



# Western Road / Sarnia Road / Philip Aziz Avenue Environmental Assessment



Integrated Transportation Community Advisory Committee Meeting

June 15, 2022

The Purpose of PIC#2 will be to:

- Present the alternative design concepts
- Present the evaluation of alternative design concepts
- Solicit feedback

## Project Extents

- Western Rd from Huron College entry (north) to Platts Ln (south)
- Sarnia Rd / Philip Aziz Ave corridor from Sleightholme Ave (west) to the Thames River (east)
  - Coombs Ave to Sleightholme Ave was added after PIC#1
  - This additional piece of Study area allows for the existing cycling lanes to the west to be extended all the way to the East Limits of the Study Area
- Coombs Ave (previous west limits)





# Problem/Opportunity Statement

## Problem

- The City of London Transportation Master Plan (2030 TMP) identified the need to improve the Western Rd and Sarnia Rd/Philip Aziz Ave intersection in the next 5 years.
- This intersection accommodates approximately pedestrians, cyclists, transit routes carrying thousands of passengers and over 41,000 vehicles (per day).
- The intersection experiences traffic congestion, safety concerns, increased delays and decreasing levels of service for all users and this will continue if left untreated.
- The existing storm drainage in the area does not meet current design standards and requires upgrades.

## Opportunity Statement

- Develop a range of planning and design alternatives that can improve pedestrian and cyclist facilities and safety, improve intersection operations, and provide additional capacity by removing constraints.
- Improve continuity with Western Road north and south of the study area, address stormwater drainage and enhance streetscape conditions.
- Consult the public and agencies and solicit feedback to select the best plan for the future.
- Follow the City of London's 'Complete Streets' guidelines, 'Urban Design' guidelines, and Western University's Master Plan Vision, to potentially create a gateway to the campus.
- Create a street/intersection that is as functional and comfortable as possible for all users (students, children, seniors, cyclists, motorists, transit users and pedestrians)

# Traffic Conditions

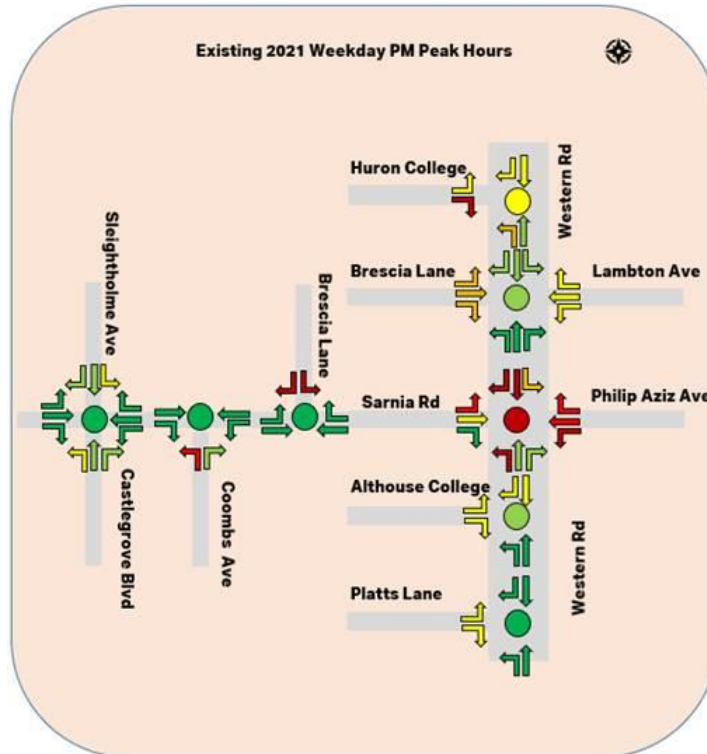
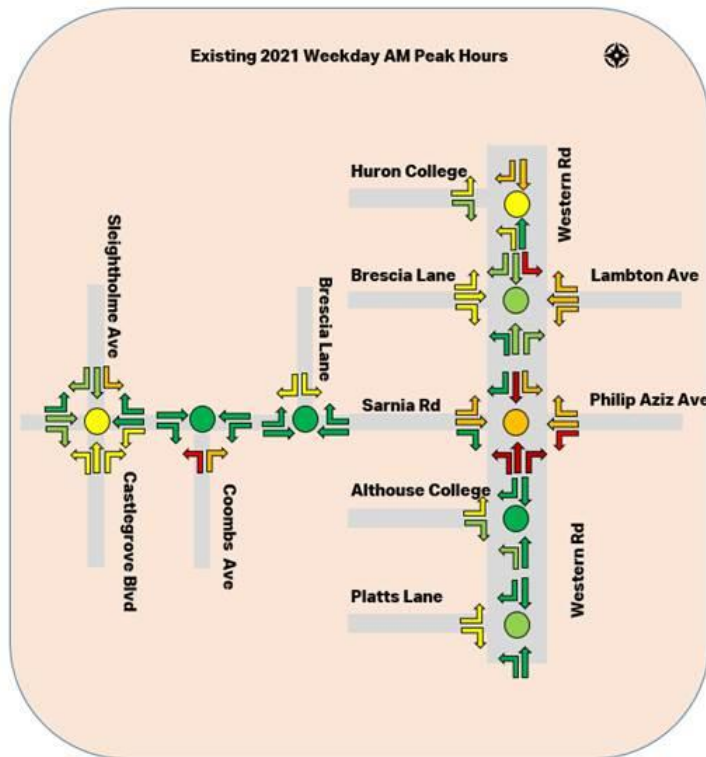
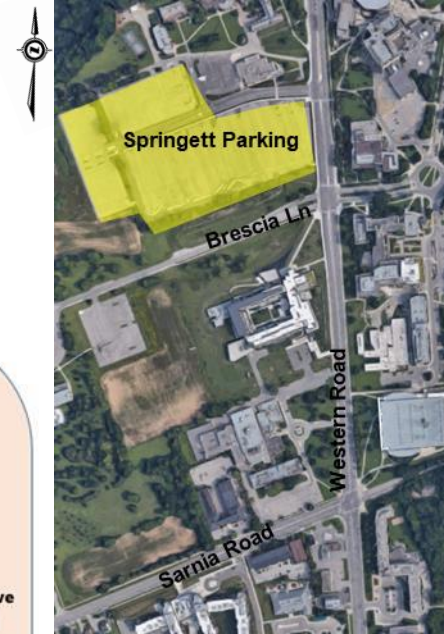
## Average Daily Traffic

- Western Rd – 28,500 vehicles per day
- Sarnia Rd – 24,000 vehicles per day

## Primary trip generating/destination area

- Springgett parking lot

The current LOS along the study corridor is illustrated in these figures for the peak travel times: morning (AM) and evening (PM).



Legend	
Turning Movements:	
Level of Service-A	
Level of Service-B	
Level of Service-C	
Level of Service-D	
Level of Service-E	
Level of Service-F	
Intersection:	
Level of Service-A	
Level of Service-B	
Level of Service-C	
Level of Service-D	
Level of Service-E	
Level of Service-F	

# Issues / Items to be Aware of

- No accommodation for future Rapid Transit.
- Buried Services:
  - Upsize watermain to 400 mm dia. on Western Rd from Platts Ln to Sarnia Rd.
  - Connect sanitary lift pump station on Philip Aziz Ave to Western Rd.
  - New stormwater piping (Western Rd and Philip Aziz Ave ) with outfall to Thames River.

# Design Alternatives

## Sarnia Rd

1. Full Urban Cross Section with reconstructed entrance to Philip Aziz property.
2. Full Urban Cross Section with relocated entrance to Philip Aziz property.  
**Recommended**

## Philip Aziz Ave

1. Full Urban Cross Section with reconstructed entrance to Philip Aziz property.
2. Full Urban Cross Section with relocated entrance to Philip Aziz property.  
**Recommended**

## Western Rd

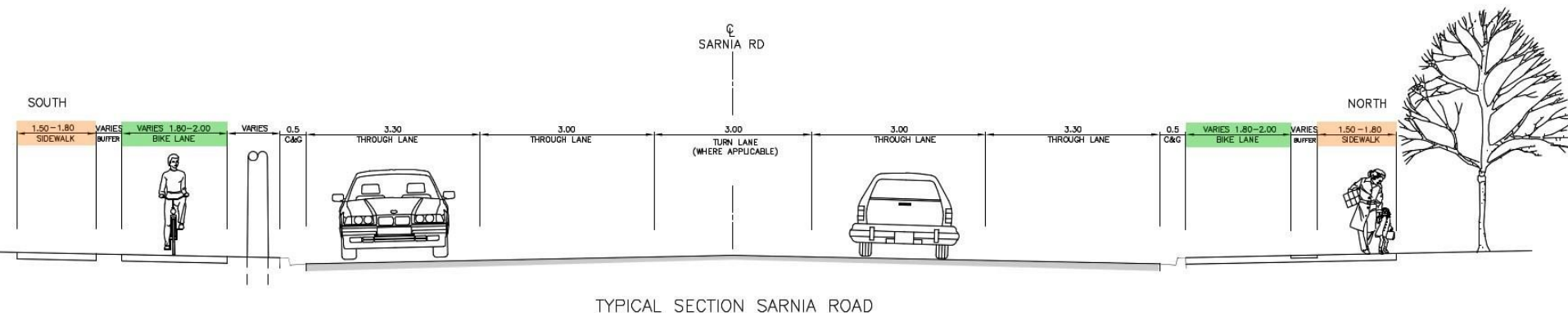
1. Extended SB turn lane  
**Recommended**
2. Added bus bays **Recommended**
3. Active transportation improvements: **Recommended**
4. Active Transportation in ROW.  
**Recommended**

## Intersection

1. Roundabout
2. Pedestrian Tunnel
3. Single (**Recommended**) vs Double left turn lane
4. Typical Pedestrian Crossway (**Recommended**) vs Scramble

# Sarnia Rd – Design Summary

- Maintain the current 4 lane configuration.
- Extend bicycle lanes to Sleightholme Ave to connect to the existing lanes.
- Bicycle lanes will be raised.
- Utilizes existing generous ROW for improving active transportation.
- No utility relocation, except for minor work involving relocation of guy poles.
- Minor regrading adjacent to existing retaining wall on north side.
- Some (minor) loss of trees along the corridor.
- Small property taking area on north side.
- Reconstruction of bus stops (with bus pads).





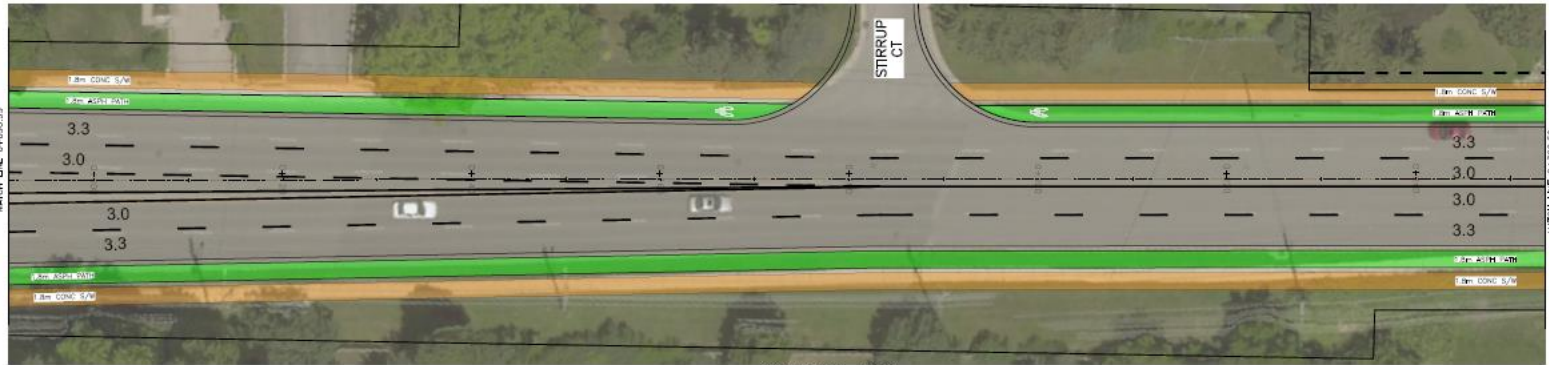


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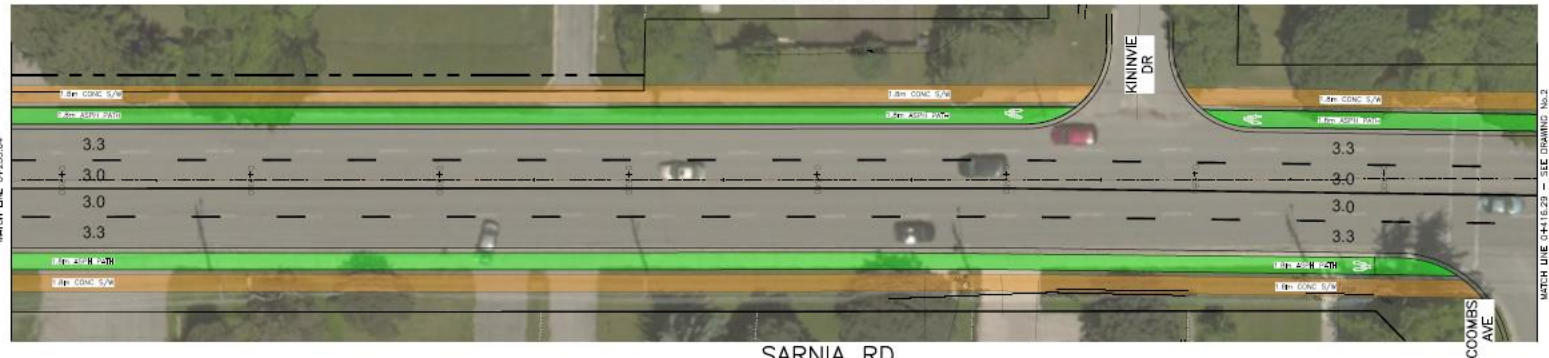
# Sarnia Rd – Layout



SARNIA RD



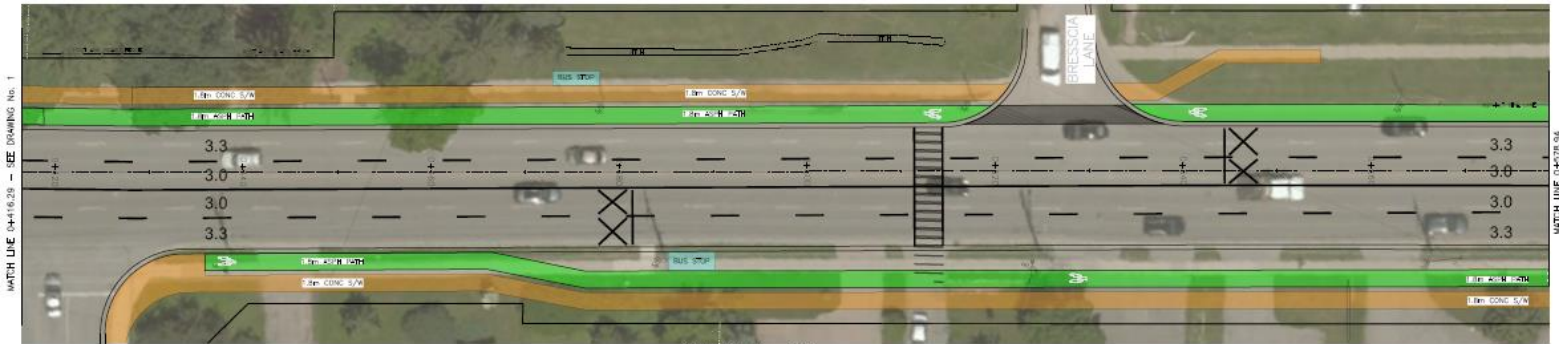
SARNIA RD



SARNIA RD



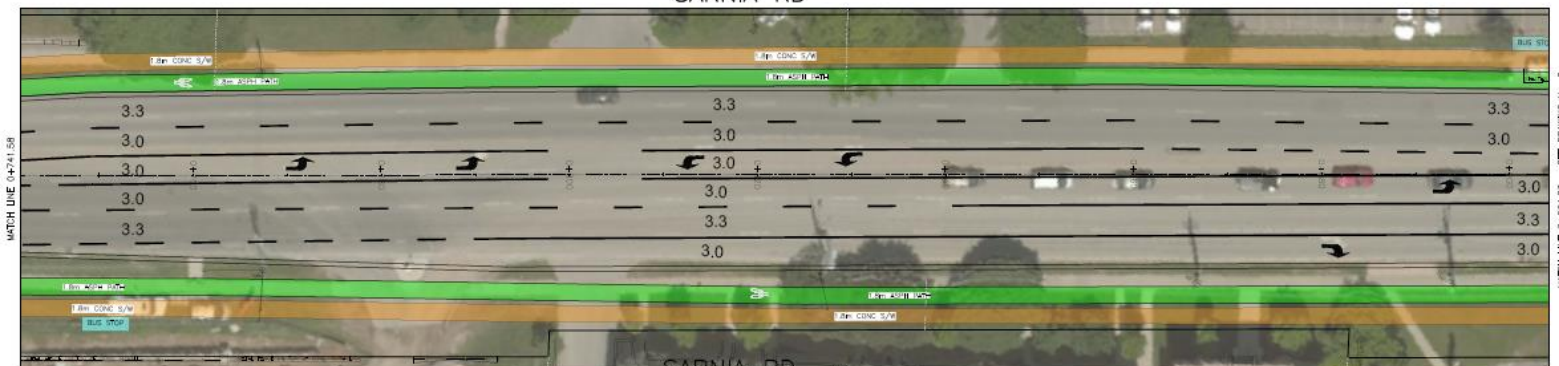
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SARNIA RD



SARNIA RD



SARNIA RD





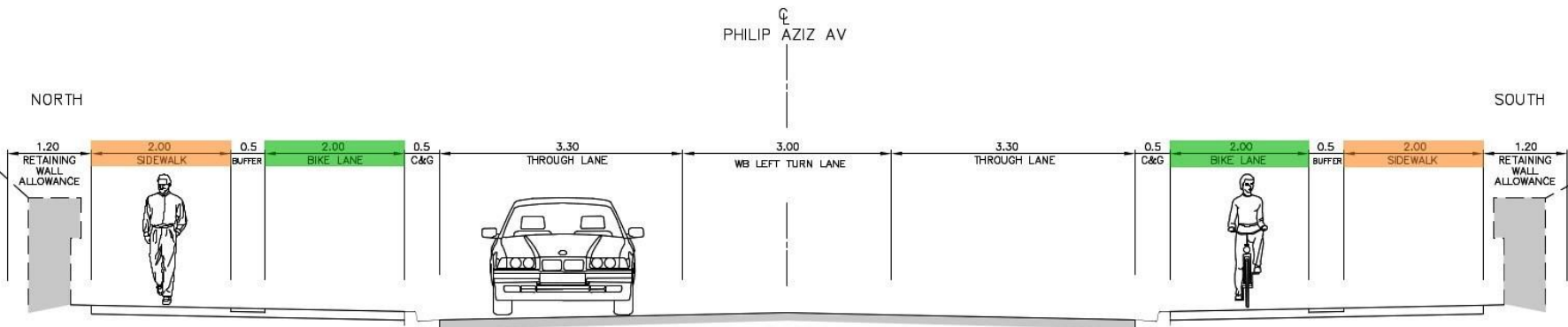
## Philip Aziz Ave - Existing

- Two lanes, short left turn lane to Western Rd, no sidewalks, no bike lanes.
- Gabion wall, heritage property entrance, overhead service, undersized storm sewer.



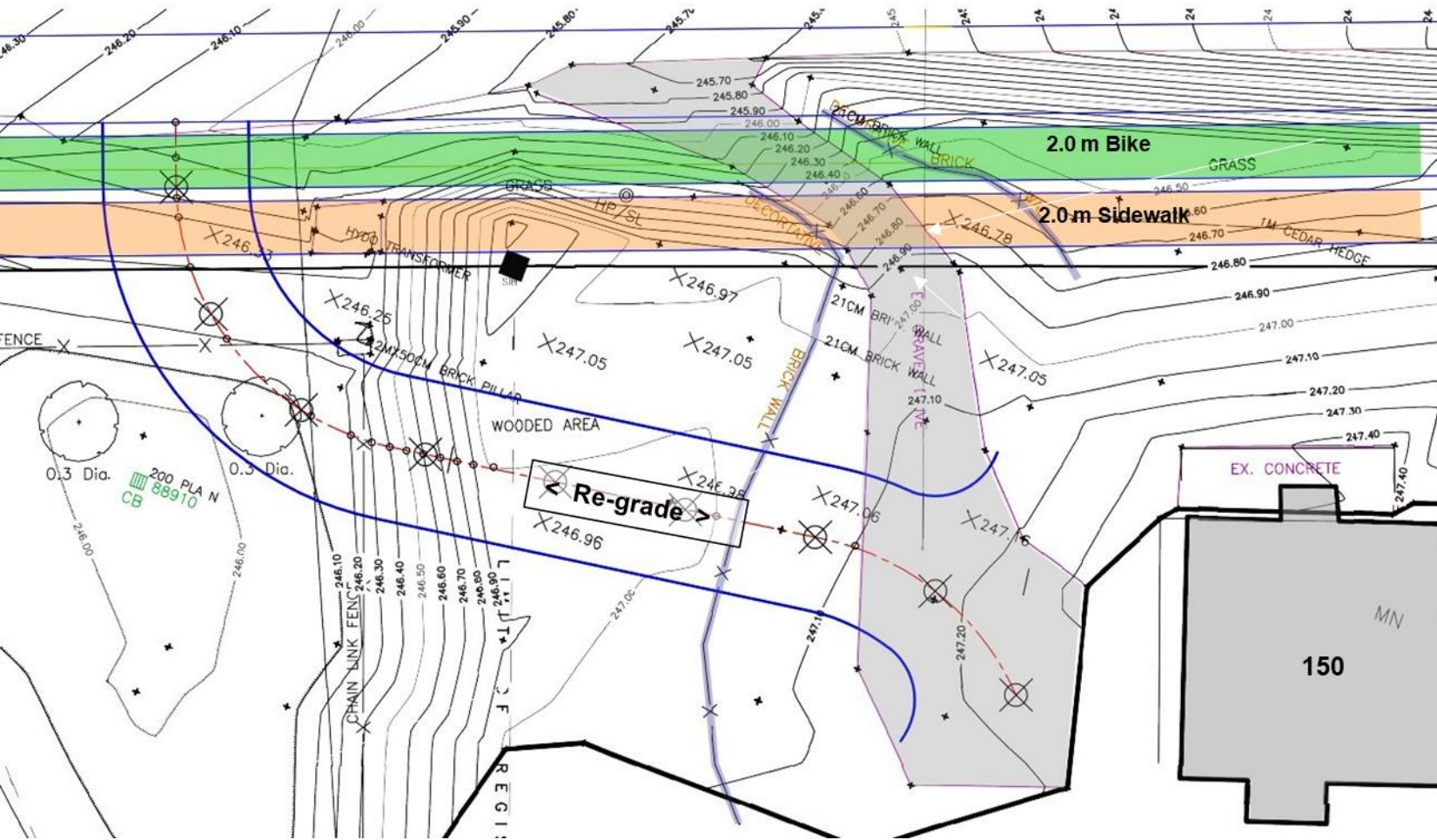
# Philip Aziz Avenue – Design Summary

- Urban Cross Section with reconstructed/realigned Philip Aziz property gate/entrance
- Overhead Services (south) relocation
- Retaining walls (N+S) with fence
- Increased left turn lane length
- Loss of vegetation (no SARs)
- Property
  - N+S sides of road
  - Area at Thames River
- Stormwater Outfall relocation
- Reconstruct bus stop (just east of Western Rd)



# Philip Aziz Ave – Property Entrance Concept

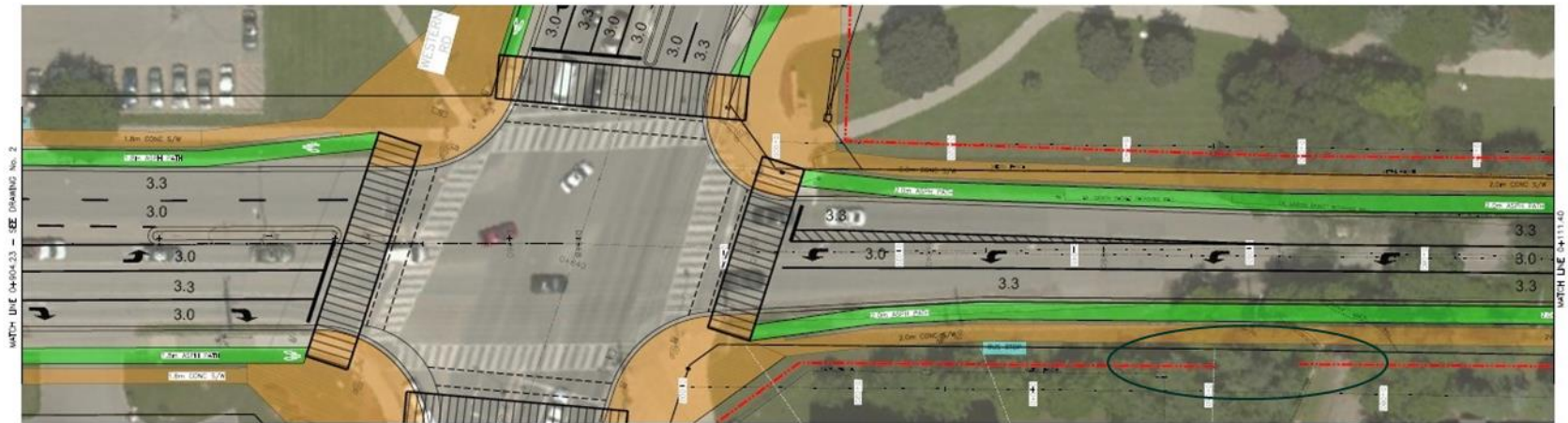
- Realigned for maintenance and fire access (max 3% grade vs 8%)
- Reconstruct / reconfigure wall (HIA required)
- University owns all lands on the south side





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# Philip Aziz Ave - Layout



SARNIA RD

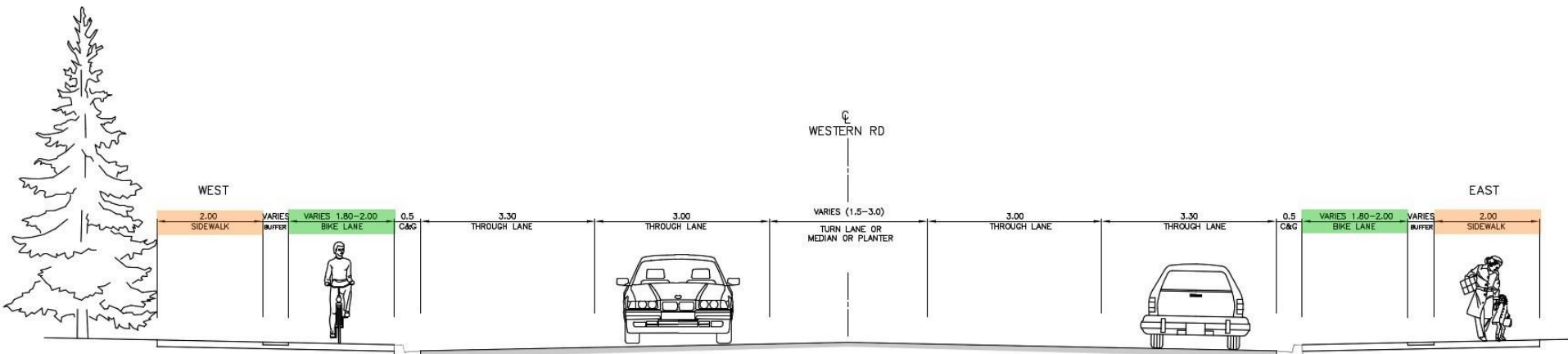
PHILIP AZIZ AVE



PHILIP AZIZ AVE

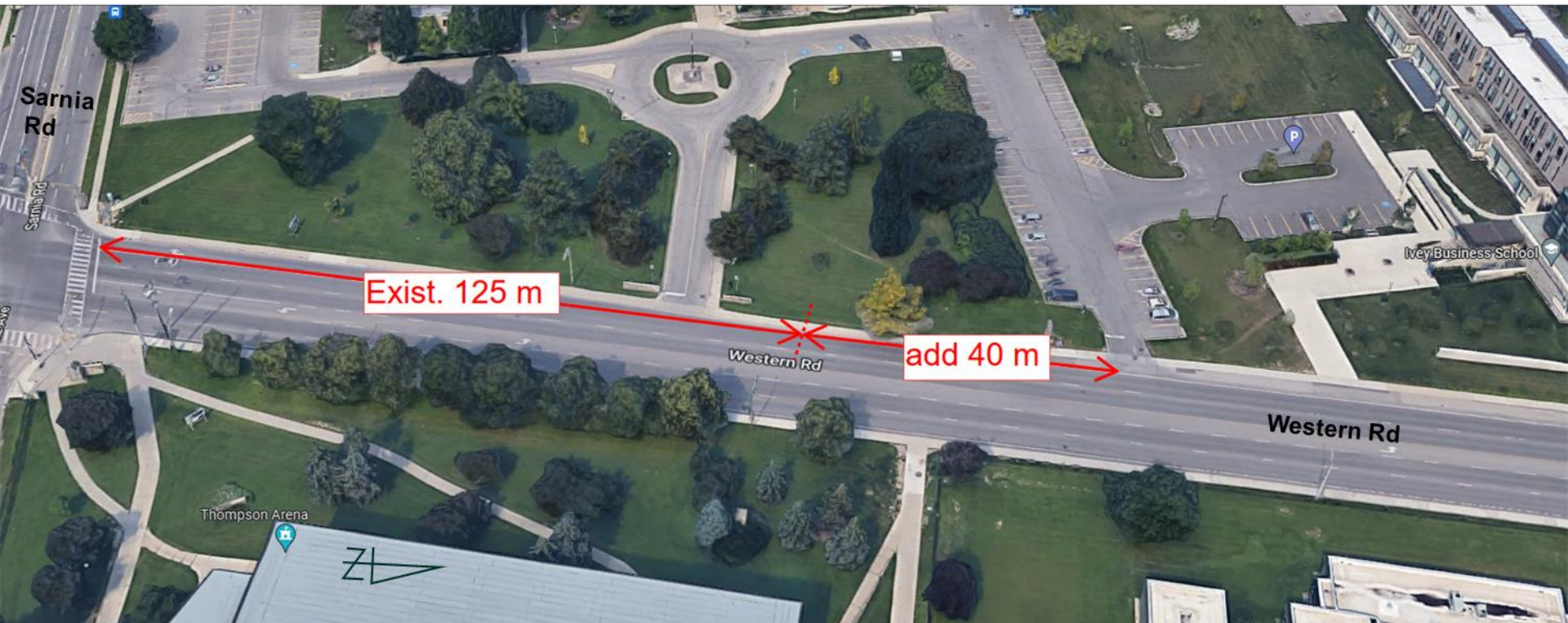
# Western Rd – Design Summary

- Connections with existing active-transportation facilities (N&S ends)
- Extended Southbound Turn Lane
- Adding bus bays (requires property) and maintaining other bus stops
- Active transportation in ROW
- Opportunity for median planters south of Lambton Drive (30-40 m)
- Relocation of numerous street light poles and guy poles/wires along entire length
- Hydro pole relocation – east side (from Essex Hall to Philip Aziz Ave)
- Property required throughout the corridor



# Western Rd – Extended SB Turn Lane

- Extend to Ivey Business School parking (+30% added length with minimal disruption)
- Requires section of property, to suit widened platform including active transportation
- Analysis shows an extended SB right turning lane improves queue delay including southbound through lanes.

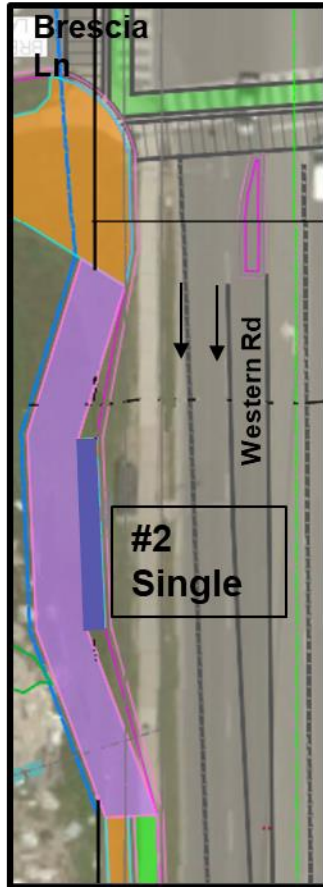
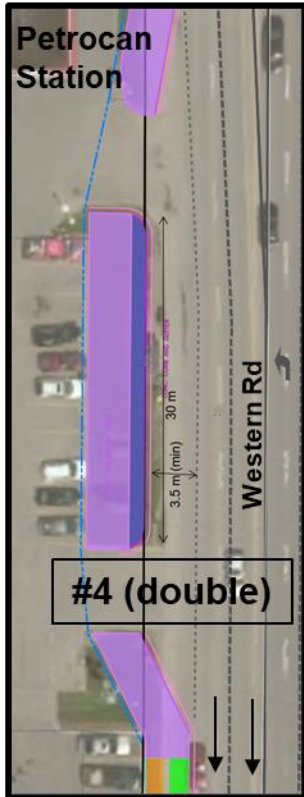




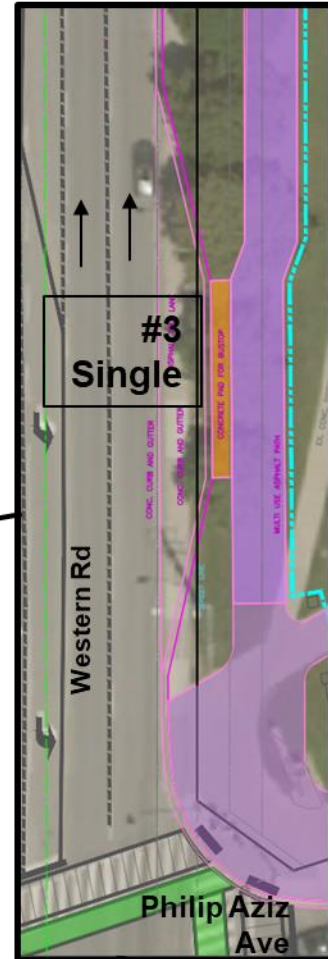
# Proposed Bus Bays

- Property required for all locations
- All locations **recommended**

LTC to confirm length requirements for articulated vs multi-bus storage

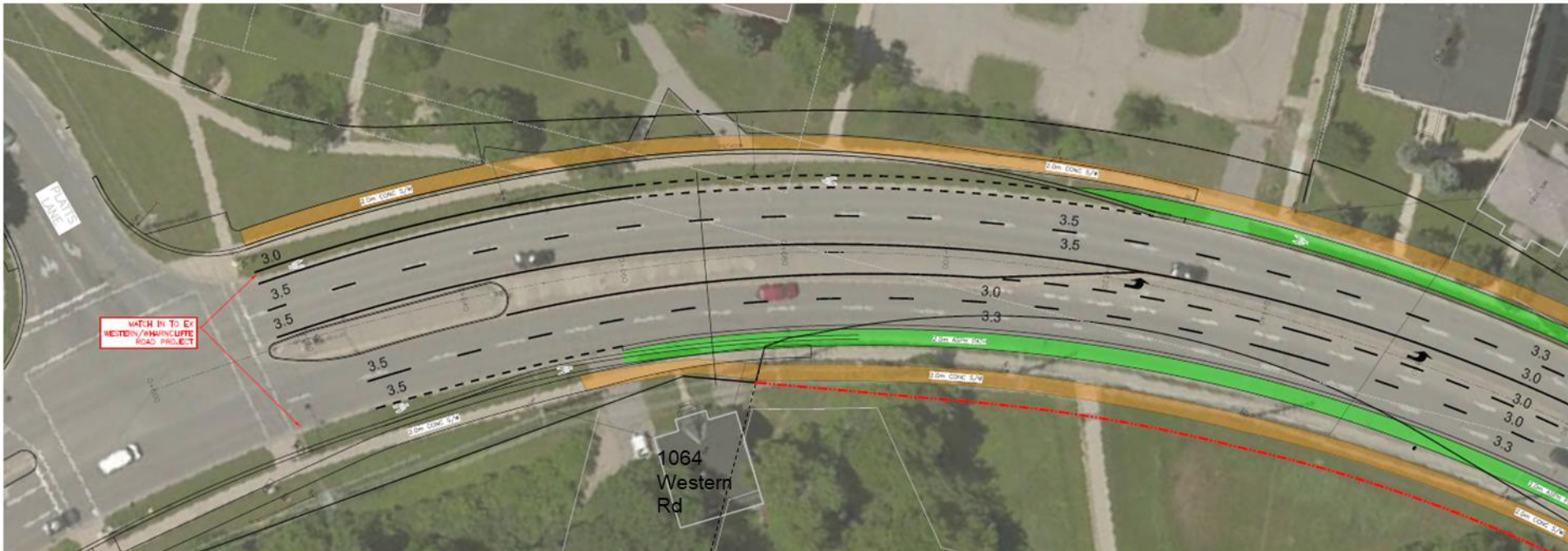


Existing Bay (north of Lambton Dr to be reconstructed)



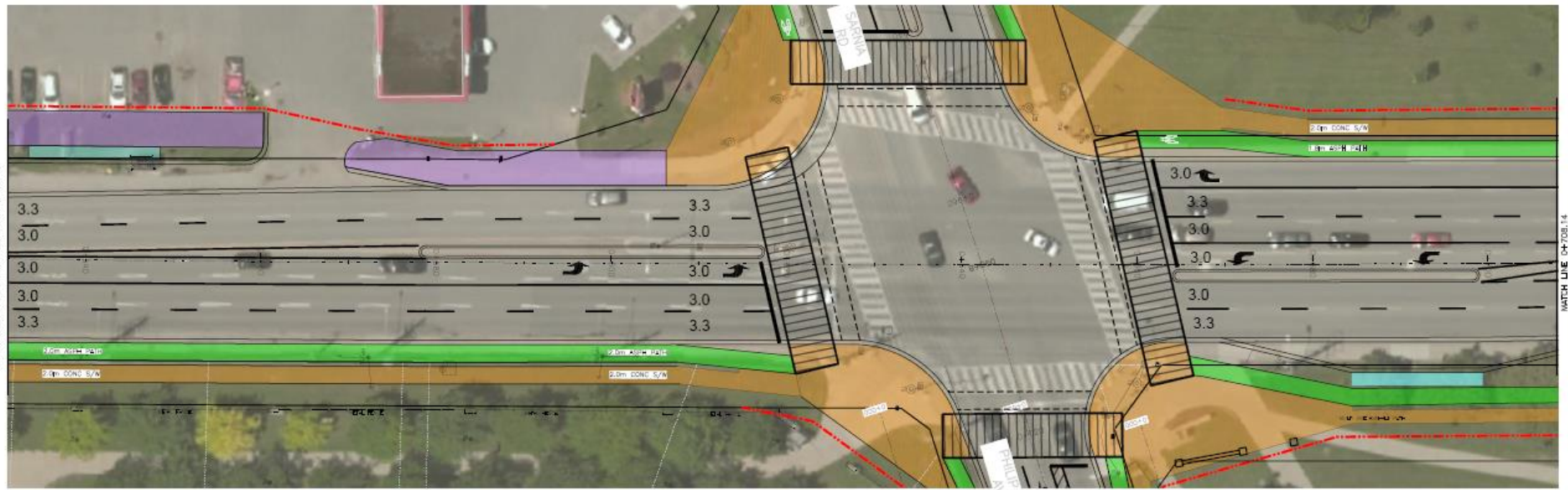
# Western Rd – at Platts Lane

- Tight clearances at 1064 Western Rd (but no property required)
- East side requires grading for  $\pm 140$  m and property taking
- Regrading and reconstruction of the walkway to Western Un. fields



WESTERN ROAD

# Western Rd - Layout



WESTERN ROAD

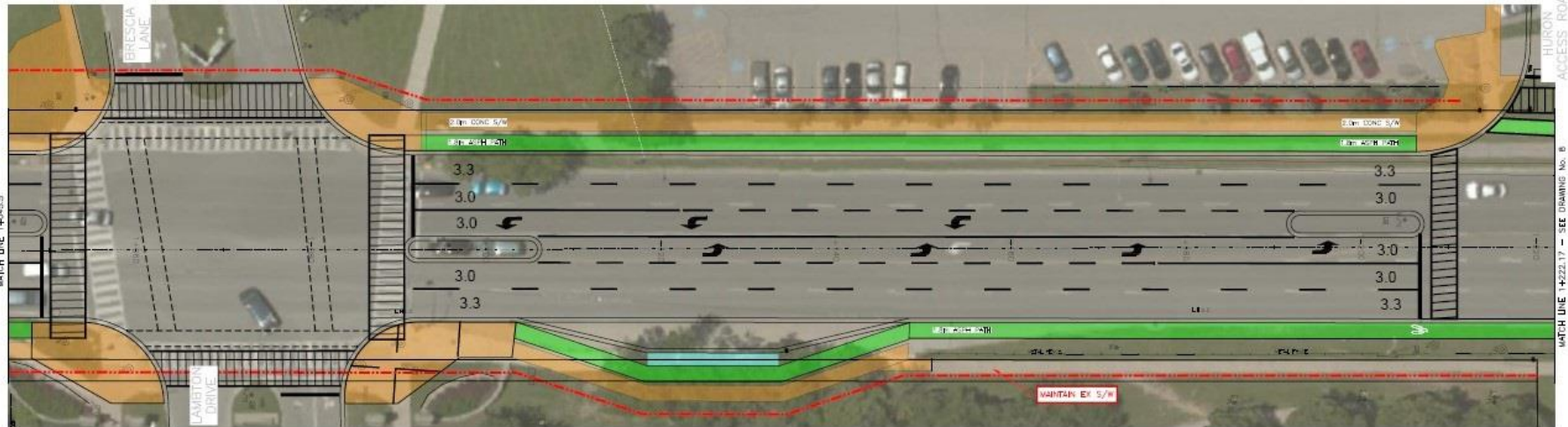


WESTERN ROAD

# Western Rd - Layout



WESTERN ROAD



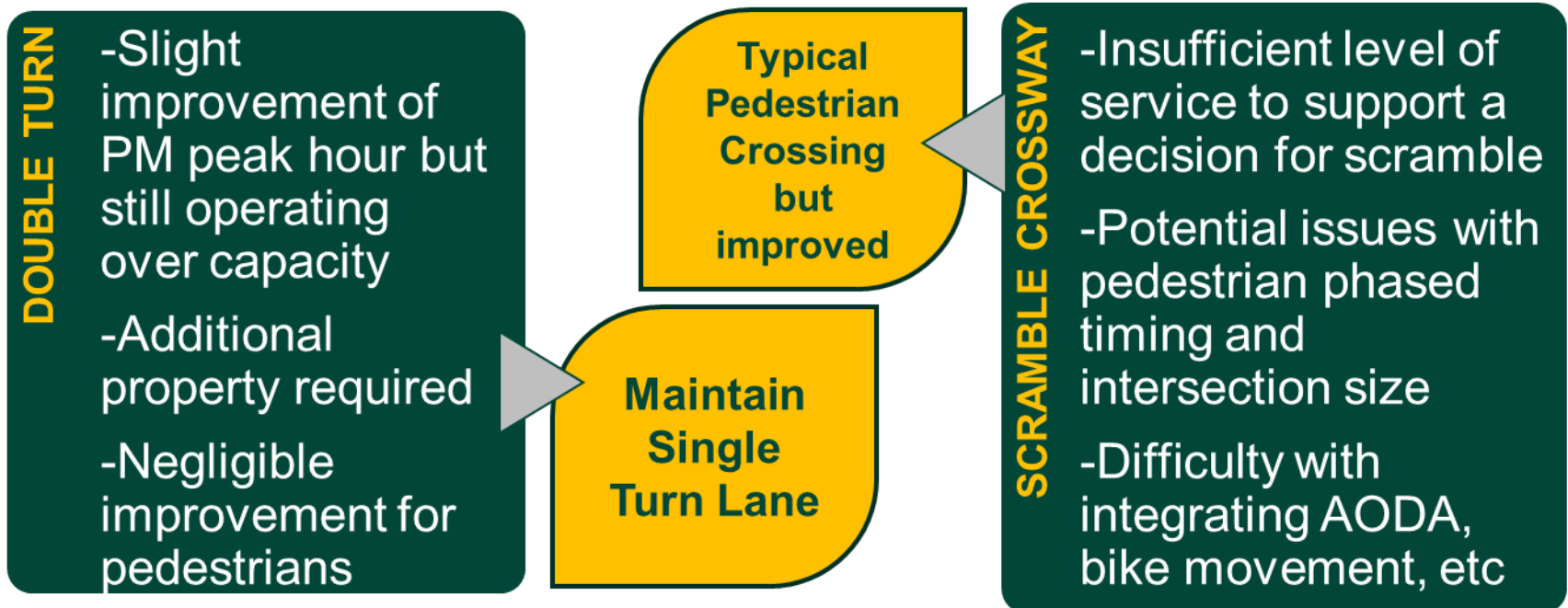
WESTERN ROAD



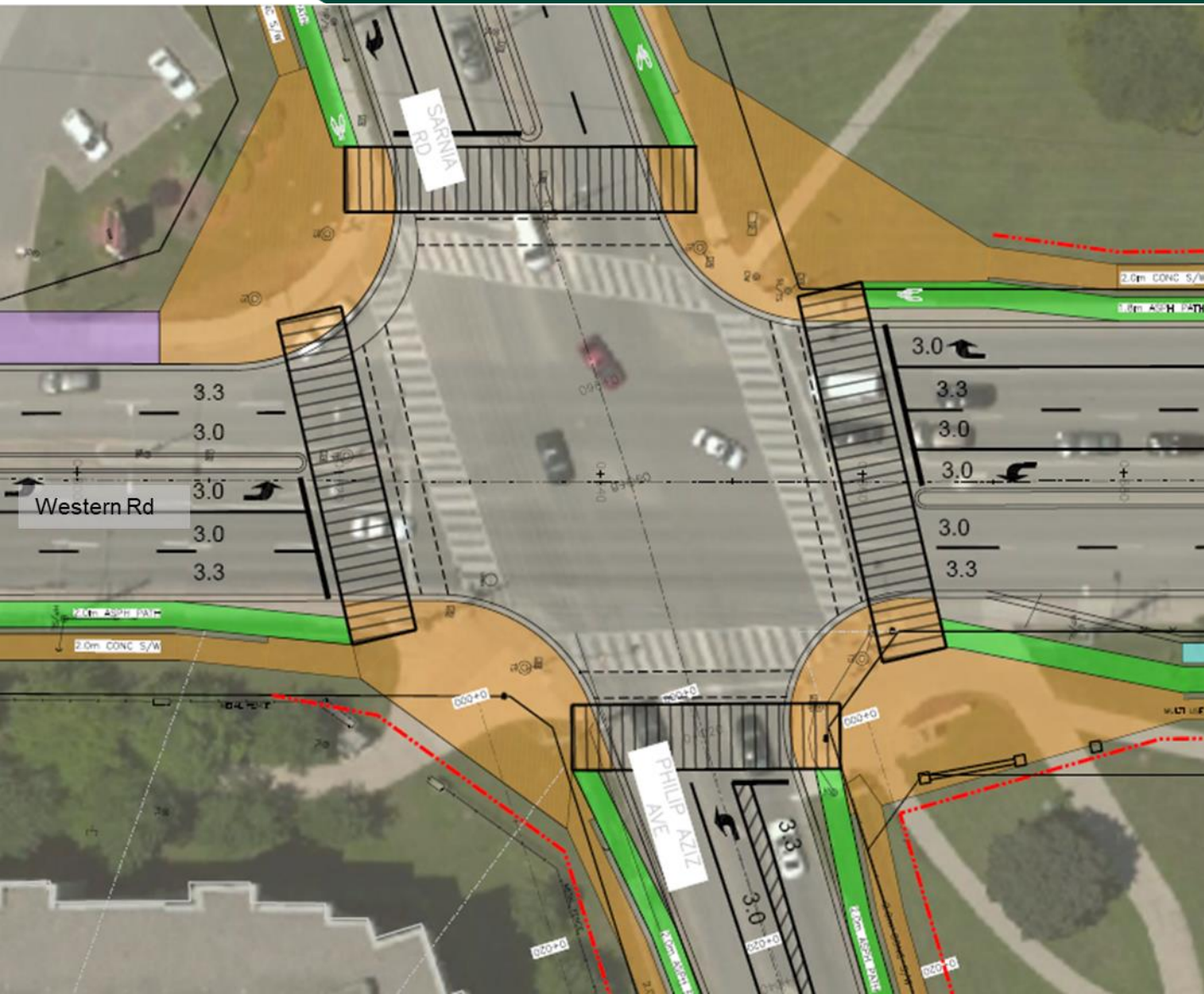
# Intersection - Alternatives & Traffic

## Alternatives for Western Rd / Sarnia Rd / Philip Aziz Ave

1. Single left turn lane with typical pedestrian crosswalk
2. Single left turn lane with scramble pedestrian crosswalk
3. Double left turn lanes with typical pedestrian crosswalk
4. Double left turn lanes with scramble pedestrian crosswalk



# Intersection – Improved Crossing



- Improved flow with bus bays permitting through traffic
- Extra wide Pedestrian crossing (5 m) and waiting areas
- Improved bicycle connections / flow and markings
- Potentially some signal optimization





## Next Steps

- Ongoing discussions with LTC and Utilities
- Issue PIC Notices
- Hold PIC #2 (June 23)
- Draft ESR – Late Summer / Early Fall