

Quietway Cycle Route

1. Introduction

- 1.1 This supplementary report forms Appendix N of the Quietway Cycle Route IDM Report to be considered by the Cabinet Member for Regeneration, Planning, and Transport.
- 1.2 The report relates to the proposed highway measures associated with Site J on the Quietway Route and specifically to the feasibility of an alternative routing of the cycle route along Cole Street and Swan Street that has been suggested by the Trinity Newington Tenants' and Residents' Association.
- 1.3 It must be noted that the current Quietway Route through Globe Street and Trinity Street has already been agreed informally by the borough and Transport for London as the most appropriate route for cyclists to use – and forms an established cycle route.

2. Background

- 2.1 Informal public consultation took place with all residents, businesses and stakeholders within the defined consultation area for Site J between the 5th August 2014 and the 5th September 2014. Responses were accepted online until the 12th September 2014.
- 2.2 On the 29th September 2014 officers consulted Borough, Bankside and Walworth Community Council, covering the background of the proposals and the consultation results with a draft of the proposed recommendation to the Cabinet member for Transport, Environment and Recycling for sites H to M.
- 2.3 At the meeting (and officially recorded in the minutes), residents discussed that there was a possible alternative route for the Quietway cycle route via Swan Street and Cole Street (refer to figure 1). Ward councillors (Chaucer Ward) detailed their full support in opposing any measures which would undermine the purpose of the carriageway gates in Trinity Street.
- 2.4 Following the community council meeting, the Cabinet Member for Regeneration, Planning, and Transport agreed to meet with officers, ward councillors and representatives from the Trinity

Newington Tenants and Resident Association to discuss the recommendations that were made in the consultation report for Site J. The meeting was held on the 20th October 2014.

2.5 Following discussions at the meeting, the Cabinet Member instructed officers to provide a report investigating the feasibility of the alternative route suggested by the Trinity Newington Tenants and Residents Association and compare it to the proposed route via Globe Street and Trinity Street.

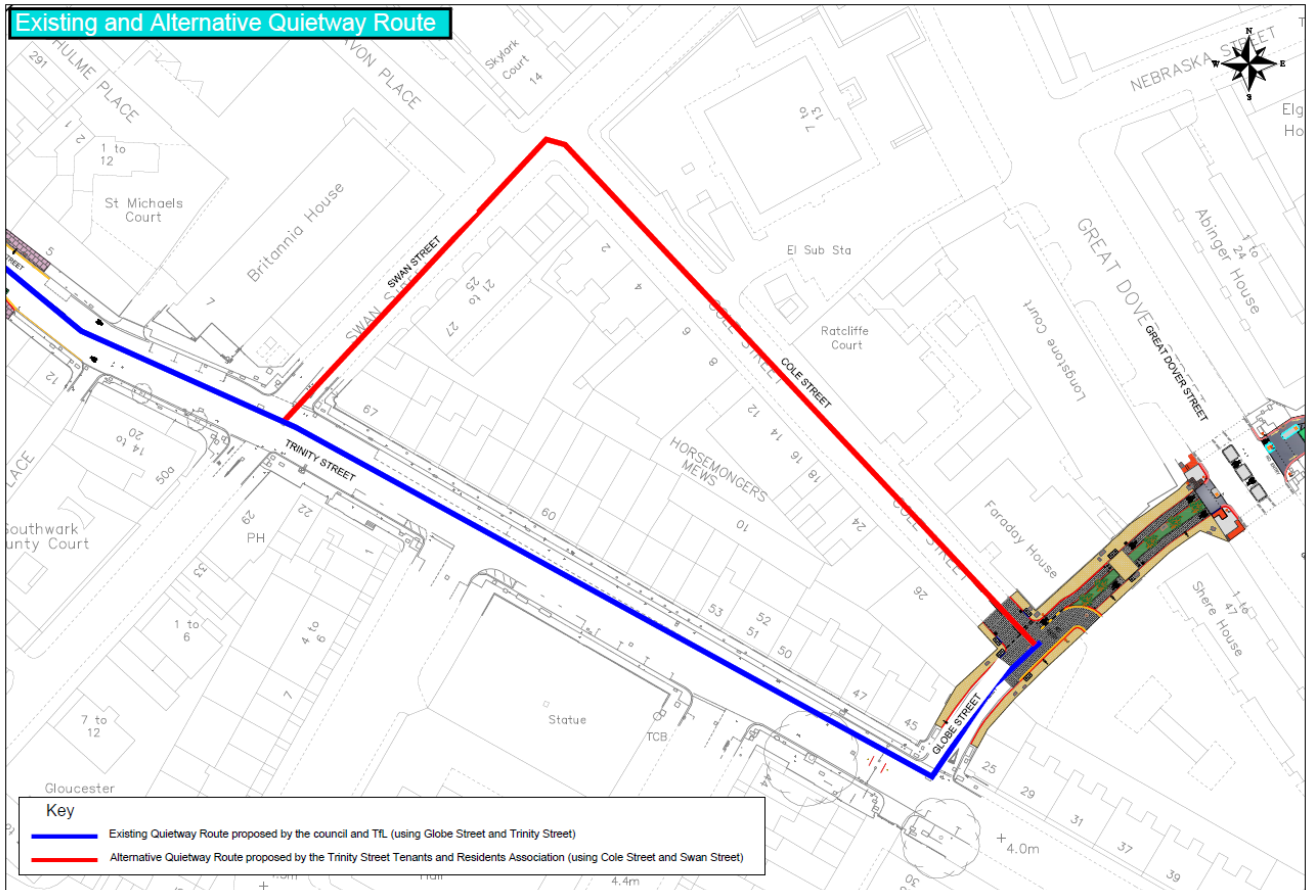


Figure 1: Existing and Alternative Quietway Cycle Route

3. Feasibility Analysis

3.1 Route Length Comparison

3.1.1 The difference in length of the existing route via Globe Street and Trinity Street compared to the alternative route via Cole Street and Swan Street is provided in table 1 below.

3.1.2 The length of both routes has been calculated from the junction of Cole Street / Globe Street to the junction of Swan Street / Trinity Street.

	Existing Routing	Alternative Routing
Length	170m	220m

Table 1: Length of both routes

3.1.3 Table 1 illustrates that the alternative route via Cole Street and Swan Street is significantly longer than the proposed Quietway route via Globe Street and Trinity Street . The alternative route is 29% longer in distance and therefore would be a disbenefit to cyclists. Quietway routes should be on the most direct alignment and not be proposed on detours that take cyclists off their intended direction of travel, resulting in additional distance and inconvenience.

3.2 Desire Line Compliance

3.2.1 When evaluating a proposed route, it is imperative to analyse if the route is likely to be traversed and provides the most direct line between key destinations of interest.

3.2.2 The key points of destination for this analysis are the junctions of Cole Street / Globe Street and Trinity Street / Swan Street. The first junction is used for eastbound cyclists to access Great Dover Street and eastern sections of the Quietway Route and the second for accessing Borough High Street and Quietways route sections to the west.

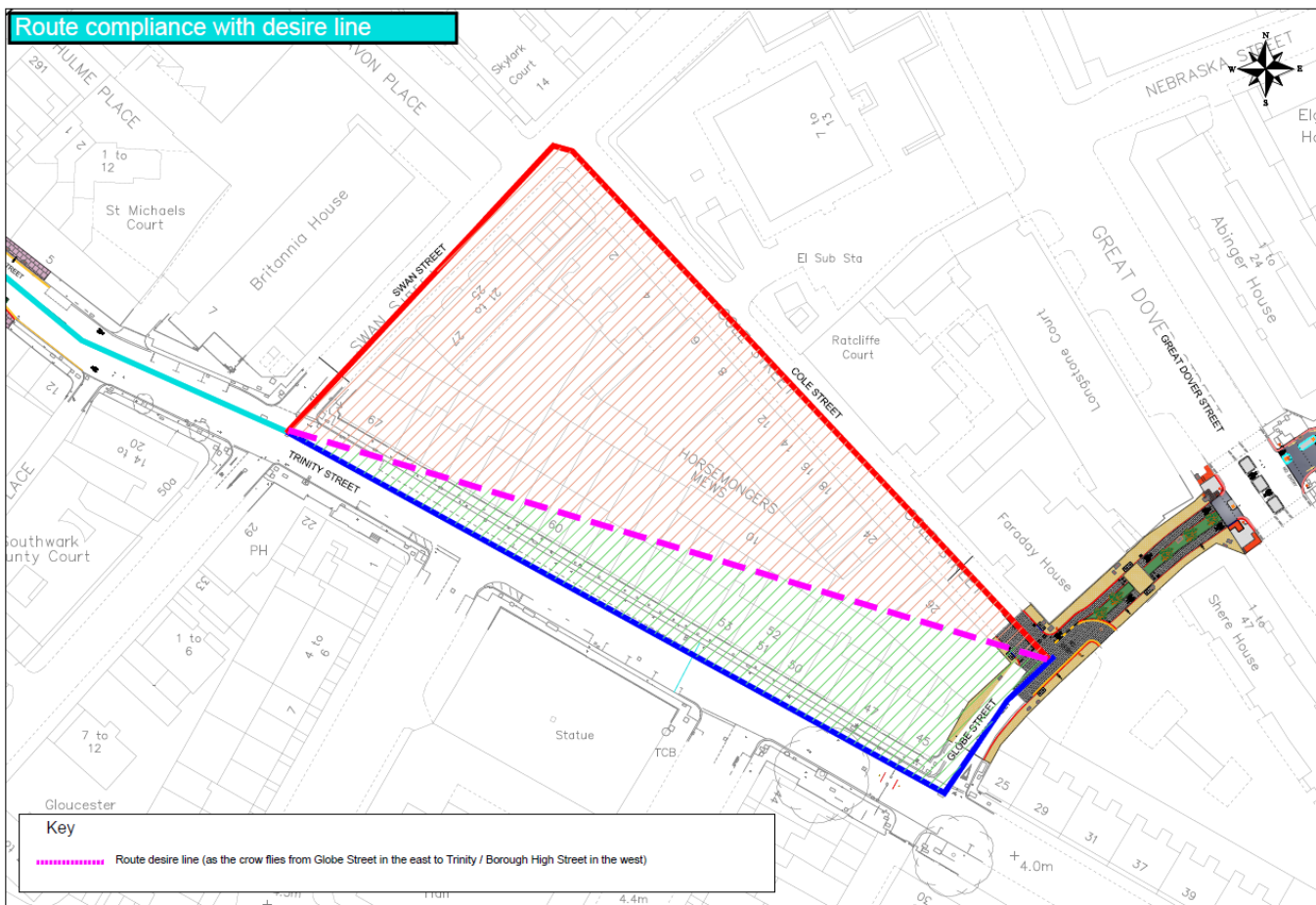


Figure 2: Desire line of cyclists using the Quietway Route

3.2.3 Figure 2 illustrates that the most direct route that best serves the existing desire line between the two junctions is the existing proposed Quietway route via Globe Street and Trinity Street. People will always traverse the shortest and most direct route to a destination. It is therefore highly unlikely that even if the Quietway route was changed to Cole Street and Swan Street, regular cyclists would actually use these streets when the most direct route is via Globe Street and Trinity Street.

3.3 Carriageway Condition

3.3.1 Existing carriageway condition has been analysed to assess the ride quality for cyclists and to ascertain if there would be any additional costs associated with resurfacing the carriageway of the alternative route via Cole Street and Swan Street.

3.3.2 It is noted that the section of Trinity Street carriageway between the barrier gate and Swan Street is poor. However this section is being resurfaced as part of NPR works in the 2014/2015 financial year, which will rectify the existing defects and significantly improve the ride quality for cyclists.

3.3.3 The carriageway condition in Globe Street is adequate and there are no visual signs of failure or cracking in the wearing course layer (see figure 3).

3.3.4 The carriageway surface of Swan Street is adequate and although some minor defects are present, there are no significant concerns for cyclists (see figure 4).



Figure 3: Globe Street carriageway



Figure 4: Swan Street carriageway

3.3.5 The carriageway of Cole Street is extremely poor with large areas of failure to both the wearing course and sub base. See attached examples in figures 5 and 6. This presents a significant safety issue to cyclists and other road users.



Figure 5 and 6: Cole Street carriageway

- 3.3.6 Cole Street would therefore need to be resurfaced. The failure of both the wearing course and sub base would require a full depth carriageway reconstruction to be undertaken. It is also noted that the sub base is concrete which is costly and time consuming to break out.
- 3.3.7 The above would have significant cost implications. The carriageway area of Cole Street is approximately 933m² and a full depth reconstruction of the carriageway including excavation, installation of base course, binder course and wearing course would result in additional costs of around £150,000. These costs would be over and above the funding available for this section of the route. TfL would be very unlikely to fund this element, as the preferred route for the Quietway that has been agreed with the council is through Globe Street and Trinity Street, which offers an extremely low cost solution (modification to the existing barriers) compared with costs required to resurface the carriageway of Cole Street.

3.4 Carriageway Widths

- 3.4.1 Carriageway widths have been analysed to provide a comparison between the existing and alternative route suggested by the Trinity and Newington TRA. Table 2 below illustrates the carriageway width for each road and includes a measurement that takes into account existing parking bays that limit available carriageway width for vehicle movement.

	Overall Width	Width adjacent to parking bays	Comment
Globe Street	6.35m	6.35m	(No kerbside parking proposed for entire length)
Trinity Street	10.72m	6.72m	(Taking into account 2m parking bay either side of the road)
Cole Street	6.75m	2.75m	(Taking into account 2m parking bay either side of the road)
Swan Street	7.53m	3.53m	(Taking into account 2m parking bay either side of the road)

Table 2: Carriageway widths of existing and alternative Quietway Route

- 3.4.2 Taking into account the narrowest section of carriageway adjacent to parking bays, Trinity Street and Globe Street have ample carriageway width to cater for the two-way operation of general traffic and cyclists.
- 3.4.3 Both Swan Street and Cole Street have lengths of carriageway with parking both sides of the road that narrows carriageway width down to a single lane width. This is a particular concern in Cole Street where the carriageway width between the existing parking bays is less than 3m. This is unacceptable for this section of the Quietway route that currently caters for an average of 185 cyclists per hour (westbound in the morning peak), with numbers expected to significantly increase once the Quietway scheme has been implemented.
- 3.4.4 The width of the carriageway in Swan Street and Cole Street is therefore a safety concern, with potential head on conflict between vehicles and cyclists or potentially resulting in cyclists becoming 'squeezed' as vehicles could attempt to overtake cyclists. Figure 7 and 8 illustrate vehicles traversing between parked vehicles in Cole Street and Swan Street, taking up the majority of available carriageway between parking bays.



Figure 7: Vehicle traversing Swan Street



Figure 8: Vehicle traversing Cole Street

- 3.4.5 As a result of sub standard carriageway widths on Cole Street and Swan Street due to sections of adjacent parking bays, existing kerbside parking provision may need to be removed in order to achieve an acceptable width to cater for two-way traffic and a large numbers of cyclists.
- 3.4.6 Parking removal would result in further consultation with residents and is likely to attract vociferous objections, as the majority of existing bays are utilised during the day, with very high occupancy rates in the evening. This issue would be exacerbated further, as no existing parking provision is proposed to be altered or removed along the existing Quietway route in Globe Street and Trinity Street.
- 3.4.7 In addition to the above, if parking was to be removed along Cole Street and Swan Street, then it would be likely that the bays on the western side of Swan Street (see figure 9) and northern side of Cole Street (see figure 10) would be removed, as they are not directly outside residential or commercial frontages. However these particular bays are currently shared use and their removal would also have a negative financial impact due to loss of pay and display income.



Figure 9: Shared use bays on the western side of Swan Street



Figure 10: Shared use bays on the northern side of Cole Street

3.4.8 It is noted that there are also two designated doctor vehicle bays that would have to be relocated. When reviewing the area, it is possible to relocate the bays on the southern side of Trinity Street to the west of Swan Street junction.

3.4.9 However when reviewing the area, there are no suitable locations to relocate the shared use bays. The only potential location was the western kerbline of Swan Street to the north of Cole Street junction, where there is currently an existing single yellow line. However upon further review, the single yellow line restriction has been implemented to ensure that there is enough carriageway width for vehicles accessing the northern section of Swan Street, which is a dead end, to turn around. It is also evident from site investigations that the single yellow line is also used for loading activity and the servicing requirements for the adjacent frontages in Great Dover Street. It must also be noted that whilst there are sections of existing single lines adjacent to or opposite road junctions, these locations are also not suitable due to the requirement maintain sightlines.

3.4.10 Therefore the introduction of the cycle route along Cole Street and Swan Street will most likely result a net loss of eight shared use bays.

3.5 Additional Elements of Concern

3.5.1 Number of Junctions Traversed by the Alternative Route

3.5.1.1 The alternative route suggested via Cole Street and Swan Street results in cyclists having to negotiate an additional road junction. The current route requires cyclists to traverse the Globe Street / Trinity Street junction, whereas the alternative route requires cyclists to negotiate the Cole Street / Swan Street junction and Swan Street / Trinity Street junction.

3.5.1.2 This not only presents an additional safety risk to cyclists using the route, but also increases journey time and reduces the confluence of the route. Cyclists travelling westbound would have to give way at both junctions thereby creating delay to their journey, compared to using

the existing route via Globe Street and Trinity Street. This adds further to the outcomes discussed in above sections of the report relating to desire line and distance..

3.5.1.3 A potential safety issue was also identified for cyclists exiting Swan Street into Trinity Street. Existing parking bays on the northern side of Trinity Street to the west Swan Street have the potential to obstruct sightlines of cyclists exiting Swan Street (see figure 11). This would be of particular concern if all three bays are occupied or a bay was occupied by a high sided vehicle. Therefore it would be recommended to remove the parking bays to ensure adequate sightlines are achieved to cater for the number of cyclists that would be exiting Swan Street. It is also noted that these are shared use bays and their removal would adversely impact council revenue.



Figure 11: Obstruction of westbound visibility splay exiting Swan Street

3.5.2 Encouraging Cyclists to use an Existing Vehicle Diversion Route

3.5.2.1 Both Cole Street and Swan Street are the existing east / west diversion route for motorised vehicles to bypass the barrier in Trinity Street. Realigning the Quietway route along these roads would therefore increase the risks to cyclists leading to potential conflicts, particularly at junctions and in locations of narrow carriageway width



Figure 12: Van traversing Cole Street

Weekday am peak 08:00 - 09:00

	Westbound	Eastbound
Cole Street	47	32

Table 3: AM peak traffic volume in Cole Street

3.5.2.2 Table 3 illustrates the morning peak traffic volume in Cole Street, with 32 vehicles recorded travelling eastbound and 47 travelling westbound. In addition, 28% of vehicles recorded were categorised as vans or larger tray-top utility vehicles (such as the vehicle depicted in figure 12).

3.5.2.3 Taking into account the above traffic volumes on Cole Street and the existing and projected cyclist numbers that will be using the Quietway route; and the fact that motorised vehicle traffic is prevented from traversing Trinity Street (other than for local access), there is an additional and unnecessary conflict risk for cyclists in using Cole Street and Swan Street.

3.5.3 Future Changes in Building Occupancy and Redevelopment

3.5.3.1 When planning the Quietway route, consideration was made to potential redevelopment of existing sites as well as future occupancy of vacant residential and commercial properties. Redevelopment or changes in occupancy will have a direct impact on the volume of vehicles accessing the area.

3.5.3.2 There is a large commercial office block located on the north-eastern corner of the Cole Street / Swan Street junction that is currently vacant (see figure 13). It is assumed that this property will be occupied by new commercial tenants or redeveloped / modernised into new offices or a large residential development.

3.5.3.3 It is noted that the current vehicle and service access into this site is via Cole Street. Therefore when the building becomes occupied by new tenants, traffic is likely to increase in Swan Street and Cole Street to access the site. This would be particularly concerning if the Quietway route was diverted along these streets, as an increase in the number of service and delivery vehicles including refuse lorries, would potentially have an adverse impact on cyclist safety.

3.5.3.4 In comparison, the frontages along Trinity Street are residential and it is highly unlikely that any major changes will occur along this section of the route that would change the current volume or composition of vehicles traversing the street.



Figure 13: Large empty commercial property in Cole Street

3.5.4 Requirement to Improve Accessibility for Trinity Street / Great Dover Street Route

3.5.4.1 In addition to the Quietway cycle route, there is also an established cycle route along Trinity Street linking Great Dover Street in the east and Borough High Street in the west. The closure of Great Dover Street / Falmouth Road / Trinity Street junction to motorised vehicles has removed the majority of non local traffic from traversing Trinity Street and has created a direct and safe route for cyclists (see figure 14).

3.5.4.2 As part of the council's emerging Cycling Strategy, changes to the existing barrier would be required regardless of the Quietway Route implementation. Principle 2, objective 2.2 in the draft strategy (cycling as a priority), outlines the need to prioritise cycling as a preferred mode of sustainable transport and to remove existing barriers that provide obstruction to ensure cyclists of all abilities are able to traverse a defined route without issue. In addition to the above there is also an existing prescribed route traffic order that prevents motorised vehicles traversing through the barriers (see figure 15).



Figure 14: Trinity Street link to Great Dover Street



Figure 15: Existing motorised vehicle prohibition

3.5.4.3 Also, as the existing barriers are difficult to negotiate, many cyclists currently prefer to use the adjacent footways to bypass the double chicane in the carriageway (see figure 16). This presents a safety issue for pedestrians and was raised as a concern by a number of local residents during the recent consultation exercise for Site J. As a result, the council is duty bound to modify the existing highway layout to enhance accessibility for cyclists and address the existing safety issues that has been identified at this location.



Figure 16: A cyclist using the footway of Trinity Street to bypass the carriageway barriers

4. Response to Safety Concern regarding the Ingress and Egress of Vehicles at Bedford Row

- 4.1 At the council / Trinity Newington TRA meeting on the 20th October, residents raised a concern relating to the ingress and egress of vehicles from Bedford Row being a danger to cyclists using the Trinity Street carriageway barrier / gate. Particular reference was made to refuse lorries reversing out onto the street, the number of vehicles using Bedford Row and that sightlines were poor for vehicles exiting onto the carriageway.
- 4.2 In response, Bedford Row is a gated development with only ten residential properties and no commercial activity (see figure 17). The only vehicles entering and exiting the site are associated with the residential properties and therefore the use of this vehicular accessway is minimal. Numerous site investigations during the Quietway Scheme development stage did not observe any vehicles entering or exiting from this location.
- 4.3 Residential refuse collection only takes place once a week and therefore the risk of refuse lorries colliding with cyclists is negligible. As part of the planning design and access requirements when the site was redeveloped, a suitable area should have been provided so that refuse lorries can turn on the site to exit onto Trinity Street in forward gear. It is noted on site that refuse lorries can undertake a three point turning manoeuvre using the carriageway of Bedford Row and the vehicular access leading to the underground car park that serves the residential dwellings.



Figure 16: Gated vehicular entrance into Bedford Row

4.4 Figures 17 and 18 below illustrate the visibility splays when exiting Bedford Row. Both photos clearly indicate that there are adequate visibility splays in both directions when exiting Bedford Row and comply with the requirements set out in Design Standard 114 of the Southwark Streetscape Design Manual. In addition to this, cyclists accessing the barrier on Trinity Street traverse down the centre of the carriageway in accordance the position of the barrier, and not the nearside kerb, which places them away from the vehicular entrance of Bedford Row. Likewise, cyclists accessing Trinity Street from Globe Street on the Quietway Route can see the vehicles access from as far back as Cole Street junction and are therefore able to identify potential turning movements of vehicles exiting Bedford Row before entering Trinity Street.



Figure 17: Bedford Row visibility splay to the west



Figure 18: Bedford Row visibility splay to the east

4.5 As a result of the above investigation, there are no major safety risks posed to cyclists or other road users relating to the use of the gated vehicle access associated with the Bedford Row residential development.

5. Conclusion

- 5.1 When reviewing the alternative Quietway route via Cole Street and Swan Street proposed by the Trinity Newington Residents Association, there are many issues that make the route impractical, less safe and more costly than the existing agreed routing by the council and TfL along Globe Street and Trinity Street. These are summarised below in Table 4.

Comparative Element	Existing Route	Alternative Route
Route distance (shortest preferred)	✓	
Most likely to conform to cycle route desire line	✓	
Suitable carriageway width for cyclists and general traffic	✓	
Adequate carriageway condition	✓	
Most cost effective highway interventions	✓	
Least number of road junctions to traverse	✓	
Parking removal to facilitate adequate carriageway width		✓
Loss of council revenue associated with parking removal		✓
Increased risk of conflict with motor vehicles		✓
Future changes along the route that will increase vehicle volumes		✓

Table 4: Comparison of the existing and alternative proposed route

- 5.2 Table 4 illustrates that the existing route via Globe Street and Trinity Street is the shortest and most direct route (desire line compliance). The carriageway condition is suitable to produce a good ride quality for cyclists and carriageway width between parking bays is adequate to facilitate the safe passage of cyclists and motor vehicles without conflict. The proposed change to the layout of the carriageway barriers is also a low cost, high impact solution.
- 5.3 In contrast, the alternative route is longer, less direct and places cyclists off the required desire line. The carriageway condition in Cole Street is extremely poor and it would be very costly to reconstruct and renew the surface. The sections of existing carriageway are too narrow to cater for two-way traffic and high volumes of cyclists. Parking bays would have to be removed which would not only reduce kerbside parking availability for local residents and businesses, but also impact on council revenue. There are also more road junctions for cyclists to negotiate and increased chance of conflict with other motorised vehicles, as Cole Street and Swan Street form part of the vehicle bypass of the Trinity Street barrier. It is also likely that future occupation or redevelopment of the large commercial property on the corner of Swan Street and Cole Street will increase traffic volumes, which would have an adverse effect on cyclists.
- 5.4 In addition to the above, due to high volume east/west cycle flows along Trinity Street from Great Dover Street, cycling accessibility and inclusive principals prescribed in the council's emerging Cycling Strategy and existing safety concerns such as cyclists using pedestrian footways to bypass the carriageway barriers, modifications to the existing arrangement of the carriageway barriers in Trinity Street would be required regardless of the Quietway Route implementation.

5.5 As a result of the above, the alternative route proposed by the Trinity Newington Residents Association has been discounted as a viable alternative to the existing route via Globe Street and Swan Street.