

# Welcome Public Open House

Exploring the Options



CENTRAL OKANAGAN PLANNING STUDY



Ministry of  
Transportation  
and Infrastructure



# Open House Purpose and Objectives

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01

Present the preliminary options to meet the current and future needs of Highway 97 using existing and alternate corridors.

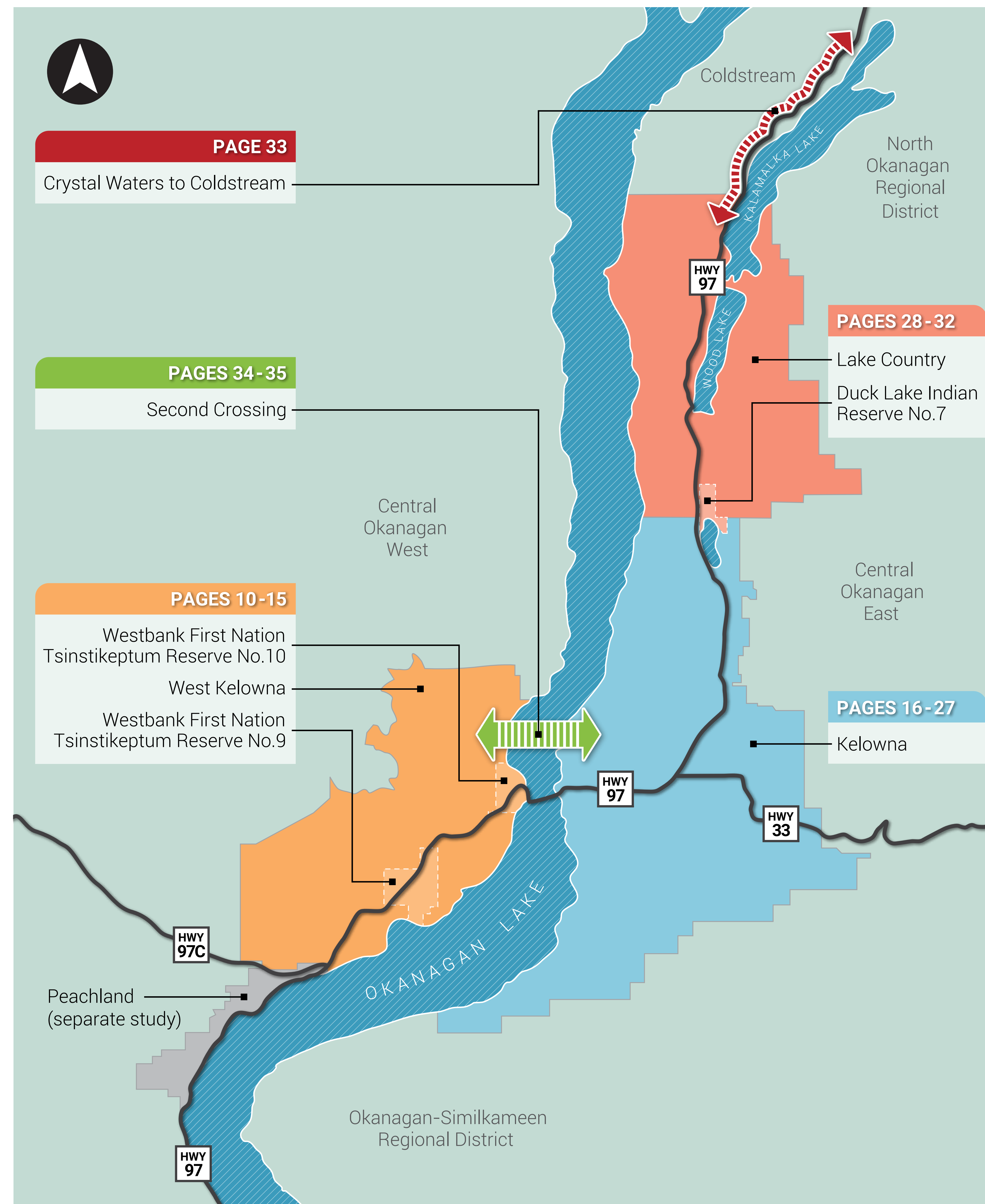
02

Gather your input on the corridor options and locations for a potential second crossing.





# Study Overview and Outcomes



The study will make recommendations for short, medium, and long-term improvements to the corridor.

Based on 2040 projections, the Central Okanagan Planning Study is exploring:

- Long-term options (40 years plus) for improvements to the existing corridor and alternate routes
- If, where and when a second crossing of Okanagan Lake might be required

# Project Update

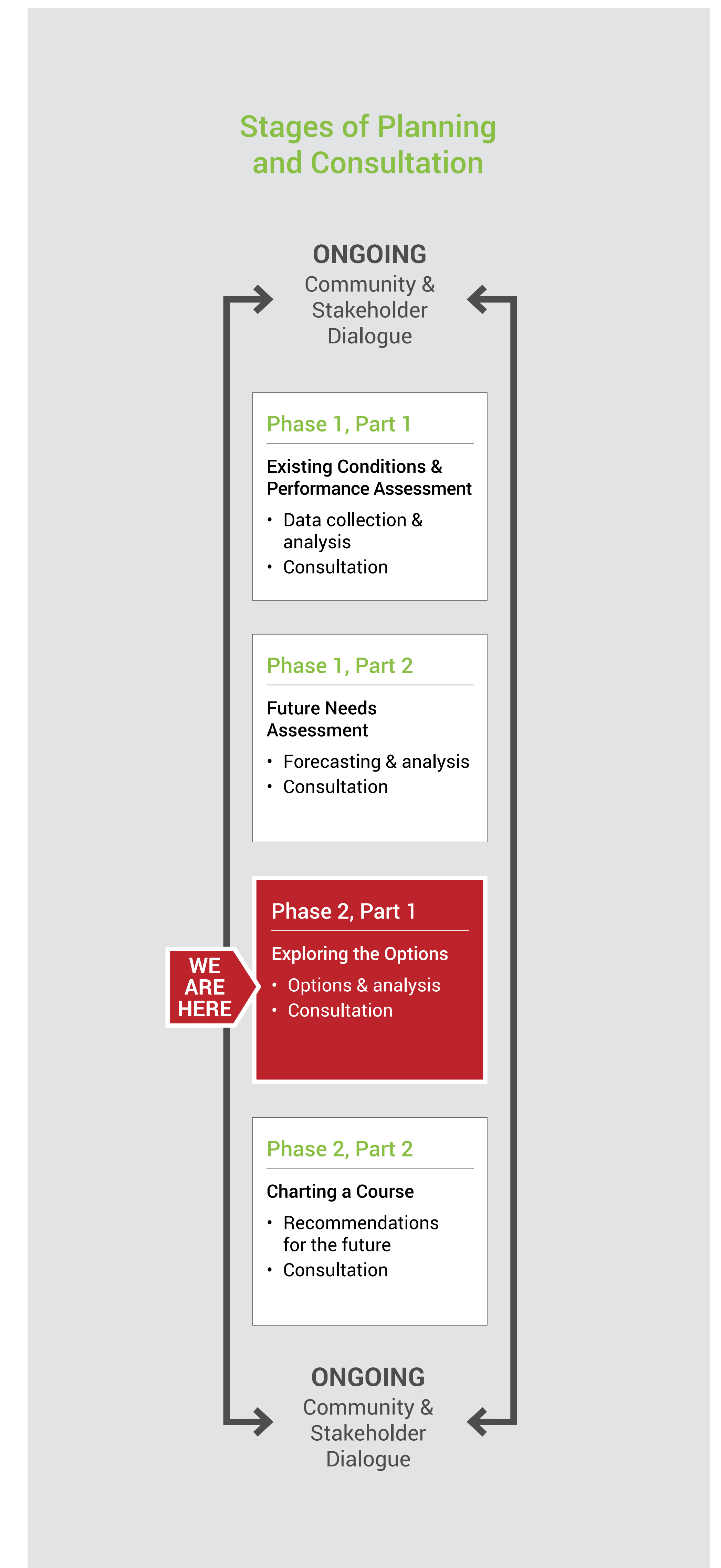
## Phase 1 Public Input (May & November 2015)

- **Presented analysis** of existing conditions and performance of the corridor, and a forecast of future conditions
- **Confirmed analyses matched user experience** and identified any items overlooked in technical analysis

## Since April 2016...

The project team has been **developing potential options** for the corridor that:

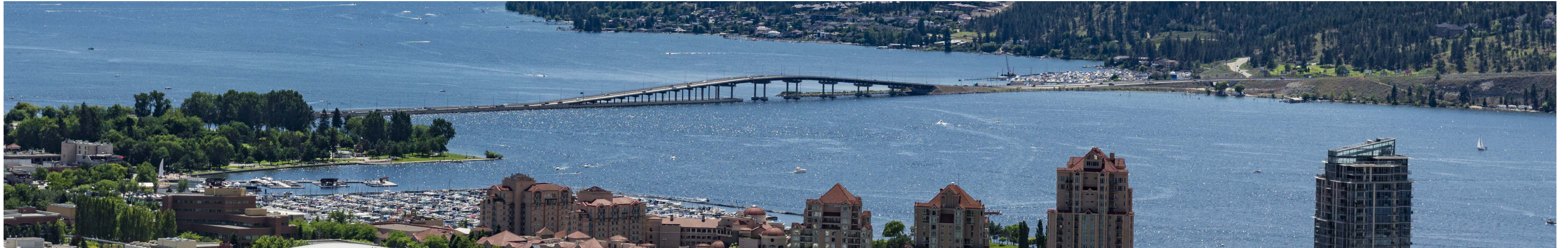
- Improve safety and traffic flow
- May include existing corridor improvements and alternate alignments
- Identify potential locations for a second crossing





# What We Heard

The public has identified several considerations for the study team to keep in mind when designing and evaluating possible options for the highway. These include:



- Addressing Future Congestion

Respondents tended to favour an alternate route to Highway 97 and another bridge to address future traffic congestion. However, there was also significant support for grade separations (overpasses) to replace signals. West Kelowna respondents appeared to place a higher priority on a second crossing than did Kelowna respondents.

- Preferred Second Crossing Location

Among those who favour a second crossing of Okanagan Lake, the majority appear to favour a location north of the current facility. Responses opposing an additional bridge again suggest that an additional bridge is a higher priority for residents of West Kelowna.

- Measures to Reduce Travel Demand

Among alternatives to reduce travel demand, improved transit was the most popular choice. More mixed-use development was supported by a significant percentage of Kelowna respondents. More cycling facilities tended to be favoured over more high-occupancy vehicle lanes.

- Role of Highway 97

There appears to be significant public support for the concept of the highway (whether on its existing or an alternative alignment) as more of an expressway facility through urban areas, with fewer direct accesses that contribute to congestion.



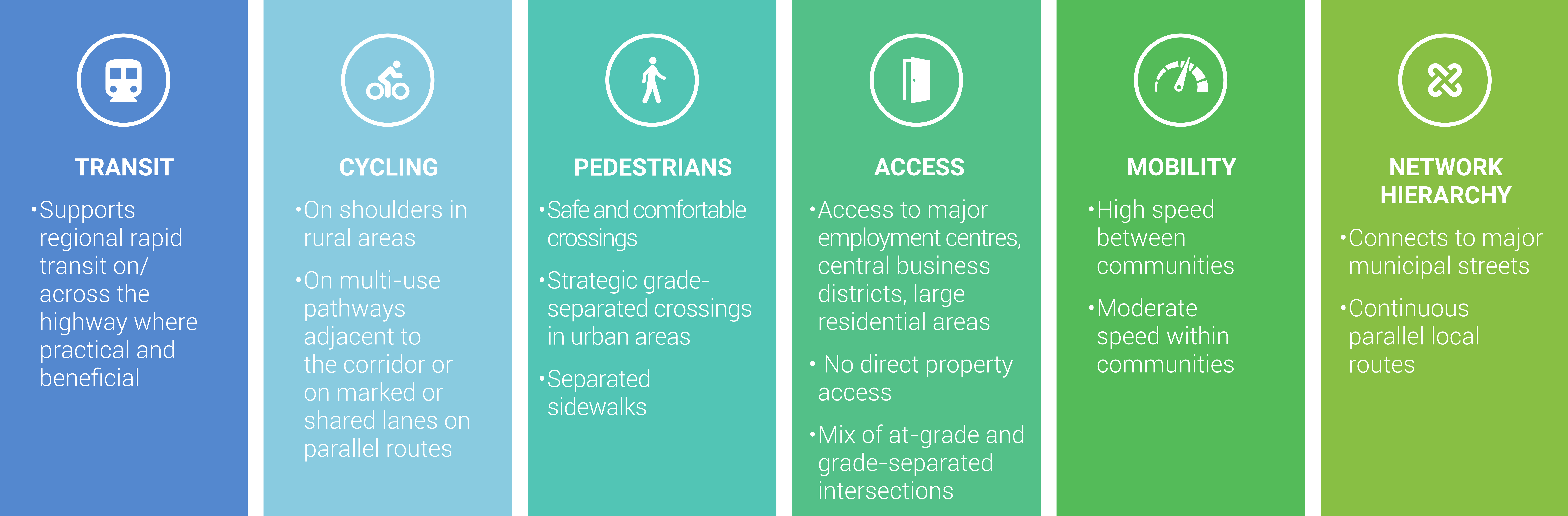
# Option Development - Guiding Principles & Objectives

## Role of Highway 97:

The primary role of Highway 97 in the Central Okanagan is to connect Central Okanagan communities, regional/provincial activity centres and other provincial highways.

## Guiding Principles:

- Provide a safe, functional, and efficient corridor
- Create a multi-modal transportation corridor
- Utilize coordinated approach to planning and network improvements



This diagram describes the desired highway corridor and how it will be used, based on input from local governments, First Nations, key stakeholders and the public.



# Option Development - Process

With guiding principles and functional objectives established, long term options are developed through the following process:

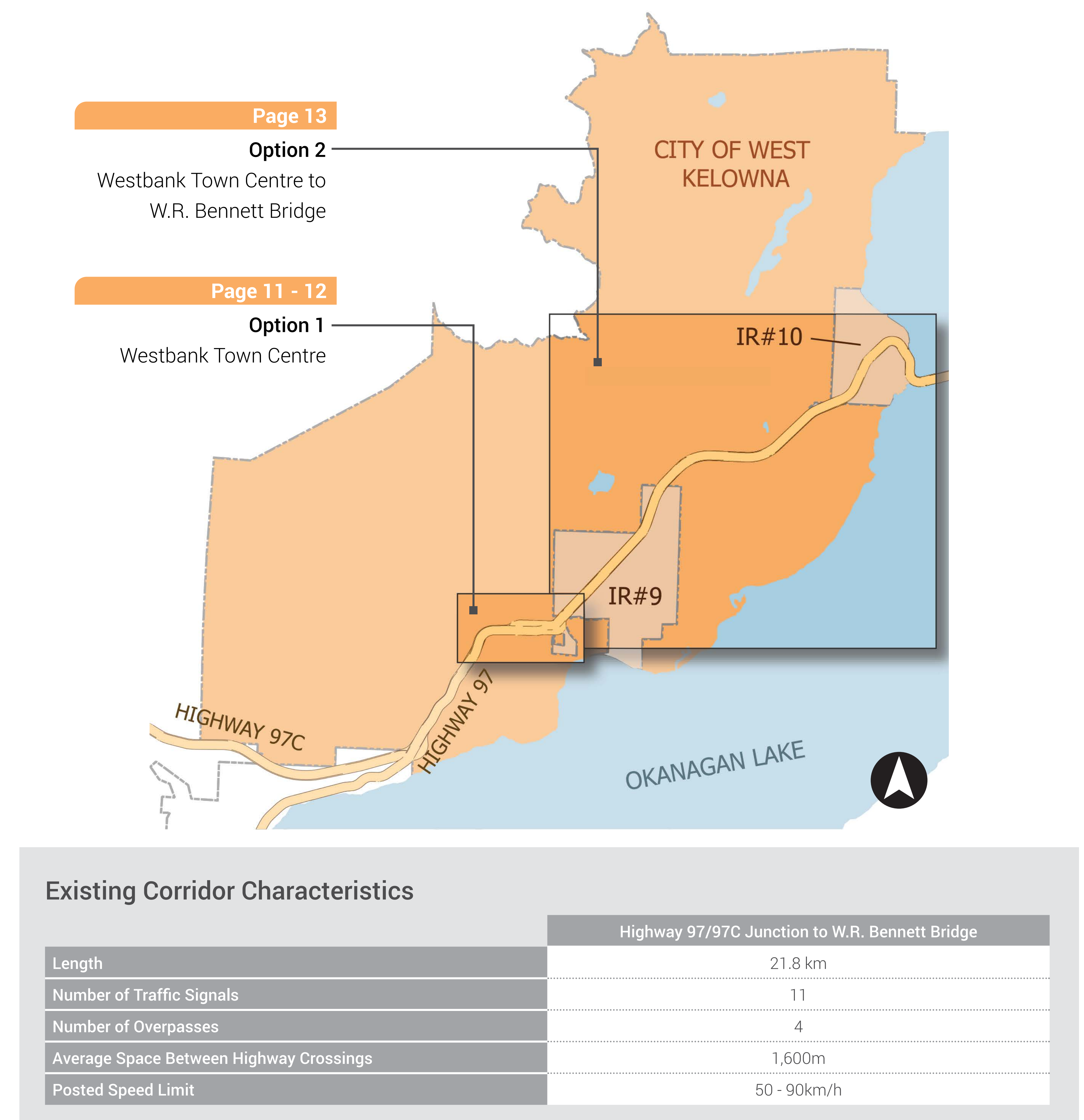




# West Kelowna and Westbank First Nation Existing Corridor Options

Highway 97 through West Kelowna and Westbank First Nation is characterized by:

- **Changes in speed** between high-speed suburban and low-speed urban sections
- **Significant peak hour delays**
- **Higher intersection collision rates** in Westbank Town Centre than similar intersections in the province
- **High collision severity** at signalized intersections between Westbank Town Centre and W.R. Bennett Bridge





# West Kelowna & WFN Existing Corridor Options

## Option Group 1 – Westbank Town Centre

THIS OPTION GROUP CAN BE FOUND IN THE CONSULTATION COMPANION PAGES 11 & 12

### ? What is this option group trying to achieve?

- Maintain a comfortable Main Street with pedestrian access to retail businesses in the Westbank Town Centre
- Create efficient movement of highway traffic through the area and add safety

### ? How would it do this?

- Shifting highway to Dobbin Road and realigning the east end of Dobbin Road north of the RCMP Building, turning it into a two-way, four-lane highway with no traffic signals, by either:
  - Removing traffic signals and providing overpasses for key local roads (Option 1a), or
  - Placing Dobbin Road in a trench and providing multiple crossing locations for local traffic (Option 1b)

Existing Highway

Option Alignment

Trenched

Median Express Lanes

Grade Separated Express Lanes

Local Connection

Number of Lanes in a Direction

Interchange

Half Interchange

Right-In/Right-Out

Closed Access

Grade Separated Crossing

Bike/Ped. Grade Separated Crossing

Area of Special Consideration

Rapid Transit Stop

Transit Access Only

Agricultural Land Reserve

Parks

Municipal or IR Boundary

Indian Reserve Lands

Option 1a Dobbin Road — Grade-separated Crossings

Option 1b Dobbin Road — Trench



# West Kelowna & WFN Existing Corridor Options

## Option 2 – Westbank Town Centre to W.R. Bennett Bridge

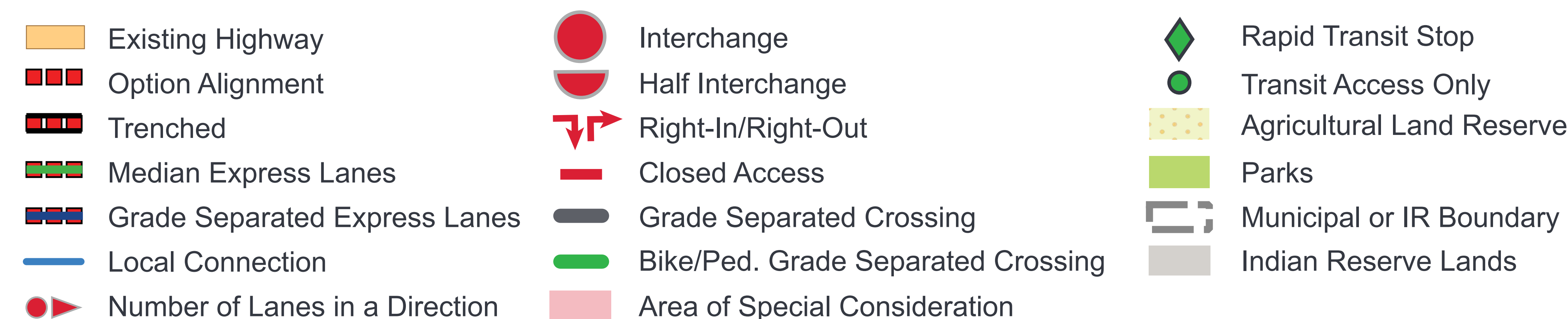
THIS OPTION CAN BE FOUND IN THE CONSULTATION COMPANION PAGE 13

### ? What is this option trying to achieve?

- Reduce congestion and create safer intersections through the area

### ? How would it do this?

- Removing traffic signals and providing crossings with underpasses, overpasses, and/or interchanges

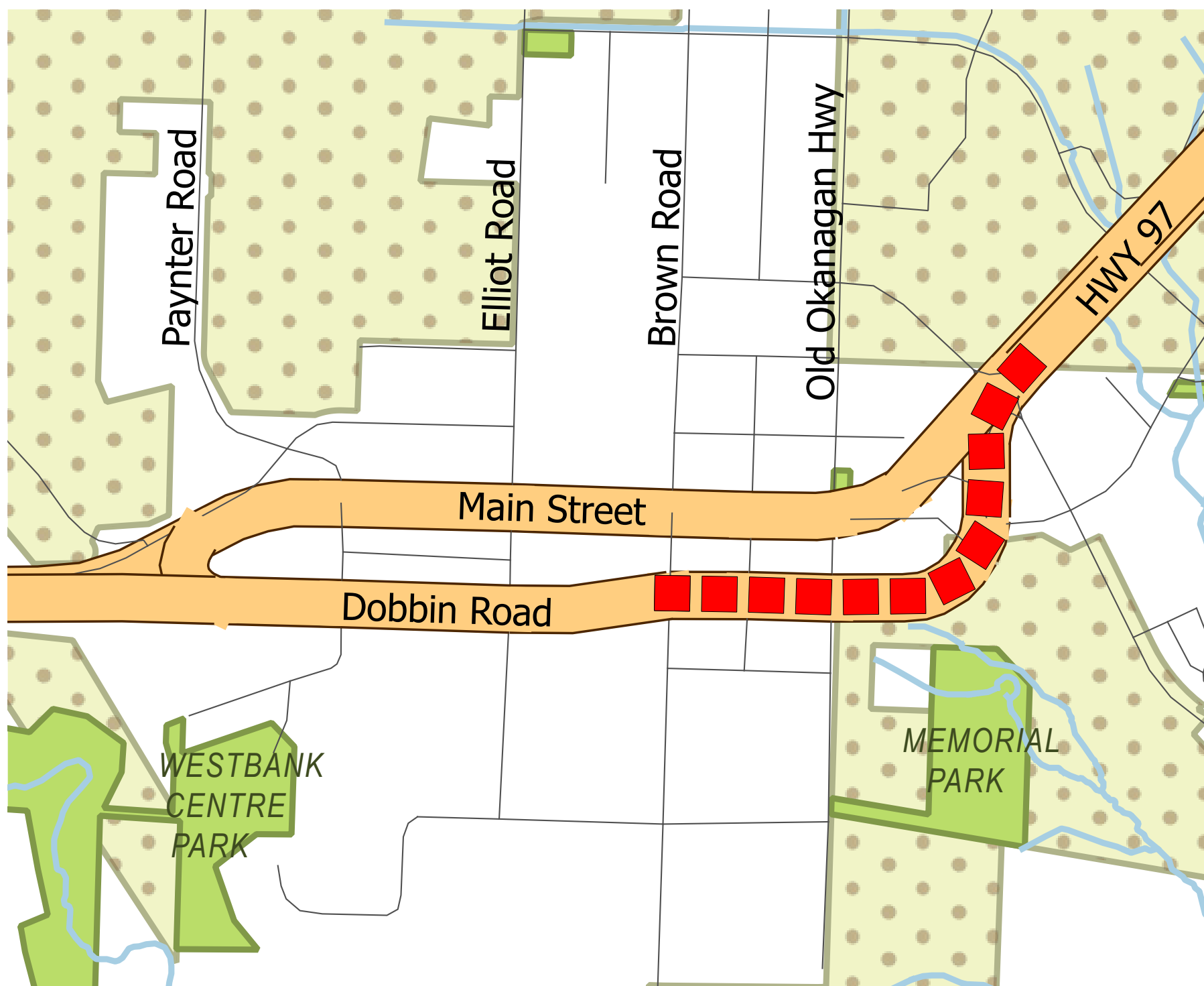


Option 2 Westbank Town Centre to W.R. Bennett Bridge– Grade Separation

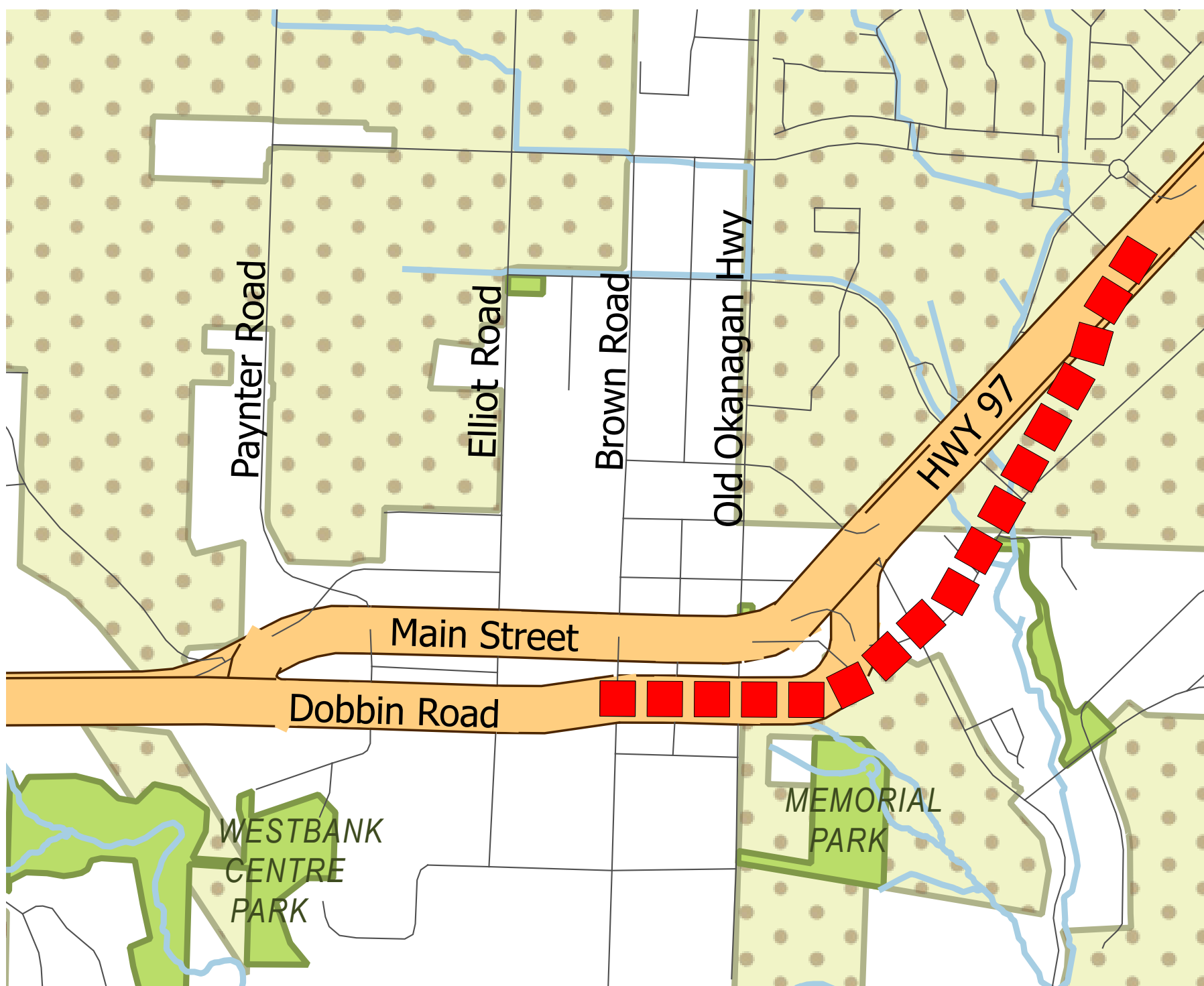


# West Kelowna and Westbank First Nation Existing Corridor Options Removed from Consideration

## EAST CONNECTION



EXISTING ALIGNMENT  
Not able to support expected travel speeds and potential safety issue



CARRINGTON EXTENSION  
Longest and potentially most expensive option

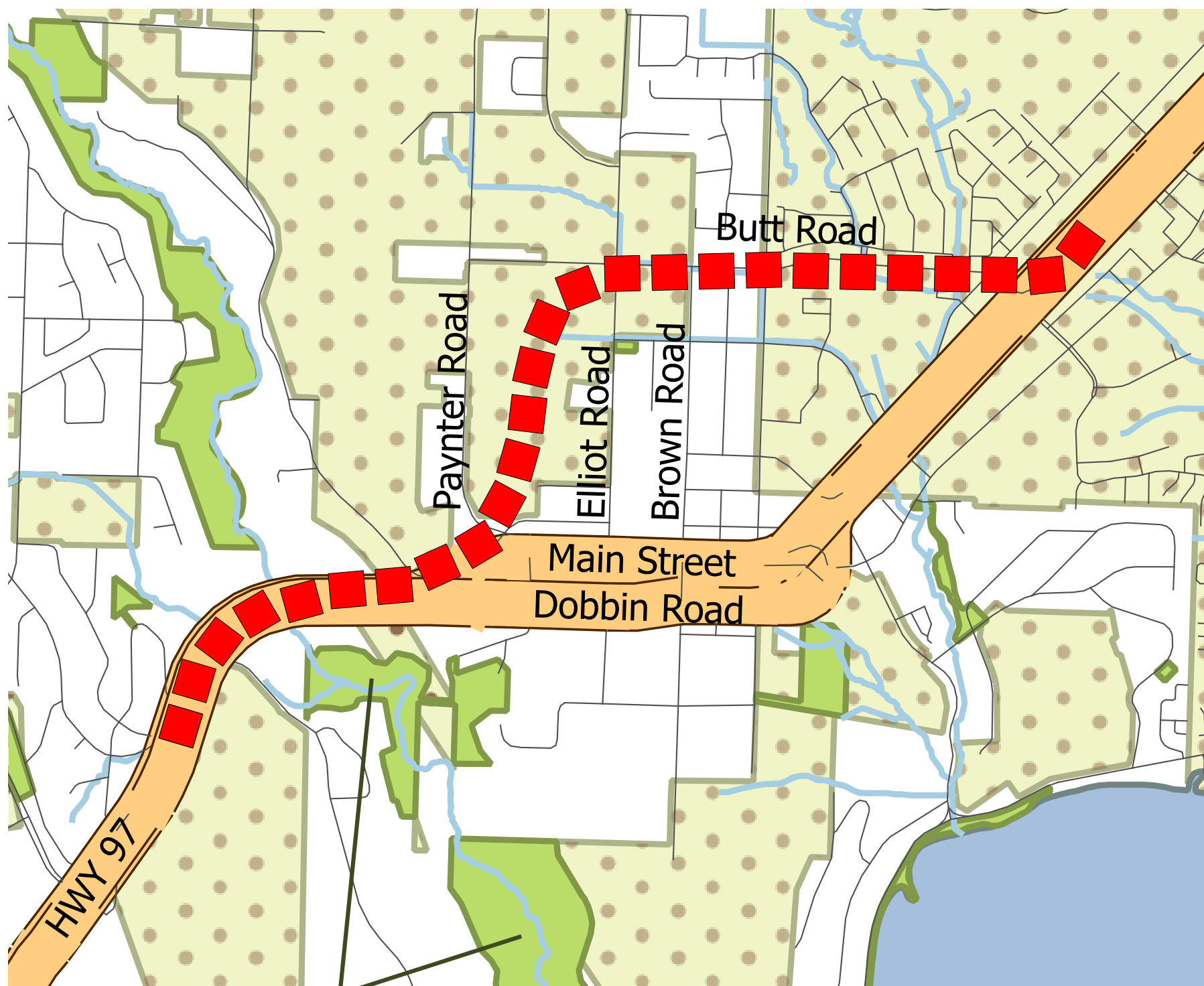


COUPLET WITH GRADE-SEPARATED CROSSINGS  
Highest community severance

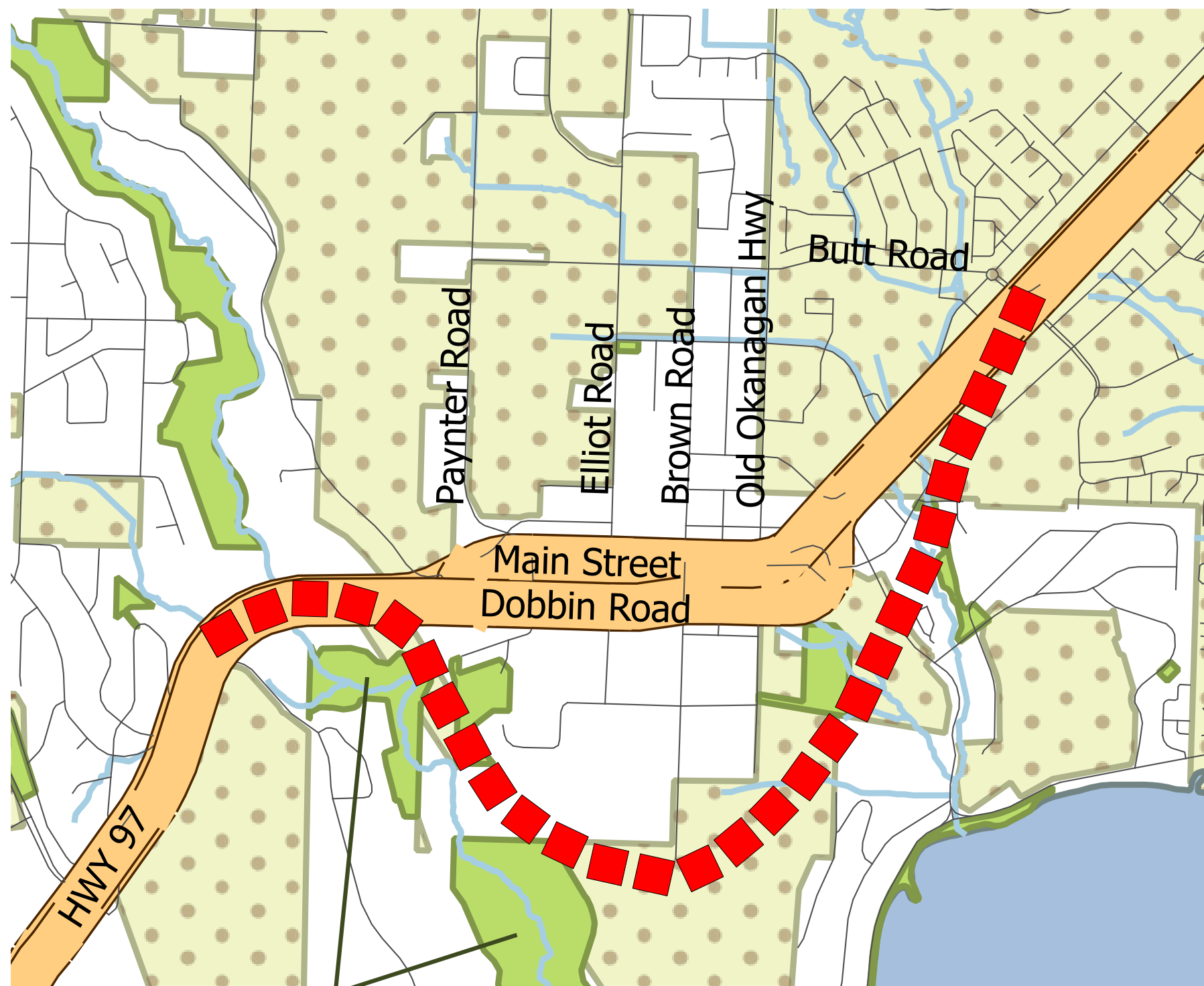


4-LANE HIGHWAY ON DOBBIN WITH INTERCHANGE ON ELLIOTT  
Poor connectivity and significant land consumption effects

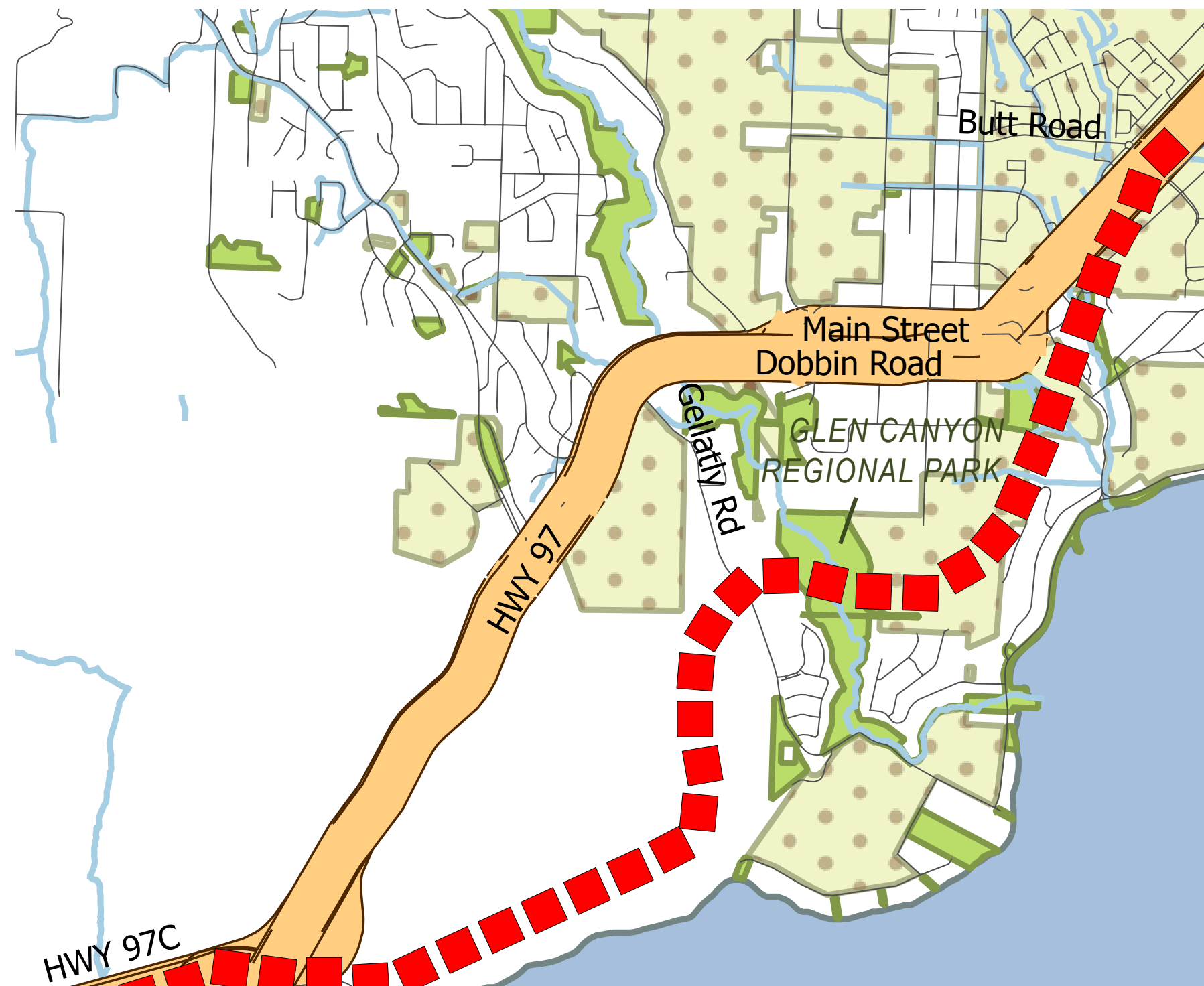
## SHORT TOWN CENTRE REALIGNMENTS



BUTT ROAD REALIGNMENT  
Major residential and commercial property effects



SOUTH REALIGNMENT FROM GLEN CANYON  
Impact on park and existing residential development

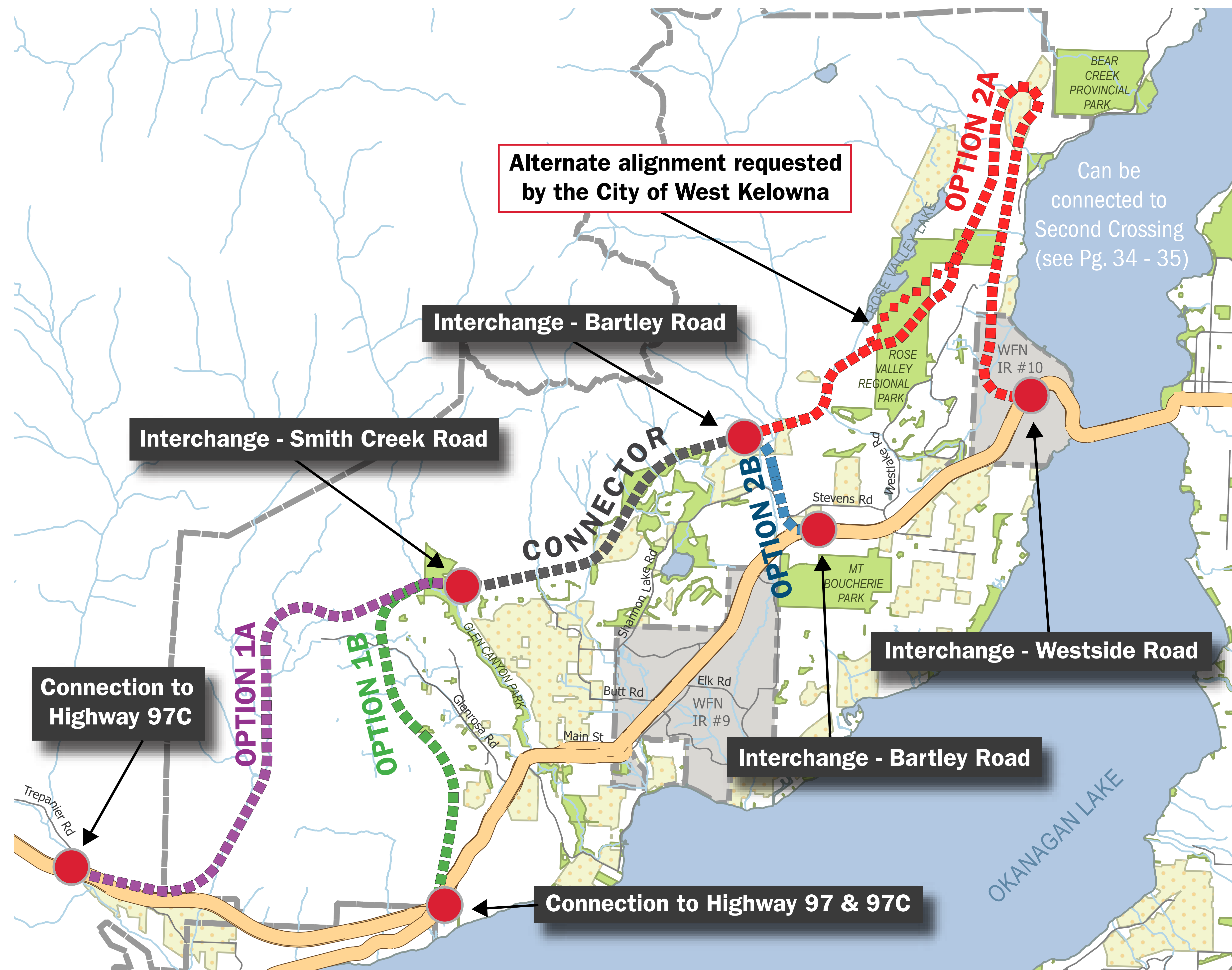


SOUTH REALIGNMENT DIRECT FROM 97C  
Impact on park and existing residential development



# West Kelowna and Westbank First Nation Alternate Corridor Options

THESE OPTIONS CAN BE FOUND IN THE CONSULTATION COMPANION PAGES 14 & 15



Westbank West Kelowna and Westbank First Nation Alternate Corridor Options

An alternate highway corridor between Highway 97C and Westside Road was identified in the West Kelowna Transportation Master Plan. Alternate highway corridors generally following the City's north boundary would be new highway corridors that are high-speed with controlled access (limited to a few key interchanges).

What are these options are trying to achieve?

- Remove through traffic from the existing highway corridor
- Provide an alternate route around the developed areas of West Kelowna

How would they do this?

- Creating a new high-speed highway around West Kelowna to divert traffic from the existing corridor



# West Kelowna and Westbank First Nation Alternate Corridor Options Removed from Consideration



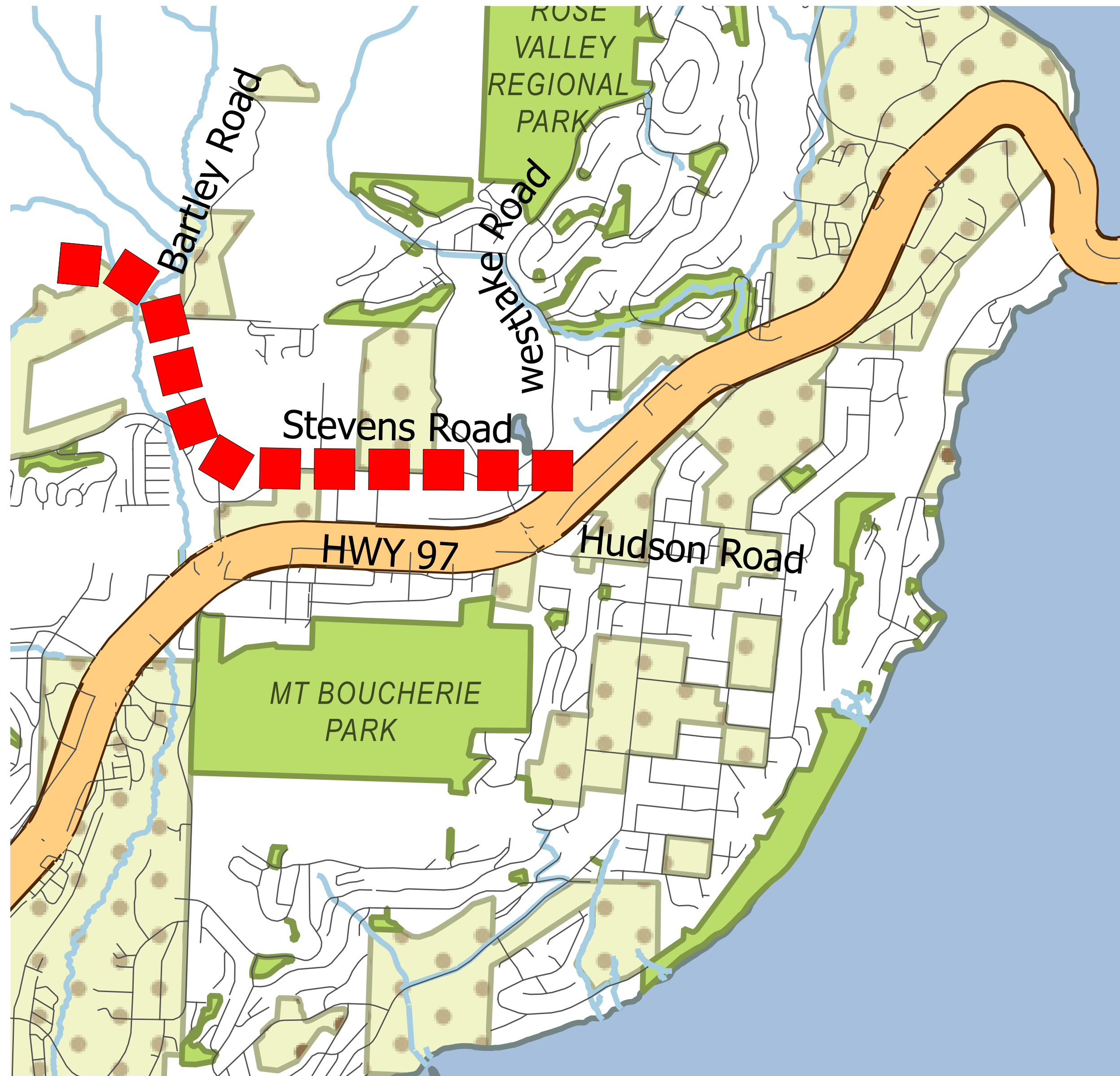
## SOUTH CONNECTION THROUGH GLEN CANYON

- Major impact on the park
- Highest noise, visual and property impact



## SOUTH CONNECTION HIGHWAY 97/97C JUNCTION TO SMITH CREEK ROAD (WEST ALIGNMENT)

- Higher visual and noise impacts than East Alignment (1B)



## NORTH CONNECTION STEVENS ROAD/WESTLAKE ROAD

- Higher cost than Bartley Road Extension Option
- Would cause a loss of access to Stevens Road properties



# Kelowna Existing Corridor Options

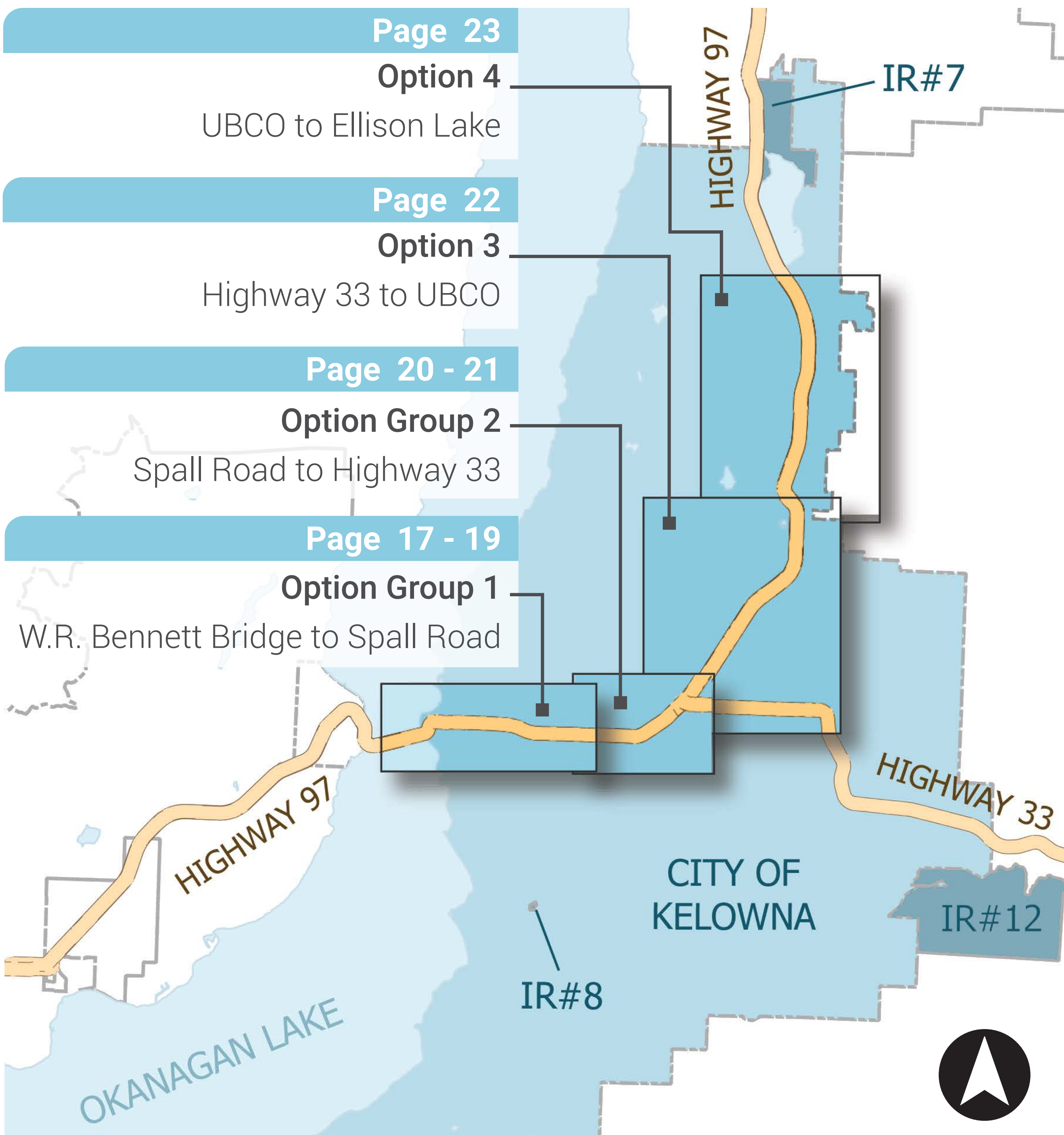
Highway 97 (Harvey Avenue) through Kelowna is characterized by:

- Highway movements given priority causing delays at side streets
- Higher collision rates than similar intersections in the province
- Almost all traffic signals reaching capacity within 25 years, lengthening delays along highway and side streets

## Highway 97 and Downtown Kelowna (between the bridge and Richter Street)

Possible changes to Highway 97 through downtown Kelowna would balance efficient movement with the urban character of downtown and would consider various forms including highway or express lanes:

- At-grade
- Elevated
- In a trench
- In a tunnel



Existing Corridor Characteristics

	Bridge to Spall Road	Spall Road to Highway 33	Highway 33 to UBCO	UBCO to Ellison Lake
Length	3.7km	2.7km	6.1km	5.2km
Number of Traffic Signals	8	5	4	2
Number of Overpasses	1 pedestrian	0	1 at John Hindle Drive	0
Average Space Between Highways Crossings	410m (pedestrians) 460m (vehicles)	540m	1,200m	2,600m
Posted Speed Limit	50 - 60 km/h	60 km/h	70 - 80km/h	80 - 90km/h



# Kelowna Existing Corridor Options

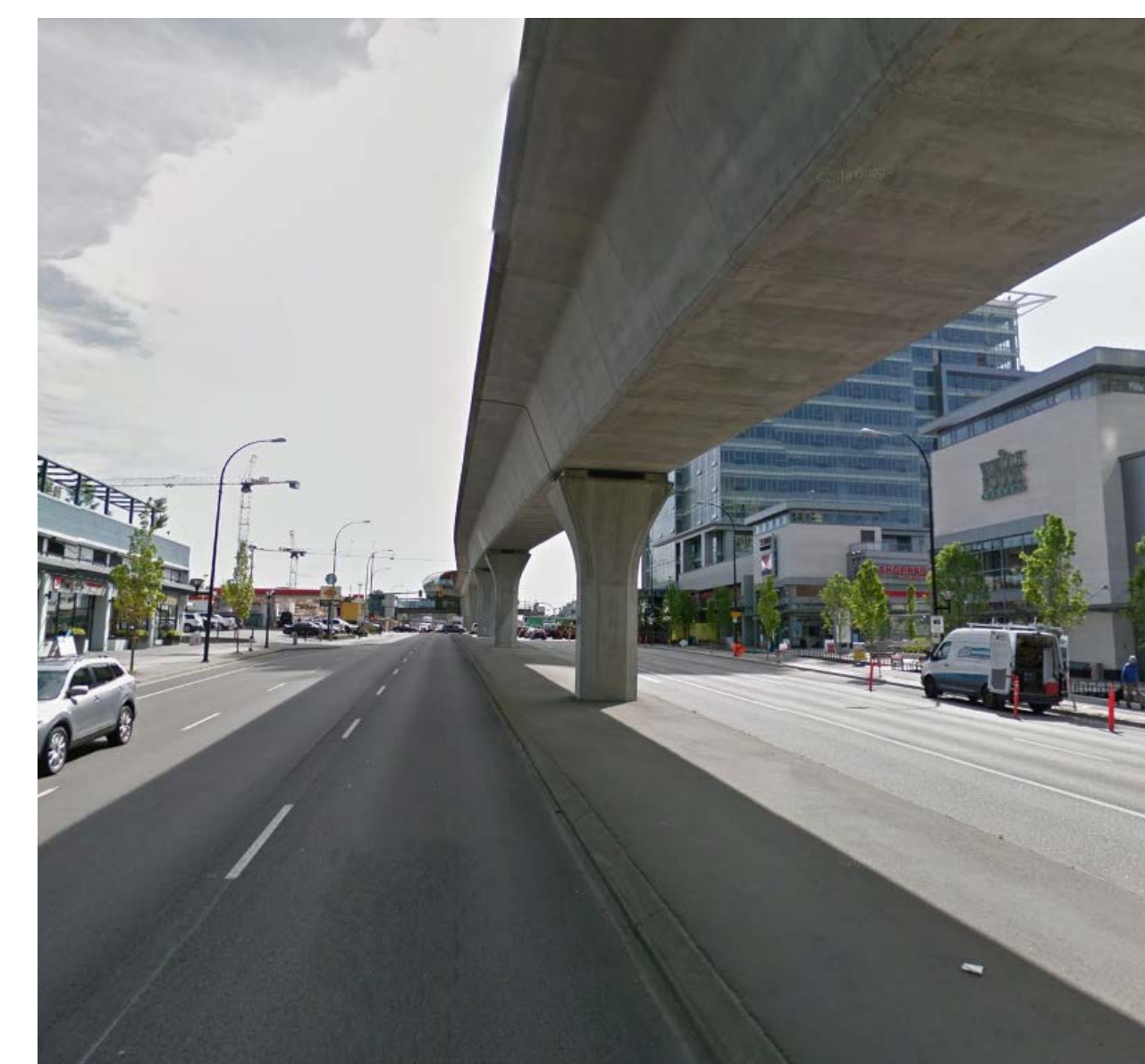
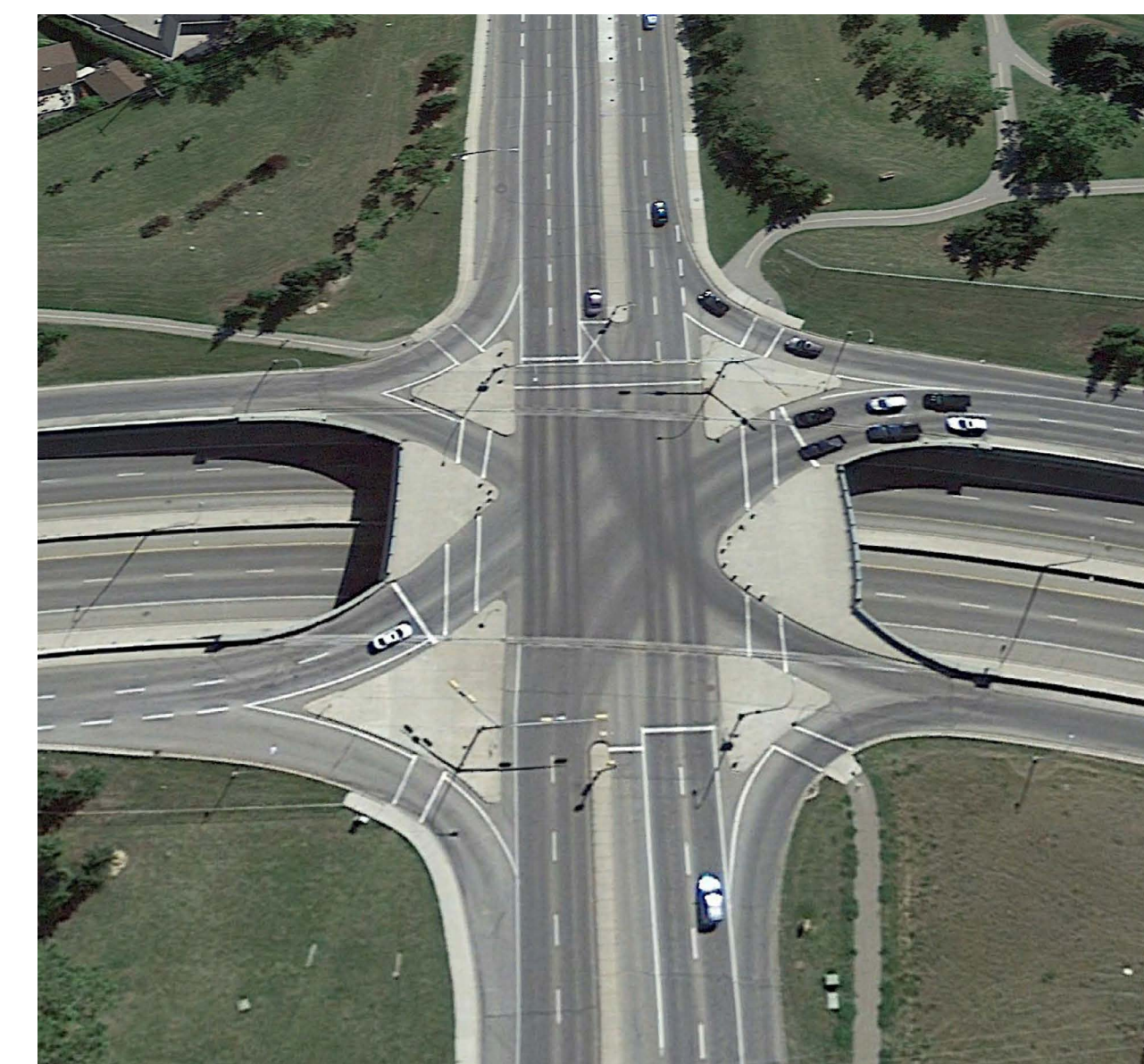
## Option Group 1 – W.R. Bennett Bridge to Spall Road

THIS OPTION GROUP CAN BE FOUND IN THE CONSULTATION COMPANION PAGES 17 – 19



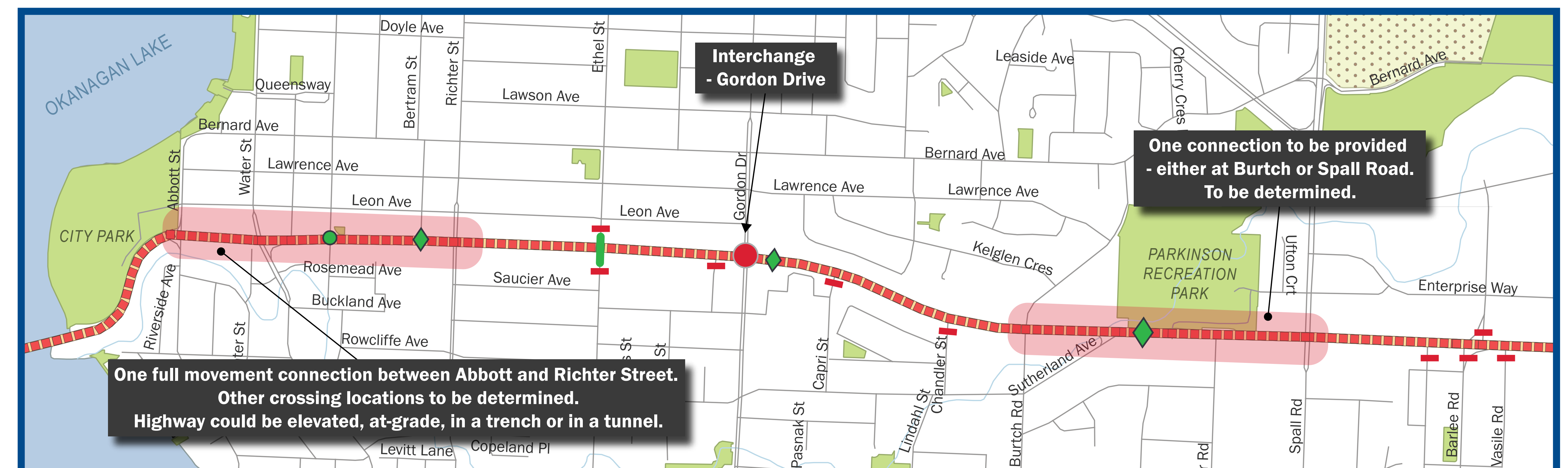
What is this option group trying to achieve?

- Relieve congestion along and across Highway 97 (Harvey Avenue)
- Minimize barriers to travel for vehicles, pedestrians and cyclists
- Provide uncongested travel for regional transit

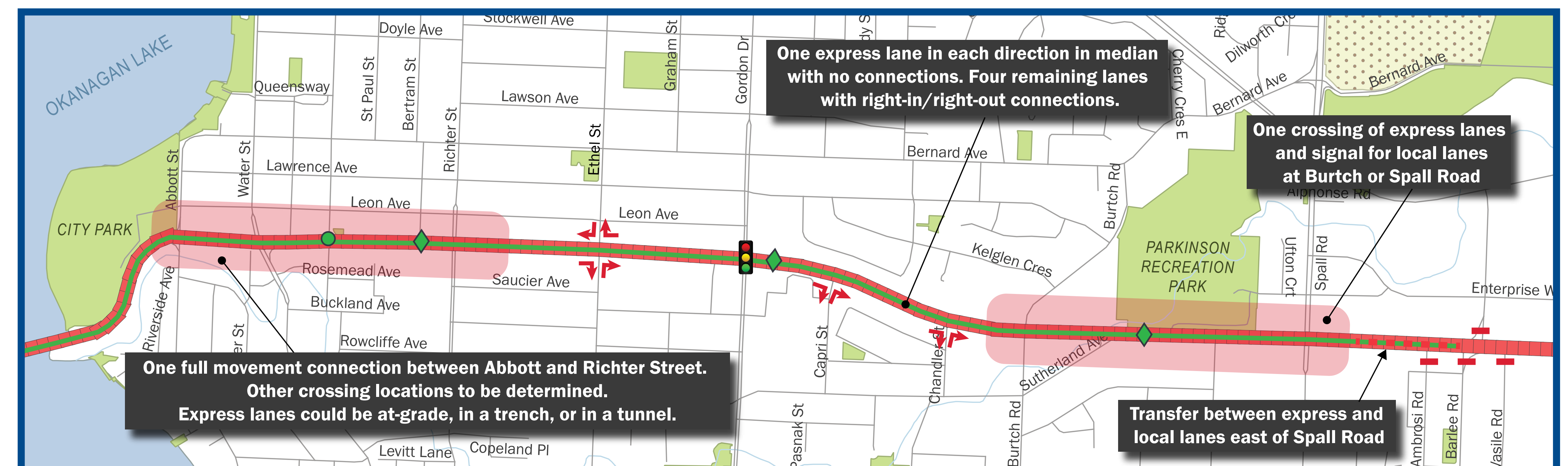


How would it do this?

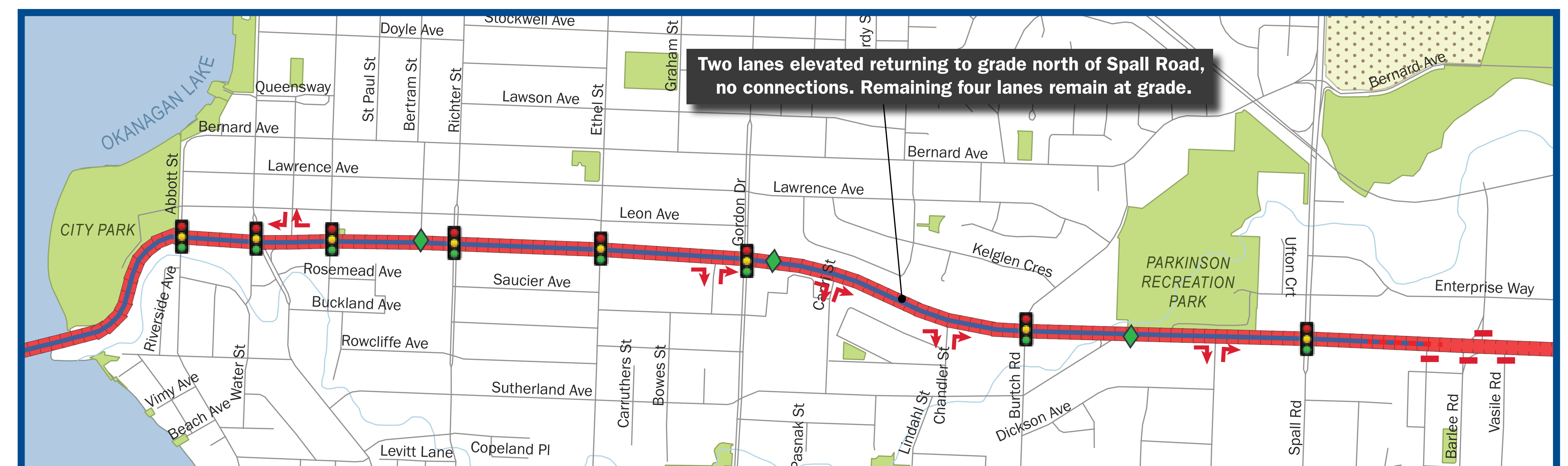
- Reducing traffic signals to increase capacity of Highway 97 (Harvey Avenue)
- Providing pedestrian and cycling crossings at rapid transit stations



Option 1a Six Lanes with Grade-separated Interchanges



Option 1b Median Express Lanes



Option 1c Elevated Express Lanes



# Kelowna Existing Corridor Options

## Option Group 2 – Spall Road to Highway 33

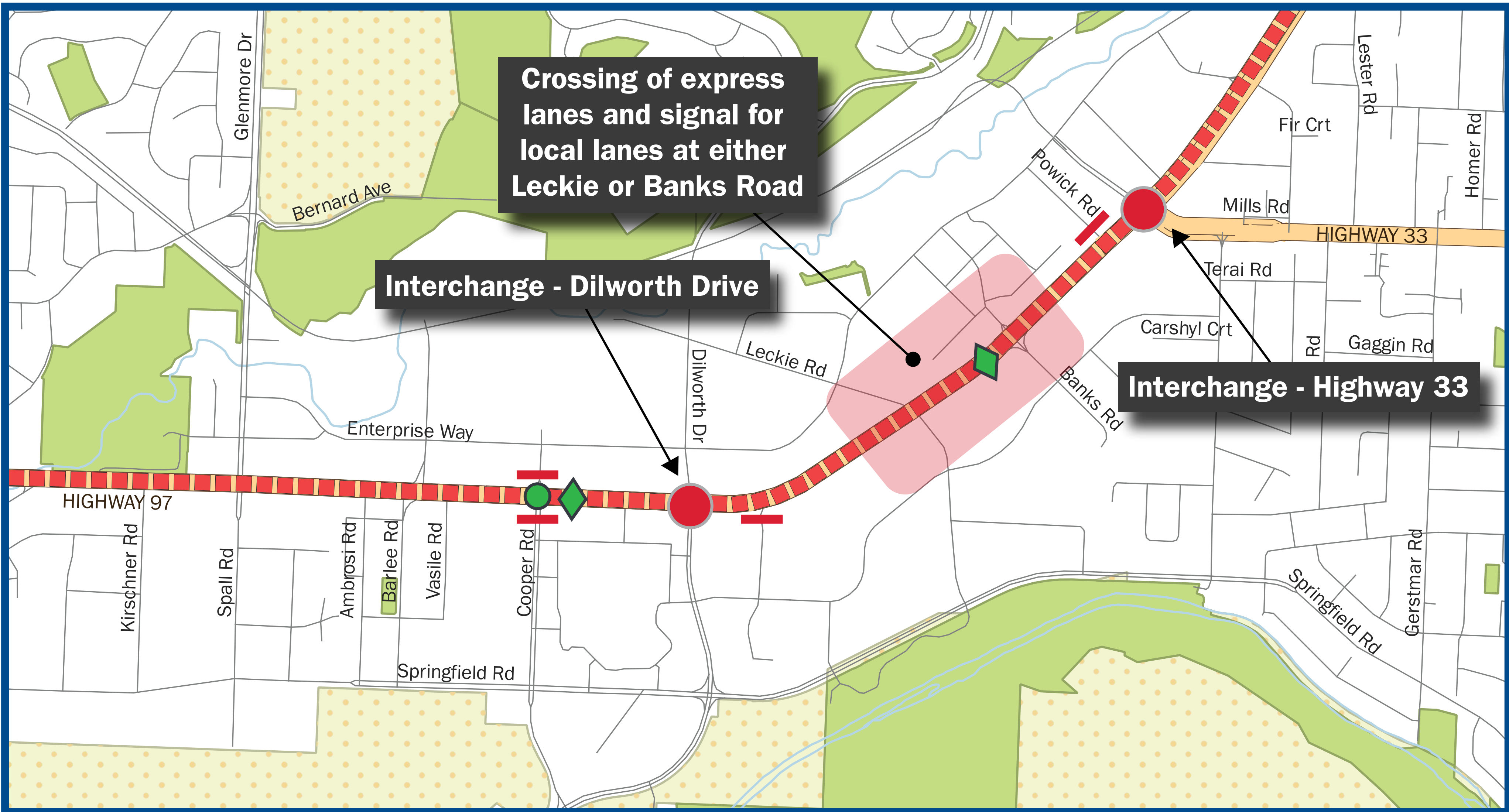
THIS OPTION GROUP CAN BE FOUND IN THE CONSULTATION COMPANION PAGES 20 & 21

? What is this option group trying to achieve?

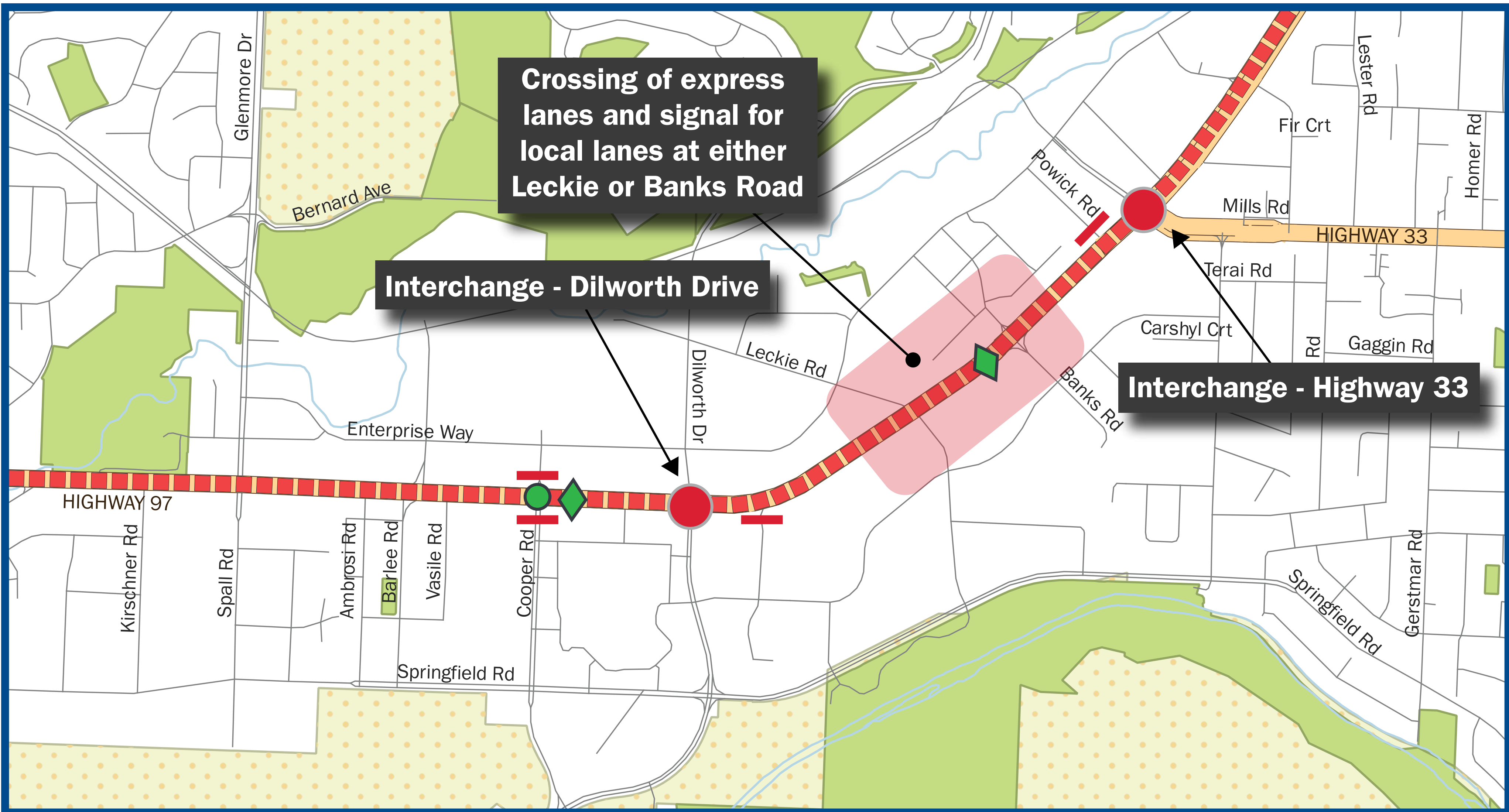
- Maintain access to major shopping and commercial activities through this area
- Reduce collisions and improve travel across the highway
- Provide transit access to the Orchard Park Transit Exchange

? How would it do this?

- Providing additional capacity by either:
  - Maintaining existing six lanes and removing all signals (Option 2a), or
  - Creating separate two-lane express road in the median (Option 2b)



Option 2a Six Lanes with Grade-separated Interchanges



Option 2b Median Express Lanes



# Kelowna Existing Corridor Options

## Option 3 – Highway 33 to UBCO

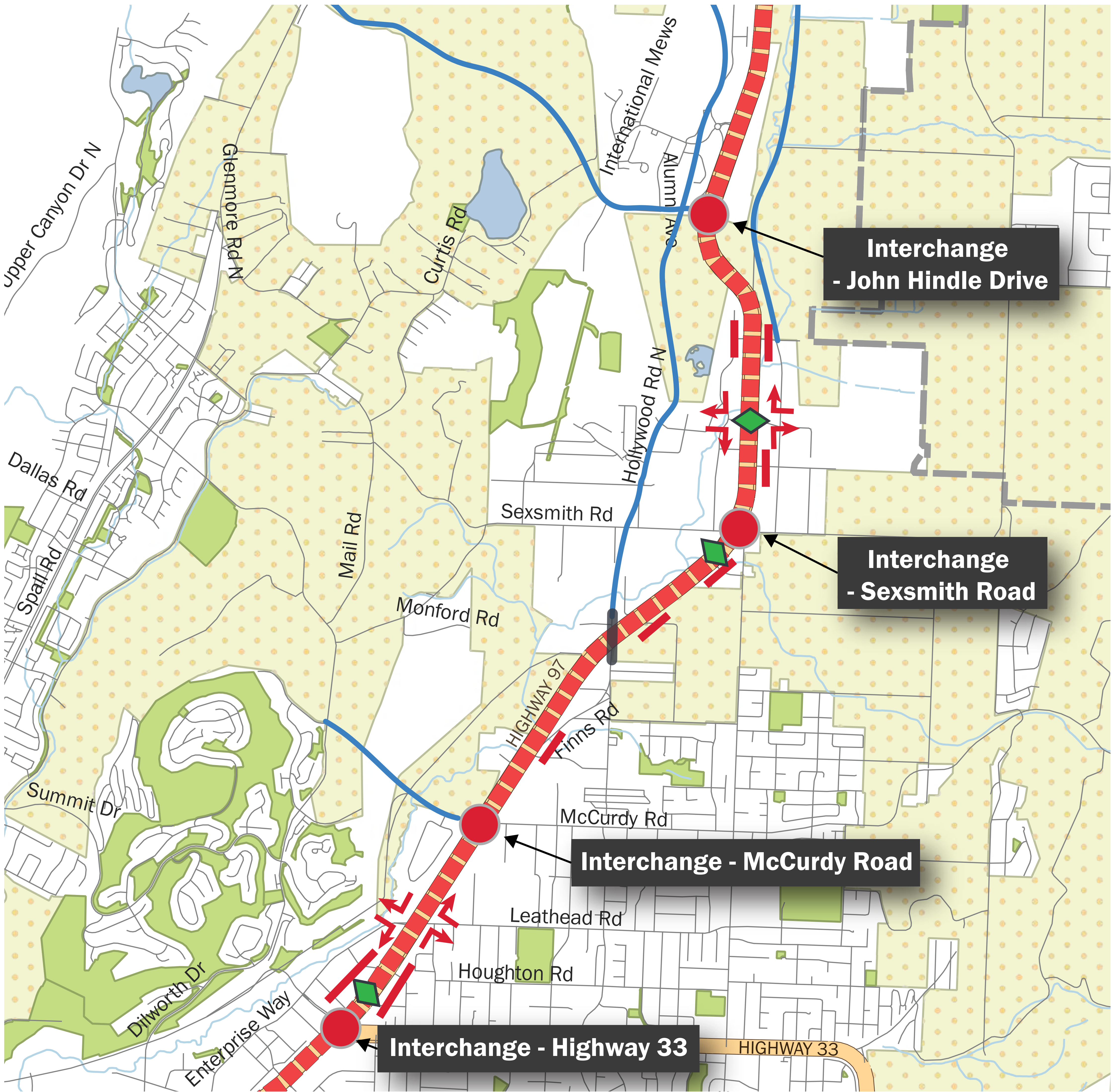
THIS OPTION CAN BE FOUND IN THE CONSULTATION COMPANION PAGE 22

### ? What is this option trying to achieve?

- Improve traffic flow through this area
- Tie into current six-laning project on Highway 97 north of Highway 33
- Tie into future road extensions planned in City of Kelowna 30 Year Road Network Plan

### ? How would it do this?

- Maintaining the existing six lanes and removing all signals



Option 3 Highway 33 to UBCO – Six Lanes with Grade-separated Interchanges



# Kelowna Existing Corridor Options

## Option 4 –UBCO to Ellison Lake

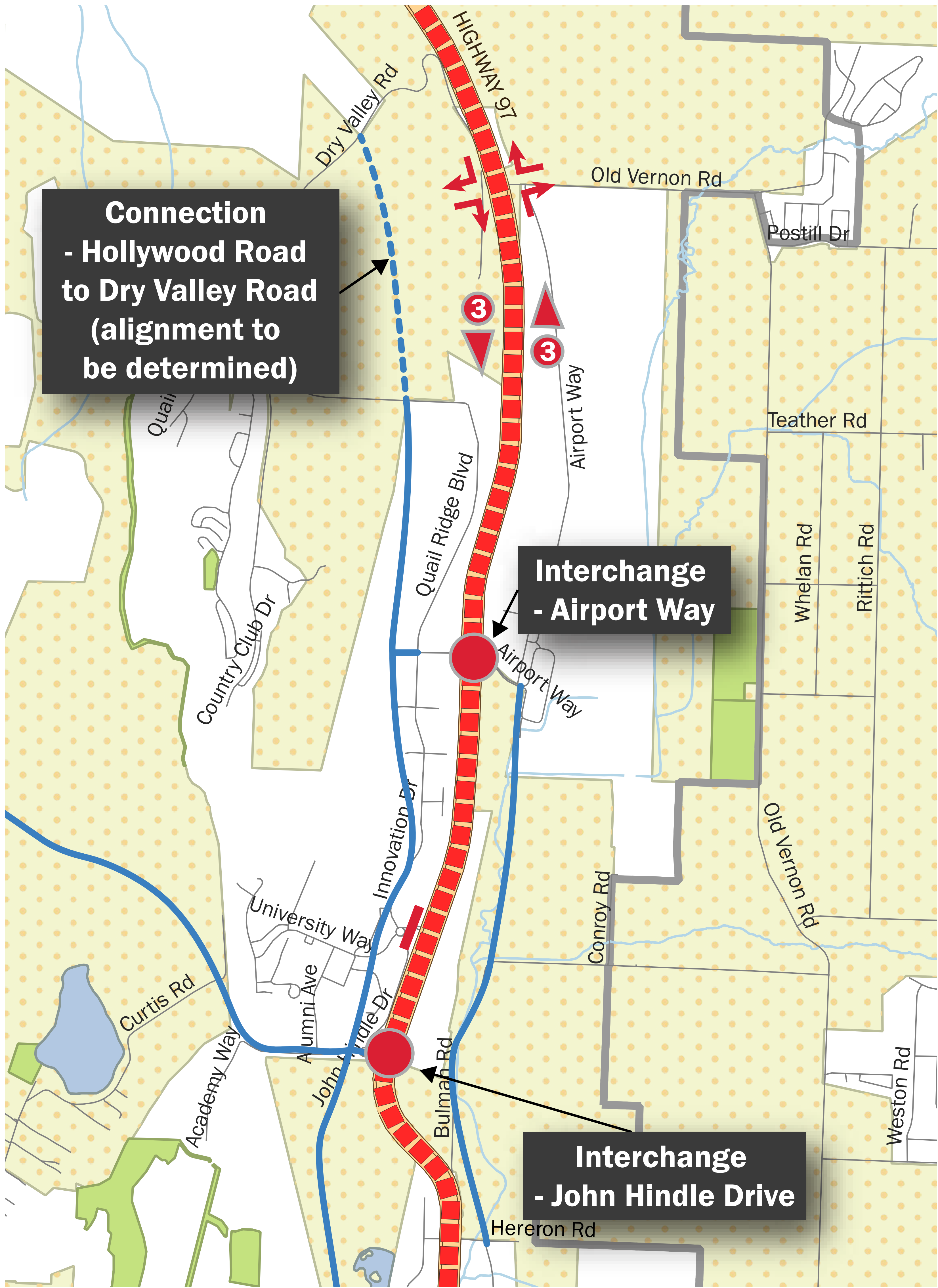
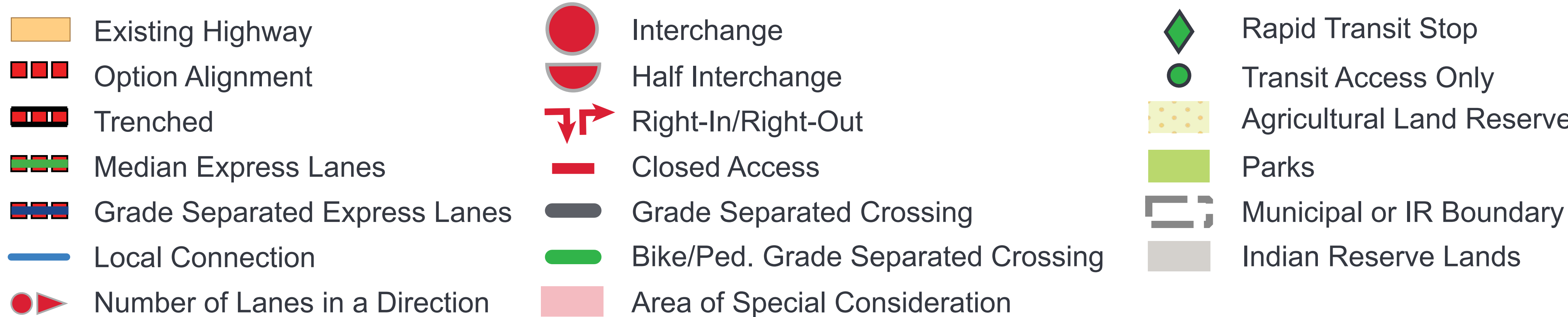
THIS OPTION CAN BE FOUND IN THE CONSULTATION COMPANION PAGE 23

**?** What is this option trying to achieve?

- Improve traffic flow through this area
- Improve UBCO and airport access
- Tie into local road connections planned in City of Kelowna 30 Year Road Network Plan and other network planning for the area

**?** How would it do this?

- Maintaining the existing six lanes and removing all signals



Option 4 UBCO to Ellison Lake – Grade-separated Interchanges



# Kelowna Downtown North End (DNE) Second Crossing Connection Options

THIS OPTION GROUP CAN BE FOUND IN THE CONSULTATION COMPANION PAGES 24 & 25



The options through the north end of downtown Kelowna represent connections between a potential second crossing and the first phase of the COMMC on Clement Avenue. Two general second crossing locations have been investigated, at Poplar Point and Manhattan Point. There are several variations at Manhattan Point that would connect to different potential second crossing alignments.

## ? What is this option group trying to achieve?

- **Connect a potential second crossing** of Okanagan Lake with Clement Avenue and potentially an alternate corridor through Kelowna
- **Reduce congestion** on the W.R. Bennett Bridge and existing Highway 97 (Harvey Avenue) corridor

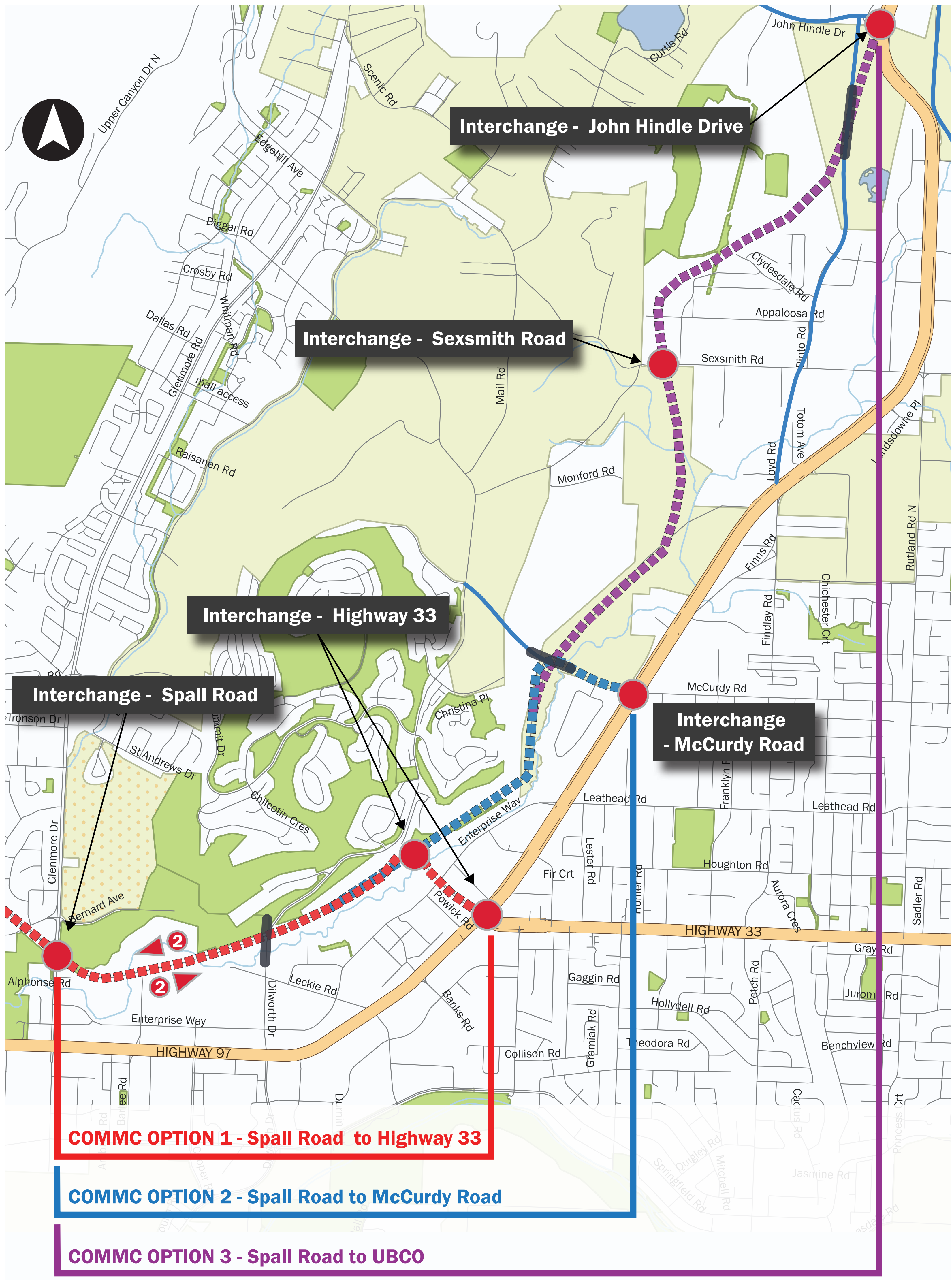
## ? How would it do this?

- **Creating a new alternate route** through the north end of downtown Kelowna
- **Providing access** with interchanges and crossings via overpasses (no traffic signals)



# Kelowna Central Okanagan Multi-Modal Corridor (COMMC) Alternate Corridor Options

THIS OPTION GROUP CAN BE FOUND IN THE CONSULTATION COMPANION PAGES 26 & 27



This group of options considers a highway alignment along the route that has previously been identified as the Central Okanagan Multi-Modal Corridor. All options would connect to Clement Avenue at the south end, with three variations for a northern connection back to the existing highway. The COMMC options could be developed as a connection to a potential second crossing or could serve as an alternate route into downtown Kelowna without a second crossing.

- ? What is this option group trying to achieve?
  - Provide a less congested route through Kelowna
  - Reduce traffic on existing Highway 97 (Harvey Avenue) corridor
  - Provide more opportunity for transit on the existing corridor
- ? How would it do this?
  - Diverting traffic from the existing highway
  - Providing access with interchanges and crossings via overpasses (no traffic signals)
  - Creating capacity on the existing corridor for additional transit



# Kelowna Downtown North End Second Crossing Connection Options Removed from Consideration



## POPLAR POINT TO CLEMENT AVENUE ABOVE POPLAR POINT ROAD

Significant engineering and community impact issues with alignment above Poplar Point Road



## MANHATTAN POINT TO CLEMENT AVENUE ALONG BAY AVENUE AND THROUGH THE MILL SITE

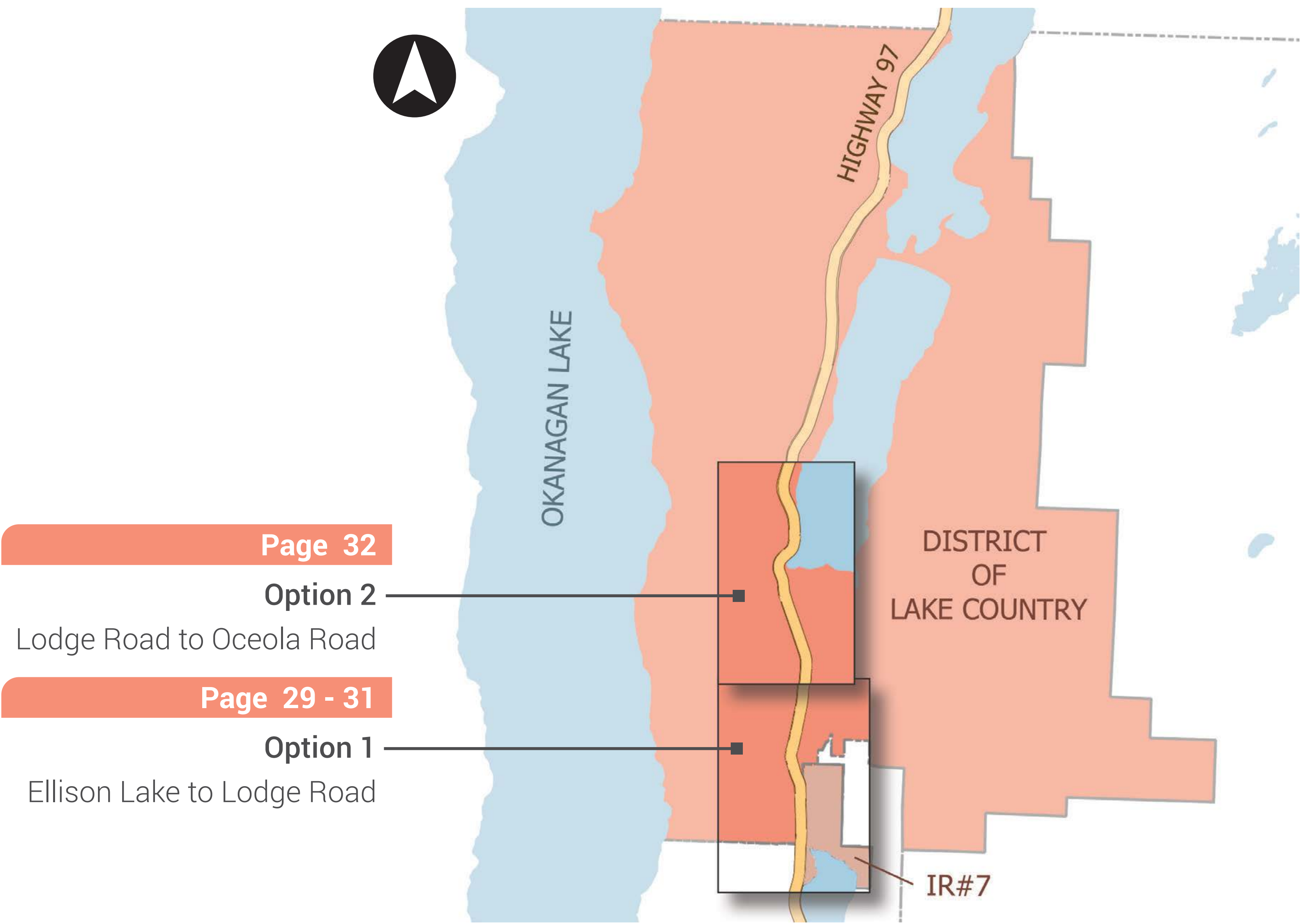
Relies on mill site being available and has residential impacts on Manhattan Point



# Lake Country and Duck Lake I.R. No. 7 Existing Corridor Options

Highway 97 through Lake Country and Duck Lake I.R. No. 7 is characterized by:

- **Changes in speed** between high-speed suburban and low-speed urban sections
- **Safety issues and delays** caused by vehicles turning
- **Long delays and steep approaches** at several intersections



## Existing Corridor Characteristics

	Lake Country and Duck Lake I.R. No. 7
Length	21.8 km
Number of Traffic Signals	11
Number of Overpasses	4
Average Space Between Highway Crossings	1,400m
Posted Speed Limit	50 - 70km/h



# Lake Country & Duck Lake I.R. No. 7 Existing Corridor Options

## Option Group 1 – Ellison Lake to Lodge Road

THIS OPTION GROUP CAN BE FOUND IN THE CONSULTATION COMPANION PAGES 29 – 31



What is this option group trying to achieve?

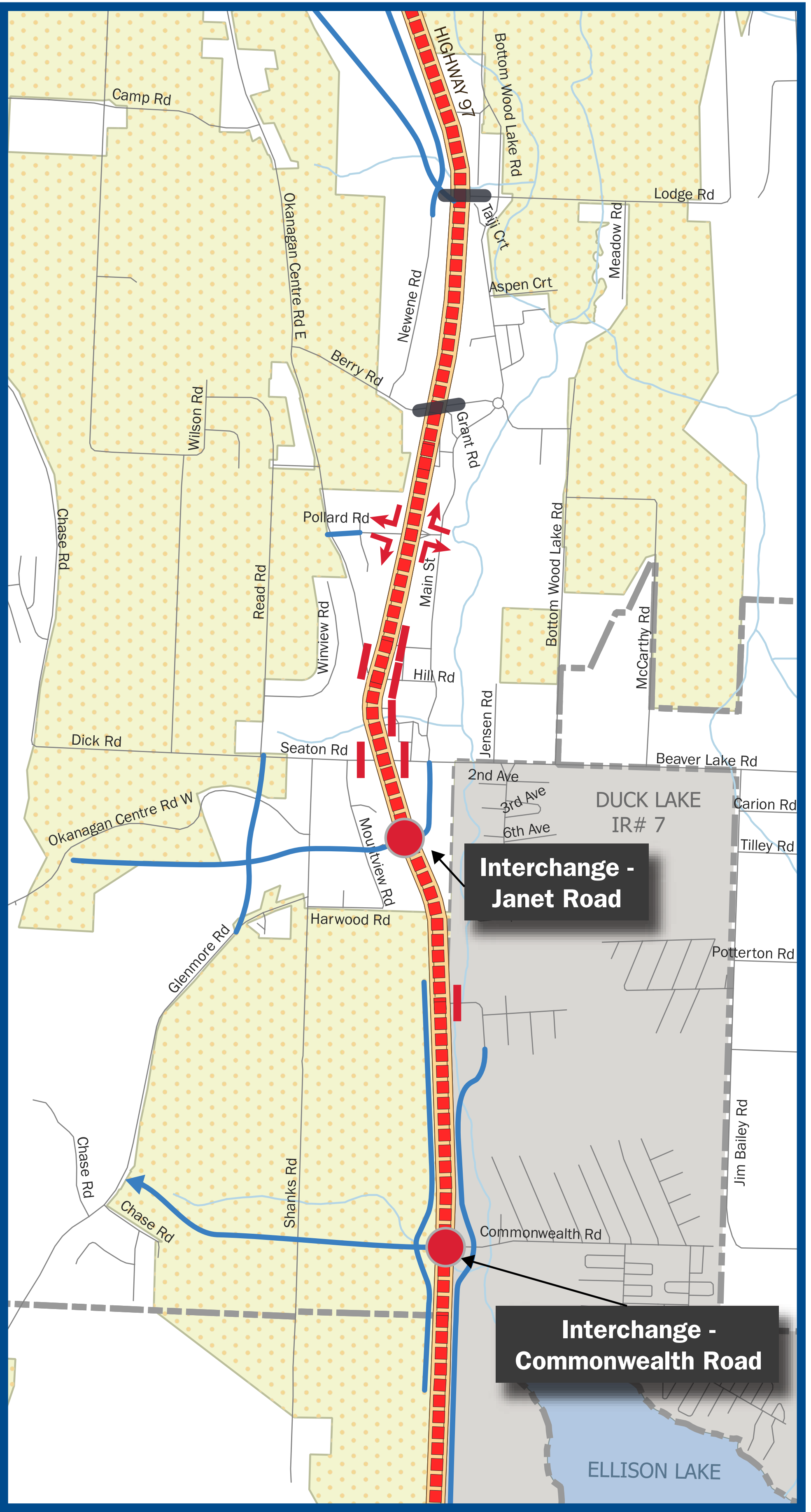
- Improve traffic flow through this area
- Provide access points and connections across highway for all modes



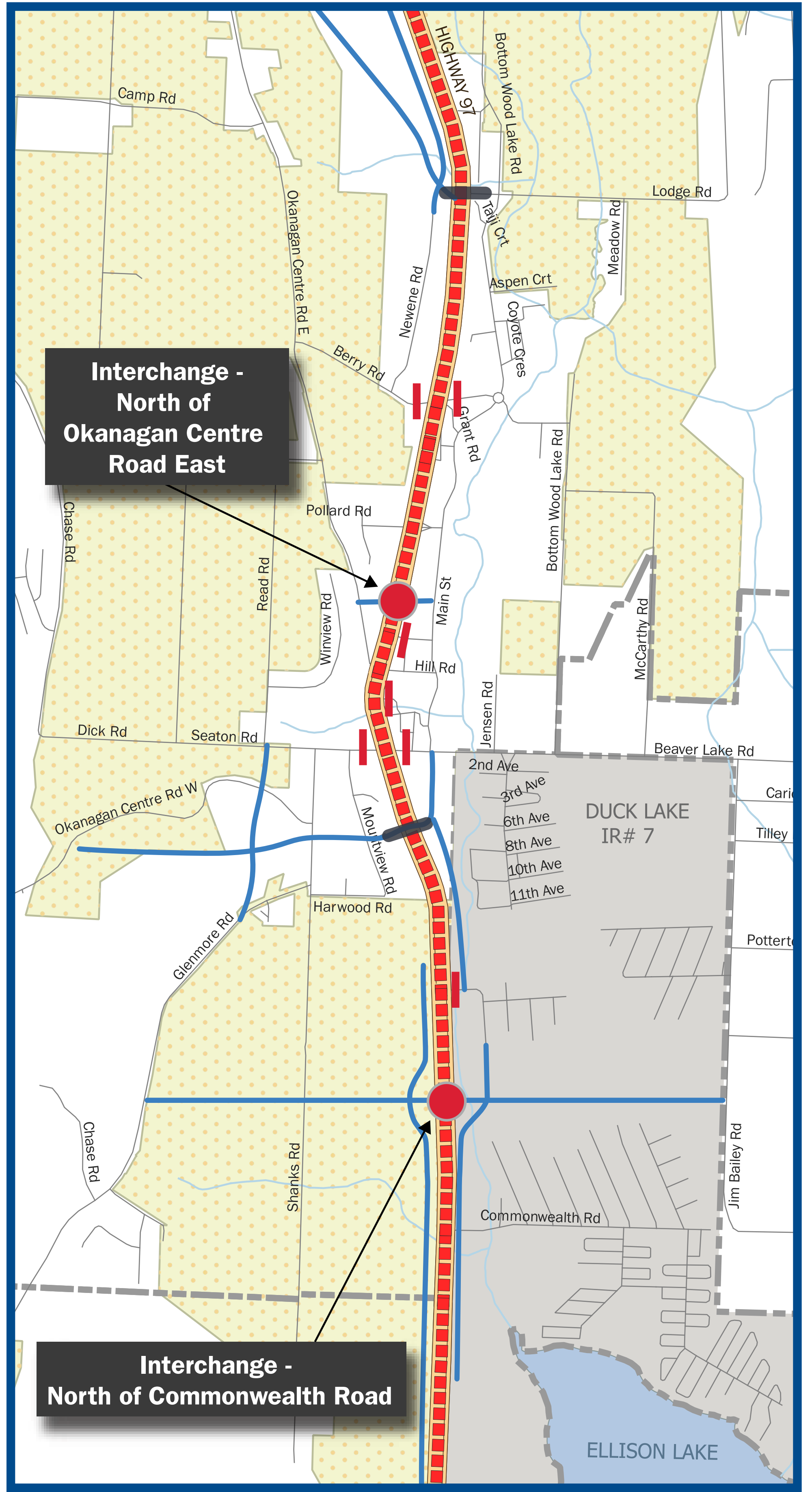
How would it do this?

- Remove traffic signals and close other highway access points by:
  - Providing interchanges at Commonwealth Road and Janet Road (Option 1a),
  - Providing interchanges at Commonwealth Road and Okanagan Centre Road East (Option 1b), or
  - Providing an interchange north of Commonwealth Road and half interchanges at Janet Road and Pollard Road (Option 1c)

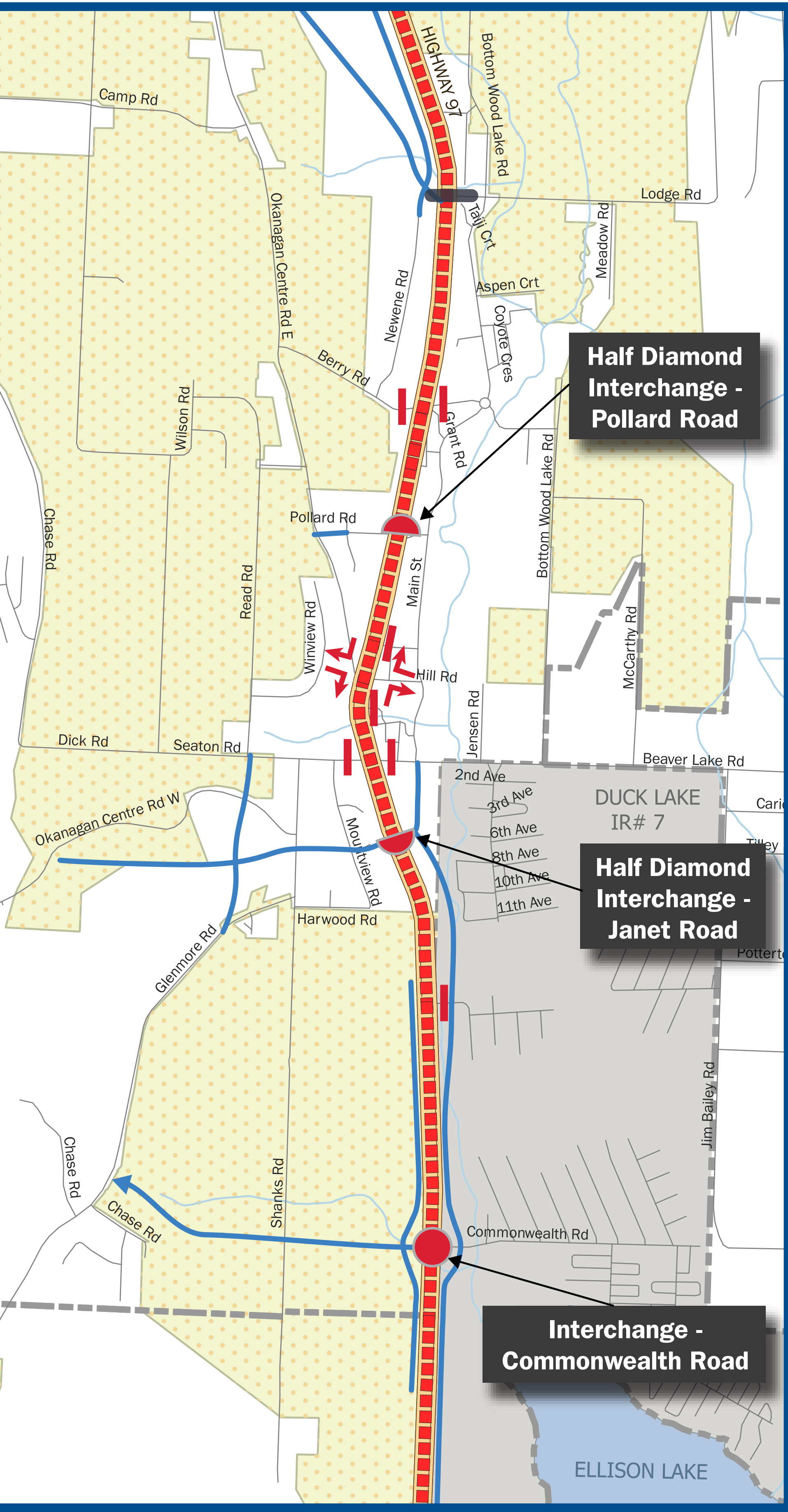
**Option 1a** Interchanges at Commonwealth Road and Janet Road



**Option 1b** Interchanges at Commonwealth Road and Okanagan Centre Road East



**Option 1c** Interchanges North of Commonwealth Road and Half Interchanges at Janet Road and Pollard Road





# Lake Country & Duck Lake I.R. No. 7 Existing Corridor Options

## Option 2 – Lodge Road to Ocela Road

THIS OPTION CAN BE FOUND IN THE CONSULTATION COMPANION PAGE 32



What is this option trying to achieve?

- Provide efficient and safe access to Ocela Road and Woodsdale Road



How would it do this?

- Providing an interchange at Ocela Road and closing the existing left turns to/from Robinson Road

Existing Highway	Interchange	Rapid Transit Stop
Option Alignment	Half Interchange	Transit Access Only
Trenched	Right-In/Right-Out	Agricultural Land Reserve
Median Express Lanes	Closed Access	Parks
Grade Separated Express Lanes	Grade Separated Crossing	Municipal or IR Boundary
Local Connection	Bike/Ped. Grade Separated Crossing	Indian Reserve Lands
Number of Lanes in a Direction	Area of Special Consideration	



Option 2 Lodge Road to Ocela Road



# Lake Country and Duck I.R. No. 7 Option Removed from Consideration

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## OVERPASS AT ROBINSON ROAD

Robinson Road is not an appropriate connection to carry high volumes of traffic that need to cross the highway to make left turns



# Crystal Waters to Coldstream

THIS OPTION CAN BE FOUND IN THE CONSULTATION COMPANION PAGE 33

- ?

What is this option trying to achieve?

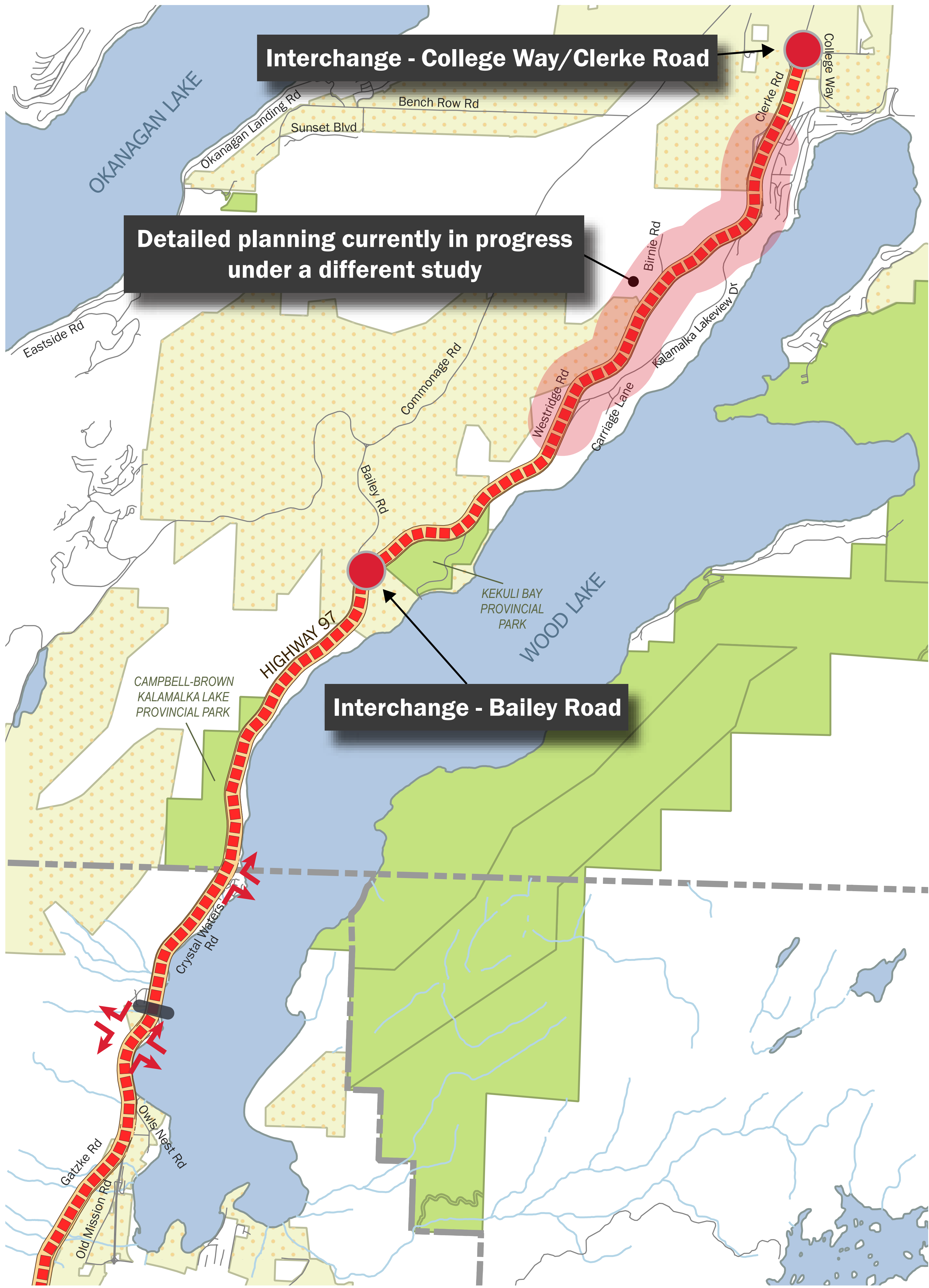
•Improve safety

by reducing collisions through this area
- ?

How would it do this?

•Removing all left turns to and from the highway

over the long term and replacing them with safer right turn movements and overpasses/underpasses



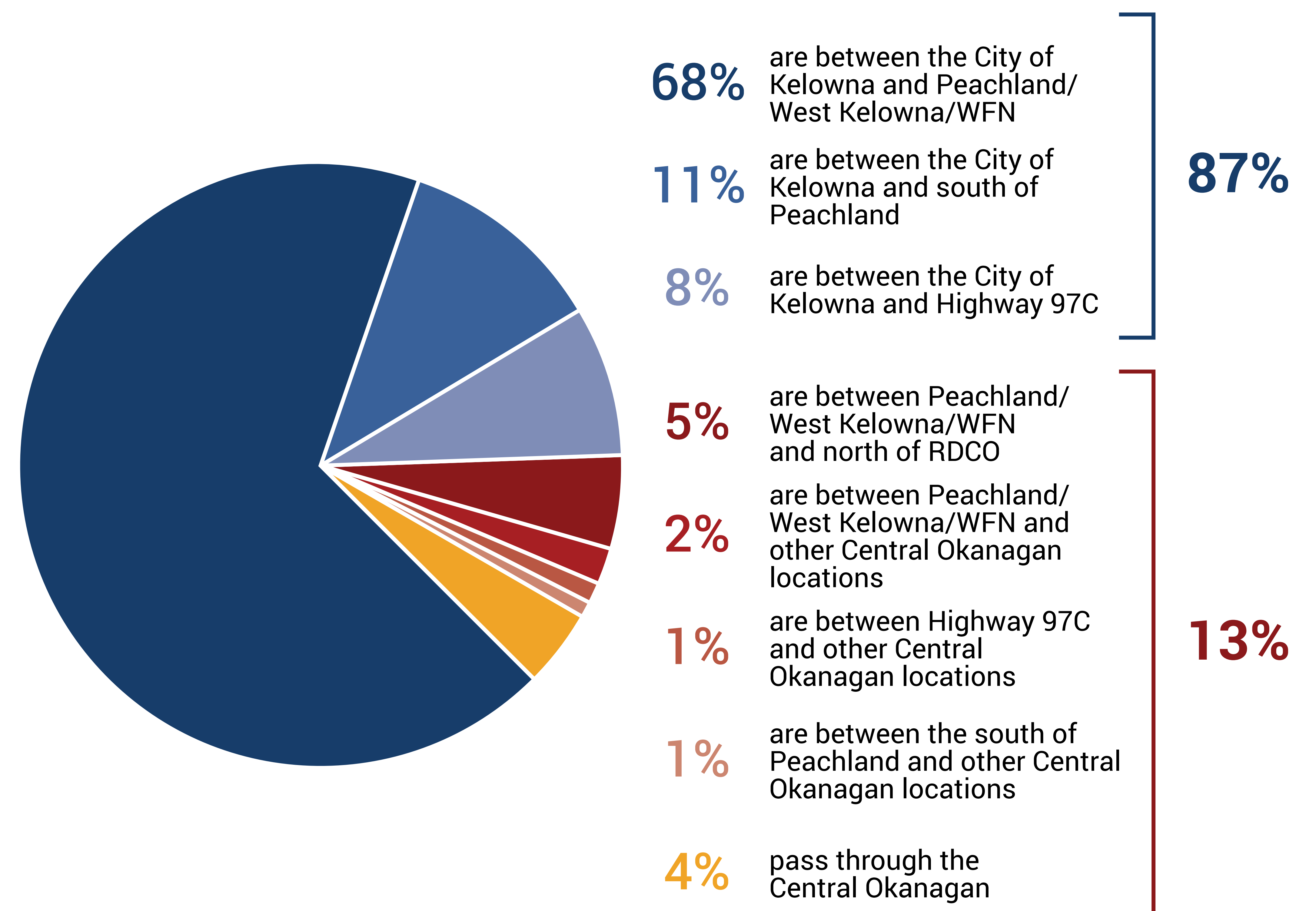
Crystal Waters to Coldstream



# Exploring Second Crossing Options

Where does traffic on the W.R. Bennett Bridge come from?

- Congestion on the corridor is mainly from local/regional traffic
- Only 1/3 of vehicles entering the Central Okanagan from outside the area **actually cross the W.R. Bennett Bridge**
- Only 4% of bridge traffic is the result of **vehicles just passing through** the Central Okanagan





# Exploring Second Crossing Options

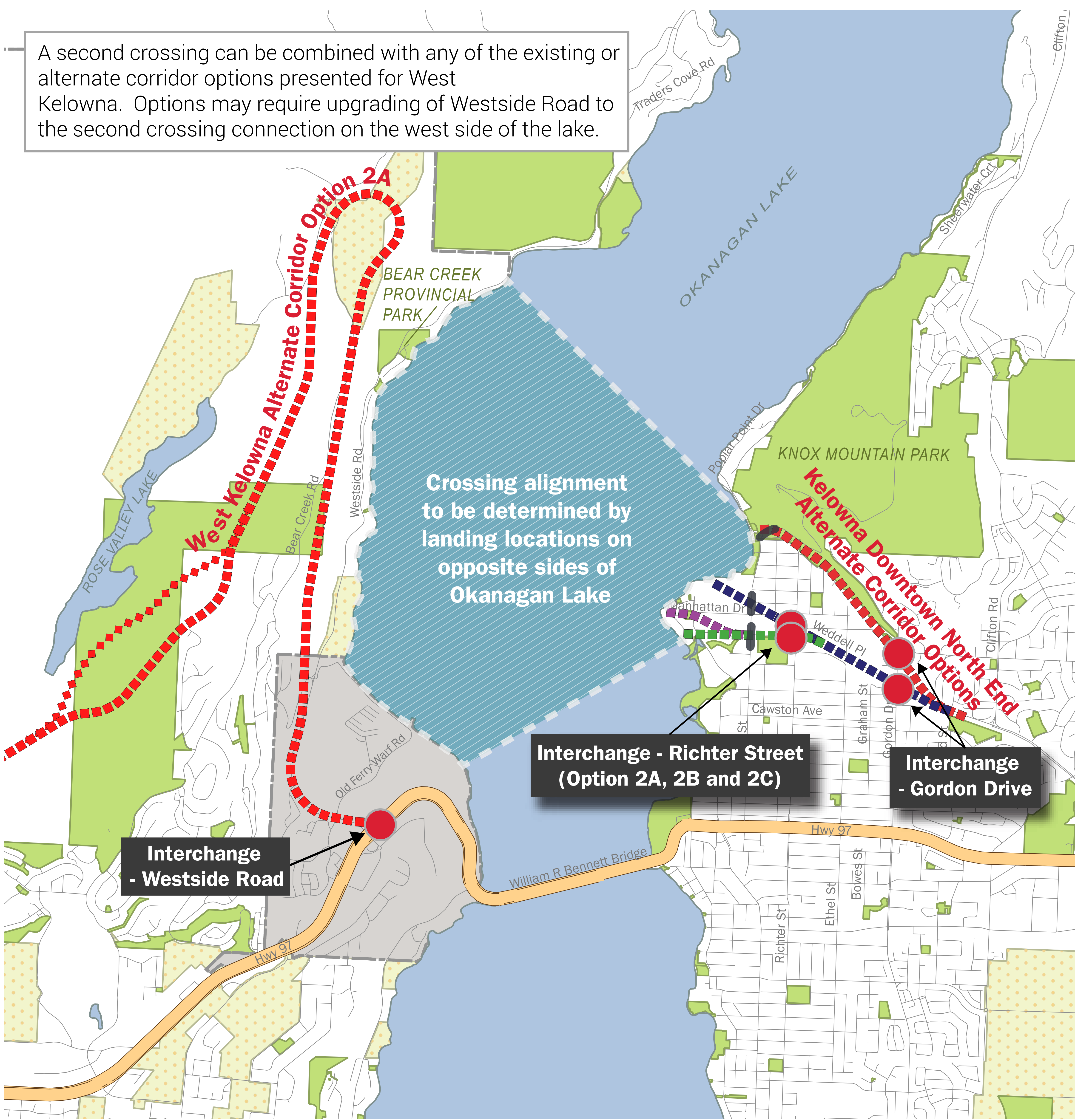
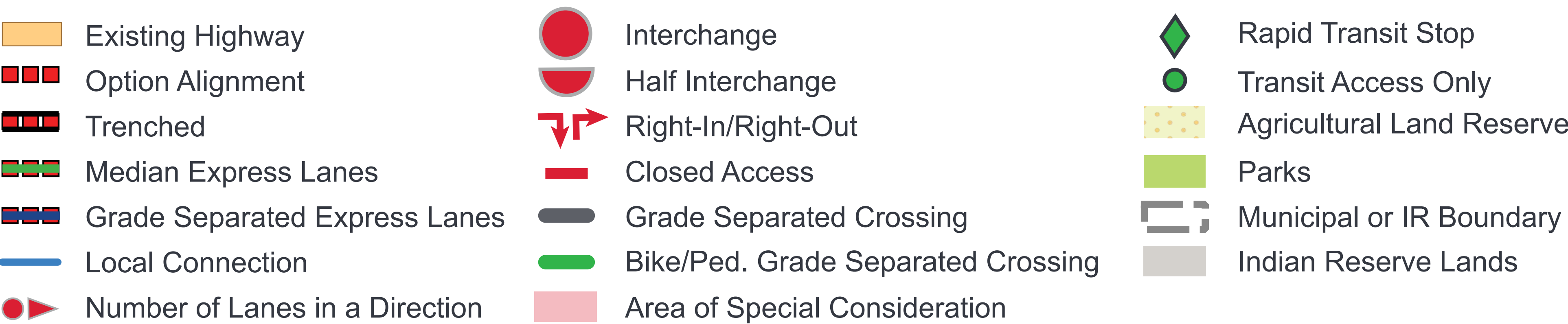
SEE THE CONSULTATION COMPANION PAGES 34 & 35

## A Reduced Study Area for a Second Crossing

Based on the work completed to date in the study, the area for a second crossing location has been narrowed to:

- West Side** – south of Old Ferry Wharf Road to south of Bear Creek Provincial Park
- East Side** - south of Poplar Point to south of Manhattan Point
- Existing Location** - expansion of capacity

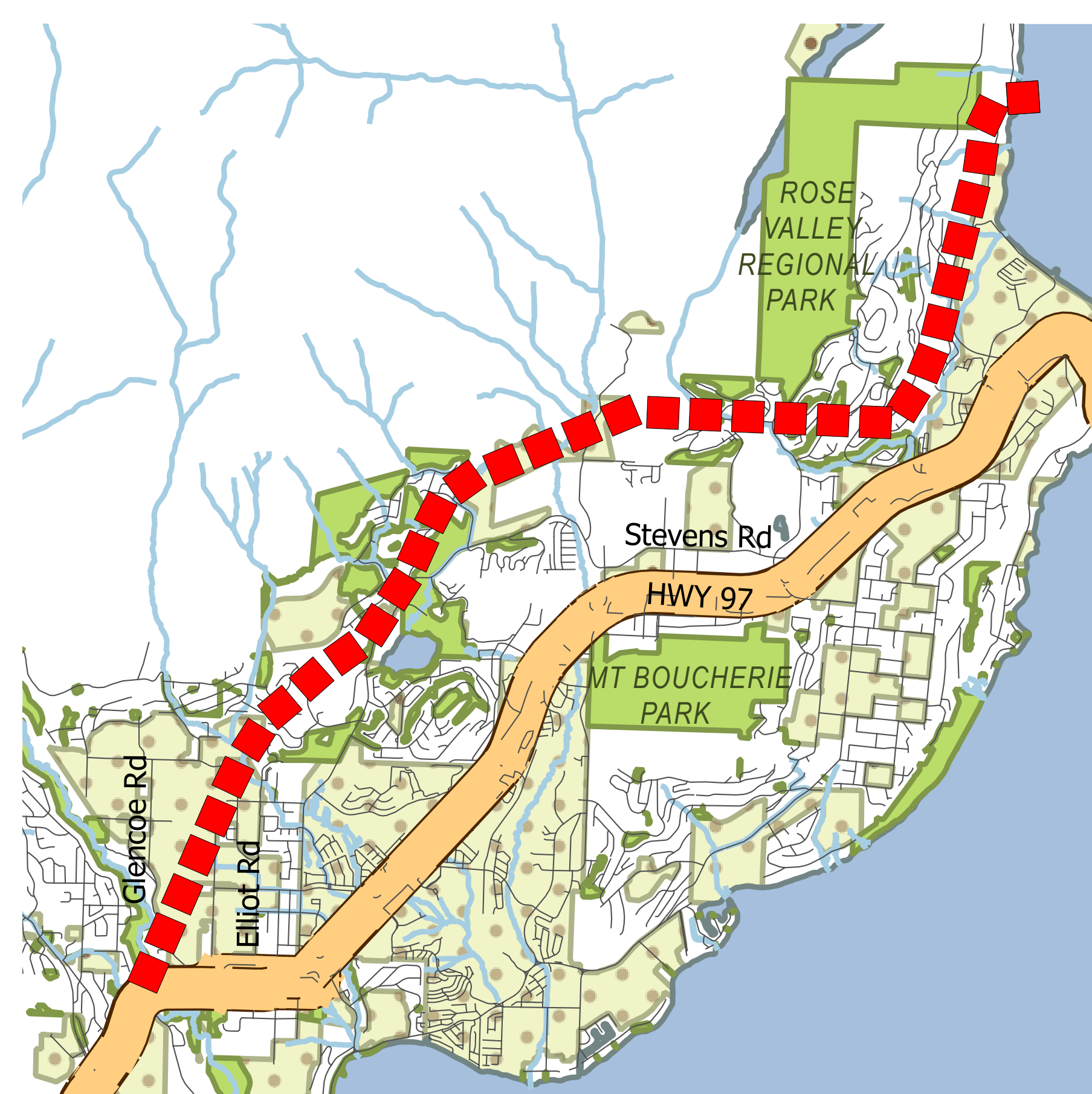
Specific crossing locations will be examined through the next stage of the Central Okanagan Planning Study.



Second Crossing Options

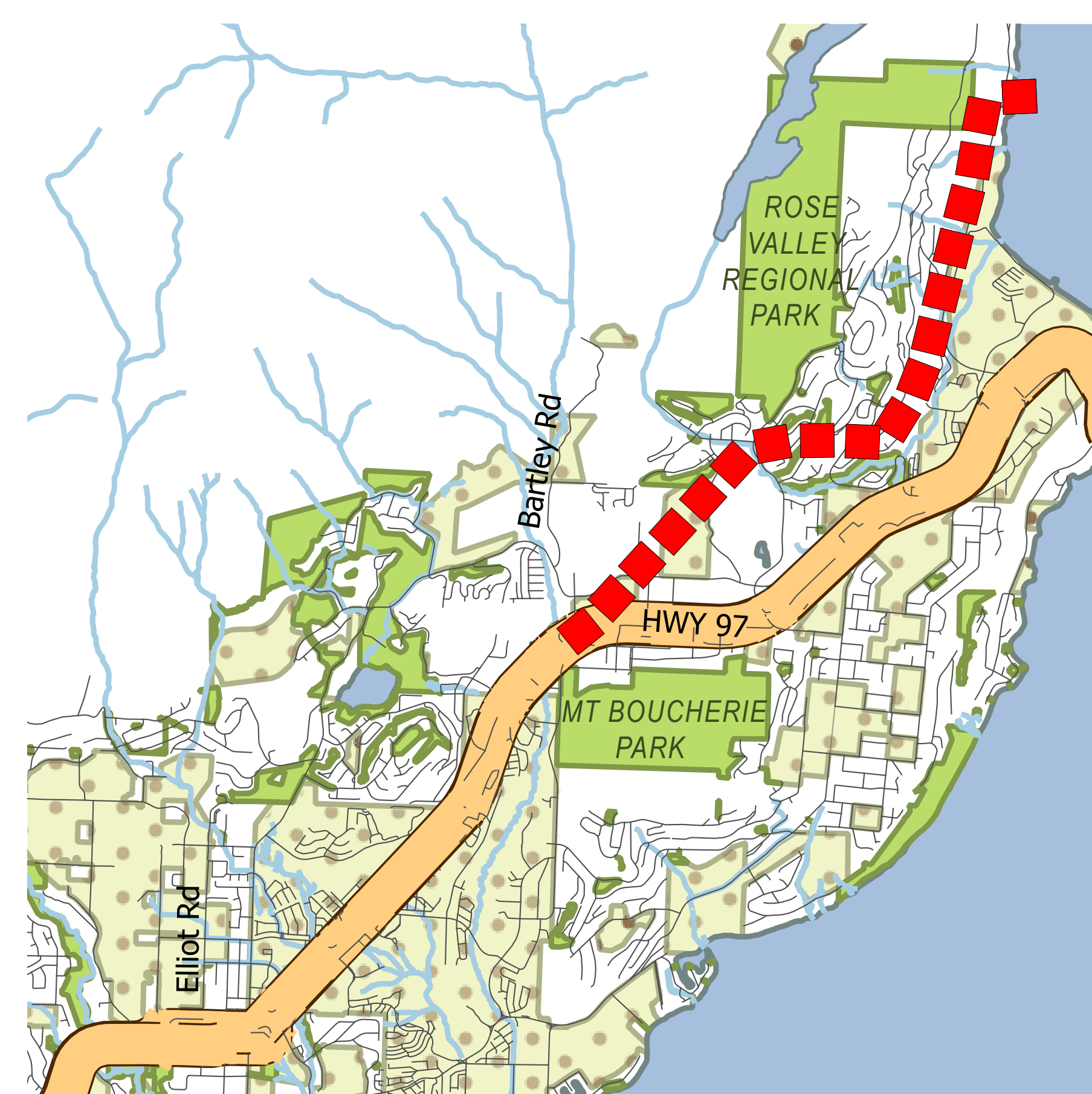


# Second Crossing Options Removed From Consideration



## WEST KELOWNA HISTORICAL ALTERNATE CORRIDOR WESTSIDE ROAD TO GLENROSA ROAD

Passes through areas that  
are now fully developed  
neighbourhoods



## WEST KELOWNA HISTORICAL ALTERNATE CORRIDOR WESTSIDE ROAD TO BARTLEY ROAD

Passes through areas that  
are now fully developed  
neighbourhoods



## WEST KELOWNA ALTERNATE CORRIDOR SOUTH CROSSING

Very long crossing and would  
attract negligible traffic from  
the existing bridge



## NORTH CROSSING

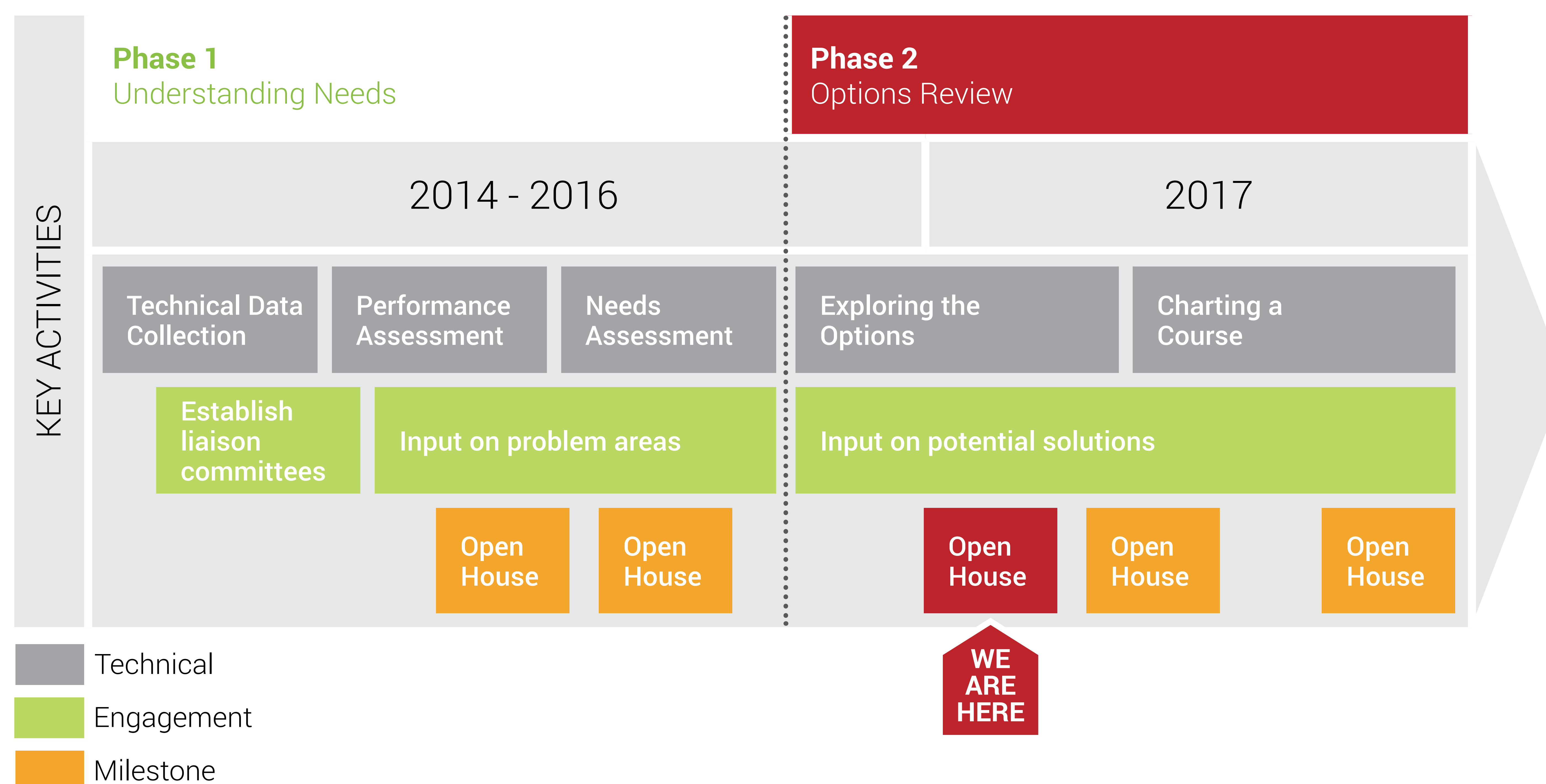
Would not provide substantive  
relief to existing bridge/corridor  
and has an effect on Westside  
Road and McKinley Landing



# Next Steps

The options for Highway 97 through the Central Okanagan will **now be evaluated from a number of perspectives** to better understand how the options compare to each other.

Once this is complete, the study team will **present the evaluation results to the public for input.**





# We Want To Hear From You!

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Provide your input by:

- Speaking with a member of the project team
- Filling out a comment form (drop off here or send by mail, fax or email)
- Visit us online at: <http://engage.gov.bc.ca/okanagansecondcrossing>



To sign up for project updates or to contact a member of the project team, please email: [okanagansecondcrossing@gov.bc.ca](mailto:okanagansecondcrossing@gov.bc.ca)