

**A25 (Dryhill Lane to the Surrey Border)
Route Study**



Client: Kent Highway Services, West Kent Division

A25 (Dryhill Lane to Surrey Border) Route Study



April 2008

Project Number B0820600
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A25 (Dryhill Lane to the Surrey Border) Route Study

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Document status: -

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1. Executive Summary

1.1 General Analysis

There have been 37 crashes on the A25 between Dryhill Lane and the Surrey border in the last 3 years; this is compared to the previous 3 years where there were 46 crashes.

Generally the severity ratio for the route is below the national average for both built up and non - built up A roads. However over the past 2 years there has been a gradual decrease with a sharp increase over the last year.

Surface

The last 3 years identify a lower level of crashes on the A25 occurring on wet road surfaces at 24%, this level is lower than the National average.

Time of Day

The analysis highlights a high proportion of crashes occurring during the AM and PM peak times. Tuesday experiences the highest number of crashes with 27%.

Speed Limit

The majority crashes occur in the built-up areas within the 30mph speed limits.

Manoeuvre

Aside from “going ahead other” the dominant manoeuvres involved in crashes are those related to vehicles turning right/waiting to go ahead, highlighting the dangers of vehicles turning across fast moving on coming traffic.

Junction Detail

The highest proportion of crashes relates to those at T or staggered junctions. This may be related to both maintenance issues and/or lack of suitable signing.

Age of Driver / type of vehicle

The highest category of vehicle involvement is cars at 81% followed by powered two wheelers at 9%. This last figure is slightly higher than the county average which stands at 8%.

Casualties

There is a fairly even spread of casualties by type and age grouping. Pedestrians account for 15% of all casualties which is a fairly high figure compared to the national average of 8% (RCGB 2006) indicating the route is heavily used by this casualty class. The 30 to 59 year old age group experiences the highest number of casualties with 34%.

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1.2 Speed limit review

The existing speed limits were generally found to be suitable and compliant with the DfT Circular 01/2006.

Recommendation in brief is:

The 30mph speed limit gateways for Sundridge, Brasted and Westerham should be enhanced significantly to increase driver awareness.

1.3 Site Specific Analysis and Assessment

Carriageway markings

The road markings from Dryhill lane to the Surrey border generally require installation and or reinstatement in site specific locations. In particular the double yellow lines on either side of New Road Sundridge should be extended by +/-18 metres to improve the view for vehicles exiting New Road at peak times. Install 'Slow' road markings on the eastern and western approaches to the shop and post office in Sundridge as well as the western approach to the junction with Hosey Hill and the eastern approach to Vicarage Hill in Westerham. The 'give way' road markings on Farley Lane should be aligned and reinstated with the existing carriageway edge line.

Junctions

A significant number of crashes have occurred at T or staggered junctions and many along the route were found to be insufficiently lined and signed. Also the speed at which vehicles are travelling on the majority of the route makes it harder for vehicles exiting T junctions onto the main road. It is desirable that all junctions should be similarly signed and enhanced in order to establish consistent warning at each junction.

Speed Limit Gateways

The conspicuity generally of the gateways are poor, in particular the gateway features on the western approach to the eastern gateway Brasted and the approach to the eastern gateway Westerham. The gateways should be enhanced to a similar standard in order to effectively reduce speeds.

Pedestrian Features

The majority of the A25 route is through rural areas however there are a number of pedestrian features which require improvements.

There are sections of the footpath which are in a poor condition, in particular the sections along the Main Road in Sundridge, from adjacent 'Park Cottage' to the National Speed limit gateway in Brasted and from just prior to the 30mph speed limit eastern gateway to the Darent Car Park and from Goodley Stock Lane in Westerham to the Surrey Border.

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Powered 2 Wheelers

6 (9%) crashes occurred which is slightly higher than the county average which stands at 8% for the latest available 3 year period, and is lower than the national average for A roads of 12% for the same period.

Surfacing

Generally the A25 road surface is deteriorating with cracks, road surface breaking away, sunken road surface and utility covers and sections where there are potholes forming.

A significant number of junction interfaces along the route require repairs to the surfacing and also the reinstatement of the high friction surfacing.

Signing

There are signs which are dirty and missing which require cleaning and replacing.

It is recommended to install a 'road narrows on both sides ahead' sign opposite the entrance to 'Owl House' Westerham to increase awareness of the 'pinch point' on Vicarage Hill and to enforce the 30mph speed limit in this section.

Drainage

A large proportion of the gullies along the A25 were found to be blocked and with a high number of crashes on the route, it is imperative that the drainage is maintained.

Village

The speed limits throughout the villages do not appear to be observed. Improvements to all village gateways as well additional road markings will assist to increase visibility and awareness to inform drivers to reduce speeds when required.

Carriageway Definition

There are a number of locations where road marker posts have been damaged, missing or coated in grime and require cleaning and replacement.

1.4 Best ranking km schemes

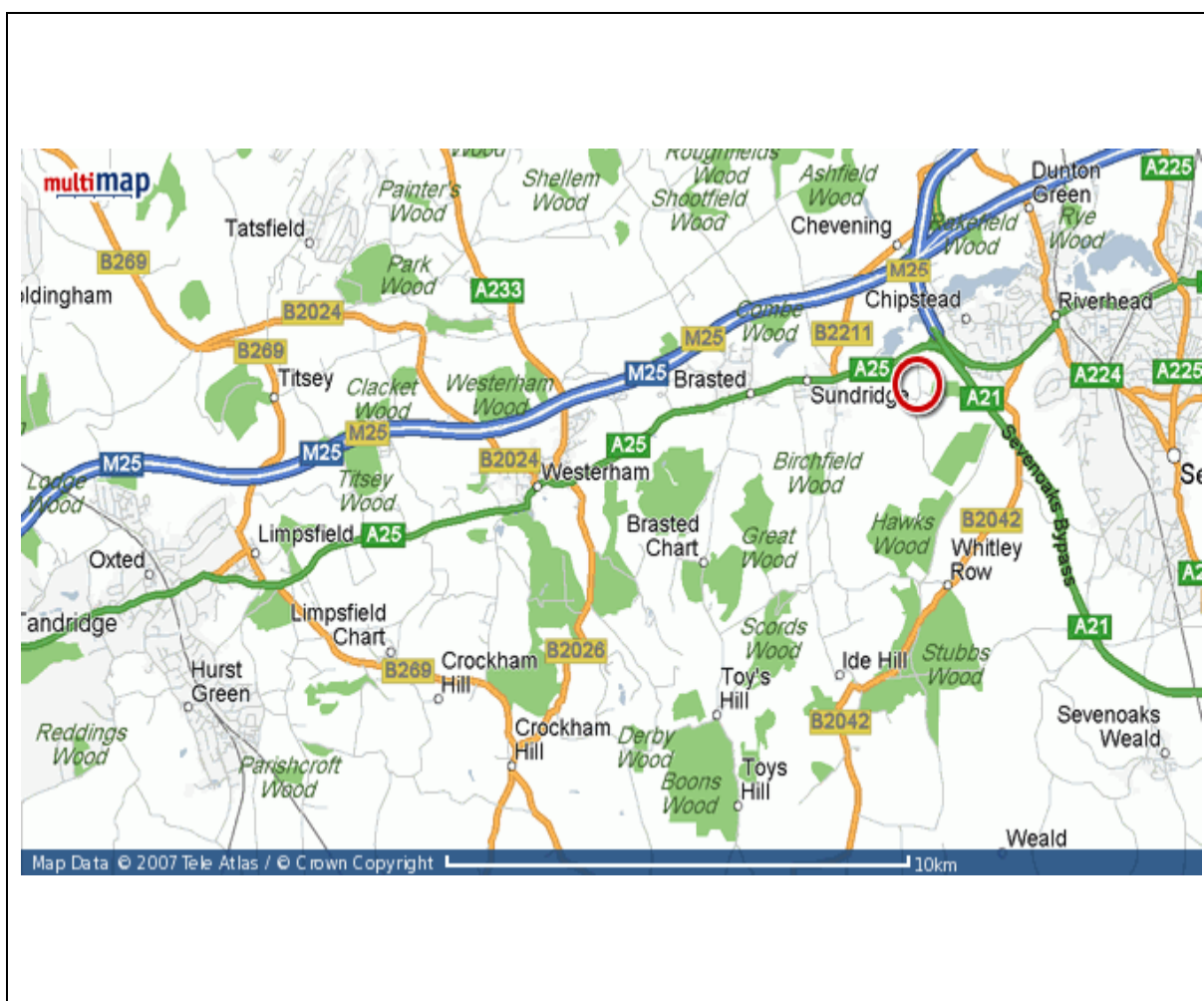
1. 1km improvement to the junction mouth at Dryhill Lane, repair sunken carriageway along Main Road, replace Kee Klamp fencing and clean gullies.
2. 2km reinstate road markings, surfacing and improvements to the junction mouth at New Road and clean gullies.
3. 3km surfacing repairs, improvements to the junction mouth at Church Road and vegetation removal at the western approach to the 30mph speed limit gateway Brasted.

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4. 4km footpath repairs, surfacing repairs and improvements to the junction mouth at 'Park Farm' Cottage.
5. 5km surfacing repairs, clean gullies and repair pedestrian crossing floodlights.
6. 6km footpath repairs, install road markings, surfacing repairs and install signage on Vicarage Hill.
7. 7km surfacing repairs, footpath repairs and improvements to the junction mouth at Farley Lane.

2. Introduction

Jacobs Engineering UK Ltd has been commissioned by Kent Highway Services (West Kent Division) to carry out a route study crash investigation of the A25 from its junction with Dryhill Lane, in the east, to the Surrey Border, in the west.



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2.1 This report shall include the following:-

- a) Detailed site investigation / Survey – Walking of whole route – reported by Km length
- b) Detailed crash analysis
- c) Outline crash remedial measures and costs
- d) Assessment of existing through traffic signing
- e) Assessment of existing speed limit and recommendations for changes

2.2 Report Team includes:-

John Jones–Transport Engineer, KHS Road Safety Team (Jacobs)
Rob Fletcher – Senior Technical Assistant, KHS Road Safety Team (Jacobs)
Gareth Williams – Technical Director, KHS Road Safety Team (Jacobs) RoSpa
Kirstie Horton – Engineer, KHS Road Safety Team (Jacobs) RoSpa

3. Site Description

The Site under investigation is the A25 on a section from its junction with Dryhill Lane westwards through the semi-rural villages of Sundridge, Brasted, and Westerham to the Surrey Border.

The A25 is a major A road but not considered to be a primary route, it is moderately trafficked, carrying traffic from the A20 London Road, Wrotham Heath to Redhill via Limpsfield in Surrey, although this scenario changes when the M25 and M26 Motorways are closed for whatever reason and becomes heavily trafficked. The route runs generally east to west and varies in characteristics throughout its length but is predominantly rural single carriageway.

The study covers approximately 7 kilometres (4.35 miles).

For assessment purposes crash analysis, observations and recommendations have been carried out per Km length. This is also the same for crash remedial works which have been grouped into sites in order to identify complete packages of works.

The Km sections are shown on the analysis drawings at the end of each site specific analysis section.

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4. Overall Crash Summary & Comparison

4.1 General

4.1.1 The crash data for this study has been obtained from Kent County Council and refers to the 36 month period from 01/12/2004 to 30/11/2007. There have been a total of 37 crashes involving personal injury in this period (1 Fatal, 3 Serious and 33 Slight)

4.1.2 In the 36 month period prior to the above study, namely 01.12.2001 – 30.11.2004, there were 46 crashes (2 Fatal, 7 Serious and 37 slight)

4.1.3 Analysis by severity and severity ratio are shown in table 1 below:

Table 1

	Year	Fatal	Serious	Slight	Total	Severity Ratio
3 year comparis on period	2001/2	0	3	11	14	0.21
	2002/3	1	2	12	15	0.20
	2003/4	1	2	14	17	0.18
	Total	2	7	37	46	0.19
3 year study period	2004/5	0	1	10	11	0.09
	2005/6	0	1	17	18	0.06
	2006/7	1	1	6	8	0.25
	Total	1	3	33	37	0.11

4.1.4 Nationally for this type of road, we would expect a severity ratio of 0.12 for built up A roads and 0.20 for non-built up A roads (RCGB 2006). Generally the severity ratio for the A25 over the 3 year study period is below the expected level for both built up and non-built up areas as shown in Table 1 above.

The last 3 years has seen a gradual decrease in severity ratio levels over the first two years and a sharp increase over the third year. The number of crashes has reduced to 37 compared to the previous 3 years which had 46.

5. Comparison with National Data

In order to consider the accident record on the A25, in relation to national data, the accident rate per 100 million vehicle kilometres has been calculated. The length of route has been separated into site length (as shown on the drawings in Appendix A). Accident rates have been calculated for each site and compared with similar data from Road Casualties Great Britain 2006, as summarised in Table 2 below. In addition, Table 2 gives a comparison for all built-up (speed limit under 40mph) and non-built up (speed limit 40mph or greater) section.

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Table 2

Selected area on the A25	Total crashes in study period	Rate per 100 million vehicle kilometres	
		A25	RCGB 2007
		All severities	All severities (A Roads)
A25 – Villages of Sundridge; Brasted and Westerham (30mph)	31	49.4	36
A25 – Dryhill Lane to Sundridge; Brasted to Westerham and Westerham to the Surrey border (40mph or greater)	6	7.2	

N.B data for this table is for the full 3 year study period taken from data used in the countywide speed limit review at selected locations on the A25.

The table shows the A25 30mph generally has a significantly higher than national average for A roads, except for the area around 84-88 Main Road Brasted where the accident rate is considerably lower than the national average.

5.1 General Analysis

5.1.1 Analysis by road surface

The following table shows an analysis of crashes by road surface conditions.

Table 3

	Year	Wet	Dry	Ice	Total	% Wet
3 year study period	2004/5	2	9	0	11	18
	2005/6	5	13	0	18	28
	2006/7	2	6	0	8	25
	Total	9	28	0	37	24

It is generally regarded that about one third of crashes occur when the road surface is wet (RCGB2006). The A25 data for the 3 year study period shows this is low with 24% of all crashes occurring on wet road surfaces.

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5.1.2 Analysis by Weather conditions

The following table shows an analysis of Weather conditions

Table 4

	Year	Fine	Rain	Rain/ Wind	Snow/ Wind	Fog/ Mist	Other	Total
3 year study period	2004/5	9	1	0	0	0	1	11
	2005/6	15	0	0	0	0	3	18
	2006/7	7	1	0	0	0	0	8
	Total	31	2	0	0	0	4	37

5% of all crashes occurred in rainy conditions.

5.1.3 Analysis by light conditions

Table 5

	Year	Light	Dark	Total	% Dark
3 year study period	2004/5	8	3	11	27
	2005/6	14	4	18	22
	2006/7	5	3	8	38
	Total	27	10	37	

It is generally regarded that about one third of crashes occur during the hours of darkness (RCGB2006). The A25 data for the 3 year study period shows this is just below average, however this is due to a low percentage of crashes in the dark in 2004/5 (27%) and 2005/6 (22%). The final year of the 3 year study period was above average.

5.1.4 Accidents by Month and year

Table 6

Month	2004/5	2005/6	2006/7	Total	%
January	2	1	1	4	11
February	1	0	0	1	3
March	1	1	0	2	5
April	1	3	2	6	16
May	0	0	0	0	0
June	1	1	2	4	11
July	1	2	1	4	11
August	0	2	0	2	5
September	0	4	0	4	11
October	3	0	1	4	11
November	0	0	1	1	3
December	1	4	0	5	13
Total	11	18	8	37	100%

The numbers of crashes are fairly well spread out during the months of January, June, July, September, October and December along the route. The number of crashes peaks in April. February, March, August and November

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recorded low monthly figures and the month of May did not record any crashes for the 3 year period.

5.1.5 Accidents by Day and Time

Table 7

Time	Sun	Mon	Tues	Wed	Thurs	Fri	Sat	Total
Midnight – 00:59	0	0	0	0	0	0	0	0
01:00 – 01:59	0	0	0	0	0	0	0	0
02:00 – 02:59	0	0	0	0	0	0	1	1
03:00 – 03:59	0	0	0	0	0	0	0	0
04:00 – 04:59	0	0	0	0	0	0	0	0
05:00 – 05:59	0	0	0	0	0	0	0	0
06:00 – 06:59	0	0	0	0	1	0	0	1
07:00 – 07:59	0	0	1	0	0	0	0	1
08:00 – 08:59	0	2	0	0	1	1	0	4
09:00 – 09:59	0	0	1	0	0	0	0	1
10:00 – 10:59	0	0	1	0	1	0	0	2
11:00 – 11:59	1	0	0	0	0	0	0	1
12:00 – 12:59	1	0	0	0	0	0	1	2
13:00 – 13:59	0	0	0	0	0	0	0	0
14:00 – 14:59	0	1	1	1	0	0	0	3
15:00 – 15:59	1	1	1	1	1	1	0	6
16:00 – 16:59	0	0	0	0	0	0	1	1
17:00 – 17:59	1	1	1	0	1	0	0	4
18:00 – 18:59	1	0	1	1	1	0	0	4
19:00 – 19:59	0	0	1	0	0	0	1	2
20:00 – 20:59	0	0	0	0	0	0	0	0
21:00 – 21:59	0	0	0	0	0	0	0	0

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22:00 – 22:59	0	1	1	0	0	0	0	2
23:00 – 23:59	0	0	1	0	0	0	1	2
Total	5	6	10	3	6	2	5	37
%	14%	16%	27%	8%	16%	5%	14%	100%

The diurnal pattern fits broadly with the expected level for the nature of the route with a high proportion of crashes occurring during the AM and PM peaks. The morning peak is fairly short and extends from 08:00 to 9:59. The afternoon peak extends from 15:00 through to 17:59. Tuesday experiences the highest number of crashes with 27%, this could be due to the high number of passing traffic on the route and people not local to the A25 using the route.

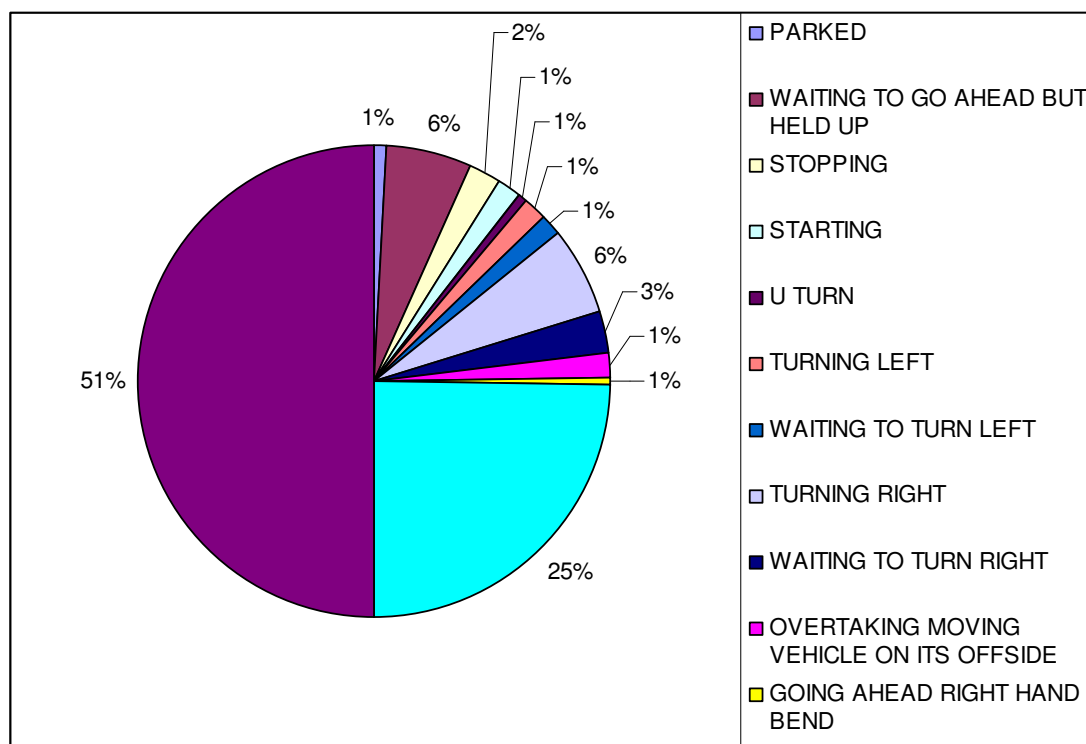
5.1.6 Analysis by Speed Limit

Table 8

Speed Limit	Number	%
30 Mph	31	84
50 Mph	1	3
60 Mph	5	13
Total	37	

The majority of crashes occur in the rural areas with lower speeds, with 84% of crashes in the 30mph speed limit zones. The nature of the A25 is generally flat, with bends, junctions and one traffic signal cross road in Sundridge. The road is bordered almost continuously with residential development and inclines at Vicarage Hill Westerham to the village centre outside the Kings Arms Public House where it declines down Market Square and the High Street to Mill lane.

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Aside from “going ahead other” the dominant manoeuvres are those related to vehicles turning right/waiting to go ahead, but held up at 12%. This highlights the dangers of vehicles turning across fast moving on coming traffic.

5.1.7 Analysis by Junction Detail

Table 9

Junction Detail	Number	%
T or Staggered	14	38
Cross Roads	3	8
Multiple Junction	1	3
Private Drive	3	8
Other Junction	2	5
Not at junction	14	38
Total	37	100

Excluding crashes not at the junctions the highest proportion of crashes occurs at T or staggered junctions. This may be related to both maintenance issues and/or a lack of suitable signing. Also the speed at which vehicles are travelling on the majority of the route makes it harder for vehicles exiting T junctions onto the main road.

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5.1.8 Analysis of vehicle involvement by type and age of driver

Table 10

Vehicles involved by type and age of Driver								
Type	0 to 15	16 to 19	20 to 29	30 to 59	60 Plus	Unknown	Total	%
Pedal Cycle	0	0	0	1	0	0	1	1
PTW	1	1	0	3	0	1	6	9
Car	0	7	9	20	9	9	54	81
Goods <3.5T	0	0	2	0	0	0	2	3
Goods >3.5T	0	0	0	3	0	1	4	6
Total	1	8	11	27	9	11	67	
%	1	12	16	40	13	16		

The highest category of vehicle involvement is cars at 81% followed by powered two wheelers at 9%. This last figure is slightly higher than the county average which stands at 8% for the latest available 3 year period, and is lower than the national average for A roads of 12% for the same period.

5.1.9 Analysis of Casualties by Type and age Grouping

Table 11

Casualties by type and age Grouping									
Type	0 to 4	5 to 15	16 to 19	20 to 29	30 to 59	60 Plus	Unknown	Total	%
Pedestrian	1	1	0	0	2	2	1	6	15
Pedal Cyclist	0	0	0	0	1	0	0	1	2
PTW Rider	0	1	1	0	3	0	0	5	12
Car	0	0	5	6	5	3	2	19	46
Car Passenger	0	1	1	1	3	3	0	9	22
Goods Driver	0	0	0	1	0	0	0	1	2
Total	1	3	7	8	14	8	3	41	
%	2	7	17	20	34	20			
Number of casualties with unknown age: 3									

There is a fairly even spread of casualties by type and age grouping. Pedestrians account for 15% of all casualties which is a fairly high figure compared to the national average of 8% (RCGB 2006) indicating the route is heavily used by this casualty class. The 30 to 59 year old age group experiences the highest number of casualties with 34%.

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The current speed limit sections are as follows:-

Section	Approx length	Speed Limit	Description
1	1 Km	40mph	From its junction with Dryhill Lane, westwards to a point adjacent to the EDF training centre access road, Sundridge. 40mph speed limit repeater signs in place
2	2 Km	30mph	From a point adjacent to the EDF training centre access road, Sundridge, westwards to a point adjacent to the track leading to Brasted recreation ground. 30mph speed limit repeater signs through the village of Sundridge, but not Brasted.
3	2 Km	50mph	From a point adjacent to the track leading to Brasted recreation ground, westwards to a point adjacent to the Darenth Car Park, Westerham. 50mph speed limit repeater signs in place
4	1.5 Km	30mph	From a point adjacent to the Darenth Car Park, Westerham, westwards to a point 100 metres west of its junction with Farley Lane, Westerham. 30mph speed limit gateway signs in place
5	0.5 Km	National	From a point 100metres west of its junction with Farley Lane, Westerham, and westwards to the Surrey border. National speed limit signs in place

6. Site Specific Analysis and Assessment

Each Km section of the route (travelling west) has been surveyed and is presented with an examination of the crash history, observations from site and suggested crash remedial measures.

Costings are for guidance only and any schemes will be subject to target costing. Fee costs have not been included except where stated. Prices have been estimated from current and previous schemes.

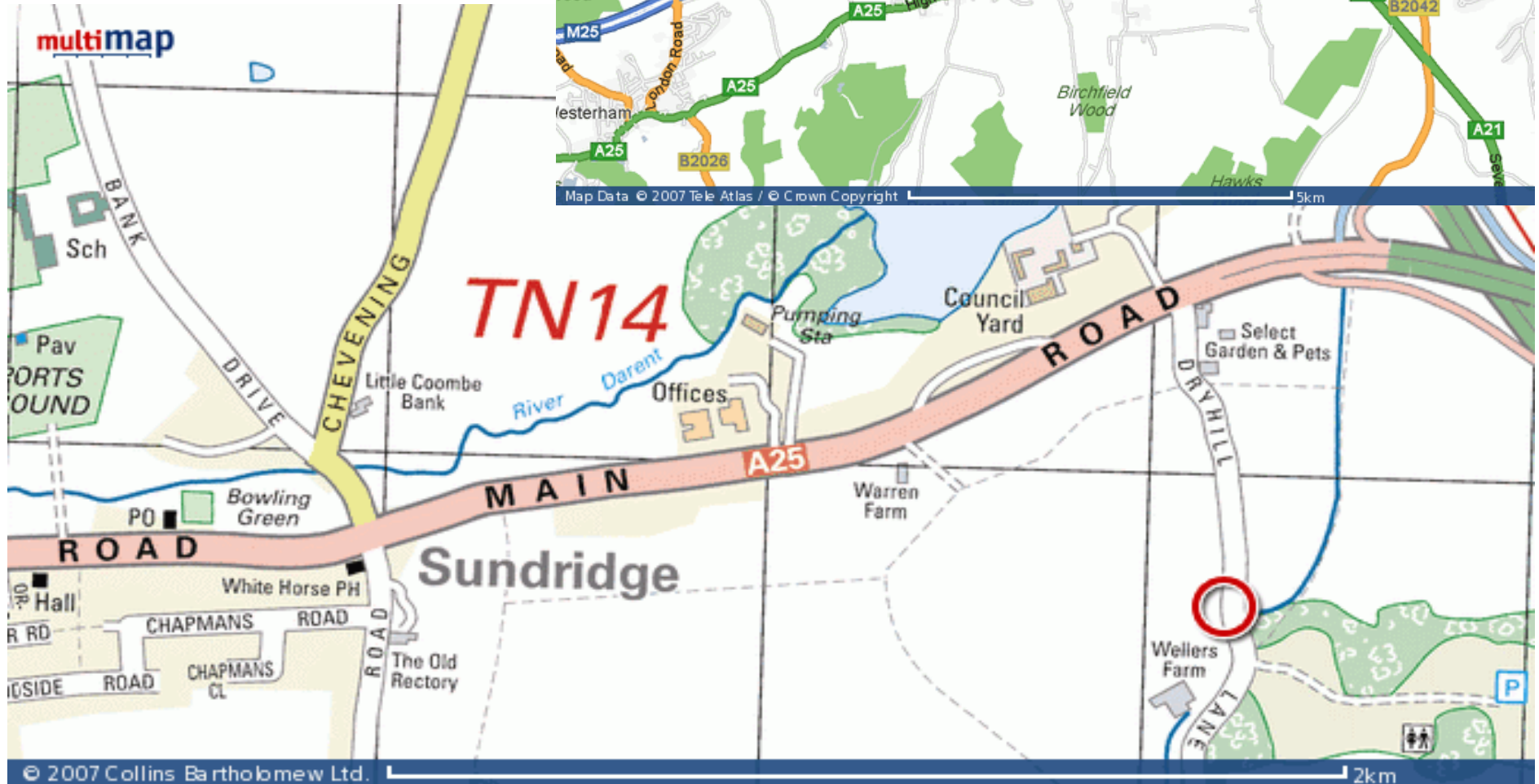
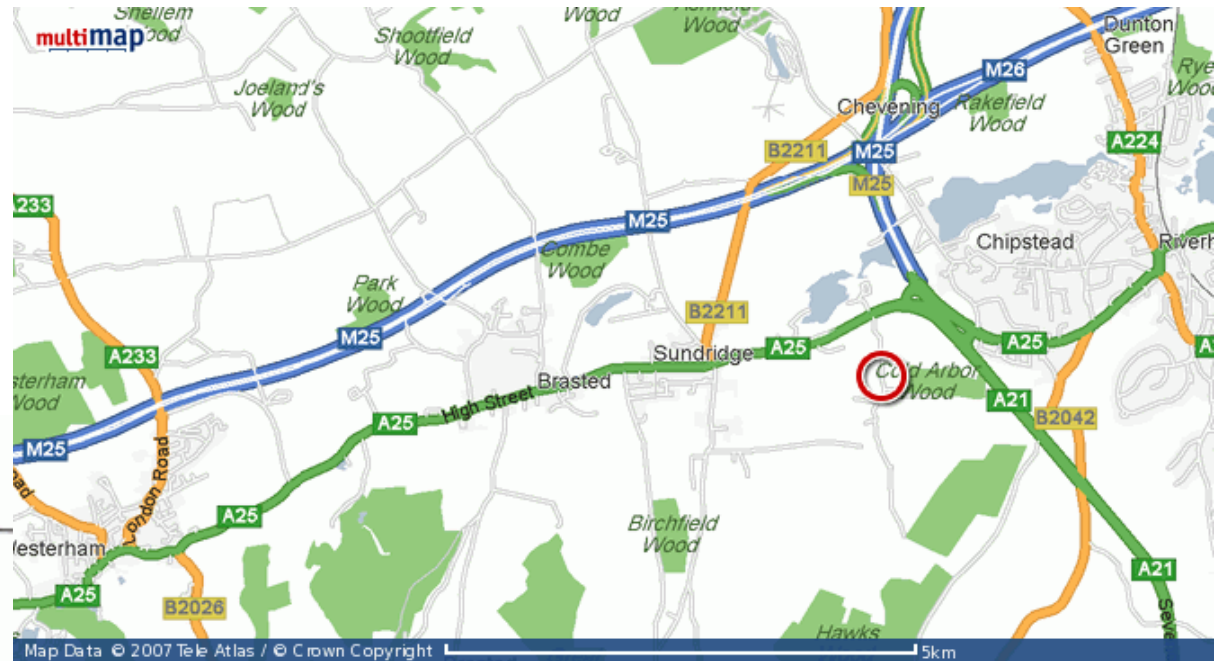
The crash analysis drawings for each Km section are provided at the rear of the section.

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1 Km

**A25 (Dryhill Lane to the Surrey Border)
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1st Km section



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1 Km

Section	Approx length	Speed Limit	Description
1	0.40Km	40mph	From Dryhill Lane to approximately 30metres east of the EDF Development Centre. Single Carriageway with repeaters in place.
2	0.60 Km	30mph	From approx 30 metres east from EDF Development Centre and 100 metres east from the traffic lights in Sundridge. Single carriageway with street lights and repeaters in place.

1.1 Crash Analysis

No crashes have occurred in this section of road in the 3 year study period.

1.2 Crash Ratios

Severity

There were no reported Crashes over this distance.

1.3 Crash Location and Descriptions

Accident Ref No.	Severity	Location	Description	Vulnerable users
		No reported Crashes over this distance		

1.4 Site Observations

The following observations start at the A25 / Dryhill Lane junction travelling west and terminating just after Sundridge House Restaurant.

The road has a 40mph speed limit reducing to 30mph speed limit just prior to the EDF Development Centre.

Dryhill Lane

In the junction mouth of Dryhill Lane the kerb entry gully is blocked with debris and has a broken cover, the road surface has cracks appearing and at the entry onto the main carriageway the road is in a poor condition with the surface sunken and road surface breaking up. Visibility in both directions from Dryhill Lane is good.

There is a 40mph terminal speed limit sign located approximately 16 metres on Dryhill Lane which has a 'Neighbourhood Watch' and a 'Hydrant' sign illegally secured to the post. There is no street lighting at this location.

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Photo 1 - Kerb entry gully cover broken



Photo 2 -Junction interface sunken and breaking up

Opposite house number 10 Main Road

A feeder pillar supplying the central island of the pedestrian crossing opposite house number 10 and approximately 50metres west from Dryhill Lane on the south side of the main carriageway has been dislodged.

The illuminated bollards at the pedestrian crossing are coated in grime.



Photo 3 - A feeder pillar is dislodged and the illuminated bollards coated in grime

Opposite house numbers 8 -14 - 16 Main Road

On the A25 east bound carriageway opposite house number 8 (for approximately 50 metres west) the centre of the carriageway has sunk by heavy nearside use of vehicles and a ridge has formed on the carriageway edge, adjacent to the kerb, this creates a ponding effect when it rains. When vehicles travel along this section of the A25 the water is dispersed up and over the footpath and at times over the garden fence of the houses.

The 40mph 450mm diameter repeater sign opposite house number 14 is coated with grime.

Road marker posts on the southern verge of the west bound carriageway opposite house number 16 have been struck.

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Photo 4 -Sunken carriageway



Photo 5 - Road marker posts have been dislodged and the repeater sign is coated with grime

House numbers 18 - 26 Main Road Sundridge

The footpath outside house numbers 18 - 22 Main Road Sundridge is deteriorating with previous remedial work cracking and breaking away. There is evidence of ponding on the southern side of the main carriageway opposite house number 18.

Opposite house number 26 on the main carriageway the gully is blocked with debris.

At the eastern entry to the service road there is a road marker post missing and a damaged marker post with its reflective white bands peeling and missing.



Photo 6 - Road marker post missing



Photo 7 - The footpath is deteriorating

House numbers 30 - 34 - 40

The gullies on the main carriageway outside and opposite houses 30, 34, 40 are blocked with debris.

At the western entry to the service road the 'Service Road only' sign wide base post has the panel cover missing at the base of the post, exposing the electrical wiring. The post is misaligned.

Over this section the road markings and signage are generally in good order and there is no street lighting.

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Photo 8 - Gullies are blocked



Photo 9 - The panel cover is missing

House numbers 48 - 54 - 56 - 58 Main Road

The gullies outside and opposite house numbers 48 -54- 56 -58 are blocked with debris and outside house number 52 a section of the footpath is deteriorating with previous remedial work breaking away. There is rutting on the edge of carriageway outside house number 58.

‘Green Oak Barn’ and house numbers 62 - 70 Main Road

The lay-by outside ‘Green Oak Barn’ is in a poor condition with evidence of ponding and the road surface is cracking and breaking up with potholes forming at the edge of the carriageway.

The Footpath outside house numbers 62 and 64 is deteriorating with previous remedial work breaking away.

The gully surrounds outside house number 66 are breaking up.

The carriageway edge adjacent to the kerb outside house numbers 66 and 70 is breaking away and sunk where ponding is evident.



Photo 10 - Lay-by is in a poor



Photo 11 - Edge of carriageway

The 30mph eastern speed limit gateway Sundridge

The 30mph speed limit gateway at the eastern entrance to Sundridge is in good order and visibility in both directions to the gateway is good.

Over this section the High Friction Surface is worn, the road markings and signage are generally in good order. There is no street lighting over this section.

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Outside 84 - 88 Main Road

The pedestrian crossing located outside 84 -88 Main Road has defective floodlights and the illuminated bollards are coated in grime.

The Flecta bollards at the second pedestrian crossing located approximately 15metres west adjacent to the entrance to 84-88 Main Road are covered with grime and their reflective quality severely diminished. There are gravel spillages at both pedestrian crossings. The gullies over this section are blocked with debris.

There is a street light opposite the pedestrian crossing which has the cover bowl missing.



Photo 12 - Flecta Bollards coated in grime

Outside house number 27 Main Road

The road marker posts outside house number 27 Main Road on the west bound edge of the carriageway are coated with grime, with some reflectors and reflective bands missing which is severely diminishing their reflective quality.

There is vegetation with thorns on a fence which is encroaching onto the footpath opposite house number 27 Main Road.

There is a Kee Klamp steel and concrete post fence starting opposite house number 27 Main Road on the east bound carriageway footpath to the traffic lights in Sundridge. Sections of the bottom steel pipes have been disconnected from the adjacent pipe. There is street lighting along this section in conjunction with 30mph repeater signs.

The east bound carriageway from outside house number 29 Main Road to the traffic lights in Sundridge is cracking.



Photo 13 - Road marker posts coated in grime



Photo 14 - Thorny vegetation encroaching onto footpath

A25 (Dryhill Lane to the Surrey Border) Route Study

Sundridge House Restaurant

The gullies outside and opposite Sundridge House are blocked with debris. There is no west bound edge of carriageway road markings on this section.

1.5 Discussion / Outline Solutions

Dryhill Lane

The Dryhill Lane junction mouth should be repaired and the kerb entry gully cleaned and the broken cover replaced.

The 'Neighbourhood Watch' and 'Hydrant' signs located on Dryhill Lane should be removed.

- The gully should be cleaned and the cover replaced (1.5.1)
- The junction mouth should be repaired (1.5.2).
- The 'Neighbourhood Watch' sign should be removed and the 'Hydrant' sign relocated (1.5.3).

Outside house numbers 8 -10 - 14 - 16

The ponding effect opposite house numbers 8 -16 should be addressed.

- The road surface should be repaired (1.5.4).

A feeder pillar opposite house number 10 should be reinstalled. The illuminated bollards coated in grime require cleaning to enhance the conspicuity of the crossing.

- The pedestrian crossing feeder post should be checked and reinstalled (1.5.5).
- The illumination bollards at the pedestrian crossing should be cleaned (1.5.6).

The repeater sign opposite house number 14 is coated in grime requires cleaning to enhance the conspicuity of the sign, enforcing the current 40mph speed limit.

Road marker posts opposite house number 16 should be reinstalled.

- The 40mph speed limit repeater sign should be cleaned (1.5.7).
- Reinstallation of the road marker posts should be carried out (1.5.8).

A25 (Dryhill Lane to the Surrey Border) Route Study

Outside house numbers 18 - 20 - 22 - 26

The repairs are required to the footpath outside House numbers 18 -22 Main Road Sundridge to improve pedestrian safety and the main carriageway opposite house number 18 should be repaired.

The gully opposite house number 26 requires cleaning to remove excess water off the carriageway and to reduce ponding.

The missing and damaged road markers should be replaced and existing ones require cleaning to enhance the conspicuity of the road entrance / exit.

- The footpath should be repaired (1.5.9).
- Repairs to the west bound carriageway opposite house number 18 should be carried out (1.6.0).
- The gully should be cleaned (1.6.1).
- Replace missing and damaged road marker posts (1.6.2).

Outside house numbers 30 - 34 - 40 - 48

The lamp post for the 'Service Road only' sign should be removed.
The gullies outside and opposite houses 30, 34, 40 and 48 requiring cleaning to remove excess water from the carriageway and to reduce ponding.

- Removal of the wide base lamp post should be considered (1.6.3).
- The gullies should be cleaned (1.6.4).

Outside house 52 - 54 - 58 and Green Oak Barn

The footpath outside house number 52 should be repaired to improve pedestrian safety.
The gully outside house number 54 this should be cleaned to remove excess water from the carriageway.

The repairs to the carriageway outside house number 58 and the lay-by outside Green Oak Barn should be carried out.

- The footpath should be repaired (1.6.5).
- Clean gullies over this section (1.6.6).
- Repair rutting in the edge of carriageway (1.6.7).
- Repairs to the lay-by outside 'Green Oak Barn' should be carried out (1.6.8).

A25 (Dryhill Lane to the Surrey Border) Route Study

Outside house numbers 62 - 64 - 66 - 70 Main Road

The Footpath outside house numbers 62 and 64 should be repaired to improve pedestrian safety and the carriageway edge outside house number 66 and 70 and the gully surrounds outside house number 66 requires repairing.

- Repairs to the footpath should be carried out (1.6.9).
- The gully surrounds should be repaired (1.7.0).
- Carry out edge of 'Service Road' repairs (1.7.1).

Outside 84 - 88 Main Road

The illuminated bollards and Flecta bollards at the pedestrian crossings located adjacent to the entrance to 84 -88 Main Road these should be cleaned to enhance the conspicuity of the crossing and the gravel spillage should be cleaned to improve pedestrian safety.

- The illumination bollards and Flecta boards should be cleaned (1.7.2).
- Remove gravel spillage at the pedestrian crossings (1.7.3).

Outside house number 27 Main Road

The road marker posts outside house number 27 Main Road should be replaced to clearly demarcate the carriageway edge.

There is thorny vegetation opposite house number 27 Main Road should be cut back to improve pedestrian access.

The Kee Klamp steel and concrete post fence on the western approach to 84-88 Main Road to the traffic lights in Sundridge should be replaced with a panelled wooden fence and repairs to the carriageway road surface from house number 27 Main Road to the traffic lights in Sundridge should be considered and several gullies over this section require cleaning.

- Replace road markers on the west bound carriageway (1.7.4).
- Cut back the vegetation encroaching onto the footpath (1.7.5)
- The Kee Klamp steel and concrete fence should be replaced with a panelled wooden fence (1.7.6).
- Repair carriageway road surface (1.7.7).
- Clean gullies over this section (1.7.8)

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

Sunridge House Restaurant

The gullies outside and opposite Sundridge House should be cleaned to reduce ponding and remove excess water from the carriageway.

- The gullies in this section should be cleaned.(1.7.9)

1.6 Summary

Location	Recommendation	Estimated costs
Dryhill Lane	The gully should be cleaned and the cover replaced (1.5.1).	Maintenance
	The junction mouth should be repaired (1.5.2).	£ 2700
	The 'Neighbourhood Watch' sign should be removed and the 'Hydrant' sign relocated (1.5.3).	£ 300
House numbers 8 - 16 Main Road	The road surface should be repaired (1.5.4)	£ 2700
	The pedestrian crossing feeder post should be checked and reinstalled (1.5.5).	Maintenance
	The illumination bollards at the pedestrian crossing should be cleaned (1.5.6).	Maintenance
	The 40mph speed limit repeater sign should be cleaned (1.5.7).	Maintenance
	Reinstallation of the road marker posts should be carried out (1.5.8)	Maintenance
Outside house number 18 Main Road	The footpath should be repaired (1.5.9).	£ 2000
	Repairs to the west bound carriageway opposite house number 18 should be carried out (1.6.0).	£ 2700
Opposite house 26 Main Road	The gully should be cleaned (1.6.1).	Maintenance
Entry to the Service road	Replace missing and damaged road marker posts (1.6.2).	Maintenance
	Removal of the wide base lamp post should be considered (1.6.3).	£ 500
Outside house numbers 30 - 24 - 40 - 48	The gullies should be cleaned (1.6.4).	Maintenance
	The footpath should be repaired (1.6.5).	£ 2000

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

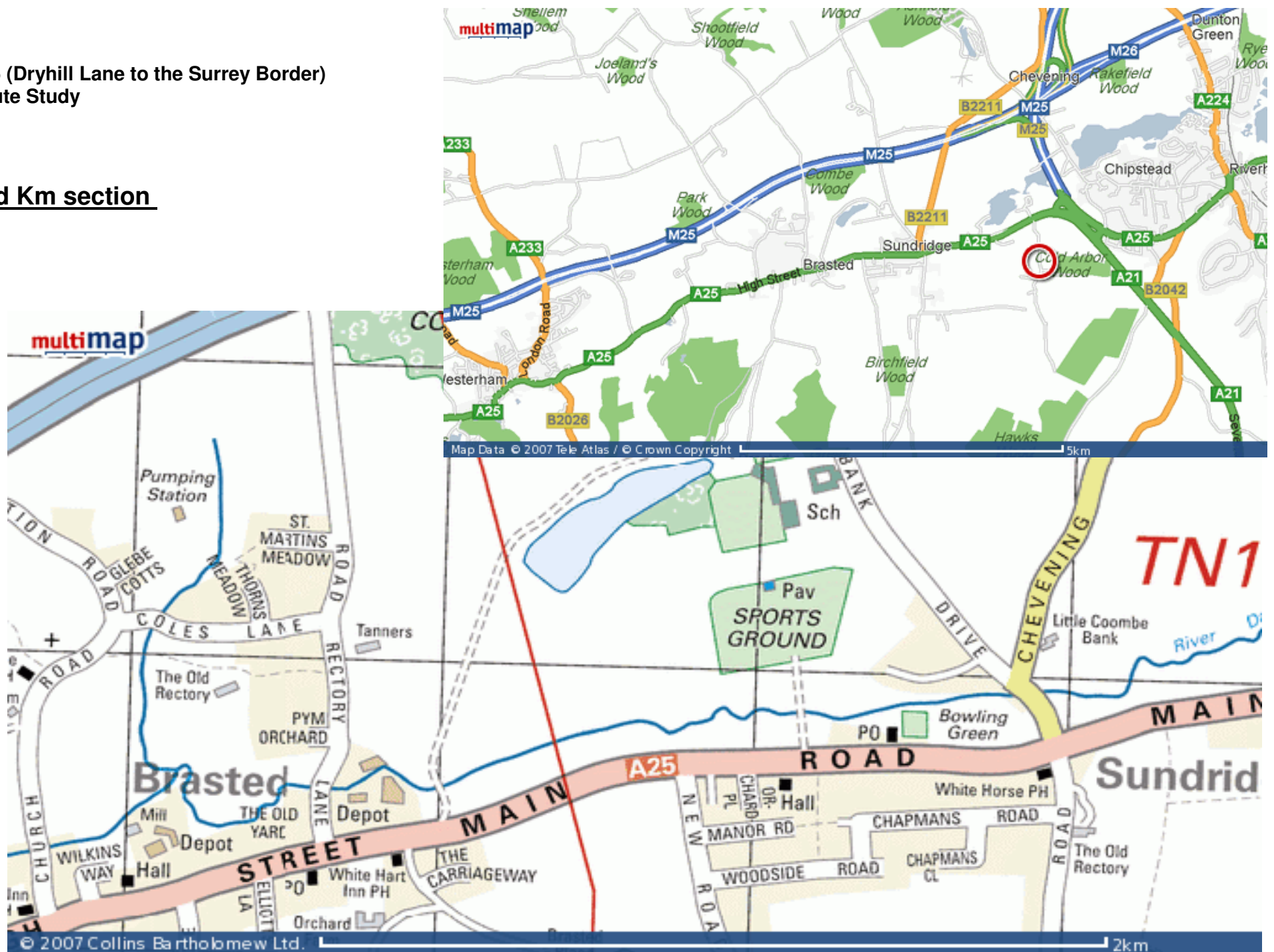
Main Road		
Outside house numbers 54-56-58 Main Road	Clean gullies over this section (1.6.6).	Maintenance
Outside house number 58	Repair rutting in the edge of carriageway (1.6.7).	£ 2700
Green Oak Barn	Repairs to the lay-by outside 'Green Oak Barn' should be carried out (1.6.8).	Consider re-surfacing £ 10 per square metre (£ 1050)
Outside house numbers 62 - 64 Main Road	Repairs to the footpath should be carried out (1.6.9).	£ 2000
Outside house number 66	The gully surrounds should be repaired (1.7.0).	Maintenance
Outside house number 66 - 70 Main Road	Carry out edge of 'Service Road' repairs (1.7.1).	£ 2000
Outside 84 - 88 Main Road	The illumination bollards and Flecta boards should be cleaned (1.7.2).	Maintenance
	Remove gravel spillage at the pedestrian crossings (1.7.3).	Maintenance
Outside house number 27 Main Road to the traffic lights Sundridge	The road markers on the west bound carriageway outside house number 27 Main Road should be replaced (1.7.4).	Maintenance
	The vegetation with thorns encroaching onto the footpath opposite house number 27 Main Road should be severely cut back (1.7.5).	Maintenance
	The blocked gullies should be cleaned (1.7.6).	Maintenance
	The Kee Klamp steel and concrete fence should be replaced with a panelled wooden fence (1.7.7).	£ 150 per metre length (£ 20000)
	Repair carriageway road surface (1.7.8).	£ 2700
Sundridge Restaurant	The gullies in this section should be cleaned (1.7.9).	Maintenance
		Total: £ 43350

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

2 Km

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

2nd Km section



**A25 (Dryhill Lane to the Surrey Border)
Route Study**

2 Km

Section	Approx length	Speed Limit	Description
2	1.0 Km	30mph	From approx 100 metres east from the Sundridge traffic lights to the 30mph speed limit western gateway in Sundridge. Single carriageway with street lights and repeaters in place.

2.1 Crash Analysis

A total of 11 crashes have occurred in this section of road in the 3 year study period.

2.2 Crash Ratios

Severity

Of the 11 crashes, 1 was fatal, 1 was serious and 9 resulted in slight injury.

The ratio of serious and fatal crashes is 30%, compared with an average of 14% for A roads in Kent for the latest 3 year period (up to 2006), and the average for the whole of 23%

Time

The distribution by time of day indicated that 3 crashes occurred at non peak times and 7 during peak hours.

Dark/Light

2 of the 10 crashes occurred in the dark

Wet/Dry

1 of the 10 crashes occurred in the wet

2.3 Crash Location and Descriptions

Accident Ref No.	Severity	Location	Description	Vulnerable users
070144937 1	Slight	A25 Main Road, Sundridge	Vehicle 3 stopped to turn right into a private driveway. Vehicle 2 stopped behind. The driver of Vehicle 1 was distracted by something behind and hit V2, which in turn hit V3, causing minor damage and minor injury.	Car
060131901 2	Slight	A25 Main Road J/W New Road, Sundridge	Vehicle 2 was waiting to turn right into New Road, off Main Road, when Vehicle 1 collided with the rear of V2, causing V2 to move into the path of oncoming traffic.	car

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

060131445 3	Slight	A25 Main Road (outside house no. 211), Sundridge	Vehicle 1 was travelling west along A25 Sundridge. V1 was overtaking a parked car on his nearside when a cat ran in front of his car. V1 swerved to avoid the cat and collided with V2 causing damage to rear wing and wheel on the offside of V2. and damage to nearside front wheel on the nearside front wheel wing of V1.	car
070150183 4	Fatal	A25 Main Road, Sundridge	Driver of Vehicle 1 heading towards Sevenoaks on Main Road at Sundridge, when for reasons unknown at this time, driver struck pedestrian on carriageway.	car
050105798 5	Slight	A25 Main Road (outside house no. 147), Sundridge	Vehicle 2 was travelling west along A25. Vehicle 1 was attempting to turn right onto this road from his drive. There were two parked vehicles partially blocking his view, so he pulled out. As he did so the front of V1 collided with the nearside front wing of V2. This forced V2 across the carriageway onto the path. V2 offside front then hit a low wall and a tree. It then hit a wooden fence. Section 170 complied with for drivers. Details left with owner of wall/fence as they were not in at the time.	car
070148026 6	Slight	A25 Main Road (outside house no. 167), Sundridge	3 Vehicle RTC on busy A25. Vehicle 1 collided with Vehicle 2, which in turn collided with Vehicle 3. V3 and V2 had stopped suddenly and V1 could not stop in time to avoid the collision.	car
060130157 7	Slight	A25 Main Road (outside house no. 47), Sundridge	Vehicle 1 travelling to Scotland missed turning for M25 from A25. V1 turned into a double driveway in order to do a U-turn. V1 pulled out into the road colliding with Vehicle 2 causing V2 to collide with railings on the offside.	car

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

060132100 8	Slight	A25 Main Road (outside "White Horse" Public House, 30 metres west of J/W Chevening Road, Sundridge	The IP was standing on the footpath at the eastbound Bus Stop on Main Road opposite the "White Horse" Public House. Vehicle 1 drove past travelling towards Sevenoaks and struck the IP on the back of her head and shoulders causing her to fall. She was hit by the door mirror on the nearside of the vehicle. The driver stopped and approached the IP, who was lying on the ground and told her not to exaggerate the situation. He then got back into his cab and drove off.	Goods 3.5 – 7.5t/ pedestrian
050117476 9	Slight	A25 Main Road J/W B2211 Chevening Road, Sundridge	Vehicle 1 turning right at crossroads (from Church Road into Sundridge Road) and collided with Vehicle 2, which was going straight across the crossroads. The crossroads are governed by Traffic Lights. V1 late turning right due to oncoming traffic and V2 proceeding through a green light, did not expect a vehicle to be turning. No witnesses or evidence to suggest V1 past a red light, which the driver of V1 strongly denied.	car
050121766 10	Slight	A25 Westerham Road 30 metres east of A25 Main Road, Sundridge	Vehicle 2 in centre of road to turn right. Vehicle 1 facing V2 also turning right (opposite way). V1 pulled out without looking into the path of V2.	car
070142526 11	Serious	A25 Main Road J/W B2211 Chevening Road, Sundridge	Traffic was tailed back in four directions on A25 Main Road/Church Road/Chevening Road. Kent Fire Brigade was dealing with a car, which was on fire. A red Rover car mounted the pavement on the Main Road part of Sundridge. It failed to stop for uniformed Police Officer. Off duty Special Constable had time to step out of way of this vehicle	car

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

			and jumped on the bonnet to prevent injuries to his legs. Vehicle carried on down Chevening Road for approximately 100 metres. The vehicle then made off towards Polehill.	
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2.4 Site observations

The following observations were taken along the main carriageway from just west of Sundridge House Restaurant terminating at the 30mph western gateway feature at Sundridge.

The road has a 30mph speed limit.

The A25 / Chevening B2211 and Church Road junction

On the approach to the junction traffic signals a tourist sign, the directional signs for Ide Hill, Chevening B2211, Church Road and the 'Ide Hill Park Housing Development' sign are partly obscured by vegetation.

The carriageway within the junction area is cracking with the utility covers sunken and the surface area around a utility cover is breaking up and in the centre of the junction a pothole is forming at the junction interface with Chevening Road and the main carriageway there is evidence of rutting and road surface is cracking and a utility cover sunken.

In this section the road markings and signage are generally in good order. The gully opposite the 'White Horse Public House' is sunken and blocked with debris.

There is a non compliant AAT sign and an illegal 'Ide Hill' Park Housing Development sign located on the lamp column on the western side of Chevening Road at the junction mouth.



Photo 15 - Tourist sign partly obscured by vegetation



Photo 16 - Road surface is deteriorating

A25 (Dryhill Lane to the Surrey Border) Route Study



Photo 17 - Road surface is deteriorating

'White Horse' Public House

There is a gully opposite the 'White Horse' Public House which is blocked and the carriageway road surface from the outside the 'White Horse' Public House to the 'White Horse' bus stop is cracking.

There are 30mph repeaters in conjunction with street lighting over this section.

The 30mph repeater sign outside the 'White Horse Public House' car park is inconspicuous due to its size, current location on the footpath and is hidden by bordering fruit trees and not in the line of sight for drivers.



Photo 18 - Inconspicuous 30mph speed sign

Outside house numbers 143 - 187 - 189 Main Road

The street lamp outside house numbers 143 - 145 Main Road Sundridge is in a poor condition.

Adjacent to the shop on the east bound carriageway, the Medical Centre and to house number 179 Main Road Sundridge there is evidence of the road surface cracking, sinking and has a pothole.

There is ponding along sections of the east bound carriageway edge between the pelican crossing opposite house number 189 Main Road Sundridge and New Road.

The 30mph speed limit repeater sign on the east bound carriageway opposite house number 154 Main Road is partly obscured by a 'House for Sale' sign.

A25 (Dryhill Lane to the Surrey Border) Route Study



Photo 19 - Partly obscured
30mph speed limit sign



Photo 20 - Ponding on carriageway

Opposite house numbers 199 - 233

The wooden fence along the footpath opposite house number 199 Main Road to the 30mph speed limit gateway exiting Sundridge is in a poor condition and is falling down. There is ponding on the carriageway opposite house number 199 Main Road for approximately 12metres.

The Recreational ground sign opposite house number 219 Main Road are misaligned.

A 30mph speed limit repeater sign opposite house number 233 Main Road is partly obscured by an overhanging tree branch.



Photo 21 - The wooden fence is in a
poor condition and 30mph speed limit
sign partly obscured by vegetation

New Road

The directional signs opposite the junction with New Road are located on the verge beyond the footpath and partly obscured by a lamp post and vegetation.

The section of the carriageway adjacent to New Road has an uneven surface and the utility covers are sunken.

The junction mouth and the carriageway interface with New Road are in poor condition with the kerb side entry gully broken.

There is a non compliant AAT sign located adjacent to New Road and a gully adjacent to the junction mouth which is blocked with debris.

A25 (Dryhill Lane to the Surrey Border) Route Study

There is a wooden structure located adjacent to the New Road Bus stop which is in a poor condition.

A gully located approximately 60metres from the first Brasted 30mph speed limit gateway signs is blocked with debris.

There are street lights in conjunction with 30mph speed limit roundels over this section. There are no carriageway edge road markings over this section.



Photo 22 - Partly obscured directional signs



Photo 23 - Junction interface deteriorating

2.5 Discussion / Outline Solutions

A25 / Chevening junction traffic lights

On the eastern approach to the traffic signals in Sundridge a 'tourism' and the directional signs for Ide Hill, Chevening B2211 and 'Ide Hill Park Housing Development' should be cut back to improve the visibility splay.

Due to the high volume of traffic utilising the A25, Chevening Road and Church Road junction area, the junction should be repaired and road markings reinstated.

There is a non compliant AAT sign and a 'Ide Hill Housing Development' sign located on the lamp column on the western side of Chevening Road at the junction mouth and these non compliant AAT and illegal 'Ide Hill Housing Development' signs should be removed. (Both signs do not conform to the TSRGD 2002)

- The vegetation obscuring the tourist sign and the directional signs should be cut back (2.5.1).
- The junction road surface should be repaired and the utility covers reset and road markings reinstated (2.5.2).
- The non compliant AAT sign and the 'Ide Hill Development' located on the lamp post should be removed (2.5.3).

A25 (Dryhill Lane to the Surrey Border) Route Study

The 'White Horse' Public House

The gully opposite the 'White Horse Public House' should be cleaned to reduce the likelihood of ponding.

The carriageway road surface from outside the 'White Horse' Public House to the 'White Horse' bus stop which is cracking and should be repaired.

The inconspicuous 300mm 30mph terminal speed limit repeater sign outside the 'White Horse' Public House car park should be relocated marginally north, closer to the carriageway and the current 300mm 30mph speed limit sign should be increased to a 450mm 30mph speed limit to greatly enhance the sign and enforce the 30mph speed limit.

- The blocked gully should be cleaned (2.5.4).
- Repairs to the carriageway should be carried out (2.5.5)
- The 300mm 30mph speed limit sign should be increased in size to 450mm (2.5.6).

House numbers 143 - 187 - 189 Main Road Sundridge

The street lamp outside house number 143 Main Road Sundridge should be cleaned and tested to increase illumination splay.

The carriageway adjacent to the shop and outside the Medical Centre to House number 179 Main Road Sundridge should be repaired.

The ponding along sections of the east bound carriageway edge between the Pelican crossing opposite house number 154 Main Road Sundridge and New Road should be repaired.

- The street lamp should be cleaned and tested (2.5.7).
- Repairs to the carriageway should be carried out (2.5.8)(2.5.9)

House numbers 187- 199 Main Road Sundridge

This 'House for sale' sign should be removed or relocated.

The wooden fence opposite house number 199 Main Road to the 30mph speed limit gateway exiting Sundridge should be replaced.

- Relocation or removal of the 'House for Sale' sign obscuring the repeater sign should be carried out (2.6.0).
- Replacement of the wooden fence should be considered (2.6.1).

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House numbers 219 - 233 Main Road Sundridge

The Recreational Ground sign opposite house number 219 Main Road should be realigned to improve its visibility splay.

The overhanging tree branch opposite house number 233 should be cut back.

- Sign for the Recreational ground should be realigned (2.6.2).
- The overhanging tree branch should be cut back (2.6.3).

New Road

The directional signs located opposite New Road should be relocated marginally south on the footpath and vegetation cut back to improve its visibility splay.

The carriageway adjacent to New Road and the junction mouth should be repaired and the utility covers reset and new road markings reinstated.

The kerb side entry gully in New Road should be repaired.

There is a non compliant AAT sign located adjacent to New Road and should be removed.

The gullies adjacent New Road junction mouth and the 30mph speed limit gateway signs should be cleaned to reduce ponding and remove excess water from the carriageway.

The wooden structure located adjacent to the New Road Bus stop should be removed.

- The directional signs should be relocated and the vegetation cut back (2.6.4).
- Repairs to the carriageway should be carried out and the utility covers reset (2.6.5).
- The junction mouth should be repaired and road markings reinstated (2.6.6).
- The kerb side entry gully should be repaired (2.6.7).
- The non compliant AAT sign should be removed (2.6.8).
- The gullies adjacent to the junction mouth should be cleaned (2.6.9).
- The wooden structure adjacent to New Road bus stop should be removed (2.7.0).

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

2.6 Summary

Location	Recommendation	Estimated Costs
A25/Chevening Road junction	<p>The vegetation obscuring the tourist sign and the directional signs should be cut back (2.5.1).</p> <p>The junction road surface should be repaired and the utility covers reset and road markings reinstated (2.5.2)</p> <p>The non compliant AAT sign and the 'Ide Hill Development' located on the lamp post should be removed (2.5.3).</p>	<p>Maintenance</p> <p>£ 2700</p> <p>£ 300</p>
Opposite 'White Horse' Public House	<p>The blocked gully should be cleaned (2.5.4).</p> <p>Repairs to the carriageway should be carried out (2.5.5)</p> <p>The 300mm 30mph speed limit sign should be increased in size to 450mm (2.5.6).</p>	<p>Maintenance</p> <p>£ 2700</p> <p>£ 150</p>
Outside house numbers 143 - 145 Main Road	The street lamp should be cleaned and tested (2.5.7).	Maintenance
Carriageway adjacent to the shop and Medical Centre	Repairs to the carriageway should be carried out (2.5.8).	£ 2700
Opposite house number 189 Main Road	Repairs to the carriageway should be carried out (2.5.9)	£ 2700
Opposite house number 187 Main Road	Relocation or removal of the 'House for Sale' sign obscuring the repeater sign should be carried out (2.6.0).	£ 150
Opposite house number 199 Main Road	Replacement of the wooden fence should be considered (2.6.1).	£ 150 per metre length (£ 9000)
Opposite house number 219 Main Road	Sign for the Recreational ground should be realigned (2.6.2).	Maintenance
Opposite house number 233 Main Road	The overhanging tree branch should be cut back (2.6.3).	Maintenance
New Road	<p>The directional signs should be relocated and the vegetation cut back (2.6.4).</p> <p>Repairs to the carriageway should be carried out and the utility covers reset (2.6.5).</p>	<p>£ 150 / Maintenance</p> <p>£ 2700</p>

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

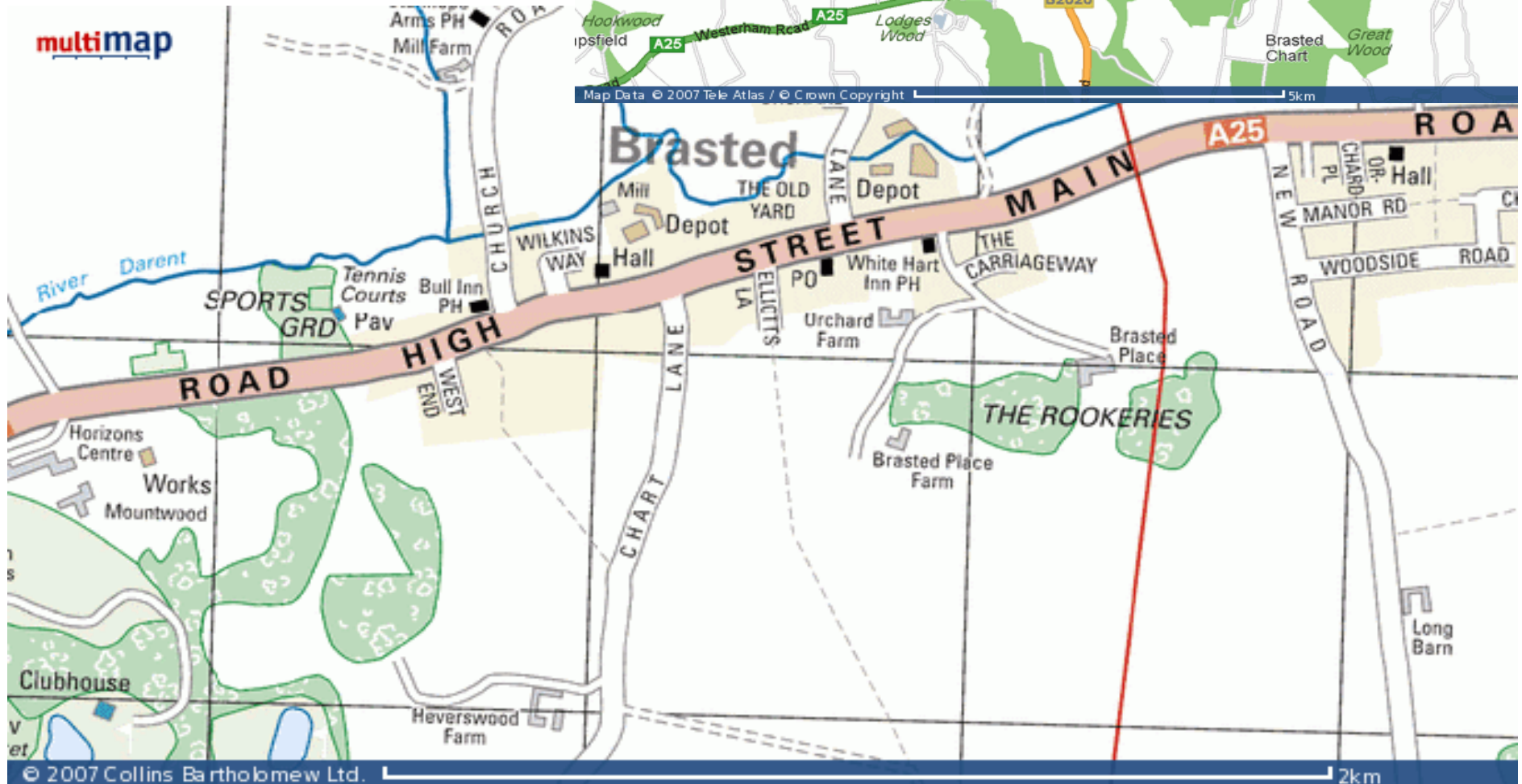
	The junction mouth should be repaired and road markings reinstalled (2.6.6).	£ 2700
	The kerb side entry gully in New Road should be repaired (2.6.7).	Maintenance
	The non compliant AAT sign should be removed (2.6.8).	£ 150
	The gullies adjacent to the junction mouth should be cleaned (2.6.9).	Maintenance
	The wooden structure adjacent to New Road bus stop should be removed (2.7.0).	Maintenance
		Total: £ 26100

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

3 Km

A25 (Dryhill Lane to the Surrey Border)
Route Study

3rd Km section



**A25 (Dryhill Lane to the Surrey Border)
Route Study**

3 Km

Section	Approx length	Speed Limit	Description
3	1.0 Km	30mph	From the 30mph speed limit western gateway feature in Sundridge to outside 'Park Cottage' 'Heverwood Lodge' Brasted.

3.1 Crash Analysis

A total of 5 crashes have occurred in this section of road in the 3 year study period.

3.2 Crash Ratios

Severity

Of the 5 crashes, 0 were fatal, 0 were serious and 5 resulted in slight injury.

The ratio of serious and fatal crashes is 0%, compared with an average of 14% for A roads in Kent for the latest 3 year period available (upto 2006), and the average for the whole route of 23%.

Time

The distribution by time of day indicated that all crashes occurred at peak times.

Dark/Light

All 3 crashes occurred during daylight.

Wet/Dry

All 3 crashes occurred in dry conditions.

3.3 Crash Location and Descriptions

Accident Ref No.	Severity	Location	Description	Vulnerable users
050106981 1	Slight	A25 Westerham Road J/W Church Road, Brasted	Vehicle 1 pulled out "The Bull Inn" Car Park in front of a car that made an emergency stop. The driver of V1 lost control of the vehicle, hit a bank opposite and rebounded into Vehicle 2. V1 then drove away. The driver of V2 found V1 an hour later being recovered and spoke to the driver.	car
050105519 2	Slight	A25 High Street J/W Rectory Lane, Brasted	Vehicle 1 entering main road from minor road failed to observe vehicle 2 and a collision occurred.	car
050113499 3	Slight	A25 High Street J/W Rectory Lane, Brasted	Vehicle 2 (pedal cycle) being driven along pavement adjoining High Street (west to east). Vehicle 1 driven along a private driveway towards	car

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

			the footpath (north to south). The rider of V2 alleges V1 struck her handlebars throwing her from the cycle. The driver of V1 maintains rider fell off her cycle as she approached footpath and no contact was made.	
050117450 4	Slight	A25 High Street 25 metres east of J/W Rectory Lane, Brasted	Vehicle 2 made left turn onto Main Road. Access was clear of approaching vehicles. Once turn was made V2 was hit from rear by Vehicle 1, which had no lights on. V1 then reversed and made off along Rectory Lane.	car
050116362 5	Slight	A25 Main Road, Sundridge	Vehicle 2 was travelling on A25 towards Brasted. Moving traffic in lane opposite. Vehicle 1 then pulled out into the path of V2 from the other side of the road and they collided "head on" on V2's side of the road.	car

3.4 Site observations

The following observations were taken from the 30mph western gateway feature in Sundridge and terminating outside 'Park Cottage' and 'Heverwood Lodge' Brasted.

The road has a 30mph speed limit.

The 30mph speed limit road markings, HFS and 'Dragon's teeth' at the 30mph speed limit gateway are worn and faded with no carriageway edge road markings over this section. There is a 'Neighbourhood Watch' sign secured to the gateway post.



Photo 24 - Road markings are worn

A25 (Dryhill Lane to the Surrey Border) Route Study

House numbers 'Parkview' 168 - 172 Main Road

There is evidence of ponding outside house 'Parkview' 168 Main Road Brasted.

The wooden fence is in a poor condition and sections missing on the footpath adjacent to house number 172. There is a steel fence on the southern carriageway footpath which is in a poor condition and broken in sections, protruding slightly onto the footpath.

Sections of the southern footpath opposite 'Parkview' 168 Main Road to the 30mph eastern speed limit gateway are showing signs of deterioration.

The street lamp bowl outside 168 - 172 Main Road Brasted is missing.

The west bound carriageway, approximately 100 metres in advance of the western 30mph speed limit gateway, Brasted, the utility covers are sunken and surrounds broken.



Photo 25 - Wooden fence is in a poor condition



Photo 26 - Footpath is deteriorating

30mph speed limit gateway feature Brasted

The road markings and HFS are worn and faded. The 30mph speed limit gateway sign on the north side is obscured by vegetation.

A 1 metre high wide base stump post located adjacent to the 30mph gateway feature on the south side has a sharp edge. The illuminated 'Traffic calming' sign has been dislodged and leaning backwards and a 'Slow' road marking adjacent to the sign has faded.

There is a 'Neighbourhood Watch' sign located on a lamp column which is incorrectly positioned obscuring a traffic calming sign.



Photo 27 - Obscured 30mph speed limit sign



Photo 28 - Dislodged sign and worn 'Slow' road marking

A25 (Dryhill Lane to the Surrey Border) Route Study

Opposite 'Tanners'

The illuminated 'Traffic calming' sign has been dislodged and is leaning backwards and a 'Slow' road marking adjacent to the sign has faded. There is a protruding manhole cover in the footpath opposite 'Tanners' that constitute a trip hazard.

There is evidence of ponding on the block work opposite 'Tanners'. Outside 'Paygate' the HFS is cracking and worn.

'Brasted Place'

The double yellow lines on the 'Brasted Place' junction mouth are worn and faded and the gullies in the junction mouth are blocked with debris. There is a redundant post located adjacent to 'Brasted Place' and outside the 'White Hart Inn' Public House.



Photo 29 - Yellow lines are worn and gully is blocked



Photo 30 - There is a redundant pole

'White Hart Inn' Public House

There is a redundant post located outside the 'White Hart Inn' Public House. There are road marker posts on both sides of the carriageway just prior to the 'White Hart Inn' Public House which are coated in grime, some damaged and some with missing reflectors. Opposite the 'White Hart Inn' Public House the carriageway is cracking and deteriorating with evidence of ponding at the carriageway edge.

The utility covers in the footpath outside the 'White Hart Inn' Public House have been unevenly set. There is evidence of ponding on the paved footpath outside the 'White Hart Inn' Public House. The west bound edge of carriageway road markings are worn and faded.

Opposite the entrance to the 'White Hart Inn' Public House car park at the traffic calming island the door to the lamp column is missing.

At the pedestrian crossing an illuminated bollard has been dislodged and the other is coated in grime.

A road marker post outside 'Threshers' is damaged with its reflector and reflective bands missing.

A25 (Dryhill Lane to the Surrey Border) Route Study



Photo 31 - Dislodged illuminating bollard



Photo 32 - Missing lamp column door

'Fine Antiques'

The pedestrian crossing road markings outside 'Fine Antiques' and the 'Slow' road markings outside 'The Mount House' are worn and faded.



Photo 33 - Road markings are worn

'Wisteria House'

The gully outside 'Wisteria House' is blocked with debris and the vegetation is overhanging the footpath opposite the 'Kings Arms' bus stop.

Chart Lane

The Chart Lane junction mouth road surface is in good order and road markings are worn. There is a fly poster secured to the street lamp post opposite Chart Lane.

There are two non compliant AAT signs located outside and opposite 'The Village House'.

The 'Village Hall' and 'Surgery' signs are misaligned on the lamp column.

A25 (Dryhill Lane to the Surrey Border) Route Study

'Nobs Cottage' 2 Main Road

The utility cover located in the paved footpath opposite 'Nobs Cottage' and a section of the footpath has sunken.

Outside 'The Village House' there is evidence of rutting in the carriageway retrenchment and the 'Slow' road marking is worn.



Photo 34 - Footpath has sunken



Photo 35 - Misaligned signs

'Mill House'

The gully opposite 'Mill House' is blocked with debris.

There is a non compliant AAT sign located on the lamp column HBW021 outside 'Chartside House'.

There is evidence of ponding on the footpath outside 'Chartside House'.

The utility covers in the footpath outside 'Chartwell Kitchens' and adjacent to Chart Lane junction mouth are sunken and not flush with the footpath.

Road markings on the west bound carriageway edge from Chart Lane to 'Holmesdale House' are worn and faded.

There is a kerb loose at the junction mouth to Chart Lane.



Photo 36 - Sunken utility covers



Photo 37 - Road markings are worn

A25 (Dryhill Lane to the Surrey Border) Route Study

Church Road Brasted

The main carriageway and the Church Road junction interface are in poor condition with cracking and rutting in evidence.

The Church Road junction mouth and road markings are in a poor condition and there are two stop signs on Church Road leading to the interface with the main carriageway outside the 'Bull Inn' Public House that have non compliant AAT signs secured to the posts.

Outside the 'Bull Inn' Public House there is rutting in the east bound carriageway and the 'Slow' road marking is worn and faded.

The West End junction mouth is in a good condition but at the main carriageway interface with West End there is evidence of rutting, breaking up in the carriageway centre and a pothole forming.

In the carriageway outside 'Hawthorn Cottages' the gully cover is protruding.



Photo 38- Junction mouth is in a poor condition



Photo 39 - Pothole in carriageway

3.5 Discussion / Outline Solutions

30mph speed limit gateway feature Brasted

The 30mph speed limit gateway road markings, HFS and 'Dragon's teeth' and to enhance this gateway feature and enforce the current speed limit, road markings and the HFS should be reinstated. The 'Neighbourhood Watch' sign secured to the gateway post should be removed.

With reference to the ponding outside house 'Parkview' 168 Main Road the road surface requires repairing.

The wooden fence adjacent to house number 172 should be replaced. The footpath opposite 'Parkview' 168 Main Road to the 30mph speed limit gateway should be repaired to improve pedestrian safety.

The street lamp bowl outside house numbers 168 - 77 Main Road Brasted should be replaced and the utility covers reset and repaired.

A25 (Dryhill Lane to the Surrey Border) Route Study

- At the 30mph speed limit eastern gateway the HFS and 'Dragons teeth and road markings should be reinstated (3.5.1).
- The road surface outside 'Parkview' 168 Main Road should be repaired (3.5.2).
- Replace the wooden fence adjacent to house number 172 Main Road (3.5.3).
- The missing street lamp bowl should be replaced (3.5.4).
- Replacement of the steel fence opposite 'Park View' 168 Main Road should be considered (3.5.5).
- The footpath opposite 'Park View' 168 Main Road to the 30mph speed limit gateway should be repaired (3.5.6).
- The utility covers and surrounds in the west bound carriageway should be reset and repaired (3.5.7).

30mph eastern speed limit gateway feature Brasted

The HFS and road markings at the 30mph speed limit gateway feature should be reinstated and the 30mph speed limit gateway sign on the north side should have the vegetation severely cut back to increase the visibility splay.

A 1 metre high wide base post stump located adjacent to the 30mph gateway feature should be capped or removed for pedestrian safety.

The illuminated 'Traffic calming' sign should be realigned and the 'Slow' road marking adjacent to the sign should be reinstated to enforce the current 30mph speed limit.

The 'Neighbourhood Watch' sign located on a street lamp column obscuring the 'Traffic Calming' sign should be repositioned to improve the visibility splay of the sign.

- The High Friction Surface at the 30mph speed limit gateway should be reinstated (3.5.8).
- The 30mph speed limit gateway sign on the east bound carriageway should have the vegetation severely cut back (3.5.9).
- The 1 metre high wide base post stump should be capped or removed (3.6.0).
- The illuminated 'Traffic calming' sign should be realigned and the 'Slow' road marking reinstated (3.6.1).
- The 'Neighbourhood Watch' sign should be repositioned (3.6.2).

A25 (Dryhill Lane to the Surrey Border) Route Study

'Tanners'

The manhole cover opposite 'Tanners' requires resetting to reduce the risk as a trip hazard and the footpath block work opposite 'Tanners' should be repaired.

The HFS outside 'Paygate' should be reinstated as well as the 'Slow' road marking located outside 'Tanners' requires reinstatement to enhance and enforce the 30mph speed limit.

The double yellow lines in the 'Brasted Place' junction mouth should be reinstated to enforce the parking restrictions and the gullies in the 'Brasted Place' junction mouth should be cleaned to reduce ponding and to remove excess water from the carriageway.

The redundant sign post located adjacent to 'Brasted Place' and outside the 'White Hart Inn' Public House should be removed to increase pedestrian access.

- The manhole cover opposite 'Tanners' should be reset (3.6.3).
- The 'Slow' road marking should be reinstated (3.6.4).
- The ponding on the footpath block work should be repaired (3.6.5).
- The High Friction Surface outside 'Paygate' should be reinstated (3.6.6).
- Reinstatement of the double yellow lines in 'Brasted Place' (3.6.7).
- The blocked gullies in 'Brasted Place' junction mouth should be cleaned (3.6.8).

The 'White Hart Inn' Public House

The road marker posts on both sides of the carriageway just prior to the 'White Hart Inn' Public House, require cleaning and or replacement to enhance the demarcation of the carriageway edge.

The carriageway opposite the 'White Hart Inn' Public House should be repaired and to improve pedestrian safety the utility covers in the footpath outside the 'White Hart Inn' Public House should be reset to reduce the risk of a trip hazard.

The paved footpath outside the 'White Hart Inn' Public House requires a section of paved footpath to be levelled and outside the 'White Hart Inn' Public House the edge of carriageway road markings require reinstatement to clearly demarcate the carriageway edge.

The lamp column cover opposite the entrance to 'White Hart Inn' Public House car park and the road marker post outside 'Threshers' should be replaced and to improve the conspicuity of the pedestrian crossing the illuminated bollard should be reinstated and the other requires cleaning.

A25 (Dryhill Lane to the Surrey Border) Route Study

- The unsigned post located outside the 'White Hart Inn' Public House should be removed (3.6.9).
- Replacement of the road marker posts just prior to the 'White Hart Inn' Public House should be considered (3.7.0).
- The road surface opposite the 'White Hart Inn' Public House should be repaired (3.7.1).
- The utility covers in the footpath outside the 'White Hart Inn' Public House should be reset (3.7.2).
- The footpath outside the 'White Hart Inn' Public House should be repaired (3.7.3).
- The road markings on the west bound carriageway outside the 'White Hart Inn' Public House should be reinstated (3.7.4).
- The panel cover on the street lamp column opposite the entrance to the 'White Hart Inn' Public House should be replaced (3.7.5).
- The dislodged pedestrian crossing illumination bollard should be re-erected (3.7.6).
- The illumination bollard covered in grime should be cleaned (3.7.7).
- The damaged road marker should be replaced (3.7.8).

'Fine Antiques'

The pedestrian crossing outside 'Fine Antiques' and 'The Mount House' 'Slow' road markings should be reinstated to enhance and enforce the 30mph speed limit.

- The road markings should be reinstated (3.7.9).
- The 'Slow road markings should be reinstated (3.8.0).

'Wisteria House'

The gully outside 'Wisteria House' should be cleaned to reduce ponding and the vegetation opposite the 'Kings Arms' bus stop should be cut back to improve pedestrian access.

- The blocked gully should be cleaned (3.8.1).
- The vegetation overhanging the footpath should be cut back (3.8.2).

A25 (Dryhill Lane to the Surrey Border) Route Study

Chart Lane

The fly poster sign opposite Chart Lane and the AAT signs located outside and opposite the 'Village House' and outside 'Chartside House' should be removed as well as the 'Village Hall' and 'Surgery' signs on the street lamp column require realignment.

The road markings from Chart Lane to 'Holmesdale House' should be reinstated.

The paved footpath outside 'Chartside House' and 'Chartwell Kitchens' should be levelled and the utility covers reset to reduce the risk of a trip hazard.

- The fly poster secured to the street lamp column should be removed (3.8.3).
- The two non compliant AAT signs located outside and opposite 'Village House' should be removed (3.8.4).
- The 'Village House' and 'Surgery' signs should be realigned (3.8.5).
- The edge of carriageway road markings from Chart Lane to 'Holmesdale House' should be reinstated (3.8.6).
- The paved footpath outside 'Chartwell Kitchens' should be levelled and utility covers reset (3.8.7).
- The non compliant AAT sign located on the lamp column 'HBW021' outside 'Chartside House' should be removed (3.8.8).
- The paved footpath outside 'Chartside House' should be levelled (3.8.9).
- The loose kerb at the junction mouth to Chart Lane should be reset (3.9.0).

'Nobs Cottage' 2 Main Road Brasted

The footpath and utility covers located opposite 'Nobs Cottage' require levelling and the utility covers reset and the gully opposite 'Mill House' should be cleaned to reduce ponding.

- Level footpath and reset the utility covers (3.9.1).
- The blocked gully should be cleaned (3.9.2).

A25 (Dryhill Lane to the Surrey Border) Route Study

Church Road

The carriageway at the junction with Church Road and the Church Road junction mouth should be repaired and road markings reinstated and the AAT signs on the stop signs removed.

The carriageway outside the 'Bull Inn' Public House should be repaired and the 'Slow' road marking reinstated.

- The main carriageway junction interface, junction mouth and road markings should be repaired and road markings reinstated (3.9.3).
- The two non compliant AAT signs should be removed (3.9.4).
- Repairs to the carriageway should be considered (3.9.5).
- The 'Slow road markings should be reinstated (3.9.6).

'West End'

The main carriageway interface with West End should be repaired and the gully cover outside 'Hawthorn Cottages' should be reset.

- The carriageway interface should be repaired (3.9.7).
- The gully cover in the east bound carriageway should be reset (3.9.8).

3.6 Summary

Location	Recommendation	Estimated Costs
30mph speed limit gateway feature	At the 30mph speed limit eastern gateway feature the road markings, HFS and 'Dragons teeth' should be reinstated (3.5.1).	£ 6900
Outside 'Parkview' 168 and house number 172 Main Road	The road surface outside house 'Parkview' 168 Main Road should be repaired (3.5.2). The wooden fence adjacent to house number 172 Main Road should be replaced (3.5.3). The street lamp bowl that is missing should be replaced (3.5.4).	£ 2700 £ 150 per metre length (£ 7500) Maintenance
Opposite 'Parkview' 168 Main Road	Replacement of the steel fence opposite 'Park View' 168 Main Road should be considered (3.5.5)	£ 150 per metre length (£ 7500)

**A25 (Dryhill Lane to the Surrey Border)
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	The footpath opposite 'Parkview 168' to the 30mph speed limit gateway should be repaired (3.5.6).	£ 2000
Approximately 100metres in advance of the 30mph speed limit gateway Brasted	The utility covers and surrounds in the west bound carriageway should be reset and repaired (3.5.7).	Maintenance
30mph speed limit gateway feature	The High Friction Surface at the 30mph speed limit gateway feature should be reinstated (3.5.8).	£ 6900
	The 30mph speed limit gateway sign on the east bound carriageway should have the vegetation severely cut back (3.5.9).	Maintenance
	The 1 metre high wide base post stump should be capped or removed (3.6.0).	£ 500
	The illuminated 'traffic calming' sign should be realigned and the 'Slow' road marking reinstated (3.6.1).	£ 300
	The incorrectly positioned 'Neighbourhood Watch' sign should be repositioned (3.6.2).	£ 150
Opposite 'Tanners'	The manhole cover opposite 'Tanners' should be reset (3.6.3).	Maintenance
	The 'Slow' road marking should be reinstated (3.6.4).	£ 150
	The ponding on the footpath block work should be repaired (3.6.5).	Maintenance
Outside 'Paygate'	The High Friction Surface outside 'Paygate' should be reinstated. (3.6.6).	£ 6900
'Brasted Place'	Reinstate double yellow lines in 'Brasted Place' (3.6.7).	£ 150
	The blocked gullies in the 'Brasted Place' junction mouth should be cleaned (3.6.8).	Maintenance
The 'White Hart Inn' Public House	The unsigned post located outside the 'White Hart Inn' Public House should be removed (3.6.9).	Maintenance
	The road marker posts just prior to the 'White Hart Inn' Public House should be replaced (3.7.0).	Maintenance

**A25 (Dryhill Lane to the Surrey Border)
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	<p>The road surface opposite the 'White Hart Inn' Public should be repaired (3.7.1)</p> <p>The utility covers in the footpath outside the 'White Hart Inn' should be reset (3.7.2).</p> <p>The footpath outside the 'White Hart Inn' Public House should be repaired (3.7.3).</p> <p>The road markings on the west bound carriageway outside the 'White Hart Inn' Public House should be reinstated (3.7.4).</p> <p>The panel cover on the street lamp column opposite the entrance to the 'White Hart Inn' Public House should be replaced (3.7.5).</p> <p>The dislodged pedestrian crossing illumination bollard should be re-erected (3.7.6).</p> <p>The illumination bollard covered in grime should be cleaned (3.7.7).</p>	<p>£ 2700</p> <p>Maintenance</p> <p>£ 2000</p> <p>£ 150</p> <p>Maintenance</p> <p>Maintenance</p> <p>Maintenance</p>
'Threshers'	The damaged road marker post outside 'Threshers' should be replaced (3.7.8).	Maintenance
'Fine Antiques'	The road markings should be reinstated (3.7.9).	£ 150
'The Mount House'	The 'Slow' road markings should be reinstated (3.8.0).	£ 150
'Wisteria House'	The blocked gully should be cleaned (3.8.1).	Maintenance
The 'Kings Arms' bus stop	The vegetation overhanging the footpath should be cut back (3.8.2).	Maintenance
Chart Lane	The fly poster sign secured to the street lamp column should be removed (3.8.3).	£ 150
	The two non compliant AAT signs located outside and opposite the 'Village House' should be removed (3.8.4).	£ 300
	The 'Village House' and 'Surgery' signs should be realigned (3.8.5).	£ 300
	The edge of carriageway road markings from Chart Lane to 'Holmesdale House' should be reinstated (3.8.6).	£ 150

**A25 (Dryhill Lane to the Surrey Border)
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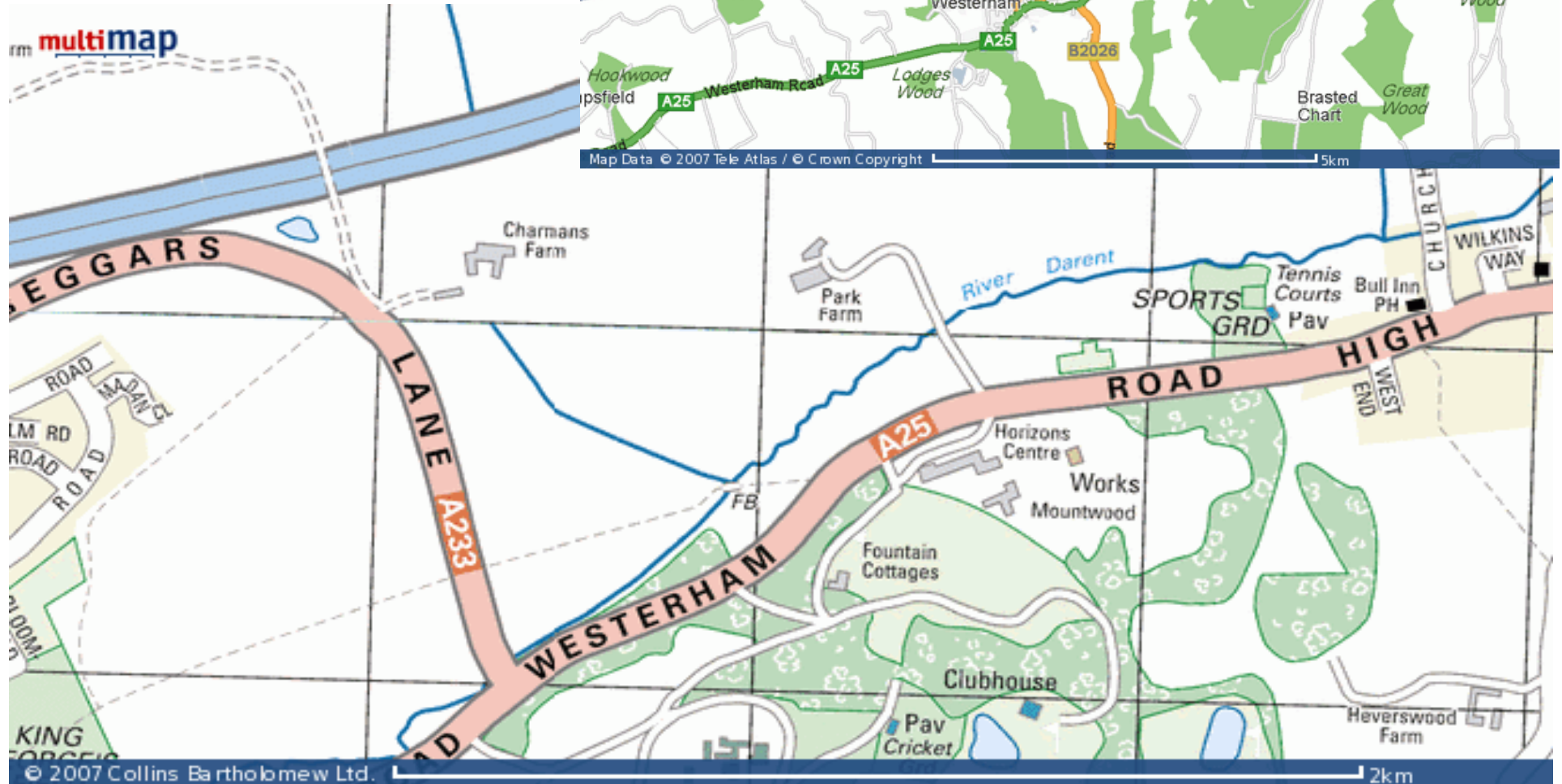
	<p>The paved footpath outside 'Chartwell Kitchens' should be levelled and the utility covers reset (3.8.7).</p> <p>The non compliant AAT sign located on the lamp column 'HBW021' outside 'Chartside House' should be removed (3.8.8).</p> <p>The paved footpath outside 'Chartside House' should be levelled (3.8.9).</p> <p>The loose kerb at the junction mouth to Chart Lane should be reset (3.9.0).</p>	<p>Maintenance</p> <p>£ 150</p> <p>Maintenance</p> <p>Maintenance</p>
'Nobs Cottage'	Level footpath and reset the utility covers (3.9.1).	£ 2000
Outside 'Mill House'	The blocked gulley should be cleaned (3.9.2).	Maintenance
Church Road	<p>The main carriageway junction interface, junction mouth and road markings for Church Road should be repaired and road markings reinstated (3.9.3).</p> <p>The two non compliant AAT signs should be removed (3.9.4).</p> <p>Repairs to the carriageway should be considered (3.9.5).</p> <p>The 'Slow' road markings should be reinstated (3.9.6).</p>	<p>£ 2700</p> <p>£ 300</p> <p>£ 2700</p> <p>£ 150</p>
'West End'	The carriageway interface should be repaired (3.9.7).	£ 2700
'Hawthorn Cottage'	The gully cover in the east bound carriageway should be reset (3.9.8).	Maintenance
		Total: £ 58400

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

4 Km

A25 (Dryhill Lane to the Surrey Border) Route Study

4th Km Section



**A25 (Dryhill Lane to the Surrey Border)
Route Study**

4 Km

Section	Approx length	Speed Limit	Description
3	0.15Km	30mph	From outside 'Park Cottage' and 'Heverwood Lodge' Brasted to the National speed limit gateway Brasted. Single carriageway with street lights and repeaters in place.
4	0.85Km	National	From the National speed limit gateway Brasted to the junction to the Westerham Golf Club. Single carriageway with repeaters.

4.1 Crash Analysis

A total of 1 crash has occurred in this section of road in the 3 year study period.

4.2 Crash Ratios

Severity

Of the 1 crash, 0 was fatal, 1 was serious and 0 resulted in slight injury.

The ratio of serious and fatal crashes is 33%, compared with an average of 14% for A roads in the latest 3 year period available (upto 2006), and the average for the whole route of 23%.

Time

The distribution by time of day indicates that the 1 crash occurred at a non-peak time.

Dark/Light

The 1 crash occurred during daylight.

Wet/Dry

2 of the 6 crashes occurred in the wet, with a further crash occurring in icy conditions.

4.3 Crash Location and Descriptions

Accident Ref No.	Severity	Location	Description	Vulnerable users
060130158 1	Serious	A25 Westerham Road 350 metres east of J/W A233 Beggars Lane, Brasted	Inexperienced rider failed to negotiate right hand bend, clipped kerb and fell from machine.	m/cycle 50 - 125cc

A25 (Dryhill Lane to the Surrey Border) Route Study

4.4 Site observation

The following observations were taken from outside 'Park Cottage' and 'Heverwood Lodge' Brasted and terminating at the junction to 'Westerham Golf Club'.

The road has a 30mph speed limit increasing to 50mph speed limit 100metres west of 'Heverwood Lodge'.

Park Cottage and Heverwood Lodge

The road marker post opposite 'Heverwood Lodge' is damaged, with reflector missing and reflector bands peeling off. In the carriageway the 'Slow' road marking is worn and faded.

The Kee Klamp steel and concrete post fence starting on the western side adjacent to 'Park Cottage' along the footpath to the 50mph speed limit western gateway feature of Brasted, has sections where the top and bottom steel pipes have disconnected from the adjacent pipes and the footpath edge is breaking away and uneven.

The road marker posts located approximately 15metres west adjacent to 'Park Cottage and 'Heverwood Lodge' are coated in grime and some reflectors missing.

The road surface around a gully is cracked and breaking away.

There is a 30mph speed limit interactive sign located approximately 5metres west of 'Park Cottage' partly obscured by vegetation.

The 'Slow' road marking located approximately 40metres east of the 30/50mph speed limit gateway feature is worn and faded. There is no edge of carriageway road markings over this section and the HFS and main carriageway is cracking and breaking up.



Photo 40 - Road marker posts are coated in grime



Photo 41 - Footpath subsiding

30/50mph speed limit gateway feature

The section of HFS located at the illuminated 30/50mph speed limit gateway feature is showing signs of severe deterioration, the 30mph speed limit and 'Dragons Teeth' road markings are worn and faded.

The illuminated 30/50mph speed limit gateway feature is in good order.

The 'Playground' sign located approximately 110metres west from the 30/50mph speed limit gateway feature is obscured by vegetation and has faded.

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The road surface from the 30/50mph speed limit gateway feature to just west of the entrance to H.S.W Timber Co Ltd is deteriorating with cracks, surface breaking away, rutting and evidence of ponding.

The concrete and steel fence starting from the entrance to the 'Recreation Ground' in Brasted to 'Park Farm' cottage has some concrete posts broken and steel piping disconnected.

The 50mph speed limit repeater signs located over this section of the carriageway are in good order.



Photo 42- HFS broken away and road markings are worn



Photo 43 - Road surface deteriorating

H.S.W Timber Co Ltd

At the eastern junction interface with the entrance to H.S.W Timber Co Ltd the carriageway edge has a section broken and missing where ponding is evident. The junction interface with the main carriageway has kerb slabs embedded in concrete along the junction mouth with the west side uneven and ponding is evident.

The 'Park Farm' Cottage junction mouth is in poor condition and the carriageway outside 'Park Farm' Cottage to the 'Brasted Lodge' bus stop is cracking with deep rutting, potholes and with two utility covers sunken on the edge of the west bound carriageway.

There are two gullies on the east bound carriageway just prior to the pedestrian crossing blocked and sunken.

The gullies just prior to the pedestrian crossing on the west bound carriageway are blocked.

At the pedestrian crossing there is gravel build up, an illuminated bollard is coated in grime and the other has cracked. There is one flood light defective and the other coated in grime. The 'Look Right' road markings at the pedestrian crossing are worn.

A25 (Dryhill Lane to the Surrey Border) Route Study



Photo 44 - Junction interface is in a poor condition



Photo 45 - Carriageway deteriorating

‘Charles Dean Developments’

Opposite ‘Charles Dean Developments’ the utility covers have sunken and carriageway is cracking.

There is a redundant post opposite ‘Charles Dean Developments’ reducing the width of the footpath.

There are sections of the footpath which are uneven between the pedestrian crossing and the ‘Public footpath’ and could constitute a trip hazard.



Photo 46 - Footpath uneven and an unsigned post

The ‘Public footpath’

A section of the footpath has broken away at the ‘Post office telephones’ access point adjacent to the ‘Public footpath’.

The ‘School’ sign located approximately 10 metres west of the ‘Public footpath’ is partly obscured by a hedge.

Opposite the ‘School’ sign to the Westerham Golf Club/Valance School the carriageway has sunken with rutting and road surface cracking and breaking up.

A25 (Dryhill Lane to the Surrey Border) Route Study



Photo 47 - Footpath broken away at 'Post Office Telephones' utility cover



Photo 48 - Carriageway deteriorating

4.5 Discussion /Outline Solutions

'Park' Cottage and 'Heverwood' Lodge

The road marker posts from 'Park Cottage' and 'Heverwood Lodge' require cleaning and or replacing to clearly demarcate the carriageway edge and the 'Slow' road marking outside 'Park Cottage' should be reinstated to enhance and enforce the 30mph speed limit.

The Kee Klamp steel and concrete post fence adjacent to 'Park Cottage' should be replaced and the footpath to the Recreational Ground should be repaired.

The High Friction Surfacing located on the carriageway between the road marker posts should be reinstated to increase skid resistance just prior to the bend outside 'Heverwood Lodge' and 'Park Cottage'.

The road surface around a gully should be repaired to reduce ponding. The vegetation should be cut back to increase the signs conspicuity and enforce the current 30mph speed limit

- The damaged road marker post opposite 'Heverwood Lodge' should be replaced (4.5.1).
- The Kee Klamp Steel and concrete fence should be replaced by a panelled wooden fence (4.5.2).
- The footpath should be repaired (4.5.3).
- The road marker posts should be cleaned and road markers with missing reflectors should be replaced (4.5.4).
- The HFS located on the carriageway between the road markers should be reinstated (4.5.5).
- The road surface around a gully should be repaired (4.5.6).

A25 (Dryhill Lane to the Surrey Border) Route Study

- The vegetation partly obscuring the 30mph interactive speed limit sign should be cut back (4.5.7).
- Reinstate 'Slow' road markings (4.5.8).

30/50mph speed limit gateway feature Brasted

The carriageway and HFS at 30/50mph speed limit gateway feature requires repairing and road markings reinstated to enhance the gateway feature and enforce the speed limit.

The 'Playground' sign located approximately 110metres west from the 30/50mph speed limit gateway feature this should be replaced and the vegetation cut back to enhance the location of the 'Play Ground' and improve pedestrian safety.

The road surface from the 30/50mph speed limit gateway feature to the entrance to H.S.W Timber Co Ltd should be repaired.
The steel and concrete post fence starting from the entrance to the Recreation Ground to 'Park Farm' cottage should be replaced with a panelled wooden fence.

The conspicuity of the 450mm 50mph speed limit repeater signs located over this section of the carriageway is good.

- The HFS, road markings should be reinstated (4.5.9).
- Reinstate 'Slow' road markings (4.6.0)
- The 'Playground ' sign should be replaced and the vegetation cut back (4.6.1)
- The edge of carriageway road markings should be installed (4.6.2).
- Repair road surface from the 30/50mph speed limit gateway to the H.S.W Timber Co Ltd. (4.6.3).
- The Kee Klamp steel and concrete fence should be replaced by a panelled wooden fence (4.6.4).

H.S.W Timber Co Ltd

The junction interface to H.S.W Timber Co Ltd should be repaired to reduce ponding on the carriageway.

The 'Park Farm' Cottage Road junction interface with the main carriageway requires resurfacing for a minimum of 25 metres.

The carriageway outside 'Park Farm' Cottage to the 'Brasted Lodge' bus stop should be repaired and the utility covers reset.

A25 (Dryhill Lane to the Surrey Border) Route Study

The gullies on the carriageway between H.S.W Timber Co Ltd and just prior to the pedestrian crossing, should be reset and cleaned to reduce ponding and to remove excess water from the carriageway.

At the pedestrian crossing the gravel build up, the illuminated bollard and floodlights should be cleaned, repaired and the illuminated bollard should be replaced to improve pedestrian safety and enhance the conspicuity.

The 'Look Right' road markings at the pedestrian crossing should be reinstated.

- The carriageway interface to H.S.W Timber Co Ltd should be repaired (4.6.5).
- Repair the 'Park Farm' Cottage junction mouth (4.6.6).
- The gullies between H.S.W Timber Co Ltd to the pedestrian crossing should be reset and cleaned (4.6.7).
- The gravel build up at the pedestrian crossing should be removed and the illumination bollard cleaned and the other replaced (4.6.8).
- The floodlights at the pedestrian crossing should be repaired and cleaned (4.6.9).
- The 'Look Right' road markings at the pedestrian crossing should be reinstated (4.7.0).

'Charles Dean Developments'

At 'Charles Dean Developments' consideration should be given to have the utility covers reset and road surface repaired.

The redundant post opposite the 'Charles Dean Developments' should be removed and sections of the footpath between the pedestrian crossing and the 'Public footpath' repaired to improve pedestrian access and safety.

- Reset sunken utility covers and repair road surface (4.7.1).
- The unsigned post located on the footpath should be removed (4.7.2).
- The sections of the uneven footpath should be repaired (4.7.3)

A25 (Dryhill Lane to the Surrey Border) Route Study

'Public footpath'

A section of the footpath at the 'Post office telephones' access point adjacent to the 'Public footpath' and should be repaired to improve pedestrian safety.

The repairs to the carriageway from 'School' sign to the Westerham Golf Club should be considered due to the heavy volume of traffic and all the gullies cleaned to reduce ponding and to remove excess water from the carriageway.

- Repair footpath at the 'Post Office telephones' access point (4.7.4).
- The 'School' sign partly obscured by a hedge should be cut back (4.7.5).
- Repair carriageway from the 'School' sign to the Westerham Golf Club (4.7.6).

4.6 Summary

Location	Recommendations	Estimated Costs
'Heverwood Lodge' and 'Park Cottage'	The damaged road marker post opposite 'Heverwood Lodge' should be replaced (4.5.1).	Maintenance
	The Kee Klamp steel and concrete fence should be replaced by a panelled wooden fence (4.5.2).	£ 150 per metre length (£ 10500)
	The footpath should be repaired (4.5.3).	£ 2000
	The road marker posts should be cleaned and road markers with missing reflectors should be replaced (4.5.4).	Maintenance
	The HFS located on the carriageway between the road markers should be reinstated (4.5.5).	£ 6900
	The road surface around a gully should be repaired (4.5.6).	Maintenance
	The vegetation partly obscuring the 30mph interactive speed limit sign should be cut back (4.5.7).	Maintenance
	Reinstate 'Slow' road marking (4.5.8).	£ 150

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<p>30/50mph speed limit gateway feature</p>	<p>The HFS, road markings should be reinstated (4.5.9).</p> <p>Reinstate 'Slow' road markings (4.6.0)</p> <p>The 'Playground' sign should be replaced and the vegetation cut back (4.6.1).</p> <p>The edge of carriageway road markings should be installed (4.6.2).</p> <p>Repair the road surface from the 30/50mph speed limit gateway to the H.S.W Timber Co Ltd (4.6.3).</p> <p>The Kee Klamp steel and concrete fence should be replaced by a panelled wooden fence (4.6.4).</p>	<p>£ 6900</p> <p>£ 150</p> <p>£ 150</p> <p>£ 150</p> <p>£ 2700</p> <p>£ 150 per metre length (£ 20000)</p>
<p>H.S.W Timber Co Ltd</p>	<p>The carriageway interface to H.S.W Timber Co Ltd should be repaired (4.6.5).</p> <p>Repair the 'Park Farm' Cottage junction mouth (4.6.6).</p> <p>The gullies between H.S.W Timber Co Ltd to the pedestrian crossing should be reset and cleaned (4.6.7).</p> <p>The gravel build up at the pedestrian crossing should be removed and the illumination bollard cleaned and the other replaced (4.6.8).</p> <p>The floodlights at the pedestrian crossing should be repaired and cleaned (4.6.9).</p> <p>The 'Look Right' road markings at the pedestrian crossing should be reinstated (4.7.0).</p>	<p>£ 2700</p> <p>£ 2700</p> <p>Maintenance</p> <p>Maintenance</p> <p>Maintenance</p> <p>£ 150</p>

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

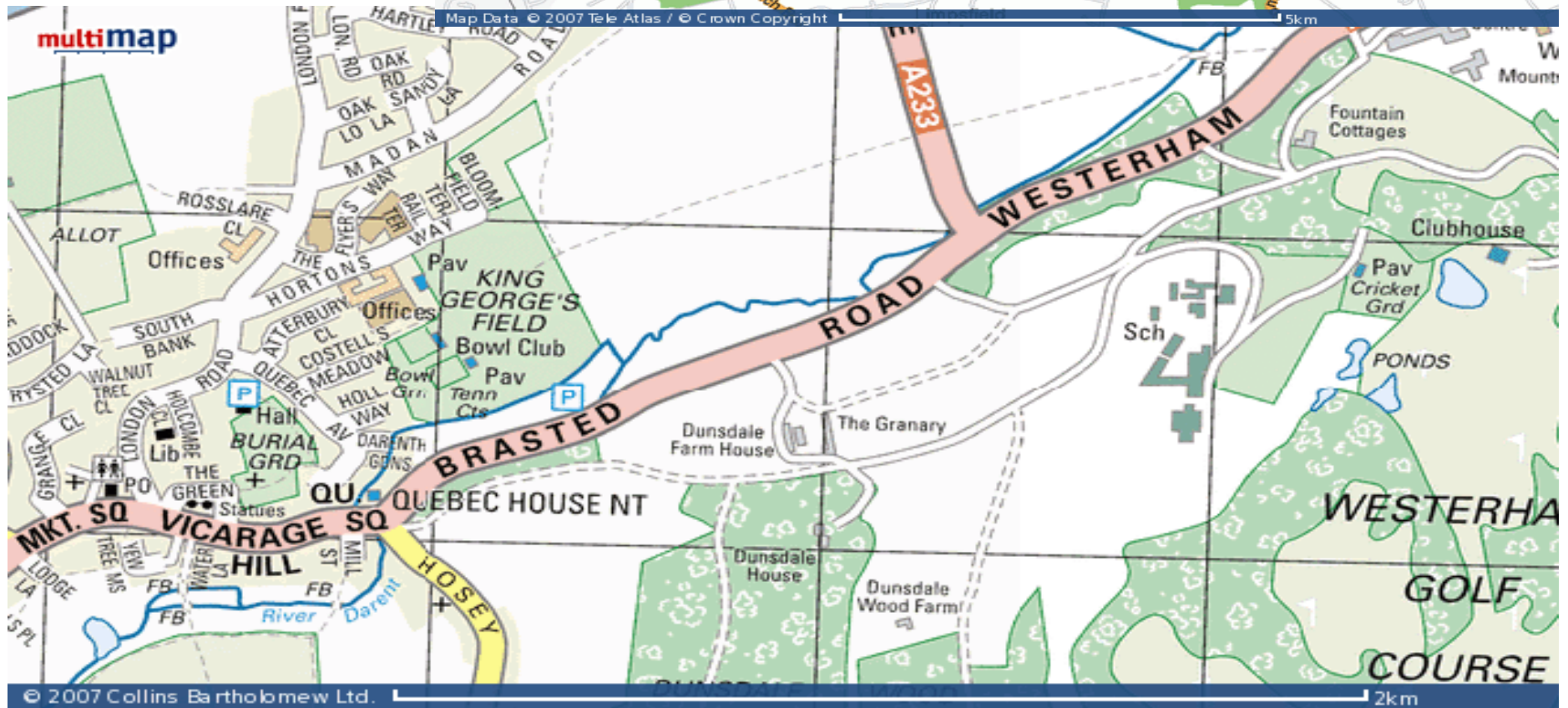
<p>'Charles Dean Development'</p>	<p>The carriageway opposite the 'Charles Dean Developments' with sunken utility covers and road surface cracking and potholes should be repaired (4.7.1).</p> <p>The unsigned post located on the footpath opposite 'Charles Dean Developments' should be removed (4.7.2).</p> <p>The sections of the footpath which are uneven between the pedestrian crossing and the 'Public footpath' should be repaired (4.7.3).</p>	<p>£ 2700</p> <p>Maintenance</p> <p>£ 2000</p>
<p>'Public footpath'</p>	<p>Repair footpath at the 'Post Office telephones' access point (4.7.4).</p> <p>The 'School' sign partly obscured by a hedge should be cut back (4.7.5).</p> <p>Repair carriageway from the 'School' sign to the Westerham Golf Club (4.7.6).</p>	<p>£ 2000</p> <p>Maintenance</p> <p>£ 2700</p>
		<p>Total: £ 64550</p>

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

5 Km

A25 (Dryhill Lane to the Surrey Border)
Route Study

5th Km section



**A25 (Dryhill Lane to the Surrey Border)
Route Study**

5 Km

Section	Approx length	Speed Limit	Description
4	0.87Km	50mph	From Westerham Golf Club and Valance School junction to approximately 130metres east of the Darent car park Westerham. Single carriageway with repeaters.
4	0.13km	30mph	From the 30mph speed limit eastern gateway Westerham to approximately 10metres after the Darent car Park. Single carriageway.

5.1 Crash Analysis

A total of 5 crashes have occurred in this section of road in the 3 year study period.

5.2 Crash Ratios

Severity

Of the 5 crashes, 0 were fatal, 0 were serious and 5 resulted in slight injury.

The ratio of serious and fatal crashes is 0%, compared with an average of 14% for A roads in Kent for the latest available 3 year period (upto 2006), and the average for the whole route of 23%.

Time

The distribution by time of day indicated that all 4 crashes occurred at non-peak times.

Dark/Light

1 of the 4 crashes occurred in the dark.

Wet/Dry

All 4 crashes occurred in the wet.

5.3 Crash Location and Descriptions

Accident Ref No.	Severity	Location	Description	Vulnerable users
070142386 1	Slight	A25, Darent Valley Car Park, Westerham	Vehicle 1 possibly overtaking motor cyclist (unknown) into path of Vehicle 2.	m/cycle 125-500cc car
050112592 2	Slight	A25, 50 metres south of Darent Valley Car Park, Westerham	Vehicle 1 travelling west on A25 veered over centre line hitting Vehicle 2. V1 failed to stop.	car
060125235 3	Slight	A25 London Road J/W Beggars Lane, Westerham	Vehicle 2 travelling along Beggars Lane and stopped at J/W A25 London Road. Vehicle 1 pulled up behind. V2 pulled away slowly and stopped. V1 did not see	car

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

			V2. Has stopped and collided into rear of V2 causing minor damage	
050112070 4	Slight	A25 London Road J/W Beggars Lane, Westerham	Vehicle 1 was behind Vehicle 2. They were both stationary. The driver of V1 sneezed and then realised he had hit V2. Details were exchanged, but now the driver of V2 is claiming to be injured.	car
050107768 5	Slight	A25 Brasted Road J/W Beggars Lane, Westerham	Vehicle 2 travelling east towards Sevenoaks when Vehicle 1 pulled out of the junction at Beggars Lane. V1 collided with V2 in the middle of the junction causing front end damage to V1 and front offside damage to V2	car

5.4 Site observations

The following observations were taken from the junction for Westerham Golf Club/Valance School and terminating just after the junction to the Darent Car Park Westerham.

The road has a 50mph speed limit reducing to 30mph speed limit 130metres east of Darent Car Park entrance.

Westerham Golf Club / Valance school

The pedestrian crossing at the Westerham Golf Club/Valance School entrance has defective flood lights and the illuminated bollards are coated in grime.

The gullies from the 'School' sign up to the Westerham Golf Club/Valance School entrance are blocked.

There is rutting at the trench reinstatement across the carriageway adjacent to the junction mouth for Westerham Golf Club/Valance School and evidence of ponding opposite the entrance.

The road surface around a manhole cover located in the carriageway at the pedestrian crossing is in a poor condition.

The pedestrian crossing located approximately 110metres west for Westerham Golf Club/Valance School entrance has defective flood lights and the illuminated bollards are coated in grime.

There is an illegal sign secured to the pedestrian crossing refuge indicator.

The utility covers located in the carriageway adjacent to the pedestrian crossings have sunken and one has a cover missing.

The gullies leading up to the pedestrian crossings are blocked and a gully located approximately 15metres west of the pedestrian crossing is blocked and the road surface around it is breaking up.

In this section the road markings are generally in good order.

A25 (Dryhill Lane to the Surrey Border) Route Study



Photo 49 - Rutting in the carriageway



Photo 50 - Manhole cover surrounds breaking up

Beggars Lane

Prior to the junction with Beggars Lane the directional sign for the A233 is partly obscured by vegetation and the signage at the junction for the A25/A233 is in good order.

At the junction mouth for the A233 there is evidence of rutting and opposite the junction mouth a gulley has sunken and carriageway is cracking and carriageway edge is deteriorating.



Photo 51 - Partly obscured sign



Photo 52 - Carriageway edge is deteriorating

Valance Lodge

Adjacent to the eastern pedestrian crossing at the junction leading to Valance Lodge the carriageway is cracking and the surface is breaking up and the eastern pedestrian crossing at the junction to Valance Lodge has one defective floodlight and the other is coated in grime. The floodlights at the pedestrian crossing are coated in grime and this severely impacts on the illuminating splay.

The western pedestrian crossing has a large amount of debris build up. The floodlights at the pedestrian crossing are coated in grime and severely impacts on the illuminating splay.

A branch from a fallen tree just prior to the western pedestrian crossing is partly obstructing free access on the footpath.

The road marker posts at the western pedestrian crossing are damaged and are coated in grime severely diminishing their reflective quality.

A25 (Dryhill Lane to the Surrey Border) Route Study



Photo 53 - Road surface is deteriorating



Photo 54 - Floodlights are coated in grime

‘Dunsdale House’

There is evidence that the road surface from the western pedestrian crossing to ‘Dunsdale House’ bus stop is deteriorating with surface breaking away and adjacent to the bus stop small potholes are forming.

There is evidence that a portion of the footpath commencing from the centre of the footpath to verge edge is subsiding.

The west bound carriageway edge from approximately 300metres from ‘Dunsdale House’ is deteriorating to the 30mph speed limit eastern gateway in Westerham.



Photo 55 - Carriageway is deteriorating



Photo 56 - Footpath verge subsiding

30/50mph terminal speed limit gateway feature Westerham

The steel and concrete post fence starting approximately 150metres east from the 30mph terminal speed limit gateway feature on the approach to Westerham is in a poor condition.

The footpath commencing approximately 150metres east from the 30/50mph terminal speed limit gateway feature on the approach to Westerham to the junction with Darent Car Park is in a very poor condition and constitutes a trip hazard where severe subsidence is evident and is about to impact onto the carriageway adjacent to the 30mph terminal speed limit gateway feature.

There is a 30/50mph terminal speed limit sign on the eastern bound carriageway is missing.

A25 (Dryhill Lane to the Surrey Border) Route Study

The HFS adjacent to the 30/50mph terminal speed limit gateway feature on the eastern approach to Westerham is breaking up and worn.



Photo 57 - Footpath is subsiding



Photo 58 - HFS is breaking up and worn

Darent Car Park

The junction mouth to Darent Car Park is deteriorating with potholes, rutting and ponding is in evidence on the eastern exit.

The kee Klamp steel and concrete post fence starting from Darent Car Park to the car park footpath access has some concrete posts broken.

The gullies along this section are blocked.



Photo 59 - Junction mouth deteriorating

5.5 Discussion / Outline Solution

Westerham Golf Club / Valance school

To enhance the pedestrian crossing at the entrance to the Westerham Golf Club/Valance School the flood lights should be repaired and the illuminated bollards cleaned.

The trench reinstatement, the carriageway adjacent to the junction mouth for Westerham Golf Club/Valance School and the surface surrounds a manhole cover outside the entrance to Valance School should be repaired.

A25 (Dryhill Lane to the Surrey Border) Route Study

The floodlights at the pedestrian crossing located west of Westerham Golf Club/Valence School entrance should be repaired and the illuminated bollards should be cleaned to enhance the pedestrian crossing.

The fly poster secured to the refuge indicator lamp column should be removed.

All the gullies in this section should be cleaned to reduce ponding and remove excess water from the carriageway.

The utility covers located in the carriageway adjacent to the pedestrian crossings should be reset and or replaced

- The flood lights at the pedestrian Crossing should be repaired (5.5.1).
- Clean the illuminated bollards (5.5.2)
- The gullies over this section should be cleaned (5.5.3).
- Repair the trench reinstatement across the carriageway adjacent to the junction to Westerham Golf Club/Valence School (5.5.4).
- The carriageway opposite the entrance to Westerham Golf Club/Valence School should be repaired (5.5.5).
- Repair road surface around a manhole cover located in the carriageway at the pedestrian crossing (5.5.6).
- The floodlights should be repaired at the pedestrian crossing located approx 110 metres West of Westerham Golf Club/Valence School entrance (5.5.7).
- The sign secured to the pedestrian crossing lamp column should be removed (5.5.8).
- The gullies over this section should be cleaned (5.5.9).
- The utility covers located in the carriageway should be reset and the missing one should be replaced (5.6.0).
- The blocked gully with the broken road surface should be cleaned and repaired (5.6.1).

Beggars Lane

The junction interface for the A233 and the main carriageway should be repaired due to the heavy volume of traffic.

- Repair the A233 junction interface and the main carriageway (5.6.2).
- The gully opposite the A233 junction mouth should be reset (5.6.3).

A25 (Dryhill Lane to the Surrey Border) Route Study

Valance Lodge

The carriageway adjacent to the pedestrian crossing at the junction leading to 'Valance Lodge' should be repaired.

The pedestrian crossings to 'Valance Lodge' should be enhanced by having the floodlights cleaned and repaired to improve visibility splay and the western pedestrian crossing cleaned to improve pedestrian safety.

A branch from a fallen tree just prior to the western pedestrian crossing on the footpath should be removed to allow full pedestrian access.

To enhance the pedestrian crossing the road marker posts should be cleaned and replaced.

The carriageway from the western pedestrian crossing to 'Dunsdale House' bus stop requires repairing.

- Repair carriageway at junction to 'Valance Lodge' (5.6.4).
- The floodlight at the pedestrian crossing at the junction to 'Valance Lodge' should be repaired and the other cleaned (5.6.5).
- At the western pedestrian crossing the build up of debris should be removed (5.6.6).
- The branch from a fallen tree just prior to the western pedestrian crossing should be removed (5.6.7).
- The floodlights which are coated with grime should be cleaned (5.6.8).
- The road markers that are damaged should be replaced and the ones coated in grime should be cleaned (5.6.9).
- The carriageway from the western pedestrian crossing adjacent to 'Valance Lodge' to 'Dunsdale House' should be repaired (5.7.0).
- The edge of carriageway road markings should be reinstated (5.7.1).

'Dunsdale House'

The carriageway road markings in this section should be installed.

The footpath and the southern carriageway edge from 'Dunsdale House' should be repaired.

- Repair footpath from 'Dunsdale House' bus stop (5.7.2)
- Repair carriageway from 'Dunsdale House' to just prior to the 30/50mph speed limit gateway signs (5.7.3).

**A25 (Dryhill Lane to the Surrey Border)
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30/50mph speed limit gateway feature Westerham

The steel and concrete post fence should be replaced with a panelled wooden fence and the footpath repaired as a matter of urgency.

To enhance and enforce the 30/50mph terminal speed limit 30/50mph sign on carriageway and the HFS at the 30/50mph terminal speed limit signs and the road markings should be reinstated.

- The Kee Klamp steel and concrete post fence should be replaced (5.7.4).
- Footpath should be repaired (5.7.5).
- Replace the eastern 30/50mph terminal speed limit gateway sign (5.7.6).
- The HFS at the eastern 30/50mph terminal speed limit gateway signs should be reinstated (5.7.7).

Darent Car Park

Resurfacing of the Darent Car Park junction mouth should be considered and the road surface around a manhole adjacent to the Darent Car Park junction mouth should be repaired.

- The junction mouth should be repaired (5.7.8).
- Repair road surface around the manhole (5.7.9).

5.6 Summary

Location	Recommendation	Estimated Costs
Westerham Golf Club / Valance School	The flood lights at the pedestrian Crossing should be repaired (5.5.1).	Maintenance
	Clean the illuminated bollards (5.5.2)	Maintenance
	The gullies over this section should be cleaned (5.5.3).	Maintenance
	Repair the trench reinstatement across the carriageway adjacent to the junction to Westerham Golf Club/Valance School (5.5.4).	Maintenance
	The carriageway opposite the entrance to Westerham Golf Club/Valance School should be repaired (5.5.5).	£ 2700

**A25 (Dryhill Lane to the Surrey Border)
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	<p>Repair road surface around a manhole cover located in the carriageway at the pedestrian crossing (5.5.6).</p> <p>The floodlights should be repaired at the pedestrian crossing located approx 110 metres west of Westerham Golf Club/Valence School entrance (5.5.7).</p> <p>The sign secured to the pedestrian crossing lamp column should be removed (5.5.8).</p> <p>The gullies over this section should be cleaned (5.5.9).</p> <p>The utility covers located in the carriageway should be reset and the missing one should be replaced (5.6.0).</p> <p>The blocked gully with the broken road surface should be cleaned and repaired (5.6.1).</p>	<p>Maintenance</p> <p>Maintenance</p> <p>£ 150</p> <p>Maintenance</p> <p>Maintenance</p> <p>Maintenance</p>
Beggars Lane	<p>Repair the A233 junction interface and the main carriageway (5.6.2).</p> <p>The gully opposite the A233 junction mouth should be reset and the carriageway repaired (5.6.3).</p>	<p>£ 2700</p> <p>£ 2700</p>
Valance Lodge	<p>Repair carriageway at junction to Valance Lodge (5.6.4).</p> <p>The floodlight at the pedestrian crossing at the junction to Valance Lodge should be repaired and the other cleaned (5.6.5).</p> <p>At the western pedestrian crossing the large build up of debris should be removed (5.6.6).</p> <p>The branch from a fallen tree just prior to the western pedestrian crossing should be removed (5.6.7).</p> <p>The floodlights which are coated with grime should be cleaned (5.6.8).</p> <p>The road markers that are damaged should be replaced and the ones coated in grime should be cleaned (5.6.9).</p> <p>The carriageway from the western pedestrian crossing adjacent to Valance Lodge to Dunsdale House should be repaired (5.7.0).</p>	<p>£ 2700</p> <p>Maintenance</p> <p>Maintenance</p> <p>Maintenance</p> <p>Maintenance</p> <p>Maintenance</p> <p>£ 2700</p>

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

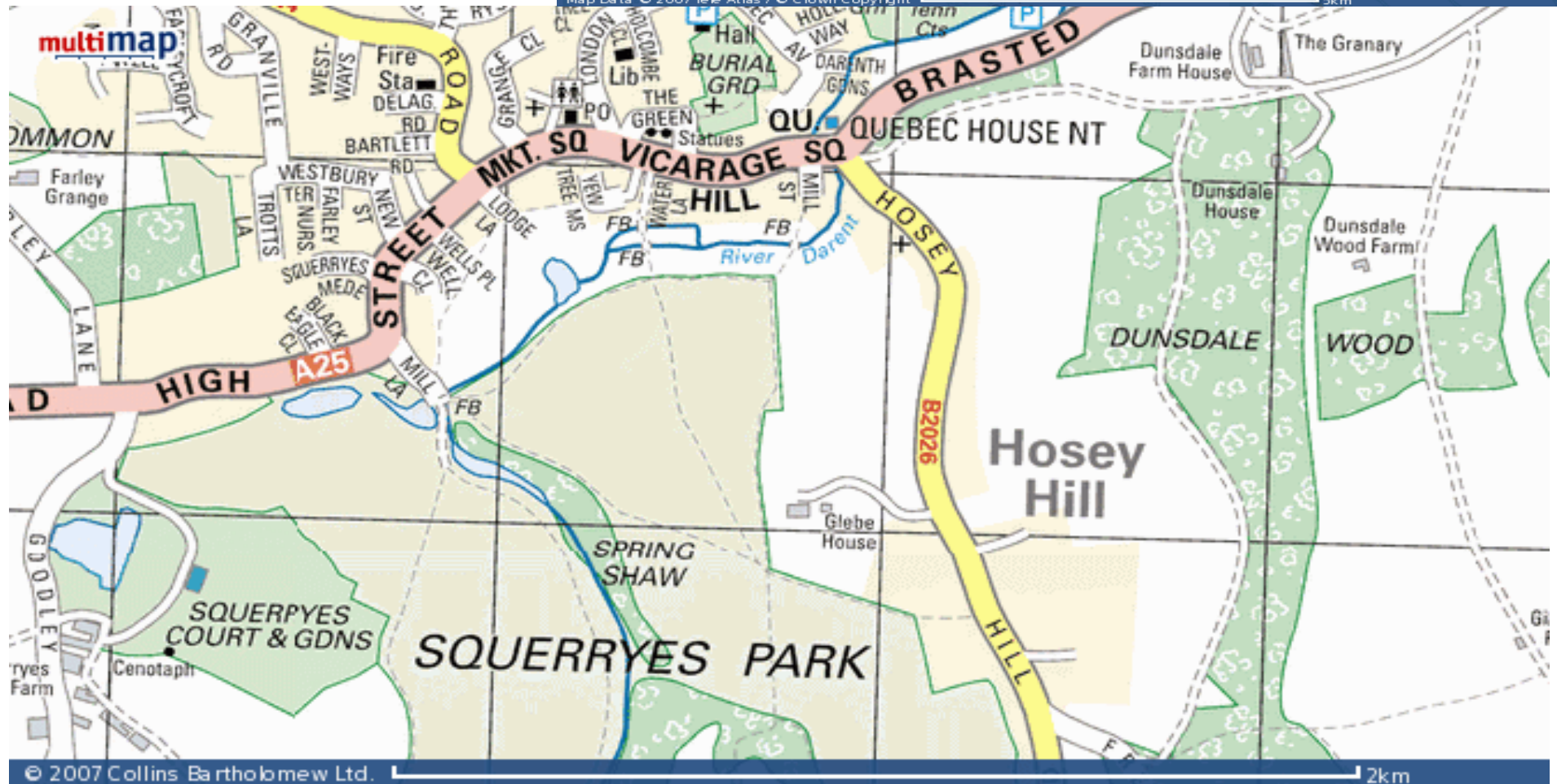
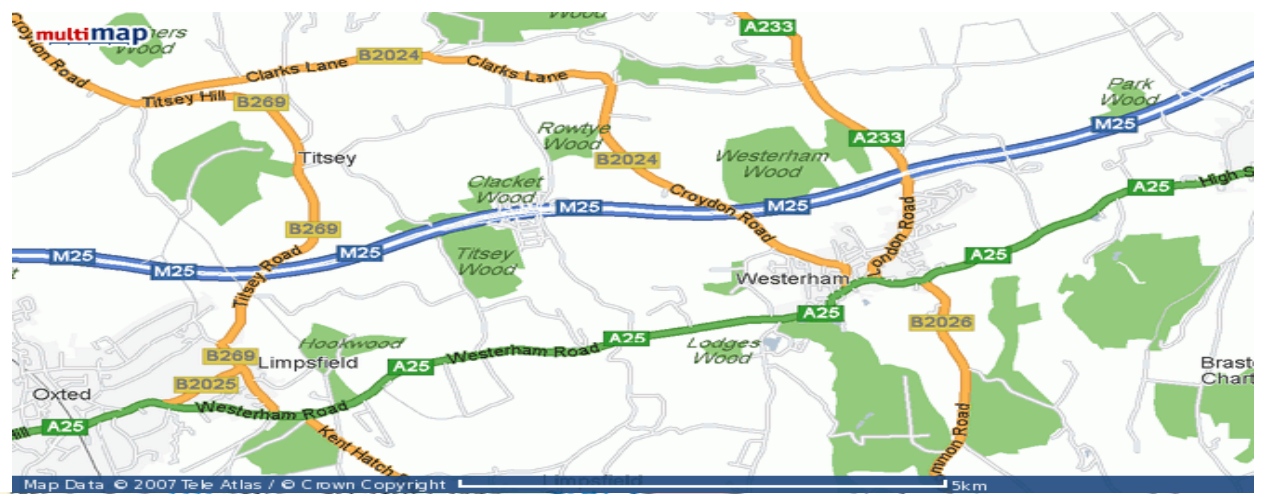
	The edge of carriageway road markings should be reinstated (5.7.1).	£ 150
Dunsdale House	Repair footpath from Dunsdale House bus stop (5.7.2)	£ 2000
	Repair carriageway from Dunsdale House to just prior to the 30/50mph speed limit gateway signs (5.7.3).	£ 2700
30/50mph speed limit gateway feature Westerham	The Kee Klamp steel and concrete post fence just prior to the 30/50mph terminal speed limit gateway signs to Darent Car Park should be replaced (5.7.4).	£ 150 per metre length (£ 10500)
	The footpath should be repaired (5.7.5).	£ 2000
	Replace the eastern 30/50mph terminal speed limit gateway sign (5.7.6).	£ 300
	The HFS at the eastern 30/50mph terminal speed limit gateway signs should be reinstated (5.7.7).	£ 6900
Darent Car Park	The junction mouth should be repaired (5.7.8).	£ 2700
	Repair the road surface around the manhole (5.7.9).	Maintenance
		Total: £ 40900

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

6 km

A25 (Dryhill Lane to the Surrey Border) Route Study

6th Km section



**A25 (Dryhill Lane to the Surrey Border)
Route Study**

6 Km

Section	Approx length	Speed Limit	Description
5	1.0Km	30mph	Approx 10 metres west from the junction with the 'Main Town' car park through the village of Westerham to outside 'The Tudor House and 'Park Cottage' Westerham.

6.1 Crash Analysis

A total of 2 crashes have occurred in this section of road in the 3 year study period.

6.2 Crash Ratios

Severity

Of the 2 crashes, 0 were fatal, 0 were serious and 2 resulted in slight injury.

The ratio of serious and fatal crashes is 0%, compared with an average of 14% for A roads in Kent for the latest available 3 year period (upto 2006), and the average for the whole route of 23%.

Time

The distribution by time of day indicated that all of the crashes occurred at non peak times.

Dark/Light

1 of the 2 crashes occurred in the dark.

Wet/Dry

2 out of 2 crashes occurred in the wet.

6.3 Crash Location and Descriptions

Accident Ref No.	Severity	Location	Description	Vulnerable users
070140206 1	Slight	A25 High Street, 10 metres west of Mill Lane, Westerham	Vehicle 1 was travelling along High Street towards Westerham Centre, when the back wheel of the bike slid causing driver to lose control. Vehicle 1 then slid along the ground and crashed into an oncoming Vehicle 2.	m/cycle > 500cc car
050119856 2	Slight	A25 Westerham Road J/W Croydon Road, Westerham	Both vehicles claim to be travelling along A25 when both claim that the other vehicle pulled out from junction and collided with other.	car
060129536 3	Slight	A25 High Street J/W Croydon Road,	Vehicle 1 travelling east to north from High Street, Westerham to Croydon	car

**A25 (Dryhill Lane to the Surrey Border)
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		Westerham	Road. Vehicle 1, which was on the main carriageway passing the junction of Croydon Road. V1 collided with the side of V2.	
060123520 4	Slight	A25 Westerham Road J/W Croydon Road, Westerham	Vehicle 1 turning right hit pedestrian. No other information available	car/ pedestrian
070136523 5	Slight	A25 Market Square J/W B2024 Croydon Road, Westerham	Vehicle 2 was travelling from Surrey towards Westerham at the junction of Croydon Road, Westerham. Vehicle 1 turned right out of Croydon Road hitting V2. Witnesses left prior to Police arrival. Details left with driver of V2. Driver of V1 reported for careless driving.	car
060122882 6	Slight	A25 High Street J/W Croydon Road, Westerham	Vehicle 2 was heading west along A25. Slowed to stop to allow a tractor to pass, which was coming towards V2. Vehicle 1 came straight into the back of V2. V1 reversed and turned right into Croydon Road at speed.	car
050119231 7	Slight	A25 Market Square 75 metres east of J/W London Road, Westerham	Solo motor-cyclist pulled away from a pedestrian crossing and rear wheel lost traction on white block of paint marking crossing area causing rider to fall off	m/cycle > 500cc
WK049710 4 8	Serious	A25 High Street 50 metres south of J/W The Green, Westerham	Group crossing the road, waiting in the middle of the road. Child broke away from mother as Vehicle 1 passed. Child was struck by V1	car/child
060130132 9	Slight	A25. Outside of "Orvis", Vicarage Hill, Westerham	Vehicle 1 parked in Vicarage Hill outside Company name of "Orvis". Vehicle 2 stopped behind V1. The driver of V2 was shouting at driver of V1. It then drove forward crushing driver of V1 against the offside of V1, causing injury to him and damage to V1. V2 did not stop	LGV <3.5t HGV >7.5t
050108778 10	Slight	A25. "The Vicarage" at J/W Vicarage Hill, Westerham	Vehicle 1 exiting from private drive onto A25 when pedestrian walked in front of V1. V1 hit pedestrian. RTA Sect 170 not complied with	car/ pedestrian

**A25 (Dryhill Lane to the Surrey Border)
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070140777 11	Slight	A25 London Road 10 metres west of B2026, Westerham	Vehicle 1 travelling from Westerham towards Sevenoaks. Lost control on the bend j/w B2026 before hitting telegraph post. No other vehicle involved.	car
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6.4 Site observation

The following observations were taken just after the junction with the Main Town Car Park in Westerham and terminating outside 'The Tudor House' and Park Cottage Westerham.

This road has a 30mph speed limit

'Quebec House'

The 'Main Town Car Park' and 'Quebec House' sign is covered in grime. The 'No Stopping' sign located just prior to Hosity Hill on the south side has been dislodged and obscured by vegetation and the other opposite and adjacent to the wall of 'Quebec House' is severely coated in grime. There are no 'junction with bend' signs or 'slow' road markings prior to Hosity Hill.

There are non compliant AAT signs secured to the 'No Stopping' sign posts. The directional signs located on the eastern side of the junction mouth to Hosity Hill are partly obscured by vegetation.

There is a pothole forming at the junction interface with 'Hosity Hill' and the main carriageway.

Outside 'Quebec House' the utility cover located in the footpath has sunken and ponding is evident.



Photo 60 - Partly obscured sign and AAT sign



Photo 61 - Pothole in junction interface and partly obscured sign

A25 (Dryhill Lane to the Surrey Border) Route Study

Vicarage Hill

A gully is blocked at the junction with Mill Street.
The white demarcation lines at the lay-by up Vicarage Hill are worn and a section unpainted.
There is an illegal 'Astor Place' sign secured to the telegraph pole in conjunction with tourism signs.
There are non compliant AAT signs located outside and opposite 'Old Mill Leat' and 'Vicarage Cottage'.



Photo 62 - Lay-by lines are worn and a section unpainted



Photo 63 - An illegal sign with tourism signs

Westerham Green

There is no 'road narrows on both sides ahead' sign prior to the entrance to Vicarage Hill.
The pedestrian crossing floodlights at the 'Westerham Green' bus stop are defective.
The carriageway edge outside the 'Orvis' shop has sunken and the HFS road markings on the junction mouth with London Road are worn.



Photo 64 - HFS and road markings are worn

A25 (Dryhill Lane to the Surrey Border) Route Study

'The George and Dragon' Public House Westerham

The cobbled pavement outside the 'The George and Dragon' Public House has some excessively raised stones that constitute a trip hazard.

The carriageway outside the Chemist to the shop 'Chows' is deteriorating; with evidence of rutting and potholes forming.

The directional signs outside the Chemist are coated in grime.

The paved footpath outside the 'Kings Arms' Public House has some slabs broken.

The pedestrian crossing road markings are worn and one floodlight missing.



Photo 65 - Carriageway deteriorating



Photo 66 - Road markings are worn

Winterton House

The carriageway outside Winterton House is cracking at the utility reinstatement and a manhole cover protruding.

The toilet sign outside the 'Nationwide' Building Society is misaligned.

The carriageway outside the 'Warm Living' shop is sunken around a utility cover.

Shop advertising boards (A boards) placed on the footpath are partially obstructing pedestrian access between the Coffee Shop and Barbers.



Photo 67 - Carriageway deteriorating



Photo 68 - A boards on footpath

A25 (Dryhill Lane to the Surrey Border) Route Study

Croydon Road B2024 Junction

An A25 direction sign has been bent on Lodge Lane and opposite the junction to the B2024 Croydon Road.

The B2024 junction mouth is in good order.

The carriageway central road markings opposite the B2024 junction down to 'Squerryes Mede' junction are worn.



Photo 69 - Carriageway centre line is worn

'Squerryes Mede'

The carriageway opposite New Street is cracking and the gulley sunken and the junction mouth with 'Squerryes Mede' is deteriorating.

The carriageway at the 'Squerryes Mede' junction has utility covers and the road surface is sinking.



Photo 70 - Carriageway has sunken and junction mouth deteriorating

Warde Arms 32 High Street

The bus stop road markings outside 'Warde Arms' 32 High Street and the house 'Round the Bend' 87 High Street are worn.

The two chevron signs which are coated in grime located on Mill Lane corner and the main carriageway have their reflective quality diminished and one has been dislodged.

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Photo 71 - Bus road markings are worn



Photo 72 - Chevron signs are coated in grime and one has been dislodged

Black Eagle Close

There is ponding both sides of the junction mouth with Black Eagle Close. The western lamp column adjacent to Black Eagle Close has an illegal sign secured to it. The steel and concrete post fence at the 'Kinara' car park is in poor condition.



Photo 73 - Ponding in carriageway

6.5 Discussion / Outline Solutions

Darent Car Park and Hosey Hill

To enhance the 'Main Town' Car Park and 'Quebec House' signs conspicuity, these signs should be cleaned.

To improve the visibility splay of the 'No Stopping' and directional signs located just prior to and at Hosey Hill, these signs should be realigned, cleaned and the vegetation severely cut back.

The non compliant AAT signs secured to the 'No Stopping' sign posts should be removed.

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Consideration should be given to installing a 'junction on bend' sign and 'Slow' road marking prior to Hosey Hill to increase awareness of the bend and the current 30mph speed limit.

The junction eastern interface with 'Hosey Hill' should be repaired and the road markings reinstated and outside 'Quebec House' the utility covers located in the footpath should be reset.

- The signs located at the entrance to the car park footpath are coated with grime and should be cleaned (6.5.1).
- The sign is dislodged and obscured by vegetation should be realigned and the vegetation cut back (6.5.2).
- The sign located adjacent to the 'Quebec House' wall which is coated with grime should be cleaned (6.5.3).
- Install a 'junction on bend' sign prior to Hosey Hill (6.5.4)
- 'Slow' road markings should be installed in the carriageway prior to Hosey Hill (6.5.5)
- The non compliant AAT signs secured to the 'No Stopping' sign posts should be removed (6.5.6).
- The pothole on the eastern junction interface with 'Hosey Hill' should be repaired and the road markings reinstated (6.5.7).
- The sunken utility covers on the footpath outside 'Quebec House' should have the covers reset (6.5.8).

Vicarage Hill

The gully at the junction with Mill Street and should be cleaned to remove excess water from the carriageway.

The white demarcation lines of the lay-by up Vicarage Hill should be reinstated.

The 'Astor Place' sign just prior to Vicarage Hill and the AAT signs located outside 'Old Mill Leat' and 'Vicarage Cottage' on Vicarage Hill and should be removed.

- The blocked gully outside 'Mill House' should be cleaned (6.5.9).
- The white demarcations lines of the lay-by up Vicarage Hill should be reinstated (6.6.0).
- The illegal 'Astor Place' sign secured to the telegraph pole should be removed (6.6.1).
- The two non compliant AAT signs secured to lamp posts outside 'Old Mill Leat' and 'Vicarage Cottage' should be removed (6.6.2).

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Westerham Green

A 'road narrows on both sides ahead' sign should be installed on Westerham Green on the eastern approach to Vicarage Hill in conjunction with 'Slow' road markings in the carriageway just prior to Vicarage Hill.

To enhance the conspicuity of the pedestrian crossing at the 'Westerham Green' bus stop the floodlights should be repaired.

The carriageway edge outside the 'Orvis' shop should be repaired due to the heavy volume of traffic and to reduce the rumbling noise and vibration.

The High Friction Surface and road markings in the junction mouth with London Road should be reinstated.

- A 'road narrows on both sides ahead' sign should be installed on Westerham Green. (6.6.3)
- 'Slow' road markings should be installed in the carriageway prior to Vicarage Hill (6.6.4)
- Repair pedestrian crossing floodlights at the 'Westerham Green' bus stop (6.6.5).
- The carriageway outside 'Orvis' shop is sinking and should be repaired (6.6.6).
- The HFS and road markings in the junction mouth with London Road should be reinstated (6.6.7).

The 'George and Dragon' Public House

The cobbled pavement outside the 'The George and Dragon' Public House should be reset to reduce the risk of a trip hazard to pedestrians.

The carriageway outside the Chemist to the shop 'Chows' requires repairing and the directional signs outside the Chemist require cleaning to improve the conspicuity of the signs.

A paved footpath outside the 'Kings Arms' Public House could constitute a trip hazard and to reduce the risk to pedestrians the slab should be replaced.

The toilet sign outside the 'Nationwide' Building Society should be realigned and to assist pedestrians.

To enhance the conspicuity of the pedestrian crossing the floodlight should be replaced and road markings reinstated.

- The cobbled pavement has raised stones and should be reset (6.6.8).
- Repair the carriageway outside the Chemist to the shop 'Chows' (6.6.9).

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- The directional signs outside the Chemist are coated with grime and should be cleaned (6.7.0).
- Replace broken slabs in footpath outside the Kings Arms Public House (6.7.1).
- The toilet sign outside the Nationwide Building society should be realigned (6.7.2).
- The missing floodlight at the pedestrian crossing outside the 'Nationwide' Building society should be replaced and road markings reinstated. (6.7.3).

'Warm Living' Shop

The carriageway outside the 'Warm Living' shop and the 'Winter House' should be repaired due to the heavy volume of traffic.

The shop advertising boards (A boards) located outside the 'Coffee Shop' and 'Barbers' should be relocated or removed.

- Repair carriageway outside the Warm Living shop (6.7.4).
- The carriageway outside Winter House should be repaired (6.7.5).
- Advertising boards (A boards) outside the 'Coffee Shop' and Barbers should be relocated or removed (6.7.6).

Croydon Road B2024

An A25 direction sign opposite the junction to the B2024 Croydon Road should be replaced.

The reinstatement of the carriageway central road markings from outside 'Ibbert Mosely 'Estate agents to 'Squerryes Mede' should be considered.

The carriageway at the junction with New Street, 'Squerryes Mede' and 'Squerryes Mede' junction mouth should be repaired.

- The bent A25 direction sign opposite the junction to the B2024 road should be replaced (6.7.7).
- The carriageway centre road markings should be reinstated (6.7.8).
- The carriageway opposite New Street should be repaired (6.7.9).
- The junction mouth for 'Squerryes Mede' should be repaired (6.8.0).
- The carriageway at the 'Squerryes Mede' junction should be repaired (6.8.1).

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Warde Arms 32 High Street

The bus stop road markings outside 'Warde Arms' 32 High Street and the house 'Round the Bend' 87 High Street should be reinstated to enhance the conspicuity of the bus stops.

Too further enhance the bend at Mill Lane consideration should be given to installing two, two arrow chevron signs positioned on two posts and located marginally lower down and installing a 'junction on bend' sign and 'Slow' road markings prior to Mill Lane.

- The bus stop road markings should be reinstated (6.8.2).
- Replace the existing signs with two, two arrow chevron signs (6.8.3).

Black Eagle Close

Installation of a 'junction on bend' sign and 'Slow' road marking adjacent to Black Eagle Close should be considered to increase awareness of the bend.

Consideration should be given to repairing the carriageway at Black Eagle Close and the signs located on the lamp column adjacent to Black Eagle Close should be removed.

The steel and concrete post fence at the 'Kinara' car park should be replaced by a panelled wooden fence.

- Install a 'junction on bend' sign adjacent to Black Eagle Close (6.8.4)
- The carriageway adjacent to the junction with 'Black Eagle' Close should be repaired (6.8.5).
- The two illegal signs adjacent to 'Black Eagle' Close should be removed (6.8.6).
- The steel and concrete post fence located outside the 'Kinara' car park should be removed and replaced with a panelled wooden fence (6.8.7).

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6.6 Summary

Location	Recommendation	Estimated Costs
Darent Car Park	The signs located at the entrance to the car park footpath should be cleaned (6.5.1).	Maintenance
Hosey Hill	The sign is dislodged and obscured by vegetation should be realigned and the vegetation cut back (6.5.2).	Maintenance
	The sign located adjacent to the 'Quebec House' wall which is coated with grime should be cleaned (6.5.3).	Maintenance
	Install a 'junction on bend' sign prior to Hosey Hill (6.5.4)	£ 250
	'Slow' road markings should be installed in the carriageway prior to Hosey Hill (6.5.5)	£ 150
	The non compliant AAT signs secured to the 'No Stopping' sign posts should be removed (6.5.6).	£ 300
	The pothole on the eastern junction interface with Hosey Hill should be repaired and the road markings reinstated (6.5.7).	Maintenance
	The sunken utility covers on the footpath outside Quebec House should have the covers reset (6.5.8).	Maintenance
Vicarage Hill	The blocked gully outside 'Mill House' should be cleaned (6.5.9).	Maintenance
	The white demarcations lines of the lay-by up Vicarage Hill should be reinstated (6.6.0).	£ 150
	The illegal 'Astor Place' sign secured to the telegraph pole should be removed (6.6.1).	£ 150
	The two non compliant AAT signs secured to lamp posts outside 'Old Mill Leat' and Vicarage Cottage should be removed (6.6.2).	£ 300
Westerham Green	A 'road narrows on both sides ahead' sign should be installed on Westerham Green. (6.6.3)	£ 500
	'Slow' road markings should be installed in the carriageway prior to Vicarage Hill (6.6.4)	£ 150

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	<p>Repair pedestrian crossing floodlights at the 'Westerham Green' bus stop (6.6.5).</p> <p>The carriageway outside 'Orvis' shop has sunken and should be repaired (6.6.6).</p> <p>The HFS and road markings in the junction mouth with London Road should be reinstated (6.6.7).</p>	<p>Maintenance</p> <p>£ 2700</p> <p>£ 6900</p>
The 'George and Dragon' Public House	<p>The cobbled pavement has raised stones and should be reset (6.6.8).</p> <p>Repair the carriageway outside the Chemist to the shop 'Chows' (6.6.9).</p> <p>The directional signs outside the Chemist are coated with grime and should be cleaned (6.7.0).</p> <p>Replace broken slabs in footpath outside the Kings Arms Public House (6.7.1).</p> <p>The toilet sign outside the 'Nationwide' Building society should be realigned (6.7.2).</p> <p>The missing floodlight at the pedestrian crossing outside the 'Nationwide' Building society should be replaced and road markings reinstated. (6.7.3).</p>	<p>Maintenance</p> <p>£ 2700</p> <p>Maintenance</p> <p>Maintenance</p> <p>Maintenance</p> <p>Maintenance / £ 250</p>
'Warm Living' shop	<p>Repair carriageway outside the Warm Living shop (6.7.4).</p> <p>The carriageway outside Winter House should be repaired (6.7.5).</p> <p>Advertising boards (A boards) outside the 'Coffee Shop' and Barbers should be removed (6.7.6).</p>	<p>£ 2700</p> <p>£ 2700</p> <p>Maintenance</p>
Croydon Road B2024	<p>The bent A25 direction sign opposite the junction to the B2024 road should be replaced (6.7.7).</p> <p>The carriageway centre road markings should be reinstated (6.7.8).</p>	<p>£ 250</p> <p>£ 150</p>
New Street	<p>The carriageway opposite New Street should be repaired (6.7.9).</p> <p>The junction mouth for 'Squerryes Mede' should be repaired (6.8.0).</p>	<p>£ 2700</p> <p>£ 2700</p>

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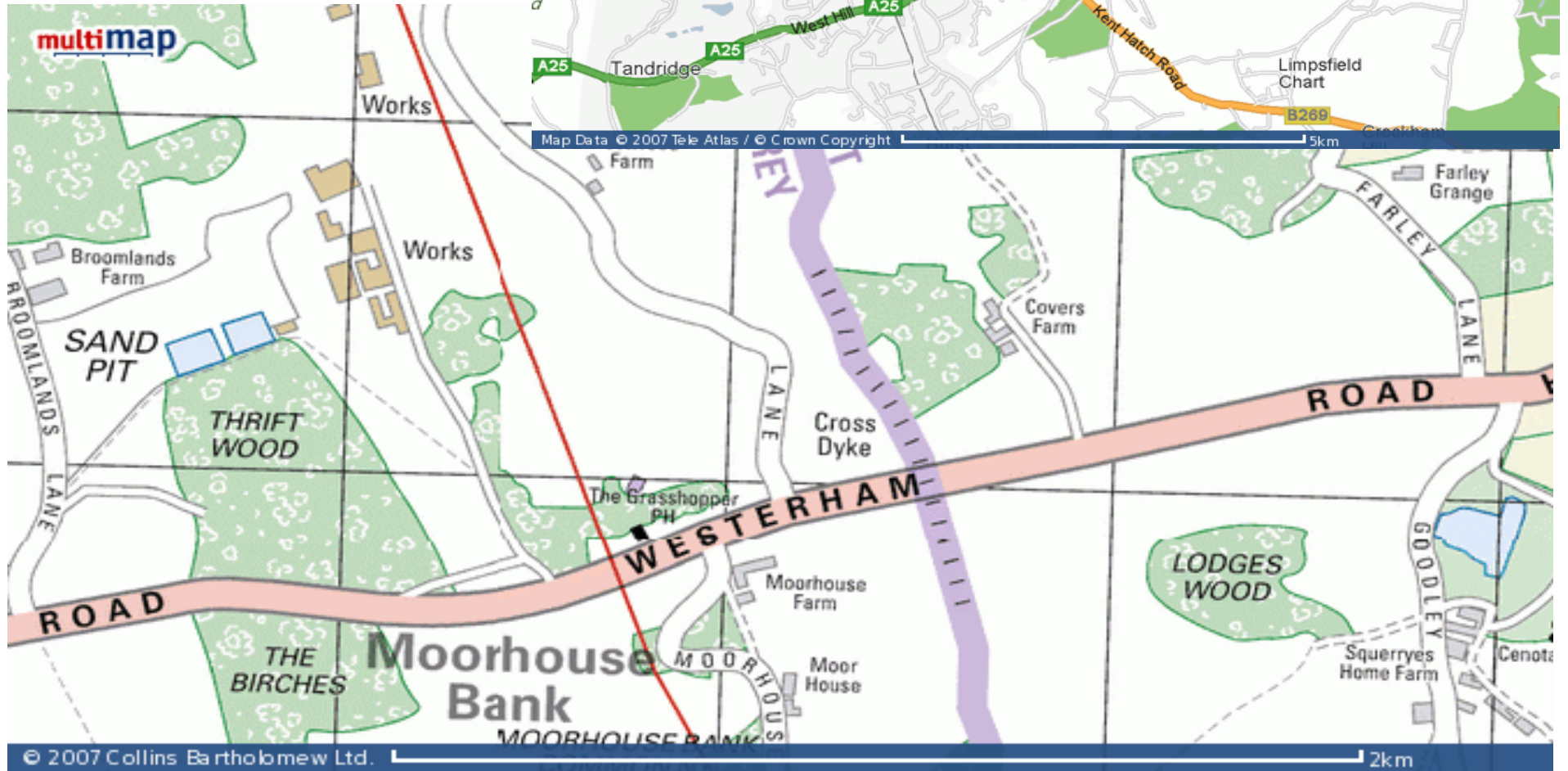
	The carriageway at the 'Squerryes Mede' junction should be repaired (6.8.1).	£ 2700
Warde Arms and 'Around the Bend'	The bus stop road markings should be reinstated (6.8.2).	£ 300
	Replace the existing signs with two, two arrow chevron signs (6.8.3).	£ 250
	Install a junction on bend sign adjacent to Black Eagle Close (6.8.4)	£ 250
Black Eagle Close	The carriageway adjacent to the junction with Black Eagle Close should be repaired (6.8.5).	£ 2700
	The two illegal signs adjacent to Black Eagle Close should be removed (6.8.6).	£ 300
	The steel and concrete post fence located outside the 'Kinara' car park should be removed and replaced with a panelled wooden fence (6.8.7).	£ 150 per metre length (£ 8000)
		Total: £ 39350

**A25 (Dryhill Lane to the Surrey Border)
Route Study**

7 km

A25 (Dryhill Lane to the Surrey Border)
Route Study

7th Km section



**A25 (Dryhill Lane to the Surrey Border)
Route Study**

7 Km

Section	Approx length	Speed Limit	Description
5	0.50Km	30mph	From outside 'The Tudor House' and 'Park Cottage' Westerham to the National speed limit gateway located approximately 100metres west of Farley Lane.
5	0.50Km	National	From the National speed limit western gateway Westerham located approximately 100metres from Farley Lane to the Surrey border.

7.1 Crash Analysis

A total of 7 crashes have occurred in this section of road in the 3 year study period.

7.2 Crash Ratios

Severity

Of the 7 crashes, 0 were fatal, 1 was serious and 6 resulted in slight injury.

The ratio of serious and fatal crashes is 14%, compared with an average of 14% for A roads in Kent for the latest 3 year period available (up to 2006), and the average for the whole route of 23%.

Time

The distribution by time of day indicated that 2 crashes occurred at peak times and 5 crashes occurred at non – peak times.

Dark/Light

3 of the 7 crashes occurred in the dark.

Wet/Dry

6 of the 7 crashes occurred in the wet.

7.3 Crash Location and Descriptions

Accident Ref No.	Severity	Location	Description	Vulnerable users
050121967 1	Slight	A25 Westerham Road, Westerham	Vehicle 1 was travelling along Westerham, which is an unlit road. She suddenly saw a pedestrian wearing dark clothing on the edge of the road in her lane. V1 swerved to avoid and went into a field, where the vehicle overturned.	car
060124984 2	Slight	A25 Westerham Road J/W Farley Lane, Westerham	Driver of Vehicle 1 was attending his premises as the occupiers of Vehicle 2 had been seen burgling his	car

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			premises. Driver of V1 pulled up in front of V2 attempting to stop it until the Police arrived. V2 pushed V1 to one side and made off towards Westerham. V2 was later found burnt out in Knockholt.	
060125056 3	Slight	A25 Westerham Road, 5 metres south of J/W Farley Lane, Westerham	Vehicle 1 travelling directly behind Vehicle 2 along the A25 Westerham Road going in the direction of Oxted. As they were approaching the junction of Farley Lane, V2 braked suddenly and V1 was unable to stop in time and collided into the back of V1. The driver of V2 has stated to Police that she stopped suddenly as the vehicle in front of her stopped suddenly as the vehicle in front of V1 had turned right into Farley Lane and had failed to signal.	car
060130804 4	Slight	A25 Westerham Road J/W Goodley Stock Road, Westerham	Apparently Vehicle 2 pulled out of Goodley Stock Road onto the path of Vehicle 1, which was travelling along A25 Westerham Road.	car

7.4 Site observations

The following observations were taken from outside 'Park Cottage' Westerham and terminating at the Surrey border.

The road has 30mph speed limit increasing to 60mph from approximately 100metres west of Farley Lane.

Goodley Stock Lane

The 'Junction Ahead' and tourist sign just prior to Goodley Stock Lane is partly obscured by vegetation.

The junction to Goodley Stock Lane is in good order.

The 'Housing Development' sign located on the directional and tourist signpost adjacent to the junction mouth of Goodley Stock Lane is positioned to low and constitutes a hazard.

The southern footpath from Goodley Stock Lane to Farley Lane is in a poor condition.

The 30mph speed limit interactive sign opposite Goodley Stock Lane is in good operating order.

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Photo 74 - 'Housing Development' sign is positioned to low



Photo 75 - Footpath is in a poor condition

Farley Lane

The view to exit Farley Lane is severely restricted by a hedge and a bank to the west.

The Farley Lane western junction interface adjacent to the wall has sunken and ponding is evident and the junction mouth road markings are incorrectly positioned in the carriageway.



Photo 76 - The view to exit Farley Lane is severely restricted

30/60mph speed limit western gateway Westerham

The carriageway edge road markings terminate approximately 60metres west of the 30mph/60mph speed limit Western gateway signs Westerham to the Surrey border. The carriageway central road markings are worn. The 'Junction Ahead' and the deteriorated 'Tourist' signs located approximately 70metres west of the 30mph speed limit gateway signs are partly obscured by vegetation.

The carriageway approximately 60metres from the 30/60mph speed limit gateway signs to the Surrey border is deteriorating with cracking and road surface breaking up.

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Photo 77 - No carriageway edge road markings and an outdated tourist sign



Photo 78 - Carriageway cracking and evidence of deterioration

'Covers Farm'

On the east bound carriageway verge an illegal construction sign is secured to the Westerham entry sign post.

The junction interface with 'Covers Farm' is in a poor condition with potholes, ponding and covered with a large amount of gravel.

The footpath is in a poor condition, with the footpath breaking away and portions subsiding down the embankment. The wood and barbed wire fence is broken.

The vegetation approximately 200metres from the Surrey border is encroaching onto the footpath reducing the footpath width.

The kerb entry gully covers just prior to the Surrey border are in a poor condition.



Photo 79 - Junction mouth is in a poor condition



Photo 80 - Footpath subsiding

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7.5 Discussion / Outline Solutions

Goodley Stock Lane

To enhance the conspicuity of the signs just prior to Goodley Stock Lane the vegetation should be cut.

The 'Housing Development' sign located on the directional and tourism signpost at the junction mouth of Goodley Stock Lane should be removed and the footpath from Goodley Stock Lane to Farley Lane should be repaired.

- The 'Junction Ahead' and tourist sign which is partly obscured by vegetation should be cut back (7.5.1).
- The 'Housing Development' sign should be removed (7.5.2).
- Repair southern footpath from 'Goodley Stock' Lane to 30/60mph speed limit gateway (7.5.3).

Farley Lane

To enhance and safely exit Farley Lane consideration should be given to severely cut back the hedge and a portion of the bank should be removed as well as the junction mouth road markings should be repositioned and reinstated with the current carriageway edge lining.

- The view to exit Farley Lane is severely restricted by a hedge and should be cut back (7.5.4).
- The Farley Lane western junction interface adjacent to the wall should be repaired and to improve visibility a portion of the bank should be removed (7.5.5).
- The Farley Lane junction mouth road markings should be reinstated and aligned with the existing carriageway edge line (7.5.6).

30/60mph speed limit western gateway Westerham

To enhance the edge and centre line of the carriageway, the road markings should be installed and carriageway repaired.

The 'Junction Ahead' sign should have the vegetation cut back to improve conspicuity and the tourism sign replaced with a current regulation sign.

The construction sign is secured to a Westerham entry sign post should be removed.

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- Reinststate carriageway lines to the Surrey border (7.5.7).
- The carriageway approx. 60metres from the 30/60mph speed limit gateway to the Surrey border should be repaired (7.5.8).
- The vegetation obscuring the 'Junction Ahead' and an outdated 'tourist' sign should be cut back (7.5.9).
- An illegal construction sign secured to a Westerham entry sign post should be removed (7.6.0).

'Covers Farm'

The junction interface with 'Covers Farm' requires resurfacing of the junction interface for a minimum distance of 25metres.

To improve pedestrian safety the footpath should be repaired and the wooden and barbed wire fence replaced, in addition the vegetation should be cut back to increase pedestrian access.

The kerb entry gully covers just prior to the Surrey border require replacing to improve pedestrian safety.

- The junction interface with 'Covers Farm' should be repaired (7.6.1).
- The footpath and barbed wire fence should be repaired (7.6.2).
- Vegetation that is encroaching onto the footpath should be cut back (7.6.3).
- The kerb entry gully covers just prior to the Surrey border should be replaced (7.6.4).

7.6 Summary

Location	Recommendations	Estimated Costs
'Park Cottage' and 'Tudor House'	The 'Junction Ahead' and tourist sign which is partly obscured by vegetation should be cut back (7.5.1).	Maintenance
	The 'Housing Development' sign should be removed (7.5.2).	£ 150
	Repair southern footpath from 'Goodley Stock' Lane to 30/60mph speed limit gateway (7.5.3).	£ 2000

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Farley Lane	<p>The view to exit Farley Lane is severely restricted by a hedge and should be cut back (7.5.4).</p> <p>The Farley Lane western junction interface adjacent to the wall should be repaired and to improve visibility a portion of the bank should be removed (7.5.5).</p> <p>The Farley Lane junction mouth road markings should be reinstated and aligned with the existing carriageway edge line (7.5.6).</p>	<p>Maintenance</p> <p>£ 2700</p> <p>£ 250</p>
30/60mph speed limit gateway	<p>Reinstate carriageway lines to the Surrey border (7.5.7).</p> <p>The carriageway approx. 60metres from the 30/60mph speed limit gateway to the Surrey border should be repaired (7.5.8).</p> <p>The vegetation obscuring the 'Junction Ahead' and an outdated 'Tourist' sign should be cut back (7.5.9).</p> <p>An illegal construction sign secured to a Westerham entry sign post should be removed (7.6.0).</p>	<p>£ 450</p> <p>£ 2700</p> <p>Maintenance</p> <p>£ 150</p>
'Covers Farm'	<p>The junction interface with 'Covers Farm' should be repaired (7.6.1).</p> <p>The footpath and the barbed wire fence should be repaired (7.6.2).</p> <p>Vegetation that is encroaching onto the footpath should be cut back (7.6.3).</p> <p>The kerb entry gully covers just prior to the Surrey border should be replaced (7.6.4).</p>	<p>£ 2700</p> <p>£ 2000</p> <p>Maintenance</p> <p>Maintenance</p>
		<p>Total: £ 13100</p>

Appendix A

Crash Analysis drawings B0820600 (1) to (7)