

# Army and Navy Sustainable Transport Package – Cycling Groups Briefing

March 2022



## Agenda

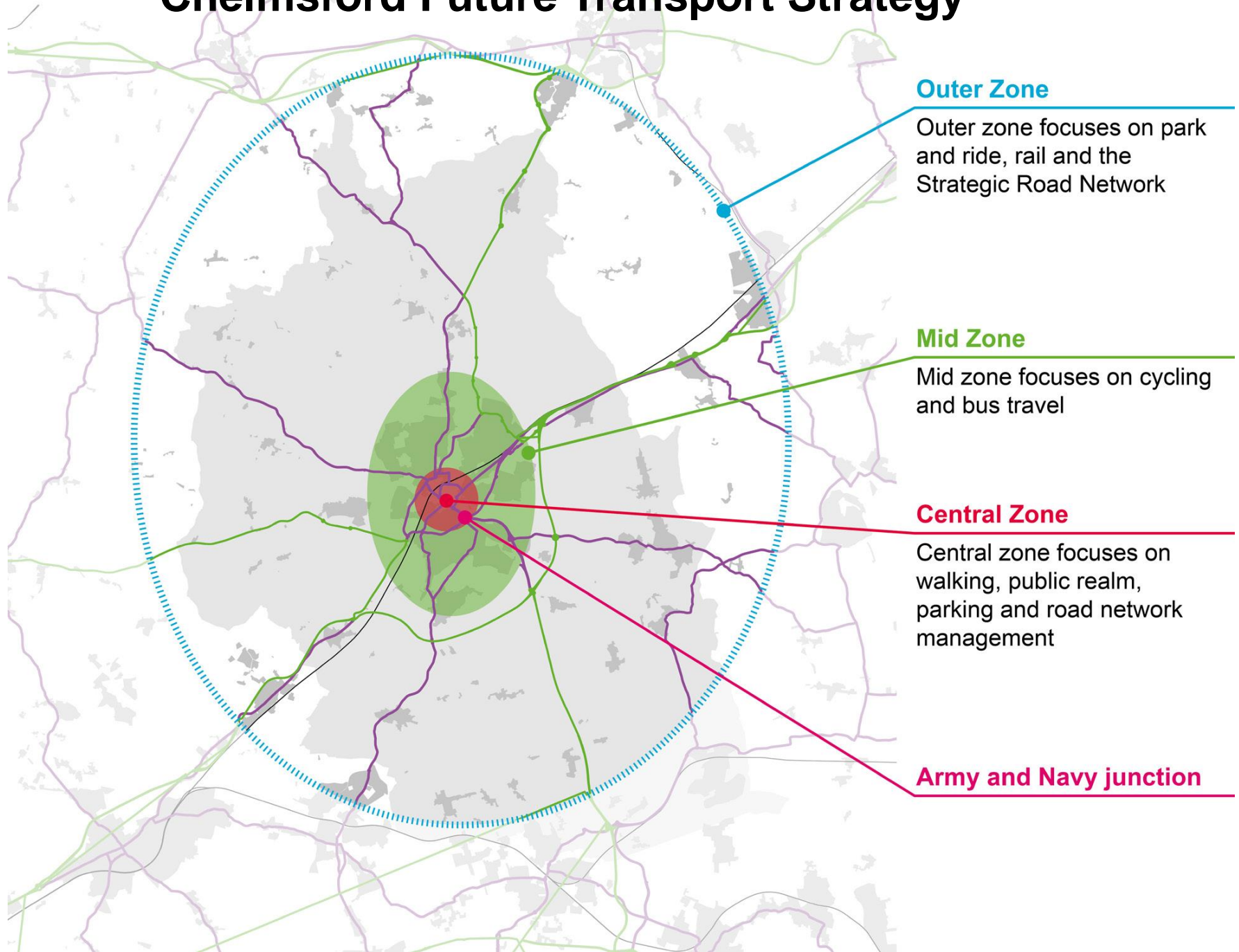
1. Welcome
2. Project recap and package update
3. Public consultation and preferred junction option
4. Cycling improvements update
5. Next steps



# Project recap and package update



# Chelmsford Future Transport Strategy



## Outer Zone

Outer zone focuses on park and ride, rail and the Strategic Road Network

## Mid Zone

Mid zone focuses on cycling and bus travel

## Central Zone

Central zone focuses on walking, public realm, parking and road network management

## Army and Navy junction

# Project objectives



Offer inclusive, attractive and safe walking and cycling facilities



Positively manage resilience and journey time reliability, improving journey times for passenger transport services



Provide enhanced connectivity for communities and support sustainable growth



Increase the attractiveness of the gateway into the city centre



Improve safety and the perception of safety



Manage environmental conditions, such as air quality and noise



Actively manage resilience and journey time reliability for private vehicles

## Army and Navy Sustainable Transport Package

This is an unmissable opportunity to provide better options for people to travel and encourage safer, greener, and healthier ways of getting around Chelmsford.

The Army and Navy Sustainable Transport Package includes:

- Redesign of Army and Navy junction to improve journeys for all modes
- Improvements to walking and cycling facilities at the Army and Navy and on the approaches to and from the junction
- Park and Ride capacity improvements



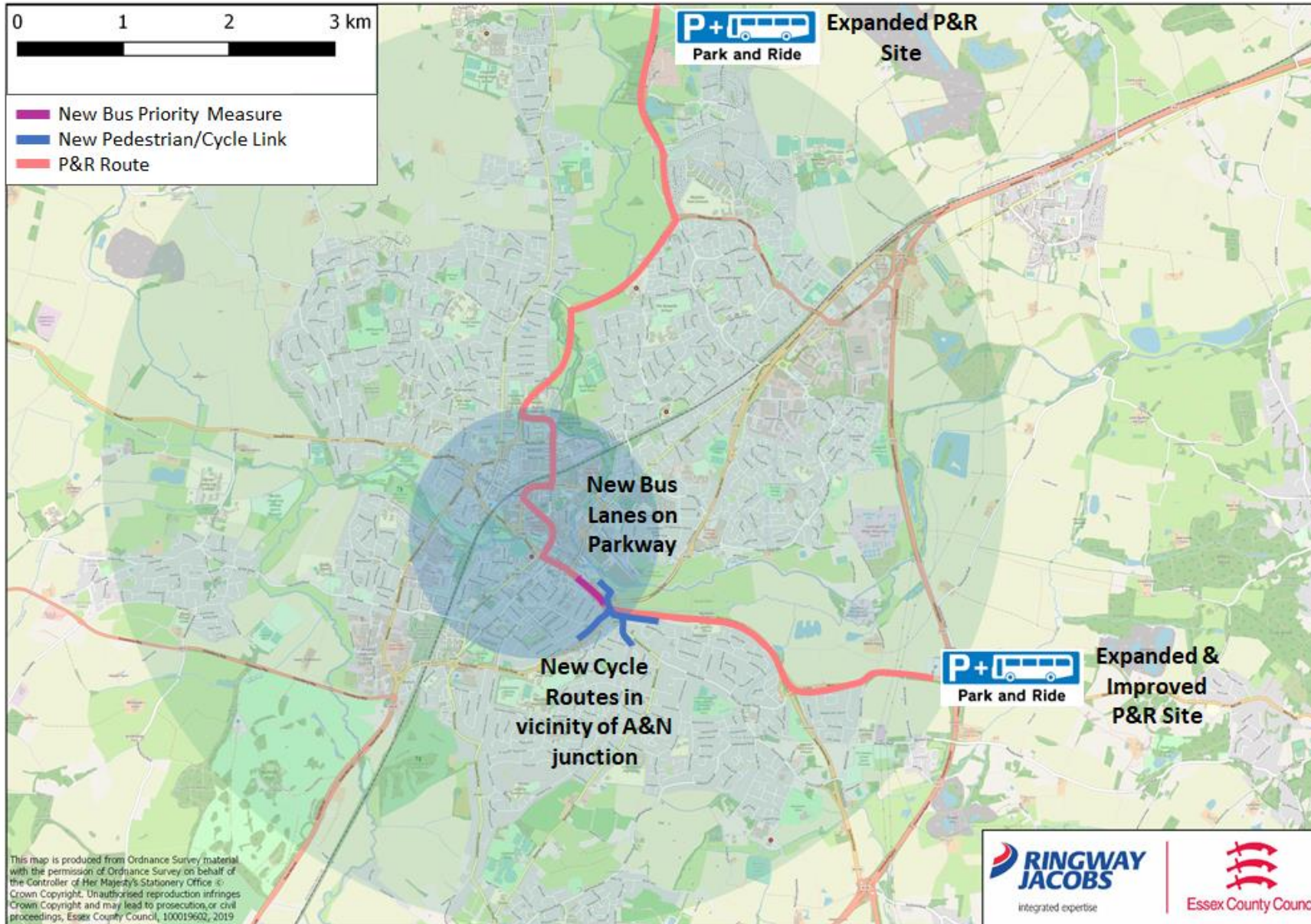


## Key milestones

- Five initial junction options shared with public – **November 2019**
- Chancellor announced in Spring Budget that project could proceed to next stage – **March 2020**
- Public consultation – **August to October 2021**
- Task Force endorsed preferred junction option – **December 2021**
- DfT approved strategic outline business case – **February 2022**
- ECC Cabinet formally approved preferred junction option – **March 2022**



# What is in the Army and Navy Sustainable Transport Package?



## Elements now included:

- Redesign of Army and Navy junction (Hamburger Roundabout)
- Expansion and enhancement of existing Sandon Park and Ride site
- Expansion of Chelmer Valley Park and Ride site
- Essex Yeomanry Way bus lane extension
- Improved walking and cycling facilities at Army and Navy junction and on approaches
- Improved bus priority/bus lanes on Parkway



# Public consultation and preferred option



## Public consultation – summary

- Public consultation ran from August to October 2021, focusing on two junction options (Hamburger Roundabout and Separate T-Junctions)
- 5,847 visitors to the virtual exhibition and 9,273 page views on project webpage
- 850 consultation responses (839 online survey, 7 email responses and 4 written responses)
- 77% of respondents to the online survey visited the virtual exhibition
- 75% said information provided as part of consultation was helpful (14% neither helpful or unhelpful)



## Public consultation – survey headlines

- 60% identified the Hamburger Roundabout as favoured option (21% Separate T-Junctions, 18% undecided/no preference and 1% did not answer)
- 20% said Hamburger Roundabout and wider measures would encourage them to consider a different mode (18% unsure), compared with 16% for Separate T-Junctions (15% unsure)
- 55% of people agreed the proposed Army and Navy Sustainable Transport Package would have a positive impact on Chelmsford (24% neutral and 21% disagree)
- 47% of people believed the proposals would create a more coherent network for pedestrians and cyclists (32% neutral, 20% disagreed and 1% did not answer)



## Public consultation – qualitative feedback

- Good level of support for proposed junction options and the impact they would be likely to have, however there were also a number of respondents who felt a flyover would be a better option, as well as others who recognised the reasons it was discounted
- Concerns were raised about certain elements of the junction options (potential for confusion, increase in the number of traffic signals and negative impact of proposals to remove existing permit parking bays in Van Diemens Road)
- Some positive feedback about walking and cycling proposals, however others felt measures did not go far enough and there was mixed feedback about removing the subway





### **Benefits and costs**

The preferred option must show sufficient benefits in terms of economics and wellbeing in comparison with the costs of the proposed measures

### **Environmental considerations**

Any environmental impacts, such as air quality, noise and flooding, must be assessed and managed appropriately

### **Public feedback**

Feedback from the public forms one part of the decision-making process. It is important we consider people's views before making decisions

### **Construction**

Elements of the construction of the scheme, such as duration, complexity and risks of the works, must also be considered

### **Objectives**

The chosen option must fulfil the project objectives as best as possible



## Preferred junction option – Hamburger Roundabout

- The Hamburger Roundabout was public's preferred option at consultation
- It also performs better from a business case and performance perspective
- In December 2021, In December 2021, the Army and Navy Task Force endorsed the Hamburger Roundabout as its preferred option
- Earlier this month, the decision was formally made by Essex County Council's Cabinet
- A preferred junction option was needed to finalise and submit an outline business case to the Department for Transport for funding for the scheme





# Hamburger Roundabout





# Cycling improvements update





## Cycling improvements summary

We are proposing significantly improved walking and cycling facilities at ground-level at the junction, replacing the current subway and creating attractive, safe and accessible routes.

These include:

- Fully segregated cycling and walking facilities through the junction
- New pedestrian and cycling facilities on Baddow Road
- New cycle route through Meadgate Avenue and a new cycleway alongside Essex Yeomanry Way, providing an improved route from Great Baddow
- Connection to existing Chelmer Road cycle route to Chelmer Village
- Fully segregated two-way cycle route on western side of Van Diemens Road
- New segregated cycleway into the city centre via River Chelmer route



## Cycling improvements explanation

- To encourage more people to walk and cycle in Chelmsford, we need to provide high quality facilities that are attractive and accessible to everyone.
- Inclusive cycling is the underlying theme of the Department for Transport's cycle infrastructure design guidance LTN 1/20 - 'Not only must cycle infrastructure be safe, it should also be perceived to be safe so that more people feel able to cycle'.
- In line with LTN 1/20, our proposals include fully segregated cycle lanes with direct crossings and no staggers.
- Optimised signal timings will help ensure cyclists and pedestrians can travel across the junction safely and quickly.



## Key LTN 1/20 advice on signal controlled cycle facilities

Poor

**Figure 10.8:** Toucan crossing with stagger – can be highly problematic



Good

**Figure 10.9:** Single-stage straight-over cycle crossing next to multi-stage staggered pedestrian crossing, South Gloucestershire



Good

**Figure 10.10:** Two-stage angled crossing with cycle signals on the central island (Norwich)



## Cycling improvements explanation (continued)

- LTN 1/20s core design principles are that cycle networks and routes should be **Coherent; Direct; Safe; Comfortable** and **Attractive**. We have sought to achieve this in the Army and Navy project.
- If we were to include a subway under the Army and Navy junction, the space required for the ramps would not allow us to provide the vastly improved ground level walking and cycling facilities.
- We know that many people feel unsafe using subways, especially at night, and that ramps can be difficult for people to negotiate.
- By not building a subway, it allows us to provide the best quality ground level facilities that we can – fully segregated walking and cycling routes that are wide, attractive and available to all users.



### Key LTN 1/20 advice on grade separated cycle facilities

- Grade separation of cycle facilities might be suitable on larger roads with higher speeds. However, it can involve cyclists in changes in level and a deviation from their overall desire line, is costlier than at-grade provision and may be difficult to retro-fit into existing junctions due to space and cost constraints.
- There can also be concerns over personal security on grade separated routes, particularly underbridges and subways.
- Underbridges should be designed to maximise natural light and user perceptions of safety. Also, provision should be made for any cycle facilities to continue so that cyclists do not need to change levels more than is necessary.

**Figure 10.51** Underbridge near Cowley on Oxford Bypass with at-grade approach, wing walls and clear sightlines



**Figure: 10.52** Underbridge (cycle and pedestrian-only) with divided carriageway above to create opening – Lund, Sweden

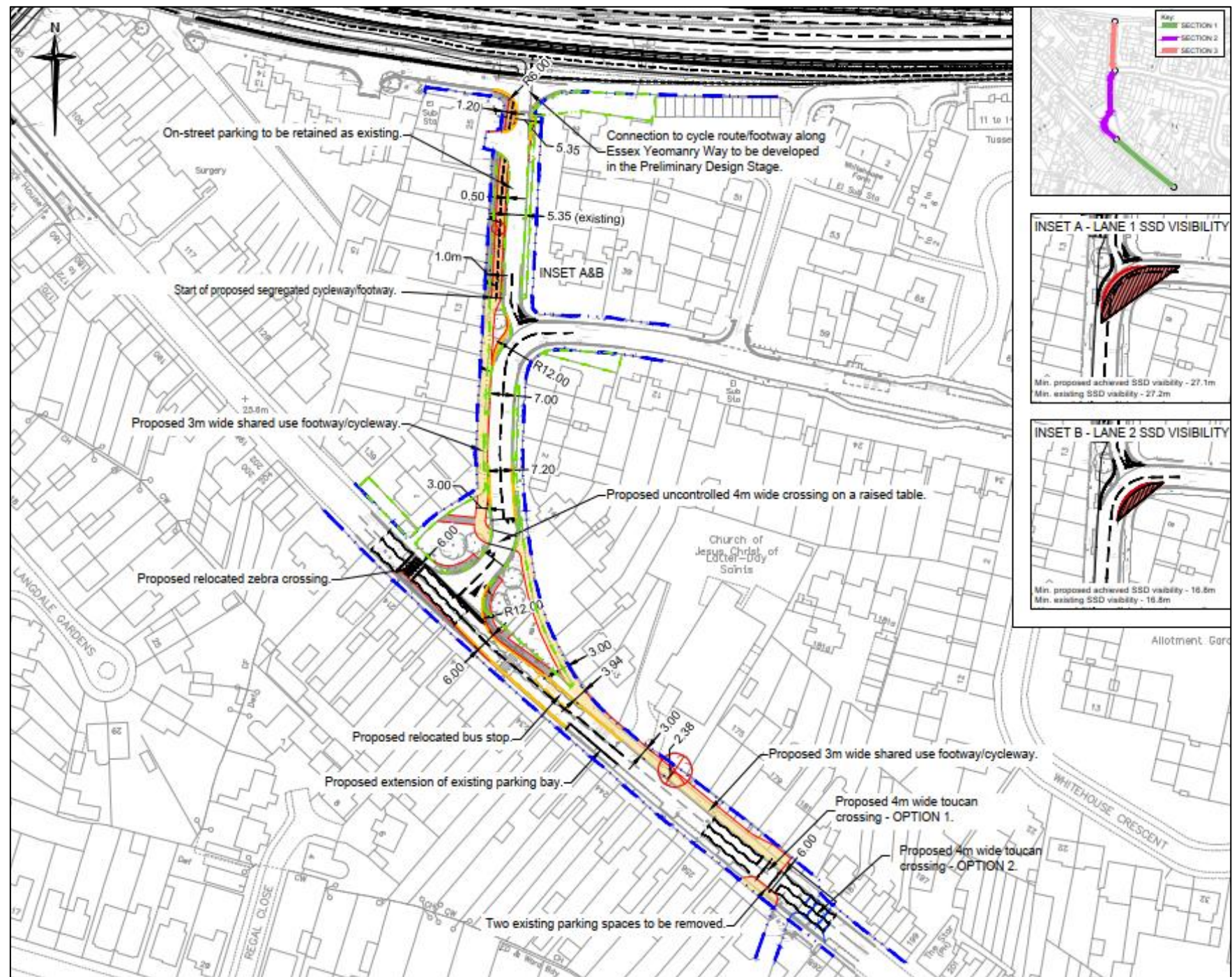






# Baddow Road/Meadgate Avenue cycle connection

- Toucan crossing of Baddow Road (two options)
- Relocation of existing zebra crossing on Baddow Road
- Relocation of two permit parking spaces (extension of other parking bay)
- New crossing of Meadgate Avenue
- Primarily shared use walking/cycling facilities – appropriate for no. of users
- Connection to Essex Yeomanry yet to be designed



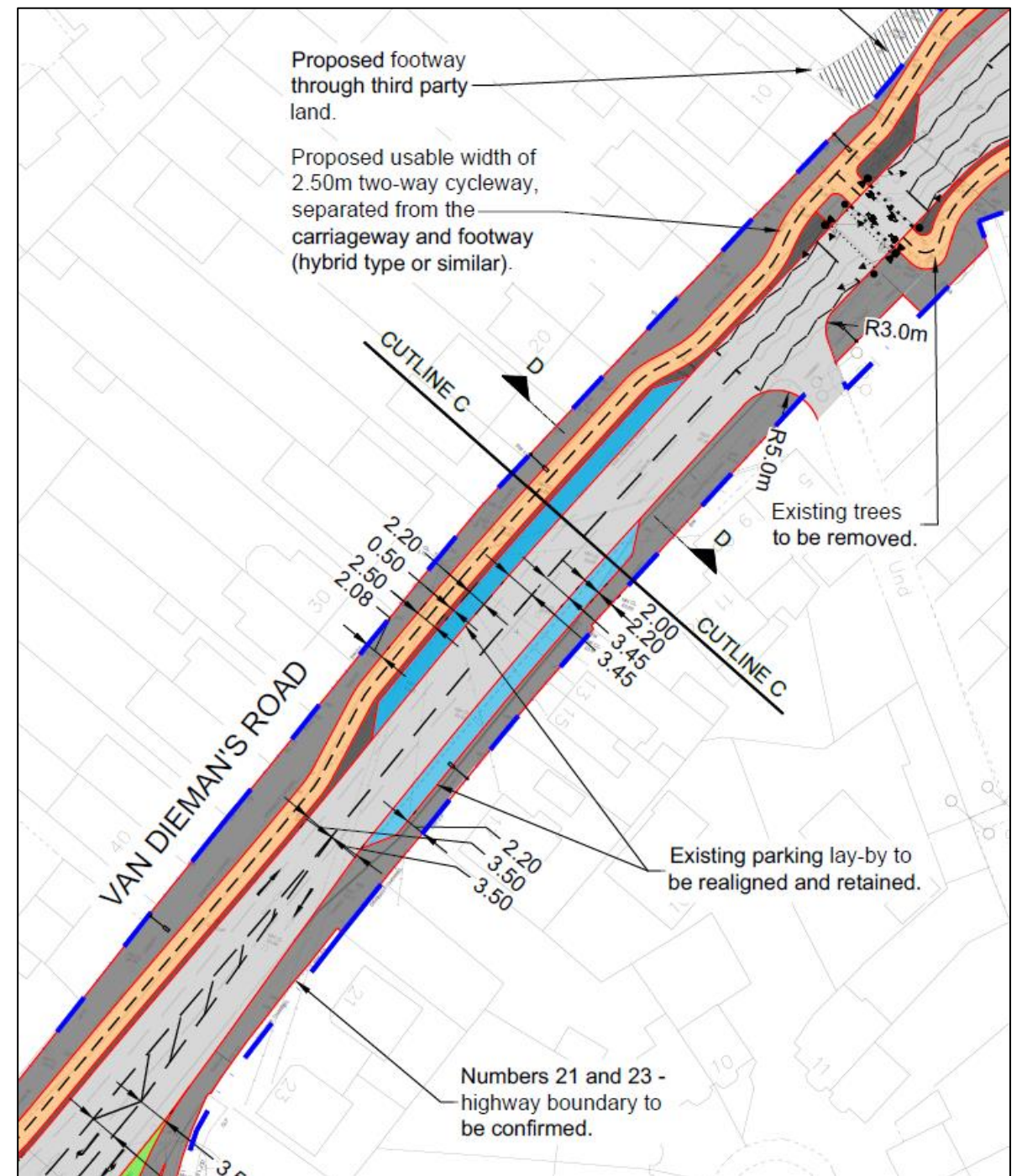


# Van Diemens Road cycle connection

Following feedback received during the consultation, we are now proposing a revised layout for Van Diemens Road.

- Two-way cycle track on western side of Van Diemens Road
- One northbound lane for general traffic on Van Diemens Road (flaring to two at the Army and Navy junction)
- Crossing close to Army and Navy junction put back to its current position
- Parking bays on Van Diemens Road re-aligned but retained

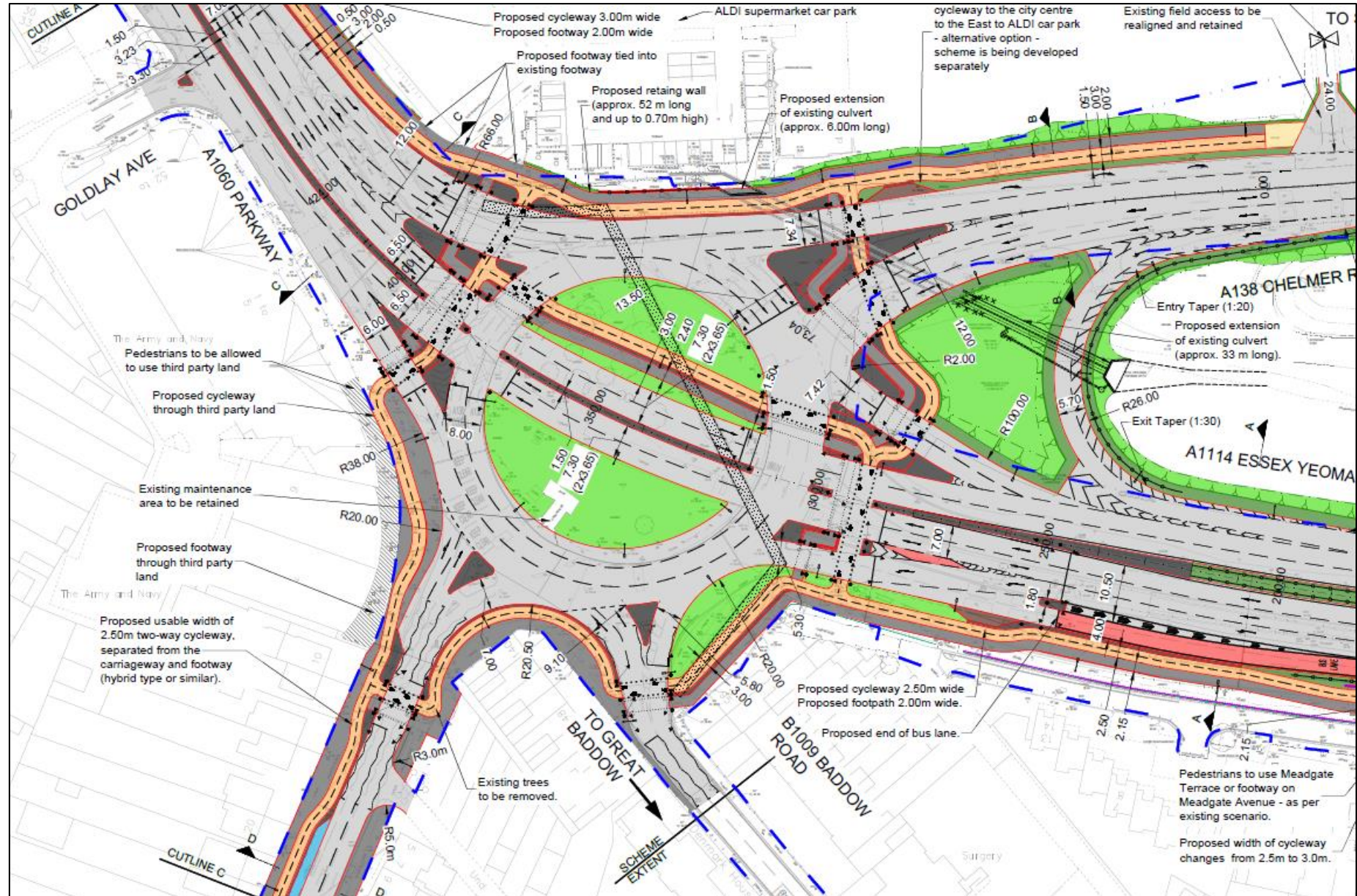
The revised layout remains subject to road safety audit





# Baddow Road crossing

- Some concerns were raised during the consultation about the proposed zebra crossing on the Baddow Road arm of the junction, particularly regarding visibility and safety
- Design now amended to a signalised crossing
- Signal timings linked in with the rest of junction
- Reduced bus and car journey times on Baddow Road





## Lady Lane options

- As a result of the revised changes to Van Diemens Road layout, revisions are required to the Lady Lane junction, so options for this are also being considered
- Three main options have been developed – two signalised junction options and one improved give-way junction option (a fourth option was developed but discounted)
- Although the options are not subject to further formal consultation, the project team have been engaging residents on the options and will take feedback into consideration
- No decisions have been made about the Lady Lane junction options at this stage



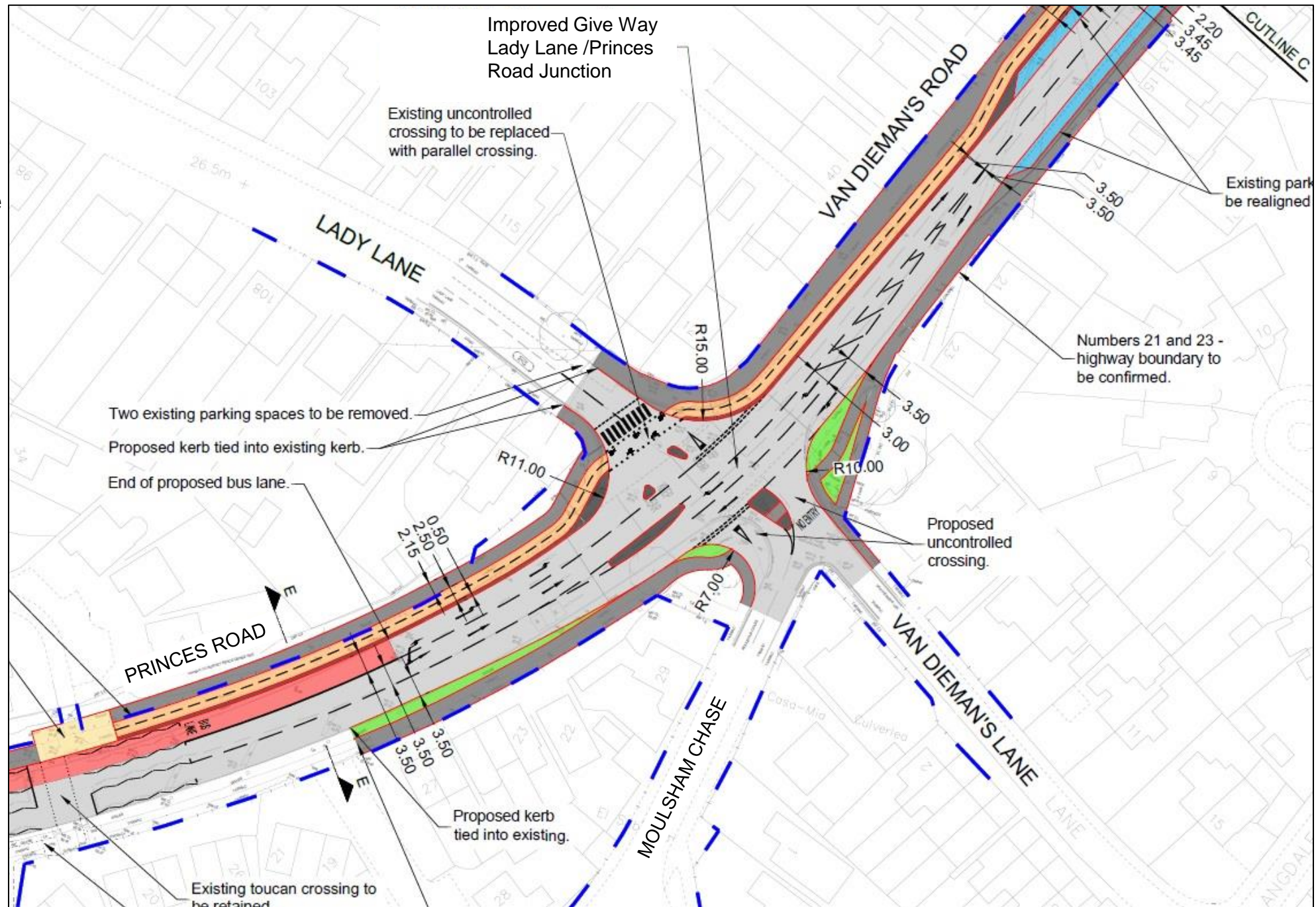
The options remain subject to road safety audit

## Lady Lane Junction Option 1:

One northbound lane for general traffic on Van Diemans Road and a give way Lady Lane junction.

Traffic movements from Moulsham Chase/Van Diemans Lane would be unrestricted.

The layout options are subject to road safety audit



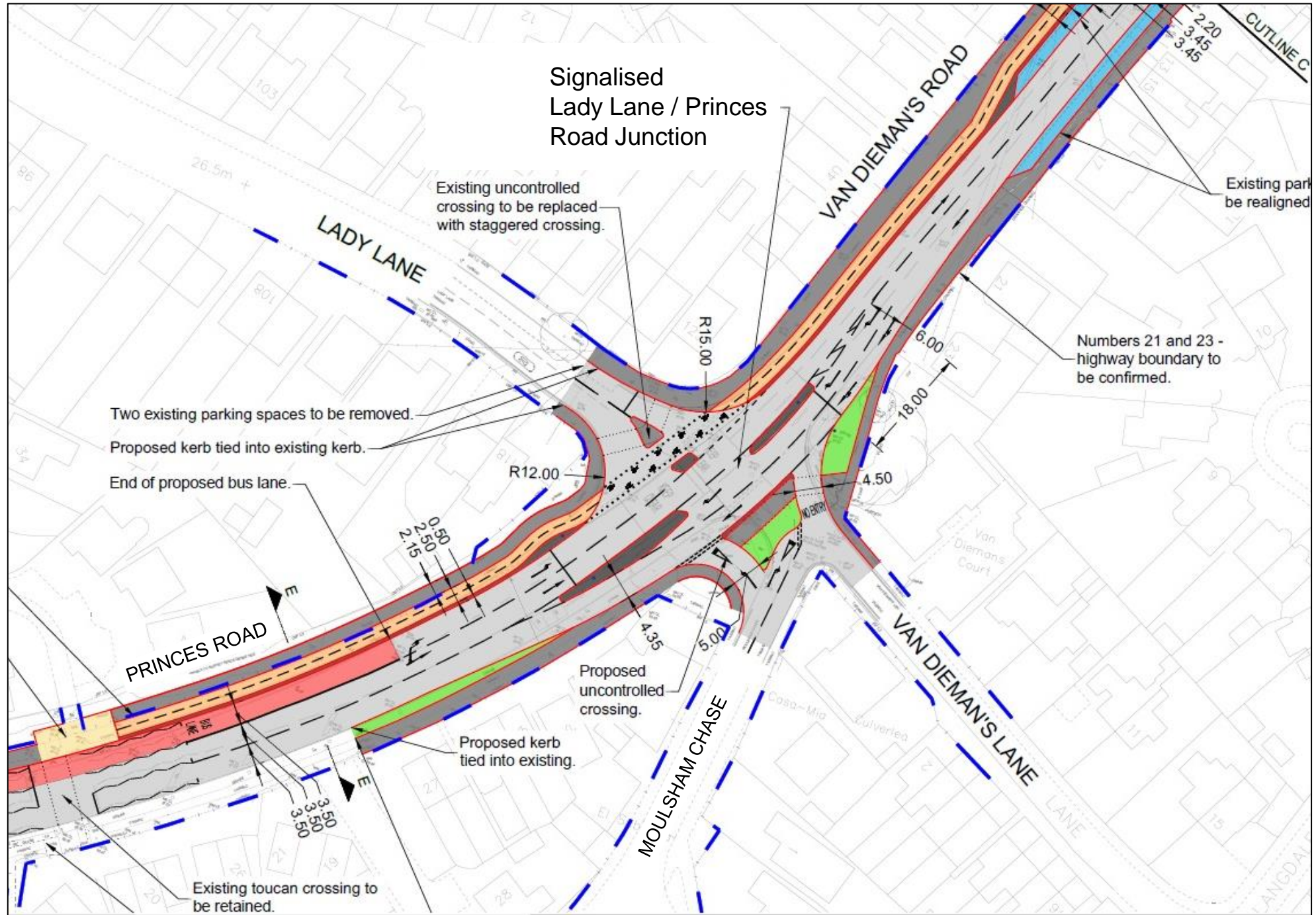


## Lady Lane Junction Option 2:

One northbound lane for general traffic on Van Diemans Road and a signalised Lady Lane junction.

Traffic from Moulsham Chase/ Van Diemans Lane would be restricted to left-in and left-out movements.

The layout options are subject to road safety audit



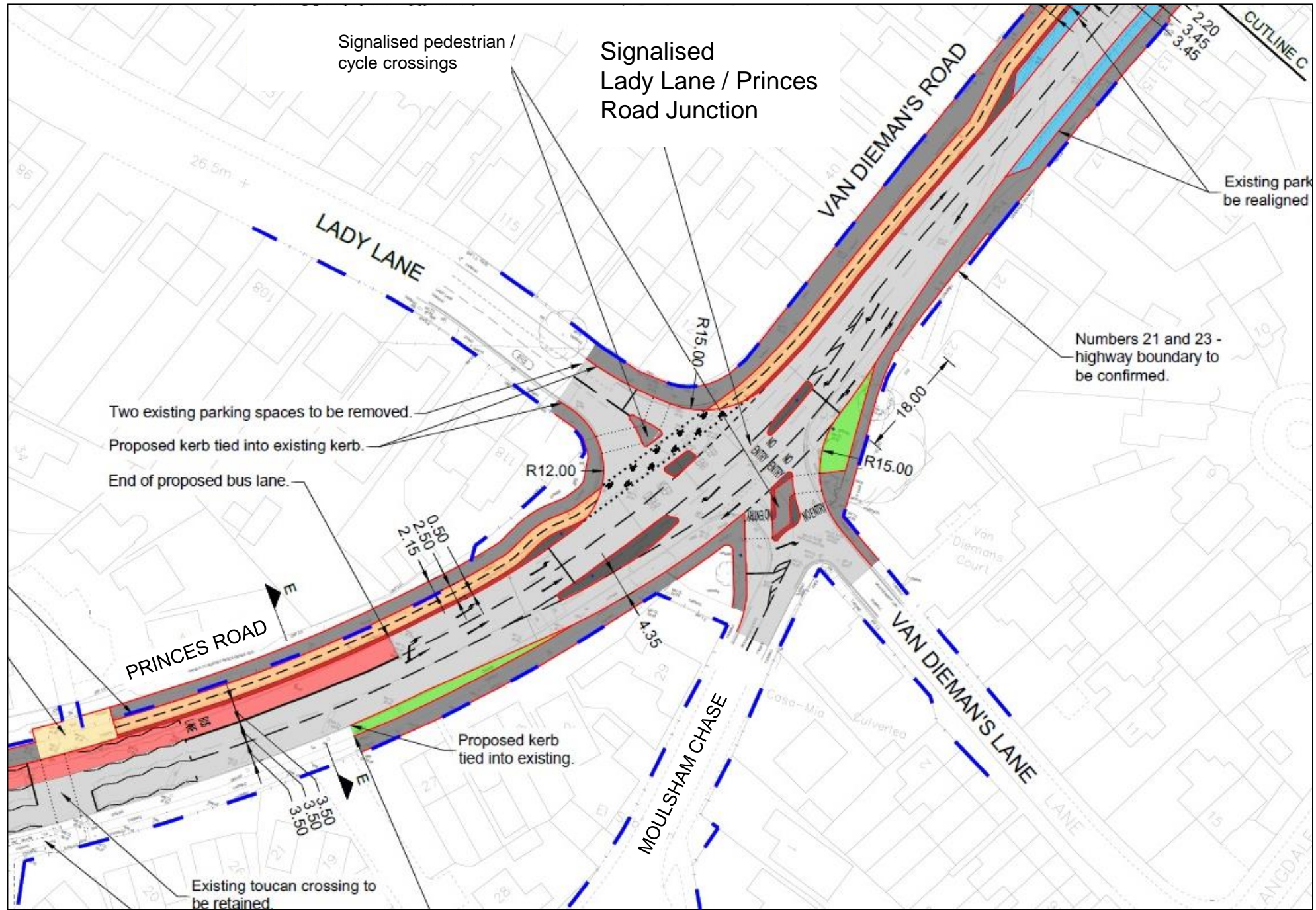


# Lady Lane Junction Option 3:

One northbound lane for general traffic on Van Diemans Road and a signalised Lady Lane junction.

Traffic from Moulsham Chase/ Van Diemans Lane would be restricted to left-in and right-out movements.

The layout options are subject to road safety audit



# Lady Lane junction options: Key features

| Lady Lane junction option |                            | Key features                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|---------------------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Option 1</b>           | Improved give way junction | <ul style="list-style-type: none"> <li>• Parallel (zebra) crossing of Lady Lane, giving priority to pedestrians and cyclists</li> <li>• Waiting area for vehicles turning right into Lady Lane</li> <li>• Likely to improve safety compared to existing layout</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Options 2 and 3</b>    | Signalised junctions       | <ul style="list-style-type: none"> <li>• Signalised pedestrian and cycle crossings of Lady Lane would result in more delay to active travellers than a 'parallel' crossing</li> <li>• Signals would make it easier for motor vehicles to exit Lady Lane and Moulsham Chase/Van Diemens Lane</li> <li>• Some existing traffic movements would no longer be possible:               <ul style="list-style-type: none"> <li>• Lady Lane to Moulsham Chase/Van Diemens Lane (and vice versa)</li> <li>• Moulsham Chase/Van Diemens Lane to Van Diemens Road <b>OR</b> Moulsham Chase/Van Diemens Lane to Princes Road</li> </ul> </li> <li>• Likely to improve safety compared to existing layout</li> </ul> |



## Design changes – Impacts on journey times

Additional refinements to signal timings, alongside the outlined design changes, have enabled us to improve journey times further for the majority of modes of transport, particularly cyclists and buses.

The latest modelled journey time improvements for the Hamburger Roundabout are:

- Average journey times for cyclists will now be 42% quicker (was 35% for the consultation design)
- Bus journey times will be about 38% faster on average (was 24%)
- Journeys will be 53% quicker on average for motorised vehicles (was 49%)
- Walking through the junction at ground level would be about 10% quicker (was 11%)



# Next steps



## Next steps







Thank you

