

Report of the Director of City Strategy

LINKS TO CYCLE ROUTE THROUGH HOSPITAL GROUNDS: PROPOSED TRAFFIC SIGNALS AT BOOTHAM TO CATER FOR CYCLIST CROSSING MOVEMENTS

Summary

1. This report advises Members about the results of consultation on proposals to install traffic signals at the junction of Bootham, St Mary's and the entrance to Bootham Park Hospital (known as 'The Drive') to provide a priority crossing for cyclists across Bootham. Members are asked to consider the contents of this report and approve the recommended option for implementation.

Background

2. Encouraging more people to cycle has been a long-standing priority for the Council, and this work has recently been given a huge boost by our successful bid to become a 'Cycling City'.
3. As part of an action plan to address existing gaps in the cycle route network, we are seeking to improve the Haxby to York Station route. The overall route plan is shown in **Annex A**. The aim is to provide a signalised crossing facility for cyclists across the busy A19 Bootham to resolve the difficulties currently being experienced by cyclists crossing Bootham from both St. Mary's and 'The Drive'. The new route through the hospital grounds is a planning condition linked to the new multi-storey car park, which is due to be built soon. The overall route will provide improved access to many employment sites, schools, leisure facilities, healthcare and retail sites.
4. Although checks on the accident levels at the junction on Bootham over the last three years show that there have been no injury accidents, on-site observations show that cyclists experience difficulties in crossing Bootham. This is particularly evident during peak periods, even when the inbound traffic flow is queuing, because cyclists crossing or making a right turn from 'The Drive' can be masked from the view of outbound traffic. Currently, around 70 cyclists exit 'The Drive' during the pm peak hour, and this is expected to increase in the future, following the implementation of the proposed measures.

Proposals

5. The proposals are shown in **Annex B** and a description of the main elements is provided below:
 - Removal of the existing Pelican crossing point and the installation of new traffic signals to provide cyclists with a priority crossing over Bootham at its junction with St. Mary's and 'The Drive';
 - Red/Green man pedestrian crossing facility over Bootham;
 - Non-signalised pedestrian crossings over St. Mary's and 'The Drive';
 - Narrowing the entrance to 'The Drive' to improve intervisibility between road users and pedestrians.
6. It is proposed that the signals would operate in four separate stages, as outlined below:

Stage 1 would allow all Bootham traffic to flow;

Stage 2 would allow pedestrians to cross Bootham;

Stage 3 would allow vehicles, including cyclists, to emerge from 'The Drive'*.

Stage 4 would allow vehicles, including cyclists, to emerge from St. Mary's*.

*Please note that Stages 3 & 4 would operate on demand. If no vehicle demand was triggered from detection loops in either of the side roads, then Stage 1 would automatically recommence after Stage 2 to minimise any delay to traffic on Bootham. In addition, the pedestrian phase would take precedence over any other movements.

7. This arrangement has the advantage of keeping the traffic flowing on Bootham, as a red signal will only be displayed for traffic on Bootham when there is a demand to use the Pelican, or a demand from either side road. The side roads need to have separate stages for two main reasons. Firstly, the width of the gateway to 'The Drive' is not sufficient to safely accommodate two-way traffic flow. Secondly, the separate signal phases will ensure that cyclists moving between 'The Drive' and St. Mary's are not at risk from opposing traffic, which could make right turns across their path.

Consultation Feedback

8. Consultation letters were sent out to local residents, businesses and other interested parties on Friday 17th October. The correspondence included a leaflet with drawings showing the proposals, along with a description of the proposed measures. A summary of the feedback received is outlined below.

Local Residents & Businesses

9. Bootham School point out that the existing Pelican crossing facility on Bootham was originally installed with a 'quick response' push button control to reduce the likelihood of students being tempted to cross against a red man, potentially dodging between vehicles on the carriageway, and putting themselves at risk.

The Council should ensure that any replacement crossing is also designed to respond quickly when the pedestrian push button control is activated.

Officer response

The proposed pedestrian crossing facility incorporated within the signal control for the junction will operate in a similar way to the existing Pelican. There may be short delays for pedestrians whilst a side road movement takes time to clear the signals, if this is called just prior to a pedestrian demand. However, demand from pedestrians will generally take precedence over vehicle and cyclist movements from the side roads, so any increase in pedestrian delays should be small (for details of the proposed signal sequences, refer to paragraph 6 above).

10. A resident has written to say that although she welcomes the overall proposals, the provision of a four-phase timed system seems unnecessarily complex and expensive, given the very low flows out of the two side roads compared with the volume of traffic on Bootham. The flows along Bootham would be halted quite needlessly (even if there was no trigger from the side roads), and would be stopped in three of the four phases. In addition, cyclists wishing to turn right from Bootham, in either direction, would not be helped in Stage 1, as the oncoming traffic would not be stopped. The resident suggests that either a simple notice to cyclists in St. Mary's and on The Drive should be provided, instructing them to cross Bootham, dismount and use the Pelican crossing. Alternatively, leave the existing Pelican crossing in place and provide a push-button system for cyclists in St. Mary's and on 'The Drive', which would activate the lights on the pelican crossing. The north-west signals would have to be repositioned accordingly towards Clifton. Lower cyclist-lights (like those in the Netherlands) would have to be provided in St Mary's and beside the gates in The Drive. Such a solution is likely to be much less intrusive than a full-scale set of standard traffic lights.

Officer response

In order to provide a safe and efficient controlled crossing for cyclists, full signalisation of the junction is required. Traffic flows on Bootham will not be stopped unless there is a demand from the newly incorporated pedestrian crossing, or either of the side roads. This should not adversely affect the traffic flow on Bootham, given the low traffic flows from the side roads.

Officers recognise that cyclists may have difficulty turning right from Bootham into 'The Drive'. Therefore, Officers propose that a Yellow Junction Box marking on Bootham should be included (but only to cover the inbound traffic lane), given that for a large proportion of the day, inbound traffic on Bootham is either slow moving, or in a queue. This would create sufficient gaps for right turning cyclists and vehicles. A Yellow Junction Box marking would also help to prevent vehicles blocking the exit from both side roads. In addition, inbound cyclists on Bootham would no longer be masked from the view of traffic turning right into 'The Drive' by traffic queuing inbound on Bootham.

A simple sign instructing cyclists to dismount and use the existing Pelican would not cater for the cyclist desire line, would be unattractive to use and is

not supported by Cycling England for these reasons. It is also likely that such signing would be ignored by the majority of cyclists, meaning that there would be no difference to the existing situation, as the Pelican is not currently being used in this way. In addition, Officers generally avoid using cyclists dismount signs unless they are considered absolutely necessary.

Officers consider that the alternative design suggested to incorporate cyclist signals operated by push-button would be both unsafe and impractical. This arrangement would be likely to create conflict with motor vehicles, which would be allowed to enter or exit either of the side roads. The side roads need to operate separately because the entrance to 'The Drive' is only wide enough for one vehicle to emerge. In addition, with the relocated stop line north-west of 'The Drive', there would be an unacceptably large gap to the existing Pelican crossing, given the excessive length between the studs on the crossing and the stop line, which would not conform with current legislation. At approximately 25m long (approximately five car lengths) the suggested arrangement would be subject to regular abuse, with the possibility of red signal violation, as well as traffic potentially blocking movements from the side roads. Therefore, Officers are unable to adopt the suggestion as a realistic alternative.

11. York Hospital have some concerns regarding the visibility of the signals, and the visual impact of them, given the proximity of listed buildings nearby. York Hospital and Bootham Park Hospital also have concerns regarding the safety of pedestrians on Bootham due to vehicles emerging from 'The Drive' on a green signal. York Hospital also ask if the scheme has been risk assessed, and whether a simpler solution to the one proposed has been considered.

Officer response

The signal positions have been chosen to ensure that they are visible to the appropriate road users. The visual impact of the new signals will be offset by the removal of the existing Pelican signal equipment, which is also near listed buildings.

An alternative scheme based on converting the existing Pelican to a Toucan was drawn up and assessed. However, this would have involved moving cyclists away from their natural desire line, and would have created new conflicts with pedestrians. In addition, it would have involved removing an area of the cobbles and the introduction of a shared surface on the western footway where there is a tree, thus causing a pinch point. For these reasons, that proposal was rejected.

The problem of potential pedestrian and vehicular conflict as described in the comments from the hospital is recognised and was considered in developing the current proposals. Indeed, Officers originally considered whether red/green man control should be used across 'The Drive' and St. Mary's instead of an uncontrolled crossing facility. Given the high numbers of pedestrians crossing these side roads, it would appear to be unnecessarily restrictive and unrealistic to expect pedestrians to wait for a green man signal, which could only be safely shown if all traffic movements at the junction are stopped. This would make the junction very inefficient,

and Officers anticipate that many pedestrians would regularly cross against a red man signal. It is therefore considered more appropriate to have an uncontrolled crossing arrangement, where pedestrians would be encouraged to treat the crossing movement with more caution, and make a conscious decision to look before making the decision to cross. Such arrangements are used at other signal installations where pedestrians have to cross minor arms of the junction (for example, across Claremont Terrace at the junction of Lord Mayor's Walk, Clarence Street and Gillygate). To make this arrangement as safe as possible, the entrance to 'The Drive' would be re-arranged to make it look more like a conventional minor road junction. As part of this, the entrance width would be reduced to ensure intervisibility between emerging vehicle drivers and Bootham pedestrians. Also, tactile paving would be introduced on both sides of the entrance to make these pedestrians aware that there was a roadway ahead of them.

An initial Safety Audit Risk Assessment has not highlighted any fundamental concerns, but has recommended that a full Safety Audit is carried out at the detailed design stage. Officers hope that this will be done in time to be able to report the results to Members as an update at the meeting.

Emergency Services

12. The view from the Police is that the traffic light signals at the junction of 'The Drive' and St. Mary's would be dangerous, and object to the proposed scheme on that basis. The main reason is that they fear drivers on Bootham may go through the red lights because they are not able to see traffic waiting in 'The Drive' (and vice versa), and may therefore not appreciate that traffic will be emerging from 'The Drive'. This is likely to lead to road safety and enforcement problems (indeed, they consider that there is a risk of red signal violations at all four arms of the junction). They are also concerned that drivers in St. Mary's who may be unfamiliar with the area (there are many guest houses locally) could end up driving into the grounds of Bootham Park Hospital, unless a robust signing regime was introduced to prevent this. However, the erection of signage may further reduce visibility. In addition, they feel that the signalisation of this entrance would set a precedent for the signalisation of all private drive entrances.

Officer Response

Officers consider it to be very unlikely that drivers on Bootham will become impatient and run through the red signals, because traffic emerging from 'The Drive' will very quickly appear before them, after the signal for traffic on Bootham turns red. The signal operation would be such that the default green signal would be shown to vehicles on Bootham, so they will only turn red when there is a demand registered from the side roads or the pedestrian crossing. Each stage of the signal's cycle given to the minor arms of the junction would be deliberately short to ensure that the traffic on Bootham would only be interrupted for the minimum amount of time. Therefore, Officers consider that the likelihood of non-compliance with the red signals would be negligible.

Officers consider that the proposals in this scheme do not form a precedent for the signalisation of other private driveways. The entrance to Bootham Park Hospital is clearly more than a typical driveway, and is already signed as an important cycle route. The desire to help cyclists cross Bootham has driven this particular scheme and, whilst other ways of achieving this objective have been considered, the current proposal is thought to offer the best solution in terms of safety and convenience for cyclists.

13. At the time of writing, the Ambulance Service has not responded.
14. The Fire and Rescue Service wrote to confirm that they have no objections to the proposals, apart from concerns that the entrance to 'The Drive' is not narrowed excessively, so as to prevent fire appliances from accessing 'The Drive'.

Officer Response

The narrowed down entrance has been modelled and checked with vehicle tracking software and it was found that the new alignment would not impede a fire appliance from turning into or out of 'The Drive'.

Road User Groups

15. The Cycle Touring Club responded by expressing their support for the proposals.
16. The York Cycle Campaign have not raised any concerns in relation to the proposed signals.

Other Consultees

17. The Council for British Archaeology support the proposals.
18. Cycling England have been made aware of the proposals and welcome the improvements that the scheme would bring to cyclists.

Member Views

Ward Members

19. Councillor Looker supports the proposals. At the time of finalising this report, Councillor Watson had not responded. Should further comments be received following the submission of this report, they will be presented as an update at the meeting.

Other Members

20. Councillors Gillies, Potter and Stephen Galloway were also made aware of the scheme proposals and asked for their comments. Councillors Potter and Stephen Galloway both support the scheme. At the time of finalising this report, Councillor Gillies had not responded.

Options on the Way Forward

21. There appears to be a general support for the proposals in principle, with some comments received about certain aspects. Therefore, Officers have formulated the following options for Members to consider:

Option One – approve the proposals to implement the traffic signals and ancillary works, as shown on **Annex B**.

Option Two – make any changes to the proposals that Members consider necessary.

Option Three – no cycle improvement measures to be implemented.

Analysis of Options

22. Officers consider that the proposals represented in Option One are the best in terms of advancing the aims of the Council as a Cycling City, in that the overall proposals would tackle a difficult crossing point on an important strategic cycle route. As part of this, Officers consider that the proposals could be enhanced by the inclusion of a Yellow Junction Box road marking on Bootham, but only to protect the inbound side, where queuing regularly occurs.
23. The only major area of concern highlighted by the consultation process is the issue of road safety, with particular concern about pedestrians crossing 'The Drive'. Officers have investigated whether red/green man control should be used across the side roads, but on balance, consider that an uncontrolled crossing facility would be a better solution. This is because red/green men would lead to frustrating and unnecessary delays for pedestrians, with many probably choosing to cross against the red man signal. In such situations, pedestrians can be served better by not providing signal controlled crossings. However, it is very important to ensure that they are made aware of the risk of emerging traffic and make a conscious decision to look before making the decision to cross. Officers have designed the scheme with this in mind and do not consider that any amendments to the scheme (Option Two) need to be recommended.
24. Clearly, Option Three would do nothing to promote cycling, and crucially, this option would not fulfil the Council's obligations in relation to being a Cycling City. More specifically, this option would fail to deliver on two of the seven key aims of the Cycling City initiative, namely to encourage more people to cycle more often, and to address the gaps in connections and cycle routes. Therefore, this option cannot be recommended.

Corporate Priorities

25. These proposals should help meet the Council's Corporate Priorities for increasing the use of public and other environmentally friendly modes of transport, and also for improving the health and lifestyles of the people who live in York, in particular among groups whose levels of health are the poorest.

Implications

Financial/Programme

26. The cost of the scheme is estimated at approximately £75k. This is higher than originally anticipated and allowed for in establishing the 2008/09 Capital Programme. However, the scheme is still considered to represent good value, given the strategic importance of the route. Therefore, the Capital Programme Manager is seeking an increased budget for the scheme as part of his Capital Programme Monitoring report due to be considered at EMAP on 8th December.

Human Resources (HR)

27. There are no human resources implications.

Equalities

28. There are no equalities implications.

Legal

29. There are no legal implications.

Crime and Disorder

30. The crime and disorder implications have been discussed at length with the Police. Although the Police remain in objection to the proposals, Officers have taken their concerns into account, and have made efforts to reduce the potential for non-compliance with red signals by traffic on Bootham.

Information Technology (IT)

31. There are no information technology implications.

Property

32. The Council has powers to implement the proposals under the provisions of the Highways Act and the Road Traffic Act. However, permission from the Bootham Park Hospital authorities would be required to enable the scheme to go ahead as shown, as some signal equipment would need to be sited on their property. At the present time, the indication from the hospital is that 'in principle' they support the proposals, with some specific reservations (refer to paragraph 11 above). Therefore, it is likely that permission will be obtained to make the necessary changes to the current layout within their grounds.

Risk Management

Risk Category	Impact	Likelihood	Score
Physical	Medium	Possible	9
Organisation/Reputation	Medium	Possible	9

33. There is the potential for safety issues (Physical). There is always a potential for new safety issues to arise whenever an existing highway layout is altered, but risks are minimised through careful design and the road safety audit checking process. There is also a risk of criticism from the public in implementing a scheme to which some have objections (Organisation/Reputation). Measured in terms of impact and likelihood, the risk scores have all been assessed at lower than 16. This means that at this point, the risks need only to be monitored, as they do not provide a real threat to the achievement of the objectives of this report.

Recommendations

34. That the Advisory Panel advise the Executive Member to approve Option One, to implement the proposals as shown in **Annex B**, with the addition of a Yellow Junction Box road marking on Bootham to cover the inbound lane only.

Reason: Officers consider that these proposals will provide significant improvements for cyclists, as this addresses a difficult crossing point over a major road on a strategic cycle route. The proposed measures would also make a significant contribution towards the aims of the Council as a Cycling City.

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Report Approved

Date 12/11/08

Specialist Implications Officer(s)

There are no special implications

All

Wards Affected: Guildhall

For further information please contact the author of the report

Background Papers:

“Proposed 2008/09 City Strategy Capital Programme” – report to the Meeting of Executive Members for City Strategy and Advisory Panel on 17th March 2008

“York Cycling City” – report to the Meeting of Executive Members for City Strategy and Advisory Panel on 8th September 2008

Annexes:

Annex A – Overall Route Plan
Annex B – Bootham Signal Proposals