Site Report Essex Highways Casualty Reduction Site Report 2019/20





Location: A176 Uppermayne Roundabout Junction with A176 Noak Hill Road, South Wash Road & A127 Eastbound Off-slip, Noak Bridge

District: Basildon

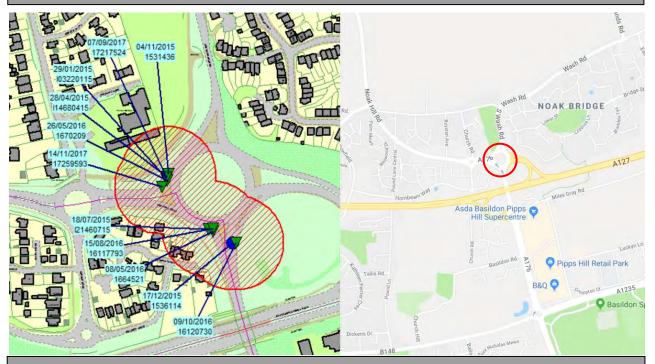
Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: Single Site 231

Intervention works: Undertake investigations and design into potential re-alignment of the northbound and eastbound approaches to the roundabout junction

Principle: A study of the personal injury collisions at this junction shows a pattern of nose to tail collisions on the northbound and eastbound approaches to this junction. It is considered that these are occurring as a result of poor entry alignment to the roundabout resulting in a lack of deflection and increased approach speeds.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information		COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT		
	0	1	10	0	1	14		

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
Nose to tail collisions on the eastbound approach	0	0	6	0	0	7	
Nose to tail collisions on the northbound approach	0	0	3	0	0	3	



Image 1 - Damaged ADS sign on eastbound approach



Image 2 – 40mph speed limit signs & clearway signs on the eastbound approach.

Worn edge of carriageway and centre line road markings.



Image 3 – Chevron sign is missing from sign posts on the eastbound approach



Image 4 – Map type advanced directional sign on northbound approach





Image 6 - Lane line road marking obscured by joint repairs on northbound approach



Page 5 of 6

Image 7 – Nearside kerbing & verge on the eastbound approach has been over run

4.0 Recommendations

Remedial Measures

- 1) The existing chevron signage on the roundabout should be reviewed / amended to tie in with the revised approach alignment.
- 2) The carriageway will need to be resurfaced on the eastbound and northbound approaches to the roundabout as part of any scheme implementation. (This funding will come separately from the Asset Management skid resistance funding).

Site Report Essex Highways Casualty Reduction Site Report 2019/20





Location: A127 Eastbound Off-slip J/w B148 RAB, Dunton

District: Basildon

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 81

EXECUTIVE SUMMARY

Intervention works: Along the A127 eastbound off-slip, changes to reduce visibility being provided too far in advance of the roundabout with B148 and also removing unnecessary obstructions from the visibility splay once at the give way lines.

Principle: A study of the personal injury collisions at this junction shows a pattern of motorists approaching the give way lines on the A127 eastbound off-slip at inappropriate speeds and then failing to stop and give way to northbound pedal cyclists on the roundabout circulatory due to obstructions within the visibility splay. Providing highway screening on the distant offside approach to the roundabout junction will encourage reduced approach speeds. Removing unnecessary obstructions from the visibility splay on the immediate approach to the give way lines will improve visibility to the right, particularly of pedal cyclists or motorcyclists.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
	0	2	5	0	2	8	

Pattern(s) at Cluster Site						
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Eastbound motorists failing to give way to northbound pedal cyclists on the roundabout circulatory or eastbound nose to tail	0	2	2	0	2	3

Additional information

It should be noted that this location has previously been raised as a casualty reduction site in 2018/19. Following a review of the personal injury collision data for the past ten years (01/01/2008 to 31/12/2017) it is clear that there is an ongoing issue with motorists failing to give way to pedal cyclists on the roundabout circulatory with nine collisions involving pedal cyclists recorded during this period. There has also been an additional collision recorded involving a motorist failing to give way to a pedal cyclist in February 2018.

3.0 Site Photographs



Image 1 – Excessive visibility to the right on the approach to the roundabout junction



Image 2 – Overgrown low level vegetation and lighting column within visibility splay

4.0 Recommendations

Remedial Measures

- 1) It is recommended that 'approach screening' be provided to the offside of the eastbound offslip to a point 15m in advance of the give way line. This is proposed in order to reduce excessive visibility of other vehicles on the northbound overbridge over the A127 in order to reduce approach speeds on the off-slip.
- 2) It is recommended that all vegetation is removed from the area to the offside of the off-slip within 15m of the give way lines, and this be made an area of hardstanding in order to reduce the potential for future growth and the need for ongoing maintenance.

Site Report Essex Highways Casualty Reduction Site Report 2018/19





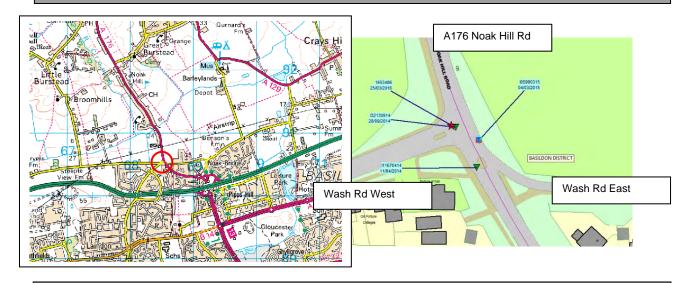
Location: A176 Noak Hill Rd jw Wash Rd West, Noak Bridge

District: Basildon

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 102

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis 01/01/2014 - 30/06/2017

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL SERIOUS SLIGHT			FATAL	SERIOUS	SLIGHT	
	1	0	3	1	0	4	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS				CASUALTIE	S
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Road users turning right out of Wash Road (west) into the path of northbound road users (3 collisions) and southbound road users (1 collision)	1	0	3	1	0	4





Image 1 -

Image 2 -





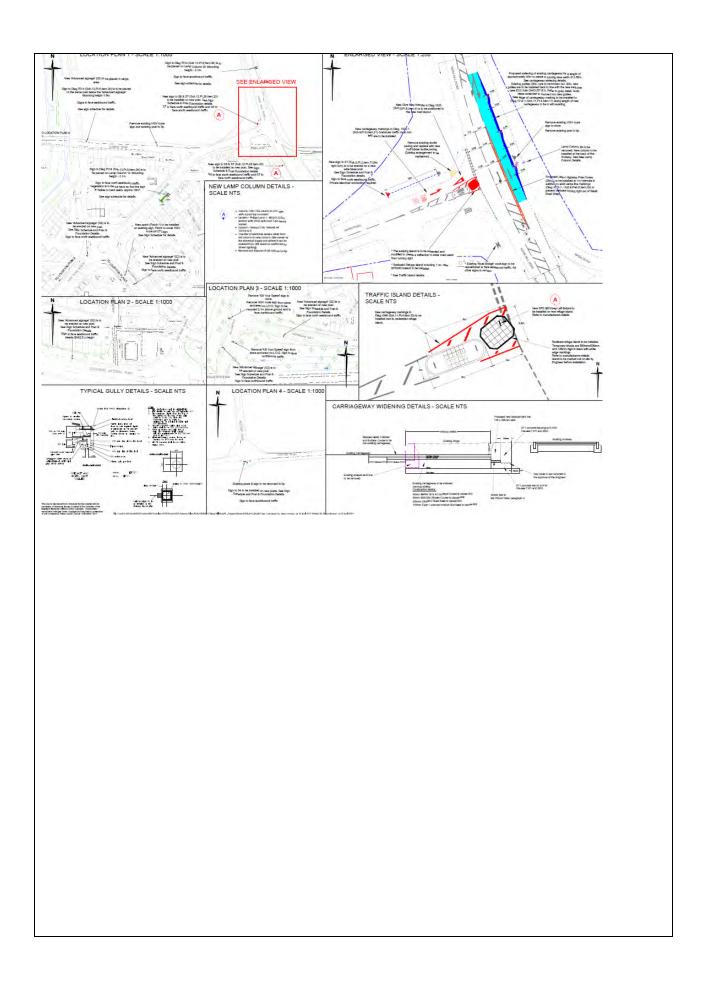
Image 3 -

Image 4 -

4.0 Recommendations

Remedial Measures

As detailed above and in the drawing below: Implementation of a right turn prohibition of right turn for road users exiting Wash Road (west) **Temporary Trial of 18 months:**



Site Report Essex Highways Casualty Reduction Site Report 2018/19





Location: A176 Nethermayne / BP Service Station

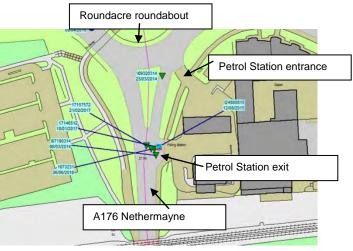
District: Basildon

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 189

1.0 Site Plan with Collision Plot





2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
	0	0	6	0	0	6	

Identified Collision	COLLISIONS			CASUALTIES		
Pattern(s) at Cluster Site						
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Road users exiting BP service station, to travel north, colliding with other road users (southbound 4 collisions, northbound 1 collision)		0	5	0	0	5

3.0 Site Photographs





Image 1 -





Image 4 -

4.0 Recommendations

Remedial Measures

- Extending the central island along A176 Nethermayne (as per image 3) to prevent road users turning out of the B.P. station to travel north along the A176 onto Roundacre roundabout.
- Undertake discussions with B.P Services station (and Beverley Gould from ECC) to determine if we can reverse the entry / exit to the BP station.
- Undertake preliminary design that would be required to kerbing etc if the entry / exits of BP service station were reversed.

Site Report Essex Highways Casualty Reduction Site Report 2019/20





Location: A1321 Broadmayne Roundabout J/w B1419 Timberlog Lane & Churchill

Avenue, Basildon District: Basildon

Collision Investigation Period: 01/01/2015 – 31/12/2017

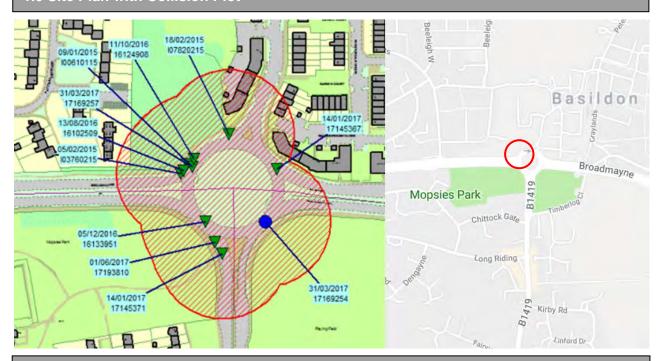
Site Ranking: 226

EXECUTIVE SUMMARY

Intervention works: Along the A1321 Broadmayne eastbound approach, make amendments to the existing highway screening / hedgerow to improve motorist's visibility of the roundabout, Make improvements to existing warning signs to highlight the roundabout.

Principle: A study of the personal injury collisions at this junction shows a pattern of nose to tail collisions on the eastbound approach to the roundabout. There has also been a collision involving a motorist failing to give way to one already on the roundabout circulatory, and a loss of control collision on this approach. By making amendments to the existing highway screening / hedgerow on the offside approach to the roundabout this will improve visibility to the right, and should reduce occurrences of sudden braking on the immediate approach to the roundabout. Improvements to existing traffic signs and road markings should help to better highlight the presence of the roundabout junction and encourage motorists to slow down.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
	0	1	10	0	1	10	

Identified Collision	COLLISIONS	CASUALTIES
Pattern(s) at Cluster Site		

	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Eastbound motorists failing to give way to motorists on the roundabout circulatory, eastbound nose to tail, or	0	0	5	0	0	5
eastbound loss of control						

Ad	ditional
in	formation

N/a



Image 1 – Existing highway screening / hedgerow terminates immediately adjacent the give way lines, impeding the visibility splay for eastbound motorists



Image 2 - Gap in the existing highway screening / hedgerow



Image 3 – Existing 'Roundabout ahead' warning signs are damaged / partially missing



Image 4 – Existing 'Chevroflex' type sign facing the eastbound approach 4.0 Recommendations

Remedial Measures

- 1) It is recommended that the existing highway screening / hedgerow should be amended so that it terminates 15m in advance of the give way lines in order to improve the visibility splay of motorists on the roundabout circulatory.
- 2) It is recommended that the gap in the existing highway screening / hedgerow should be filled in to reduce the potential for approaching motorists to look for gaps in traffic on the roundabout circulatory and approach the roundabout at inappropriate speeds.
- 3) It is recommended that the overgrown vegetation / overhanging tree canopies on the nearside of the carriageway on the eastbound approach should be substantially cut back and maintained on a regular basis to ensure appropriate forward visibility of the existing stack type advanced directional sign is provided
- 4) It is recommended that the existing damaged / partially missing nearside & offside 'Roundabout ahead' warning signs should be repaired / replaced with yellow backed versions with 'Reduce speed now' supplementary plates.
- 5) It is recommended that a review of existing 50mph speed limit repeater signs be undertaken and additional signs be provided as appropriate.
- 6) It is recommended that discussions should be held with the Asset Management Team to identify if the carriageway on the A1321 Broadmayne approaches to this roundabout, particularly the eastbound approach can be resurfaced / treated as a priority.
- 7) It is recommended that the worn road markings should be refreshed either independently or in conjunction with item 7 (Above).

Site Report Essex Highways Casualty Reduction Site Report 2018/19





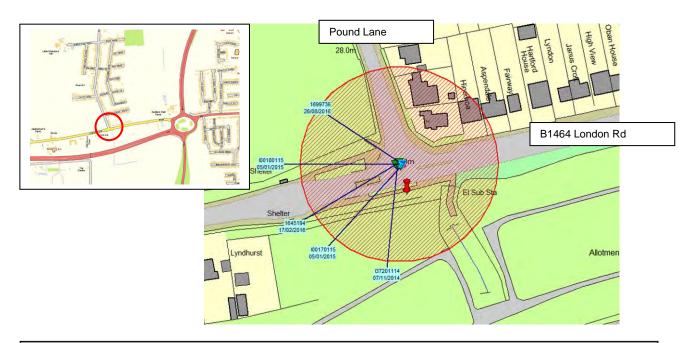
Location: B1464 London Rd jw Pound Lane

District: Basildon

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 289

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL SERIOUS SLIGHT			FATAL	SERIOUS	SLIGHT	
	0	0	5	0	0	8	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS				CASUALTIE	S
	FATAL SERIOUS SLIGHT			FATAL	SERIOUS	SLIGHT
Westbound road users turning right across the path of eastbound road users.	0	0	5	0	0	8





Image 1 – B1464 westbound approach

Image 2 – B1464 – right turn filter into Pound Lane



Image 3 – Pound Lane southbound approach to junction



 $Image\ 4-B1464\ junction\ with\ Pound\ Lane$

4.0 Recommendations

Remedial Measures

Lane 1 signalled for ahead movement only and lane 2 separately signalled for the right turn movement only. This would ensure that vehicles on London Road eastbound are held on red whilst vehicles turn right into Pound Lane.

The impact on capacity should be considered in the event that introducing these measures could lead to increased queuing on London Road in both directions

Site Report Essex Highways Casualty Reduction Site Report 2019/20





Location: A131/A131 Roundabout London Road Great Notley

District: Braintree

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 1

EXECUTIVE SUMMARY

Intervention works: To help improve poor lane discipline and vehicle speeds on the roundabout circulatory.

Principle: A study of the personal injury collisions at this roundabout shows a pattern of motorists attempting to take the first exit colliding with road users attempting to travel straight over on the roundabout circulatory. The scheme aims to improve this behaviour and to help mitigate the speeds on the approaches and through the roundabout junction.

1.0 Site Plan with Collision Plot A131 London Road A131 BRAINTREE Site Location

Identified Collision	COLLISIONS		CASUALTIES			
Pattern(s) at Cluster Site						
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Road users in lane 1 of North East bound approach of the A131 then travelling straight across to London Road coming into conflict with road users in lane 2 of North East bound approach who are turning to take the northbound first exit up the A131.	0	3	1	0	3	1

Additional information

This area has been previously investigated as part of a Jacobs study. However it felt that further Road Safety specific measures should be provided to help mitigate the collisions that are currently occurring.



Image 1 – view looking north west from the A131 western arm. View shows wide carriageway widths and vegetation in the nearside verge



Image 2 – View looking at the circulatory for A131 northern arm when heading south. Image shows motorist not indicating to head north on the A131



Image 3 – View looking north leaving the roundabout circulatory. Image shows missing nearside 60mph Terminal



Image 4 – View travelling from A131 Western arm to London Road west to North. Image shows damaged lamp column



Image 5 – View looking south west on circulatory of the roundabout, image showing area to be hatched out to reduce lane widths.

Recommendations

Remedial Measures

1) It is recommended that Yellow backed chevron signs are provided on the roundabout island for motorists heading north east on A131 to help reduce speeds on the approach and then across the roundabout.

2) It is recommended that lane destination markings and new arrows are provided on the A131 north western arm to provide directions to A131/ A120 and London Road/ Local traffic. Lane 1 markings to turn left, lane 2 markings to carry straight onto London Road

3) It is recommended that lane destination markings and new arrows are provided on the Roundabout circulatory to provide directions to A131/ A120 and London Road/ Local traffic



Image 6- Example of lane destination marking on roundabout circulatory

4) It is recommended that the nearside of the roundabout circulatory for the western arm to northern arm is partially hatched out to help narrow the road and reduce speeds on the circulatory. It may also be necessary to provide a hatched section on the circulatory between the lanes 1 and 2 for motorists heading towards London Road. It is recommended that this is drawn up to establish if this is achievable.



Image 7- Example of lane hatching between lanes 1 and 2

- 5) It is recommended that the 60mph terminals are replaced with yellow backed signs on the northern arm of the A131 when traveling north to help mitigate speeds exiting the roundabout and highlight the change in speed limit.
- 6) It is recommended that liaison is undertaken with the street lighting team and that the damaged lamp column is replaced on the northern central reserve for the roundabout, for the A131 northern Arm (see Image 4).
- 7) It is recommended that additional signing to TSRGD 877 is placed in line with the new road destination markings on the A131 North West bound approach. One in the nearside verge and one in the central reserve.

Site Report Essex Highways Casualty Reduction Site Report 2018/19





Location: Witham Road B1018 Temple Lane

District: Braintree

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 3

1.0 Site Plan with Collision Plot B1018 Temple Witham Lane Road 21/03/2016 1652739 19/08/2014 I27190814 1 Site located at grid ref 579815, 218946 Cressing Rolphs, Farmhouse Egypts Fm Hawbush Green Silver End Rivenball Div Cressing Temple

Hungry

2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIE	S	
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
 5 Personal Injury Collisions, these consisted of: One motor cycle losing control on the approach to the junction. Three failure to giveway collisions with right turners heading to Temple lane pulling across the path of oncoming motorists 2 serious and 1 slight. 	0	3	1	0	3	4

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES			
	FATAL SERIOUS SLIGHT			FATAL	SERIOUS	SLIGHT	
Vehicles Failing to give way turning into a junction	0	2	1	0	2	1	

3.0 Site Photographs (Note ADS sign images taken from Google Maps)





1 – View looking south on Witham Road with the junction for Temple Lane on the left Image 2 – View looking north on Witham Road with the junction for Temple Lane on the right





Image 3 – View looking west on Temple Lane (van travelling south on Witham Road)

Image 4 – Existing flag tourist sign within visibility splay

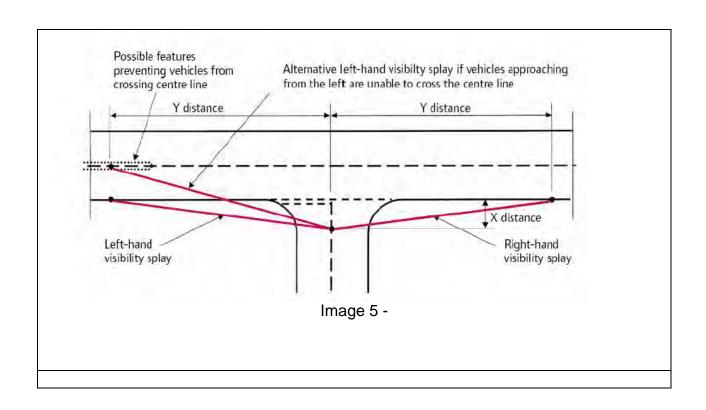
4.0 Recommendations

Remedial Measures

The Road Safety Engineering Team recommends the following:

This location has been investigated previously with a feasibility report commissioned in 2016, and the area is a known collision site, both for the junction of Witham Road/ Temple Lane, and also along the main B1018, which is a 50mph speed limit, and has numerous bend warning signs, and a double white line system to prevent over taking. It is recommended that the previous feasibility report is reviewed and that options from that study are revised to include for:-

- 1: It is felt realigning the junction would help provide better inter-visibility between motorists on Witham road to motorists turning right from Temple Lane.
- 2: remove the bennet island and provide a normal junction layout which would also help reduce traffic speeds into and out of the junction pushing the give-way line further north. Which in turn will allow motorists to sit further north when turning into the junction.
- 3: There is a water main and fire hydrant this needs to be relocated to the northern verge.
- 4: provide new road surface and associated road markings.
- 5: Provide new giveway signing and relocate existing flag signs.
- 6: Review southbound approach signing of the junction itself.



Site Report Essex Highways Casualty Reduction Site Report 2019/20





Location: A131 Halsted Road 385 metres south of junction with Petersfield Lane

District: Braintree

Collision Investigation Period: 01/01/2015 – 31/12/2017

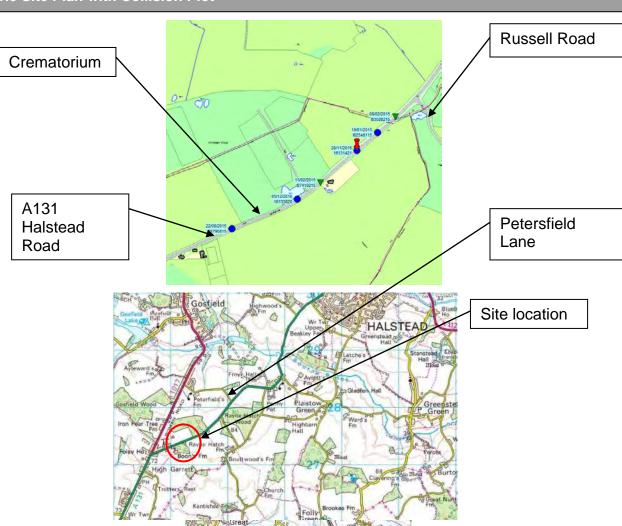
Site Ranking: 015

EXECUTIVE SUMMARY

Intervention works: To help reduce the severity of collisions and to prevent loss of control of motor vehicles and Powered two wheelers on a rural route.

Principle: A study of the personal injury collisions along this section of Halstead Road show that there are issues involving road users losing control and colliding with other vehicles &/or verges along this route.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS				CASUALTIE	S
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Collisions included: Two serious loss of control collisions north east bound within the 40mph limit. One Serious north-east bound road user losing control and drifting/colliding with traffic head on.	0	4	2	0	5	3
One slight shunt/ nose to tail. One slight Collison involving poor overtake manoeuvre. One serious loss of control due to an animal in the road.						

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Northeast bound road users losing control	0	3	0	0	3	0

Additional information

Google maps shows that in 2009 there are Warning signs for Deer, this appears to be an ongoing issue. Although there is no cluster in one specific location the 6 collisions have occurred within a 1km section.



Image 1 – View looking north east with the crematorium to the left of the image.



Image 2 – View looking north east at the speed limit change



Image 3 - View looking north east on the approach to the first bend



Image 4 – View looking north east with the Deer warning sign in the foreground and a lay/by hard stand area to the left of the image.



Image 5 – View looking north east with the hard stand area to the left of the image



Image 6 – View looking South/West on Halstead Road with the Russell Road Junction to the left of the image.



Image 7 – View looking South/West on Halstead Road on the approach to the second bend



Image 8 - View looking South/West on Halstead Road on the approach to the first bend



Image 9 – View looking South/West on Halstead Road with the hard stand area on the right of the image



Image 10 – View looking South/West on Halstead Road with Deer Sign and the approach to the first bend.



Image 11 – View looking South/West on Halstead Road with the change in speed limt (circled in red), note the speed limit signs do not stand out against the back ground.



Image 12 – View looking South/West on Halstead Road within the 40mph Limit with the crematorium on the right of the image.

4.0 Recommendations

Remedial Measures

- 1) It is recommended that improvements are made to highlight the speed limit change close to the Crematorium (as seen in image 11) .The start of the 40mph limit is not very well defined due to the amount of vegetation by the road side. The signs could be mounted on White Oak/ or similar Gateway posts to highlight the speed limit change.
- 2) It is recommended that verge marker posts at 20m centres are provided on either side of A131 Halstead Road from the change of speed 40mph limit (north of the cemetery) up to its junction with Russel Road. On the bends the provision of these marker posts should be reduced to 10m centres 50m either side of the bends.
- 3) It is recommended that the existing Deer Warning sign is replaced with two new yellow backed Deer Warning Signs one in either verge to warn motorists in both directions of the hazard of animals crossing the carriageway.

Site Report Essex Highways Casualty Reduction Site Report 2019/20





Location: Braxted Road, Rivenhall

District: Braintree

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 37 (Rural)

EXECUTIVE SUMMARY

Intervention works: Highlight bend in road with upgraded chevron signing and reflective bollards, as well as clearing and cleaning existing signing

Principle: A study of the personal injury collisions at location shows a pattern of eastbound vehicles losing control at a bend in the road along Braxted Park Road. Improving chevron signing, providing reflective hazard marker posts and providing road studs in this location will better guide motorists around the bend. Moreover, improving visibility to existing signing by clearing surrounding vegetation and cleaning the sign faces will ensure motorists can easily observe them and react accordingly.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL SERIOUS SLIGHT			FATAL	SERIOUS	SLIGHT	
	0	0 2 3			2	3	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL SERIOUS SLIGHT			FATAL	SERIOUS	SLIGHT
Southeast bound vehicles losing control on right hand bend	0	2	1	0	2	1

Additional information

One of the collisions (Serious - Ref 1644506) has been plotted incorrectly and is not in line with the collision description, which indicates the collision actually occurred on the bend to the north, rather than the bend to the south (as shown on the map). Therefore, this collision has been included within the pattern identified above.



Image 1 - Braxted Park Road; southeast-bound approach to bend in road



Image 2 – Braxted Park Road; at bend in road (from southeast-bound approach)



Image 3 – Braxted Park Road; at bend in road (from northwest-bound approach)



Image 4 - Braxted Park Road; southeast-bound approach to bend

Remedial Measures

Remove existing chevron signs and replace with a number of back-to back single chevron signs (with yellow borders) placed consistently around the bend.

Install reflective bollards within the verge and stick-on road studs within the carriageway throughout the bend.

Clean existing 'Double bend Ahead' sign on the eastbound approach to the bend, and cut back vegetation along the northern side of Braxted Park Road from this sign, in an easterly direction, to the bend itself.





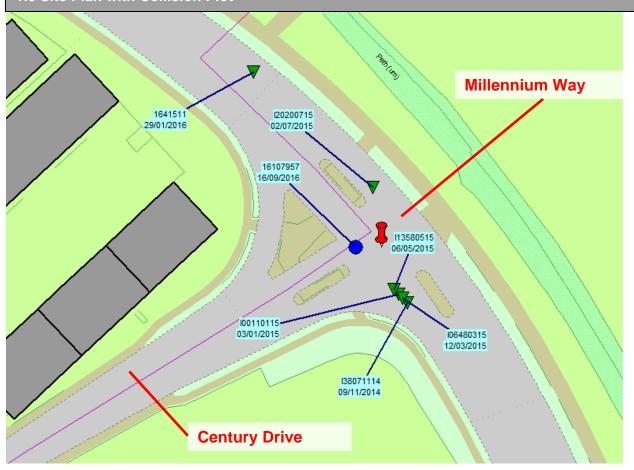
Location: B1018 Millenium Way

District: Braintree

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 216

1.0 Site Plan with Collision Plot





2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
 5 Personal Injury Collisions, these consisted of: Three nose to tail collisions two north bound one south bound. Two failure to giveway collisions with right turners heading to the retail area pulling out into the path of north westbound vehicles. One side swipe collision for one motorists trying to turn left from lane one when travelling north on Millennium Way One collision between a car and a pedestrian using the crossing facility on millennium Way 	0	1	6	0	1	8

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Southeast bound road users failing to give way at a right turn facility, and turning right across the path of north-west bound road users.		1	1	0	1	1

3.0 Site Photographs (Note ADS sign images taken from Google Maps)



Charter Way looking east in advance of the signals (showing 40mph terminal sign)



Millennium Way looking south at the existing junction and traffic islands

Image 1 -



Millennium Way looking north at the existing junction and traffic islands

Image 2 –



Millennium Way looking south at the existing junction and traffic islands

Image 3 -

Image 4 –



Millennium Way looking south at the existing right turn phase following a motorist not waiting for the indicative green arrow in front of the path of an oncoming vehicle.

Image 5 -

Remedial Measures

The Road Safety Engineering Team recommends the following:

1: Undertake a study to Investigate capacity at the junction. If there is sufficient capacity provide a separate right turn phase for the signals complete with new signal head, removing the existing indicative green signal and installing a full signal (complete with three aspects).





Location: Thoby Lane J/w St Annes Road, Mountnessing

District: Brentwood

Collision Investigation Period: 01/01/2015 – 31/12/2017

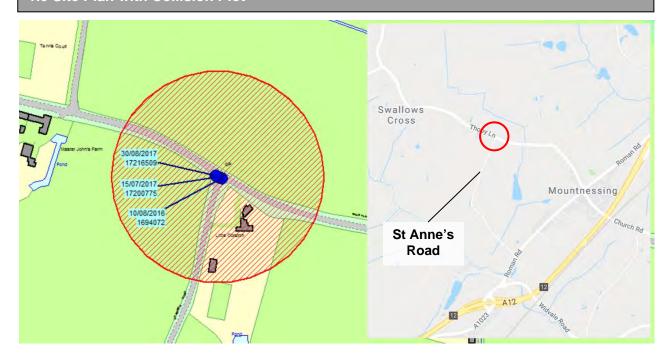
Site Ranking: Rural Site 002

EXECUTIVE SUMMARY

Intervention works: Visibility & signage improvements at the junction of Thoby Lane with St Annes Road in Mountnessing

Principle: A study of the personal injury collisions at this junction shows a pattern of collisions involving motorists when either turning right into, or left out of St Annes Road. All of these collisions have resulted in serious injuries. Through clearance of vegetation of within the visibility splay for motorists waiting at the give way lines in St Annes Road this should improve visibility of approaching vehicles and therefore reduce the likelihood of fail to give way type collisions. Through improvements to traffic signs on both Thoby Lane approaches and opposite the junction this should highlight the presence of the junction to approaching motorists and encourage them to adjust their speeds accordingly.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL SERIOUS SLIGHT			FATAL	SERIOUS	SLIGHT	
	0	0 3 0			4	0	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS				CASUALTIE	S
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT

Motorists failing to give way	0	3	0	0	4	0
when turning right into, or left						
out of St Annes Road						

Additional information

It is noted that there was an additional collision involving a motorist turning right into St Annes Road across the path of an oncoming (westbound) motorists recorded in June 2014. This collision also resulted in serious injuries.



Image 1 – Existing 'Side road ahead' warning sign on eastbound approach is badly faded and partially obscured by overgrown vegetation



Image 2 – Existing 'Give way' sign on St Annes Road northbound approach



Image 3 – Reverse of existing '7.5T' weight limit signs, nearside sign leaning in verge



Image 4 - Existing finger post directional sign with sign facing into St Annes Road missing



Image 5 – Telegraph pole and overgrown vegetation located the within visibility splay to the left when sitting in at the give way lines on St Annes Road



Image 6 – Telegraph pole and overgrown vegetation located the within visibility splay to the right when sitting in at the give way lines on St Annes Road



Image 7 – Overgrown vegetation to the northern side of Thoby Lane restricts forward visibility to the existing finger post directional sign opposite St Annes Road

Remedial Measures

- 1) It is recommended that any overgrown vegetation located within the visibility splay should be cut back and maintained on a regular basis.
- 2) It is recommended that the existing 'Side road ahead' warning sign on the Thoby Lane eastbound approach should be replaced with a new yellow backed version and overgrown vegetation should be cut back and maintained on a regular basis, or the sign should be relocated to an area without adjacent vegetation.
- 3) It is recommended that a new yellow backed 'Side road ahead' warning sign should be provided on the Thoby Lane westbound approach.
- 4) It is recommended that the existing finger post directional sign located opposite the junction should be replaced with a more substantial flag type sign to improve conspicuity of the junction.
- 5) It is recommended that the area of overgrown vegetation located along the northern side of Thoby Lane to the east of the junction should be cut back and maintained on a regular basis in order to improve forward visibility to the new flag type sign.
- 6) It is recommended that the worn road markings should be refreshed.





Location: Wash Road / Widvale Road J/w Old Church Lane, Mountnessing

District: Brentwood

Collision Investigation Period: 01/01/2015 – 31/12/2017

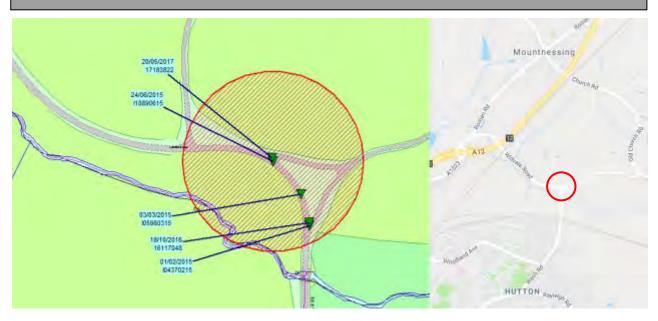
Site Ranking: Rural Site 120

EXECUTIVE SUMMARY

Intervention works: Improvements to warning signage on both Wash Road / Widvale Road approaches to the junction. Substantial vegetation clearance to improve visibility splays and forward visibility in the vicinity of the junction.

Principle: A study of the personal injury collisions at this junction shows a pattern of collisions involving motorists turning right from Old Church Lane into Wash Road / Widvale Road. It is not absolutely clear which section of Old Church Lane (Northern of Southern) motorists are turning right from but it is felt that by improving conspicuity of the junction this will reduce the risk of such collisions and encourage reduced vehicle speeds. Improvement to warning signs and substantial vegetation clearance should also help to improve junction conspicuity and improve visibility splays for motorists undertaking turning movements at the junction.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL SERIOUS SLIGHT			FATAL	SERIOUS	SLIGHT	
	0	0	5	0	0	7	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
Motorists failing to give way when turning right from Old Church Lane into Wash Road / Widvale Road	0	0	4	0	0	6	

Additional	NI/o
information	N/a



Image 1 – Existing 'Side road on bend ahead' warning sign on Wash Road / Widvale Road eastbound approach is partially faded



Image 2 – Existing yellow backed chevron signs facing eastbound motorists are partially obscured by overgrown vegetation



Image 3 – Existing 'Side road on bend ahead' warning sign on Wash Road / Widvale Road northbound approach



Image 4 – Existing yellow backed chevron signs facing northbound motorists are partially obscured by overgrown vegetation.



Image 5 – Existing 'Give way' sign on Old Church Lane westbound approach (Southern section) is partially soiled / dirty and the sign post appears to be rusty.



Image 6 – Existing 'Give way' sign on Old Church Lane westbound approach (Northern Section) is in good condition and is generally visible to approaching motorists.



Image 7 – Visibility to the left from give way lines on Old Church Lane westbound approach (Southern Section) is partially obscured by overgrown vegetation.



Image 8 – Visibility to the right from give way lines on Old Church Lane westbound approach (Northern Section) is generally good but can be obscured by passing westbound vehicles.

Remedial Measures

- 1) It is recommended that any overgrown vegetation located within the visibility splays should be cut back and maintained on a regular basis, including the area to the inside of the sharp bend (Subject to highway boundary). Overgrown areas of vegetation surrounding and/or obscuring existing chevron signs should also be cut back and maintained on a regular basis.
- 2) It is recommended that the existing 'Side road on bend ahead' warning signs on both Wash Road / Widvale Road approaches should be replaced with new yellow backed versions.
- 3) It is recommended that a new 'Give way' sign assembly should be provided on the Old Church Lane westbound approach (Southern section).





Location: A13 London Road J/w Downer Road (South), Benfleet

District: Castle Point

Collision Investigation Period: 01/01/2015 – 31/12/2017

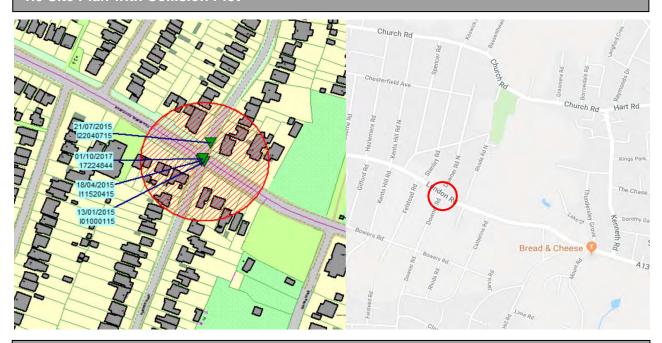
Site Ranking: Single Site 255

EXECUTIVE SUMMARY

Intervention works: Feasibility study into the possibility of making amendments to the kerb-line along the southern side of A13 London Road in order to improve the visibility splays for motorists turning out of Downer Road.

Principle: A study of the personal injury collisions at this junction shows a pattern of collisions involving motorists turning right onto the A13 London Road (London bound) across the path of westbound motorists. Two of these collisions involved vulnerable road users (Motorcyclists).

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL SERIOUS SLIGHT			FATAL	SERIOUS	SLIGHT
	0	0	4	0	0	9

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Motorists turning right from Downer Road into A13 London Road in the path of westbound vehicles	0	0	3	0	0	7

Additional	It should be noted that 2 of the collisions involved right turns across the path of
information	powered two wheelers.

It should also be noted that there have been two additional collisions recorded at this junction involving motorists turning right out of Downer Road across the path of vulnerable road users during the previous fourteen month period (01/11/2013 to 31/12/2014). One of these collisions involved a pedal cyclist and resulted in serious injuries, the other involved a powered two wheeler and resulted in slight injuries.



Image 1 – Existing 'Give way' sign on Downer Road (South) approach



Image 2 – Visibility to the right obscured by a boundary fence



Image 3 – Visibility to the left obscured by a telegraph pole and street name sign

Remedial Measures

- 1) It is recommended that a feasibility study be carried out to identify if it is possible to re-align the kerb line to the southern side of A13 London Road in order to bring the give way lines forward in order to improve visibility splays for motorists turning out of Downer Road. It appears that it may be possible to narrow the existing right turn lanes to the centre of A13 London Road in order to shift the westbound running lane further north and therefore allow re-alignment of the southern kerb line.
- 2) It is recommend that the street name sign located to the southern side of Downer Road (South) should be relocated further into the junction, outside of the visibility splay.





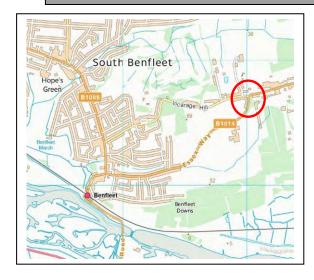
Location: B1014 Essex Way Jw Vicarage Hill

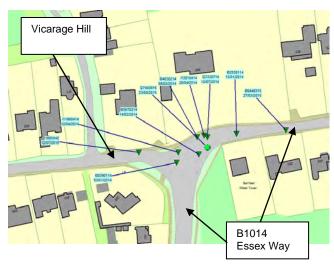
District: Castle Point

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 231

1.0 Site Plan with Collision Plot





2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
	0	1	9	0	1	11

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
5 x NB loss of control collisions around the bend. (all loss of control collisions occurred in wet conditions involving single vehicles)	0	0	5	0	0	5





Image 1 -







Image 3 –

Image 4 -

4.0 Recommendations

Remedial Measures

Liaise with Asset Management (Nic Starling) and put forward the bend for remedial resurfacing.

Yellow back the bend ahead warning sign for northbound road users.

Speed Survey directly at the entry of the 30mph section for northbound road users and another speed survey within the 30mph section itself.

Following speed survey results look at Introducing a 40mph buffer zone along the northbound to be positioned prior to entry to the 30mph limit.

30mph carriageway roundel to be removed from current location and repositioned at the terminal location.

'historic' New road layout sign ahead sign to be removed.





Location: Pan Lane (approx. 500m from Southend Road)

District: Chelmsford

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 28 (Rural)

EXECUTIVE SUMMARY

Intervention works: Vegetation clearance on the inside of a bend to increase forward visibility to oncoming vehicles. Road markings and signing installed to assist in guiding motorists around the bend.

Principle: A study of the personal injury collisions at location shows a pattern of southbound motorists colliding with oncoming vehicles whilst negotiating a left hand bend along Pan Lane. Clearing vegetation within the inside of the bend will increase forward visibility and provide an increased opportunity for southbound motorists to observe oncoming traffic. Providing road markings on the approach to the bend will help to provide a visual narrowing, encouraging motorists to take care when negotiating the bend.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
	0	2	2	0	2	4

Identified Collision Pattern(s) at Cluster Site	COLLISIONS		CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Southbound vehicles entering opposing traffic lane and colliding with westbound vehicles on the bend	0	1	2	0	1	4

Additional	None.
information	





Image 2 - Vegetation within inside of southernmost bend obstructing forward visibility



Image 3 – Westbound approach to southernmost bend

Remedial Measures

Remove and sterilise an area of vegetation along the inside of the bend, including a tree to increase visibility around the bend.

Clear vegetation from around 'Double bend ahead' warning sign along eastbound approach to double bends to ensure adequate visibility to the sign.

Provide a number of centre line markings on both approaches to each bend. Terminate the centre line through the extents of each bend to provide a visual narrowing.

Provide a 'Road narrows ahead' sign with an 'Oncoming vehicles in middle of road' sub plate on both approaches to the southernmost bend.





Location: A1060 Roxwell Road (approx. 400m from Lordship Road)

District: Chelmsford

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 101 (Single Site)

EXECUTIVE SUMMARY

Intervention works: Provision of signing on approach to car wash facility

Principle: A study of the personal injury collisions at location shows a pattern of westbound motorists colliding with the rear of vehicles waiting to turn right into a car wash facility off Roxwell Road. Providing signing and slow markings for westbound vehicles on the approach to the car wash facility will make motorists aware of vehicles waiting to turn right ahead. Installing bollards either side of the car wash entry and exit will also highlight the facility to all road users.

Site Plan with Collision Plot



Identified Collision Pattern(s) at Cluster Site	COLLISIONS		CASUALTIES			
	FATAL SERIOUS SLIGHT		FATAL	SERIOUS	SLIGHT	
Westbound vehicles colliding with the rear of vehicles turning right into a car wash facility	0	0	3	0	0	4

Additional	None.
information	



Image 1 – Roxwell Road; westbound approach to Car Wash facility



Image 2 - Roxwell Road; looking in a westerly direction at Car Wash facility



Image 3 - Roxwell Road; looking in an easterly direction at Car Wash facility entry



Image 4 - Roxwell Road; looking in an easterly direction at Car Wash facility exit

Remedial Measures

Provide a 'Queues Likely' warning sign (to TSRGD diagram 584) on westbound approach to Car Wash facility.

Provide a 'SLOW' road marking adjacent to the new warning sign.

Install a reflective bollard either side of the entry and the exit to the Car Wash facility.





Location: Lawn Lane j/w Brackenden Drive

District: Chelmsford

Collision Investigation Period: 01/01/2015 – 31/12/2017

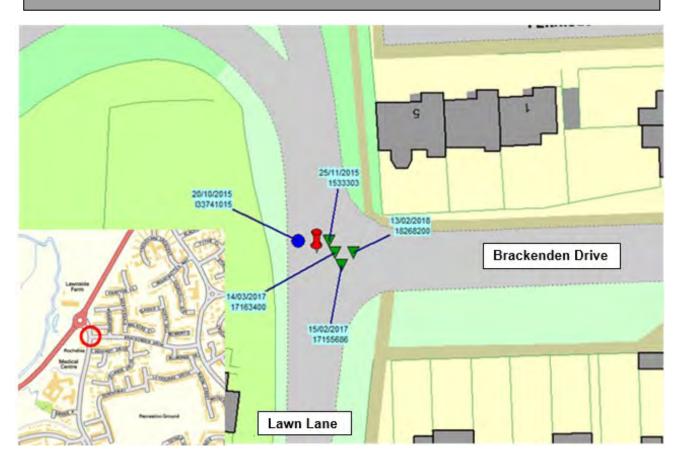
Site Ranking: 106 (Single Site)

EXECUTIVE SUMMARY

Intervention works: Replacing missing speed limit signing and refreshing road markings to reinforce 30mph speed limit for southbound road users. Erecting a 'Give Way' at Brackenden Drive for westbound motorists approaching the junction.

Principle: A study of the personal injury collisions at location shows a pattern of vehicles pulling out of Brackenden Drive into the path of southbound vehicles along Lawn Lane. Replacing a missing terminal speed sign and refreshing an existing 30 roundel with red surfacing for southbound vehicles exiting the roundabout, will reinforce the speed limit to motorists and control speeds along Lawn Lane.

Site Plan with Collision Plot



Identified Collision Pattern(s) at Cluster Site	COLLISIONS		CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Vehicles exiting Brackenden Drive failing to give way to southbound vehicles along Lawn Lane	0	1	3	0	1	3

Additional No

None.



Image 1 – Lawn Lane; speed limit sign (nearside) for southbound vehicles exiting A1016 roundabout towards junction



Image 2 - Lawn Lane; southbound approach to junction with Brackenden Drive



Image 3 - Brackenden Drive; looking in an northerly direction along Lawn Lane



Image 4 – Brackenden Drive; looking in an southerly direction along Lawn Lane

Recommendations

Remedial Measures

Replace missing illuminated 30mph terminal sign within splitter island to reinforce the change in speed limit to motorists exiting the A1016 roundabout (if no electrical connection is present, then consider providing an unilluminated sign if scheme funding is an issue).

Refresh the red band surfacing and 30 roundel along southbound carriageway adjacent to the 30mph speed limit signing.

Install a new Give Way sign on the nearside verge along Brackenden Drive at the junction.

Refresh road markings at Brackenden Drive junction, to increase conspicuousness of give way and traffic lanes.

Site Report Essex Highways Casualty Reduction Site Report 2019/20





Location: A414 Ongar Road West j/w Wyses Road

District: Chelmsford

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 121 (Single Site)

EXECUTIVE SUMMARY

Intervention works: Extend edge hatching along southern side of A414 in a westerly direction, up to its junction with Wyses Lane.

Principle: A study of the personal injury collisions at this location shows a pattern of westbound motorists along A414 Ongar Road West colliding with vehicles pulling out of Wyses Road. Currently the junction mouth for Wyses Road extends either side of the junction for a notable distance. This arrangement could confuse road users as westbound vehicles turning left into Wyses Road could enter into the junction mouth and mask vehicles following behind. Hatching either side of the junction, thus shortening the junction mouth, will ensure westbound vehicles do not straddle the traffic lane and partially enter the junction mouth. Instead, they will be encouraged to remain wholly within the traffic lane, making it easier for motorists waiting at Wyses Road to judge their path.

Site Plan with Collision Plot



Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
Vehicles pulling out of Wyses Road into the path of westbound vehicles along Ongar Road West	0	0	3	0	0	4	

Additional None.

Site Photographs



Image 1 – A414; westbound approach to junction with Wyses Road



Image 2 – Wyses Road; looking east along A414



Image 3 – Wyses Road; approach to junction with A414

Recommendations

Remedial Measures

Extend edge hatching along southern side of A414 in a westerly direction, up to its junction with Wyses Lane (see Images 1 & 2, above)

Site Report Essex Highways Casualty Reduction Site Report 2018/19





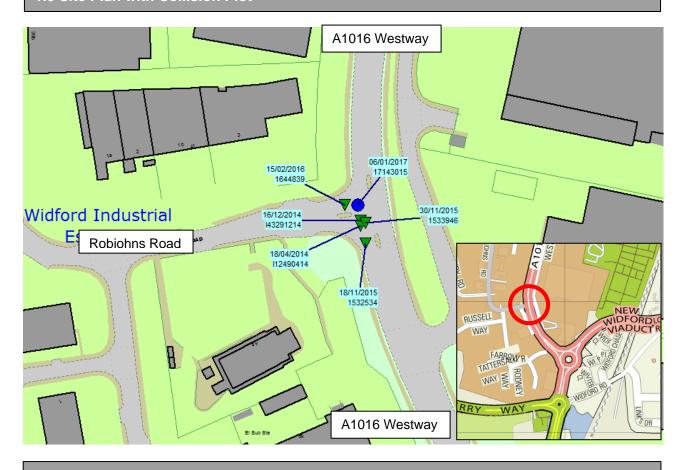
Location: A1016 Westway / Robjohns Road, Chelmsford

District: Chelmsford

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 200

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
	0	1	5	0	1	9

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Southbound vehicles turning right from Westway into Robjohns Road colliding with northbound vehicles along Westway.	0	1	3	0	1	6

3.0 Site Photographs



Image 1 – Southbound approach along
Westway Road (current loop position for right
turning traffic highlighted in red)



Image 2 – Looking at Robjohns Road arm from Westway



Image 3 – Westway; looking northbound towards junction



Image 4 – Westway; looking northbound across to Robjohns Road

4.0 Recommendations

Remedial Measures

- Relocate traffic signal loop within carriageway for right turning vehicles further south into junction, to a point where waiting vehicles will activate the right turn phase.
- Following further discussions with ITS team (05/12/2018) moving of stop line and providing right turn phase at this location is likely to cause a high level of capacity issues for road users attempting to travel north into Chelmsford. Other feasibility measures which include banning the right turn manoeuvre into Robjohns Rd are going to be explored from a modelling perspective in this year. With a potential design in Financial year 20_21

Site Report Essex Highways Casualty Reduction Site Report 2019/20





Location: A134 ON ROUNDABOUT WITH NAYLAND ROAD District: Colchester

Collision Investigation Period: 01/01/2015 - 31/12/2017

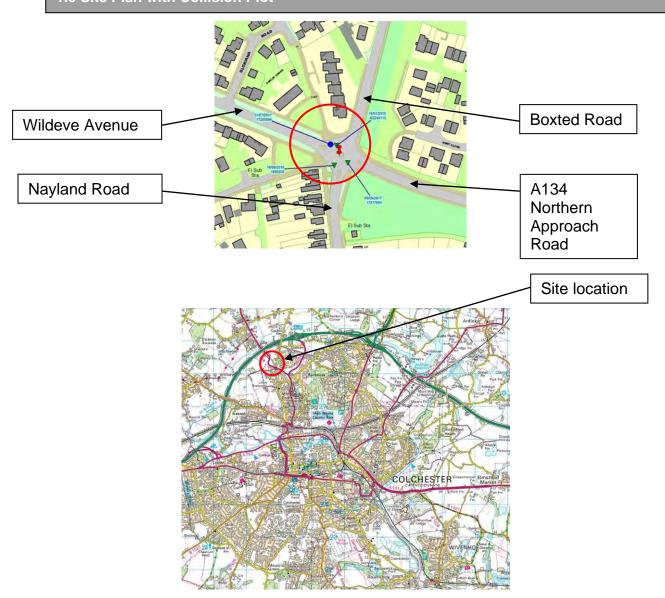
Site Ranking: 110

EXECUTIVE SUMMARY

Intervention works: To help improve cyclist safety at the intersection of A134 and Nayland Road. By improving off carriageway facilities on Nayland Road

Principle: A study of the personal injury collisions along this section of A134 show that there are issues involving vulnerable road users (cyclists) being injured by motorists entering the roundabout circulatory.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Collisions included: All collisions involved motor vehicles failing to giveway and colliding with Cyclists on the roundabout circulatory. (the descriptions are a little ambiguous as to Vehicle 1's direction of travel)	0	1	3	0	1	3

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Cyclists being struck by motor vehicles on the roundabout circulatory.	0	1	2	0	1	2

3.0 Site Photographs



Image 1 – View looking North from the bus gate on Nayland Road



Image 2 – View looking East on Wildeve Avenue (notice articulated vehicle over running the over run area)



Image 3 - View looking North from the bus gate on Nayland Road



Image 4 - View looking south at the roundabout on Boxted Road



Image 5 - View looking west on Northern Approach Road.



Image 6 - View looking East on Wildeve Avenue

4.0 Recommendations

Remedial Measures

- 1) Discuss the location with Essex Cycling Strategy Leader:
- 2) It is recommended that additional shared use signing is provided on the shared footway/ cycleway on the western side of Nayland Road. To highlight the facility for cyclists heading north on Nayland Road, across Wildeve Avenue and onto Boxted Rd.
- 3) It is recommended that the central hatching along Nayland Road is partially removed and a cycle right turn lane is provided to allow cyclists to turn right and join the shared facility on the corner of Nayland Road (new dropped kerbing will be required on the corner) and Northern Approach Road when passing through the bus gate, this will allow them to use the toucan crossing on Northern Approach Road. See proposed route in red below.



Image 7: Red line showing prefered route from Nayland Road to Boxted Road using new Toucan crossing.



Image 8: Example of cycle right turn lane.

- 4) It is recommended that a cycle scoop is provided on the northern side of Wildeve Road with new surfacing to tie into the cycleway to allow cyclists to join the shared facility on the northern side of Wildeve Road and then onto the new shared cycleway that will run north on Boxted Road, or to alternatively carry onto the toucan on A134 Northern Approach Road to head south towards the Rail Station and town centre.
- 5) It is recommended that a cyclist warning sign is provided on Wildeve Avenue when heading east in the northern verge. It was observed that motorists are failing to slow on the approach to the roundabout when heading east, as there is a bus gate for Nayland Road with minimal flow from that arm. It is felt that additional signing would help highlight cyclists in the area to motorists.

Site Report Essex Highways Casualty Reduction Site Report 2018/19





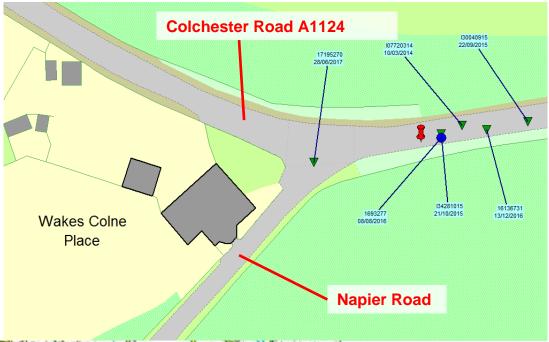
Location: Colchester Road A1124 Wakes Colne

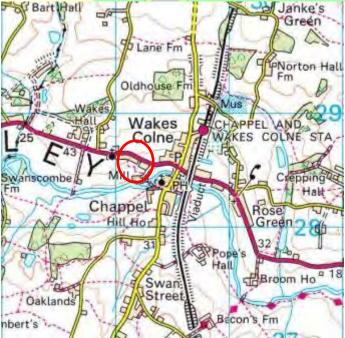
District: Colchester

Collision Investigation Period: 01/01/2014 - 30/06/2017

Site Ranking: 191

1.0 Site Plan with Collision Plot



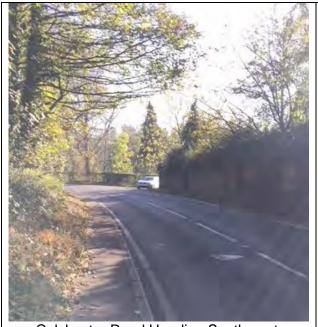


2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
 6 Personal Injury Collisions, these consisted of: One signal vehicle loss of control in the wet. Two number two vehicle loss of control in the wet one northbound one south bound. Two number two loss of control collisions with Vehicle 1 drifting colliding head on to opposing vehicles One nose to tail collision at temporary traffic signals in wet conditions 	0	1	5	0	2	2

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Vehicles losing control in wet conditions. (three eastbound and one westbound)	0	0	4	0	0	4

3.0 Site Photographs (Note approach to signals images taken from Google Maps)



Colchester Road Heading South east



Colchester Road Heading North west

Image 1 –





Existing gulley opposite Lanes Road junction Image 3 –



Existing Gulley offlet opposite Lanes Road junction

Image 4 –



View looking north from Lanes Road junction mouth.



Existing gulley offlet south east of the bend likely to be piped into adjacent field.

Image 5 -

Image 6 -

4.0 Recommendations

Remedial Measures

The Road Safety Engineering Team recommends the following:

- 1: Liaise with the Area Maintenance Engineer and organise to jet out the existing drainage system, Investigate capacity of the existing surface water system undertaking a cctv survey locating the outfall.
- 2: If the system is damaged or the soak away is no longer working arrange for repairs to the system to be made.
- 3. If capacity is available within the system undertake a topo survey to locate the low spots within the carriageway and install 2 x new gulley's on the bend.
- 4: Liaise with the surfacing team to ascertain if surfacing works are planned for the area due to the poor scrim data it is recommended that the area is resurfaced in the near future.
- 5: If surfacing is due to take place organise for rain line to be laid for the edge of carriageway lines and 30 roundels at regular intervals adjacent to the existing 30mph repeater signing.
- 6: Install slippery road surface signs in both directions of Colchester Road

Site Report Essex Highways Casualty Reduction Site Report 2019/20





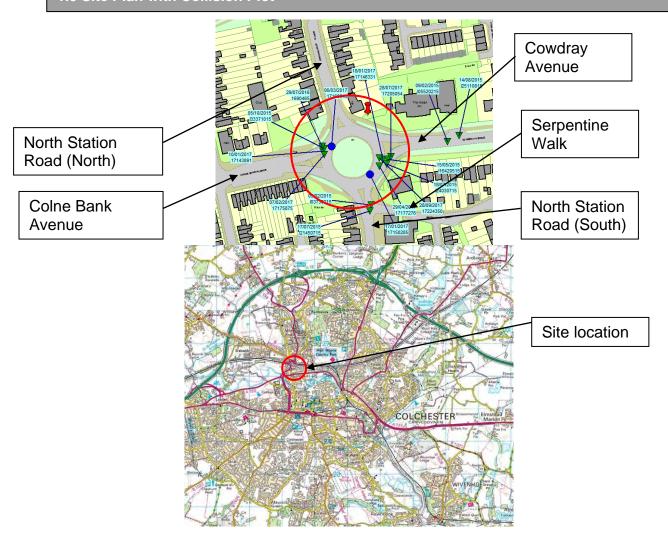
Location: Cowdray Av jw North Station Rd, (Albert Roundabout) District: Colchester Collision Investigation Period: 01/01/2015 – 31/12/2017 Site Ranking: 211

EXECUTIVE SUMMARY

Intervention works: To help improve cyclist safety at the intersection of Cowdray Avenue and North Station Road at The Albert Roundabout, by improving on and off carriageway facilities on North Station Road and the roundabout circulatory.

Principle: A study of the personal injury collisions on The Albert Roundabout show that there are issues involving vulnerable road users (cyclists) being injured by motorists entering the roundabout circulatory on the approaches of Colne Bank Avenue and Cowdray Avenue.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information		COLLISION	S	CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Collisions included: Seven of the collisions involved road users failing to give way and colliding with Cyclists on the roundabout circulatory.	0	2	12	0	2	13
Two of these were serious and five of these were slight severity.						
The collisions are in two clusters, one at the eastern approach from Colne Bank Avenue, and the second is the west bound approach from Cowdray Avenue.						
The other collisions involved three nose to tail collisions on Cowdray Avenue westbound approach.						
The other collisions as motor vehicles and a failure to give way at the junction of Northern approach Road and Serpentine Walk. Three of the collisions involved Powered two wheelers.						

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Southbound cyclists being struck by road users exiting onto the roundabout circulatory at the intersection of Cowdray Avenue/ Northbound cyclists being struck by road users exiting onto the roundabout circulatory at the intersection of Colne Bank Ave	0	2	5	0	2	5



Image 1 - View looking east approaching the roundabout on Colne Bank Avenue



Image 2 - View looking West approaching the roundabout on Cowdray Avenue



Image 3 – View looking South on approach to the roundabout from North Station Road (North)



Image 4 – View looking North on the approach to the roundabout on North Station Road (South)



Image 5 – View looking North on North Station Road (South) at the three lane approach to the roundabout.



Image 6 – View looking South on Wildeve Avenue across the circulatory to North Station Road (South)

4.0 Recommendations

Remedial Measures

- 1) Undertake discussions with Essex Cycling Strategy Leader.
- 2) It is recommended that counts are taken for cyclists using the existing toucan crossings and cycle infrastructure off carriageway. It is recommended that counts are taken for cyclists

using the area on carriageway particularly for the north south and vice versa route to and from the town centre and Northern rail station. It is recommended that traffic counts are taken for vehicles on all approaches and exit.

- 3) A study should be undertaken to determine if additional measures are needed for the area, this may include for a larger scheme and changes to the Toucan crossings and the provision to get to them. It may be suitable to provide cycle lanes on the roundabout circulatory, these should all be investigated. The investigation should also include as a minimum for the design and costing of the following measures below:-
- 4) It is recommended that entry and exit to the shared cycleway is investigated for all four arms of the roundabout in the form of new cycle slips/ scoops so that cyclist can join the cycleway in advance of the roundabout. There are a number of areas that may be suitable (see Images below). It is recommended that a cycle symbol and left turn arrow is provided on the carriageway. Existing Hatching on Colne Bank Avenue will need to be removed. On Colne Bank Avenue and North Station Road (South) new dropped kerbing and profiled paving will be needed.



Images- 7, 8, 9, 10 Red circles showing prefered location of new cycle scoops.



Image 11- Example of Cycle carriageway marking.

5) Following survey results if on carriageway cycle numbers are high and that traffic flows are appropriate It is recommended that a short section of mandatory cycle lane at 1.5m wide is provided on North Station Road (southern arm) on the approach to the roundabout (see red circle on image 12 below), and that the three lanes for motor vehicles are removed and replaced with two lanes.

The new lane one, for left turners to head west on Colne Bank Avenue and straight over (for buses and taxis) to continue north on North Station Road (Northern Arm). Lane two would remain as straight over for vehicles to turn right to head east on Cowdray Avenue. It was observed on site that motorists are straddling the existing lanes.



Image 12- Location of proposed Cycle lane.

6) It is recommended that cyclist warning signs are provided on the approaches to the roundabout on both Cowdray Avenue and on Colne Bank Avenue.

Site Report Essex Highways Casualty Reduction Site Report 2018/19





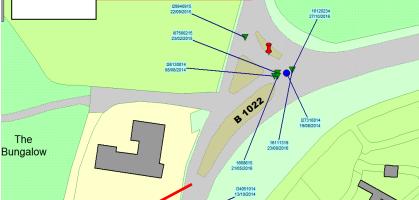
Location: B1022 Maldon Road Junction with Warren Lane

District: Colchester

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 214

1.0 Site Plan with Collision Plot Warren Lane







2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
 5 Personal Injury Collisions, these consisted of : One motorist losing control on Maldon Road. Seven failure to give-way collisions with right turners heading to Warren lane lane pulling across the path of oncoming motorists. 	0	1	7	0	1	14

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Westbound road users turning right into Warren Lane – turning across the path of eastbound road users	0	1	6	0	1	13

3.0 Site Photographs (Note ADS sign images taken from Google Maps)



1 – View looking north on travelling uphill towards the junction on B1022 Maldon Road



Image 2 - View looking south on Warren Lane



Image 3 – View looking west on B1022 Maldon Road entering the 30mph limit



Image 4 – View looking west along B1022
Maldon Road entering the right turn lane with
Warren lane to the right of the image



Image 5 – View looking south east at the junction on Warren Lane



Image 6 – Vehicle turning right from B1022 Maldon Road into Warren Lane

4.0 Recommendations

Remedial Measures

The Road Safety Engineering Team recommends the following study is undertaken and should include:

- 1: Undertake a topo survey of the existing junction.
- 2: Investigate land ownership and associated costs of purchasing land to the south east of the site.
- 3: Investigate remedial measures to realign the existing junction removing the left turn slip from Maldon Road into Warren Lane.
- 4: Investigate removal of the islands, left turn lane and realign the entire junction to a standard t junction north of its existing alignment.
- 5: Investigate signalisation of the junction and providing an appropriate layout.

- 6: Investigate the removal of the junction and the installation of a roundabout.
- 7: Report should include all associated costs for implementing options 3, 4, 5 and 6.

Site Report Essex Highways Casualty Reduction Site Report 2019/20





Location: B1026 LAYER ROAD jw BOADICEA WAY District: Colchester

Collision Investigation Period: 01/01/2015 – 31/12/2017

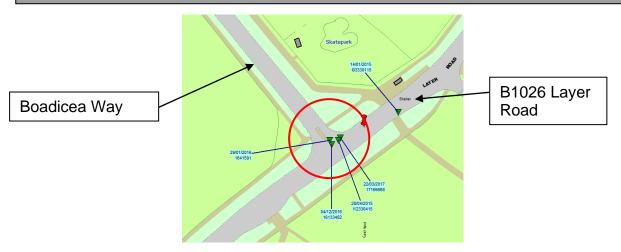
Site Ranking: 268

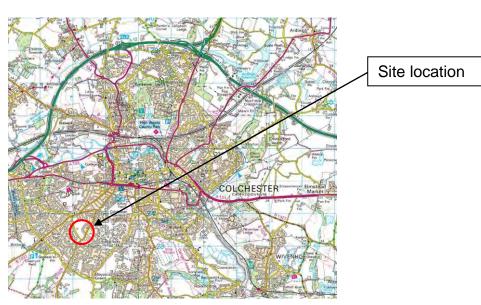
EXECUTIVE SUMMARY

Intervention works: To help improve cyclist safety at the intersection of Layer Road and Boadicea Way. This will involve improvements to on carriageway cycle facilities.

Principle: A study of the personal injury collisions along this section of Layer Road show that there are issues involving vulnerable road users (cyclists) being injured by motorists entering the Layer Road into Boadicea.

1.0 Site Plan with Collision Plot





2.0 Site Description & Observations

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Collisions included: Three collisions involved road users failing to give-way exiting Boadicea Way and colliding with northeast bound cyclists on B1026 Layer Road.	0	0	5	0	0	5
One collision involved a Pedestrian being struck on the Toucan crossing (plot suggests Toucan crossing but description suggests the zebra crossing to the south). One of the collisions involved a powered two wheeler.						

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
North east bound cyclists on B1026 Layer Rd being struck by road users exiting Boadicea Way.	0	0	3	0	0	3

Additional	There is a proposal to provide new cycle facilities to the north of the collision
information	site along Layer Road. This is includes off carriageway facilities.

3.0 Site Photographs



Image 1 – View looking South East on Boadicea Way



Image 2 - View looking North East on Layer Road



Image 3 - View looking South West on Layer Road

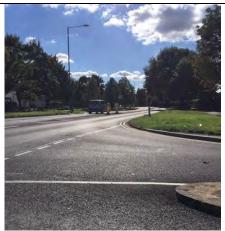


Image 4 – View looking south from the junction mouth



Image 5 – View looking north from the junction mouth.

4.0 Recommendations

Remedial Measures

- 1) Discuss the location with Essex Cycling Strategy leader
- 2) It is recommended that 1.5m advisory cycle lanes complete with cycle carriageway symbols are provided on B1026 Layer Road either side of the junction (running from the bus layby and traffic island to abut the new cycle facility north of the Toucan crossing) to highlight cyclists crossing the junction mouth in either direction. This may require the removal of some of the central hatching north of the traffic island.
- 3) If budget permits it is recommended that the cycle lane area is infilled with Green High Friction Surfacing across the junction mouth to highlight the provision, this should be considered an option and if there is <u>insufficient</u> budget then this element can be removed from the scheme.
- 4) It is recommended that a cyclist warning sign is provided on the Boadicea Way approach to the junction in the northern verge to highlight cyclists.

Site Report Essex Highways Casualty Reduction Site Report 2018/19





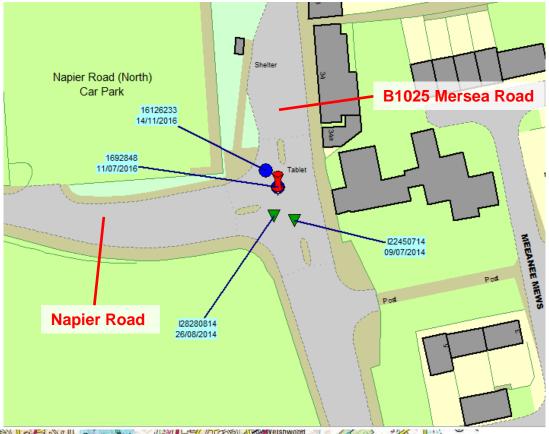
Location: B1025 Mersea Road

District: Colchester

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 34

1.0 Site Plan with Collision Plot





2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
4 Personal Injury Collisions, these consisted of : • Four failure to giveway collisions with right turners heading to Napier Road pulling out into the path of northbound vehicles.	0	2	2	0	2	2

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
Vehicles Failing to give way at a right turn facility.	0	2	2	0	2	2	

3.0 Site Photographs (Note approach to signals images taken from Google Maps)





Mersea Road Heading south

Image 1 – Image 2 –



Napier Road heading east



Mersea Road looking at the primary and secondary heads when travelling south

Image 4 –

Image 3 -



Existing secondary head on Mersea Road for right turning traffic with indicative green situated below the "normal" green aspect.

Looking South west at the traffic/ pedestrian island on Mersea Road

Image 5 –

Image 6 -

4.0 Recommendations

Remedial Measures

The Road Safety Engineering Team recommends the following:

1: Undertake a study to investigate capacity at the junction. If there is sufficient capacity

provide a separate right turn phase for the signals complete with new signal head, removing the existing signal head with indicative green signal and installing a 2 x full signal (complete with three aspects) one depicting right turn green signal and one straight on green arrow.



Image 7 Signal Head.

- 2: As part of the study investigate if the existing traffic island will need to be widened to facilitate enough clearance of the new signal heads
- 3: Investigate amending the existing hatching and lining to allow for the new widened island.
- 4: Liaise with the surfacing team to ascertain if surfacing works are planned for the area (although the HFS is in poor condition the collision pattern does not suggest there is a skidding issue at this site, however due to the poor scrim data it is recommended that the area is resurfaced in the near future as part of any construction works in year 2 of the scheme)

Site Report Essex Highways Casualty Reduction Site Report 2018/19





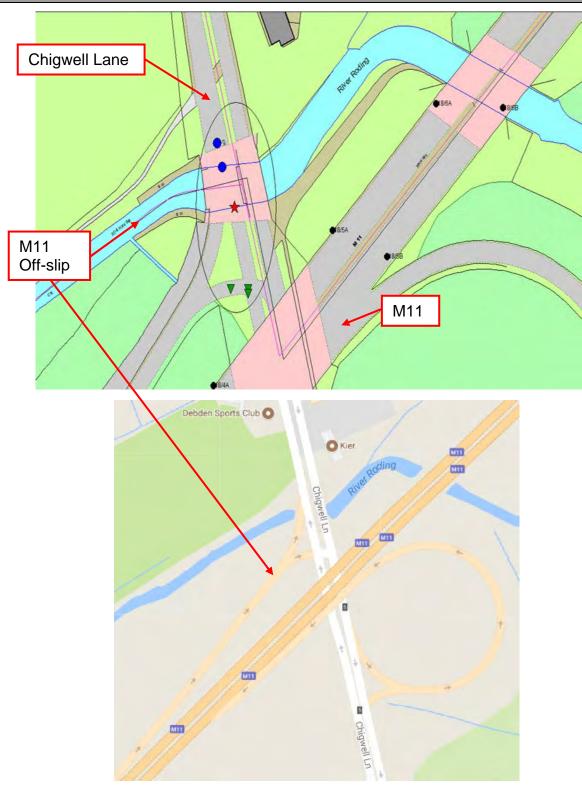
Location: CHIGWELL LANE A1168 M11 MOTORWAY M11

District: EPPING

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 8

1.0 Site Plan with Collision Plot



Page 1 of 4

3.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
	1	2	3	1	2	5	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Vehicles exiting the Off-slip failing to give way at the junctions and colliding with northbound road users on Chigwell Lane.	0	2	2	0	2	4

4.0 Site Photographs



Image 1 - Chigwell Ln northbound approach



Image 2 - M11 Off slip approach



Image 3 - View from Off-slip junction 1



Image 4 – View from Off-slip junction 2

5.0 Recommendations

Remedial Measures

A study of the PIC's at this junction shows a pattern of vehicles failing to Give Way at the junction of the M11 Off-slip and Chigwell Lane (A1168). To encourage lower approach speeds on the Off-slip, it is proposed to increase the length of and widen the centre hatching separating the two lanes of the slip road. This will reduce the width of the running lanes and encourage caution on the approach. To reduce the masking of vehicles waiting at the junction for northbound traffic on Chigwell Lane, it is proposed to reduce the northbound section of Chigwell Lane to a single carriageway. The appropriate advanced signing will be deployed on the northbound approach to the junction to the south of the M11 over-bridge.





Location: B194 WALTHAM ROAD NEAR JN WITH LAUNDRY LANE

District: EPPING FOREST

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 9

1.0 Site Plan with Collision Plot

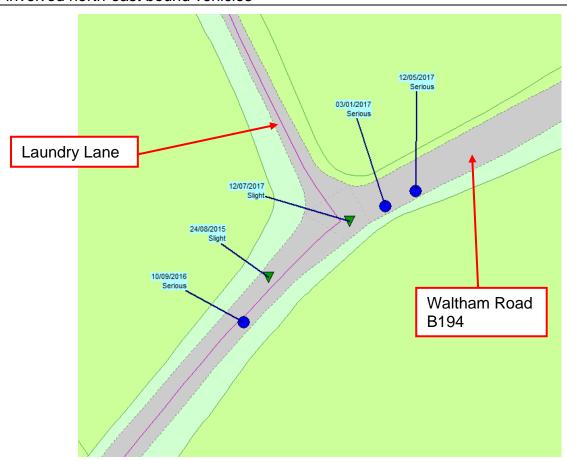
Executive Summary

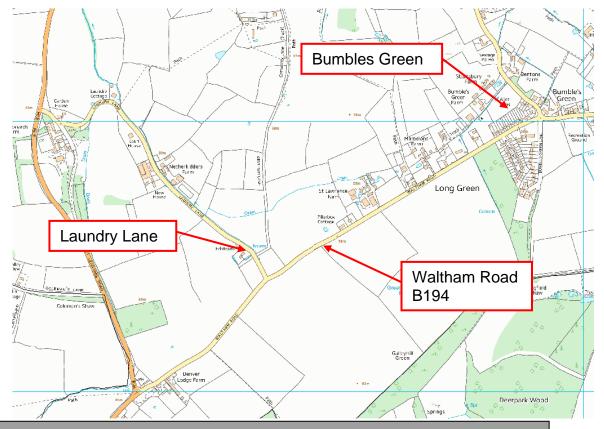
Intervention works:

To encourage lower approach speeds, it is proposed to raise awareness of the junction by providing advanced 'Side Road Ahead' warning (Diag 506.1) with 'Reduce Speed Now' subplates (Diag. 511) on both B194 approaches. It is also proposed to provide 'Verge Marker Posts' through the junction to guide road users through the junction bends.

Principle:

A study of the PIC's at this location shows a pattern vehicles losing control and colliding with other vehicles or roadside objects. Three collisions involved south-west bound vehicles and two involved north-east bound vehicles





2.0 Personal Injury Collision Analysis

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
	0	3	2	0	4	4	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Pattern of collisions involve vehicles losing control and colliding with other vehicles or roadside objects. Three collisions involved south-west bound vehicles and two involved north-east bound vehicles.	0	2	1	0	3	3



Image 1 – Waltham Rd southwest bound approach



Image 2 – Waltham Rd northeast bound approach



Image 3 – Laundry Lane approach to junction

Image 4 -

4.0 Recommendations

Remedial Measures

A study of the PIC's at this location shows a pattern vehicles losing control and colliding with other vehicles or roadside objects. Three collisions involved south-west bound vehicles and two involved north-east bound vehicles To encourage lower approach speeds it is proposed to raise awareness of the junction by providing advanced 'Side Road Ahead' warning (Diag 506.1) with 'Reduce Speed Now' sub-plates (Diag. 511) on both B194 approaches. It is also proposed to provide 'Verge Marker Posts' through the junction to guide road users through the junction bends.





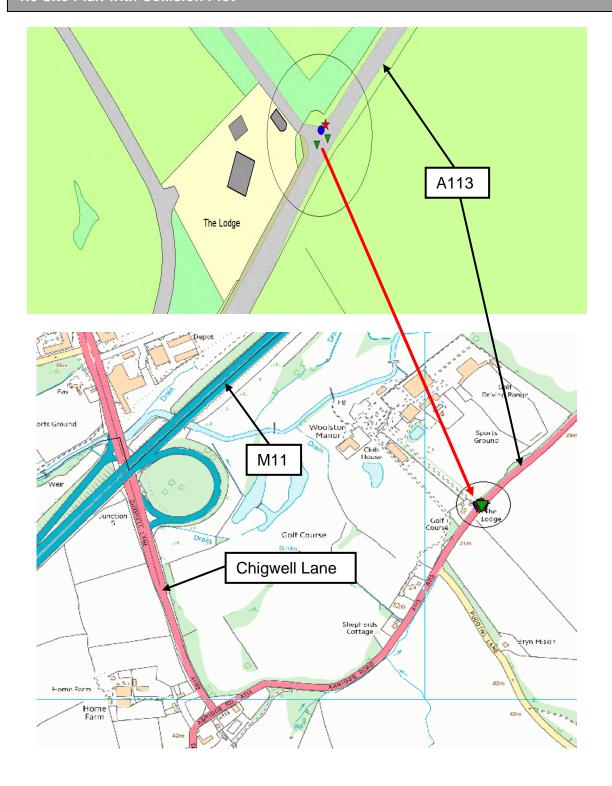
Location: A113 ABRIDGE ROAD JNCT WITH ENTRANCE TO VIRGIN ACTIVE

District: EPPING

Collision Investigation Period: 01/01/2014 – 30/06/2017

Site Ranking: 13

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision Information		COLLISION	S	CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
	1	1	2	1	2	5	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
Pattern of vehicles exiting the Health Club access into the path of approaching traffic on the A113 Abridge Road	1	1	2	1	2	5	



Image 1 – Abridge Road northeast bound approach to access

Image 2 – View to right from access



Image 3 – Abridge Road southwest bound approach to access

4.0 Recommendations

Remedial Measures

A study of the PIC's at this location shows a pattern of vehicles exiting the access and colliding with northeast bound traffic on Abridge Road (A113). To provide improved inter-visibility between approaching vehicles and vehicles exiting the access by cutting back the overhanging vegetation. It is also proposed to improve the conspicuity of the access by providing centre hatching and leave a gap at the junction with the access.

An alternative solution is to widen / realign the carriageway sufficiently to allow the give way to be brought forward and provide improved inter-visibility.

A request to extend the 40mph speed limit further east past the junction of Virgin Active will also be taken into consideration as part of the wider design proposals when undertaking the carriageway widening / realignment.





Location: A113 LONDON RD/ROMFORD RD, LITTLE COLEMANS

District: EPPING FOREST

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 75

1.0 Site Plan with Collision Plot

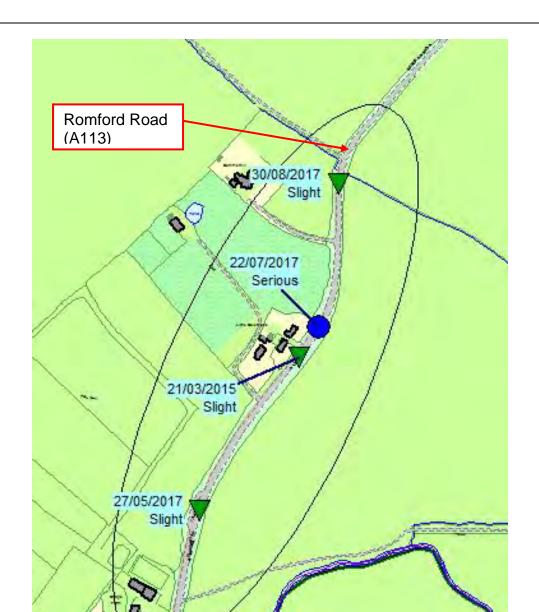
Executive Summary

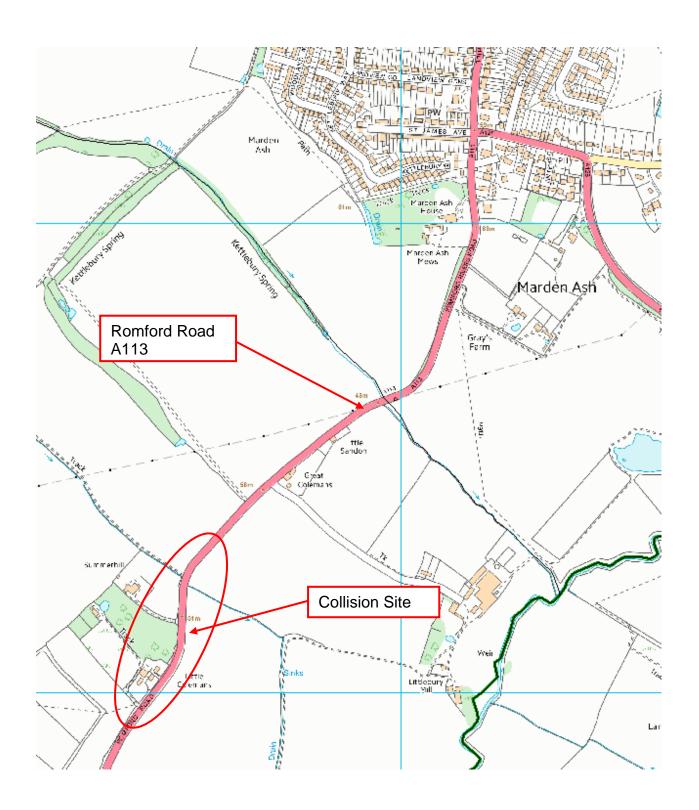
Intervention works:

To encourage road users to use caution and slow approach speeds, it is proposed to improve the warning signs and provide Advisory Max. Speed 30mph signs on both approaches to the bends, clear vegetation from the exiting warning signs locations and provide additional chevron signing on the northbound approach to the bends. Evidence gathered suggests that the carriageway should be resurfaced through the extents of the bends.

Principle:

A study of the PIC's at this location shows a pattern of vehicles losing control as they negotiate the bends.





2.0 Site Description & Observations

Cluster Site Collision Information		COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT		
	0	1	3	0	1	8		

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
All collisions involve road users coming into conflict with oncoming vehicles on bends	0	1	2	0	1	7	

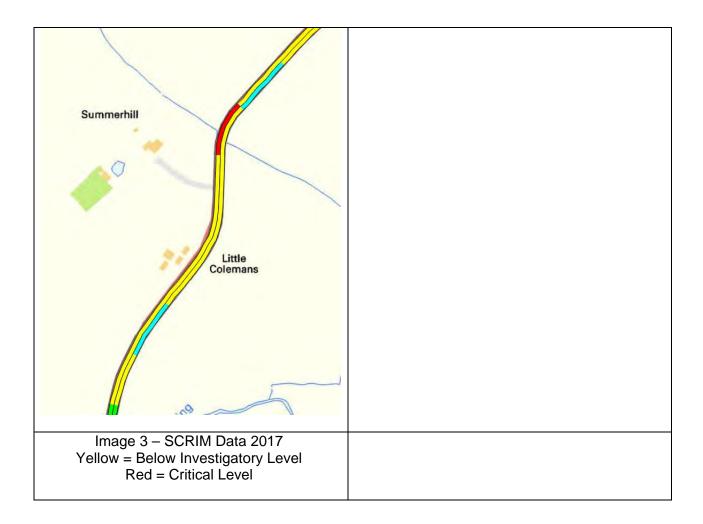
It should be noted that there has recently been a fatal collision of the same nature at this location. Whilst it is not included within this study, it is an indication of an ongoing problem.



Image 1 – Romford Rd north bound approach to bends



Image 2 – Romford Rd south bound approach to bends (sign missing)



4.0 Recommendations

Remedial Measures

A study of the PIC's at this location shows a pattern of vehicles losing control as they negotiate the bends. Forward visibility of oncoming traffic is restricted by the alignment of the carriageway and the adjacent vegetation. To permit safer movements through the bends, it is proposed to provide enhanced Double Bend warning signs on yellow backing with advisory 'Max Speed 30mph' sub-plates on both approaches to encourage lower entry speeds. It is also proposed to provide back-to-back chevron signs on the northbound approach to the bends and clear all adjacent vegetation from sign locations. A study of the carriageway condition shows deficiencies in the skidding resistance of the carriageway surface. It is therefore proposed to resurface the carriageway through the extents of the bends.





Location: Common Road j/w B181 Epping Road

District: EPPING FOREST

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 204

1.0 Site Plan with Collision Plot

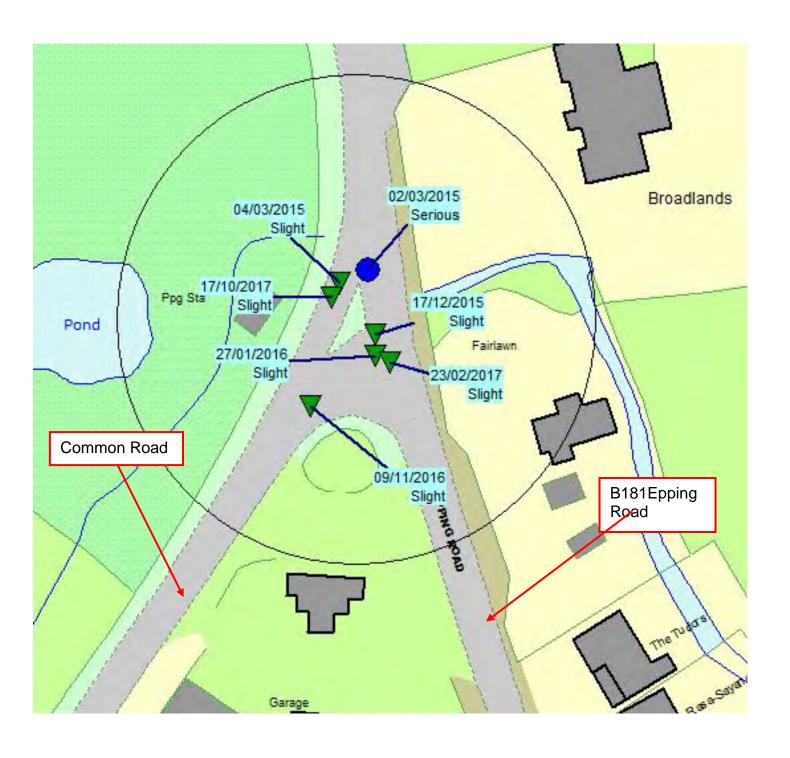
Executive Summary

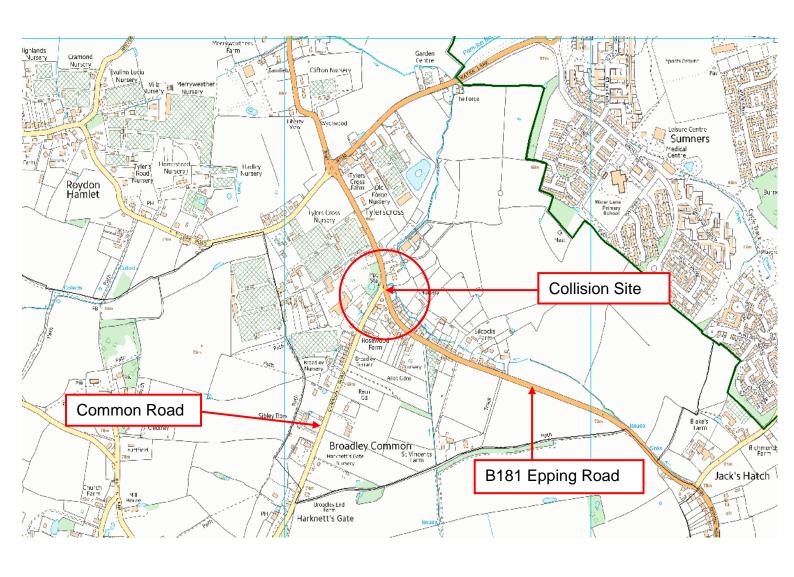
Intervention works:

To provide northbound road users, on Common Road, with suitable advanced warning of the junction ahead and encourage appropriate approach speeds it is proposed to replace the existing Give Way sign on a yellow backing (on Common Rd) which has become faded and clear all vegetation from traffic signs on all approaches. A high proportion of the collisions occurred in 'wet/damp' conditions. A study of the 2018 carriageway condition shows the skidding resistance of two of the approaches to be 'Below Investigatory Level', which suggests that the junction should be treated. To reduce 'masking' of oncoming vehicles when turning out of Common Road it is proposed to reduce the approach to a single lane exit.

Principle:

A study of the PIC's at this location shows a pattern of failing to give way turning right out of Common Rd into the path of oncoming traffic and nose-to-tail collisions on the northbound approach to the junction. The carriageway condition shows the skidding resistance of two of the approaches to be 'Below Investigatory Level' which affects stopping distances. It was observed that when there are two vehicles exiting Common Road (one left turn, one right turn) visibility of vehicles on Epping Road is compromised leading to vehicles entering Epping Road into the path of oncoming traffic.





2.0 Site Description & Observations

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
	0	1	6	0	0	9

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
All collisions involve road users turning right out of Common Rd and failing to give way to oncoming northbound vehicles or north-east bound nose-to-tail collisions at the junction.	0	1	5	0	1	7



Image 1 – Common Rd northbound approach to junction.



Image 2 – Epping Rd westbound approach to junction



Image 3 – Epping Rd eastbound approach to junction

4.0 Recommendations

Remedial Measures

A study of the PIC's at this location shows a pattern of nose-to-tail collisions on the northeast-bound (Common Rd) approach to the junction and traffic turning right from Common Rd failing to give way to oncoming traffic. A high proportion of the collisions (70%) occurred in 'wet/damp' conditions.

2018 data regarding the condition of the carriageway shows deficiencies in the skidding resistance of the carriageway surface north-bound on Common Rd and southeast-bound on Epping Rd (No data available for northwest-bound on Epping Rd).

To provide improved visibility from the Give Way line on Common Rd, improved forward visibility of advanced warning signs and encourage appropriate approach speeds it is proposed to provide the following measures to reduce the number of casualties at this location:

- Replace the existing Give Way sign along Common Rd on a yellow backing which has become faded
- Clear all vegetation from traffic signs on all approaches
- Resurface the approaches with a high PSV surfacing.
- Move Give Way line on Common Road forward
- Reduce Common Road to a single lane exit with nearside hatching





Location: B172 Coppice Row jw Loughton Lane

District: EPPING FOREST

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 213

1.0 Site Plan with Collision Plot

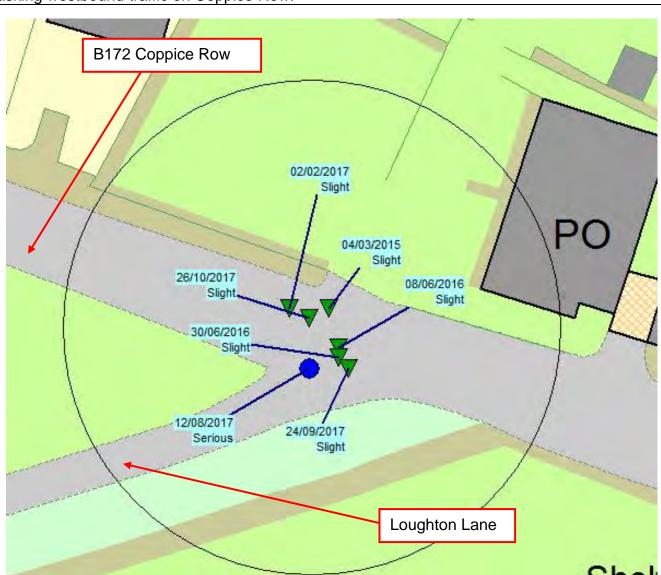
Executive Summary

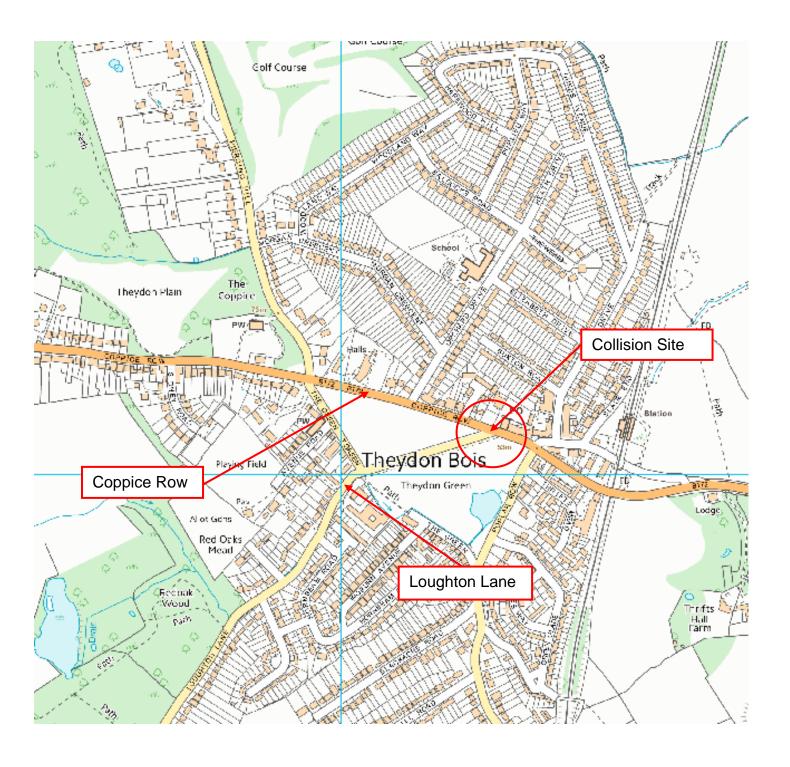
Intervention works:

To provide north eastbound road users improved visibility when exiting from Loughton Lane onto the B172 Coppice Row. It is proposed to move the Give Way line along Loughton Way further forward into B172 Coppice Row. To prevent southwest bound queueing vehicles on Loughton Lane obscuring visibility to the right when turning from Loughton Lane, it is proposed to relocate the parking facilities, on Loughton Lane to provide more stacking space. Relocate Give Way sign on Loughton Lane to improve the forward visibility.

Principle:

A study of the PIC's at this location shows a pattern of failing to give way to oncoming traffic when turning from Loughton Lane onto B172 Coppice Row. Queueing traffic on Loughton Lane masking westbound traffic on Coppice Row.





2.0 Site Description & Observations

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
	0	1	6	0	1	8	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
Collisions involve road users failing to give way to oncoming vehicles when exiting from Loughton Lane.	0	1	3	0	1	3	



Image 1 – Eastbound (Coppice Row) approach to junction.



Image 2 – – Westbound (Coppice Row) approach to junction.



Image 3 – Northeast bound (Loughton Ln) approach

to junction. (showing previous no waiting at any time restriction)

4.0 Recommendations

Remedial Measures

A study of the PIC's at this location shows a pattern of drivers failing to give way to oncoming traffic when turning from Loughton Lane onto B172 Coppice Row.

To provide improved visibility of traffic on Coppice Row and help prevent masking of westbound traffic on Coppice Row, it is proposed to provide the following measures to reduce the number of casualties at this location:

- Move the Give Way line on Loughton Lane and adjust kerb line.
- Relocate the parking facilities on Loughton Lane further south
- Relocate the Give Way sign in Loughton Lane.





Location: B170 Palmerstone Rd jw Victoria Rd, Buckhurst Hill

District: EPPING FOREST

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 10

1.0 Site Plan with Collision Plot

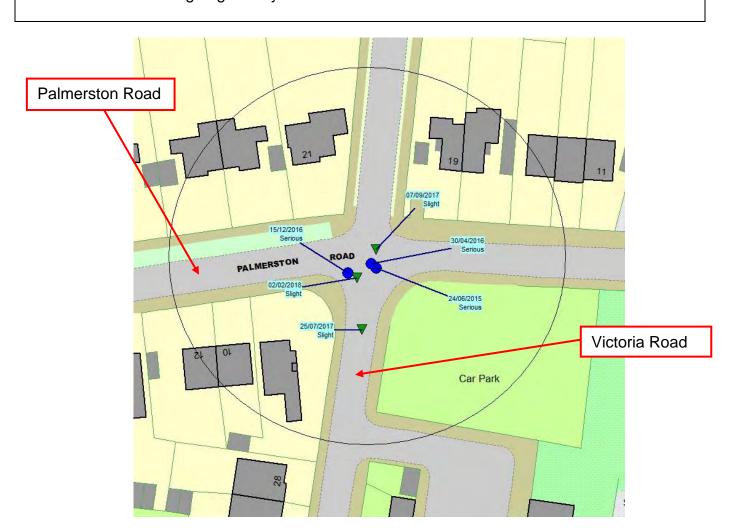
Executive Summary

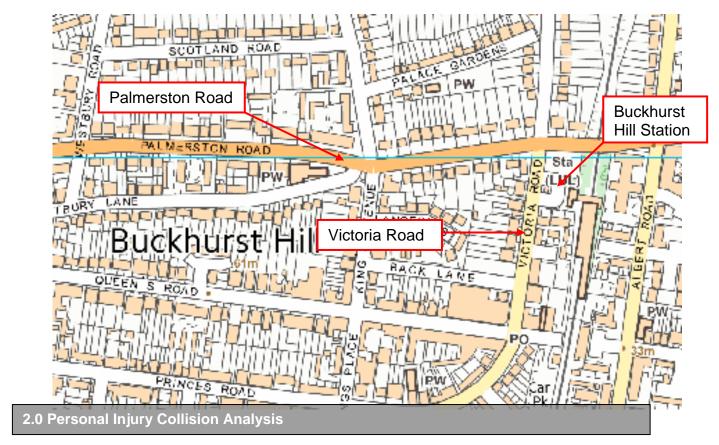
Intervention works:

To permit safer turning movements into and out of Victoria Road from Palmerston Road, it is proposed to provide a 'Yellow Box' marking at the junction of Palmerston Road and Victoria Road. To raise awareness of the junction it is proposed to install advanced 'Crossroad Ahead' warning (Diag 504.1) on both B170 Palmerston Road approaches. It is also proposed to install a Give Way sign on Stradbroke Grove and refresh all carriageway markings through the junction.

Principle:

A study of the PIC's at this location shows a pattern of B170 eastbound vehicles turning right across oncoming westbound vehicles on Palmerston Road or southbound vehicles along Stradbroke Grove failing to give way to traffic on B170 Palmerston Road.





Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
	0	3	3	0	4	5	

Identified Collision	COLLISIONS			CASUALTIES		
Pattern(s) at Cluster Site						
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
50% of collisions involve vehicles turning vehicles into or out of Victoria Road across oncoming vehicles on Palmerston Road or failing to give way to traffic on Palmerston Road. There are also collisions involving vehicles exiting Stradbroke Grove.	0	2	2	0	3	3

3.0 Site Photographs



Image 1 – Palmerston Rd east bound approach.



Image 2 – Palmerston Rd west bound approach.



Image 3 – Victoria Rd approach to junction



Image 4 – Stradbroke Grove approach to junction

4.0 Recommendations

Remedial Measures

A study of the PIC's at this location shows a pattern vehicles turning into or out of Victoria Road across oncoming vehicles on Palmerston Road or failing to give way to traffic on Palmerston Road. To permit safer turning movements into and out of Victoria Road from Palmerston Road, it is proposed to provide a 'Yellow Box' marking at the junction. To raise awareness of the junction it is proposed to install advanced 'Crossroad Ahead' warning signs (Diag 504.1) on both Palmerston Road approaches. It is also proposed to install a Give Way sign on Stradbroke Grove and refresh all carriageway markings through the junction.





78-FIRST AVENUE UNSPECIFIED ROAD OR LOCATION ORCHARD CROFT Location:

HARLOW District:

Collision Investigation Period: 01/01/2014 – 30/06/2017 Site Ranking: 78

1.0 Site Plan with Collision Plot





2.0 Site Description & Observations

Cluster Site Collision Information	COLLISIONS			CASUALTIES			
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT	
	1	1	5	1	1	5	

Identified Collision Pattern(s) at Cluster Site	COLLISIONS				CASUALTIE	S
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Pattern of east bound vehicles turning into Orchard Croft into the path of west bound motorcyclists in the Bus Lane.	1	0	3	1	0	3

3.0 Site Photographs



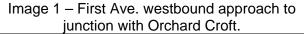




Image 2 – First Ave. eastbound approach to junction with Orchard Croft.

4.0 Recommendations

Remedial Measures

A study of the PIC's at this location shows a pattern of east bound vehicles turning into Orchard Croft into the path of west bound motorcyclists in the Bus Lane. From the descriptions provided by Essex Police, it is understood that the motorcyclists are being masked by stationary west bound vehicles in lane 2 (Bus Lane being Lane 1). It is proposed to reduce the length of the Bus Lane and provide a traffic island on First Ave to provide one westbound running lane through the junction. This will remove the masking issue.





Location: B1018 Burnham Road j/w Green Lane

District: Maldon

Collision Investigation Period: 01/01/2015 – 31/12/2017

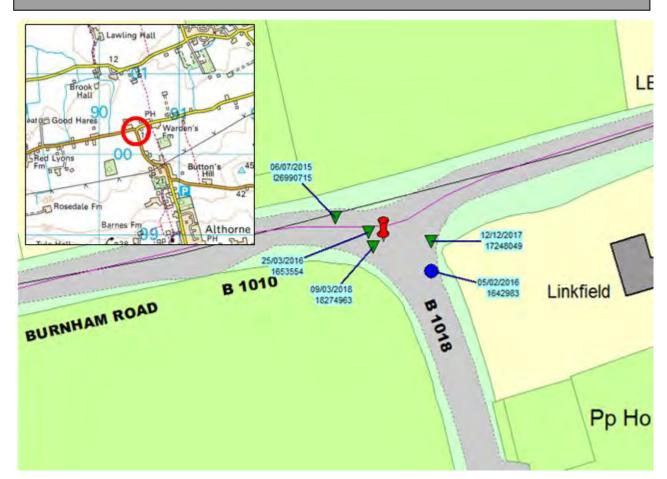
Site Ranking: 122 (Single Site)

EXECUTIVE SUMMARY

Intervention works: Provision of upgraded chevron signing, stick-on road studs and improvements to signing.

Principle: A study of the personal injury collisions at location shows a pattern of vehicles losing control in either direction along B1018 Burnham Road. Upgrading the chevron signing will help motorists negotiate the bend in both directions. The provision of reflective stick-on road studs will further highlight the bend during the hours of darkness. Improving the signing on the approaches to, and on the bend, will ensure motorists are adequately warned of the bend and its layout.

Site Plan with Collision Plot



Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Vehicles along B1018	0	0	3	0	0	3
Burnham Road losing control						
on the bend						

Additional None.



Image 1 – B1018 Burnham Road; eastbound approach to bend in road



Image 2 – B1018 Burnham Road; damaged signing at bend in road and junction



Image 3 - Green Road; damaged signing at junction (looking towards Burnham Road)



Image 4 – B1018 Burnham Road; damaged direction sign along northbound approach to bend

Recommendations

Remedial Measures

- Remove existing chevron signs from the bend and provide a number of single, double-backed chevron signs with yellow borders around the extents of the bend, to better guide motorists.
- Provide reflective stick-on road studs around the extents of the bend, to further highlight the bend during the hours of darkness.
- Provide a 'Junction on the outside of a bend ahead' warning sign to TSRGD 512.1 along the northbound approach to the bend with a 'SLOW' road marking.

- Provide a 'SLOW' road marking at the existing 'Junction on the outside of a bend ahead'
 warning sign (see Image 1, above) along the eastbound approach to the bend.
- Replace damaged direction signing at junction and on northbound approach to the bend (see Images 3 & 4, above).





Location: B1035 Clacton Road 10 metres north of junction with Pedlers Corner

District: Tendring

Collision Investigation Period: 01/01/2015 – 31/12/2017

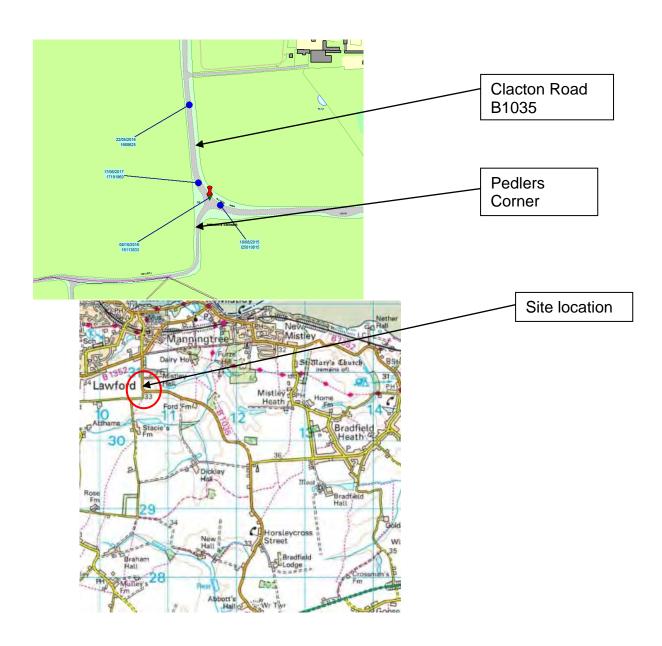
Site Ranking: 006

EXECUTIVE SUMMARY

Intervention works: To help to reduce the severity of collisions and to prevent loss of control of motor vehicles and Powered two wheelers on a rural bend.

Principle: A study of the personal injury collisions along this section of Clacton Road show that there are issues of road users losing control on a tight rural junction on a bend.

1.0 Site Plan with Collision Plot



2.0 Personal Injury Collision Analysis

Cluster Site Collision	COLLISIONS			CASUALTIES		
Information						
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
Collisions included: Three of the collisions involved vehicles losing control on the bend. Two serious and one slight severity. The other Collison involved a poor overtake and was serious severity. Two of the collisions involved powered two wheelers. Two of the collisions involved in the dark	0	3	1	0	3	6

Identified Collision	COLLISIONS			CASUALTIES		
Pattern(s) at Cluster Site	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
	FAIAL		SLIGHT	FAIAL	SEKIUUS	SLIGHT
Vehicles losing control on the	0	3	0	0	3	0
bend colliding with other						
vehicles. Two Collisions						
involved northbound road						
users losing control and						
colliding with southbound road						
users. One collision involved						
southbound road user losing						
control and being struck by a						
following vehicle.						

Additional information	None
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Image 1 – View looking south



Image 2 - View looking south



Image 3 - View looking south/ east



Image 4 – View looking east on Pedlers Corner



Image 5 – View looking north from the junction mouth



Image 6 – View looking east from the junction



Image 7 - View looking west on the approach to the bend



Image 8 – View looking west on the approach to the junction



Image 9 - View looking South/West on the bend



Image 10 – View looking West on the bend (note damaged flag signs)



Image 11 – View looking north after the junction

4.0 Recommendations

Remedial Measures

1) It is recommended that the individual black chevron sign is removed and replaced with six individual yellow backed signs. 3 signs to be positioned on each side of the junction helping to clearly delineate the severity of the bend. These should be mounted back to back on the outside of the bend, 12 signs in total. Ensure that they are not situated within the visibility splay for the junction.



2) Image 12- Example of individual Chevron signs for a junction on a bend.

- 3) It is recommended that white Glasdon Bollards complete with reflective banding are provided either side of the Pedlers Corner junction mouth, to highlight the junction.
- 4) Install new Junction on Bend warning signs on both approaches to the bend.





Location: B1052Little Walden Road, Near Stonebridge Farm

District: UTTLESFORD

Collision Investigation Period: 01/01/2015 – 31/12/2017

Site Ranking: 14

1.0 Site Plan with Collision Plot

Executive Summary

Intervention works:

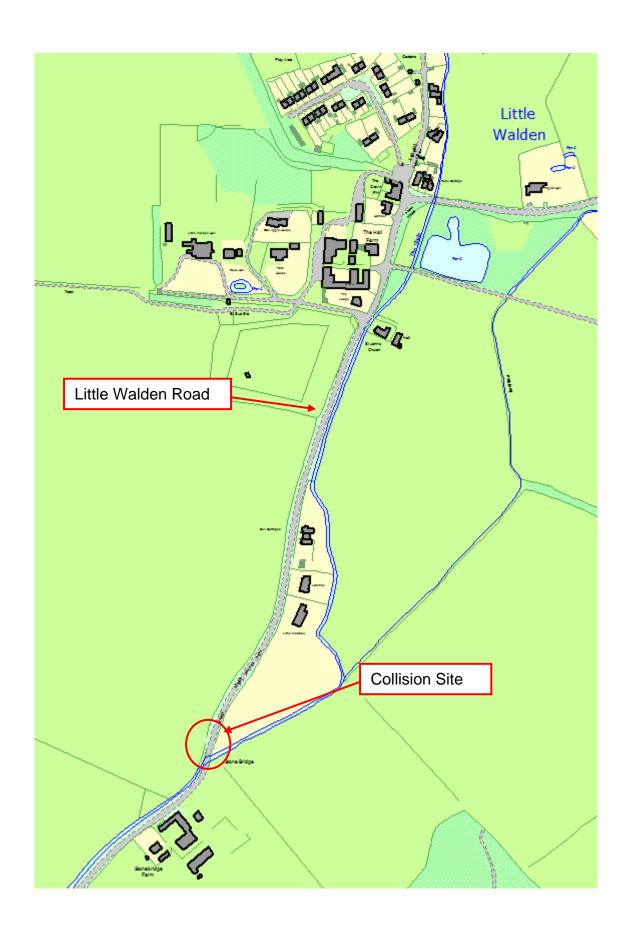
To encourage road users to use caution and slow approach speeds, it is proposed to provide single chevron signs on both approaches to the bends/bridge, clear vegetation from the existing warning signs on both approaches to the bends, install Advisory Speed Limit (20mph) signs below existing warning signs and investigate hedgerow/tree clearance within the area to the west of the bends/bridge.

Principle:

A study of the PIC's at this location shows a pattern vehicle conflict on narrow humped bridge at bend.



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2.0 Site Description & Observations

Cluster Site Collision Information	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
	0	2	1	0	2	2

Identified Collision Pattern(s) at Cluster Site	COLLISIONS			CASUALTIES		
	FATAL	SERIOUS	SLIGHT	FATAL	SERIOUS	SLIGHT
All collisions involve road users coming into conflict with oncoming vehicles at the narrow humped bridge.	0	2	1	0	2	2



Image 1 – Lt Walden Rd south bound approach.



Image 2 – Lt Walden Rd north bound approach.



Image 3 –Limited forward visibility on north bound approach to bridge

4.0 Recommendations

Remedial Measures

A study of the PIC's at this location shows a pattern of vehicle conflict on narrow humped bridge at bend. Forward visibility of oncoming traffic is restricted by the alignment of the carriageway and the adjacent vegetation. To permit safer movements into bends/bridge, it is proposed to provide chevron signs on both approaches to the bends to encourage lower entry speeds. Advisory 'Max Speed 20mph' sub-plates to be added to the existing warning signs on both approaches. Hedgerow/tree growth in area to west of bridge to be cleared to improve visibility of oncoming traffic.