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memo

To : Albert Ang, Southwark Borough Council

C.c. : -

From : Lennart Nout, Mobycon

Regarding: Bellenden Road Option Descriptions

Date: 7 december 2016

Reference: 5588-M-C

Introduction

The number of people riding their bikes in the borough of Southwark is rising. To make sure people can ride to and from work, shops and schools safely and comfortably, the borough of Southwark is creating a new safe cycle route, the Southwark Spine. This route runs along the length of the borough and connects to the proposed cycle superhighway near Elephant and Castle.

The Southwark Spine runs along Lyndhurst Way and meets the one-way system at Holly Grove and Bellenden Road. This section of the route has been identified as particularly hazardous, due to large traffic volumes and high vehicle speeds. This area is hazardous not just for people on bicycles but also for pedestrians, school children and drivers.

In the last few months, Dutch street design firm Mobycon has been engaging with locals during three separate events to figure out how to resolve this section. It is necessary to provide a safe street for all users, but also be mindful of the important role these streets play in the wider road network and make sure the streets meet the needs of the local residents.

At the engagement events, the design team listened and engaged with local stakeholders, school children and interested residents to work out an acceptable design. Two of the issues that have been raised multiple times are the desire for Holly Grove to become a green link between the two parks and for high quality, safe cycle facilities through the area.

Two concept designs have been developed that each resolve one of the desired features. They are not fully developed designs, but are concepts that can inform future design stages. For each of the drawings, the main features, advantages and challenges have been outlined below.

On November 23, both concepts were presented at a gathering in All Saints Church in Peckham. At this event, residents and stakeholders provided feedback on both designs. The key lessons from this feedback have been attached to this memo.

Option 1:

Car Circulation

In this option, Holly Grove is completely closed to motorised traffic. Only bicycles and pedestrians are allowed through. This creates a safe green link space that can become the focal point for the community. It provides outdoor seating space for the adjacent restaurant. Incidental deliveries and access to the two resident garages will be allowed by installing movable bollards.

Because Holly Grove is closed to motorised traffic, the one-way system gets extended to Highshore Road. This street will thus have the traffic direction reversed and is expected to get a significantly higher volume of traffic. The northern half of Bellenden Road will also have its direction reversed, to allow for southbound traffic in the one-way system.

At the southern end of Bellenden Road, a short section of northbound exclusive bus lane will enable a much more efficient bus route for bus number P13 route. Parking on the southern section of Bellenden Road will be allowed only on one side.

Cycling facilities

People on bicycles will be encouraged to use Lyndhurst Way. A cycleway, separated by a strip of cobble stones (or a different, tactile, material), will be provided in both directions. These cobble stones will discourage cars from driving in the cycle lane and thus provide more safety than regular, painted lanes. Meanwhile, this treatment does retain access to the parallel parking bays provided next to the cycleway.

The contraflow cycleway on Lyndhurst way is an unconventional treatment on a street like this, however, eye-contact is easily made, and thus this is considered relatively safe. It is paramount that vehicle speeds are kept low (<20 mph) on Lyndhurst Way to ensure safe operation of the cycleway.

Holly Grove will remain open for people on bicycles, however, no dedicated facilities will be made available. The surface will be dedicated as a "share with care" space.

Contra-flow cycling will be allowed on Highshore road to enable people to travel to and from the shops in Peckham. To facilitate this, a semi-separated bicycle lane will be provided on the southern side of Highshore Road. This cycle lane will be separated by a low raised set of bricks, or other light-weight separation materials.

Car parking

The total change in provided parking spaces depends on the outcome of the next design phase, but the expectation is that the overall number of parking spaces will decrease slightly. On-street parking on the southern side of Highshore Road will be removed to enable a protected cycleway and the reversal of the traffic flow. Along Lyndhurst way, additional parking spaces will be made available.

Intersections

The intersection of Highshore Road and Lyndhurst Way is reconstructed, as traffic from the north will be forced to make a left turn into Highshore Road. To facilitate an easy and safe transition from on-road cycling to the cycle lane, bicycles have to cross the stream of traffic at this intersection. This is facilitated by the raised platform, that will reduce traffic speeds here.

The intersection of Highshore Road and Bellenden Road is also redesigned. The existing two mini roundabouts are removed, as they are perceived to be a barrier to walking and cycling, while not achieving the required intersection safety. Instead, regular give-way controls will be implemented to regulate the flow of traffic. The intersection is raised, resulting in a lower operating speed.

The intersection of Holly Grove and Lyndhurst Way outside the park will be completely redesigned and simplified. Added pedestrian crossings will make it much easier to cross into the park, using just one short crossing. This will make it much safer than the current intersection.

The intersection of Holly Grove and Bellenden Road is raised, as per the existing plans. Because of the reversed traffic flow, a zebra crossing on the northern side of the intersection is considered feasible. A second crossing across Holly Grove on the eastern side is also introduced, to ease pedestrian circulation. The fourth leg of this intersection is removed, hugely simplifying the intersection.

The intersection of Lyndhurst Way and Chadwick is reconfigured to reduce vehicle speed and make drivers more aware of pedestrians and cyclists. This is done by adjusting the angle of approach from the west, to force drivers from the east to make a turn, instead of traveling straight through. This will slow down the traffic and at the same time, drivers will be facing pedestrians trying to cross.

The intersection of Bellenden Road and Chadwick Road raised, to reduce vehicle speeds on all approaches. The separate turning pockets for the northern approach are removed. The right turn lane is converted into a northbound (contraflow) bus lane to achieve a more efficient bus route. Kerb build-outs provide shorter pedestrian crossings and improved visibility. Cyclists approaching from Chadwich Road (eastbound) will have to give way to through traffic from the north.

Pedestrian crossings

A lack of safe crossing points has been identified as one the key concerns for safety in the neighbourhood, several additional zebra crossing locations have been identified. These are indicative locations pending further investigation, but are based on pedestrian desire lines and vehicle interaction.

Kerb lines

Where possible, the existing kerb lines, or the kerb lines from stage one of the works (currently under construction) have been retained to reduce the cost of the proposal. In some circumstances, alternative measures can be taken instead of full relocation of the kerb. To reduce cost, planter pots or flexiposts can be used as an interim feature.

Option 2

Car circulation

In response to feedback on the original proposal to remove the gyratory, this option retains the existing car circulation, but instead improves safety by reducing the vehicle speed, introducing safe cycle facilties and reconfiguring some intersections.

Cycling facilities

Separated cycle facilities are only provided on the gyratory section of the road network, between Holly Grove and Chadwick Road. On Holly Grove, an eastbound cycle lane is provided, separated by a low row of bricks, to deter vehicles from entering while allowing for access to and from the two garages on Holly Grove.

On Bellenden Road, a southbound on-street cycle lane is provided, that is partially protected by parked cars. Just south of Holly Grove, the cycle lane is separated by a raised, but mountable separator.

The cycle lane on Chadwick Road is similarly separated. The existing bus stop on Chadwick is retained, causing a break in the cycle lane. Given the existing frequency of the bus

route (4 buses per hour), this is considered a minor issue. The cycle lane turns right into Lyndhurst Way and is continued across the intersection with Chadwick Road (west) to ensure that drivers are aware of potential cycle movements.

On Lyndhurst Way, the northbound cycle lane is situated between parked cars and the existing kerbline. This reduces the chance of dooring by about 80%. At the same time, pushing the cars closer together will reduce the visual and practical width of the street, which in turn reduces operating speed. This makes it easier for people to cross the road on foot and to cycle.

On Bellenden Road between Highshore Road and Holly Grove, a contra-flow cycle lane is marked. This is done to draw attention to the fact that cyclists do travel in a southbound direction on this section of the street. This practice currently happens already, and should be facilitated. By drawing a contra-flow cycle lane, the place on the street for cars is clearly defined, allowing some space for bicycles.

One downside to the provided cycle facilities is that there are safety concerns at the location where the protected cycle lane merges with general traffic. It is important to ensure sufficient visibility and a slow operating speed to enable cyclist and car driver to anticipate each other's movements.

Car parking

While the exact parking numbers are pending further design steps, it is anticipated that this option will see an overall net gain in provided on-street parking spaces. Lyndhurst Way is expected to have an increased number, while Bellenden Road will see a slight drop in parking spaces. The parking on Bellenden Road is off-set, this forces cars to travel laterally and thus reduce operating speed. This also retains access to the driveways in Bellenden Road.

Intersections

Most intersections are fitted with raised platforms to reduce vehicle speed and ensure interaction between crossing pedestrians and approaching vehicles.

The intersection of Highshore Road and Lyndhurst way remains largely unchanged, except for added pedestrian crossings.

The intersection of Bellenden Road and Highshore Road is redesigned. The existing two mini roundabouts are removed, as they are perceived to be a barrier to walking and cycling, while not achieving the required intersection safety. Instead, regular give-way controls will be implemented to regulate the flow of traffic. The intersection is raised, resulting in a lower operating speed.

The intersection of Lyndhurst Way and Holly Grove is simplified by removal of the refuge island and shortening the crossing distance. The right turn pocket for traffic on Lyndhurst Way is removed, to reduce the crossing distance and simplify operations.

The intersection of Holly Grove and Bellenden Road is redesigned to reduce the speed of cars exiting Holly Grove. A guiding sunken kerbline will be implemented to guide traffic around the corner, avoiding traveling in the path of bicycles. On the northern approach, a dedicated pocket for approaching bicycles is provided, which will have to give way to car traffic from the right.

The intersection of Lyndhurst Way and Chadwick is reconfigured to reduce vehicle speed and make drivers more aware of pedestrians and cyclists. This is done by adjusting the angle of approach from the west, to force drivers from the east to make a turn, instead of traveling straight through. This will slow down the traffic and at the same time, drivers will be facing pedestrians trying to cross.

The intersection of Bellenden Road and Chadwick Road is raised and fitted with three zebra crossings. These will highlight and prioritise the many pedestrians that use this intersection. A kerb build-out is provided on the southern approach to ensure enough sight distance between the pedestrian crossing and approaching vehicles. Street furniture and posts will be removed on the eastern approach to improve visibility. The northern approach will be narrowed down to one lane, which reduces the crossing distance to 3.5 metres.

Pedestrian crossings

A lack of safe crossing points has been identified as one the key concerns for safety in the neighbourhood, several additional zebra crossing locations have been identified. These are indicative locations pending further investigation, but are based on pedestrian desire lines and vehicle interaction. Further work is required to identify the feasibility of each of these crossings.

Kerb lines

Where possible, the existing kerb lines, or the kerb lines from stage one of the works (currently under construction) have been retained to reduce the cost of the proposal. In some circumstances, alternative measures can be taken instead of full relocation of the kerb. To reduce cost, planter pots or flexiposts can be used as an interim feature.

Feedback

During the public presentation, a majority of residents and stakeholders expressed a preference for option 2.

The key issues raised regarding option 1 are:

- The added travel time due to the larger gyratory
 This is a valid point, and one of the drawbacks of option 1
- Added traffic volume on the narrow Bellenden Road
 This is also one of the drawbacks of option 1
- The loss of parking on Highshore Road

 Parking is retained on one side. A parking study will clarify if further parking removal is possible

While option 2 was generally preferred, the following key feedback was delivered through the workshop exercise:

- Parking restrictions on Bellenden Road (north).
 The narrow section of Bellenden Road will require parking restrictions to enable safe cycling.
- Parking required for Ganapati Restaurant
 Parking for Ganapati restaurant will need to be accommodated elsewhere in the area. Lyndhurst Way will have more parking capacity within close proximity to the restaurant.
- Lack of loading space
 This is a valid point. It is expected that the roads will be wide enough to overtake a parked delivery vehicle. At specific locations, loading bays will be required
- Potential for congestion when drivers reverse in driveways in Bellenden Road If on-street parking spots are occupied, residents of 101-107 Bellenden Road will have to stop in the road to back in to their driveways. Currently there is enough room to overtake. Retaining this room to overtake will not get the required levels of safety for both pedestrians, cyclists as car drivers however.

The main comments on option 2 were the fact that there was that the lack of road width would result in issues with delivery vans and minibuses stopping in the roadway. These would block traffic, causing congestion. The next design phase should address these issues by providing enough loading zones at appropriate locations. This could also be enabled by designing loading zones that are located partially on the footpath. While not ideal, in constrained environments, this may be one of the solutions.

Further feedback was expressed via email. Some of the key themes from the email feedback are:

- Concerns about traffic calming (is enough done, and will traffic calming devices cause additional noise, vibrations?)
 - This issue is part of the next design stage, where the exact location of traffic calming devices will be investigated.
- More could be done to reduce traffic volume in the area as a whole, heavy vehicles in particular. Heavy vehicle ban should be investigated
 A separate project is looking into these issues
- Questions around the width of Bellenden Road (does it fit a contra-flow cycle lane?)
 Based on the existing drawings, it will fit, but is subject to further design work following the completion of the as-built drawings of the current scheme.

Detailing examples

Mountable cycle lane separator



This type of separation deters vehicles from driving in the cycle lane while maintaining access to driveways. This can also be used as a guiding marking at an intersection.

Temporary low cost solution



This type of treatment can be used instead of permanent kerb build-outs on a temporary basis.