

**GUILDFORD BOROUGH COUNCIL AND
SURREY COUNTY COUNCIL**



GUILDFORD JOINT COMMITTEE

DATE: 21 October 2021

**LEAD OFFICER: DUNCAN KNOX, ROAD SAFETY & SUSTAINABLE SCHOOL
TRAVEL TEAM MANAGER**

**SUBJECT: PIRBRIGHT BENDS, SPEED LIMIT CHANGES AND AVERAGE
SPEED CAMERAS:
B31012 Gapemouth Road / Gole Road
D3455 Mytchett Place Road
B3405 Grange Road**

**DIVISION: WORPLESDON (FRIMLEY GREEN AND MYTCHETT, SURREY
HEATH)**

SUMMARY OF ISSUE:

Gole Road, Gapemouth Road, Mytchett Place Road and Grange Road (collectively referred to as the Pirbright bends) have suffered a history of road collisions including several resulting in serious injury and some resulting in death. It is proposed that the existing speed limits on these roads (consisting of either 30mph, 40mph, and national speed limit) are consolidated to a consistent 40mph to enable an average speed camera system to be introduced. This will help to reduce traffic speeds which in turn will reduce the risk and severity of collisions.

RECOMMENDATIONS:

The Joint Committee (Guildford) is asked to:

- (i) Agree that, based upon the evidence, the speed limit be changed to 40mph in the section of the B3012 Gapemouth Road and D3455 Mytchett Place Road that are currently subject to a 30mph speed limit.
- (ii) Agree that, based upon the evidence, the national speed limit in the B3405 Grange Road and Stanley Hill be reduced to 40mph.
- (iii) Agree that, based upon the evidence, the start of the 30mph speed limit in Mytchett Place Road is moved from its current location (in Guildford) to a new location (in Surrey Heath) to include the bend at the Keogh Barracks access.
- (iv) Authorise delegation of authority to the Area Highway Manager in consultation with the Chairman, Vice-Chairman of the Joint Committee, and the local divisional member to resolve any objections received in connection with the proposals described above.
- (v) Note that an average speed camera system will be installed to enforce the 40mph speed limit.
- (vi) Note that bend warning sign improvements will be installed to complement the average speed camera system.

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REASONS FOR RECOMMENDATIONS:

A consistent 40mph speed limit will allow the introduction of average speed cameras which will help to reduce traffic speeds and therefore reduce risk and severity of collisions on the Pirbright Bends, where there has been a history of collisions including death and serious injury.

1. INTRODUCTION AND BACKGROUND:

- 1.1 Gole Road, Gapemouth Road, Mytchett Place Road and Grange Road (collectively referred to as the Pirbright bends) form a series of generally east to west routes between Frimley Green and Mytchett in the west and Pirbright and Brookwood in the east. The area is mainly within Guildford Borough including all the roads affected by the speed limit proposals detailed below, except for the proposal for the 30mph extension in Mytchett Place Road, which is in Surrey Heath – see Annexe 1. The roads are mainly unlit and characterised by numerous bends bounded entirely by trees and ditches.
- 1.2 The county council's Road Safety & Sustainable School Travel Team host a Guildford Road Safety Working Group meeting every six months. Police and Local Area Highways colleagues attend the meeting. Analysis of collision hotspots and routes are presented to the group to develop highway improvements or enforcement programmes with the police that will target the sites that need the most attention to reduce patterns of collisions in the future. There is a central budget of £200,000 available for investment at the very worst collision hotspots where the greatest opportunity exists to reduce the risk of collisions.
- 1.3 Every time there is a collision that results in personal injury the police record the information in a national standard format. This information is shared with the county council and plotted on GIS computer mapping to aid analysis. Inspection of collision mapping has highlighted that the Gole Road, Gapemouth Road, Mytchett Place Road and Grange Road (collectively referred to as the Pirbright bends) have suffered a history of collisions including several that have resulted in serious injury, and some that have resulted in death. Summary information on road traffic collisions is available on www.crashmap.co.uk.
- 1.4 The Pirbright bends' collision history, with a dominant pattern of vehicles losing control on the bends, has been a source of concern for several decades. Consequential engineering solutions, chiefly focussing on signing improvements to highlight the road alignments and speed limit changes to moderate driver behaviour, have not achieved significant reductions in the number of collisions. The most recent scheme in 2013 introduced a 30mph speed limit to the central sections of Gapemouth Road and Mytchett Place Road where there is the highest concentration of problematic bends, but this has failed to achieve the reduction in collisions hoped for. Average speed camera enforcement is proposed to treat this persistent collision problem.

- 1.5 Average speed cameras work by reading vehicle number plates at the start and end point of a stretch of road and then calculating the average speed from the time taken to travel the distance between the cameras. Because of the need to place cameras at entry and exit points this scheme will require numerous cameras to be installed throughout the area in question to minimise the risk of road users choosing a route that avoids either entry or exit cameras. Within Great Britain national policy is to provide visible enforcement to act as a deterrent. Average speed cameras are therefore always painted bright yellow, are positioned to be visible, and the enforcement zones are always well signed with “Average speed check” warning signing.
- 1.6 Analysis of average speed camera schemes already installed in Surrey shows an average collision reduction of 47 percent. Average speed cameras are more effective than spot speed cameras because they encourage greater compliance with the speed limit over a longer stretch of road, in both directions, rather than just in the vicinity of a spot speed camera. Anecdotally they are reported as being preferred by motorists too, as they are considered fairer. This is because there is less likelihood of being issued with a penalty due to a momentary lapse, and it is not possible to slow down and then speed back up again to avoid detection as can be the case with a spot speed camera.
- 1.7 Cameras will be located at the entry and exit points to the Pirbright bends and at several locations within the bends to ensure that road users cannot bypass the enforcement zone and to encourage compliance – see Annex 2.
- 1.8 Opportunities to improve the bend warnings signs, by means of new chevron signs and hazard marker posts, have also been identified. Such measures will complement the average speed cameras and their associated signing to provide a comprehensive package of measures to address the collision problem.
- 1.9 The Pirbright Bends are currently subject to a variety of 30mph, 40mph, and 60mph speed limits. The aim of the average speed camera proposals is to moderate driver behaviour throughout the area of concern to minimise the risk and severity of collisions. To implement an effective and unambiguous average speed camera scheme therefore requires a consistent ‘blanket’ speed limit for all of the roads. This will require raising the speed limit on parts of Gapemouth Road and Mytchett Place Road to 40mph and reducing the national speed limit in Grange Road to 40mph. Setting this blanket speed limit at 40mph is appropriate given the current speed data as detailed below.
- 1.10 This speed limit rationalisation also presents the opportunity to address an existing anomaly, where the 90-degree bend in Mytchett Place Road at its junction with the Keogh Barracks access road (the location of several personal injury collisions) is within a 40mph speed limit, with the 30mph speed limit for Mytchett not starting until a point further to the northeast. This arrangement could encourage drivers to negotiate the severe bend at inappropriate speeds. It would seem prudent therefore to extend the 30mph speed limit such that the 90-degree bend lies within it.
- 1.11 Speed surveys have been commissioned to investigate the level of speeding on these roads. The data showing the nature and extent of the collisions on these roads, along with the data on the level of traffic speeds is summarised in section 2 below.

2. ANALYSIS:

- 2.1 The aim of Surrey County Council's policy "Setting Local Speed Limits" is to set speed limits that are successful in managing vehicle speeds and are appropriate to the main use of the road. Reducing speeds successfully is likely to reduce the likelihood and severity of collisions. The policy sets out a process whereby the existing speeds and collisions are analysed to inform the decision on changing the speed limit.
- 2.2 Analysis of collision data recorded by the police has highlighted that there has been a history of 52 collisions in the five-year period to the end of May 2021 – see Annex 3. These included 1 collision resulting in death, 13 collisions resulting in serious injury and 38 collisions resulting in slight injury. 42 (81 percent) of the collisions involved road users failing to safely negotiate bends in the road. The presence of trees and ditches adjacent to the carriageway edges increase the risk and severity of injuries to the occupants of errant vehicles.
- 2.3 Summary data on personal injury collisions recorded by the police is available to view on www.crashmap.co.uk. Although not all the collisions recorded will have involved excess speeds, the pattern, nature, and severity of the collisions recorded suggests that excess speed is likely to be an important factor in the number and severity of collisions taking place on these roads. Excess speed will make the risk and consequences of collisions worse irrespective of other casual factors.
- 2.4 One-week speed surveys have been undertaken on one or more locations on each of the three roads. The location and results of the speed surveys are shown within Annex 4 and within Table 1 below.
- 2.5 Surrey County Council's policy "Setting Local Speed Limits" sets out a process to predict the likely vehicle speeds that will result in an increase in the speed limit from 30mph to 40mph (Gapemouth Road and Mytchett Place Road) and a reduction of the speed limit from national speed limit to 40mph (Grange Road). The process indicates that the predicted speeds will require supporting engineering measures in Grange Road 40mph speed limit viable (Location 9 in Table 1 below). In this case these measures will consist of the average speed camera enforcement, together with signing improvements and carriageway markings to highlight the speed limit, the carriageway alignment, and the presence of the safety cameras.

Table 1: Summary of Speed Surveys with reference to Annex 4

Location	Survey site	Existing speed limit / Proposed speed limit	Direction	Mean average speed (mph)	Proposed limit allowed?
Gapemouth Road	1	40 / 40	East	41.8	Yes
			West	41.3	Yes
Gapemouth Road	2	40 / 40	East	46.0	Yes
			West	43.1	Yes
Mytchett Place Road	3	40 / 40	East	43.3	Yes
			West	41.1	Yes
Gapemouth Road	4	30 / 40	Northeast	32.6	Yes
			Southwest	36.5	Yes
Gapemouth Road	5	30 / 40	East	35.1	Yes
			South	35.8	Yes
Mytchett Place Road	6	30 / 40	Northeast	39.1	Yes
			southwest	37.9	Yes
Grange Road	7	60 / 40	East	43.6	Yes
			West	43.5	Yes
Grange Road	8	60 / 40	East	41.8	Yes
			West	42.6	Yes
Grange Road	9	60 / 40	East	49.9	Supporting measures required
			South	51.5	Supporting measures required
Mytchett Place Road	10	40 / 30	North	33.3	Yes
			South	34.4	Yes

3. OPTIONS:

- 3.1 **OPTION 1:** The recommended option is to provide a blanket 40mph speed limit throughout the Pirbright Bends. This will facilitate the installation of average speed camera enforcement, which will reduce the risk and severity of collisions. Additional bend warning signs will also assist in highlighting the carriageway alignment. Furthermore, extending the 30mph speed limit in Mytchett Place Road will encourage safer speeds at the Keogh Barracks bend.
- 3.2 **OPTION 2:** Retain the existing speed limits of 30mph, 40mph, and 60mph. This not recommended as it will prevent the installation of average speed cameras. These roads have suffered a history of collisions which all previous engineering interventions have failed to address adequately. Average speed camera technology presents the opportunity to provide a permanent solution to the collision problems at this location.

4. CONSULTATIONS:

- 4.1 Consultation has been carried out with Surrey Police, who support the proposed speed limit rationalisation and average speed cameras to reduce the risk and severity of collisions on these routes.

5. FINANCIAL AND VALUE FOR MONEY IMPLICATIONS:

- 5.1 It is expected that the costs of changing the speed limit on each road will be approximately £10,000. This includes statutory legal advertisement costs together with the costs of design and implementation of signing. It is expected that the cost of the average speed camera scheme will be in the region of £300,000.
- 5.2 The speed limit and average speed camera proposals will be funded via the police using money specifically intended for safety cameras. The ongoing operating costs of safety camera enforcement is now fully self-funding at no cost to the police or county council. This is because all costs are recovered from part of the fee charged to offenders for attending diversionary courses (such as speed awareness courses) instead of paying the usual £100 fine and 3 penalty points. Part of this money is also reinvested in improving road safety through the Drive SMART Partnership.
- 5.3 The bend warning sign enhancements will be developer funded from the sum of £100,000 available via the Deepcut Development Project.
- 5.4 The Department for Transport publish the value of the prevention of collisions for use in cost benefit analysis annually:

Collision severity	Cost per collision £ (2019)
Fatal	2,260,633
Serious	261,498
Slight	26,840
Average for all severities	105,156
Damage only	2,425

- 5.5 If the proposals successfully contribute to successful reductions in vehicle speeds which then result in a reduction in collisions, this is likely to represent very good value for money, based on the fact that the cost of the proposals are small in comparison to the value of preventing collisions, especially collisions resulting in fatal and serious injuries.

6. EQUALITIES AND DIVERSITY IMPLICATIONS:

- 6.1 The speed limit policy was subject to equalities and diversity impact assessment. Moderated driver behaviour can assist those with mobility impairments to cross the road.

7. LOCALISM:

- 7.1 The speed of traffic and collisions are frequently mentioned concerns of Surrey residents. Moderated speeds and driver behaviour can support more walking and cycling, reduce noise and air pollution, and can make places more pleasant to live.

8. OTHER IMPLICATIONS:

Area assessed:	Direct Implications:
Crime and Disorder	Set out below.
Sustainability (including Climate Change and Carbon Emissions)	Set out below.
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	Set out below.

8.1 Crime and Disorder implications

Appropriate speed limits can reduce the likelihood of speeding offences and antisocial driving.

8.2 Sustainability implications

Lower vehicle speeds will reduce fossil fuel consumption and air pollution.

8.3 Public Health implications

Reducing vehicle speeds will reduce the risk and severity of road traffic casualties. It will also reduce exhaust emissions and therefore contribute to improved air quality.

9. CONCLUSION AND RECOMMENDATIONS:

- 9.1 Inspection of collision mapping has highlighted that the Pirbright Bends as described within this report have suffered a serious history of collisions. The number, nature and severity of these collisions have led highways and police road safety specialists to conclude that the rationalisation of the speed limits to 40mph would facilitate the introduction of average speed cameras and would therefore reduce the risk and severity of collisions on these roads. Investigation has shown that the existing speeds generally comply with the county council's speed limit policy for a 40 mph speed limit.
- 9.2 It is recommended that Option 1 (to provide a blanket 40mph speed limit set out in paragraph 3.1) is implemented. This would allow the provision of average speed camera enforcement and hence reduce the risk of and severity of collisions. The proposals have the support of Surrey Police.

10. WHAT HAPPENS NEXT:

- 10.1 Design work will be completed, and the legal speed limit orders for Gapemouth Road, Mytchett Place Road, and Gole Road will be advertised in the local press. Subject to any objections being considered by the Chair, Vice Chair and Divisional Member, the new speed limits will be implemented during the current financial year.
 - 10.2 The bend warning sign improvements will be implemented during the current financial year.
 - 10.3 The average speed camera proposals will be put out for competitive tender and the winning bid will be implemented during the current financial year.
 - 10.4 After the new speed limits have been implemented, the speed surveys will be repeated to evaluate the success of the schemes. Further measures will be considered to encourage greater compliance with the speed limit if necessary.
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Consulted:

Surrey Police

Annexes:

Annex 1 – Location plan showing the roads in question and the Guildford / Surrey Heath District boundary

Annex 2 - Speed Limit and Average Speed Camera Proposals

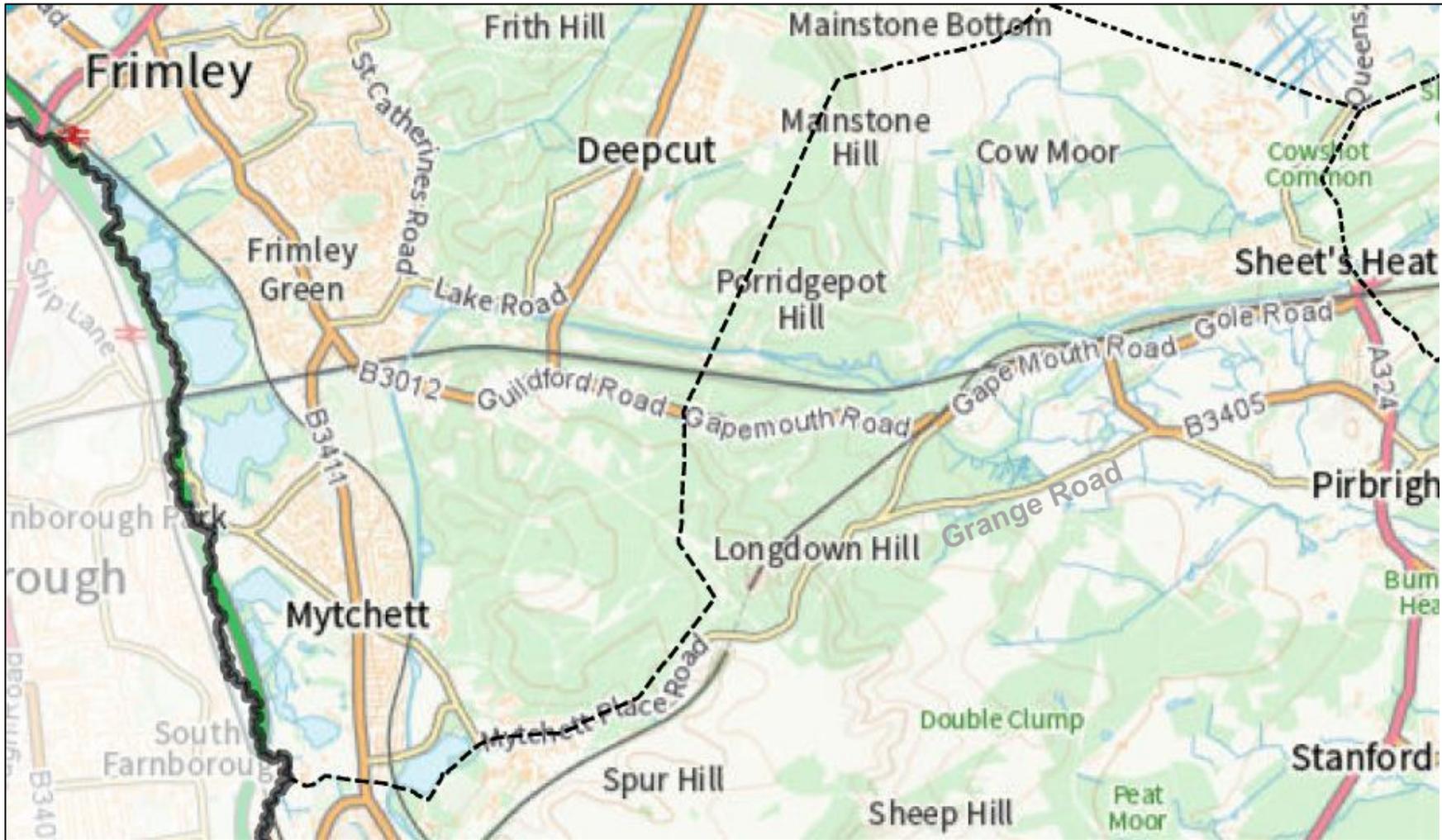
Annex 3 – Personal Injury Collisions

Annex 4 – Summary of Speed Survey Data

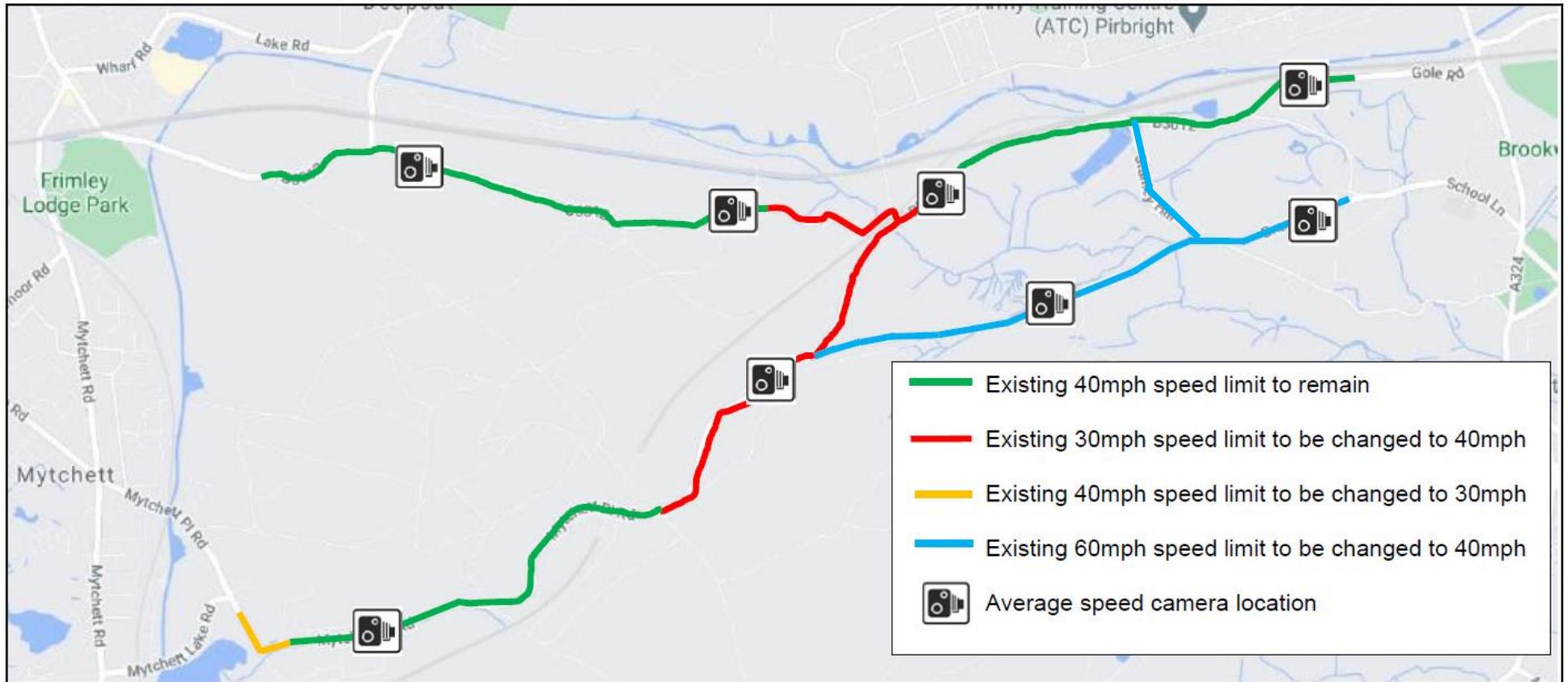
Sources/background papers:

- Surrey County Council's Policy Setting Local Speed Limits (July 2014)
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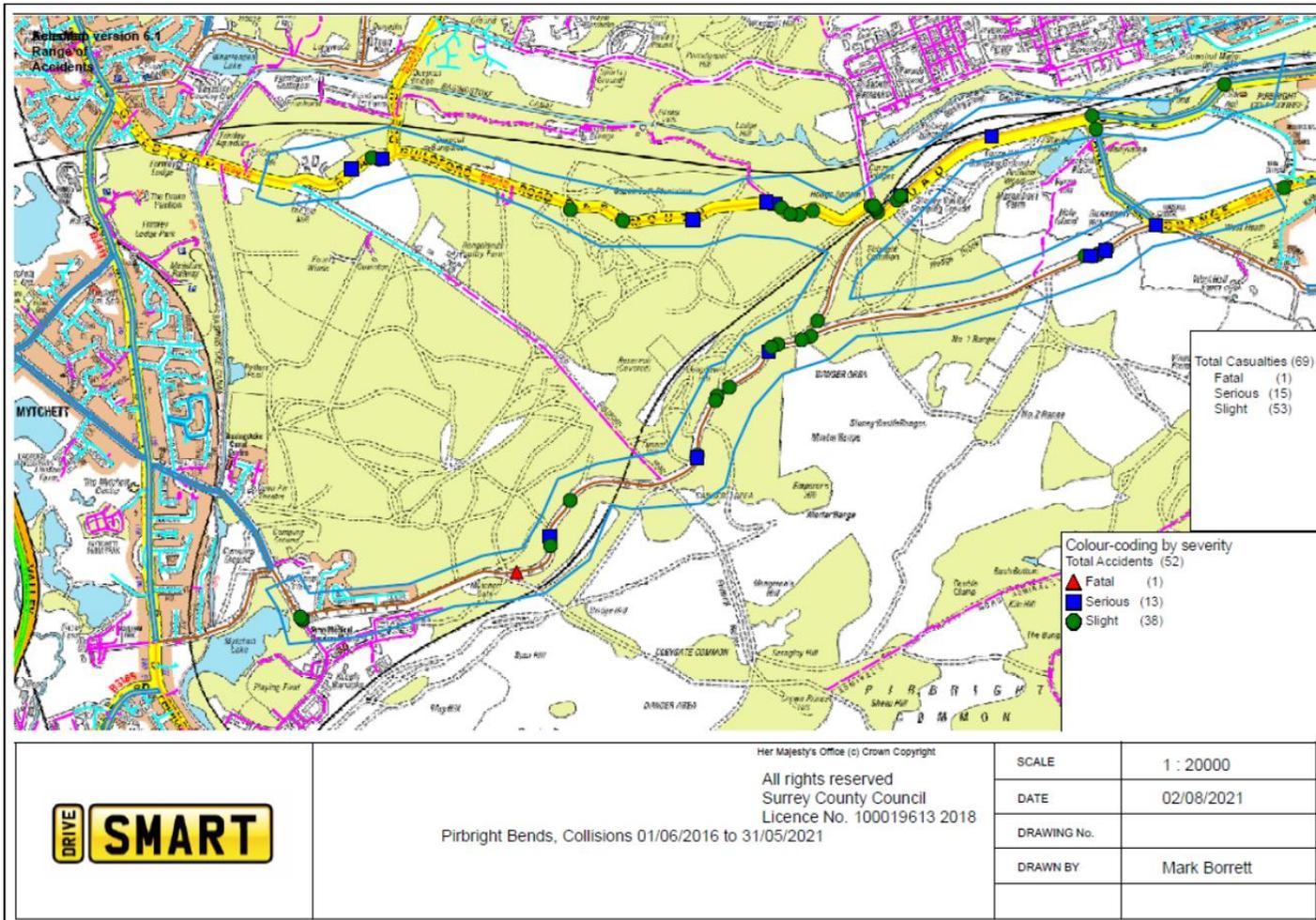
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Annex 4 – Summary of Speed Survey Data

