

**SURREY COUNTY COUNCIL****LOCAL COMMITTEE (SURREY HEATH)****DATE:** THURSDAY 13 July 2017**LEAD OFFICER:** ANDREW MILNE – AREA HIGHWAYS MANAGER (NW)**SUBJECT:** PETITION RESPONSE – 20MPH SPEED LIMIT (WITH TRAFFIC CALMING FEATURES) IN HEATHPARK DRIVE, BIRCH ROAD AND OAKWOOD ROAD, WINDLESHAM**DIVISION:** BAGSHOT, WINDLESHAM AND CHOBHAM**SUMMARY OF ISSUE:**

A petition was received at the Local Committee Public Meeting on 2 March 2017. The petition requested that the Committee consider introducing a 20mph speed limit, with relevant features, along Heathpark Drive, Birch Road and Oakwood Road in Windlesham.

A report was presented in response to the petition recommending no further action at that time. However, the Local Committee agreed that more detailed consideration should be given to options for introducing a 20mph scheme and a further report presented to the Local Committee at its meeting on 13 July 2017.

**RECOMMENDATIONS:****The Local Committee (Surrey Heath) is asked to note that:**

- (i) Relevant traffic survey data indicates a good level of drive compliance with the 30mph speed limit on Heathpark Drive and suggests the existing speed limit is appropriate,
- (ii) Implementation of a lower speed limit would require traffic calming measures to be introduced to meet Surrey County Council policy,
- (iii) Collision data indicates there have been no personal injury collisions in Heathpark Drive, Birch Road or Oakwood Road since 2000 (earliest available data) and the roads have a good compared to many other locations in Surrey Heath,

**The Local Committee (Surrey Heath) is asked to agree that:**

- (iv) The existing 30mph speed limit in Heathpark Drive, Birch Road and Oakwood Road, Windlesham should be retained and no further action taken at this time.
- (v) A further speed survey should be undertaken in Heathpark Drive once the Woodlands Lane bridge has reopened and traffic conditions in the area have returned to normal.

**REASONS FOR RECOMMENDATIONS:**

The closure of Woodlands Lane bridge has directly affected the flow of traffic along Heathpark Drive and data collected recently reflects a temporary situation whilst the bridge remains closed.

Data collected on Heathpark Drive prior to the restriction of Woodlands Lane bridge show that average speeds along the road were appropriate for a 30mph speed limit. However, average speeds are such that lowering the speed limit would require traffic calming features to enforce the lower limit.

Collision data indicates there have been no personal injury collisions in Heathpark Drive, Birch Road or Oakwood Road since 2000 (earliest available data). As a result, it would be very difficult to justify the introduction of costly traffic calming measures when other roads in Surrey Heath have a much poorer safety record.

**1. INTRODUCTION AND BACKGROUND:**

**Petition details**

1.1 The petition received by Surrey County Council states:

“Further to previous discussions, please find enclosed our Petition sheets. This Petition is requesting a 20mph speed limit + additional calming measures (i.e. signage) in Heathpark Drive, Birch Road and Oakwood Road. This has been raised by Mrs Jane Burge and Mrs Jenny Creamer, who have both lived in Heathpark Drive for over 40 years.

These are purely residential roads with a total of 130 houses. Over a four month period each household was visited, 240 signatures obtained, 1 household abstained and two houses were unoccupied – so there is overwhelming support. Residents stated extreme concern about the volume and speed of traffic and expressed very strong and varying aspect, if cars are parked in the road larger vehicles are mounting the pavements to proceed. There are elderly people, schoolchildren, babies in pushchairs, etc in this residential area and this is a very dangerous and wholly unacceptable practice.

Although the situation has been exacerbated by the M3 Smart Motorway project and the temporary loss of the Woodlands Lane Bridge, the problems and concerns have been building up over a long period of time. An independent traffic count was undertaken in September 2016 as shown overleaf where a total of 1844 vehicles were logged. It does not take account of any vehicle movement before 7am and after 7pm and was undertaken before the demolition of the Woodlands Lane bridge (19 November 2016) which has resulted in a marked worsening of the volume of traffic flow.

We respectfully request that our Petition for a 20mph speed limit be considered.”

**Previous consideration of petition**

1.2 A report was presented in response to the petition at the meeting of the Surrey Heath Local Committee held on 2 March 2017. Having considered traffic survey data, the safety record for the roads and the County Council's

policy on setting speed limits the report recommended no further action at that time.

- 1.3 However, the Local Committee agreed that the Area Highways Manager should reconsider the recommendations with the local County Councillor and bring a further report back to the next meeting of the Local Committee.
- 1.4 The Area Highways Manager has since held discussions with the local County Councillor and the County Council's Road Safety Team Manager about the residents' request for a 20mph speed limit and the different types of measures that could potentially be introduced to help reduce vehicle speeds. These options are analysed in more detail within this report.

## Location

- 1.5 Heathpark Drive, Birch Road and Oakwood Road (Windlesham) are a group of residential roads located in the east of the village. The identified roads are shown in green in figure 1 below. Heathpark Drive is a connecting road between Chertsey Road (B386) and Woodlands Lane (C4). Oakwood Road is a cul-de-sac that connects to Heathpark Drive via Birch Road. In addition to Heathpark Drive, Updown Hill and Highams Lane are the only other roads in the village that connect Chertsey Road and Woodlands Lane. (see Figure 1).

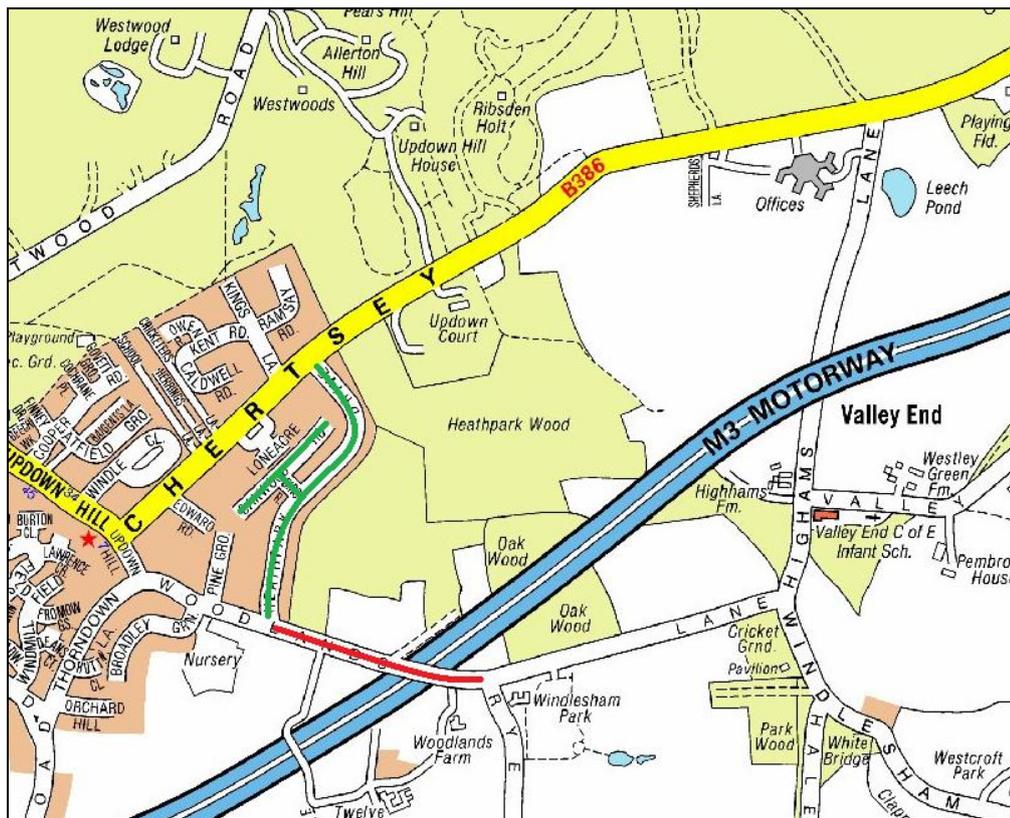


Figure 1: Map of Windlesham

## Woodlands Lane bridge closure and replacement

- 1.6 Between its junctions with Heathpark Drive and Rye Grove, Woodlands Lane runs along a bridge over the M3. A survey undertaken by Highways England

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in 2014 identified that the structure of this bridge had weakened and required a lower weight limit than the posted 23 Tonne weight restriction at the time.

- 1.7 Subsequent discussions between Highways England and Surrey County Council (SCC) resulted in an agreement that a temporary weight limit (3.5 Tonne) and width restriction (6'6") would be placed on the bridge until Highways England could replace it as part of the Managed Motorway scheme for the M3.
- 1.8 The temporary weight and width restrictions were introduced in 2014 and then Woodlands Lane was initially closed in May 2016 with the intention of demolishing the structure soon after. However, further reviews of the demolition process meant that the works had to be delayed. The road was reopened in June 2016 to minimise the impact on the local community. The road was again closed in November 2016 with the demolition of the bridge completed in the same month.
- 1.9 The bridge is due to be replaced and reopened during winter 2017. When the bridge is reopened, all weight and width restrictions will be lifted and all vehicles will be permitted to use Woodlands Lane.
- 1.10 Figure 2 below shows the extent of the existing temporary road closure (in red) in Woodlands Lane and the signed diversion route (in blue).
- 1.11 Whilst Heathpark Road is not part of the signed diversion route some drivers with local knowledge use the road as a diversion.

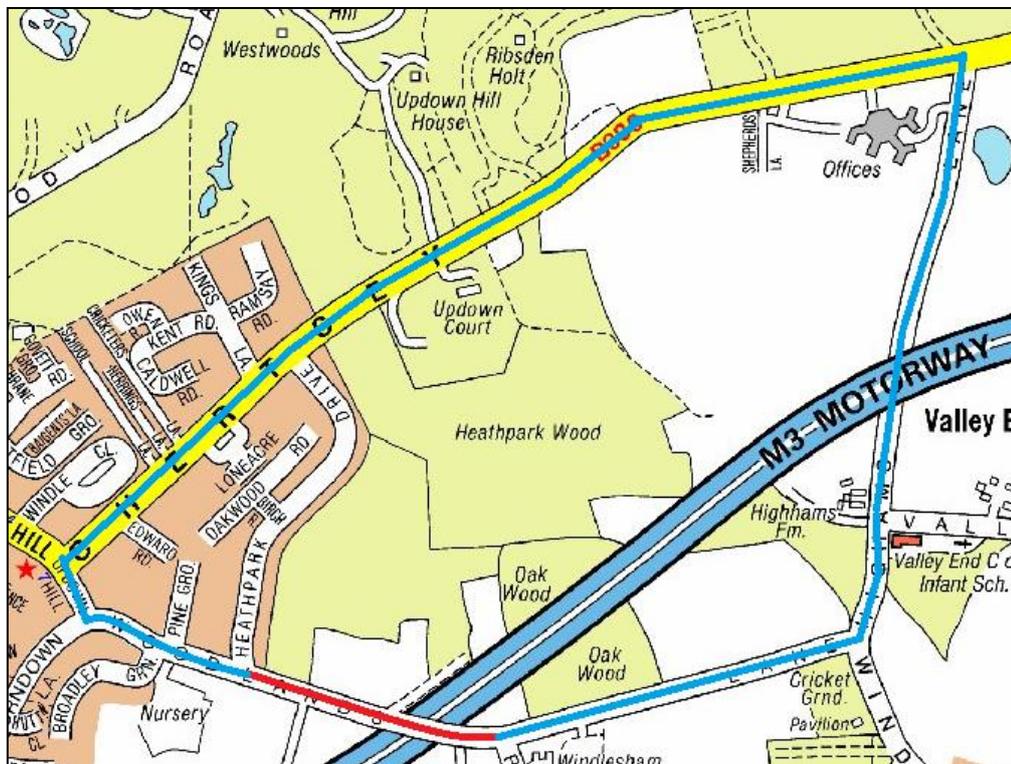


Figure 2: Woodlands Lane closure (red) and diversion route (blue)

**Surrey County Council Setting Local Speed Limits policy**

- 1.12 SCC's Setting Local Speed Limits policy was implemented in July 2014 in line with national guidance issued in 2013. The document details Surrey County Council's policy for considering changes in speed limits.
- 1.13 When considering a change in speed limits, SCC review the personal injury collision data for the road over the previous three years as well as the average vehicle speeds recorded on the road. Using that data, SCC will assess the suitability of the proposal in consultation with Surrey Police.

### **20mph Speed Limits**

- 1.14 SCC's Setting Local Speed Limits policy includes specific guidance relating to the introduction of 20mph speed limits. There are two different types of 20mph schemes, a 20mph speed limit and a 20mph zone. A 20mph speed limit is a scheme that relies on signing alone. A 20mph zone is a 20mph area where a combination of traffic calming and signage is used to enforce the speed limit.
- 1.15 SCC policy reflects national guidance (Department for Transport Circular 01/2013) in encouraging 20mph speed limits in "urban areas and built-up village streets that are primarily residential" to ensure greater safety for pedestrians and cyclists. However, it also makes it clear that 20mph speed limits should be self-enforcing and not reliant on Police enforcement.
- 1.16 Circular 01/2013 emphasises that research into signed-only 20 mph speed limits shows that they generally lead to only small reductions in traffic speeds. Signed-only 20 mph speed limits are therefore most appropriate for areas where vehicle speeds are already low. As such, the county council's policy is to only introduce signed-only 20mph speed limits where average speeds are 24mph or below.
- 1.17 Where the existing mean speeds are above 24 mph then a 20 mph scheme with traffic calming measures will be required. In accordance with the county's policy the Area Highways Team need to assess what type of traffic calming measures (e.g. narrowing the road, chicanes, priority give-way arrangements, central islands, gateways, or vertical traffic calming such as raised junctions, speed tables or speed cushions) will be appropriate and effective in achieving the necessary reduction in speed.
- 1.18 Traffic calming features will typically need to be located closer together in a 20mph speed limit than than would in 30mph speed limit in order to reduce speeds to below the required average speed threshold.
- 1.19 Careful consideration of the type of measures used is also required to ensure a sufficient reduction in speed is achieved. For example, the use of horizontal traffic calming features in isolation may not result in an acceptable reduction in speed levels unless they result in a significant angle of deflection for traffic. Similarly, the use of speed cushions extensively in a 20mph zone may not result in an acceptable reduction in speeds.

### **Assessment of schemes to reduce speed limits**

- 1.20 The County Council's policy on setting speed limits requires that surveys are undertaken following implementation of a scheme to check whether it has

been successful in reducing vehicle speeds towards compliance with the new lower speed limit.

- 1.21 If the scheme has not been successful in reducing speeds to a level below the threshold set out in the county's speed limit policy, then a report will be presented to the Local Committee. The report will consider further engineering measures that could be introduced to encourage greater compliance with the new speed limit or alternatively whether the new lower limit should be removed and the previous speed limit reinstated.

## **2. ANALYSIS:**

### **Traffic Survey Data**

- 2.1 SCC undertook two sets of traffic surveys on Heathpark Drive in 2016 to review the impact the closure of Woodlands Lane bridge had on Heathpark Drive. The first survey was undertaken in May when Woodlands Lane was originally closed but was ultimately reopened soon after. The second survey was undertaken in July 2016 after the bridge had been reopened, albeit with a 3.5T weight limit and 6'6" width restriction in place. The results of the two surveys have been provided below.

<b>Woodlands Lane restriction</b>	<b>Start Date</b>	<b>End Date</b>	<b>Total Vehicles</b>	<b>5 Day Ave.</b>	<b>7 Day Ave.</b>	<b>Average Mean Speed (mph)</b>
Full closure	Thu 12/05/16	Wed 18/05/16	13,578	2,343	1,940	27.7
3.5T weight limit and 6'6" width restriction	Mon 11/07/16	Sun 17/07/16	11,793	2,111	1,684	27.3
<b>Difference</b>	-	-	<b>1,785</b>	<b>232</b>	<b>256</b>	<b>0.4</b>

**Table 1: Traffic survey results**

- 2.2 The data in table 1 suggests that the closure of Woodlands Lane bridge increases the number of vehicles using Heathpark Drive by approximately 200 to 300 vehicles a day. However, the closure of Woodlands Lane is a temporary measure whilst the bridge is replaced. Once the bridge has been replaced, all restrictions will be removed and traffic flows in Windlesham and the surrounding network will adjust to the new arrangement.
- 2.3 Any assessment to consider a change to the speed limit or the introduction of road safety measures should be undertaken when normal traffic conditions exist. However, the above data was recorded when there were restrictions in place that have temporarily impacted on traffic flows and speeds in Heathpark Drive.
- 2.4 SCC does not have any traffic survey data for the period prior to any restrictions being imposed and it is not currently possible to record data under normal traffic conditions since the Woodlands Lane bridge is closed until winter 2017

- 2.5 However, Surrey Police undertook a survey on both Heathpark Drive and Woodlands Lane in 2013 prior to any restrictions being imposed on the bridge. This data is therefore the most valid information currently available to give an indication of vehicles speeds and volumes in Heathpark Drive under normal traffic conditions. As such, this data has been used in assessing the residents request for the introduction of a 20mph speed limit.
- 2.6 The data recorded by Surrey Police indicated a weekly total of 6,451 vehicles on Heathpark Drive and 27,208 vehicles on Woodlands Lane. The data also showed average speeds of 30mph.
- 2.7 The closure of Woodlands Lane bridge is expected to last until Winter 2017 when Highways England will reopen the bridge with no restrictions. Once the road has been reopened, traffic currently using Heathpark Drive as a diversion is likely to return to using Woodlands Lane.



Figure 3: Photograph of Heathpark Drive (1)

### Personal injury collisions

- 2.8 Personal injury collision data shows that there have been no personal injury collisions in Heathpark Drive, Birch Road and Oakwood Road between January 2000 (earliest available data) and April 2017 (latest available data).

## 3. OPTIONS:

### Recommended Option:

- 3.1 Speed survey data indicates a good level of driver compliance with the existing 30mph speed limit in Heathpark Drive which suggests the existing  
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speed limit is appropriate. The road also has a very good safety record with no personal injury collisions having occurred in Heathpark Drive (or Birch Road or Oakwood Road) since 2011.

- 3.2 Furthermore, it would not be appropriate to introduce a 20mph speed limit with signing alone based on the existing average speed of 30mph. As such, it is recommended that the existing 30mph speed limit is retained.
- 3.3 However, it is also recommended that a further traffic survey is undertaken following the reopening of Woodlands Lane bridge to check vehicle speeds and volumes have not changed significantly from those recorded by the survey undertaken by Surrey Police in 2013.

**Other options considered:**

- 3.4 A number of alternative options have also been considered. These are detailed below together with the reasons why they are not considered appropriate and have not been recommended:

**20mph speed limit with signing only**

- 3.5 The existing average vehicle speed is significantly above the threshold at which a 20mph with signing only can be introduced under SCC's speed limit policy.
- 3.6 The introduction of a 20mph speed limit with signing only would therefore be contrary to SCC policy. Furthermore, evidence suggests it is unlikely to result in a significant reduction in vehicle speeds.
- 3.7 A scheme of this type is likely to cost in the region of £10,000.

**20mph speed limit with vehicle activated signs (VAS)/road markings**

- 3.8 The introduction of VAS can help reduce vehicle speeds. However, having considered this option in consultation with SCC's Road Safety Team and Surrey Police, it is considered that the introduction of VAS alone would not reduce speeds to below 24mph (given the existing average speed and the reduction in speed typically achieved at other locations where VAS have been installed in Surrey).
- 3.9 Measures such as road markings or coloured road surfacing which are likely to have a relatively limited impact on reducing vehicle speeds in isolation could be used as part of a package of measures in conjunction with VAS. However, the combined impact of such a package of measures is still unlikely to achieve the required reduction in average speeds from 30mph to 24mph or less.
- 3.10 A scheme of this type is likely to cost in the region of £15,000 - £20,000.

**20mph zone with vertical traffic calming measures**

- 3.11 It would be possible to introduce a 20mph speed limit together with vertical traffic calming measures (such as raised junctions, speed tables or speed cushions) to reduce average vehicles speeds to below the 24mph threshold.

- 3.12 The traffic calming measures would need to be spaced much closer together than they would typically be when introduced in a 30mph speed limit. As such, a significant number of features would be required over the length of Heathpark Drive. The overall cost of a scheme of this nature is therefore likely to exceed £100,000 (when including legal, consultation and design costs) depending on the type of traffic calming measures introduced. (Additional traffic surveys would also be necessary on Birch Road and Oakwood Road to determine whether features would be necessary on these roads as well.)
- 3.13 A scheme of this nature would be difficult to justify as a priority when Heathpark Drive has a much better safety record and level of driver compliance with the existing speed limit compared to many other roads in Surrey Heath.

#### **20mph zone with horizontal traffic calming measures**

- 3.14 Similar to a scheme with vertical traffic calming measures, horizontal traffic calming measures (such as road narrowings, chicanes or pinch points) would have to be carefully designed to achieve the required reduction in speed. Measures would need to be spaced appropriately and designed to narrow the road sufficiently or create adequate deflection of traffic.
- 3.15 Given the nature of the location and traffic flows, lower cost measures are unlikely to achieve the required reduction in speed. For example, using staggered parking areas to create a chicane effect can be effective in reducing speeds where you have high levels of on-street parking throughout the day and relatively large vehicle flows. However, the low levels of on-street parking combined with relatively low vehicle flows over much of the day mean such a proposal would have limited impact in reducing vehicle speeds in Heathpark Drive. Similarly, relatively low vehicle flows over much of the day and good forward visibility would reduce the effectiveness of priority give ways in reducing speeds.
- 3.16 A scheme using horizontal traffic calming measures to achieve the required reduction in speed is therefore likely to cost a similar amount to a vertical traffic calming scheme. It would therefore be similarly difficult to justify in the circumstances.

#### **20mph zone with horizontal and vertical traffic calming measures**

- 3.17 Based on the nature of the location and traffic flows, a scheme using a combination of horizontal and vertical traffic calming measures is likely to be more effective in reducing vehicle speeds than a scheme using horizontal traffic calming measures alone. However, costs would still be significant and comparable to introducing a scheme using just vertical traffic calming measures.

### **4. CONSULTATIONS:**

- 4.1 Surrey Police have been consulted and provided the below comment:

- Surrey Police will only support the proposal should it meet the current policy. Based on current data, support for the 20mph speed limit would be reliant on average speeds being reduced to below 24mph through the introduction of traffic calming following the replacement of Woodlands Lane bridge.

**5. FINANCIAL AND VALUE FOR MONEY IMPLICATIONS:**

- 5.1 There are no financial implications for Local Committee budgets resulting from the recommendations of this report.

**6. EQUALITIES AND DIVERSITY IMPLICATIONS:**

- 6.1 The Highway Service is mindful of its needs within this area and to treat all users of the public highway with equality and understanding.

**7. LOCALISM:**

- 7.1 Through the views and needs expressed by local communities, and accommodating where possible the involvement of local communities in looking after the public highway, localism is routinely considered as part of the consultation and bidding processes for highway-related works.

- 7.2 This report responds to concerns raised by members of the local community in Windlesham.

**8. OTHER IMPLICATIONS:**

Area assessed:	Direct Implications:
Crime and Disorder	No significant implications arising from this report
Sustainability (including Climate Change and Carbon Emissions)	No significant implications arising from this report.
Corporate Parenting/Looked After Children	No significant implications arising from this report.
Safeguarding responsibilities for vulnerable children and adults	No significant implications arising from this report.
Public Health	No significant implications arising from this report.

**9. CONCLUSION AND RECOMMENDATIONS:**

- 9.1 Residents of Heathpark Drive, Birch Road and Oakwood Road have requested the introduction of a 20mph speed limit.
- 9.2 Woodlands Lane is currently closed between its junctions with Heathpark Drive and Rye Close to allow Highways England to replace the bridge over the M3 (with the road due to reopen in winter 2017). This has resulted in an increased volume of traffic using Heathpark Road. As such, it is not currently possible to undertake a traffic survey to measure vehicle speeds and volumes under normal conditions.

- 9.3 However, Surrey Police carried out a survey on Woodlands Lane in 2013 prior to any restrictions being imposed along Woodhams Lane. This data has therefore been used in the assessment of the residents request since it is the most valid data currently available to give an indication of vehicles speeds and volumes in Heathpark Drive under normal traffic conditions.
- 9.4 The Police's survey recorded an average vehicle speed of 30mph in Heathpark Drive which indicates a relatively good level of compliance with the 30mph speed limit and suggests the existing speed limit is appropriate.
- 9.5 The 30mph average speed is significantly above the 24mph threshold specified in SCC's speed limit policy for introducing a 20mph speed limit by signing alone. As such, if a 20mph speed limit were to introduced additional measures would also need to be implemented to reduce the existing vehicle speeds.
- 9.6 Surrey Police has advised it would only support the proposal should it meet the conditions in the current policy. When reviewing the possible options, Surrey Police supported the introduction of traffic calming, believing all other options to not reduce average speeds to below 24mph.
- 9.7 The different types of measures that could be introduced to reduce vehicle speeds have been considered in this report. However, it is considered that the very significant reduction in average speed from 30mph to 24mph or below could only be realistically achieved by implementing a comprehensive traffic calming scheme consisting of either vertical traffic calming measures or a combination of vertical and horizontal traffic calming measures.
- 9.8 It would be difficult to justify the cost of introducing such a scheme in Heathpark Drive when the location has a much better safety record than many other residential roads in Surrey Heath. Such a proposal would also conflict with the aim of achieving the greatest possible reduction in personal injury collisions with the limited funding that is available.
- 9.9 It is therefore recommended that the existing 30mph speed limit is retained and no further action is taken at the current time. However, once the Woodlands Lane bridge has been reopened it is recommended that a further traffic survey is undertaken to check vehicle speeds and volumes have not changed significantly from those recorded by the survey undertaken by Surrey Police in 2013.

#### **10. WHAT HAPPENS NEXT:**

- 10.1 A further speed survey will be undertaken in Heathpark Drive once the motorway bridge has been replaced in Woodlands Lane and the road has reopened.

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**Contact Officer:**

Peter Orchard (Assistant Engineer – 0300 200 1003)

**Consulted:**

Surrey Police

[www.surreycc.gov.uk/surreyheath](http://www.surreycc.gov.uk/surreyheath)

**Annexes:**

- Annex 1 - Surrey CC Setting Local Speed Limits Policy

**Sources/background papers:**

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