

Accommodating Oversize Trucks



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Outline

- Benefits of oversize trucks
- Common geometric issues and mitigating measures
- Common safety / operational issues and mitigating measures

Oversize Trucks



Truck Configurations

Legal Length



Semi-trailer



Short Double

Long Combination Vehicles (by permit)



Rocky Mountain Double (31 m)



Triple Trailer (35 m)

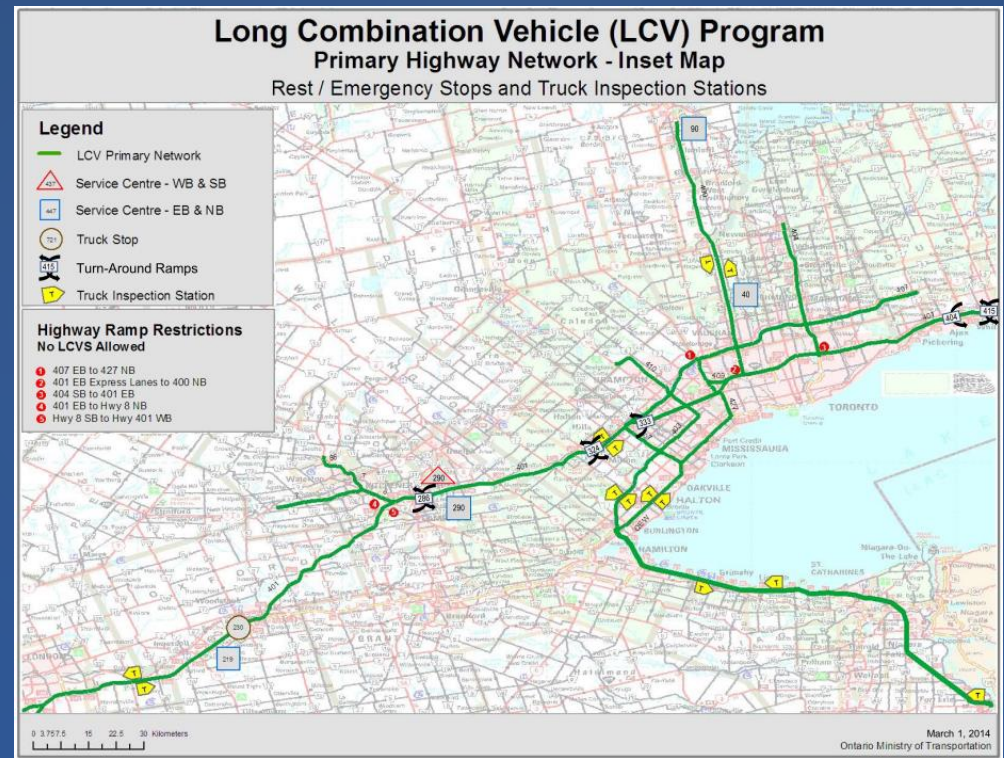


Tumpike Double (37 m)

Source: Alberta Infrastructure and Transportation

Oversize Trucks in Canada

- Long Combination Vehicles permitted in most provinces
- Permitted to operate on selected routes
- Some provinces require engineering assessment of route (i.e. Ontario with the LCV program)



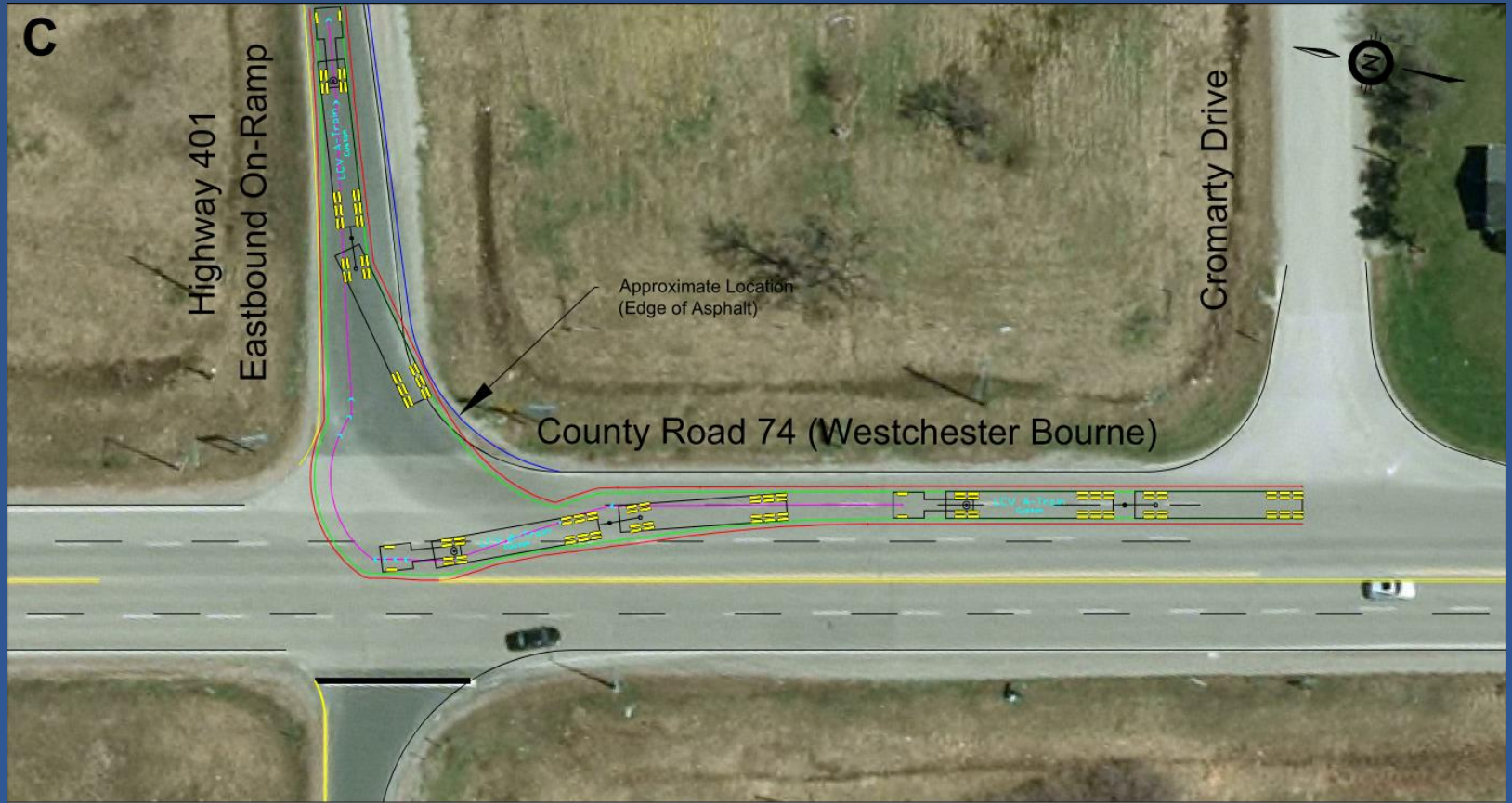
Benefits of Oversize Trucks

- Typically have a safer record per km due to:
 - Increased controls on where and when they are permitted to operate
 - Enhanced driver training
 - Better stopping ability
- Reduction in # of trips = reduction in collisions
- Decreased labour costs
- More fuel efficient – less greenhouse gases

Truck Route Assessments

- Road geometry
- Operational impacts
- Safety impacts

Assessing geometry



Common Geometric Issues

- Roundabouts
- Tight radius curves (connecting ramps)
- Right turn channels
- Medians at intersections
- Narrow entrances
- Turns onto two-lane roadways
- Shoulder encroachment



Examples

- North right turn on Brock Road at Consumers Drive (Whitby, ON)



Examples



- Eastbound Highway 401 off-ramp at Holt Road – Clarington, ON

Mitigating Measures

Permanent

- ❑ Roundabout modifications
- ❑ Truck aprons
- ❑ Widen right turn channels
- ❑ Widen entrances
- ❑ Shoulder treatments

Temporary

- ❑ Police escorts / road closures
- ❑ Hinged signs / traffic signals

Examples



Accommodating Commercial Vehicles in Roundabouts:
Discussion Paper



Ontario
Trucking
Association

December 2010



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Project # 5998



Right Turn Channel with Truck Apron



2009



2014



Now

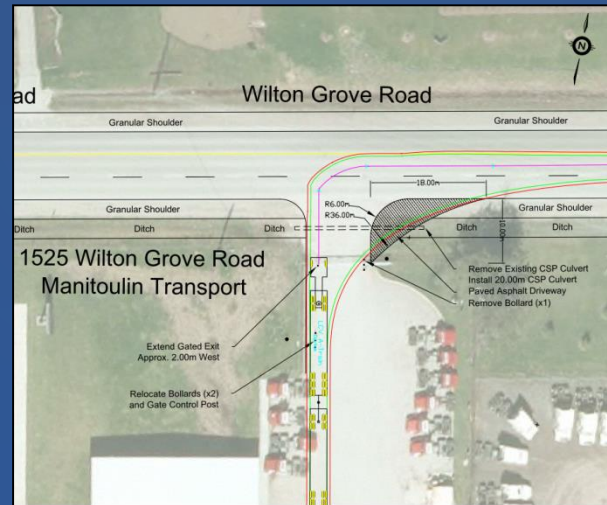
Widen Driveway



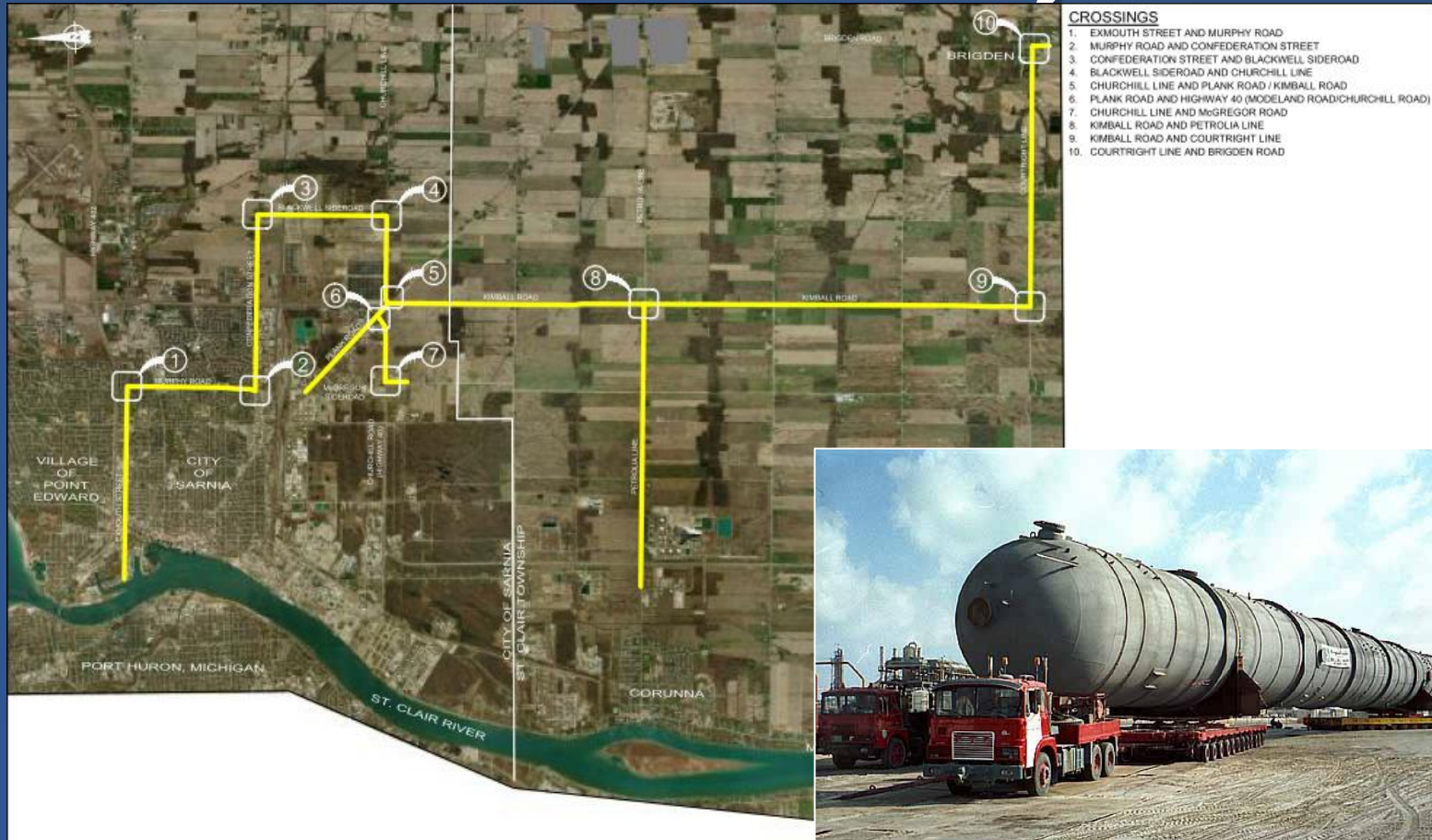
2014



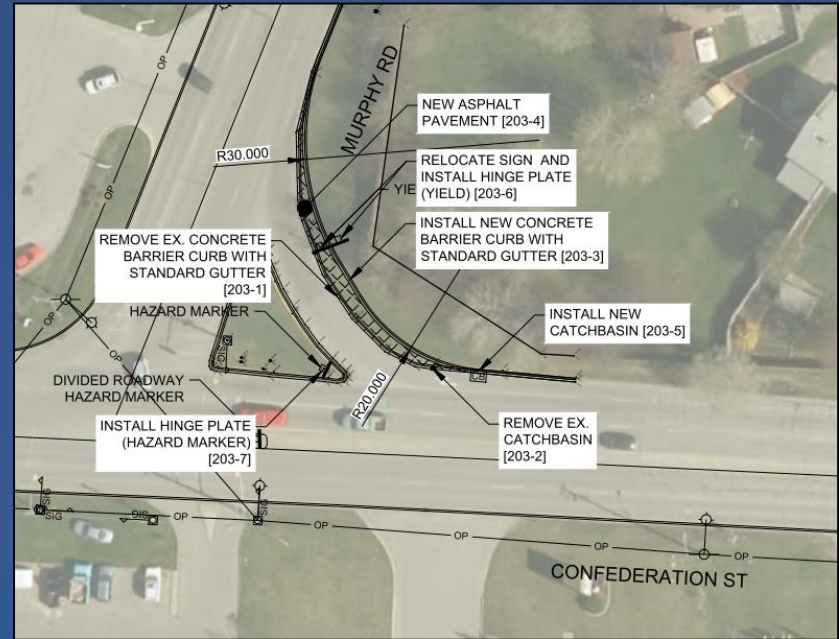
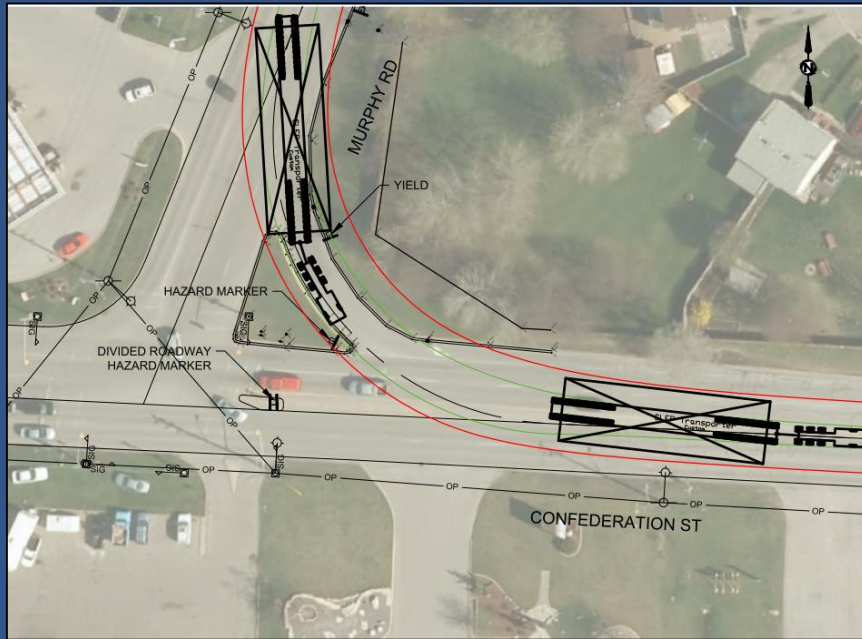
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Sarnia-Lambton Oversize Load Corridor Study



Sarnia-Lambton Oversize Load Corridor Study

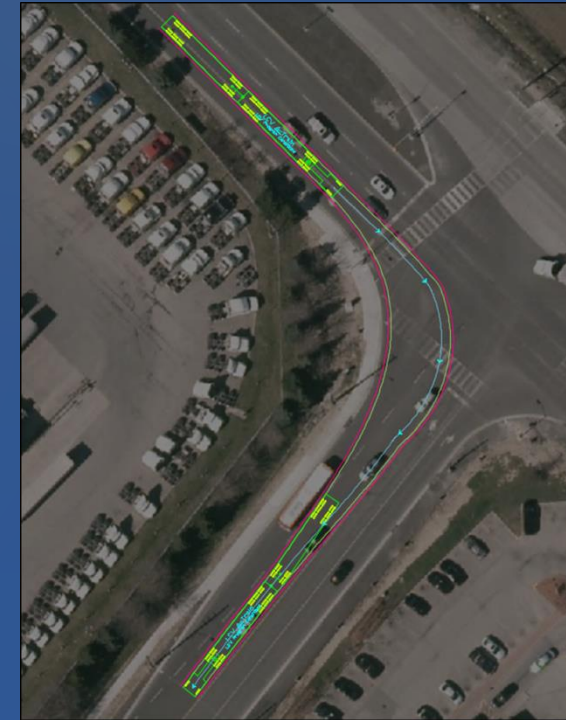
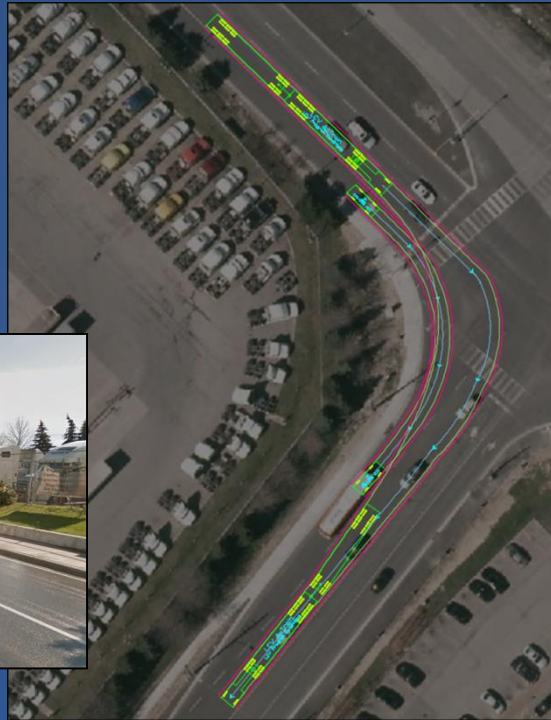
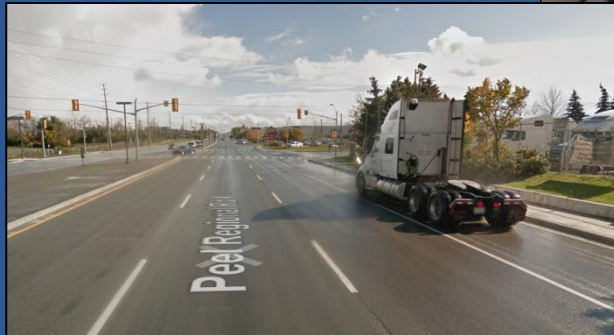


Common Operation/Safety Issues

- Conflicts with parallel movements
- Conflicts with opposing movements
- Sight distance concerns

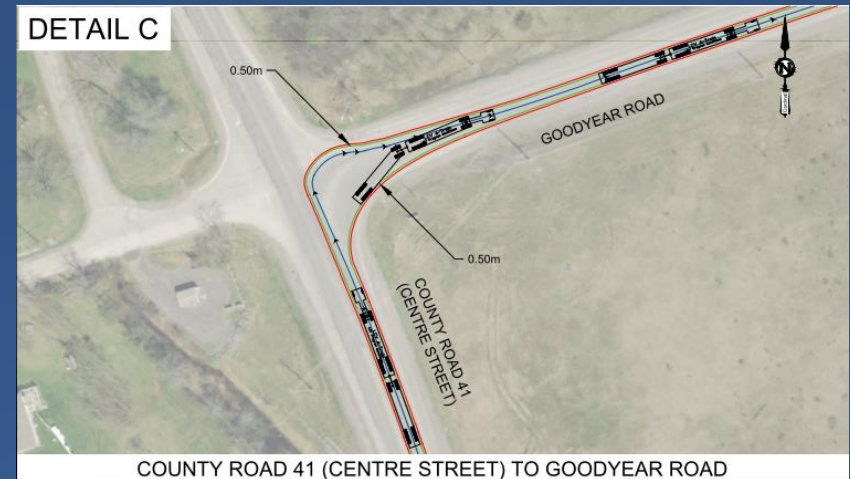
Mitigating Measures

□ Blocking



Mitigating Measures

- Gap analysis
- Time of day restrictions
 - *8 pm – 6 am only*



Mitigating Measures

- Conspicuity lights
- Truck entrance signs





Questions?