REPORT FOR: Traffic And Road Safety Advisory Panel

Date of Meeting: 26th June 2018

Subject: INFORMATION REPORT

Harrow View / Headstone Drive junction improvement (Goodwill to All) - progress

update

Responsible

Officer:

Paul Walker - Corporate Director, Community

Exempt: No

Wards affected: Headstone South, Marlborough

Enclosures: Appendix A - Technical Note

Appendix B – Proposed general arrangements



Section 1 – Summary

This information report is presented to Members to provide an update on the Goodwill to All junction improvements funded through section 106 monies obtained via the Kodak site and explains the objectives, outcomes and recommendations.

FOR INFORMATION

Section 2 – Report

Background

- 2.1 Harrow View / Headstone Road / Headstone Drive junction, also known as the Goodwill to All junction, is a four arm traffic light controlled junction located close to the old Kodak site. The junction currently has no controlled pedestrian crossing stages and operates during weekdays at or near capacity in the morning and afternoon peak times.
- There is an existing right turn ban from Harrow View (southern arm) into Headstone Drive (eastern arm) which has been in place for some time and there are three bus routes which travel through the junction the H9, H10 and H14, bus stops are located close to the junction on all four arms.
- As part of the Kodak redevelopment works involving the construction of new houses, a new school, retail facilities and a Health Centre a substantial sum of money was secured through a legal section 106 agreement with the developers of the site in order to mitigate the impact of the development on the public highway.
- 2.4 A specific element of the section 106 developer contribution was allocated to improve the existing Harrow View / Headstone Road / Headstone Drive signalised junction in order to provide an all red pedestrian phase to assist pedestrians crossing the junction and to encourage modal shift through increased walking, cycling and the use of public transport facilities in the area.
- 2.5 Construction of the housing stock is currently progressing on two sites one to the west of Harrow View on the previous Zoom Leisure site and the other to the east on the Kodak site. The funds secured through the section 106 agreement are being released in stages as different phases of the development are taken forward.
- 2.6 Eighteen months ago a sum of £50,000 was released in order to allow the council, in consultation with Transport for London (TfL), who own and operate all signals in London, to develop proposals at the junction to

- incorporate an all red pedestrian phase whilst maximising junction capacity to maintain operational effectiveness.
- 2.7 The funds were utilised to undertake traffic surveys to provide up to date information about queuing, delays, traffic flows and capacity at the junction and also to commission a transport consultant to investigate design options and undertake traffic modelling assessments.
- 2.8 Any changes to the phasing and operation of the signals at the junction will need to satisfy the requirements of TfL because they are the asset owner for traffic signals and they will give any necessary technical approvals for the proposed changes to the signal arrangement and phasing as a part of their network management duty to ensure the expeditious movement of traffic and the strategic importance of this junction on the highway network.
- 2.9 A number of different design options for the junction have been considered in order to meet the council's objectives of introducing an all red pedestrian phase into the junction whilst maintaining or improving capacity for vehicular traffic.
- 2.10 The development of design options involved developing a traffic model, for each option to assess the performance of each option as a part of the TfL Model Auditing Process (MAP). The model is required in order to support the assessment process to consider and verify the impact of different design models for the junction.
- 2.11 A detailed technical report of the options considered can be seen at **Appendix A** for information.

Options Considered

2.12 A number of different design options were considered as part of this process and these options are summarised below:

Option 1 Staggered crossings

- Staggered signalised pedestrian crossings on all approaches;
- Dedicated left turn lane on Headstone Drive;
- Ahead movements also permitted on all right turn lanes; and
- Headstone Gardens approach reduced from 3 lanes to 2.

Option 2A Straight across crossings

- Straight across signalised pedestrian crossings on all approaches;
- Ahead and right permitted from Harrow View (N) with two-lane exit:
- Harrow View (S) reduced to one lane for ahead and left movements, right turn remains restricted; and Headstone Drive and Headstone Gardens approaches remain as existing.

Option 2B Mix Stagger and Straight across Crossings

 As Option 2A with staggered crossings on the Headstone Drive and Headstone Gardens approaches.

Option 3 (Existing Layout with Straight across Crossings)

 Existing junction layout with straight across signalised pedestrian crossings on all approaches; and tightened junction by bringing kerb lines in to reduce amount of lost time between green phases.

Option 4A (All right turns Prohibited)

- Straight across signalised pedestrian crossings on all approaches;
- Right turns restricted from all approaches;
- Single lane approach on Harrow View (S); and
- Two-lane exit on Harrow View (S).

Option 4B Headstone Drive right turn allowed but all other right turn movements are banned.(except cyclists)

As Option 4A but with right turns permitted from Headstone Drive.

Option 5 Straight Across Crossings with Two-Lane Exit

- Straight across signalised pedestrian crossings on all approaches; and.
- Extended ahead and right turn flare on Harrow View (N) with a twolane exit.

Option 6 Unconstrained junction layout

- Three lanes on Harrow View (N) approach;
- Three lanes on Headstone Drive approach;
- Two lanes on Harrow View (S) approach:
- Four lanes on Headstone Gardens approach; and
- Two lane exits on all approaches.

Conclusions and Recommendations

- 2.13 All of the options were modelled and assessed by the transport consultants in consultation with the Council's transportation team. The results of the modelling exercise were shared with ward councillors and the Portfolio Holder at a meeting held earlier this year.
- 2.14 After careful consideration **Option 4B** was selected as the preferred option because it improves safety for pedestrians by providing signalised pedestrian crossings on all arms, whilst maximising capacity and

- mitigating predicted increases in future traffic flow from proposed developments in the area.
- 2.15 The Option 4B proposals allow the right turn from Headstone Drive but all other right turn movements are banned (except cyclists) and this can be seen in more detail on Page 6 of the attached technical report.
- 2.16 These proposals were taken forward in order to satisfy TfL's MAP process and is discussed in more detail below.
- 2.17 **Appendix B** shows details of the proposed layout of the junction.
- 2.18 The detailed assessment for this option indicated that during both peak hours the cycle time would have to be increased to 120 seconds to provide sufficient green time on each of the approaches to provide an all-red phase for pedestrians. The junction was also optimised for the practical reserve capacity (PRC) to optimise the junction's performance.
- 2.19 A comparison of the base and proposed modelling results for the year 2026 indicated that the proposed changes to the junction are predicted to improve performance on Harrow View (N), Headstone Drive and Headstone Gardens approaches. A marginal increase in the Degree of Saturation (DoS) and queues is reported at Harrow View (S) approach but this was not considered to be excessive.
- 2.20 The results show that this option operates at 20% over theoretical capacity in the future year 2026 and allows for right turn movement on the critical east approach whilst prohibiting right turns from the north and west approaches.
- 2.21 In order to give motorists advanced warning of the banned movements at the junction a new advanced warning signing strategy is being developed which will suggest alternative routes to avoid confusion at the junction.
- 2.22 It is anticipated that option 4B will be taken forward to public consultation later this year.

Section 3 – Further Information

3.1 There is no further information.

Section 4 – Financial Implications

4.1 The scheme is funded via a section 106 agreement from the funds associated with the Kodak Development site. A sum £ £831,800 has been secured with the developer Land Securities for the detailed modelling, the implementation of new signal equipment and all associated amendments to the junction as detailed above.

Section 5 - Equalities implications

5.1 The Transport Local Implementation Plan (LIP) sets out the relevant transport policies and objectives of the Council and was subject to an Equalities Impact Assessment which identified that there was no negative impact on any of the protected groups. The transport mitigations in the report accord with the principles of the Council's LIP.

Section 6 – Council Priorities

- 6.1 The funds allocated by TfL and Harrow for transport improvements will contribute to achieving the administration's priorities:
 - Making a difference for the vulnerable
 - Making a difference for communities
 - Making a difference for local businesses
 - Making a difference for families

Section 7 - Statutory Officer Clearance

Name: Jessie Man Date: 11/06/2018	~	on behalf of the Chief Financial Officer	
Ward Councillors notified	:	YES	

Section 8 - Contact Details and Background Papers

Contact:

Barry Philips – Transportation Team Leader Tel: 020 8424 1649, Fax: 020 8424 7662, E-mail: barry.philips@harrow.gov.uk

Background Papers:

Goodwill to All Junction - Proposed design options modelling report Business Case