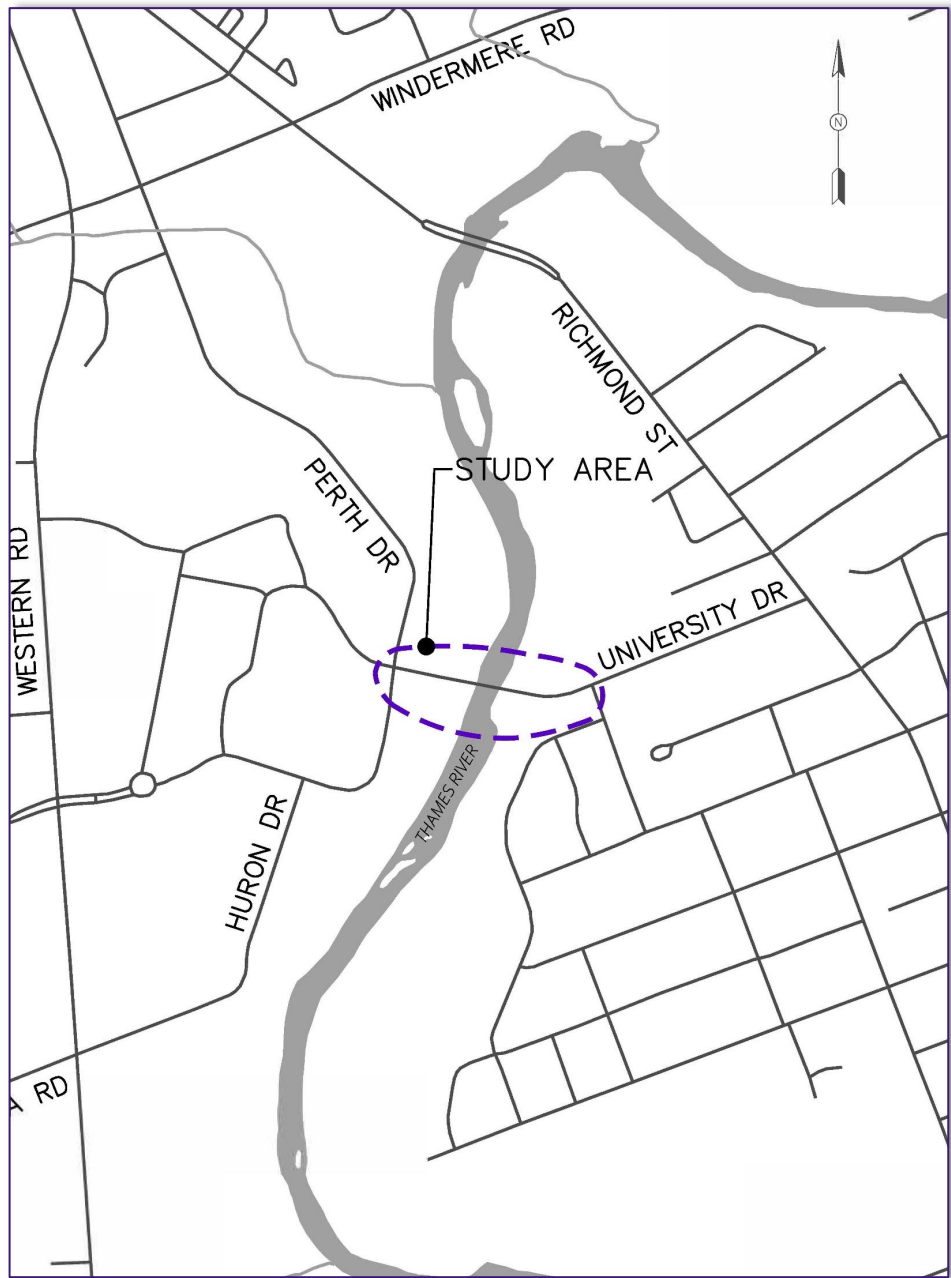


Problem and Opportunity Statement

Problem: The existing bridge is nearing the end of its service life as a vehicular bridge and has insufficient width to suitably accommodate the number of vehicles, pedestrians and cyclists. The EA has considered a range of improvement alternatives to address the University's transportation requirements and the character of the bridge that is synonymous with Western University's campus collegiate gothic style of architecture

Opportunity: This Study will develop an active transportation-focused Bridge Management Recommended Plan that can be integrated with the University's Campus Development Strategy and Open Space Strategy





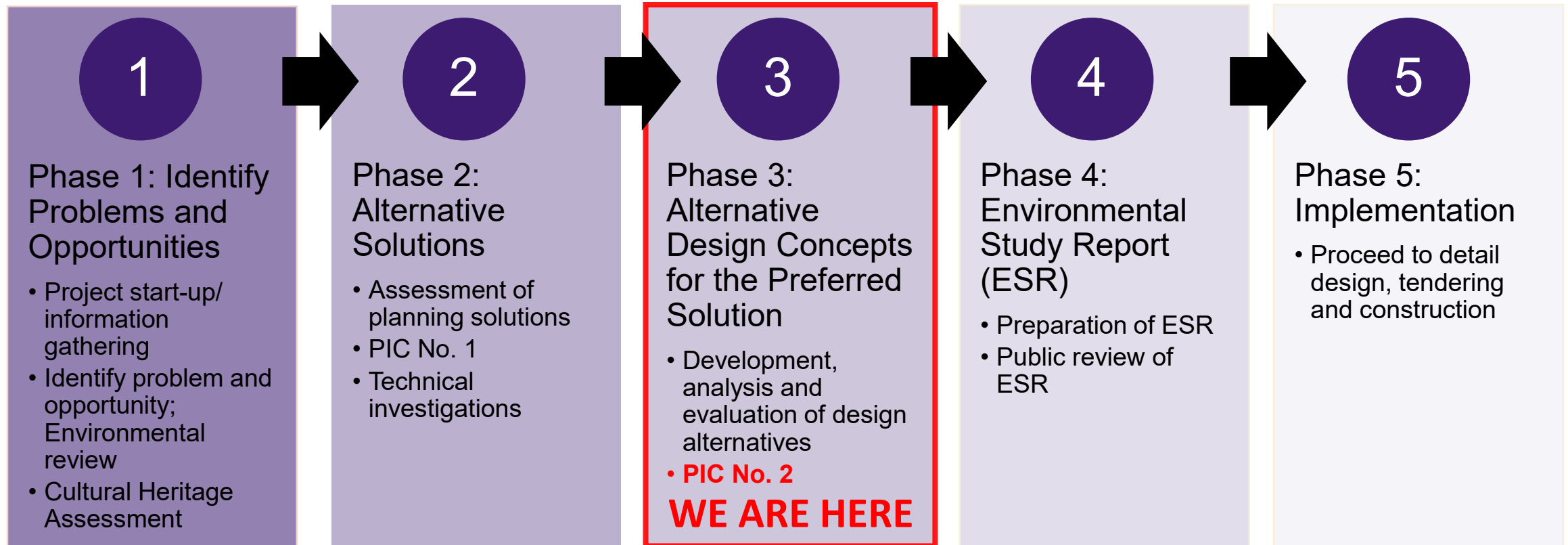
Study Area

- The study area is located on the Western University Campus and includes the University Drive Bridge over the north branch of the Thames River and adjacent areas.

Municipal Class Environmental Assessment (Class EA) Process

- The University Drive Bridge was constructed by Western University and opened to traffic in the fall of 1923, on lands owned by the University. As such, the University is a private sector Proponent under the EA Act. The Municipal Class EA affords the use of the Class EA for private sector undertakings
- This project commenced in 2022 and is being undertaken in accordance with the Municipal Engineer Association's Class EA for a Schedule C project
- The Class EA process allows an opportunity for public agencies and Indigenous communities to provide feedback during the planning and design process. The study timing has allowed the Upper Thames Region Conservation Authority to review the hydraulics of the project between PIC 1 and 2, which they approved in December 2025
- The Municipal Class EA process is illustrated on the following exhibit

Municipal Class Environmental Assessment (Class EA) Process



Preliminary Design Alternatives

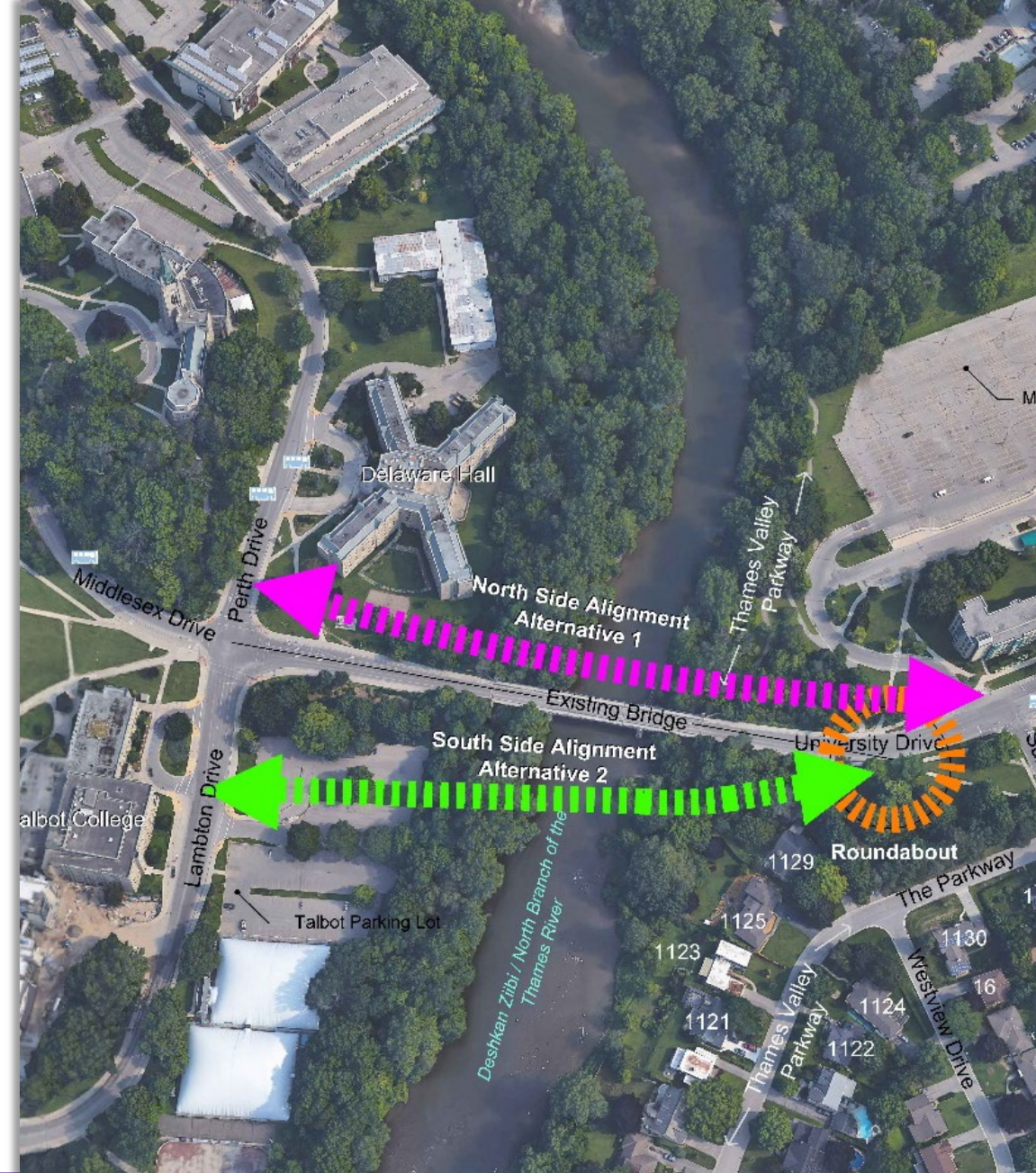
Preliminary design alternatives for the recommended planning solution for a new bridge and to conserve the existing structure include:

- 1) Bridge alignment alternatives
- 2) Structural alternatives
- 3) Hydraulic alternatives



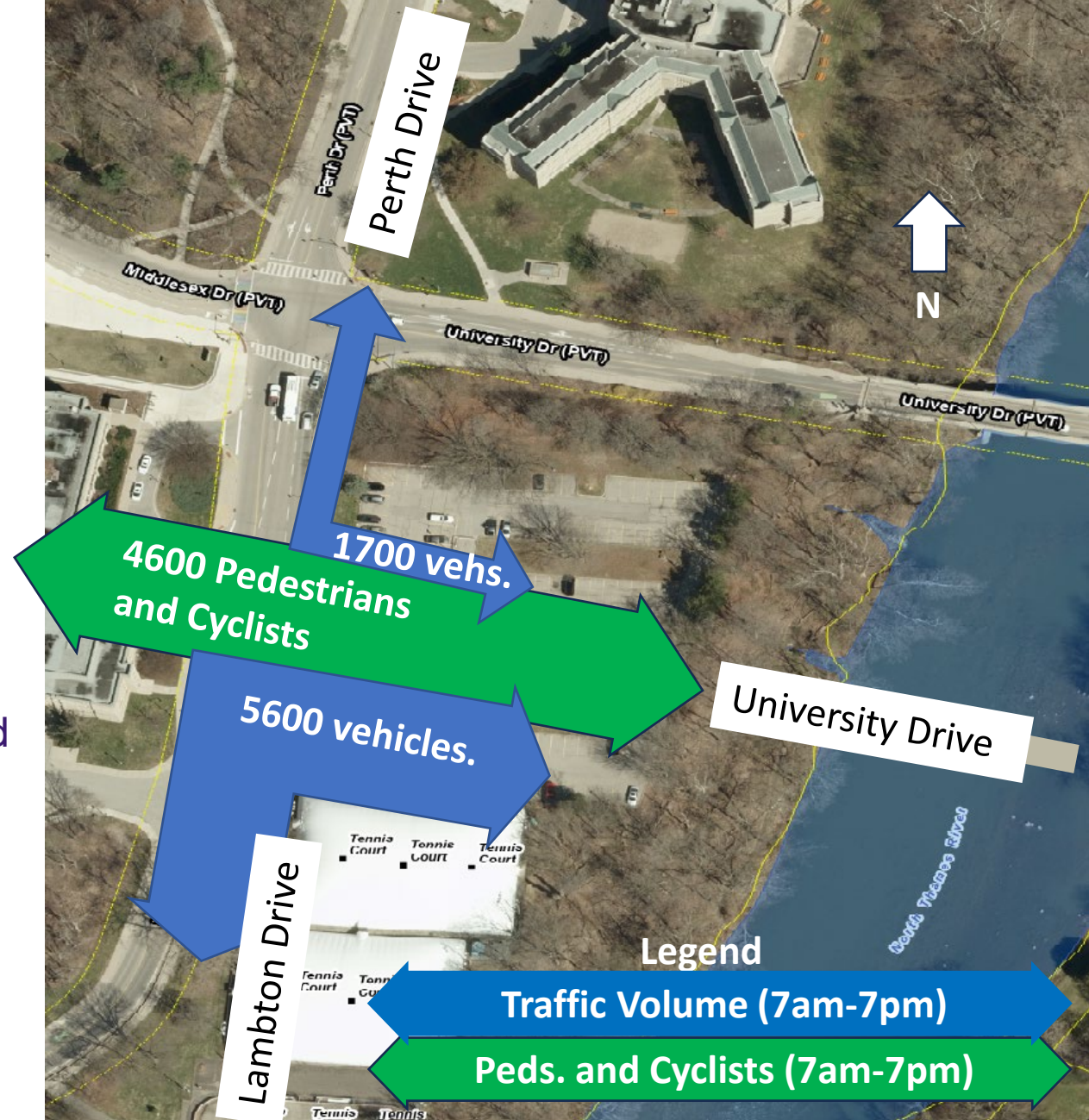
Alignment Alternatives

- The evaluation compared either a new vehicular bridge alignment to the north (Alternative 1) or to the south side (Alternative 2) of the existing bridge.
- Alternative 1 – To the north was not feasible due to insufficient physical space and impacts to infrastructure.
- Alternative 2 – To the south alignment is recommended to be carried forward, this alternative:
 - Exhibits the best transportation characteristics and minimizes the impacts to the natural, cultural and social environments, land use and property
 - Will avoid impacts to infrastructure and a SAR species (Kentucky Coffee tree) found at the existing bridge's northwest abutment



Existing Traffic Demand (7am – 7pm)

- Traffic volumes were recorded on Tuesday November 18, 2025
- Over 75% of the motorists on University Drive turn to/from Lambton Drive
- The high volume of pedestrians will further increase once the new residence on University Drive is occupied
- Realigning a new structure to the south would:
 - Reduce the pedestrian/vehicle conflicts crossing Perth Drive, and
 - Enable traffic signal operations to prioritize area pedestrian movements



Bridge Alternative 1 - Concrete Arch

- The main span over the river is supported on a single shallow concrete arch rib
- The deck is a post-tensioned concrete slab, supported on concrete wall-columns
- The arch bears against concrete foundations, supported on a combination of battered piles and inclined micropiles
- An open concrete barrier wall exposes the slenderness of the deck
- The bridge has an elegant, understated, and classic form that complements and does not detract from the form and style of the existing bridge

Bridge Alternative 1 - Concrete Arch



Bridge Alternative 2 - Steel V-Pier

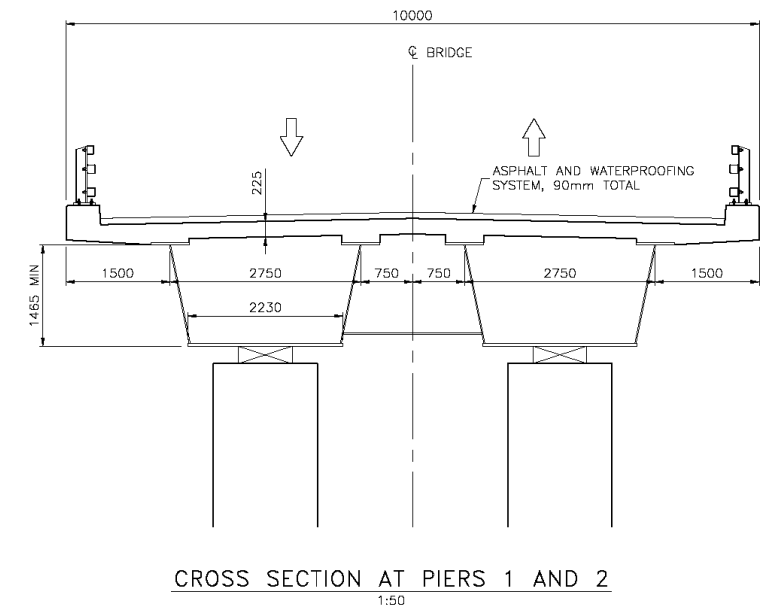
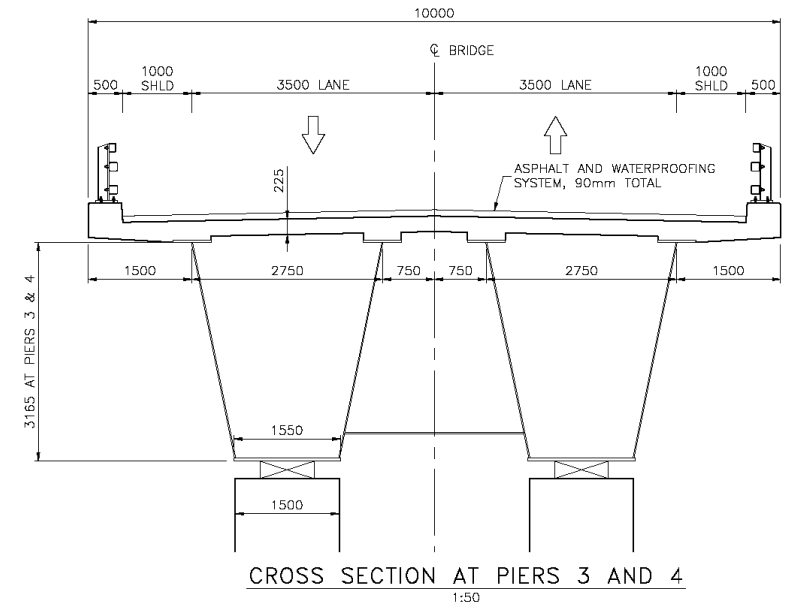
- The deck is formed by a stiffened steel plate, coated with a high-traction wearing surface
- The spans consist of three parallel steel box girders, connected by floor beams. These girders are supported by two V-shaped piers, each leg of which is a welded hollow steel tube. These V-piers are founded on concrete pedestals supported by piles
- An open steel barrier exposes the slenderness of the deck. The bridge has a very slender, minimal, and modern appearance
- Driving surface can include conventional 90 mm asphalt and waterproofing

Bridge Alternative 2 - Steel V-Pier



Bridge Alternative 3 Steel Box-Girder

- This is a conventional structural system commonly used for highway bridges
- The spans consist of steel “tubs” onto which a concrete deck is cast
- For the main span, the girders vary in depth, becoming deeper at the piers
- This alternative was not carried forward for further evaluation because of the depth of the superstructure interfering with the trail on the east side interfering with the hydraulic capacity of the river, vertical clearance for MUP and impacts raising Lampton Drive



Summary of Bridge Evaluation

Factor	Concrete Arch	Steel V Pier
Transportation		
Roadway improvements at Lambton Drive will improve safety and promote active transportation.	Equal ✓	Equal ✓
Structure Considerations		
Durability	Equal ✓	Equal ✓
Ice Impacts	Good ✓	Fair —
Maintenance	Equal ✓	Equal ✓
Hydraulics	Good ✓	Poor x
Physical Appearance		
Aesthetics of concrete generally match the existing architecture	Good ✓	Fair —
Community Impacts		
Noise (Deck Surface)	Good ✓	Good ✓
Trail interference	Good ✓	Poor x
Cost		
Cost to Construct	Comparable —	Comparable —
Constructability	Fair —	Good ✓
Recommendation	Technically Preferred Alternative	Do not carry forward.

Bridge Evaluation Summary

- Based on the evaluation of bridge alternatives, Alternative 1 Concrete Arch is recommended as the Technically Preferred Alternative in the EA process
- This alternative has visual characteristics consistent with existing bridge architectural features, minimizes the risk of ice impacts, and has less riverbank trail impacts
- The bridge design criteria is to provide a minimum 100-year service life

Hydraulic Review

The following bridge alternatives were evaluated for hydraulic performance:

- Alternative 1 – Concrete Arch
- Alternative 2 – Steel Girder bridge with V-Piers
- Alternative 1 – Concrete Arch was selected as the preferred hydraulic alternative:
 - Span: 127 m, with a main span of 65 m and no pier in the channel
 - The proposed concrete arch bridge results in no change to water levels, except for localized effects immediately upstream and downstream of the structure. These localized effects are generally confined to University-owned lands, and no impacts to adjacent private property are anticipated
 - The results of the hydraulic analysis were reviewed and accepted by the Conservation Authority
 - Private property owners immediately upstream and downstream of the proposed bridge are being contacted
 - The public has opportunity to offer feedback during the consultation process and will be documented as part of the EA

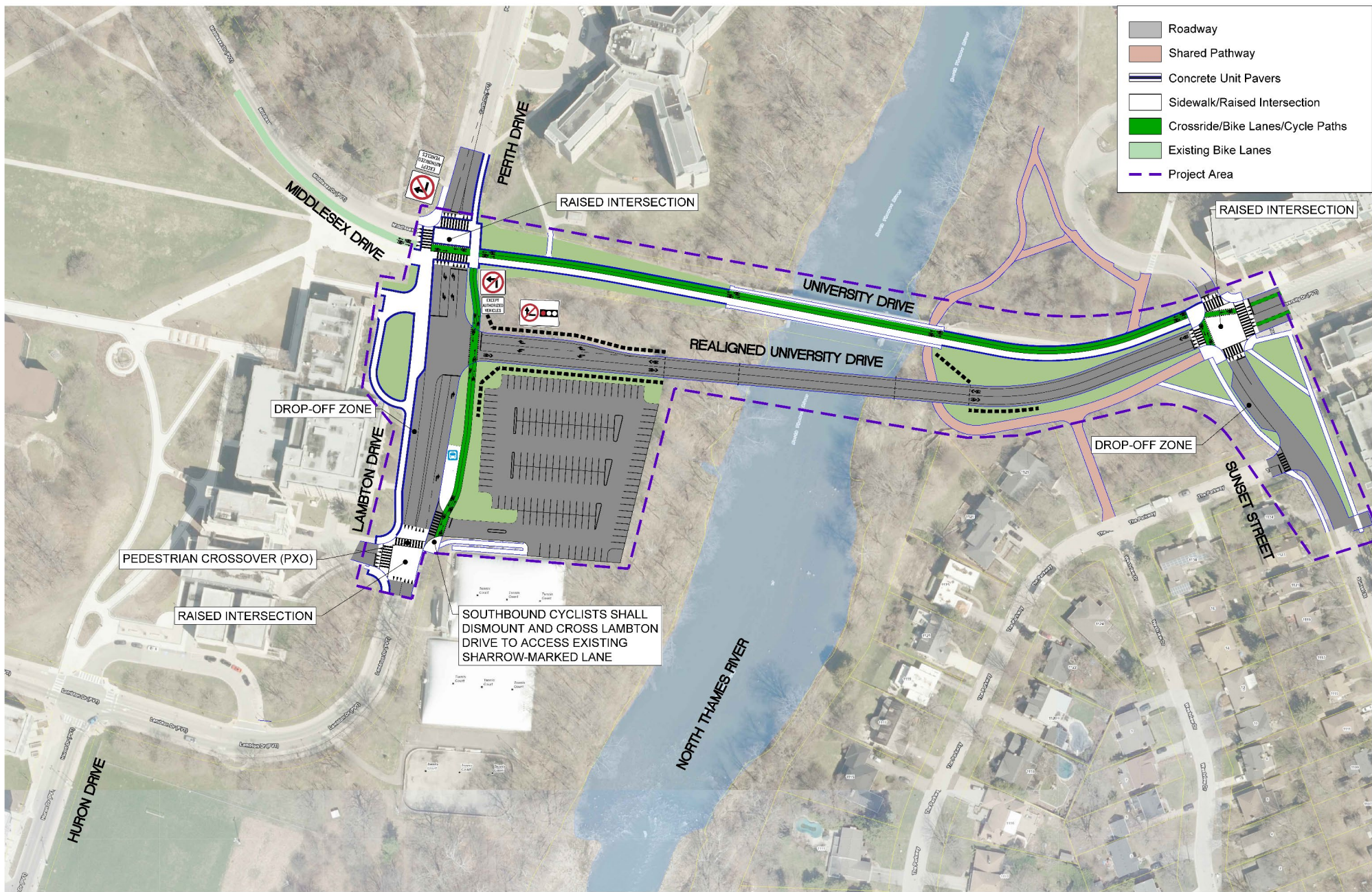
Technically Preferred Bridge Alternative



West Side Features of the Recommended Plan

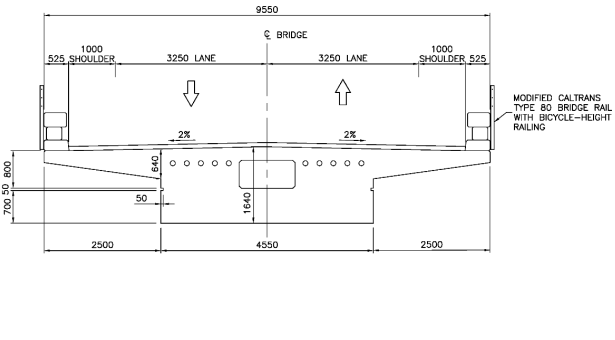
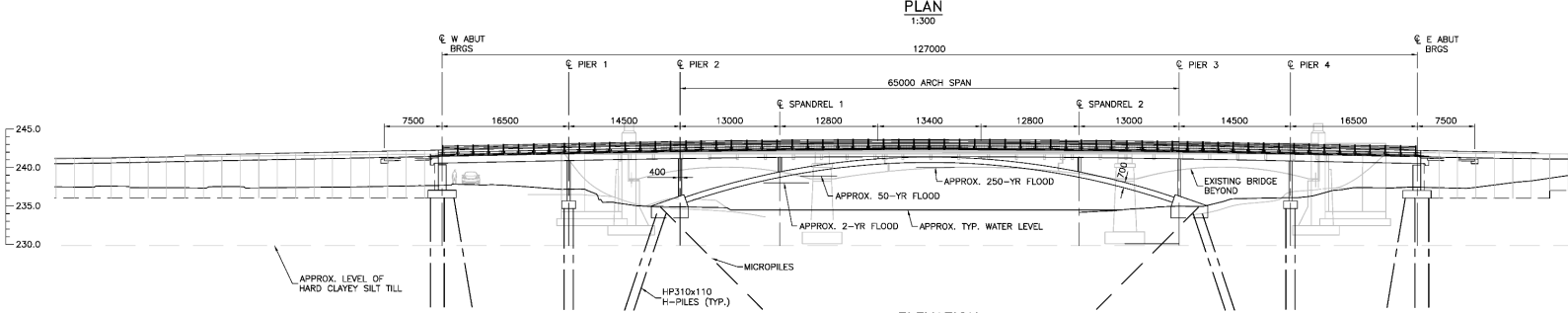
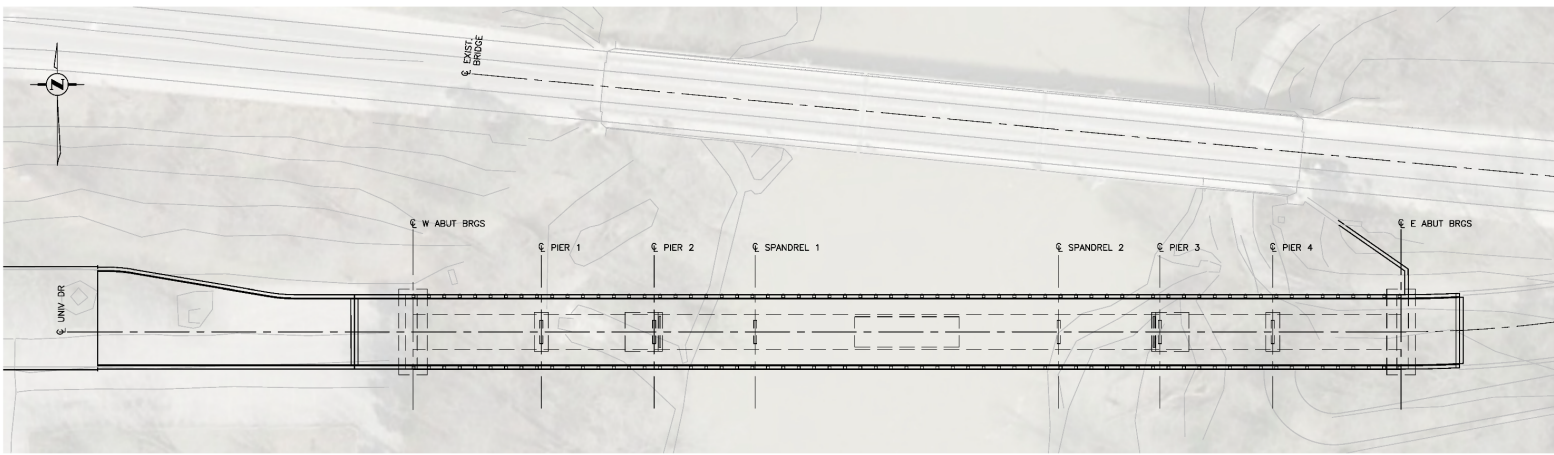
- Realigning University Drive eliminates the major vehicle–pedestrian conflicts.
- The proposed intersection would provide improved safety and allow priority to be given to pedestrians (raised crosswalk and signal phasing)
- The existing intersection operates at Level of Service* (LOS) B/C for motorists during peak hours
- During the pm peak hour, the LOS for motorists would improve from C to B with the proposed intersection
- More significantly, the LOS for pedestrian movements crossing Lambton/Perth Drive would improve from D to A

*Level of Service are measures of delay at the intersection ranging from LOS A depicting free flow conditions to LOS F depicting congested conditions with significant delays and queuing

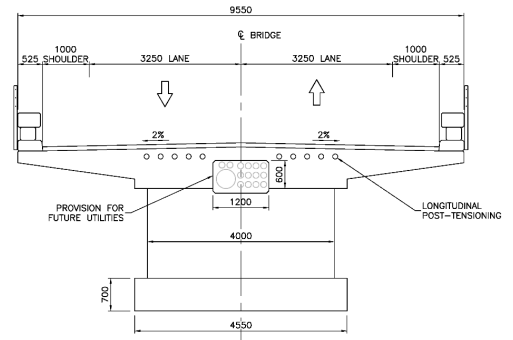


Perth & Lambton Drive Raised Crosswalk





CROSS SECTION AT ARCH CROWN
1:50



CROSS SECTION AT SPANDEL COLUMN
1:50

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0	13 APR 26	FOR REVIEW	DH
MARK	DATE	REVISIONS	BY
ENTUITIVE			
120 Bremner Blvd, 4th Floor Toronto, ON M5J 0A8 Canada +1 416 477 5832			
Western UNIVERSITY · CANADA			
PROJECT University Drive Bridge			
TITLE CONCRETE ARCH General Arrangement			
STATUS Conceptual Design			
DESIGN	DH	SCALE AS NOTED	DRAWING No.
DRAWN	DH	DATE 13 APR 2026	
CHECKED	JW	PROJECT No. EN021-03217	S-01

Existing Bridge



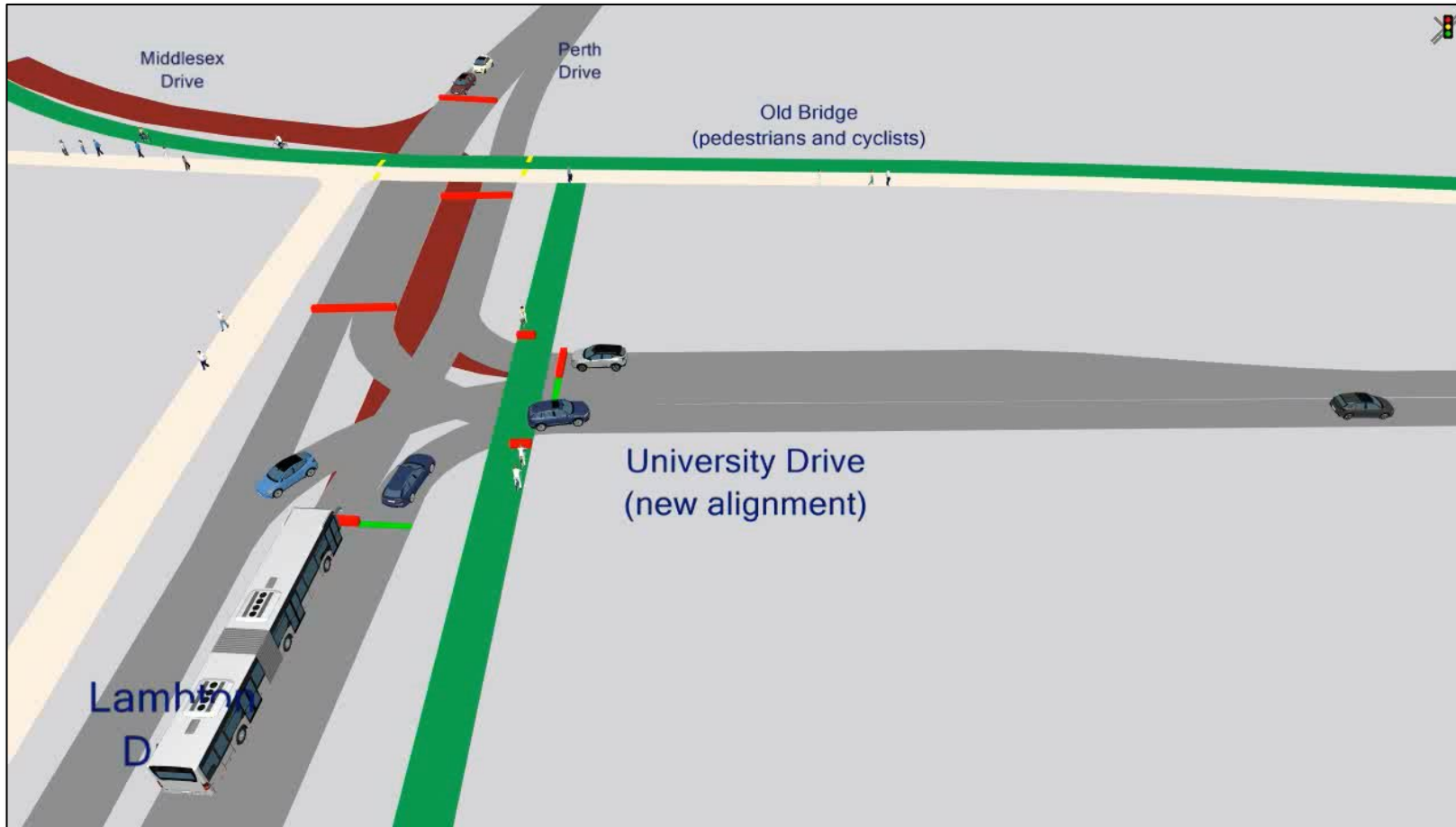
< 1.9 m
Bridge lookout >

2.5 m Sidewalk

>< 3.0 m Two-way cycle track

>< 1.9 m
Bridge lookout >

Vissim Simulation



Effects and Mitigation [1/2]

Issue/Concern Potential Effects	Concerned Agency	Proposed Mitigation (prevent, lessen or remedy potential detrimental environmental effects)
Archaeology	Ministry of Citizenship and Multiculturalism (MCM)	<ul style="list-style-type: none"> • Should previously undocumented archaeological resources be discovered, they may be a new archaeological site and therefore be subject to Section 48(1) of the Ontario Heritage Act. The proponent or person discovering the archaeological resources must cease alteration of the site immediately and engage a licensed consultant archaeologist to carry out an archaeological assessment, in compliance with Section 48(1) of the Ontario Heritage Act • Indigenous Peoples communities will be contacted during the construction phase • The Funeral, Burial and Cremation Services Act, 2002, S.O. 2002, c.33 requires that any person discovering remains must cease all activities immediately and notify the police or coroner. If the coroner does not suspect foul play in the disposition of the remains, in accordance with Ontario Regulation 30/11 the coroner shall notify the Registrar, Ontario Ministry of Public and Business Service Delivery, which administers provisions of that Act, related to burial sites. In situations where human remains are associated with archeological resources, MCM should also be notified (at archaeology@ontario.ca) to ensure that the archaeological site is not subject to unlicensed alterations which would be a contravention of the Ontario Heritage Act
Species at Risk (SAR)	MECP	<ul style="list-style-type: none"> • Undertake targeted, specialized SAR surveys during Detail Design as required, depending on species conservation status designations as they exist at that time. Comply with the Species Conservation Act (2025); Install netting to deter Barn Swallow (<i>Hirundo rustica</i>), Threatened
Erosion and Sediment Control	Downstream impacts to Thames River fish habitat.	<ul style="list-style-type: none"> • Erosion and sedimentation controls (ESC) and standard Best Management Practices (BMP) should be used around the watercourses to prevent encroachment and the transfer of deleterious substances into the direct or indirect aquatic habitat prior to construction works

Effects and Mitigation [2/2]

Issue/Concern Potential Effects	Concerned Agency	Proposed Mitigation (prevent, lessen or remedy potential detrimental environmental effects)
Migratory Birds	MNR	<ul style="list-style-type: none"> Any clearing and grubbing should be completed outside the active breeding bird season of April 1 to August 31
Turtles and Turtle Habitat	MNR	<ul style="list-style-type: none"> Conduct a turtle basking survey during detail design to confirm species presence Install silt fencing before turtle nesting season (May 15 to July 30) Protect and buffer active nests Avoid groundwater alteration in nearby wetlands and creeks between October 1 and April 1 during turtle hibernation
Hydraulic Review	UTRCA	<ul style="list-style-type: none"> No mitigation needed as the rise in water levels is localized at the new bridge and is contained within the University's property
Vegetation	MNR	<ul style="list-style-type: none"> Limit tree clearing and additional landscape planting as part of the landscape plan
Noise	University	<ul style="list-style-type: none"> Maintain equipment in good operating condition to prevent unnecessary noise. Restrict idling of equipment to the minimum necessary to perform the work
Permitting	UTRCA	<ul style="list-style-type: none"> Permit by Upper Thames River Conservation Authority (UTRCA) under the Ontario Conservation Authorities Act Regulation 41/24 - Prohibited Activities, Exemptions and Permits
	City of London	<ul style="list-style-type: none"> Distinctive Tree Permit or a Tree Protection Area Permit
	DFO	<ul style="list-style-type: none"> Request for review
Management of Surplus Materials	MECP	<ul style="list-style-type: none"> OPSS 180 apply MECP "Management of Excess Materials in Road Construction and Maintenance Guidelines" Management and disposal of wet soils

Next Steps

- Review comments from PIC 2
- Refinements based on public input
- Senior Leadership approval of project recommendations
- 30-day public review of Environmental Study Report
- Detail design, permits and approvals
- Prepare tender ready package
- Construction (access to be maintained on existing bridge until the new bridge is constructed)

Stay Connected

- **We want to hear from you!** Please provide comments to westernubridge@uwo.ca or by contacting the University's representative, or the consultant below:

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- Please provide your PIC comments on or before May 27, 2026.
- Thank you for your participation in the study. To receive updates on the project, request that your name/e-mail be added to the contact list.
- Your input into this study is valuable and appreciated. All information is collected in accordance with the *Freedom of Information and Privacy Act*.



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