London Cycling Campaign

November 2014

Consultation response on Transport for London plans for a new East-West Cycle Superhighway

1. Introduction

London Cycling Campaign is the capital's leading cycling organisation with more than 12,000 members and 40,000 supporters. We welcome the opportunity to comment on proposals for the new East-West cycle superhighway.

We are pleased to see these plans and believe they represent a major step forward in creating streets that are safe and inviting for cycling. We note that the public consultation received over 14,000 responses, 80% of which were positive.

We understand that a small minority have expressed concerns regarding the impact on journey times shown by Transport for London's modelling. We believe that the modelling critically overstates the likely impacts.

The likely impacts are minimal and we urge decision makers to recognise that modelling techniques used do not take into account the reduction in traffic levels as a result of people changing their behaviour, which is often the result of reallocation of road space of this kind.

There is also no attempt to balance any possible disadvantages against the huge benefits in casualty reduction, better health, quicker cycle journeys and cleaner environment that the Mayor's plans will bring to London. The Department for Transport recently published figures showing a likely Cost Benefit ration of 5:1 for cycling infrastructure projects. New York has recently published evidence that shows that since installing protected bicycle lanes throughout the city, there has been a reduction of vehicle volumes as road users shifted to other modes – and journey times have improved in many areas. In New York's Central Business District, travel speeds have remained steady as protected bicycle lanes are added to the roadway network.

Concerns expressed by the minority also appear to overstate the impact of the superhighway proposals on London's network. There are approximately 1,450 miles of main road in London. Of those 1450 miles, the N/S, E/W cycle superhighways and the upgrade to CS2 combined represent about 9 miles. The Mayor's Vision for Cycling includes £913m for cycling over the next 10 years. Twice this amount will be spent on road assets including resurfacing carriageway, modernising traffic signals and renewing and refurbishing and upgrading structures and tunnels.

Those raising concerns about the impact on journey times also fail to acknowledge the positive impact that a reduction in cyclist casualties could have on existing congestion. A report to the TfL board estimated that 28% of the congestion in London is the result of crashes. If a cyclist is seriously injured there can be huge delays. Where segregated cycle tracks have been implemented elsewhere, for example in New York, Cyclist injuries have decreased even as bicycle volumes have dramatically increased. At the moment there are over 600,000 cycle journeys a day in London. That is predicted to rise to between 1.2 and 1.5 million, which will include significant modal shift and reductions in the

pressure on other modes, bus and rail. Seven out of ten people who do not cycle now say they would be prepared to consider cycling if the safe facilities were available for them.

We have made efforts to mobilise our supporter base to participate in this consultation and have seen overwhelming support for the plans from thousands of Londoners, as well as the large number of high profile employers who have voiced their support through CyclingWorks. We hope that the small minority in opposition will not sway the Mayor from his promise to create high quality cycle superhighways.

It is absolutely essential to ensure that this route is implemented to a high standard. We therefore urge you to take on board the following recommendations, which have been identified through our Infrastructure Review working group process and in collaboration with LCC local groups, and which we would be willing to discuss in more detail with you.

We have split our consultation response into the following sections:

- Section A: General comments on the proposals
- Section B: Detailed comments on sections of the proposed route
- Section C: Comments on the alignment of the route

Section A: General comments

Connectivity and alignment

For a major cycle route directness and access to other routes is essential. A circuitous route or one that adds junction delays to journeys will not be used. Excessive delays will lead cyclists to use less protected routes. We have highlighted specific issues in Section B, but the principle across all routes is that directness, access to key destinations and connectivity with other routes must be considered as a priority.

We comment on alignment in more detail below, including some alternate routes. The critical omission in the current consultation is the failure to provide safe access to and from the route, particularly at Tower Bridge and on Bayswater Road.

Banned turns

Cyclists should be exempt from banned turns across the route.

Buses and bus stops.

LCC welcomes the use of bus and coach stop by-passes throughout this route. These are essential to maintain separation from motor traffic while minimising the risk of conflict with pedestrians. At some points the two-way cycle track width at bus stops is reduced to 2.7 metres which creates unnecessary hazards. We have not seen cross section detail but we note that the high kerbs with vertical faces as used on Stratford High street create extra hazards for both pedestrians and cyclists.

To minimise conflict the speed of cyclists should be low and there should be a lot of space for

pedestrians to cross the track.

The track narrowing will force two lanes of cyclists to form a longer, faster group reducing the chances for pedestrians to cross to the bus stop. If there is little or no change in level between the footway and cycle track it becomes much easier for pedestrians to access the bus stop and leave it when crossing the cycle track.

The illustration here shows a bus stop with elements showing a clear designated crossing point but still allowing pedestrians choice of access easily at either end of the bus stop, cyclists can slow down without causing too much congestion on the track.



Drainage and maintenance.

Pooling and drainage issues will need to be managed. The detailed design should ensure ease of cleaning especially to manage snow and ice as well as seasonal leaf fall on the sections with many trees.

Impact assessments and traffic capacity modelling

London Cycling Campaign notes the detailed report and modelling data relating to the proposed designs. It is clear that the base line times are based on modelled optimum flows which assume no unusual or external influences on the traffic flow. In reality these conditions rarely or ever occur. The reported model outcome timings are the worst case scenario, In practice if these 'worst' impacts happened regularly there would be a natural re-assignment of traffic routes and modes.

We also note that the modelling is based on weak assumptions that traffic volumes will stay at current levels. Inner London and other UK cities have experienced falling motor traffic levels for over a decade, this is associated with increasing population density in these areas. As the purpose of the Cycle Superhighway upgrade is to encourage modal shift by allowing more people to choose cycling then it is reasonable that this shift should have been included in the modelling calculation. It should be noted that cycling invariably allows shorter journey times for the majority of trips that use these

roads. If a cycling choice had been included in the assignment model a far more realistic set of outcomes would have been produced.

We are confident that with careful traffic management and signal timings that the problems highlighted by the modelling can be kept to a minimum. At some of the major junctions we propose simpler traffic control schemes that will enable more route flexibility than the consultation proposal.

Inclusivity

Cycle superhighways, and indeed all cycle tracks, must be suitable for people using all types of solo bicycles, but also adapted bicycles, upright and recumbent tricycles, handcycles and tandems, as well as trailers, trailer bikes and cargo bikes. Widths of cycle paths and filtered permeability arrangements, lengths of waiting areas, and areas for the swept paths of these various types of cycle need to cater for this variety and need to allow space for solo bicycles to pass too. We understand that Wheels for Wellbeing have submitted a response and we urge you to take their comments on board.

Junctions

Over 70% of the most serious injury collisions to cyclists in London happen at road junctions. Poor design of junctions, even where there are segregated routes for cyclists has been highlighted as a concern by the recent study into cyclists' fatalities in London (Pedal Cyclist Fatalities in London: Analysis of Police Collision Files (2007-2011) Thomas, R et al. 2014)

There is a need to ensure priority for cyclists at all junctions as well as providing protection along links. A segregated cycle route can only be considered safe for cycling if all the major junctions are also segregated.

The Mayor's vision for cycling highlighted the introduction of safer junction designs which separated the flow of cyclists from other traffic. We welcome the limited introduction of separated junctions in the plans for the East-West superhighway but have reservations about the detail and timing. At many junctions risks remain from turning traffic on some arms and the signal stages seem very complicated. We are particularly concerned with the use of the 'Early Start' arrangement for cyclists on and coming into the route. This design has failed to protect cyclists where there is a high proportion of motor traffic turning left or crossing the cyclists' desire line. This should not be used at Queen Street Place, at any of the junctions to Parliament Square (section 12), at Bayswater Road or Sussex Gardens (section 16).

Generally not enough consideration has been given to cyclists crossing and joining the route. All cross roads carry cycle traffic and there are some with high numbers of cyclists. At many junctions there are plans for the 'early start' design which lets cyclists move off before other traffic. By using the 'hold the left' protected turn (detailed below) there is no need for 'early start' at any signalised junction on this route.

Minor Junctions

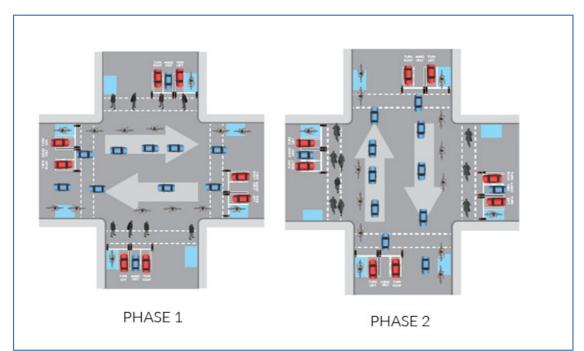
There are a number of unsignalised junctions along the route. Cyclists are given priority over turning traffic at these junctions but not enough protection is provided to ensure motor traffic has time to

see cyclists and is going slow enough to give way. The junction designs used on the existing superhighway 2 route on Stratford High Street have shown several high risk locations where traffic exits the main road at speed without giving way to cyclists.

'Hold the Left Turn' Safer junction design scheme

London Cycling Campaign has proposed a safe junction design for large signalised junctions which separates all turning movements from the straight ahead movements, for all traffic including pedestrians. This is shown schematically below for a four arm junction. We welcome the introduction of signal separated left turns for cyclists but it should be used more widely and on the access roads joining the route as well as along the route. It could be introduced at the junctions where there is a lot of road space such as at Tower Hill, Parliament Street etc. It can easily be adapted to large T-junctions such as Queen Street Place and also where the cross road is narrower and volumes are lower

The main principle of this safe junction design is that turning motor traffic is separated from straight ahead traffic as early as possible. Cyclists are protected from left (and right) turn risks. Cyclists turning right make a two stage turn using a waiting area between going ahead and turning with the next change of lights. Cyclists turning left may be able to by-pass the signals if room permits. Where pedestrian flows are high cyclists may have to wait until for the crossing to clear.

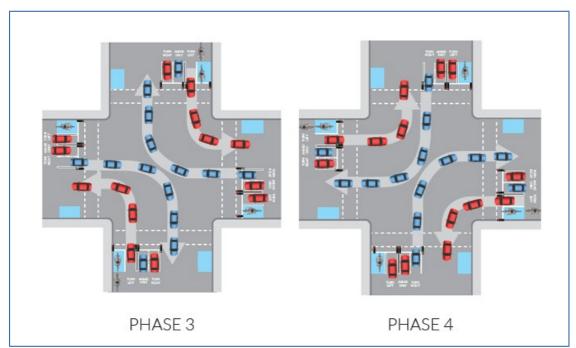


Stage 1: In this diagram traffic lights are red for traffic turning left and right, and green for traffic – drivers, cyclists and pedestrians – going ahead.

East and west-bound traffic can go at the same time, and pedestrians can cross at the same time as the ahead traffic.

Stage 2: At the next phase, the North and south-bound traffic can go.

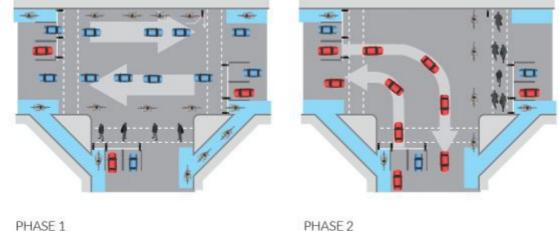
Result? No risk of traffic turning across the cyclists' path – therefore no left hook.



Stage 3: Next, the traffic lights go green for north and south bound left turns, and east and west bound right turns. All this traffic can go at the same time.

Stage 4: Now the other turns can be made. Further comments on each junction are included in the detailed route notes.

'Hold the Left' scheme for major T junction.



PHASE 1 PHASE 2 London Cycling Campaign response to consultation E-W Cycle Superhighway 2014 p. 6

These sketches refer to a scheme with cycle tracks on all arms. For the two-track in the current consultation cyclists will have to make two stage left turns for some manoeuvres.

During Stage 1, all straight ahead east and west bound traffic - vehicles, cycles and pedestrians - can go. Turning motor traffic is held; cyclists turning right do the first stage of a two stage right turn.

In Stage 2, right turning southbound traffic can go - cycles making the second stage of their two stage right turn.





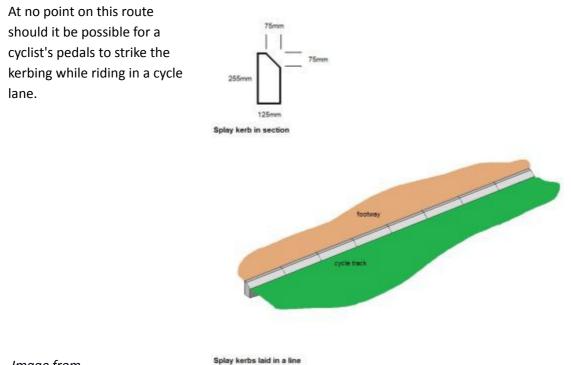
During Stage 3, left turning southbound motor traffic, right turning eastbound traffic (including cycles), and cycles turning left to go west can all go at the same time.

Lane widths, section and kerbing

The draft London Cycle Design Standard makes strong recommendations about effective lane width. The design aim should be to provide routes that allow side by side cycling and stress free overtaking. For cycle superhighway routes with a 2 metre width is seen as the minimum for a one-way track and 3 metres (ref. LCDS draft Chapter 3: Cycle lanes and tracks 3.1.15) for a two-way track, anything less fails to score in the Cycling Level of Service matrix. On the East West Cycle Superhighway where high volumes of cyclists are expected in each direction 4 metres width is needed for safe and inviting cycling while 3.5 metres should be seen as the minimum. The sections where the two-way track width is as low as 2.7 metres east of Queen Street Place are not acceptable.

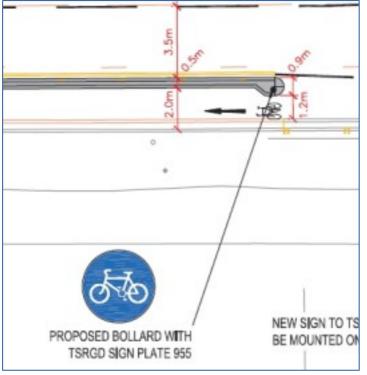
The Standard also notes how high kerbing, vertical upstands and proximity to other obstacles significantly reduce the effective width for cyclists (ref. LCDS draft Chapter 3: Cycle lanes and tracks 3.1.18). The current consultation gives very little information on the proposed cycle lane section but LCC is concerned that the design seen on the Stratford High Street of this route with high vertical upstands is not repeated. The risk of striking a pedal on high kerbs means that the effective width of the lane is reduced by about 300mm. An example of low upstands and splayed kerbs being used to maximise effective width can be seen in Oxford St in the Oxford Circus area. The upstand between carriageway and footway is generally less than 50mm and the central median strip has splayed kerbs

throughout. Splayed kerbs have angled faces at least 45° from vertical and should be able to be sensed by a blind or visually impaired person along the route. Kerbs should not prevent disabled riders from pulling over to stop or from getting out of the way of other bikes or other traffic, or from accessing cycle parking or amenities on the footway.





At about several points on the one-way route section the cycle lane width is reduced by 400mm or more where sections of segregation begin. Typically this is at junctions and occasionally after pedestrian crossings. This repeated reduction to 1.6m, and 1.2m in one case, is very hazardous, especially after junctions where there will be platoons of cyclists and a desire for overtaking. It appears that this reduction in width is to allow a bollard to be placed on the separating median strip. We note that this restriction has not been introduced on the CS2 section on Stratford High Street or on many other separated routes across London. It is unacceptable to introduce so many unnecessary hazards on what is supposed to be a safe, comfortable cycle route.



There is no need for more than 50mm vertical separation between the cycle track and footway, as is the norm in the Netherlands and Denmark. All the kerbing at the edge of the cycle lane should be splayed. For most of its length the cycle lane should be at an intermediate height between the road and footway. Where the lane crosses minor junctions it should form part of the raised junction treatment with a very clear change of level from the roadway.

The deep trough with vertical edges as on Stratford High Street creates a hostile environment for cycling it also adds to the difficulties in keeping a lane clear of snow, fallen leaves and litter.

Pedestrian crossings

Pedestrian crossings should be direct, rather than two stage, throughout the route. This would prevent risky informal crossing, which could put pedestrians into conflict with other road users, and allow for more space for protection for cyclists at junctions. The 'Hold the Left' junction design detailed above allows more time for pedestrian crossing as the pedestrian stage runs at the same time as motor traffic in a different direction.

Signage

Route signs and the route on the ground itself needs good visual contrast so all cyclists, including visually impaired cyclists, can be sure they are on a safe cycle path/route. A measure of visual contrast is difference in Light Reflectance Values (LRV levels) of adjacent surfaces. While a 30 point LRV level difference is considered sufficient in an internal environment, a much higher LRV differential is required in an external environment with lower lighting levels and with glare in the sunlight.

Speed reduction and surface treatments

A full width sinusoidal profile with a smooth surface should be the only surface treatment used for speed reduction and for transitions to raised tables.

Width of track

The plans indicate bollards are to be added at points across the superhighways, which would reduce the width. Tracks should not go below 2m at any point.

Section B: comments on sections of the E-W route

Section 1

1. We have serious concerns about the connectivity with Tower Bridge. It is not acceptable to ignore safe access to and from the route at such a busy river crossing which links to proposed Cycle Superhighway 4. Tower Bridge has a single line of traffic northbound with widens into three lanes on Tower Bridge Approach. To access the Cycle Superhighway cyclists heading west are required to cross into the third lane, heading north-east and cross to Mansell Street. This is a confused junction for motor traffic with many vehicles turning left from the right hand lane. The Tower Bridge and Tower Gateway junctions should be re-designed to provide separate signals for cyclists where there is a risk of left turn conflict. The westbound slip road could be taken out freeing up more roadspace for cyclists and for pedestrians. All the junctions linking to the Cycle Superhighway need to be designed as cycle safe junctions.

Section 2

1. We support the cycle contraflow lane and the banned turn for motor traffic into Trinity Square.

2. The junction at Great Tower St remains too complicated with unnecessary sharing of limited pavement space. The current arrangement causes distress to pedestrians which will only worsen with more cyclists using the route. We propose that the bus gate is re-designed to allow cyclists to pass on one Side.

Section 3

As noted above the 2.7 metre width to the east of Queen Street Place is too narrow for a two-way major cycle route.

We have concerns around the Queen St Place/Upper Thames St junction with Cycle Superhighwy 7. The Early Start design is inappropriate here where all the motor traffic from the bridge is turning and all the cyclists are going straight on or crossing to the north side of the junction. It should be a signal separated junction (hold the left turn) as illustrated above. A significant proportion of the eastbound motor traffic turns south across the bridge so it is feasible to separate this from the straight on traffic. If there is only one exit lane westbound from the junction there will be enough space to allow motor vehicles to turn right to the bridge.

This junction could be managed with three signal phases:

- 1. East West motor traffic, cycles and pedestrians go. Left turning cyclists give way to pedestrians. Right turning cyclists cross junction and wait to complete turn.
- 2. Eastbound motor traffic turning right and northbound turning left go while southbound cyclists and adjacent pedestrians cross Thames St.

3. Northbound motor traffic turning right and westbound motor traffic turning left to the bridge go while northbound cyclists and adjacent pedestrians cross Thames St.

Section 4

We have concerns around how confusing the junction is at Castle Baynard St. There needs to be adequate time for cyclists to make the crossing. The cycle track should be as wide as possible here. 2.9 metres is unacceptable for a busy two way track.

Section 5

As mentioned the conversion of the slip road to cyclist/pedestrian only is positive, but it means a right turn across traffic to get into the cycle track – timing will be critical here. As noted above cyclists will make a significant proportion of the traffic on this route. If they are unduly delayed compared to motor traffic some cyclists will be induced into risking using the general traffic lanes.

We understand that Audit House (58 Victoria Embankment) is undergoing works and may need an interim scheme if they're not completed on time. We hope that Transport for London will keep LCC apprised of any interim plans.

Sections 6 -10

In many ways this is the flagship section of the route. We welcome the intention to transform the Embankment to become a pleasant place for cycling and walking. Althought we have not seen section drawings the detailing suggests that the kerbing has not been designed to maximise effective width for cycling by having very low and kerbs with a splayed profile. As the track is of variable width throughout this section the risk of pedals striking a high kerb must be avoided.

It is likely that pedestrians will cross and re-cross the cycle track and it should be as easy as possible for them to step out of the track when cycles approach. There is no need for more than 75mm height difference between the cycle track and footway. That will facilitate loading of buses and coaches and make it easier for delivery operations along the embankment.

The junction treatments appear to be well thought out although providing same green time for the cyclists as motor vehicles is expected.. The use of separated cyclist phases on the approach roads is essential. The cyclist phase should run in parallel with the pedestrian crossing phase to optimise cycle time. There is space for cyclists to wait and give way to pedestrians crossing the cycle track.

International best practice suggests that it is not necessary to install signal controlled pedestrian crossings of the cycle track at every junction. We understand that combined crossings with a zebra section of the cycle track and light controlled section on the motor carriageway are being trialled in Manchester. This arrangement is likely to reduce conflict and allow for a more constant, if slower, cycling speed. The zebra crossing opposite Victoria Embankment Gardens should be retained.

We welcome the cycle contraflow on Savoy St although the narrowing of the main track to provide a turning pocket for cyclists is too severe. This junction is likely to have fewer cycle turning movements than the other due to the gradient in Savoy St.

At the junction onto Horse Guards Avenue it will be critical to make sure cyclists have enough green time. This link is a busy rat run for motor traffic which may become over loaded if the banned turns at Westminster Bridge are introduced.

Section 11

The Victoria Embankment / Westminster Bridge junction is one of the critical nodes in the cycle route system. It is essential that the route alignment includes this link with the planned enhancements to the bridge and eastern junction.

Because of the huge numbers of pedestrians in this area and on the Bridge we favour maintaining a two way cycle track across the bridge on the southern / upstream side. That would allow a simpler junction layout and control system. There is enough roadspace here to implement a signal controlled separated junction on all arms similar to that described for the Queen Street Place junction. This could be implemented in three long phases, allowing the large pedestrian flows time to clear the junction. It may be possible for a pedestrian crossing directly across Bridge street, reducing the pressure on the other crossings.

Section 12

We're pleased to see more space for pedestrians. The reallocation of carriageway space is positive, but we are concerned that it's very complicated.

The use of cyclists 'Early Start' junctions on the approach roads is unacceptable. Any protective effect from this design is lost where there is congested traffic and where there are high volumes of left turning vehicles. From Parliament Street there is a very strong left turn flow of motor vehicles, which will be augmented if turns from Victoria Embankment to Westminster Bridge are banned. At the entrances from St. Margaret Street and Broad Sanctuary the cyclists' route is intended to head for the annular track on the inside of the carriageway. That is a desire line cutting across the left turning motor traffic. Cyclists must be protected by separate signalling for these manoeuvres.

The proposal is for a point closure of Horse Guards Rd is very welcome. That is a hazardous junction with rat running traffic cutting across to Storey's Gate and adding to the congestion in the narrow section of Great George St.

Section 13

This is not part of the current consultation. It is essential that the same degree of protected space for cycling is maintained in this area as on the rest of the route. There has to be a clear route through the Spur road junction and a priority crossing point giving access to the new path parallel to Constitution Hill.

Section 14

We welcome the changes to the road crossing on the south eastern corner. with the removal of the slip road which means cyclists can cross in one stage at Hyde Park Corner. The existing layout encourages high speed motor traffic down hill and has a poor casualty record.

There is still potential for conflict between pedestrians and cyclists around Wellington Arch, despite the proposed change to layout as at the south east the pedestrians are on the northern side of the cyclist desire line and at the north west corner the pedestrians are south side of the cyclists desire line. This could be alleviated by broadening the northern arm of Apsley Way and routeing cyclists through the central section of Apsley gate with a single stage crossing of the main carriageway.

Consideration should be given to link with quiet routes along Grosvenor Crescent. A safe crossing for both pedestrians and cyclists is needed here.

Section 15

This is not part of the current consultation but it is clear that there is a need to facilitate a great number of route choices between both Cycle Superhighways at this point and the various Quietway / Grid routes in this area. London Cycling Campaign has repeatedly argued against a single high volume route through Hyde Park. The alternative is to provide for all the possible route links by opening up Serpentine Road and at least one other south-east to north-west path through the park. We are aware that the Broadwalk route linking to North Carriageway Drive is often unusable due to private events in the park and to the inappropriate re-location of public speaking away from Speakers Corner.

South Carriageway Drive and West Carriageway Drive should be closed to through motor traffic or provided with clear protected space for cyclists and fully protected routes through the junctions at Princes Gate and Victoria Gate.

Section 16

The use of an 'Early Start' junction design on Bayswater Road is unacceptable where there is a high demand for motor traffic including buses to turn left into Lancaster Terrace. The restoration of two way traffic on Bayswater Road is very welcome however there needs to be a protected route for cyclists using Basyswater Road to eliminate the risk of left turn collisions for eastbound cyclists at Lancaster Terrace and Stanhope Terrace.

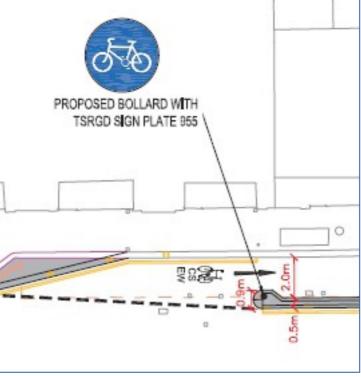
Options 1 and 2 are between Bathurst St and Stanhope Terrace. If the latter the track width would go down to 1.5m which is unacceptable and it over complicates the Westbourne St/Stanhope Terrace junction. The northbound track width should be maintained at 2 metres as an absolute minimum. For either option there needs to be clear priority for cyclists (and equestrians) over motor traffic at the Sussex Square / Stanhope Terrace junction.

On Westbourne Street southbound there is one of the many unnecessary width restrictions to 1.6 metres to place a bollard on the separating island. This creates a real hazard blocking cyclists where they are most vulnerable to motor traffic. The bollard should be omitted as on the Stratford High

Street Superhighway and many other cycle routes in London. It could be replaced by a wand without increasing the width of the island.

At the Lancaster Terrace / Sussex Gardens junction the signal timings are critical. It is expected that cyclists will become the dominant traffic flow at this junction and therefore should have adequate green time to reduce delay and congestion.

The Sussex Gardens one way system should be removed as it over complicates the traffic movements here with all the motor traffic being forced to cut across the cyclists route twice. There appears to be no



provision for northbound cyclists to turn right into Sussex Gardens which is an obvious desire line leading to Marylebone, Camden and Islington.

Section 17

There is insufficient protection for cyclists at the Craven Road junction. As this will become the only access route for northbound cyclists heading east for Paddington Station and beyond there needs to provision for cyclists to make safe right turns and also be protected from collisions with left turning motor traffic.

As noted above the width restriction of the northbound cycle lane to 1.2 metres just north of this junction is unacceptable.

Section C: Alignment of the E-W route

A critical omission in the current proposals is the lack of safe access for cyclists going to and from Tower Bridge. There is also inadequate protection for cyclists joining the route at other major junctions and at links with other Cycle Superhighways. This is of particular concern at Parliament Square and on Bayswater Road

At the western end the route should continue giving protection to cyclists up to and across Harrow Road before the extended route along the Westway is developed.

We are aware that an alternate routes have been proposed through the City of London and using Northumberland Avenue to Trafalgar Square. We have not seen the details of these routes but both routes have significantly higher bus traffic on narrower carriageways. The proposed route through Parliament Square provides good linkages to cycle routes across Westminster Bridge and to Cycle Superhighway 8 from Millbank. We have reservations about the junction designs at Parliament Square as set out below. However the network linkages achieved at Parliament Square should be give a high priority. There are also considerable pedestrian benefits in the current plans.

The routes through St.James Park and Green Park are not included in this consultation but they must offer the same level of protection from motor traffic as at other locations and have clear access through the Spur Road junction and into Green Park linking to the improved track on Constitution Hill.

Similarly there are no routes through Hyde Park indicated in this consultation. The whole of Hyde Park should allow cyclists several different route choices to link between the Cycle Superhighways, Quietway and Central London Grid routes as well as accessing the Park itself. The most effective way to do this would be to remove through motor traffic to allow safe routes for fast commuter cyclists on the Carriageways and also permit slower cycling on Serpentine road and several other cross routes in the park.

The interchange between West Carriageway Drive and North Carriageway Drive at Victoria gate needs to be re-designed to give pedestrians, cyclists and equestrians priority over motor traffic and safe access across Bayswater Road.