

D6815 Claygate Lane, Thames Ditton Cycle Facility

Feasibility Report

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Cycle facility

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1. INTRODUCTION:

Requests have been made for Surrey County Council to investigate the feasibility of installing a cycle facility along Claygate Lane, Thames Ditton, between Manor Road North and A307 Portsmouth Road. The Elmbridge Local Committee agreed to fund this study and report.

Recently a CIL funding bid was awarded to provide a shared pedestrian/cycle facility along Claygate Lane, between A309 Kingston By-pass to the south and Manor Road North to the north. There are already cycle lanes along the A307 Portsmouth Road that head towards Esher to the south west and Kingston upon Thames to the north east (see Figure 1).

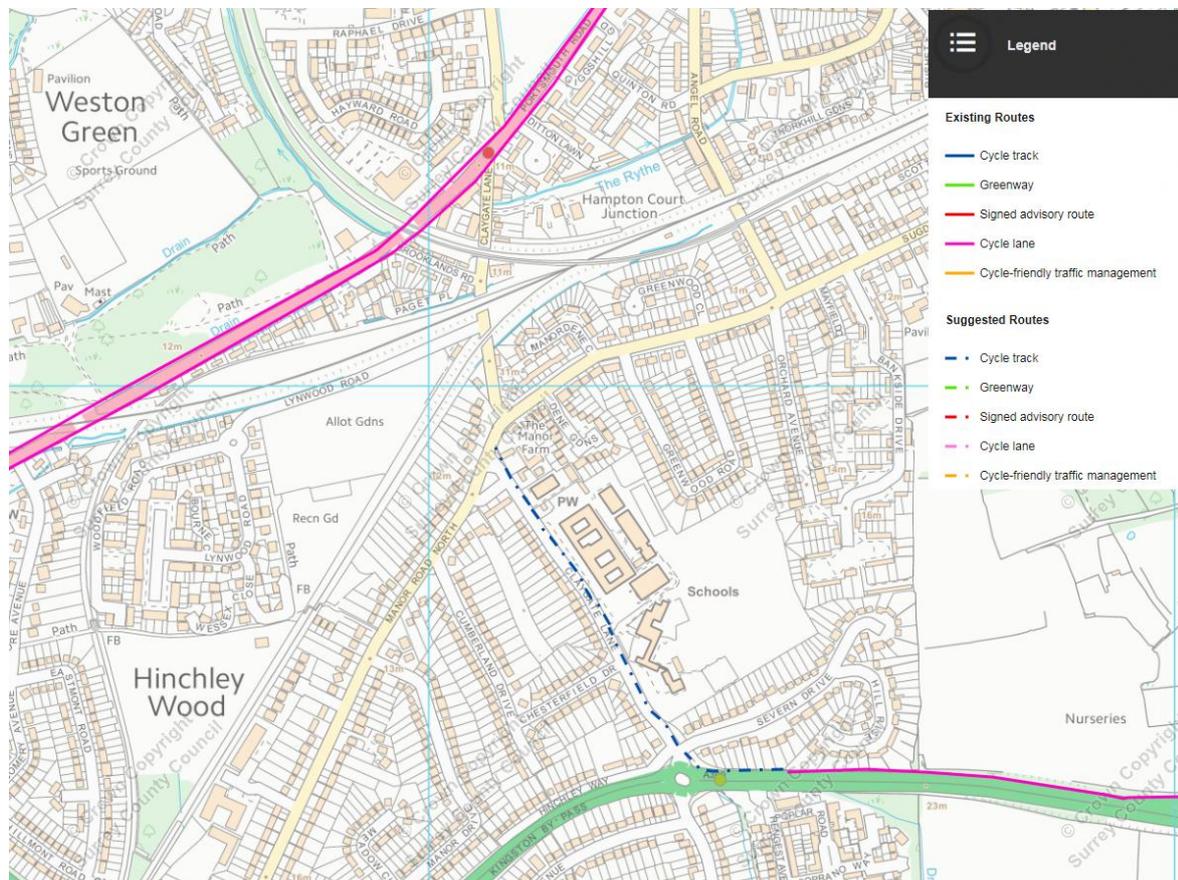


Figure 1: Cycle facility plan

This feasibility report looks at options that provide cycle facilities between the provisions mentioned above, thereby providing a continuous link for cyclists between A309 Kingston By-pass and A307 Portsmouth Road.

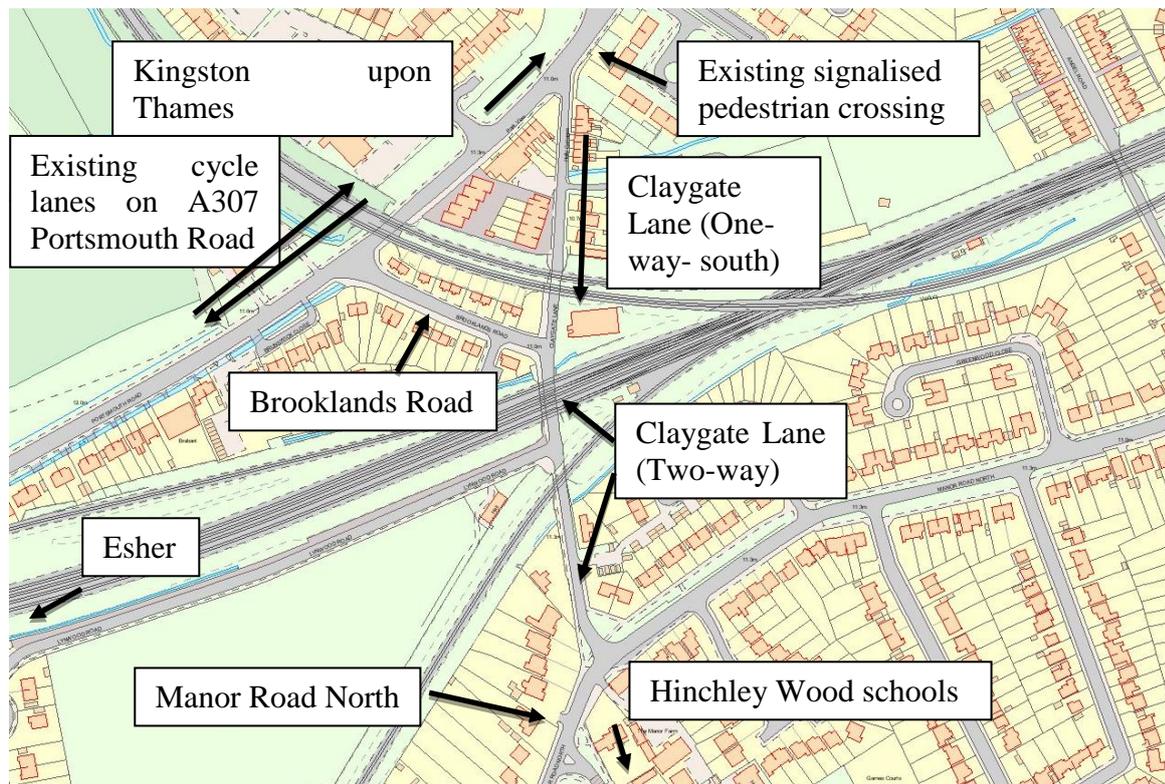


Figure 2: Location plan

2. SITE ANALYSIS:

The section of Claygate Lane under investigation runs north to south between Manor Road North and A307 Portsmouth Road. The northern most section of Claygate Lane is One-Way in the southbound direction, therefore Brooklands Road that runs northwest-southeast between Claygate Lane and A307 Portsmouth Road, will also form part of the study.

The length of Claygate Lane is approximate 350m (one-way section 150m, two way section 200m). Despite the short length the road is crossed by 3 rail bridges each with a height restriction of 14'. Brooklands Road is approximately 120m in length.

The carriageway widths along Claygate Lane vary between approximately 4.2m and 5.5m, with the width of Brooklands Road being approximately 7.5m.

Claygate Lane has an existing footway that runs along its length on the western side. It also has a footway on its eastern side in places, there is a 120m section south from its junction with Portsmouth Road, and a 55m section north from its junction with Manor Road North.

Brooklands Road has existing footways on both sides of the road.

Beyond the rear of the highway extents is mainly residential properties with railway embankment verges and some commercial properties (see Figure 3 for public highway extents plan).



Figure 3: Highway extent plan (yellow indicates public highway)

There is no bus service running along these roads.

There is an existing system of street lighting on Claygate Lane and Brooklands Road, with lighting columns present on both sides of the carriageway.



Figure 4: Photograph of Claygate Lane (2 way section), looking north



Figure 5: Photograph of Claygate Lane (one-way section), looking north



Figure 6: Photograph of Brooklands Road, looking north

3. DATA COLLECTION:

3.1 Personal Injury Collision Data

An assessment has been made of the personal injury collisions along Claygate Lane, between its junctions with Portsmouth Road to the north and Manor Road North to the south, as well as Brooklands Road for the last 3 full years and part of 2017 where data is available, giving the period between 1st January 2014 and 30th June 2017. The Police and Surrey County Council do not collect or hold 'damage only' collision data, and therefore we are unable to report or comment on these. During this period there are three recorded personal injury collisions, all had a severity of 'slight'.

Latest 3 year and year to date collisions (01/01/14 to 30/06/17)			
Year	Slight	Serious	Fatal
2014	1	0	0
2015	1	0	0
2016	1	0	0
2017 (Jan to June)	0	0	0
Total	3	0	0

Figure 7: Personal Injury Collision Data

When the police attend personal injury collisions they assess and log the contributory factors that lead to the collision. The table below shows all the factors that led to the collisions that have been recorded at this location during

this assessment period. Some collisions have a number of factors attributed to them.

Collision contributory factors (01/01/14 to (30/06/17)	
Factor	Number
Failed to look properly	2
Slippery road	1
Vision affected by dazzling sun	1
Inexperienced or learner driver/rider	1
Poor turn or manoeuvre	1

Figure 8: Personal Injury Collision Contributory Factors

All the collisions took place during daylight, and two of the three collisions happened when the road surface was dry.

Two of the three collisions involved cyclists. One collision took place at the junction of Claygate Lane and Lynwood Road, where the cyclist (12 year old) was travelling south on the footway and failed to see/give way the car that was also travelling south, and was turning right into Lynwood Road.

The other collision took place along the one-way section of Claygate Lane, where the cyclist (18 year old) who had been travelling north on the footway (against the flow of the carriageway), left the footway and collided with a car heading south.

4. DISCUSSION AND OPTIONS:

The primary purpose of a cycle facility is to provide users with a safe and more convenient route. Given the restrictions of the highway, the options available to create a cycle facility are limited.

4.1 Do nothing

This option looks at carrying out no works. If no works were conducted then it is likely that collisions involving cyclists could continue at approximately the same rate. In both of the cycle-involved collisions, the injury was caused by cyclists leaving the footway without adequate visual checks. Currently cyclists should not be on the footway as they have not been designated as a shared facility. Due to the widths of the footways however, it is likely that some cyclists will continue to ride along the footway.

By doing nothing, there will continue to be a break in cycle facility between Kingston By-pass and Portsmouth Road. To encourage cycling and other sustainable transport modes, it is important that users feel they have adequate provision along the length of their route.

Conclusion – Doing nothing will not improve the number of personal injury collisions involving cyclists, nor will it remove the break in route that could

otherwise be addressed. It is therefore recommended that this option is not chosen.

Guide price for construction £0k

4.2 Option 1 – Shared footway/cycleway, off-carriageway facility (see drawing number PC804-01)

Once the proposed cycle facility in Claygate Lane, between Kingston By-pass and Manor Road North is implemented, the facilities at either end of the area under investigation will differ, an off-carriageway facility to the south and on-carriageway cycle lanes to the north. As these facilities are already different from one another, it gives the opportunity to install either type here, and still retain a semi-constant route.

This option looks at converting the existing footway to a shared footway/cycleway and allowing cyclists to cycle off the carriageway and away from vehicles.

In order to provide an off-carriageway shared facility there needs to be adequate footway width and ideally have as few breaks, such as side road junctions, as possible. The reason for this, is that if a cyclist has to stop to give way frequently then there is more chance they will choose to cycle on the carriageway, where they do not need to give way. This will mainly depend on the cyclist using the route and whether they are confident/professional, vulnerable/casual user, or somewhere in-between. Whereas vulnerable/casual cyclists are more likely to choose to use the off-carriageway facility, confident cyclists are more likely to continue to cycle on the carriageway, even if they are immediately adjacent to the facility. It is unlikely that all cyclists would choose to use an off-carriageway cycle facility.

The footways along the one-way section of Claygate Lane are of an inadequate width to be converted to a shared facility, and the carriageway is also narrow, so the option to widen the footway into the carriageway would not be advisable. This lack of carriageway width also prevents the introduction of a contra-flow cycle lane.

The existing footway along the western side of the two-way section of Claygate Lane has a width of between 2.1m and 2.5m. The southern footway in Brooklands Road is between 3.6m and 4.8m. There are many shared facilities within Surrey that are a minimum of 2.0m and work well, however new guidance is currently being developed that would suggest off-carriageway facilities should be at least 2.5m wide. If this guidance were to be followed, then the existing footway would then require widening, some of this may be achieved by converting verge at the rear of the footway, but in some cases it may be necessary to widen into the carriageway. If widening into the carriageway becomes necessary this would further reduce the width of the carriageway.

Recent pedestrian survey data shows that on a typical school day the pedestrian refuge islands across Manor Road North either side of Claygate Lane have 825 pedestrian movements between 7am and 7pm, 49 of these were with bicycles. The vast majority of the movements take place between 8-8:30am and 3-3.30pm, which coincides with the start and finish of the school day. This would suggest that the peak footfall along Claygate Lane would also match these times. This would likely indicate that anyone trying to cycle along this footway during these times may find it difficult to do so.

If an off-carriageway shared facility were to be installed, then it would run along the western footway of Claygate Lane and the southern footway of Brookland Road. As the CIL funded scheme is looking to provide a cycle friendly crossing of Manor Road North, the shared facility would need to run to this to ensure a continuous link. To the north of this option, provision would ideally need to be made to allow cyclists to cross Portsmouth Road enabling them to access the Kingston bound on-carriageway cycle lane. A toucan crossing, is likely to be the best method for achieving this on such a busy road.

The installation of directional 'wayfinding' signage to various destinations would also help to guide cyclists.



Figure 9: Example of 'wayfinding' sign

This option would allow those who wish to use the off-carriageway facility to travel a seamless route, from one facility to another. The cost of providing this would, however, be great.

Conclusion – This option provides a full facility for those cyclists that would chose to use an off-carriage route.

Guide price for construction £200-250k

4.3 Option 2 – Signed only, on-carriageway facility (see drawing number PC0804-02)

An on carriageway facility would typically consist of advisory or mandatory cycle lanes, however, given the widths of the carriageways and the likelihood of vehicles parking on them, in this case it would not be advised.

On-site observations suggest that cyclists travelling along Claygate Lane and Brooklands Road, currently do so with little difficulty. The two personal injury collisions that have involved cyclists have both been when the cyclists were emerging from the footway onto the carriageway, and no recorded collisions of cyclists on the carriageway. Given this information it could be seen that keeping the cyclists on the carriageway helps remove the number of conflict points, and thereby the likelihood of collision.

Having the facility on the carriageway may deter some vulnerable/casual users from cycling along this route, indeed some may well still choose to cycle on the footway as is currently being done.

The very minimum needed to provide a cycle link, would be to install directional 'wayfinding' signage to various destinations. This option goes one step further by providing cycle symbols to be painted on the carriageway to help reinforce to motor vehicle drivers that cyclists may be present and therefore goes some way to raising their awareness.

Conclusion – This can be seen as a 'do-minimum' option, but still providing a cycle link.

Guide price for construction- £15-25k

5. RECOMMENDATION:

Site observations have shown that traffic along these roads is not significant, and for this reason along with other factors detailed in this report it is believed that an on-carriageway facility would be appropriate for this site, and is therefore recommended.