

Army and Navy Sustainable Transport Package – Van Diemens Road/Lady Lane update meetings

November 2022



Agenda

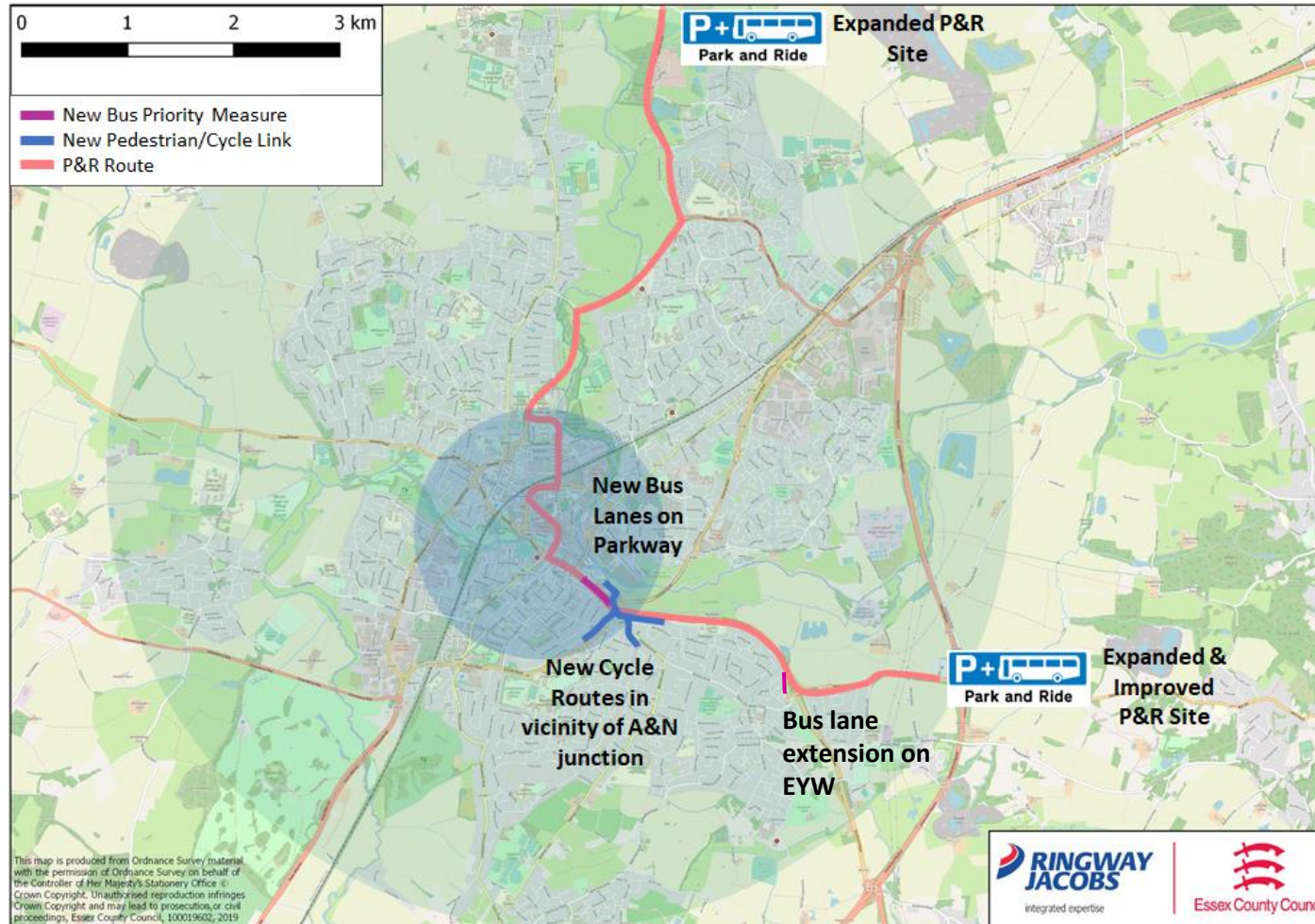
1. Outline Business Case submission
2. Design changes
3. Lady Lane junction update
4. Surveys and site investigations
5. Next steps
6. Programme
7. AOB



Outline Business Case submission



What have we included within the bid?



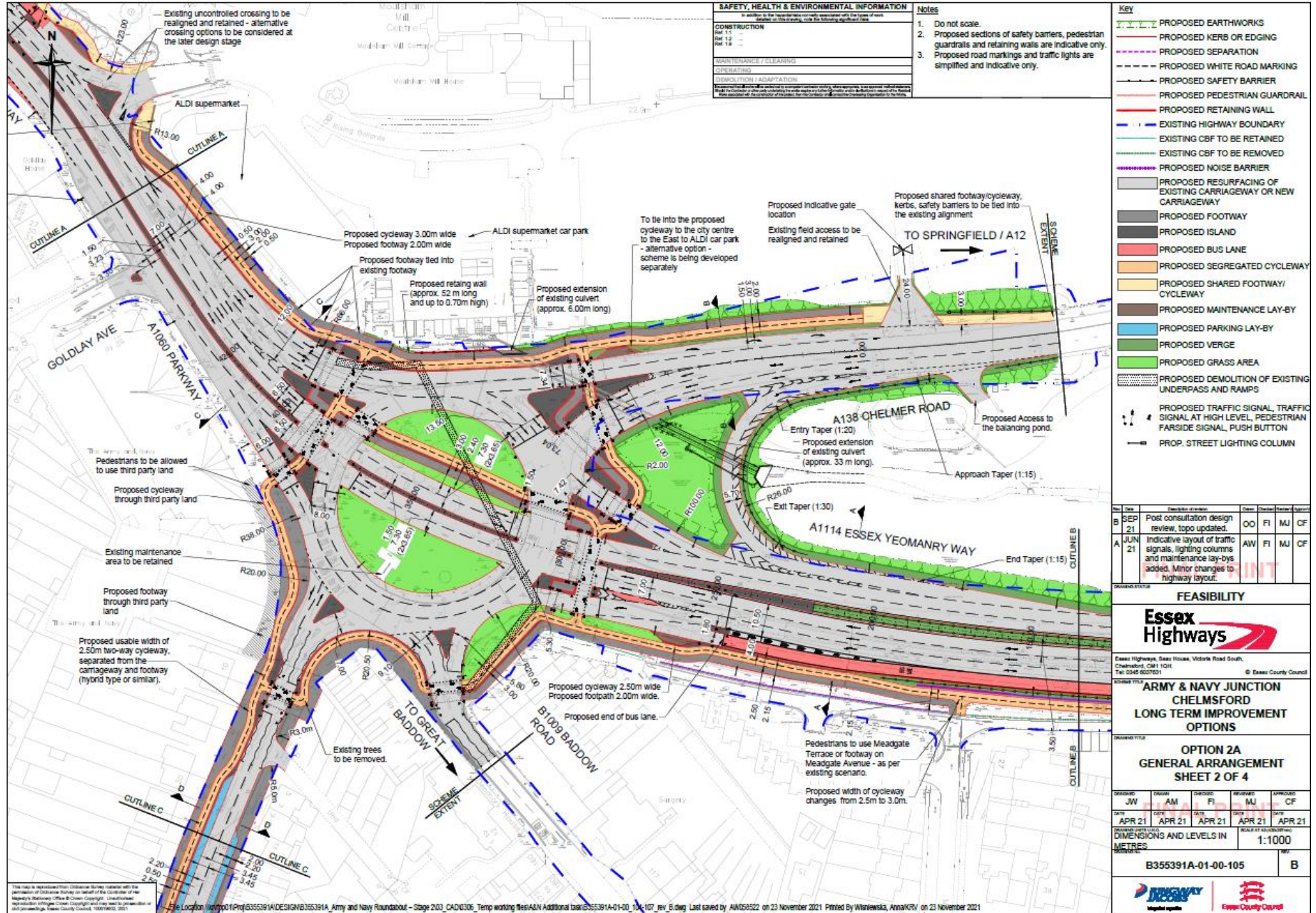
Army and Navy Sustainable Transport Package:

- 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

Design changes



Hamburger Roundabout layout



Key design changes since public consultation:

- Following feedback during the public consultation, a revised layout is now proposed for Van Diemens Road, with one northbound lane for general traffic (flaring to two at the Army and Navy junction) and a two-way cycleway on the western side of Van Diemens Road. The existing permit parking bays on Van Diemens will be re-aligned but retained.
- The proposed pedestrian/cycle crossing on Baddow Road will now be a signal-controlled crossing.

Design changes – Impacts on journey times

Additional refinements to signal timings, alongside the outlined design changes, have enabled us to improve predicted journey times further for the majority of modes of transport, compared with the journey time savings shared during the public consultation.

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

- Average journey times for cyclists will now be 44% quicker (was 35%)
- Bus journey times will be about 40% 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 11% quicker (was 11%)



Lady Lane junction update

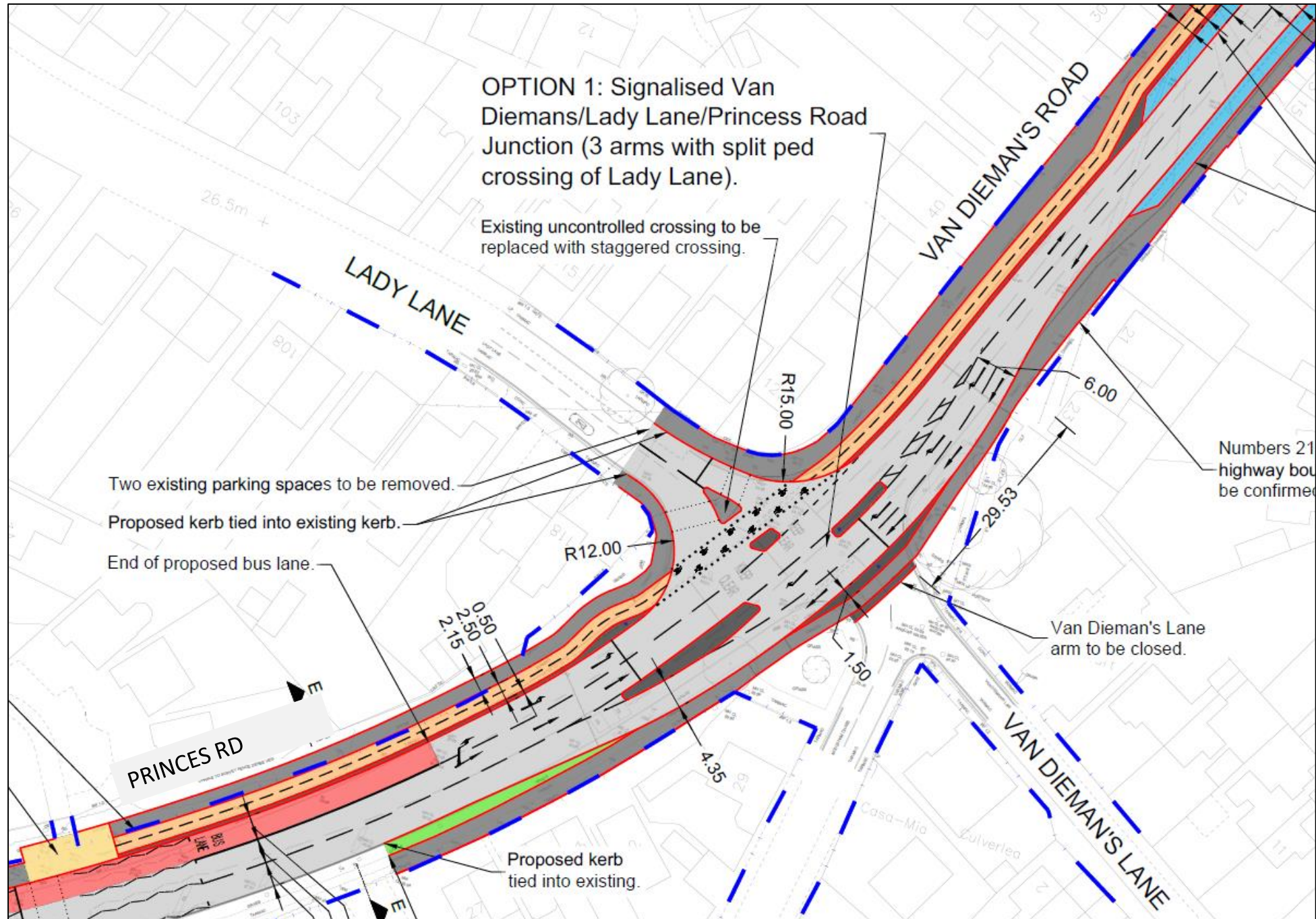


Lady Lane junction options – Overview

- As a result of the revised layout of Van Diemens Road, revisions are required to the Lady Lane junction, so options for this have been considered.
- Although these options were not subject to further formal consultation, the project team have engaged residents on the options and taken feedback into account.
- Four options were initially shared with residents in January 2022 (three signalised options and one give way option).
- The give way option has now been chosen as the preferred option for Lady Lane. The reasons for this decision are explained later in this presentation.
- Although a preferred arrangement for the Lady Lane junction has been chosen, we are still currently making amendments to elements of the design. Comments from our engagement with residents will be considered. Our design work is expected to be completed in December. Once a decision is made on the final designs, we will then make the final arrangement drawing available.

Lady Lane Junction Option 1 (signalised)

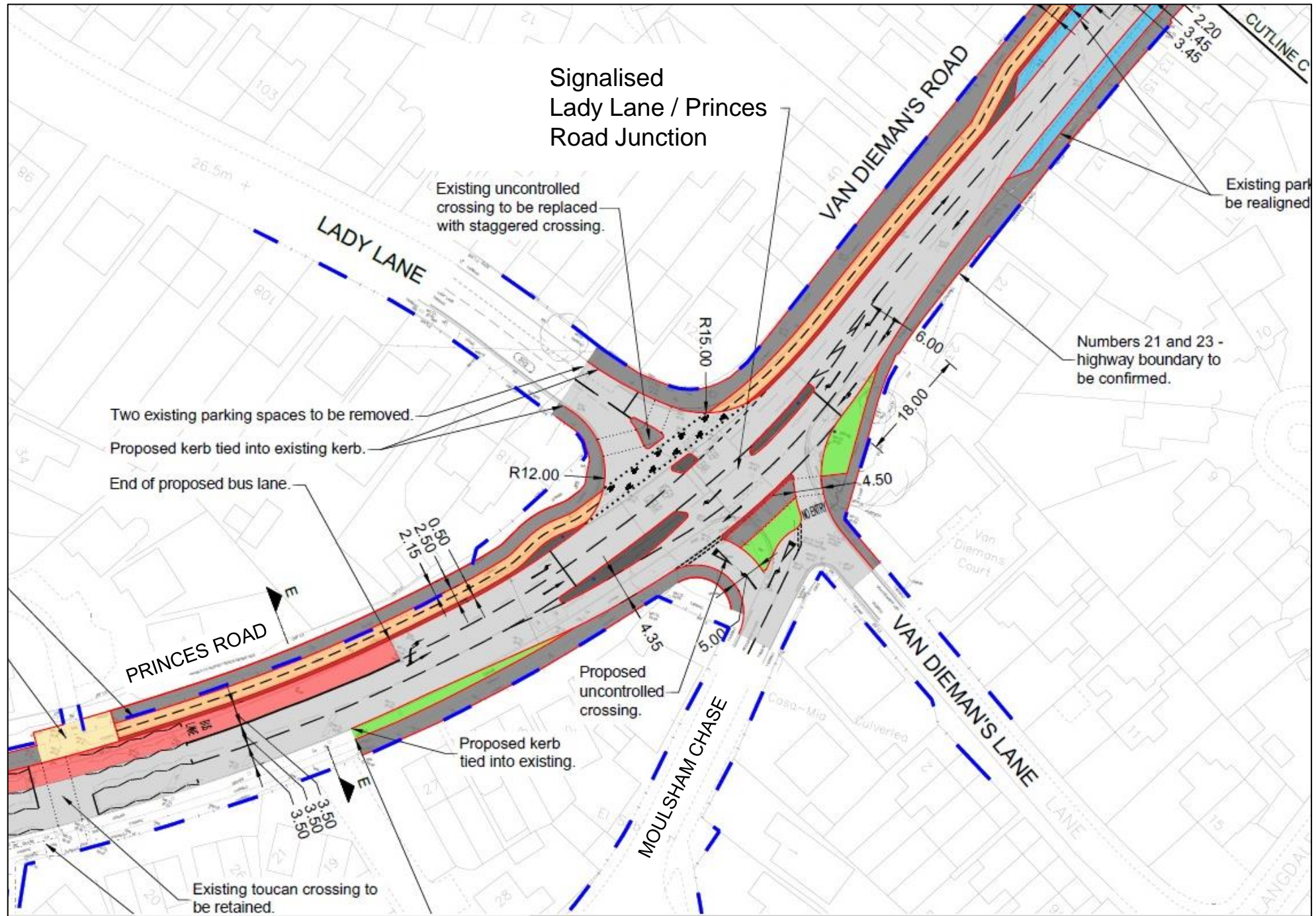
One northbound lane for general traffic on Van Diemans Road and a signalised Lady Lane junction. Requires closure of Van Diemans Lane



Lady Lane Junction Option 2 (signalised)

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

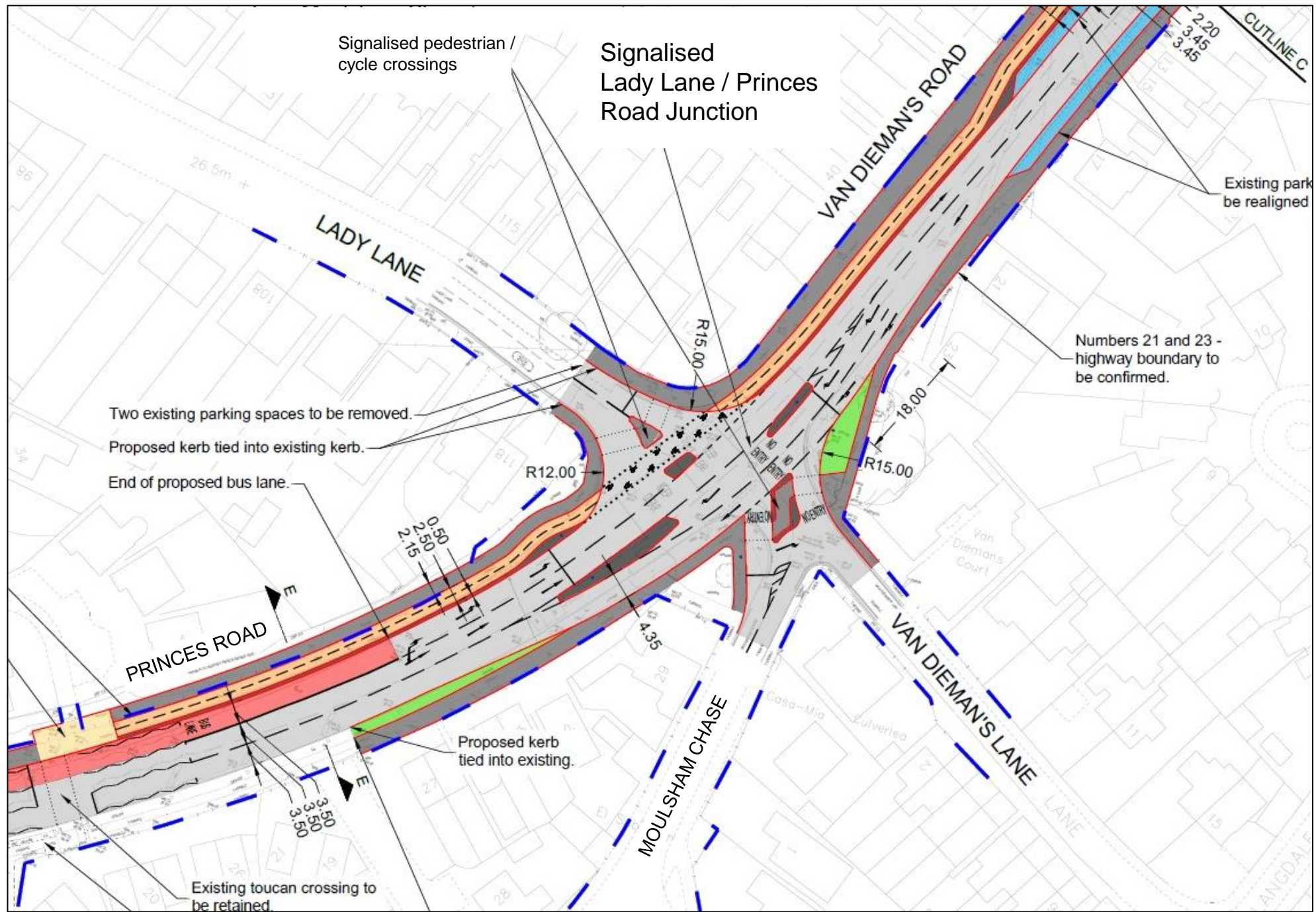
Traffic from Moulsham Chase/ Van Diemans Lane would be restricted to left-in and left-out movements.



Lady Lane Junction Option 3 (signalised)

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

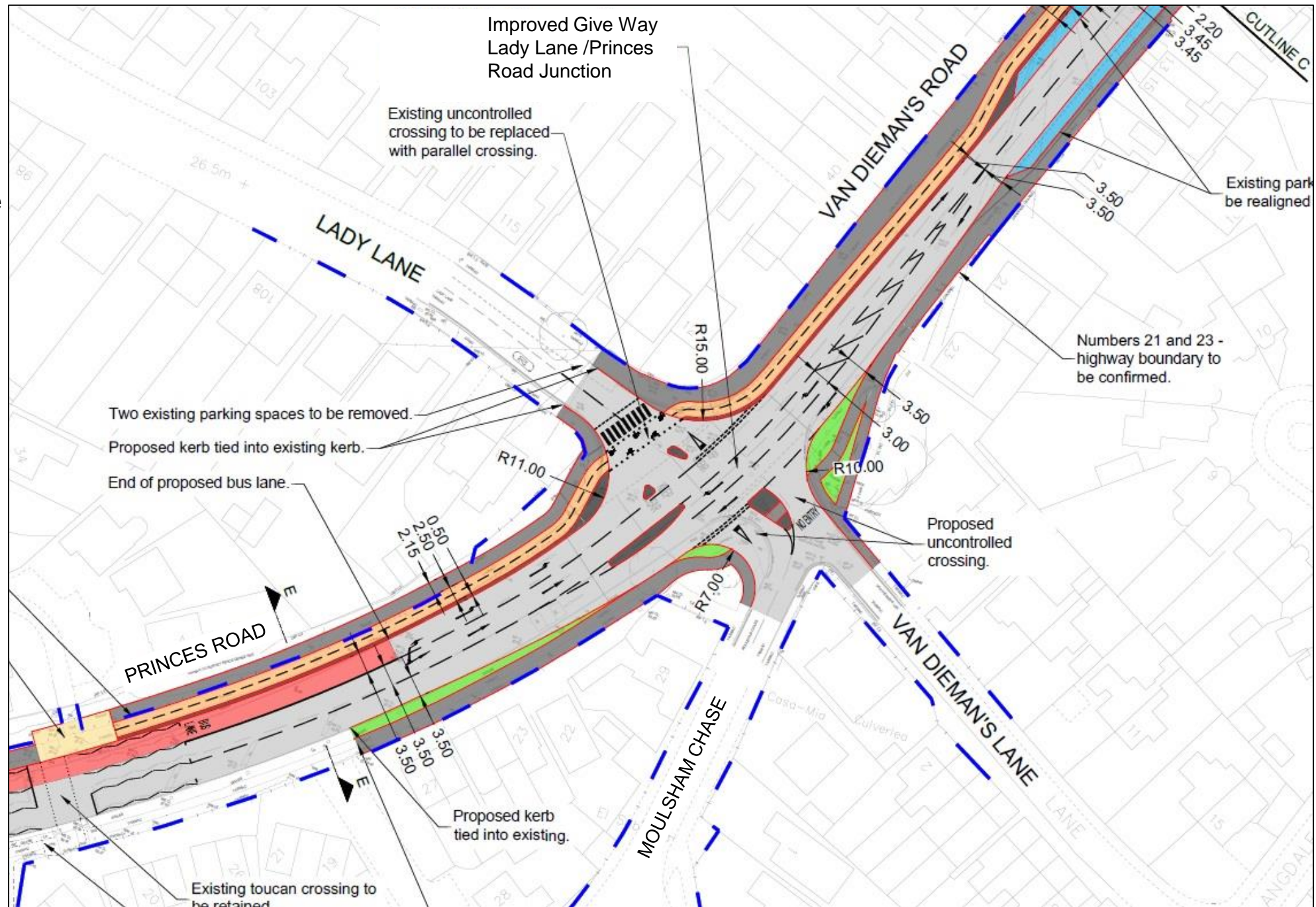
Traffic from Moulsham Chase/ Van Diemans Lane would be restricted to left-in and right-out movements.



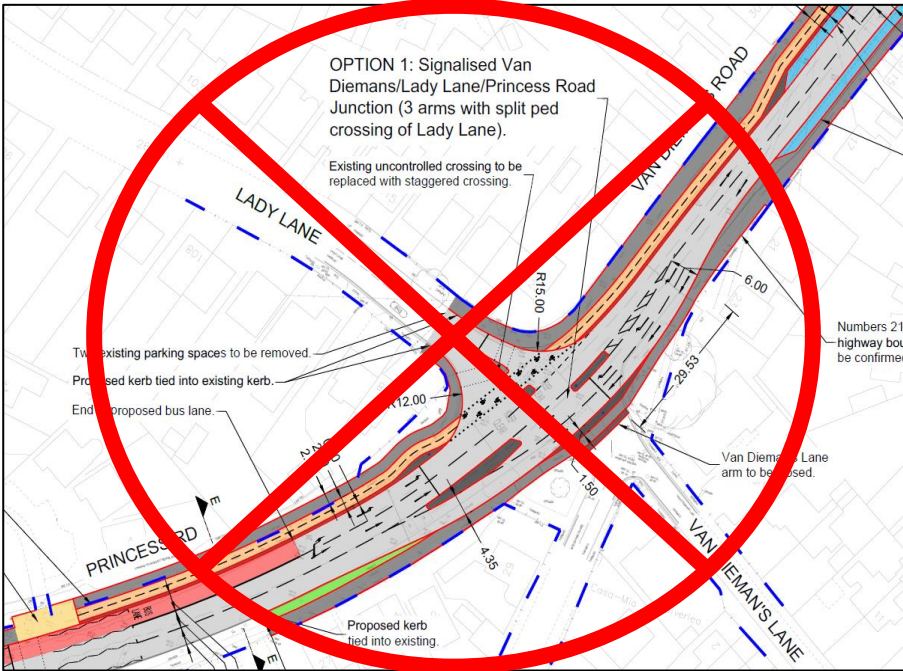
Lady Lane Junction Option 4 (give way)

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

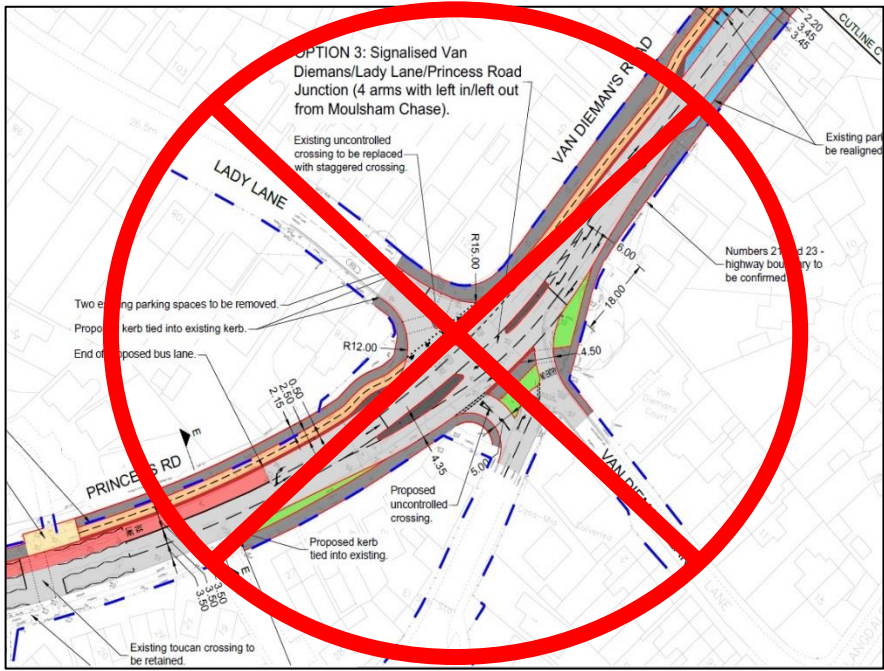
Traffic movements from Moulsham Chase/Van Diemans Lane would be unrestricted.



Option 1:



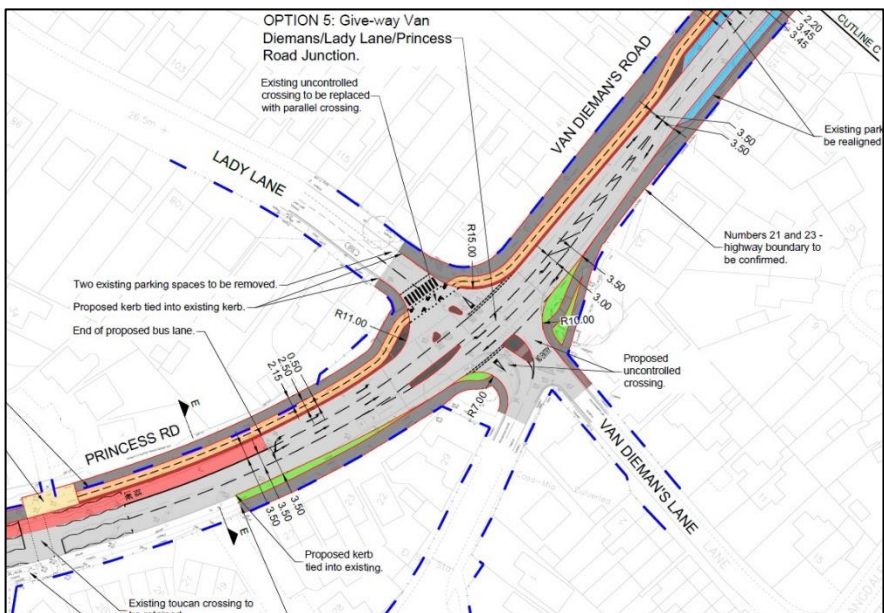
Option 2:



Option 3:



Option 4:



Princes Road/Lady Lane – Give way option chosen

- Having assessed four potential options for the Lady Lane junction, the give way option (option 4) has now been chosen as the preferred option
- There was little difference between the options in terms of operational performance/capacity
- The give way option caters for all movements and is less likely to encourage “rat running” up Moulsham Chase than a signalised option which allows right turns onto Van Diemens Road
- No safety concerns raised with either the give way or our preferred signalised option (option 2)
- The give way option (option 4) provides a parallel crossing for pedestrians/cyclists across Lady Lane, reducing journey times for them
- The give way option (option 4) was slightly better from a noise impact perspective
- Previous engagement indicated the give way option (option 4) would be preferred

Surveys and site investigations



Surveys and Site Investigations

- Various surveys and site investigations have been taking place to give us a better understanding of existing site conditions and help inform the next stage of our design work
- Ground Penetrating Radar (GPR) surveys have been completed for Army and Navy, Sandon Park and Ride and Chelmer Valley Park and Ride
- Drainage surveys also completed at Army and Navy, Sandon and Chelmer Valley
- Pavement cores and ground investigations completed at Army and Navy, and Sandon. Chelmer Valley pavement and ground investigations to be undertaken this month (November 2022)
- Trial holes likely to be undertaken at Army and Navy – scope of works being developed following Ground Penetrating Radar surveys. Dates to be confirmed.

Next steps



Design

- Currently working on updated highways alignment and drainage design
- Following completion of highways alignment design, pavement, ITS (signal design) and street lighting design will commence
- On completion of drainage design and flood modelling, along with all of the above, landscape design will be completed



Additional public consultation

- There will be additional public consultation ahead of planning submission. It would focus on the Park and Ride elements of the Army and Navy Sustainable Transport Package, and specifically Chelmer Valley
- This will ensure the public have had adequate opportunity to comment on the revised package
- We are required to submit a statement of community involvement for the different elements of the project as part of the planning process
- If we do not consult on Chelmer Valley Park and Ride then there is a risk to the Park and Ride proposals, as well as the wider project
- Consultation will be primarily digital and run in early 2023



Planning

- Flood modelling is currently ongoing and is critical to determining flood compensation requirements and the red line boundary of the scheme
- Drainage design will also impact on red line boundary once attenuation requirements are known
- Environmental Impact Assessment for Army and Navy, Sandon and Chelmer Valley are expected to be submitted in January
- We plan to submit all three planning applications (Army and Navy, Sandon and Chelmer Valley) at the same time, in parallel, linking to one another



Advanced Utility Diversions

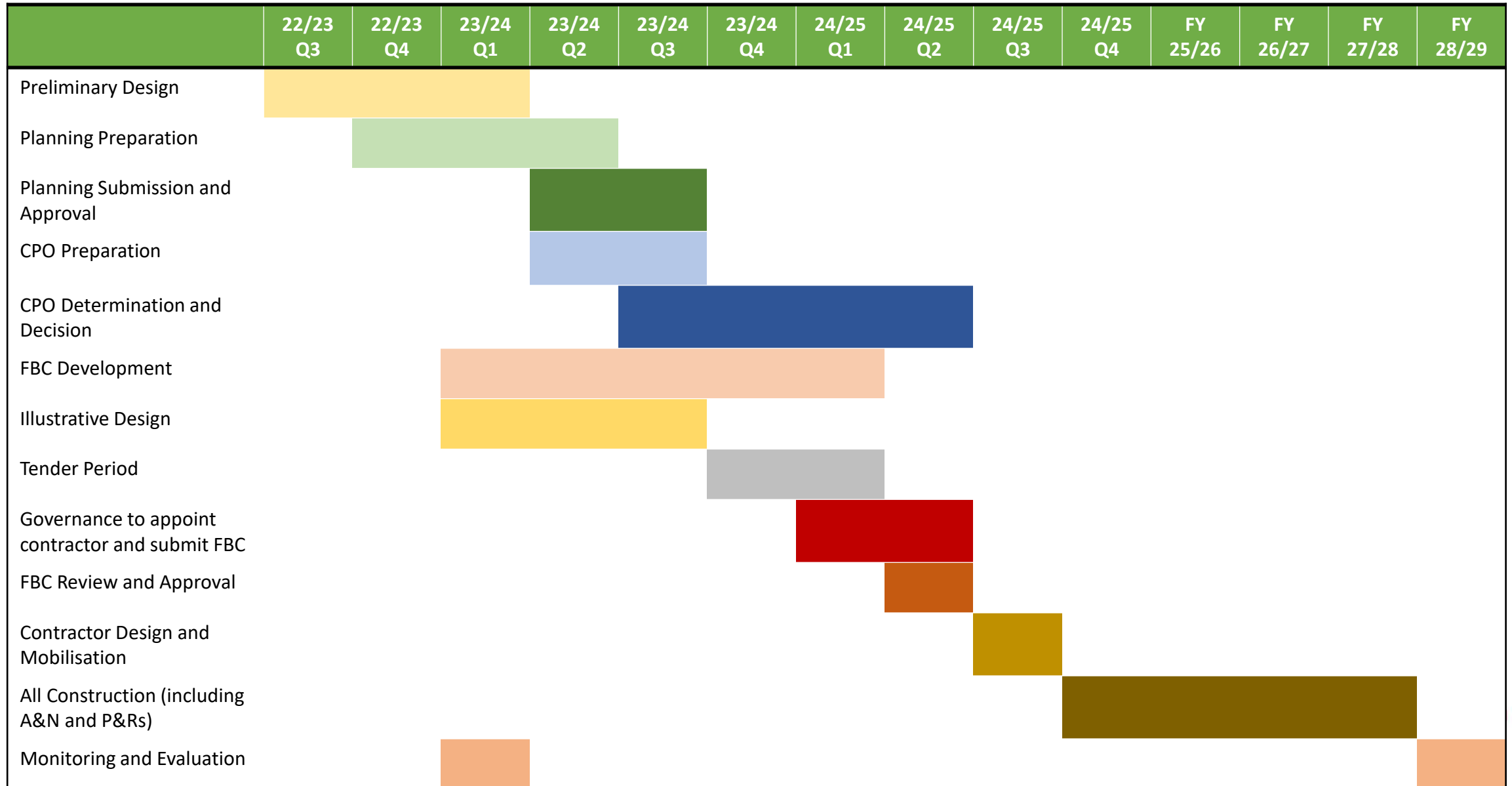
- To help mitigate the risk of utility diversions delaying the construction programme, we are exploring the possible diversion of some utilities in advance of the main construction works
- We have received costs and some diversion plans following a design fix in spring 2022
- We are chasing up outstanding diversion plans to start to identify potential opportunities for advanced utilities diversions to mitigate risk of delays during construction
- Updates will be sought in early 2023, following the next design fix before planning
- Advanced diversions would potentially be carried out in 2024/2025



Programme



Current programme





Thank you

