Committee(s):	Date(s):	
Streets and Walkways Sub-Committee	11 <sup>th</sup> January 2016	
Subject: North-South Cycle Superhighway – Object associated proposals and additional mitigation		
Report of: Director of the Built Environme	nt For Decision	

#### <u>Summary</u>

During September 2015, the City Corporation conducted a Traffic Order public consultation for proposals designed to assist with the introduction of Transport for London's North-South Cycle Superhighway. The Cycle Superhighway is being introduced on the west side of New Bridge Street and the proposals relate to Tudor Street, Bridewell Place, Kingscote Street and Watergate. In addition TfL's proposal for their East –West Cycle Superhighway at Victoria Embankment results in the closure of Temple Avenue.

As a result of this, three formal objections have been received. Officers together with representatives from TfL met with the objectors to discuss their concerns and to see if it was possible to address them. Unfortunately, under TfL's proposals, it has not been possible to resolve them.

Officers have continued to work with TfL to develop additional measures to mitigate the impacts of the proposed closure of Tudor Street and Temple Avenue as well as further technical work to ensure that the changes are safe. Consultation on the mitigation measures commenced on 10<sup>th</sup> December 2015 and ends on 6<sup>th</sup> January 2016. Through this process it is hoped current objections will be resolved. If there are any further material objections arising from this consultation, these will be provided at your meeting.

Members are therefore asked to consider the objections and decide whether or not the proposals should be implemented.

#### Recommendations

It is recommended that:

- 1. Members agree to the making of the Traffic Orders under section 6 of the Road Traffic Regulation Act 1984, so that Tudor Street at its junction with New Bridge Street is closed to motor vehicles, Bridewell Place is returned to two way traffic and contra flow cycling is removed from Kingscote Street and Watergate.
- 2. Members agree to the making of the Traffic Orders under sections 6 and 45 of the Road Traffic Regulation Act 1984 in relation to loading and waiting restrictions and provision of parking spaces, so as to implement the mitigation measures as detailed in Appendix 6.
- 3. If any objections are received that are not adequately mitigated by the

measures set out at Appendix 6 that a further report be submitted for consideration of these matters.

4. The objectors and TfL be informed of your decision accordingly.

## <u>Main Report</u>

## Background

- Transport for London is introducing two major cycle routes in London as part of the Mayor's Vision for Cycling. The Cycle Superhighways run East-West and North-South. The North-South Cycle Superhighway runs from Elephant & Castle to King's Cross, passing through the City of London via Farringdon Street and New Bridge Street. These streets are part of the Transport for London Road Network (TLRN) within the City of London.
- A public consultation was carried out between 3 September 2014 and 9 November 2014 by TfL on the full length of the proposed route. TfL state that a consultation leaflet was delivered to all properties along the route and to properties within 500m from the route prior to the start of the consultation. In February 2015 the TfL Board considered the results of the consultation – 90% of responses were in favour – and therefore decided to proceed to construction.
- In February 2015, Members accepted the Mayor's proposal for Cycle Superhighways within the City of London and agreed for officers to work with TfL to facilitate its introduction using the powers and authority available to the City of London Corporation.
- 4. Although the Cycle Superhighway runs along the TLRN, the associated measures to facilitate its introduction and operation are required in the side streets where the City of London Corporation is the traffic/highway authority. The main proposal consequent to the cycle super highway is the closure of Tudor Street at its junction with New Bridge Street, while the remainder of the measures set out in this report are to assist traffic to use the alternative access and egress routes following this closure.

## Objections

 The Traffic Order consultation (using press and street notices) for these associated measures was carried out by the City Corporation from 8<sup>th</sup> September 2015 to 29<sup>th</sup> September 2015. As a result of this, three objections were received. These are summarised below but are appended in Appendix 1.

#### The Honourable Society of the Inner Temple

6. The Society objects to two elements of the proposals – the no motor vehicles restriction at the junction of Tudor Street with New Bridge Street and the restoration of two-way working in Bridewell Place.

"Tudor Street is the only access route for vehicles visiting the Temple. The Temple is occupied by the Honourable Society of Inner Temple and the Honourable Society of Middle Temple, and houses a large number of Barristers' Chambers employing in excess of 2500 people across both sites. Tudor Gate at the western end of Tudor Street is the only vehicular access point to the Temple."

"The resident businesses receive numerous deliveries throughout the day in vehicles of various sizes. The Inn's themselves undertake annual preventative maintenance requiring scaffolding which can only be delivered by articulated lorry. The proposed closure of the junction of Tudor Street with New Bridge Street – and the proposal of using the narrow, right-angled Bridewell Place as an alternative – will cause great difficulty for the larger vehicles sending them into the oncoming carriageway in order to negotiate the turn."

"This will result in real difficulties for the running of the Temple as a thriving and world class employment centre for the legal profession. The creation of a traffic light controlled junction at the Tudor Street and New Bridge Street intersection allowing exit to northbound and southbound carriageways, and the closure of the junction of Bridewell Place with New Bridge Street would seem to be a more sensible alternative, and avoid large vehicles having to negotiate the right angled turn within Bridewell Place."

#### The Honourable Society of the Middle Temple

7. The Society supports the objections raised by the Inner Temple.

"It should also be noted that Tudor Street provides the only viable means of access for firefighting tenders and as such the proposal to restore two-way traffic flow to Bridewell Place, with its restricted turning capacity, could have a detrimental effect in an emergency."

"The proposal put forward by Richard Snowdon to install traffic lights at the intersection of Tudor Street and New Bridge Street presents the logical solution and we hope that this is adopted so as to preserve the current access arrangements into the Temple"

#### Licensed Taxi Drivers Association

8. The LTDA objects to the proposals to prohibit motor vehicles entering or leaving Tudor Street at its junction with New Bridge Street and to restore two way working for vehicles in Bridewell Place.

"This is on the grounds that Bridewell Place is too narrow to safely accommodate two way traffic, particularly as vehicles would have to negotiate a tight right angled turn in doing so. The street is busy with traffic much of which is made up by vehicles servicing premises within the Temple. The traffic includes some large articulated vehicles. In our view it would be very much preferable to construct a safe signalised junction at Tudor Street with New Bridge Street to avoid traffic having to use the less suitable Bridewell Place."

#### **Considerations and assessment**

#### Transport for London's design rationale

- 9. The objections received were all in response to the proposal to close Tudor Street to motor vehicles at its junction with New Bridge Street. Tudor Street is currently the main access to the area that is bounded by Fleet Street, New Bridge Street, Victoria Embankment and the Temple. Northbound and southbound traffic on New Bridge Street can enter Tudor Street, but egress from Tudor Street into New Bridge Street is restricted to northbound only while southbound vehicles can use Bridewell Place. Watergate provides an alternative northbound exit.
- 10. In order to keep Tudor Street open it would require the introduction of a signal controlled junction to prevent conflict with the expected high flow of cyclists in the cycle track. There are three main reasons why this location is not considered suitable for a signalised junction.
  - i. The junction would be too close to the major junction at Blackfriars. When northbound traffic is held by the signals at Tudor Street, queuing vehicles would reach back into the Blackfriars junction and block traffic on the east – west route.
  - ii. The Tudor Street junction would require a separate lane on New Bridge Street for vehicles turning left into Tudor Street. There is insufficient space on the carriageway for a left turn lane to be introduced as the carriageway is too narrow and is further impacted by the need to retain the bus stop between the Tudor Street and Watergate junctions.

iii. The above mentioned bus stop can't be relocated as the carriageway north of Tudor Street is not wide enough to accommodate a wide island (for bus patrons waiting/alighting) between the carriageway and the cycle track while still allowing northbound traffic to pass a stationary bus. The bus stop is part of a busy interchange between underground, rail services and bus services at Blackfriars. Its removal is therefore not an acceptable option for TfL. A detailed rationale is provided by TfL in Appendix 2.

## **Traffic movements**

- 11. As part of the assessments, TfL has carried out a survey to establish the level and type of traffic using Tudor Street. The survey used video cameras to record traffic in Tudor Street at the junction with New Bridge Street for 24 hours. This showed that the majority of traffic used Tudor Street to enter the area (4359 vehicles) but only a quarter (986 vehicles) used it to egress. The reason for this significant difference is likely to be down to the fact that Tudor Street is the only access route along the southern and eastern side of the area whilst there are three different egress routes, one of which leads directly onto Victoria Embankment. Tudor Street is also the easiest access route as this is fairly wide and straight, making it simpler to negotiate and less likely to encounter obstructions (as opposed to the other routes). Appendix 3 illustrates the existing access & egress routes.
- 12. The survey also identified that the vast majority of vehicles (5102 vehicles or 95%) using the area are the smaller vehicle types (from pedal cycles to light goods vehicles and mini-buses). The larger vehicles using the route included 224 (or 4%) medium sized goods vehicles and 18 (1%) heavy goods vehicles. A breakdown of the vehicle composition is provided in Appendix 4.
- 13. The proposed closure of Tudor Street will therefore displace traffic to use alternative routes. Vehicles travelling northbound along New Bridge Street will be able to use Bridewell Place (as it will become two-way) but vehicles travelling southbound will be required to enter Fleet Street and access the area either via Bouverie Street or Salisbury Court / Dorset Rise. The access routes from Fleet Street remain unchanged by the proposals.
- 14. Vehicles that currently exit the area via the Tudor Street / New Bridge Street junction can still travel both north and southbound within the proposed changes as follows: southbound traffic will continue to use Bridewell Place (although there will be traffic entering as well) and northbound traffic will be required to use

Kingscote Street and Watergate, which is an existing route. Appendix 5 illustrates the amended access and egress routes.

- 15. It should also be noted that the East-West Cycle Superhighway intends to close Temple Avenue at Victoria Embankment but open Carmelite Street as the alternative exit route. The Victoria Embankment slip road will become two-way as part of the project and retain the option to turn either way as that currently exists from Temple Avenue. The only difference is that traffic wishing to proceed eastbound on Victoria Embankment will not be as direct and will need to proceed though Blackfriars to Puddle Dock before joining the route. The Traffic Order consultation for this took place from 28<sup>th</sup> April 2015 to 19<sup>th</sup> May 2015. No objections or comments were received from this and therefore this closure and associated measures will be delivered under delegated authority.
- 16. To ensure that adequate access & egress is still available following the closures of Tudor Street and Temple Avenue, vehicle swept path analysis of a range of standard vehicles have been modelled. This has shown that, with the further mitigation measures as set out at Appendix 6, all vehicles would still be able to access and egress the area. However, the junctions along Tudor Street remain tight for the largest of the vehicles (12m rigids and 16.5m articulated HGV's). Although, in the survey, only 8 (0.1%) of these vehicles were recorded entering the area from Tudor Street and none used it to egress. It should also be noted that vehicles exceeding 12 metres in length are not permitted to access this area unless they are serving a property. This has been in place for many years to safeguard the area from HGV's using the area as a through route.

#### The mitigation measures

- 17. To maintain adequate movement, access and egress for the occupiers of the area, mitigation measures are considered necessary. These are summarised below but are further illustrated on the plan in Appendix 6.
  - Additional "at any time" waiting & loading restrictions in a number of streets and junctions. These have been kept to the minimum to ensure that some space is still available for local occupiers to service.
  - Relocate existing parking places and the taxi rank. There are no reductions in these provisions
  - Alterations to kerblines, footways and associated street furniture at junctions.
  - Alteration to the police check point island.

based on the above mitigation measures being agreed and implemented officers consider that the objections received to date, and set out at

Appendix 1 would be adequately addressed. On this basis the recommendation of the report is that the Tudor Street closure and associated mitigation measures be agreed.

- 18. Given the urgency TfL have asked the Corporation to give to this work this report has been drafted prior to the closure of the consultation on the mitigation measures proposed. Public consultation commenced on 10<sup>th</sup> December 2015 and will end on 6<sup>th</sup> January 2016. This provided the required minimum of 21 days for responses but also allowed an additional 6 days to cover the public holidays over Christmas and New Year. Any further objections arising from this will be provided to your meeting for consideration.
- 19. In addition to the mitigation measures, officers are continuing to work with TfL to agree:-
  - a regime which will allow Bridewell Place to be used as a diversionary route if there is a planned event, closure or emergency situation along Fleet Street.
  - a commuted maintenance payment from TfL to cover the potential increase in maintenance liabilities. The extra vehicles negotiating the tight junctions and other locations will invariably lead to vehicles mounting and damaging footways and other associated street furniture.

## Conclusion

- 20. The objections from the Inner and Middle Temples stated that Tudor Street is the only access route to the Temple and that closing the junction would be detrimental to the running of the Temple. The traffic survey showed that the majority of traffic used Tudor Street as an access route, egress is much less. Other access routes (Bouverie Street and Salisbury Court) in to Tudor Street already exist and are unchanged as a result of the Cycle Superhighways. Tudor Street may currently be the preferred route but closing the junction with New Bridge Street would not prevent access or egress for the Temples.
- 21. The alternative access routes to Tudor Street were modelled to ensure that HGVs could still enter or leave the area if the closure was implemented. The modelling indicated that access to the Temple was possible for all vehicles capable of entering through the Temple Gate as well as larger vehicles even if they can't get through. The Gate is a listed building with signed vehicle limits on width of 2.4m and height of 3.4m.

- 22. The objectors have concerns regarding the volume of traffic using Tudor Street and that the alternative routes are not suitable to accommodate this volume. The traffic count showed that the ratio of vehicles entering Tudor Street to those using it as an exit is over 4 to 1. For taxis this ratio raises to over 6 to 1 which suggest that it is used more as a through route to avoid the Ludgate Circus junction than it is used for access into the area. The proposed changes may potentially deter this from happening and therefore provide additional benefits associated with a reduction of traffic.
- 23. There were concerns from all three objectors that Bridewell Place was not a suitable alternative access route as it was narrower than Tudor Street, had right-angle turns and considered this to be more dangerous. Mitigation measures have been proposed to assist traffic to flow while still retaining some parking and provisions for deliveries. A realignment of the footway to the north of Bridewell Place is also proposed to increase pedestrian safety and convenience. In addition, a safety assessment of the measures has also been carried out to ensure the measures are safe. With these mitigation measures, this alternative access is considered appropriate.
- 24. The request from the objectors for Tudor Street to remain open and the junction to be converted to a signal controlled junction with New Bridge Street is not possible for TfL. The reasons have been covered in para 10.
- 25. With the mitigation measures detailed in this report, appropriate and safe access and egress will be maintained following the closures of Tudor Street and Temple Avenue is closured.

## Appendices

- 1. Objections received
- 2. TfL full design rationale for Tudor Street closure
- 3. Plan of existing access & egress routes
- 4. Vehicle composition at Tudor Street junction with New Bridge Street
- 5. Plan of amended access and egress routes
- 6. Plans of mitigation measures

## Appendix 2

#### Transport for London's full design rationale

The objections received were all in response to the proposal to close Tudor Street to motor vehicles at its junction with New Bridge Street. Tudor Street is the main access to the streets that are bounded by Fleet Street, New Bridge Street, Victoria Embankment and the Temple. Northbound and southbound traffic on New Bridge Street can enter Tudor Street, but egress is restricted and vehicles are only able to go northbound on New Bridge Street.

The volume of traffic that turns left into Tudor Street from New Bridge Street during the peak hour would require traffic signals to be introduced to control traffic crossing the cycle track to prevent conflict with the expected high flow of cyclists in the track and also with pedestrians crossing Tudor Street. A design that did not include this would not be safe and would not be considered.

In order to introduce traffic signals for this movement, the left turn into Tudor Street would need to run separately phased from cyclists on the track, who would run with north and southbound traffic. This would require an additional lane for the left turning traffic to be held in. The width of the road at this point on New Bridge Street is too narrow to accommodate the basic requirements of a signalised junction. A layout that does not meet the basic requirements would not be safe to introduce.

The constraints with meeting the requirements for a signalised junction are:-

a. The width of the carriageway is too narrow to accommodate a traffic island to separately signal the left turn from the ahead movement. A separating island between the lanes would be required to make it clear that you could only turn left from the nearside lane;

b. The width of the carriageway is too narrow to accommodate a left turn flare to store vehicles waiting to turn left;

c. There is insufficient length of carriageway to store the predicted flow of vehicles continuing northbound on New Bridge Street behind those turning left without causing blocking back at the Blackfriars Junction. The proximity to the Blackfriars Junction is just 50m. According to the traffic flows, during the peak hour there are likely to be six vehicles waiting at the left turn stop line during each signal cycle time;

d. The location of the northbound bus stop servicing Blackfriars Station further limits the space to store vehicles waiting to turn left. The bus stop is 35m long (in order to allow two buses to pull up to the kerb-line and be fully wheelchair accessible) and its position in the 50m gap between the junctions would limit the length of the left turn flare to 6m (approximately one car / small van);

e. Relocating the bus stop north of the Tudor Street junction is not an option as the width of the carriageway is even less and removal of the stop would not be supported on the grounds of high passenger demand (over 400 passengers in the peak hour);

f. The footways cannot be reduced in width to create more carriageway space as the pedestrian flows are high and levels of service would be reduced; and

g. The cycle track has already been reduced in width from 4m to 3m for this section and reducing it further would fall below the minimum levels of service, particularly given the expected high flows of cyclists through this section.

The signal junction would need to run with 3 or 4 stages to accommodate the required movements. This could not be coordinated with Blackfriars Junction signals as there is always a stream of traffic feeding north onto New Bridge Street. The introduction of a signal controlled junction at Tudor Street that cannot store the expected vehicle demand would lead to the risk that pedestrian crossings at Blackfriars Junction would become blocked.

The introduction of traffic signals at the Tudor Street junction as opposed to the proposed signals at the Bridewell Place junction would still not permit southbound traffic to turn into Tudor Street. The carriageway width does not allow a right turn lane to be introduced and allowing this movement within the north-south traffic stage would result in vehicles waiting to turn blocking the southbound flow. If the cycles are not able to run with the north-south traffic then they would be subject to being held for too long at the signals.

The proposed traffic pattern for Bridewell Place is for north-south ahead only traffic to flow along with the cycle track and pedestrians to cross Bridewell Place. The second stage is for traffic to turn left to enter Bridewell Place in addition to the northbound and southbound traffic while the cyclists and pedestrians are held. The final stage allows vehicles to turn right to exit Bridewell Place and pedestrians to cross New Bridge Street on the north side of the junction while all other movements are held.

## Appendix 4

# 24 hour vehicle composition at Tudor Street (junction with New Bridge Street)

Vehicle types	Access		Egress	
	No. of	%	No. of	%
Pedal cycles	374	9	177	18
Motor cycles	371	9	84	9
Cars	1429	33	305	31
Taxis	1376	32	212	22
Light Goods vehicles	609	14	157	16
Mini buses	7	0	1	0
Buses	1	0	0	0
Medium Goods vehicles	184	4	50	5
Heavy Goods vehicles	8	0	0	0
Total	4359	100	986	100