

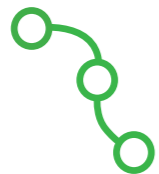
1

LAMBTON QUAY Proposed to Exclude

APPROACH


KEY FEATURES

DWELL / BUS DELAY
Accessibility




BUS STOPS
Distributed
Accessed via kerb build-out

INTERSECTIONS
Signal Optimisation




SIDE ROADS
Open with right turn ban

CONGESTION
Segregation



PMV
Included, loop circulation

PEDESTRIAN
Utility / Movement



CROSSING
Signalised / controlled

EXISTING SECTION



25m wide

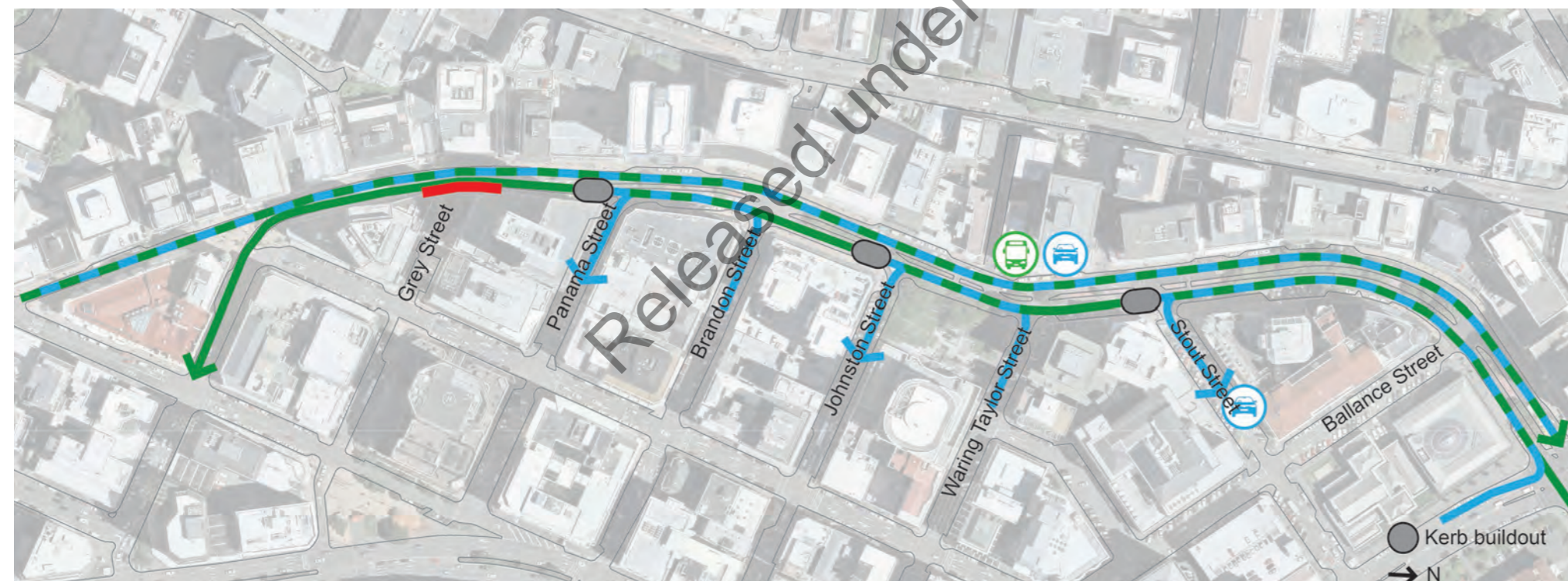
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
L 1. Improve bus travel time + reliability	L 1. Improve cycling level of service
M 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
L 3. Reduce pedestrian injury from crashes	N/A 3. Flexibility to adapt as network evolves
L 4. Increase pedestrian capacity	M 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
L 5. Improve place quality	

PLAN



FURTHER INFORMATION

- Closely spaced stops (in order of 200m spacing) aligned to key side streets and destinations
- Specific stops relocated or removed to mitigate observed conflicts with intersections
- Introduce right turn bans into secondary side streets to reduce conflicts
- Adjust signal phasing along Lambton Quay to provide additional green time on approach.
- Coordinate pedestrian signals with buses, to provide green time extension or red hold.
- Selective removal of car parks and loading zone at key delay points
- Construction of curb outstands to provide access to central bus lane
- Utilize curb outstands to direct private motor vehicles into circulation loops along side streets with general traffic banned between some side streets
- Conversion of angled car parks to extended 'forward in, forward out' parallel car parks
- Extension of pedestrian pavement area where car parks are redesigned
- Widen pedestrian crossings
- Removal of car parks or loading zones at key pedestrian pinch points and widen the footway.
- Realign pedestrian crossings with key desire lines
- Introduce zebra crossings on all side roads

2

LAMBTON QUAY Proposed to Include

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Accessibility

BUS STOPS
Distributed

INTERSECTIONS
Rationalisation

SIDE ROADS
Closed

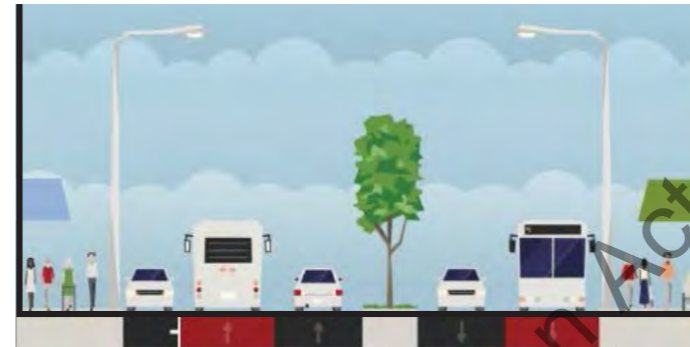
CONGESTION
Exclusivity

PMV
Removed, exclusive bus operation

PEDESTRIAN
Utility / Movement

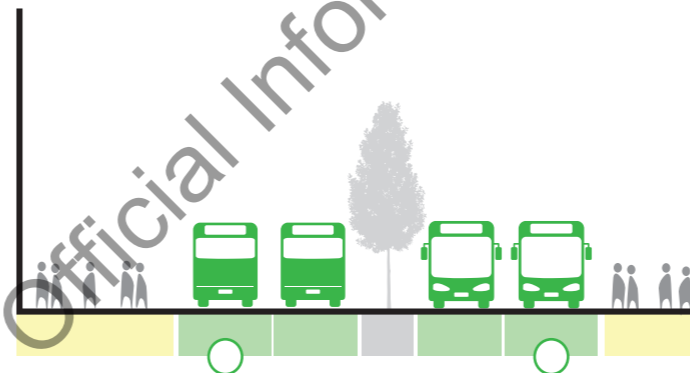
CROSSING
Signalised / controlled

EXISTING SECTION



25m wide

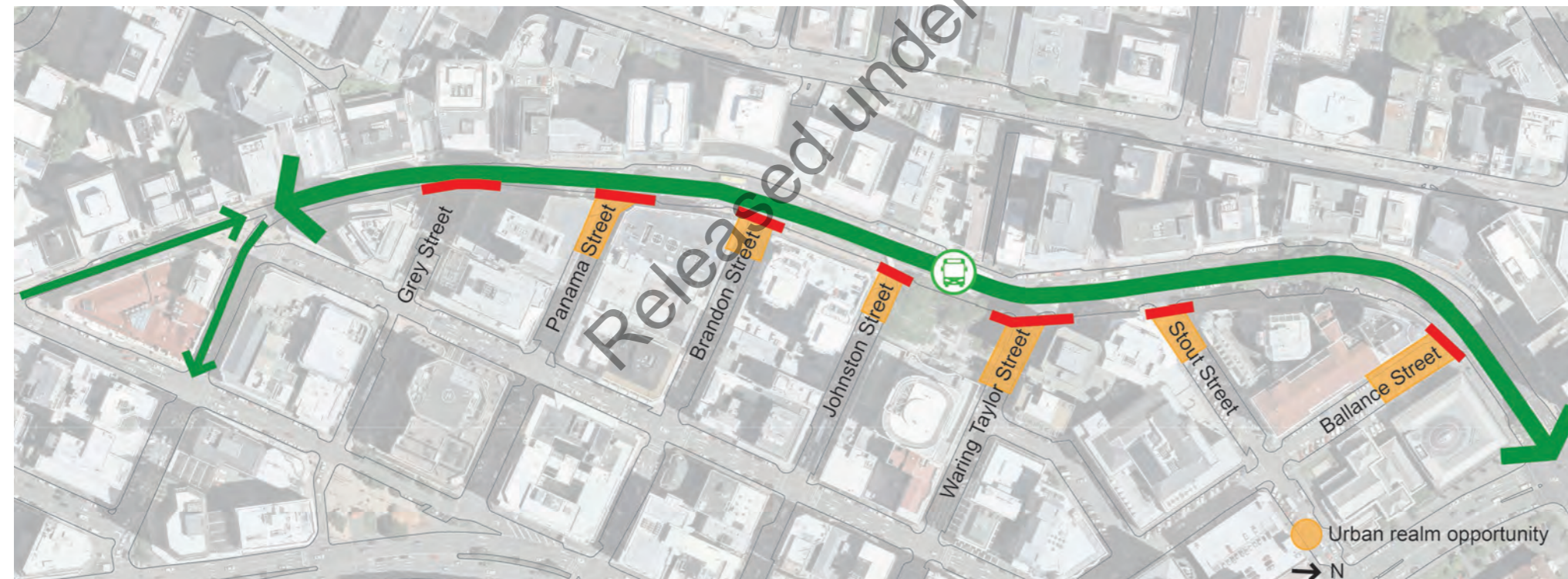
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
H 1. Improve bus travel time + reliability	M 1. Improve cycling level of service
H 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
H 3. Reduce pedestrian injury from crashes	N/A 3. Flexibility to adapt as network evolves
M 4. Increase pedestrian capacity	M 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
M 5. Improve place quality	

PLAN



FURTHER INFORMATION

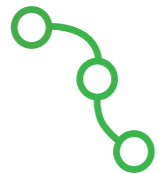


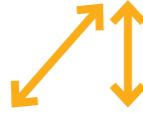
- Closely spaced stops (in order of 200m spacing) aligned to key side streets and destinations
- Stops relocated to new Lambton Quay street frontage made available by side road closures
- Closure of all secondary side roads along Lambton Quay and removal of signal controls
- All private motor vehicles prohibited from using Lambton Quay
- All parking and loading zones removed.
- Four lane cross section maintained, with reduced lane widths and lanes designated as Bus Only
- Commercial vehicle access limited to out of hours access only
- Curb line and footway extended across all side roads
- Pedestrian crossing points widened and aligned with desire lines.
- Extension of pedestrian footway into space liberated by removal of parking and loading zones
- Bus stops repositioned to minimise obstruction to pedestrian movements along Lambton Quay.

3

LAMBTON QUAY Proposed to Include

APPROACH

KEY FEATURES

DWELL / BUS DELAY Accessibility	 BUS STOPS Distributed
INTERSECTIONS Rationalisation	 SIDE ROADS Closed
CONGESTION Exclusivity	 PMV Removed, exclusive bus operation
PEDESTRIAN Urban Realm	 CROSSING Uncontrolled, following desirelines

EXISTING SECTION



25m wide

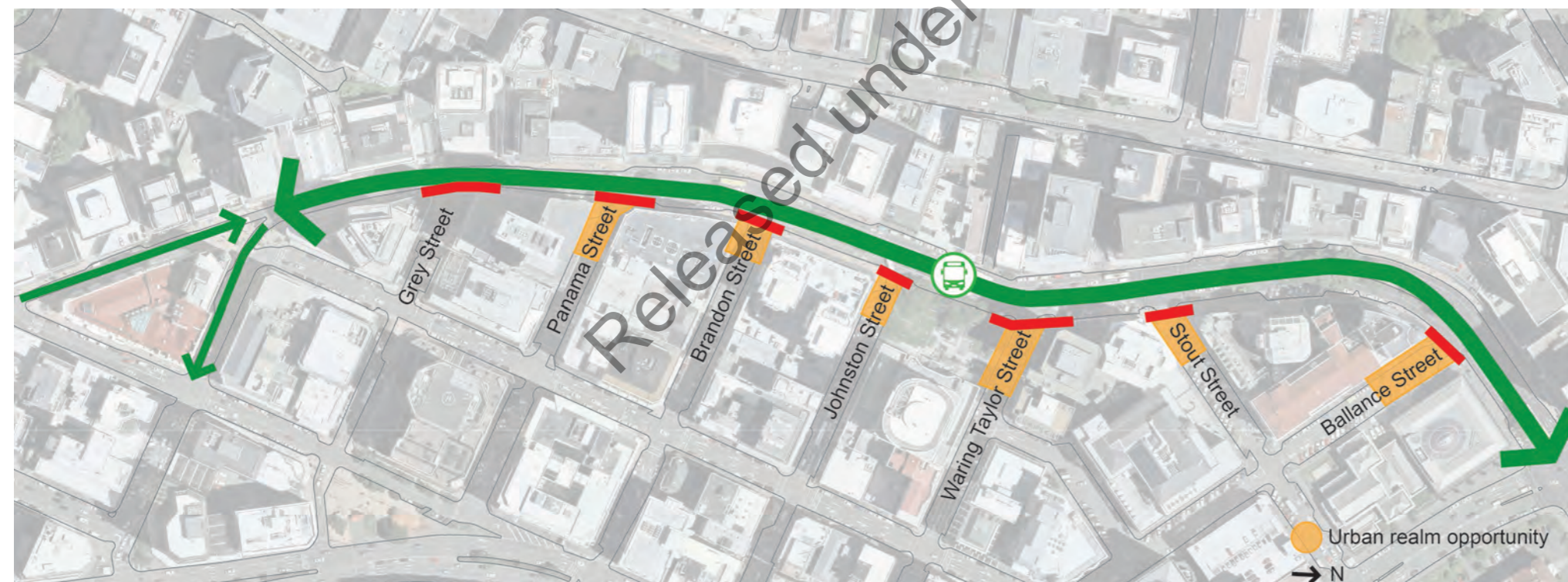
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	H	1. Improve bus travel time + reliability
	H	2. Improve bus user comfort + convenience
	H	3. Reduce pedestrian injury from crashes
	H	4. Increase pedestrian capacity
	H	5. Improve place quality
CRITICAL SUCCESS FACTORS	H	1. Improve cycling level of service
	N-	2. Resilience to network disruptions
	N/A	3. Flexibility to adapt as network evolves
	L	4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods

PLAN



FURTHER INFORMATION

- Closely spaced stops (in order of 200m spacing) aligned to key side streets and destinations
- Stops relocated to new Lambton Quay street frontage made available by side road closures
- Closure of all secondary side roads along Lambton Quay and removal of signal controls
- All private motor vehicles prohibited from using Lambton Quay
- All parking and loading zones removed.
- Cross section reduced to two lanes, with bus stops indented into the pedestrian footway.
- Commercial vehicle access limited to out of hours access only, with roll over curbs providing opportunity to park on expanded footway.
- All side roads converted to dead end shared zones
- Curb lines extended across side roads and pedestrian areas expanded to create pedestrian activity areas along the corridor (reallocating traffic lanes to pedestrians)
- Urban realm activity areas (mini parks) created at space created by side road closures
- Urban realm and expanded pedestrian footways intended to allow pedestrians to filter across Lambton Quay without formal signalised controls.

4

LAMBTON QUAY Proposed to Exclude

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Capacity

BUS STOPS
Superstop

INTERSECTIONS
Signal Optimisation

SIDE ROADS
Open with right turn ban

CONGESTION
Segregation

PMV
Included

PEDESTRIAN
Utility / Movement

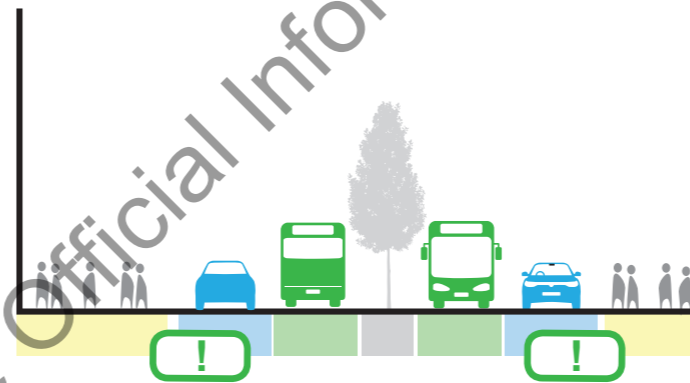
CROSSING
Signalised / controlled

EXISTING SECTION



25m wide

POTENTIAL TYPICAL SECTION

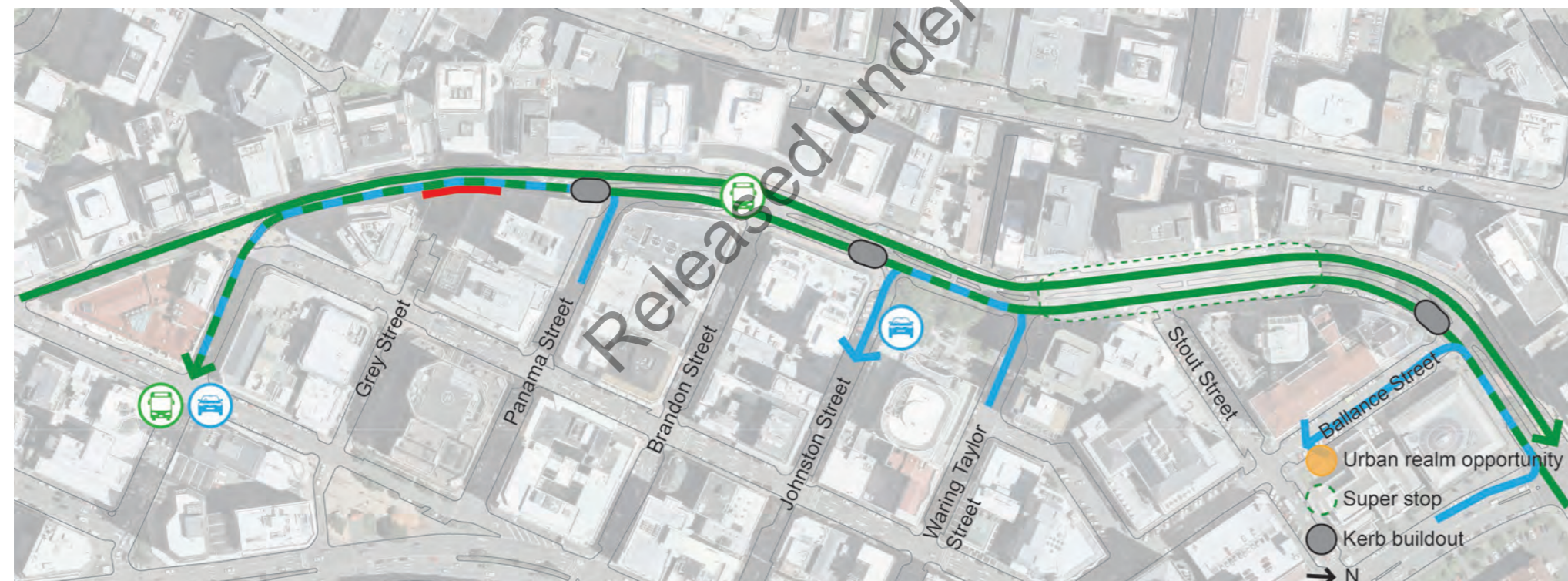


EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
N-	L
M	L
N-	N/A
L	H
N-	

1. Improve bus travel time + reliability
2. Improve bus user comfort + convenience
3. Reduce pedestrian injury from crashes
4. Increase pedestrian capacity
5. Improve place quality
1. Improve cycling level of service
2. Resilience to network disruptions
3. Flexibility to adapt as network evolves
4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods

PLAN



FURTHER INFORMATION

- All stops removed on Lambton Quay and replaced by a long frontage high capacity stop on the northbound and southbound carriageway
- High capacity stops would have multiple route specific flags to allow simultaneous boarding
- All buses attending Lambton Quay would utilise the consolidated high capacity stop.
- Introduce right turn bans into secondary side streets to reduce conflicts
- Adjust signal phasing along Lambton Quay to provide additional green time on bus approaches.
- Coordinate pedestrian signals with buses, to provide green time extension or red hold.
- Selective removal of car parks and loading zone at key delay points
- Curb outstands used to direct and restrict private motor vehicles from the southbound high capacity stop.
- Conversion of angled car parks to extended 'forward in, forward out' parallel car parks
- Extension of pedestrian pavement area where car parks are redesigned
- Widen pedestrian crossings
- Removal of car parks or loading zones at key pedestrian pinch points and widen the footway.
- Realign pedestrian crossings with key desire lines and introduce zebra crossings on all side roads

5

LAMBTON QUAY Proposed to Include

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Capacity

BUS STOPS
Superstop, location has flexibility

INTERSECTIONS
Rationalisation

SIDE ROADS
Closed

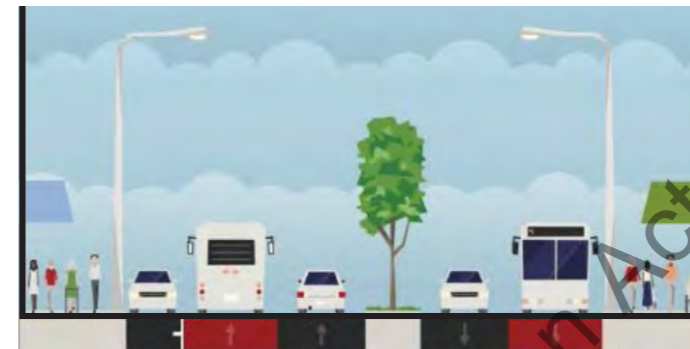
CONGESTION
Exclusivity

PMV
Removed, exclusive bus operation

PEDESTRIAN
Utility / Movement

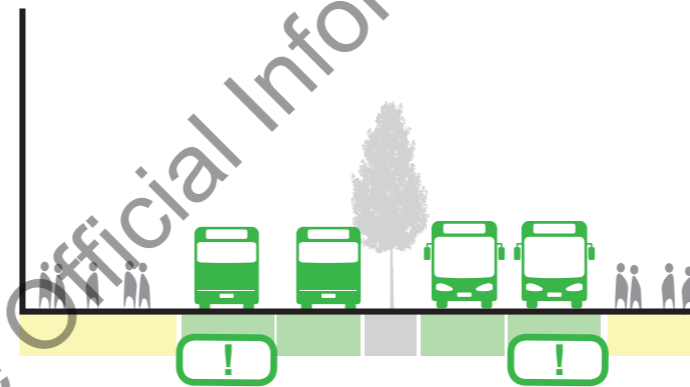
CROSSING
Signalised / controlled

EXISTING SECTION



25m wide

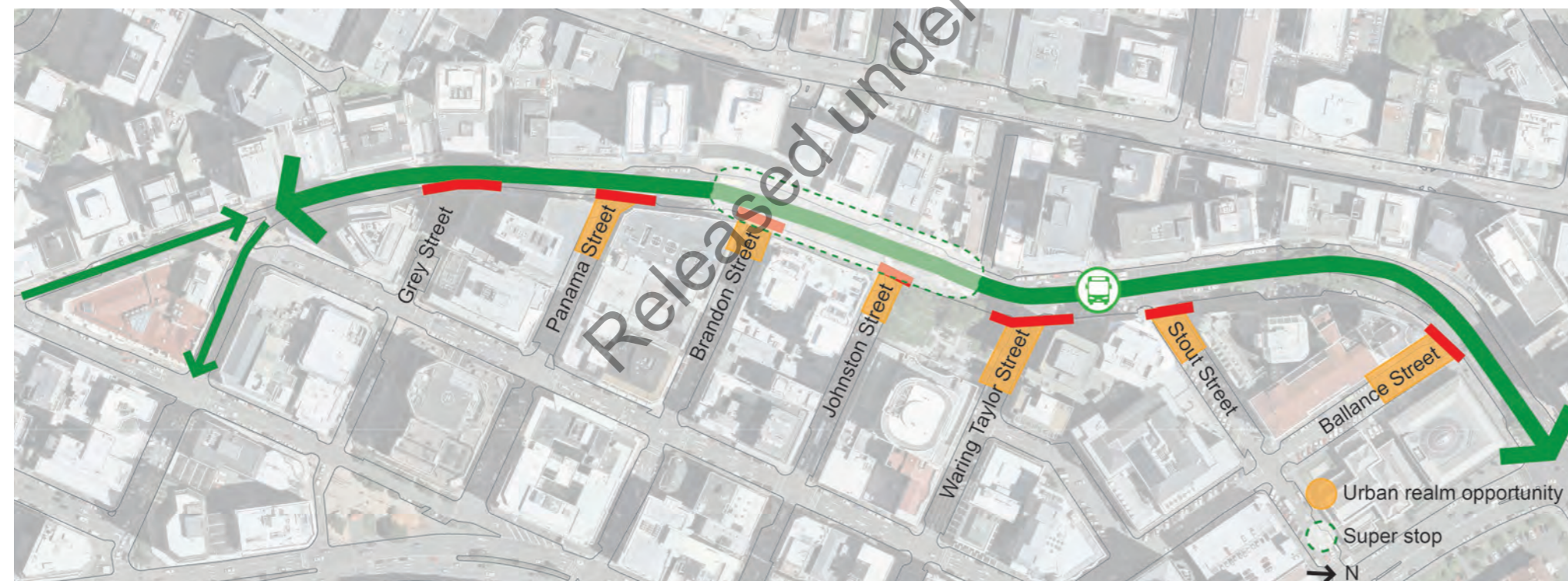
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
H 1. Improve bus travel time + reliability	M 1. Improve cycling level of service
M 2. Improve bus user comfort + convenience	N- 2. Resilience to network disruptions
M 3. Reduce pedestrian injury from crashes	N/A 3. Flexibility to adapt as network evolves
M 4. Increase pedestrian capacity	M 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
L 5. Improve place quality	

PLAN



FURTHER INFORMATION




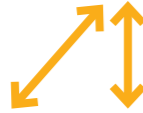
- All stops removed on Lambton Quay and replaced by a long frontage high capacity stop on the northbound and southbound carriageway
- High capacity stops would have multiple route specific flags to allow simultaneous boarding
- All buses attending Lambton Quay would utilise the consolidated high capacity stop.
- Closure of all secondary side roads along Lambton Quay and removal of signal controls
- Side road closures used to create additional Lambton Quay frontage for optimal positioning of the southbound high capacity stop.
- All private motor vehicles prohibited from using Lambton Quay
- All parking and loading zones removed.
- Four lane cross section maintained, with reduced lane widths and lanes designated as Bus Only
- Commercial vehicle access limited to out of hours access only
- Curb line and footway extended across all side roads
- Pedestrian crossing points widened and aligned with desire lines.
- Extension of pedestrian footway into space liberated by removal of parking and loading zones

LAMBTON QUAY

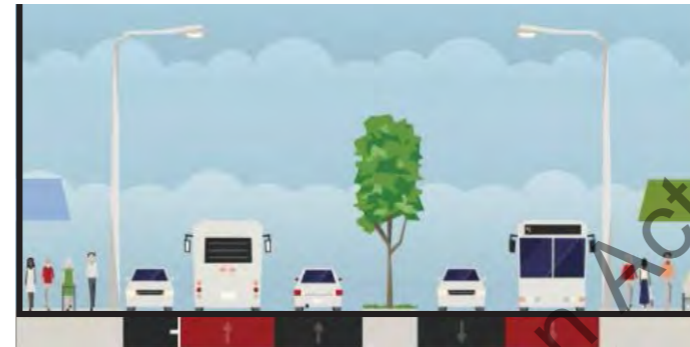
Proposed to Exclude

APPROACH

KEY FEATURES

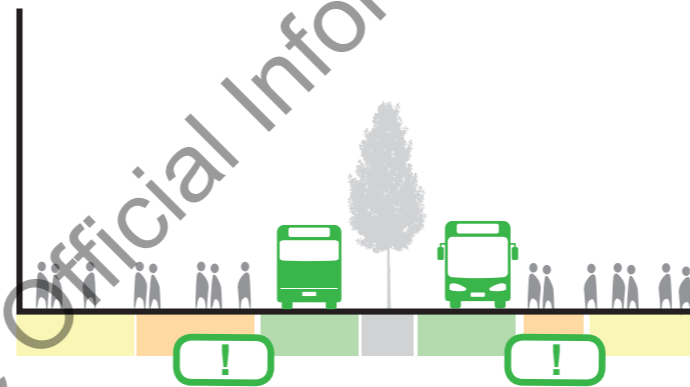
DWELL / BUS DELAY Capacity	 <p>BUS STOPS Superstop</p>
INTERSECTIONS Rationalisation	 <p>SIDE ROADS Closed</p>
CONGESTION Exclusivity	 <p>PMV Removed, exclusive bus operation</p>
PEDESTRIAN Urban Realm	 <p>CROSSING Uncontrolled, following desirelines</p>

EXISTING SECTION



25m wide

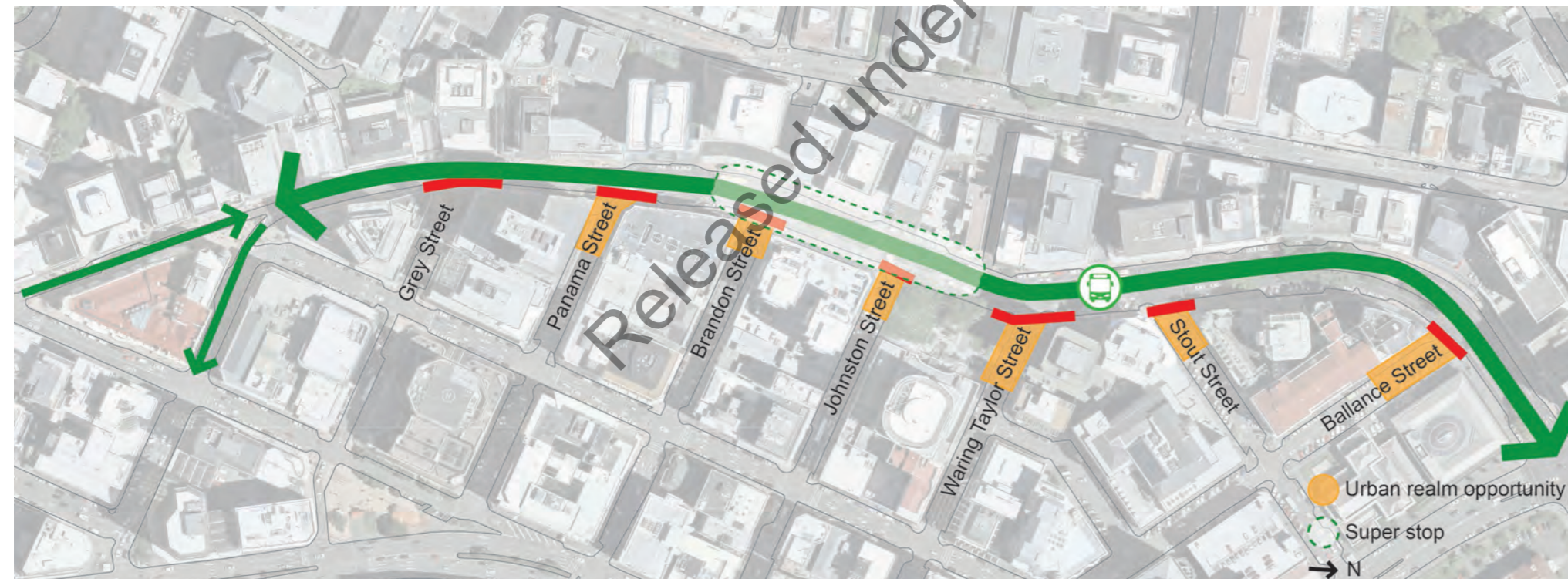
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	H	1. Improve bus travel time + reliability
	M	2. Improve bus user comfort + convenience
	M	3. Reduce pedestrian injury from crashes
	M	4. Increase pedestrian capacity
	M	5. Improve place quality
CRITICAL SUCCESS FACTORS	H	1. Improve cycling level of service
	N-	2. Resilience to network disruptions
	N/A	3. Flexibility to adapt as network evolves
	M	4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods

PLAN



FURTHER INFORMATION

- All stops removed on Lambton Quay and replaced by a long frontage high capacity stop on the northbound and southbound carriageway
- High capacity stops would have multiple, route-specific flags to allow simultaneous boarding
- All buses attending Lambton Quay would utilise the high capacity stop.
- Closure of all secondary side roads along Lambton Quay and removal of signal controls
- Side road closures used to create additional Lambton Quay frontage for optimal positioning of the southbound high capacity stop.
- All private motor vehicles prohibited from using Lambton Quay
- All parking and loading zones removed.
- Four lane cross section maintained, with reduced lane widths and lanes designated as Bus Only
- Commercial vehicle access limited to out of hours access only
- All secondary side roads converted to dead end shared zones
- Curb lines extended and pedestrian areas expanded to create pedestrian activity areas along the corridor (utilizing lane reduction)
- Urban realm and expanded pedestrian footways intended to allow pedestrians to filter across Lambton Quay without formal signalised controls.
- Pedestrian crossing will be prohibited adjacent high capacity stops

A

WILLIS STREET Proposed to Exclude

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Accessibility

BUS STOPS
Distributed

INTERSECTIONS
Signal Optimisation

SIDE ROADS
Open, Mercer Street single lane

CONGESTION
Segregation

PMV
Included

PEDESTRIAN
Utility / Movement

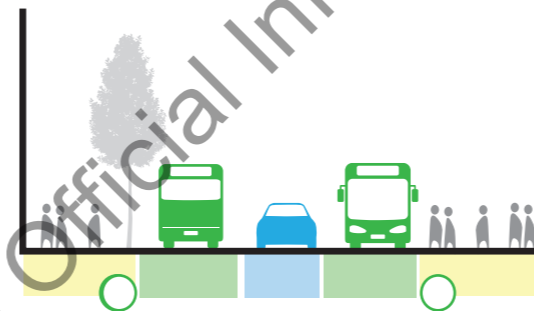
CROSSING
Signalised / controlled

EXISTING SECTION



18m wide

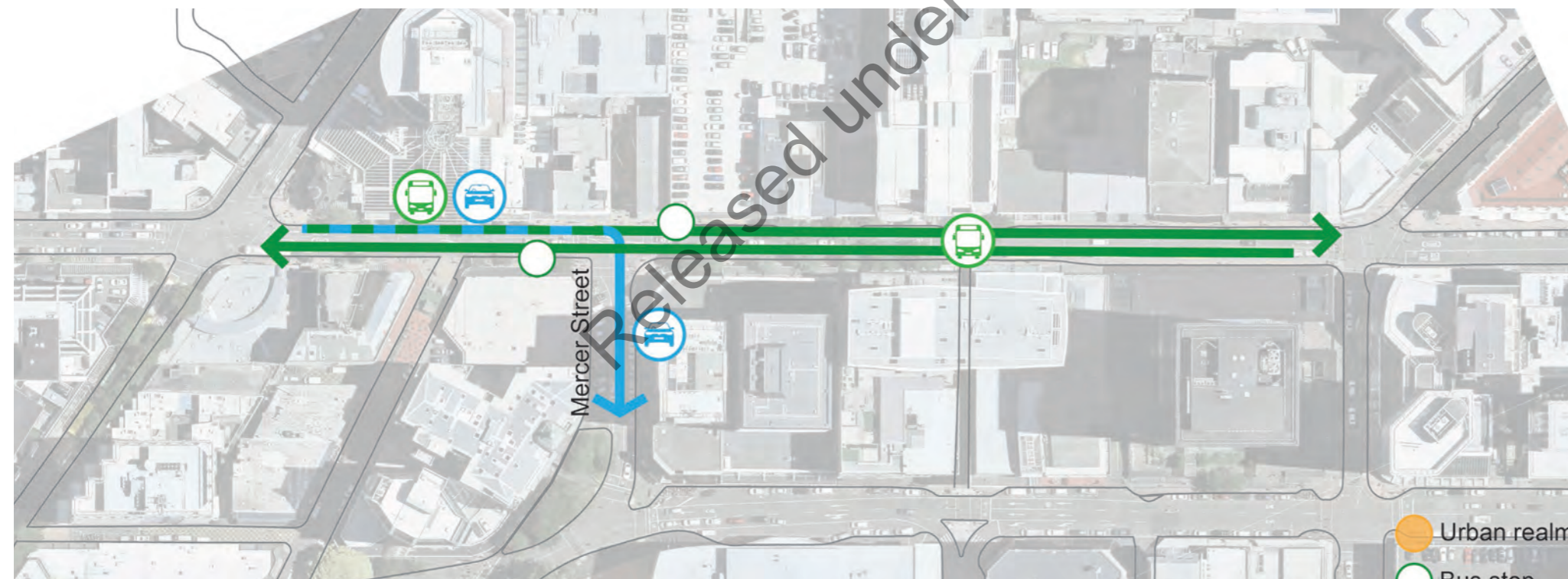
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
L 1. Improve bus travel time + reliability	L 1. Improve cycling level of service
L 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
L 3. Reduce pedestrian injury from crashes	N/A 3. Flexibility to adapt as network evolves
L 4. Increase pedestrian capacity	H 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
L 5. Improve place quality	

PLAN



FURTHER INFORMATION

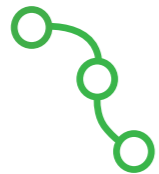



- Maintain a stop pair on Willis Street but relocate the stop pair to Mercer Street (departure side for northbound and southbound services).
- Skip stop operating plan may be required to manage limited capacity of bus stops
- Private motor vehicles limited to right turn only at Mercer Street.
- Signal phasing adjusted at Lambton/Willis and Manners/Wills to provide additional green time to bus approaches.
- Removal of parking and loading from the extent of Willis Street between Manners Street and Lambton Quay.
- Removal of parking and limitations to private motor vehicle movements allows for the creation of a continuous northbound bus only lane, however limitations in available carriageway widths will require in-line stops.
- Limited opportunity to expand pedestrian footway due to carriageway width limitations.

B

WILLIS STREET Proposed to Include

APPROACH

KEY FEATURES

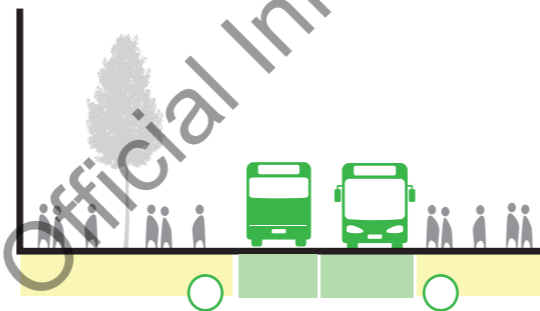
DWELL / BUS DELAY Accessibility	 BUS STOPS Distributed
INTERSECTIONS Rationalisation	 SIDE ROADS Closed
CONGESTION Exclusivity	 PMV Removed, exclusive bus operation
PEDESTRIAN Utility / Movement	 CROSSING Signalised / controlled

EXISTING SECTION



18m wide

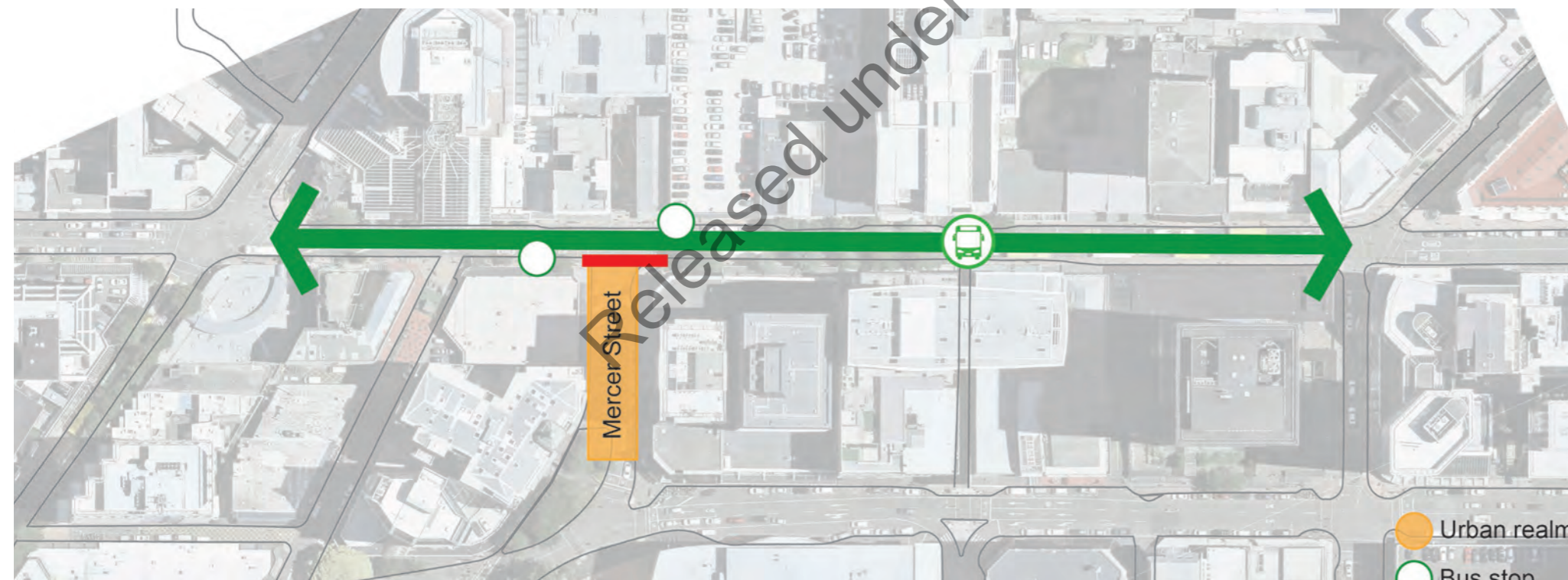
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	M	1. Improve bus travel time + reliability
	M	2. Improve bus user comfort + convenience
	M	3. Reduce pedestrian injury from crashes
	M	4. Increase pedestrian capacity
	M	5. Improve place quality
CRITICAL SUCCESS FACTORS	N-	1. Improve cycling level of service
	L	2. Resilience to network disruptions
	N/A	3. Flexibility to adapt as network evolves
	M	4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods

PLAN



FURTHER INFORMATION

- Maintain a stop pair on Willis Street but relocate the stop pair to Mercer Street
- Skip stop operating plan may be required to manage limited capacity of bus stops
- Private motor vehicles banned from Willis Street between Manners Street and Lambton Quay.
- Parking and loading removed from Willis Street between Manners Street and Lambton Quay.
- Bus stops may be indented due with carriageway reclaimed due to the closure of Mercer Street.
- Signal phasing adjusted at Lambton/Willis and Manners/Wills to provide additional green time to bus approaches.
- Commercial vehicle access limited to out of hours, with mountable curbs allowing parking on footway out of hours.
- Some expansions to pedestrian footway may be possible on the west side of Willis Street where parking and loading has been removed.

C

WILLIS STREET Proposed to Include

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Accessibility

BUS STOPS
Distributed

INTERSECTIONS
Rationalisation

SIDE ROADS
Closed

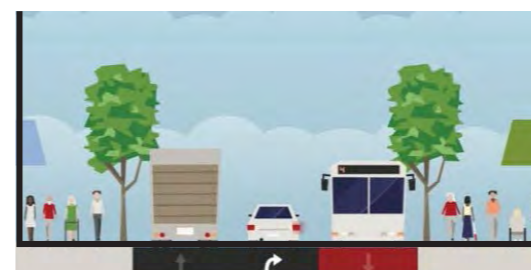
CONGESTION
Segregation

PMV
Included only north-bound

PEDESTRIAN
Utility / Movement

CROSSING
Signalised / controlled

EXISTING SECTION



18m wide

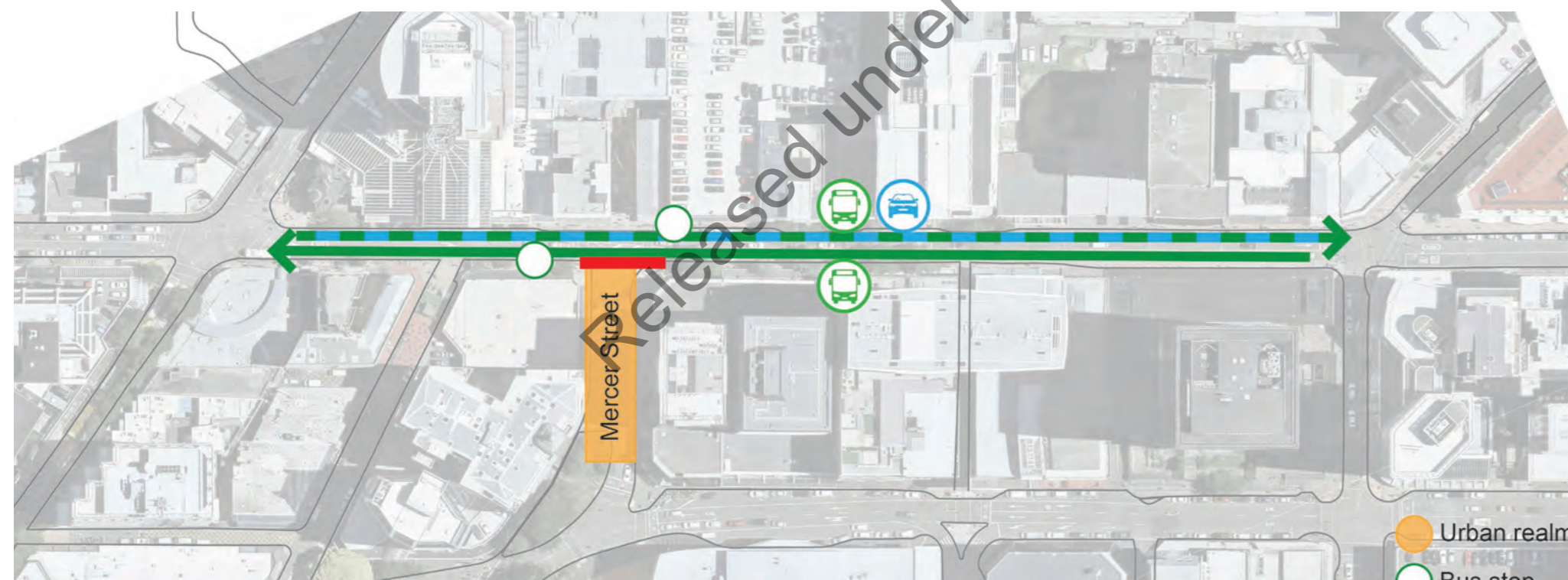
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
L 1. Improve bus travel time + reliability	L 1. Improve cycling level of service
L 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
L 3. Reduce pedestrian injury from crashes	N/A 3. Flexibility to adapt as network evolves
M 4. Increase pedestrian capacity	M 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
M 5. Improve place quality	

PLAN



FURTHER INFORMATION

- Maintain a stop pair on Willis Street but relocate the stop pair to Mercer Street
- Skip stop operating plan may be required to manage limited capacity of bus stops
- Mercer Street closed to traffic.
- Private motor vehicles restricted to northbound movements only in a shared traffic lane.
- Parking and loading removed from Willis Street between Manners Street and Lambton Quay.
- Bus stops may be indented due with carriageway reclaimed due to the closure of Mercer Street.
- Signal phasing adjusted at Lambton/Willis and Manners/Wills to provide additional green time to bus approaches.
- Commercial vehicle access limited to out of hours, with mountable curbs allowing parking on footway out of hours.
- Some expansions to pedestrian footway may be possible on the west side of Willis Street where parking and loading has been removed.
- Some mitigation of potential merging conflicts between northbound buses and general traffic may be possible, if Lambton Quay is limited to Bus Only operations – left turn lane into Lambton Quay may be designated as Bus Only.

D

WILLIS STREET Proposed to Include

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Capacity

BUS STOPS
Distributed

INTERSECTIONS
Rationalisation

SIDE ROADS
Closed

CONGESTION
Exclusivity

PMV
Removed, exclusive bus operation

PEDESTRIAN
Utility / Movement

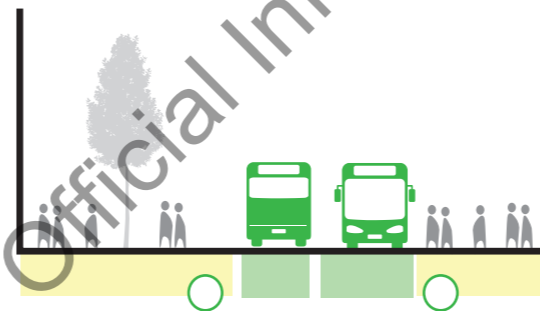
CROSSING
Signalised / controlled

EXISTING SECTION



18m wide

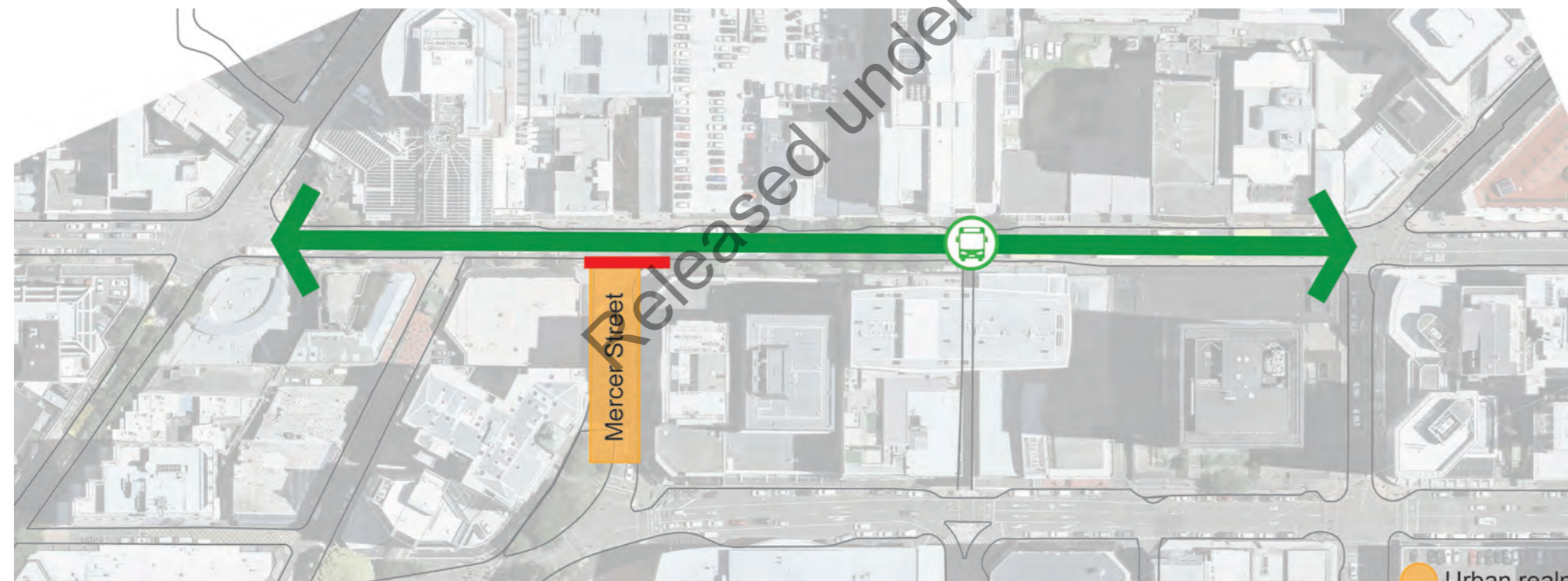
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
H 1. Improve bus travel time + reliability	N- 1. Improve cycling level of service
N- 2. Improve bus user comfort + convenience	N- 2. Resilience to network disruptions
M 3. Reduce pedestrian injury from crashes	N/A 3. Flexibility to adapt as network evolves
H 4. Increase pedestrian capacity	M 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
M 5. Improve place quality	

PLAN



FURTHER INFORMATION





- All stops removed from Willis Street.
- This may significantly reduce catchments if stops are also removed from Manners Street.
- Mercer Street closed to traffic.
- Private motor vehicles banned from Willis Street between Manners Street and Lambton Quay.
- Parking and loading removed from Willis Street between Manners Street and Lambton Quay.
- Bus stops may be indented due with carriageway reclaimed due to the closure of Mercer Street.
- Signal phasing adjusted at Lambton/Willis and Manners/Wills to provide additional green time to bus approaches.
- Commercial vehicle access limited to out of hours, with mountable curbs allowing parking on footway out of hours.
- Significant expansions to pedestrian footway due to removal of Mercer St crossing and reduction in parking and loading.

E WILLIS STREET

Proposed to Exclude

APPROACH

KEY FEATURES

DWELL / BUS DELAY Capacity	 BUS STOPS Removed
INTERSECTIONS Signal Optimisation	 SIDE ROADS Open, Mercer Street single lane
CONGESTION Segregation	 PMV Included only in southern section
PEDESTRIAN Utility / Movement	 CROSSING Signalised / controlled

EXISTING SECTION



18m wide

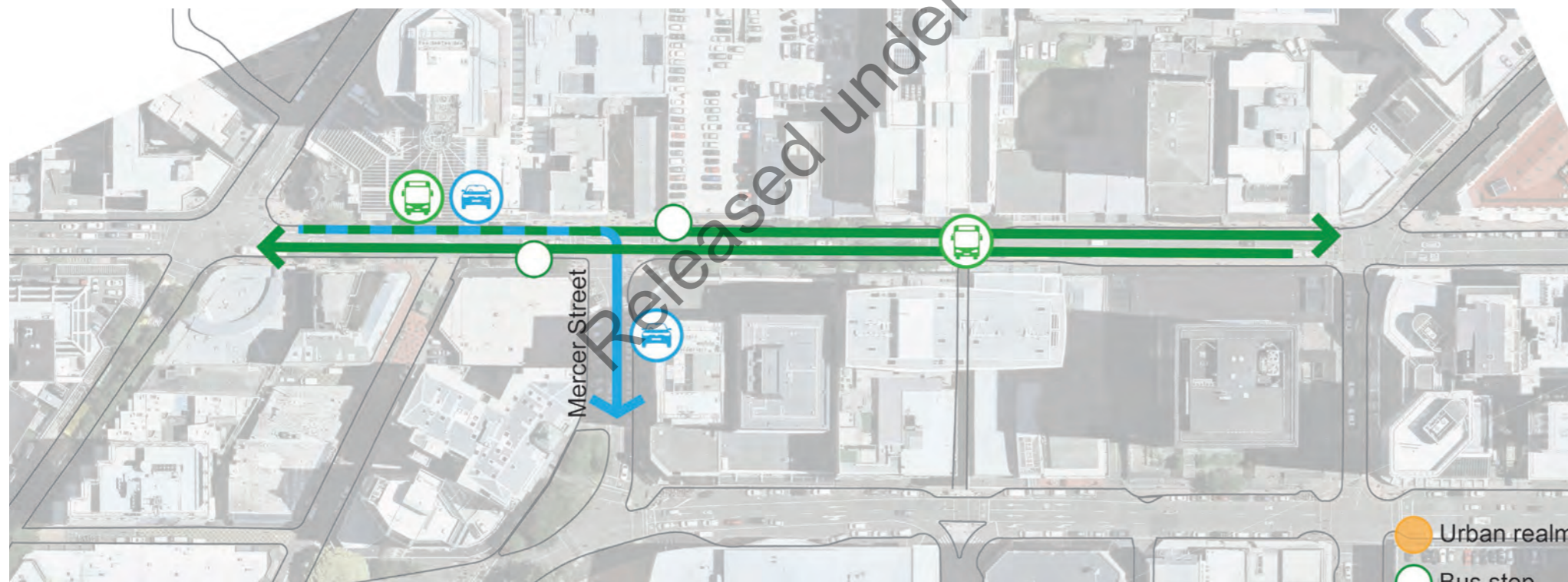
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES		
	M	1. Improve bus travel time + reliability
	N-	2. Improve bus user comfort + convenience
	L	3. Reduce pedestrian injury from crashes
	L	4. Increase pedestrian capacity
	L	5. Improve place quality
CRITICAL SUCCESS FACTORS		
	L	1. Improve cycling level of service
	L	2. Resilience to network disruptions
	N/A	3. Flexibility to adapt as network evolves
	M	4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods

PLAN



FURTHER INFORMATION

- All stops removed from Willis Street.
- This may significantly reduce catchments if stops are also removed from Manners Street.
- Private motor vehicles limited to right turn only at Mercer Street.
- Signal phasing adjusted at Lambton/Willis and Manners/Wills to provide additional green time to bus approaches.
- Removal of parking and loading from the extent of Willis Street between Manners Street and Lambton Quay.
- Removal of parking and limitations to private motor vehicle movements allows for the creation of a continuous northbound bus only lane, however limitations in available carriageway widths will require in-line stops.
- Limited opportunity to expand pedestrian footway due to carriageway width limitations.



MANNERS STREET

Proposed to Include

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Accessibility

BUS STOPS
Distributed

INTERSECTIONS
Signal Optimisation

SIDE ROADS
Cuba Street pedestrianised

CONGESTION
Exclusivity

PMV
Removed, exclusive bus operation

PEDESTRIAN
Utility / Movement

CROSSING
Signalised / controlled

EXISTING SECTION



17m wide

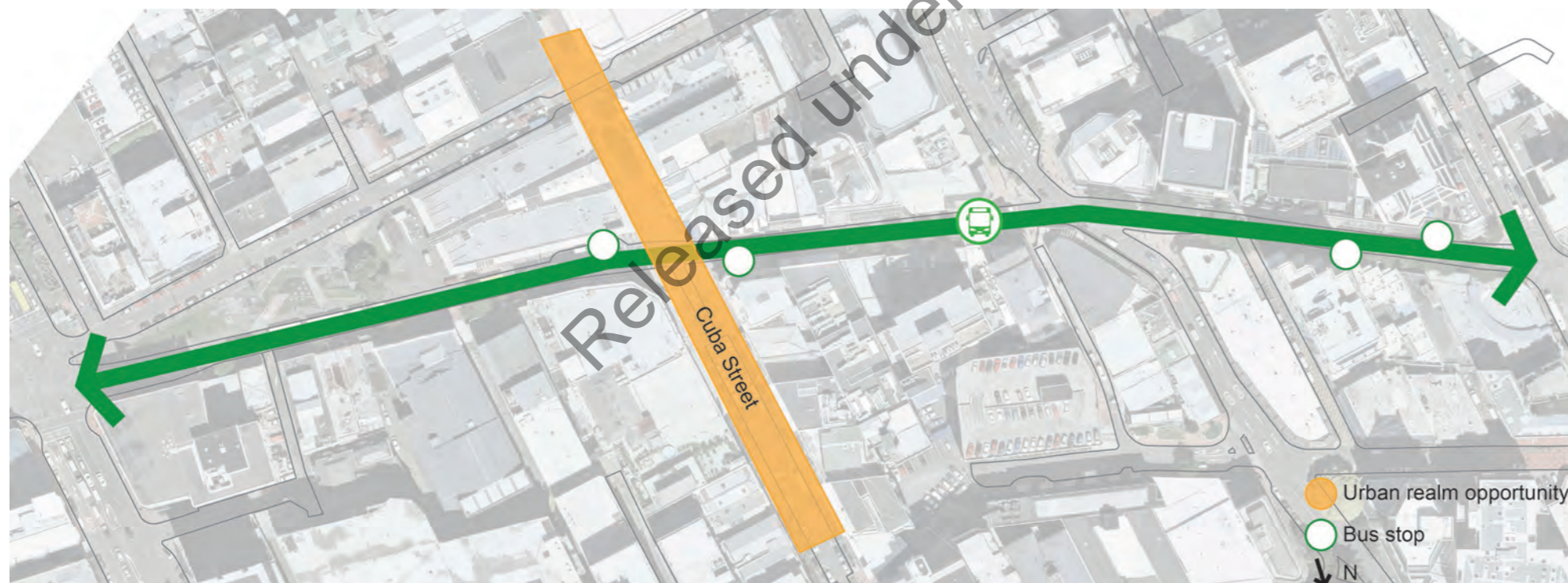
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
L 1. Improve bus travel time + reliability	L 1. Improve cycling level of service
L 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
M 3. Reduce pedestrian injury from crashes	H 3. Flexibility to adapt as network evolves
L 4. Increase pedestrian capacity	H 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
L 5. Improve place quality	

PLAN



FURTHER INFORMATION

- Maintain two stop pairs along Manners St - located near Willis/Manners and Cuba Street, relocated where possible to reduce signal interactions.
- Due to limitations in available carriageway, stops must be retained as in-line stops.
- Provide active signal priority or green time extension for bus approaches Victoria/Manners Intersection
- Provide extended northbound right turn phase at Manners/Willis Street
- Convert Cuba St into pedestrian operated signals.
- Cuba Street shared zone will require a reconfiguration to allow access from Wakefield. Ban all private motor vehicles from Manners Street extending from Taranaki to Willis Street.
- Private motor vehicles banned from Manners Street and all car parks and loading zones removed.
- Commercial vehicle access limited to out of hours.
- Pedestrian pavements may be marginally increased near Cuba Street.
- Footway may be increased at Cuba Street to narrow the crossing, due to the removal of right turns at this location.
- Potential to introduce scramble crossing phase at Victoria St/Manners




MANNERS STREET

Proposed to Include


APPROACH

KEY FEATURES


DWELL / BUS DELAY
Capacity

 **BUS STOPS**
Removed


INTERSECTIONS
Signal Optimisation

 **SIDE ROADS**
Cuba Street pedestrianised

CONGESTION
Exclusivity

 **PMV**
Removed, exclusive bus operation

PEDESTRIAN
Utility / Movement

 **CROSSING**
Signalised / controlled

EXISTING SECTION



17m wide

POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
H 1. Improve bus travel time + reliability	L 1. Improve cycling level of service
N- 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
M 3. Reduce pedestrian injury from crashes	N- 3. Flexibility to adapt as network evolves
M 4. Increase pedestrian capacity	H 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
L 5. Improve place quality	

PLAN



FURTHER INFORMATION

- All stops removed from Manners Street
- This may significantly reduce catchments if stops are also removed from Willis Street.
- Provide active signal priority or green time extension for bus approaches Victoria/Manners Intersection
- Provide extended northbound right turn phase at Manners/Willis Street
- Convert Cuba St into pedestrian operated signals.
- Cuba Street shared zone will require a reconfiguration to allow access from Wakefield. Ban all private motor vehicles from Manners Street Mercer Street closed to traffic.
- Private motor vehicles banned from Manners Street and all car parks and loading zones removed.
- Commercial vehicle access limited to out of hours.
- Pedestrian pavements may be marginally increased near Cuba Street.
- Footway may be increased at Cuba Street to narrow the crossing, due to the removal of right turns at this location.
- Potential to introduce scramble crossing phase at Victoria St/Manners




MANNERS STREET Proposed to Exclude


APPROACH

KEY FEATURES

DWELL / BUS DELAY
Capacity

 **BUS STOPS**
Removed


INTERSECTIONS
Signal Optimisation

 **SIDE ROADS**
Open, Cuba Street retains access

CONGESTION
Segregation

 **PMV**
Included

PEDESTRIAN
Utility / Movement

 **CROSSING**
Signalised / controlled

EXISTING SECTION



17m wide

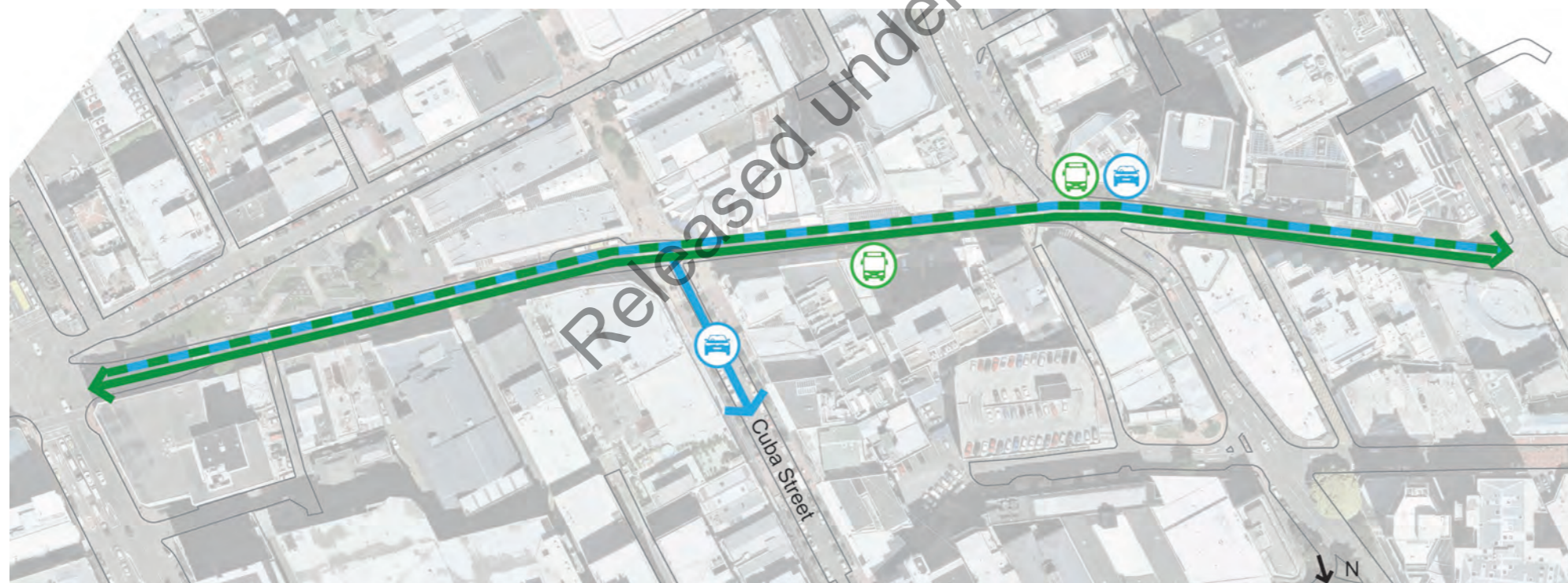
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
M 1. Improve bus travel time + reliability	L 1. Improve cycling level of service
N- 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
L 3. Reduce pedestrian injury from crashes	N- 3. Flexibility to adapt as network evolves
L 4. Increase pedestrian capacity	H 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
N- 5. Improve place quality	

PLAN



FURTHER INFORMATION

- All stops removed from Manners Street
- This may significantly reduce catchments if stops are also removed from Willis Street.
- Provide active signal priority or green time extension for bus approaches Victoria/Manners Intersection
- Provide extended northbound right turn phase at Manners/Willis Street
- All car parks and loading zones removed from Manners Street.
- Commercial vehicle access limited to out of hours.
- Footway may be increased at Cuba Street to narrow the crossing, due to the removal of car parks.
- Potential to introduce scramble crossing phase at Victoria St/Manners




MANNERS STREET

Proposed to Exclude


APPROACH

KEY FEATURES


DWELL / BUS DELAY
Capacity

 **BUS STOPS**
Removed


INTERSECTIONS
Rationalisation

 **SIDE ROADS**
Cuba Street pedestrianised

CONGESTION
Exclusivity

 **PMV**
Removed, exclusive bus operation

PEDESTRIAN
Utility / Movement

 **CROSSING**
Signalised / controlled

EXISTING SECTION



17m wide

POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
H 1. Improve bus travel time + reliability	L 1. Improve cycling level of service
N- 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
M 3. Reduce pedestrian injury from crashes	N- 3. Flexibility to adapt as network evolves
L 4. Increase pedestrian capacity	H 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
L 5. Improve place quality	

PLAN



FURTHER INFORMATION

- All stops removed from Manners Street
- This may significantly reduce catchments if stops are also removed from Willis Street.
- Provide active signal priority or green time extension for bus approaches Victoria/Manners Intersection
- Manners St/Willis St signals may be significantly improved or even removed if Willis Street is limited to Bus Only Access.
- Convert Cuba St into pedestrian operated signals.
- Cuba Street shared zone will require a reconfiguration to allow access from Wakefield. Ban all private motor vehicles from Manners Street Mercer Street closed to traffic.
- Private motor vehicles banned from Manners Street and all car parks and loading zones removed.
- Commercial vehicle access limited to out of hours.
- Pedestrian pavements may be marginally increased near Cuba Street.
- Footway may be increased at Cuba Street to narrow the crossing, due to the removal of right turns at this location.
- Potential to introduce scramble crossing phase at Victoria St/Manner

7

COURTENAY PLACE Proposed to Exclude

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Accessibility

BUS STOPS
Distributed

INTERSECTIONS
Signal Optimisation

SIDE ROADS
Open with right turn ban

CONGESTION
Segregation

PMV
Included

PEDESTRIAN
Utility / Movement

CROSSING
Signalised / controlled

EXISTING SECTION



24m wide

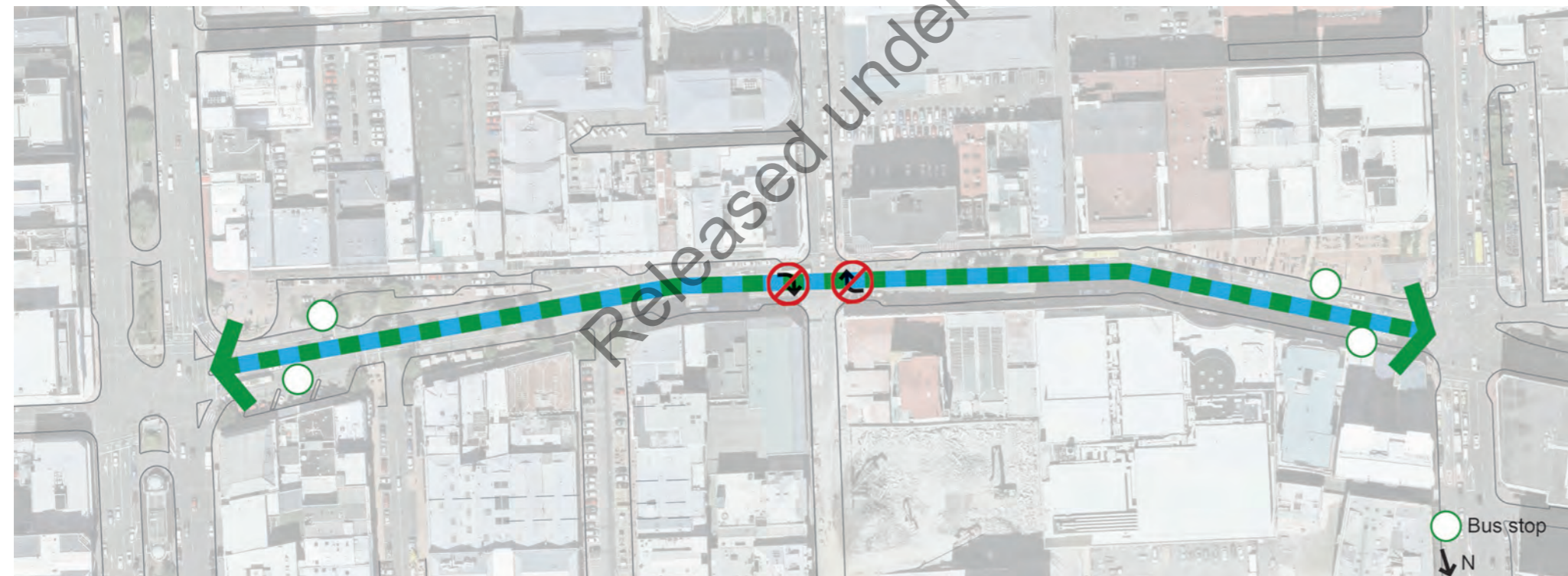
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
M 1. Improve bus travel time + reliability	L 1. Improve cycling level of service
L 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
L 3. Reduce pedestrian injury from crashes	H 3. Flexibility to adapt as network evolves
L 4. Increase pedestrian capacity	H 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
L 5. Improve place quality	

PLAN



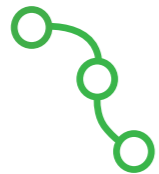



FURTHER INFORMATION

- Stop pairs maintained at Taranaki Street and Blair St/Cambridge Terrace.
- Adjust signal phasing along Courtenay Plc to provide additional green time on bus approaches (Dynamic or static adjustments)
- Introduce turn ban (left and right movements) into Tory Street from northbound & southbound Courtenay Place.
- Introduce green time extension or red hold for buses at pedestrian signals.
- Queue jump facility (transition) on northbound approach to Taranaki with secondary advanced signal for general traffic.
- Removal of all parking and loading along Courtenay Place (northbound and southbound)
- Introduction of curb side Bus Only lanes northbound and southbound along Courtenay Place.
- Courtenay Place service road will be converted to commercial vehicle/ taxi/uber use only.
- Limited curb line extensions and increase to footway may be possible with parking removal.
- Zebra crossing controls will be introduced on all unsignalized side road.

COURTENAY PLACE Proposed to Include

APPROACH

KEY FEATURES

DWELL / BUS DELAY Accessibility	 BUS STOPS Distributed
INTERSECTIONS Rationalisation	 SIDE ROADS Allen and Blair closed
CONGESTION Exclusivity	 PMV Removed, exclusive bus operation
PEDESTRIAN Utility / Movement	 CROSSING Signalised / controlled

EXISTING SECTION



24m wide

POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	H	1. Improve bus travel time + reliability
	M	2. Improve bus user comfort + convenience
	H	3. Reduce pedestrian injury from crashes
	M	4. Increase pedestrian capacity
	M	5. Improve place quality
CRITICAL SUCCESS FACTORS	M	1. Improve cycling level of service
	L	2. Resilience to network disruptions
	H	3. Flexibility to adapt as network evolves
	M	4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods

PLAN



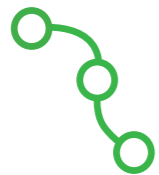


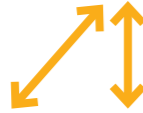
FURTHER INFORMATION

- Stop pairs maintained at Taranaki Street and Blair St/Cambridge Terrace.
- Adjust signal phasing along Courtenay Plc to provide additional green time on bus approaches (Dynamic or static adjustments)
- Blair Street, Tory Street and Allen Street intersections are closed and converted to shared zones.
- Dixon Street leg of Taranaki/Courtenay intersection closed, with vehicular access to Dixon limited to Inglewood Place only.
- Private motor vehicles banned from Courtenay Place and all parking and loading bays removed.
- Four lanes of carriageway retained, with lanes designated as Bus Only.
- Removal of Dixon Street leg and banning of private motor vehicles provides an opportunity to simplify the signal plan at Taranaki and Courtenay to improve efficiency.
- Courtenay Place service road will be converted into a commercial vehicle/taxi storage area with access limited to out of hours.
- Curb lines and footways may be extended across closed side streets
- Pedestrian footway width may be expanded by reclaiming carriageway previously used for parking/loading.
- Potential to provide a dedicated cycle lane, utilising carriageway gained from reduction in parking.
- Pedestrian crossings to be maintained with signal controls, with locations aligned to key desire lines.

COURTENAY PLACE Proposed to Include

APPROACH

KEY FEATURES

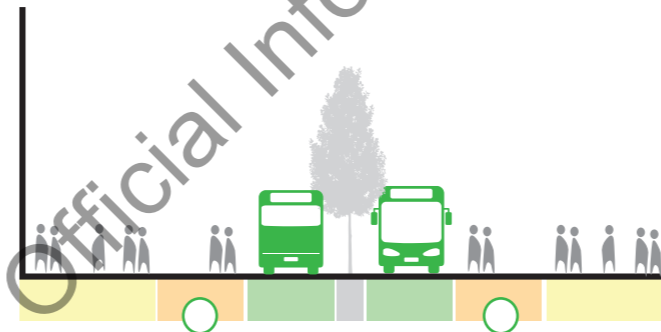
DWELL / BUS DELAY Accessibility	 <p>BUS STOPS Distributed</p>
INTERSECTIONS Rationalisation	 <p>SIDE ROADS Allen, Blair, Dixon and Tory Street urban realm opportunity</p>
CONGESTION Exclusivity	 <p>PMV Removed, exclusive bus operation</p>
PEDESTRIAN Urban Realm	 <p>CROSSING Uncontrolled, following desirelines</p>

EXISTING SECTION



24m wide

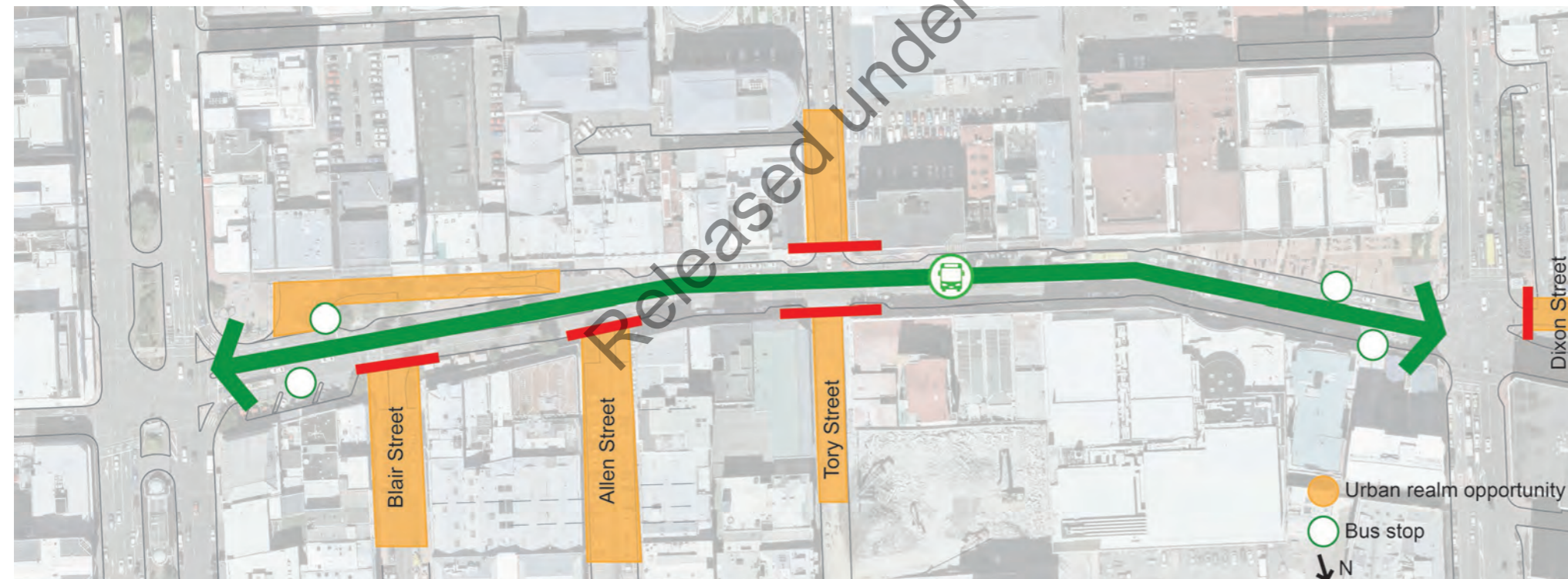
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	H	1. Improve bus travel time + reliability
	H	2. Improve bus user comfort + convenience
	H	3. Reduce pedestrian injury from crashes
	H	4. Increase pedestrian capacity
	H	5. Improve place quality
CRITICAL SUCCESS FACTORS	M	1. Improve cycling level of service
	N-	2. Resilience to network disruptions
	H	3. Flexibility to adapt as network evolves
	L	4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods

PLAN



FURTHER INFORMATION

- Stop pairs maintained at Taranaki Street and Blair St/Cambridge Terrace.
- Adjust signal phasing along Courtenay Plc to provide additional green time on bus approaches (Dynamic or static adjustments)
- Blair Street, Tory Street and Allen Street intersections are closed and converted to shared zones.
- Dixon Street leg of Taranaki/Courtenay intersection closed and converted into pedestrian only space, linking Te Aro Park with Cuba Street.
- Ban private motor vehicles from Courtenay Place and remove all parking and loading bays.
- Carriageway reduced to two lanes, with bus stops indented.
- Removal of Dixon Street leg and banning of private motor vehicles provides an opportunity to simplify the signal plan at Taranaki and Courtenay to improve efficiency.
- Courtenay Place service road will be converted into park.
- Pedestrian pavement and curb lines extended across Blair, Tory and Allen Streets.
- Urban realm enhancements will link pedestrians to Cuba Street.
- Carriageway reduction and urban realm enhancements designed to encourage free movements across and along the corridor.
- Cycles may be accommodated within the environment but will be limited to slow speeds and will mingle with pedestrian traffic.

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Capacity

BUS STOPS
Superstop

INTERSECTIONS
Signal Optimisation

SIDE ROADS
Open with right turn ban

CONGESTION
Segregation

PMV
Included

PEDESTRIAN
Utility / Movement

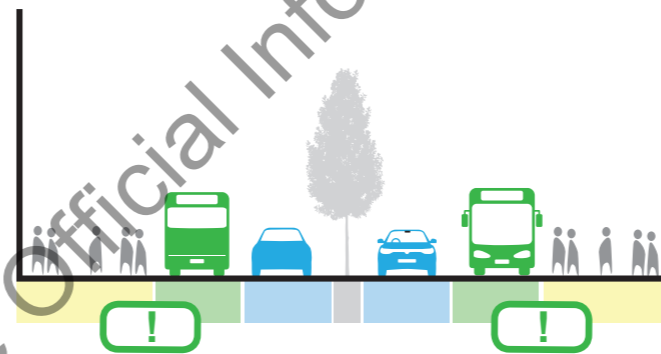
CROSSING
Signalised / controlled

EXISTING SECTION



24m wide

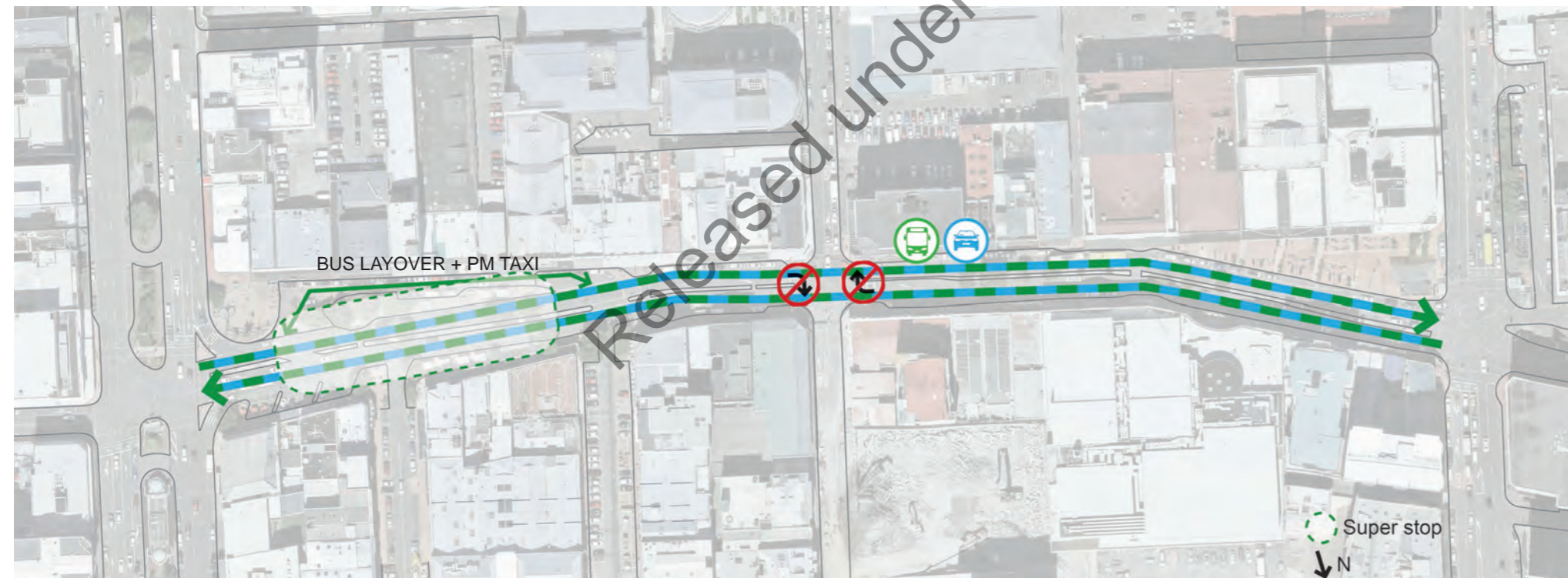
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
L 1. Improve bus travel time + reliability	L 1. Improve cycling level of service
N- 2. Improve bus user comfort + convenience	L 2. Resilience to network disruptions
N- 3. Reduce pedestrian injury from crashes	N- 3. Flexibility to adapt as network evolves
L 4. Increase pedestrian capacity	H 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
N- 5. Improve place quality	

PLAN



FURTHER INFORMATION

- Stops consolidated to form one high capacity stop for all routes on the northbound and southbound carriageways.
- Adjust signal phasing along Courtenay Plc to provide additional green time on bus approaches (Dynamic or static adjustments)
- Introduce turn ban (left and right movements) into Tory Street from northbound & southbound Courtenay Place.
- Introduce green time extension or red hold for buses at pedestrian signals.
- Queue jump facility (transition) on northbound approach to Taranaki with secondary advanced signal for general traffic.
- Removal of all parking and loading along Courtenay Place (northbound and southbound)
- Introduction of curb side Bus Only lanes northbound and southbound along Courtenay Place.
- Courtenay Place service road will be used as a bus layover and driver relief area, with taxi use after hours.
- Limited curb line extensions and increase to footway may be possible with parking removal.
- Zebra crossing controls will be introduced on all unsignalized side roads.

COURTENAY PLACE Proposed to Exclude

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Capacity

BUS STOPS
Superstop

INTERSECTIONS
Rationalisation

SIDE ROADS
Allen, Blair and Tory Street
urban realm opportunity

CONGESTION
Exclusivity

PMV
Removed, exclusive bus operation

PEDESTRIAN
Utility / Movement

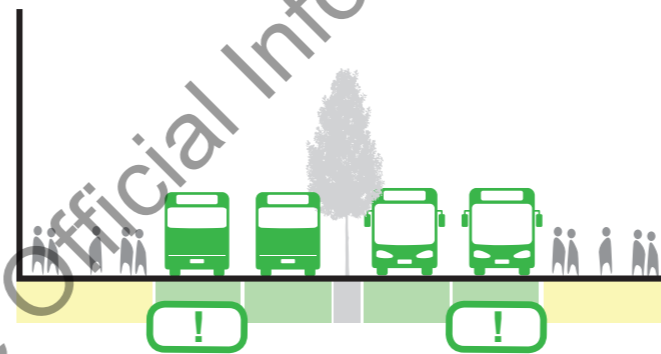
CROSSING
Signalised / controlled

EXISTING SECTION



24m wide

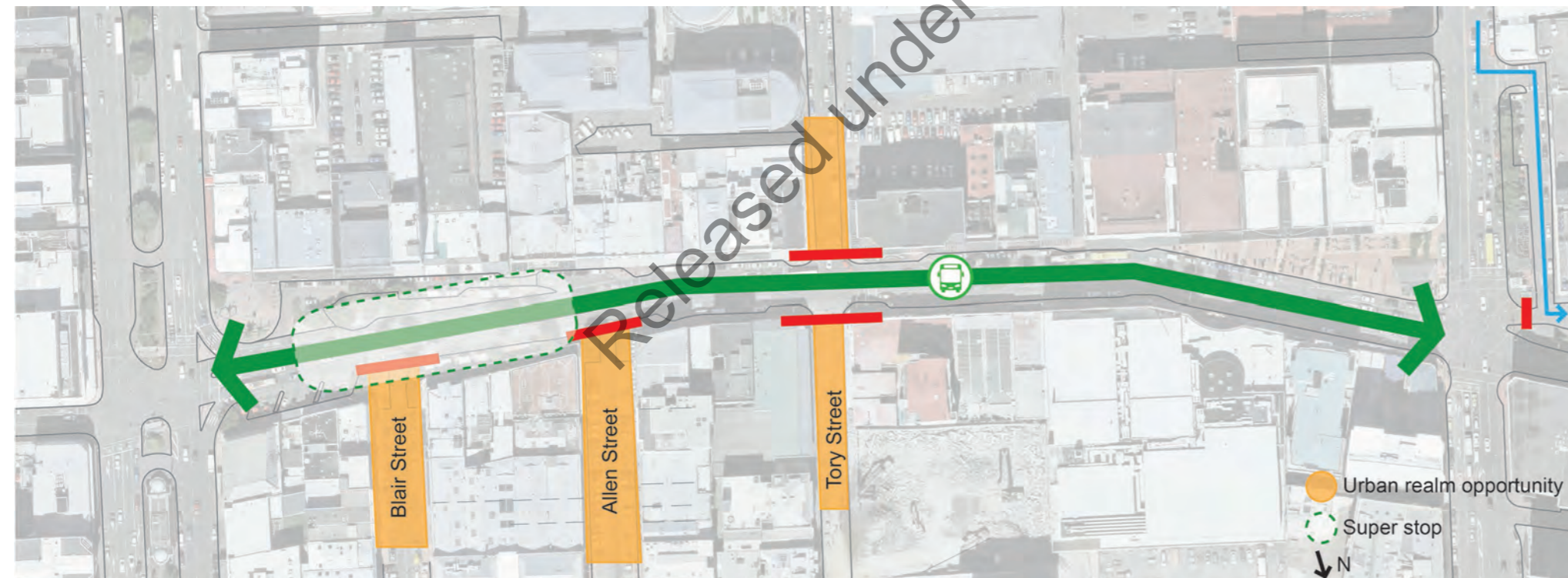
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
H 1. Improve bus travel time + reliability	M 1. Improve cycling level of service
L 2. Improve bus user comfort + convenience	N- 2. Resilience to network disruptions
L 3. Reduce pedestrian injury from crashes	N- 3. Flexibility to adapt as network evolves
M 4. Increase pedestrian capacity	L 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
L 5. Improve place quality	

PLAN



FURTHER INFORMATION

- Stops consolidated to form one high capacity stop for all routes on the northbound and southbound carriageways.
- Adjust signal phasing along Courtenay Plc to provide additional green time on bus approaches (Dynamic or static adjustments)
- Blair Street, Tory Street and Allen Street intersections are closed and converted to shared zones.
- Dixon Street leg of Taranaki/Courtenay intersection closed, with vehicular access to Dixon limited to Inglewood Place only.
- Private motor vehicles banned from Courtenay Place and all parking and loading bays removed.
- Four lanes of carriageway retained, with lanes designated as Bus Only.
- Removal of Dixon Street leg and banning of private motor vehicles provides an opportunity to simplify the signal plan at Taranaki and Courtenay to improve efficiency.
- Courtenay Place service road will be converted into a bus layover and relief are with use by taxi's after hours.
- Curb lines and footways may be extended across closed side streets
- Pedestrian footway width may be expanded by reclaiming carriageway previously used for parking/loading.
- Potential to provide a dedicated cycle lane, utilising carriageway gained from reduction in parking.
- Pedestrian crossings to be maintained with signal controls, with locations aligned to key desire lines.

APPROACH

KEY FEATURES

DWELL / BUS DELAY
Capacity

BUS STOPS
Superstop

INTERSECTIONS
Rationalisation

SIDE ROADS
Allen, Blair, Dixon and Tory Street urban realm opportunity

CONGESTION
Exclusivity

PMV
Removed, exclusive bus operation

PEDESTRIAN
Urban Realm

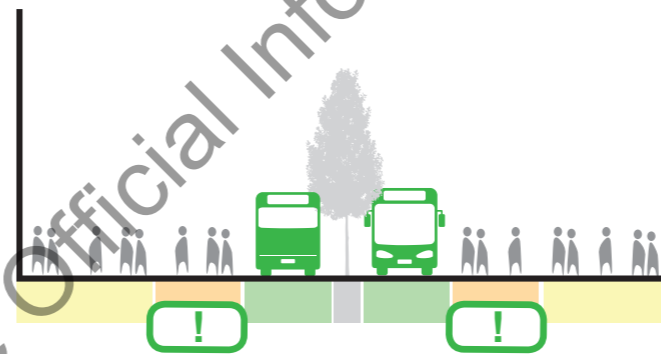
CROSSING
Uncontrolled, following desirelines

EXISTING SECTION



24m wide

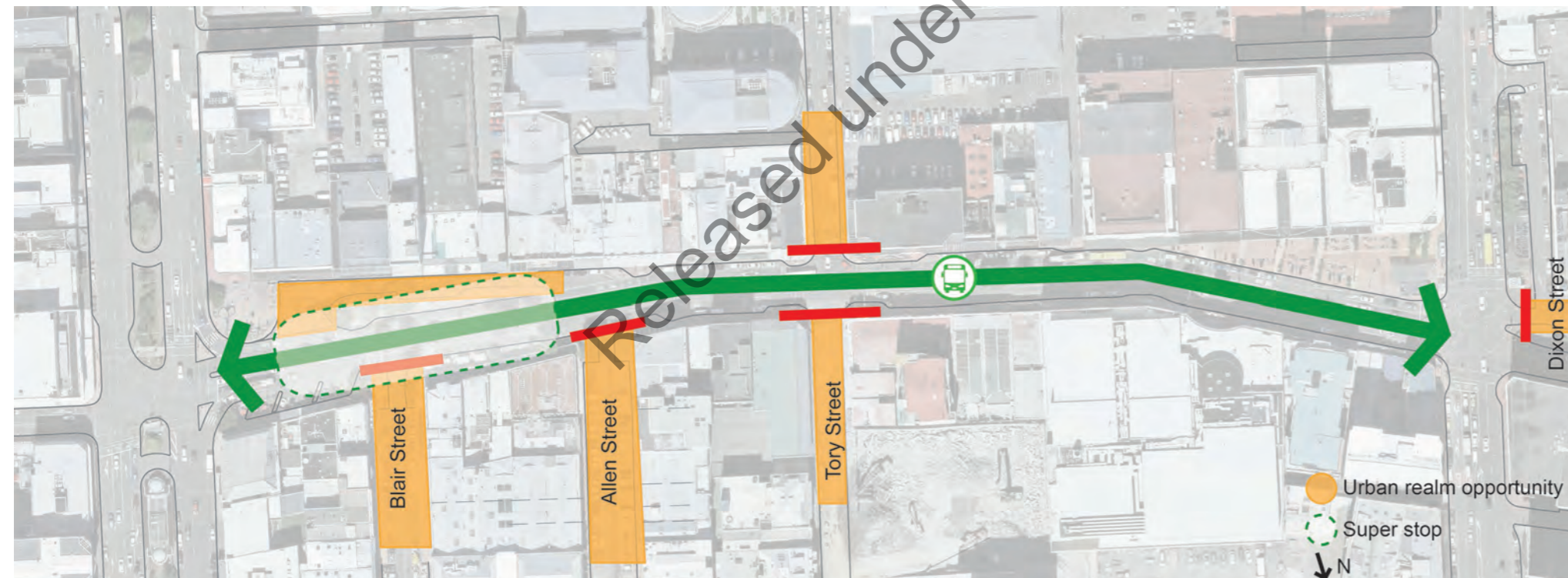
POTENTIAL TYPICAL SECTION



EVALUATION SUMMARY

INVESTMENT OBJECTIVES	CRITICAL SUCCESS FACTORS
H 1. Improve bus travel time + reliability	M 1. Improve cycling level of service
M 2. Improve bus user comfort + convenience	N- 2. Resilience to network disruptions
M 3. Reduce pedestrian injury from crashes	N- 3. Flexibility to adapt as network evolves
M 4. Increase pedestrian capacity	L 4. Tangible improvements in the 2018-21 / 2021-24 NLTP periods
M 5. Improve place quality	

PLAN



FURTHER INFORMATION

- Stops consolidated to form one high capacity stop for all routes on the northbound and southbound carriageways.
- Adjust signal phasing along Courtenay Plc to provide additional green time on bus approaches (Dynamic or static adjustments)
- Blair Street, Tory Street and Allen Street intersections are closed and converted to shared zones.
- Dixon Street leg of Taranaki/Courtenay intersection closed, with vehicular access to Dixon limited to Inglewood Place only.
- Private motor vehicles banned from Courtenay Place and all parking and loading bays removed.
- Four lanes of carriageway retained, with lanes designated as Bus Only.
- Removal of Dixon Street leg and banning of private motor vehicles provides an opportunity to simplify the signal plan at Taranaki and Courtenay to improve efficiency.
- Courtenay Place service road will be converted into a park.
- Pedestrian pavement and curb lines extended across Blair, Tory and Allen Streets.
- Urban realm enhancements will link pedestrians to Cuba Street.
- Carriageway reduction and urban realm enhancements designed to encourage free movements across and along the corridor.
- Cycles may be accommodated within the environment but will be limited to slow speeds and will mingle with pedestrian traffic.