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**Decision Session**  
**Executive Member for Transport**

**24 October 2019**

Report of the Corporate Director of Economy and Place

**Junction Alterations – Monkgate Bar**

**Summary**

1. The traffic signalling equipment at this junction is life expired and has become difficult and costly to maintain, it needs to be replaced.
2. The TSAR (Traffic Signal Asset Renewal) programme is the means by which life expired traffic signal assets across the city are refurbished.
3. Although the programme is primarily about asset renewal, there is scope to take advantage of ‘easy wins’ whilst refurbishing the equipment. To that end, junction alterations have been proposed that offer an improvement.

A decision is required to approve the proposed junction alterations.

**Recommendations**

1. The Executive Member is asked to:

Approve Option 1

Reason:

- This option achieves the core aim of replacing the life-expired traffic signal asset such that it can continue be operated and repaired economically.
- This option has no negative impact on junction capacity. Any option which reduces junction capacity would have a cumulative effect on congestion in this area if the proposed experimental Traffic Regulation Order in The Groves is implemented.

## **Background**

2. A report was brought to the Executive Member for Transport and Planning on 12<sup>th</sup> November 2015 to seek approval to undertake the 5-year 'TSAR' (Traffic Signal Asset Renewal) programme.
3. This programme entails a replacement of life expired traffic signal assets around York. The focus is on replacing equipment that is liable to imminent failure, rather than seeking to improve congestion or achieve a similar transport improvement goal. However, where 'easy wins' can be achieved at the same time as replacing obsolete equipment, these will be taken advantage of.
4. To date, 26 sets of signals have been refurbished and a further 4 are programmed in for the 19/20 financial year.

## **Consultation**

5. The scope of the works included within this proposal are relatively minor and in normal circumstances would not require an executive decision for approval, or an external consultation.
6. However, due to the sensitivity of the location a consultation has been carried out to offer key user groups an opportunity to have their say on the proposed scheme.
7. A summary of the consultation feedback can be found in Annex C.

## **Options**

8. The following options are available:
9. Option 1 – Approve the proposed junction layout shown in drawing Annex A.
10. Option 2 – Approve the proposed junction layout as shown in drawing Annex B.
11. Option 3 – Do not approve the presented option.

## **Analysis**

### **Option 1**

#### *Description of changes*

12. A full replacement of all traffic signalling technology, including signal heads, poles, cabling, cabinets, detectors, communications and ducting.
13. Increased size of pedestrian staggered island in Lord Mayor's Walk to 3.0m and increased crossing width and tactile paving to meet design guidance.
14. Removal of the ahead flare lane on the northern Monkgate arm. This will reduce the approach to 1 lane, allowing for the provision of a 1.5m cycle lane and an enlarged pedestrian island at the informal crossing point.
15. Increased width of signal controlled crossing and tactile paving over St Maurice's Road to meet design guidance.
16. Provision of an uncontrolled crossing point over the southern arm of Monkgate, in front of the Bar.
17. Resurfacing and line marking across the whole junction.
18. The estimated cost of the work is £280,000.

#### *Reasoning*

19. Replacement of the traffic signal technology is the fundamental purpose of this project, as per Section 2.
20. Widening of the pedestrian crossings is necessary to bring the pedestrian facilities in line with current guidance and standards. The increased size of the pedestrian island on Lord Mayors Walk will improve safety during the busiest times.
21. The cycle lane on the northern arm of Monkgate narrows on the approach to the junction in order to accommodate the ahead flare lane. By removing the flare lane, the cycle lane can be widened to 1.5m to the junction, removing the pinch point and making the route safer for cyclists.

22. Removal of the flare lane on Monkgate also creates space for a larger pedestrian island. Although this crossing point is not signal controlled, there is no evidence to suggest there is a safety concern at this point and this option does offer benefits over a signal controlled crossing in terms of junction capacity.
23. Removing the ahead flare lane will have no significant impact on the junction capacity as:
  - Very few vehicles proceed straight ahead from this arm of the junction due to access restrictions beyond the Bar.
  - The Flare lane is very short and can only accommodate 2 vehicles.
24. The carriageway at this junction is in very poor condition and these works provide an ideal opportunity to carry out resurfacing.

#### *Impact on vehicular traffic*

25. The junction has been modelled using LINSIG to assess the performance of the design. A summary of the modelling results is provided in Ammex D.
26. Modelling shows that this option has no significant impact upon journey times or delays for vehicular traffic.
27. Widening of the cycle lane on Monkgate is seen as a positive change for cyclists that has no significant drawback.

#### *Impact on pedestrians*

28. Widening the pedestrian crossings and enlarging the islands is seen as an improvement to the pedestrian facilities as users will have more room to navigate the junction. This will be especially beneficial for users of prams, wheelchairs and mobility scooters.
29. The uncontrolled crossing point in front of Mongate Bar will provide dropped kerbs and tactile paving to assist visually impaired pedestrians.

#### *Safety Considerations*

30. The new traffic signalling technology that will be introduced will improve pedestrian safety. Near-side pedestrian indicators are associated with a reduced accident rate.

31. An independent Safety Assessment has been carried out on the preliminary design attached. It highlighted some minor points that will be adequately resolved during the detailed design stage.
32. A further Road Safety Audit will be carried out after detailed design and before construction. This is the means by which the design safety will be controlled.

### *Conservation*

33. CYC Design and Sustainability Manager and York Archaeological Trust have been engaged throughout the process and will continue throughout the detailed design and construction. The area of the proposed works is within the Area of Archaeological Importance. An archaeological watching brief will be on site during all works which are penetrating ground beneath modern paving/bedding layers.

## **Option 2**

### *Description of changes*

34. A full replacement of all traffic signalling technology, including signal heads, poles, cabling, cabinets, detectors, communications and ducting.
35. Introduction of a signal controlled straight across crossing over the northern Monkgate arm.
36. Introduction of a signal controlled straight across crossing over the southern Monkgate arm, in front of the Bar.
37. Removal of the ahead flare lane on the northern Monkgate arm. This will reduce the approach to 1 lane, allowing for the provision of a 1.5m cycle lane and an enlarged pedestrian island.
38. Realignment and increased width of signal controlled crossing and tactile paving over St Maurice's Road to meet design guidance.
39. Resurfacing and line marking across the whole junction.
40. The estimated cost of the work is £330,000.

### *Reasoning*

41. Replacement of the traffic signal technology is the fundamental purpose of this project, as per Section 2.
42. Widening of the pedestrian crossings is necessary to bring the pedestrian facilities in line with current guidance and standards. The increased size of the pedestrian island on Lord Mayors Walk will improve safety during the busiest times.
43. The cycle lane on the northern arm of Monkgate narrows on the approach to the junction in order to accommodate the ahead flare lane. By removing the flare lane, the cycle lane can be widened to 1.5m to the junction, removing the pinch point and making the route safer for cyclists.
44. Introducing a signal controlled pedestrian crossing over the northern and southern Monkgate arms provides a safe crossing point for pedestrians.
45. Removing the ahead flare lane will have no significant impact on the junction capacity as:
  - Very few vehicles proceed straight ahead from this arm of the junction due to access restrictions beyond the Bar.
  - The Flare lane is very short and can only accommodate 2 vehicles.
46. The carriageway at this junction is in very poor condition and these works provide an ideal opportunity to carry out resurfacing.

#### *Impact on vehicular traffic*

47. The junction has been modelled using LINSIG to assess the performance of the design. A summary of the modelling results is provided in Annex D.
48. Introduction of signal controlled pedestrian crossings over Monkgate requires the signal staging to include an all red phase. LINSIG modelling shows that this option will result in substantial increase to overall delay and queuing, particularly during peak times. Junction capacity will be exceeded during peak times, which may impact the wider network. The additional queueing traffic is likely to have a negative effect on air quality.
49. Consideration should be given to the effect of the proposed experimental Traffic Regulation Order at The Groves which is likely to increase traffic along Lord Mayor's Walk. The reduction of capacity that results from implementing this option alongside the Groves TRO would have a

cumulative effect on congestion in this area, significantly increasing delay and queuing at this junction.

50. Widening of the cycle lane on Monkgate is seen as a positive change for cyclists that has no significant drawback.

#### *Impact on pedestrians*

51. Introducing signal controlled pedestrian crossings over Monkgate will improve safety without impacting pedestrian wait times.
52. Widening the existing pedestrian crossings and enlarging the islands is seen as an improvement to the pedestrian facilities as users will have more room to navigate the junction. This will be especially beneficial for users of prams, wheelchairs and mobility scooters.

#### *Safety Considerations*

53. The new traffic signalling technology that will be introduced will improve pedestrian safety. Near-side pedestrian indicators are associated with a reduced accident rate.
54. An independent Safety Assessment has been carried out on the preliminary design attached. It highlighted some minor points that will be adequately resolved during the detailed design stage.
55. A further Road Safety Audit will be carried out after detailed design and before construction. This is the means by which the design safety will be controlled.

#### *Conservation*

56. CYC Design and Sustainability Manager and York Archaeological Trust have been engaged throughout the process and will continue through the detailed design and construction phases. The area of the proposed works is within the Area of Archaeological Importance. An archaeological watching brief will be on site during all works which are penetrating ground beneath modern paving/bedding layers.

## **Other options already discounted**

57. Minor variations of the presented options have been considered that include different signal staging, equipment layouts and kerb alignments, as well as combinations of staggered and straight across crossing points. The options presented are the most efficient variants and will be further optimised during detailed design.

## **Council Plan**

58. Replacing life-expired traffic signalling assets allows the Authority to continue to manage the traffic on its highway network, minimising congestion and ensuring user safety. Therefore carrying out these works fulfils the 'A focus on frontline services' priority of the Council Plan.

## **Implications**

### **59. Financial**

The TSAR programme is funded from the council's capital resources, and was approved in the 19/20 Capital Budget report to 14 February 2019 Executive. Sufficient funds are available to construct the presented option.

### **60. Human Resources**

There are no HR implications.

### **61. One Planet Council / Equalities**

All junctions are designed with equalities in mind. The recommended designs follow the most up to date guidance with respect to disability access. The technology included in all designs includes aids to persons with visual and mobility impairment.

### **62. Legal**

There are no legal implications.

### **63. Crime and Disorder**

There are no Crime and Disorder implications.

### **64. Information Technology**

The Information Technology implications of constructing the proposed designs has been considered and are included in the Project Plan. No issues are envisaged.



65. **Property**

There are no property implications.

66. **Other**

Disruption during construction – Constructing the TSAR schemes inevitably means a certain level of work on the Highway, with an associated level of delay and disruption to pedestrians and vehicular traffic. Such works will be scheduled and planned to minimise this disruption, and sufficient information and notice will be given to affected parties.

**Risk Management**

70. There are no known significant risks associated with any option presented in this report.

Project Risks are recorded in the Project Risk Register and monitored.

**Contact Details**

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**Neil Ferris**  
**Corporate Director of Economy and Place**

**Report**  **Date** 15 October 2019  
**Approved**

**Wards Affected:** List wards or tick box to indicate all **All**

Guildhall Ward

**For further information please contact the author of the report**

**Background Papers:**

Cabinet Report - 'Traffic Systems Asset Renewals and Detection Equipment Plan' – 12 November 2015

## **Annexes**

*ANNEX A - YK2215 MONK BAR / LORD MAYORS WALK OPTION A*

*ANNEX B - YK2215 MONK BAR / LORD MAYORS WALK OPTION B*

*ANNEX C – Consultation Summary*

*ANNEX D – Monkgate Modelling Summary*

## **List of Abbreviations Used in this Report**

TSAR – Traffic Signal Asset Renewal

ASL – Advanced Stop Line

TRO - Traffic Regulation Order