

Chelmsford City LHP Approved Works Programme - Schemes to be Progressed

* RAG confidence in achieving finish date

Ref. No.	RAG *	Design Reference Number	Task Name	Parish	Finish	CMA Approved	Cost Code	Works Description	Allocated Budget	Comments
2012/13 Budget										
1			A138 Chelmsford Road/Sandford Road	Chelmsford Non Parished	31/03/2015	26/09/2012	LCHE007003	Signals Upgrade	£7,000.00	Was 06/05/14 - Resolving issues with remote control of existing signal control
2			ITS0006 7F01 Army and Navy flyover	Chelmsford Non Parished	23/01/2015	01/03/2013	LCHE001016	Safer Roads	£175,000.00	Was 05/09/14 - Post-Civils works phase
3			New London Road Subway Chelmsford	Chelmsford Non Parished	01/05/2015	01/03/2013	LCHE004001	Cycling	£33,912.00	Was 03/11/14 - Design under review, height issues on subway
4		DC1764	Rainsford Road Chelmsford	Chelmsford Non Parished	On Hold	01/03/2013	LCHE004002	Cycling	£12,744.00	Was 03/10/14 - Cycling Officer has ridden proposed route and has concerns around scheme
5		DC1211	A12 Howe Green Interchange	Sandon	30/03/2015	17/07/2012	LCHE001004	Safer Roads	£11,000.00	Was 13/02/14 - Delays due to booking road space with Highways Agency
6		DC1404D	Stock CE Primary School	Stock	31/03/2015	26/09/2012	LCHE006001	SCP/Site Improvements	£1,770.00	
2013/14 Approved										
7			Rainsford Road jw Primrose Hill (post design phase)	Chelmsford Non Parished	30/03/2015	10/07/2013	LCHE131027	Safer Roads	£4,000.00	Was 03/09/14 - linking scheme with pedestrian refuge island
8		DC	Parkway A1060 Odeon RAB	Chelmsford Non Parished	20/03/2015	10/07/2013	LCHE132022	Traffic Management Improvements (TMI)	£41,000.00	Was 23/01/14 - linking scheme to new signage for Car Parks, works to be carried out at same time
9			O/s Moulsham Grange, London Road, Chelmsford	Chelmsford Non Parished	13/10/2015	04/02/2014	LCHE132071c	Raise kerbing/add bollards/pave area	£12,500.00	Design available in Feasibility Study/Design Report was 04/05/15
10			Main Road, East Hanningfield	East Hanningfield	09/01/2015	12/09/2013	LCHE133011	To look at kerbing to prevent verge over-run	£2,500.00	
11			Main Rd nr j/w Church Rd, East Hanningfield	East Hanningfield	07/07/2015	04/02/2014	LCHE132068c	Create walkable verge	£11,500.00	Was 06/04/15 - issues around available width for footway
12		DC1321	Margaretting Road, Galleywood	Galleywood	07/08/2015	12/09/2013	LCHE003001	Continuation of footway from Village to Heritage Centre - Civil Works E88k, Legal/Design Costs £31k. Panel wish to use unspent budget from 2012/13	£124,000.00	Was 01/02/15 - whole length of proposed footway now appears to be on Common Land
13			Five entry point to Galleywood	Galleywood	31/03/2015	04/02/2014	LCHE132016c	Install five Village gateway features	£12,500.00	Was 01/09/14 - Possible S.106 funding
14			Ingatstone Road/Blackmore Road/Highwood Road, Highwood	Highwood	31/03/2015	12/11/2013	LCHE132061	signage improvements for Village Hall - add Highwood to finger post	£500 (Sign) and £200 (Design)	
15			Mashbury Parish	Mashbury	31/03/2015	12/11/2013	LCHE132055	Horse & Rider signage	£2,500 (Signs, Posts) and £1,500 (Design)	
16			Cross Keys A1060, Boyton Cross, Roxwell	Roxwell	28/01/2015	04/02/2014	LCHE135014c	Bus stop improvement - Bus build out	£1,500.00	Was 27/08/14 - Larger scheme on Highway Improvements Scheme List - BSI scheme2
17			Mayne Crest, Springfield	Springfield	31/03/2015	12/11/2013	LCHE132062	Pedestrian guard rail at footway from Pump Lane	£1,500 (Guard rail) and £500 (Design)	
18			Lodge Road j/w Romans Place, Writtle	Writtle	09/01/2015	12/09/2013	LCHE132012	Completion of tactile paving at crossing point	£2,000.00	Was 26/11/14 - ongoing remedial works
19			Paradise Road, Writtle	Writtle	21/04/2015	12/11/2013	LCHE132045	Signage improvements	£1,500 (Signs) and £500 (Design)	
20			Margaretting Rd/Writtle Road, Writtle	Writtle	31/03/2015	04/02/2014	LCHE132075c	Village gateway features	£7,500.00	Was 01/09/14 - delay in getting stats information back
2014/15 Approved										
21			Bicknacre Road, Bicknacre	Bicknacre	27/11/2015	09/07/2014	LCHE142043	WigWag (flashing warning) signs outside school	£15,000.00	Was 2015/16 now has finish date
22			Haselfoot Road j/w Plantation Road, Boreham	Boreham	31/03/2015	02/06/2014	LCHE142024	No through Road signage at 2.3m height to increase visibility to Goods Vehicle Drivers	£1,500.00	Was 09/01/15, delay due to getting responses to Stats Enquiries
23			Dove Ln/Wood St Cycle Track	Chelmsford Non Parished	31/03/2015	24/04/2014	LCHE144002	Removal of cycle track barrier to be replaced with bollard/extend pedestrian guard rail and road markings	£2,000.00	Was 08/04/15 -date brought forward
24			Waltham Glen Chelmsford	Chelmsford Non Parished	31/03/2015	24/04/2014	LCHE144003	LHP previously funded design work of improved signage, this is to implement the scheme CH1	£5,000.00	Was 15/08/14 - delay in programming works
25			Maltese Rd/Ridgewell Ave/Swiss Ave	Chelmsford Non Parished	06/03/2015	24/04/2014	LCHE144004	LHP previously funded design work of improvements to cycle route, this is to implement the scheme CH44	£35,000.00	Was 15/08/14 - delay in programming works
26			PROW Ftp/Bridleway 93/94	Chelmsford Non Parished	31/03/2015	24/04/2014	LCHE148003	Drainage and signage improvements	£5,000.00	Was 2015/16 now has finish date
27			North Avenue j/w Melbourne Avenue, Chelmsford	Chelmsford Non Parished	11/02/2015	02/06/2014	LCHE142025	Two number dropped kerbs with tactile paving	£2,500.00	
28			Keane Memorial Homes, Broomfield Road, Chelmsford	Chelmsford Non Parished	31/03/2015	02/06/2014	LCHE142026	Two number KEEP CLEAR road markings at entrance/exit to sheltered homes complex	£1,500.00	
29			O/s 140-147 Forest Drive Chelmsford	Chelmsford Non Parished	22/12/2015	02/06/2014	LCHE142004	To construct lay-by within available verge	£25,000.00	Was 2015/16 now has finish date
30			O/s Farthing court, Broomfield Road, Chelmsford	Chelmsford Non Parished	19/03/2015	02/06/2014	LCHE142027	Seven number bollards to prevent parking and improve sight lines for vehicles	£3,000.00	Was 09/01/15, liaison with Councillor over scope of scheme due to existing undertakers apparatus
31			Chignal Road j/w St James Park Road, Chelmsford	Chelmsford Non Parished	31/03/2015	02/06/2014	LCHE142066	KEEP CLEAR road marking	£1,000.00	
32			Avon Road, Chelmsford	Chelmsford Non Parished	04/09/2015	02/06/2014	LCHE142031	Parking improvements along whole length of road (1377m) - measures to prevent parking on verges combined with creation of parking laybys	£228,923.00	Was 09/09/15 date brought forward
33			Ten Entry points to Chelmsford City	Chelmsford Non Parished	Decision deferred	Cabinet Member decision deferred	LCHE142023	Improved City nameplate signage, to include image of area of interest within City, will require DfT approval	£40,000.00	See new Potential Scheme List scheme 5
34			Various points within City	Chelmsford Non Parished	29/12/2015	09/07/2014	LCHE142034	New Wayfinder signs to help pedestrians within City Centre	£52,120.00	
35			O/s 119-121 Arbour Lane, Chelmsford	Chelmsford Non Parished	25/03/2015	09/07/2014	LCHE145007	Clearway sign at bus stop to allow enforcement	£2,500.00	Was 15/10/14 - completed works to be checked on site
36			Citywide - Watchouse Road shops, Chelmsford Park, Writtle Library, Long Brandocks, Wellfield	Chelmsford Non Parished	31/03/2015	24/04/2014	LCHE144001	Provision of Cycle parking facilities	£10,000.00	Was 09/06/15 date brought forward
37			Dyers Hall to Cricket Ground, Mashbury Road, Chignal	Chignal	13/03/2015	02/06/2014	LCHE142032	Creation of three passing places on narrow road	£29,700.00	Was 03/04/15 date brought forward
38			Sandon Hill, Ford End 30mph signs	Ford End	31/03/2015	24/04/2014	LCHE142016	Provision of 30mph count down signs at either end of Village (will require DfT approval)	£4,000.00	Was 03/04/15 date brought forward
39			Sandon Hill, Ford End	Ford End	03/07/2015	24/04/2014	LCHE142017	Traffic management improvements through Village - Speed terminal signs at village gateways, VAS's, Improved bend signage, mini-RAB, improved school signage	£58,500.00	was 03/04/15
40			Galleywood Rd jw Dorset Ave to Vicarage Ln	Galleywood	31/03/2015	24/04/2014	LCHE141002	Surface inlay and road markings (centre hatching/edge of carriageway)	£20,000.00	Was 03/04/15 date brought forward
41			Farmbridge End Road, Good Easter	Good Easter	20/04/2015	02/06/2014	LCHE142029	Two number Danger Ahead warning signs with Road liable to flood sub-plate	£2,500.00	
42			Bennetts Lane/Mill Road/Black Chapel Lane, North End, Great Waltham	Great Waltham	21/04/2015	02/06/2014	LCHE142028	Deer warning signs at three locations	£3,100.00	
43			A131/A130/B1008, Sheepcoates RAB, Great Waltham	Great Waltham	31/03/2015	09/07/2014	LCHE142036	Two M11 sign patches to existing Advanced Directional signage	£2,500.00	
44			Bridleway 12 Highwood	Highwood	On Hold	02/06/2014	LCHE148006	Improvements to surface condition and drainage	£6,000.00	On Hold as PROW team reviewing the scheme as there is concern it could be a private landowner issue
45			Bridleway 13 Highwood	Highwood	On Hold	02/06/2014	LCHE148007	Improvements to surface condition and drainage/piped culverts	£14,000.00	On Hold as PROW team reviewing the scheme as there is concern it could be a private landowner issue
46			Bridge at Battlesbridge, Hawk Hill, Rettendon	Rettendon	20/04/2015	02/06/2014	LCHE142030	Signage improvements to priority working at bridge	£1,750.00	
47			A1060 Maldon Road j/w Molrams Lane, Sandon	Sandon	15/12/2015	02/06/2014	LCHE142021	Remedial works to Section 278 highway works - signing/lining/lighting improvements	£10,000.00	
48			PROW Ftp 40 South Woodham Ferrers	South Woodham Ferrers	31/03/2015	24/04/2014	LCHE148004	Surfacing of footpath	£4,000.00	Was On Hold Now has finish date

Ref. No.	RAG *	Design Reference Number	Task Name	Parish	Finish	CMA Approved	Cost Code	Works Description	Allocated Budget	Comments
2014/15 Approved (Continued)										
49			A132/B1012 (Shaw Farm RAB and B1012/B1418, South Woodham Ferrers	South Woodham Ferrers	29/01/2016	09/07/2014	LCHE142041	Improved Goods Vehicle Signage to keep vehicles on Priority Route and not diverting through Woodham Ferrers	£7,500.00	Was 2015/16 now has finish date
50			White hart Lane (Sainsbury's) to Beaulieu Park, Springfield	Springfield	23/01/2015	24/04/2014	LCHE144005	Phase 2 of scheme to connect cycleway from Sainsbury's to Beaulieu park	£60,000.00	Was 09/04/15 date brought forward
51			Chelmer Retail Park, Springfield	Springfield	27/02/2015	24/04/2014	LCHE144006	Phase 2 of scheme to rebuild and widen northern access ramp to retail park	£40,000.00	Was 09/04/15 date brought forward
52			PROW Ftp 18 Springfield	Springfield	31/03/2015	24/04/2014	LCHE148005	Surfacing of footpath	£15,000.00	Was 2015/16 now has finish date
53			Sites to be confirmed	Various Citywide	31/03/2015	09/07/2014	LCHE142046	Recommendation for monies to be retained by panel to allow approved schemes to be topped up	£50,000.00	
54			Church Road/Middlemead, West Hanningfield	West Hanningfield	05/08/2015	02/06/2014	LCHE142033	Road markings - 30 mph speed roundels and SLOW at start of 30 mph speed limit and either side of Village Hall access	£7,000.00	Was 06/10/15 date brought forward
55			Main Road, Woodham Ferrers	Woodham Ferrers	27/11/2015	09/07/2014	LCHE142044	Vehicle Activated Sign outside school	£8,500.00	Was 2015/16 now has finish date
56			PROW 40 South Woodham Ferrers	Woodham Ferrers	31/03/2015	09/07/2014	LCHE148004	Surface improvements to PROW, top up required to original £4,000 recommendation	£3,000.00	
57			Hylands Schl Chelmsford Rd	Writtle	20/02/2015	24/04/2014	LCHE142018	Construction of widened footpath outside school at bus stop and side/widen existing footways from Writtle to School	£14,500.00	
58			Hylands School Chelmsford Road/Writtle Road, Writtle	Writtle	31/03/2015	09/07/2014	LCHE142035	SLOW road markings at existing advanced school signage	£1,000.00	
59			O/s Hylands School, Chelmsford Road, Chelmsford	Writtle	11/08/2015	24/09/2014	LCHE142049	Wig-Wag flashing warning lights - Additional measures in support of LCHE142018, footway widening and LCHE142035 SLOW road markings at School signs	£7,000.00	Now has Finish Date

Chelmsford City Local Highways Panel

Feasibility Studies/Designs/Additional Information – January 2015

The following Feasibility Studies/Designs/Additional Information are attached for the information of the Panel.

A. Approved Works Programme – Schemes to be Progressed

Page 2

Scheme 9 - LCHE1432071c – Minor Scheme - Design

O/s Moulsham Grange, London Road, Chelmsford – Raise Kerbs/Add bollards/Pave area – Scheme Funded

Page 3

Scheme 24 – LCHE144003 – Cycling Scheme - Design

Waltham Glen, Chelmsford – Improved Cycling Signage – Scheme Funded

Page 4

Scheme 25 – LCHE144004 – Cycling Scheme – Design

Maltese Road/Ridgewell Avenue/Swiss Avenue, Chelmsford – Cycle Route Improvements – Scheme Funded

B. Approved Works Programme – Completed/Cancelled Schemes

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Scheme 106 – LCHE142011 – A132 Burnham Road South Woodham Ferrers

Feasibility study - Extension of 40mph speed limit/repositioning Town Nameplates/SLOW road markings

From Feasibility Study see Highway Improvements Scheme List – Minor Schemes – Scheme 20 - LCHE142079 – A132 Burnham Road, South Woodham Ferrers

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Scheme 108 – LCHE142042 – Buttsbury Bridge, Stock Lane, Stock

Safety Assessment of Traffic Management on Bridge

From Safety Assessment see Highway Improvements Scheme List – Minor Schemes – Scheme 24 – LCHE142080

C. Additional Information

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Highway Improvements Scheme List – Casualty Reduction Scheme 3 –

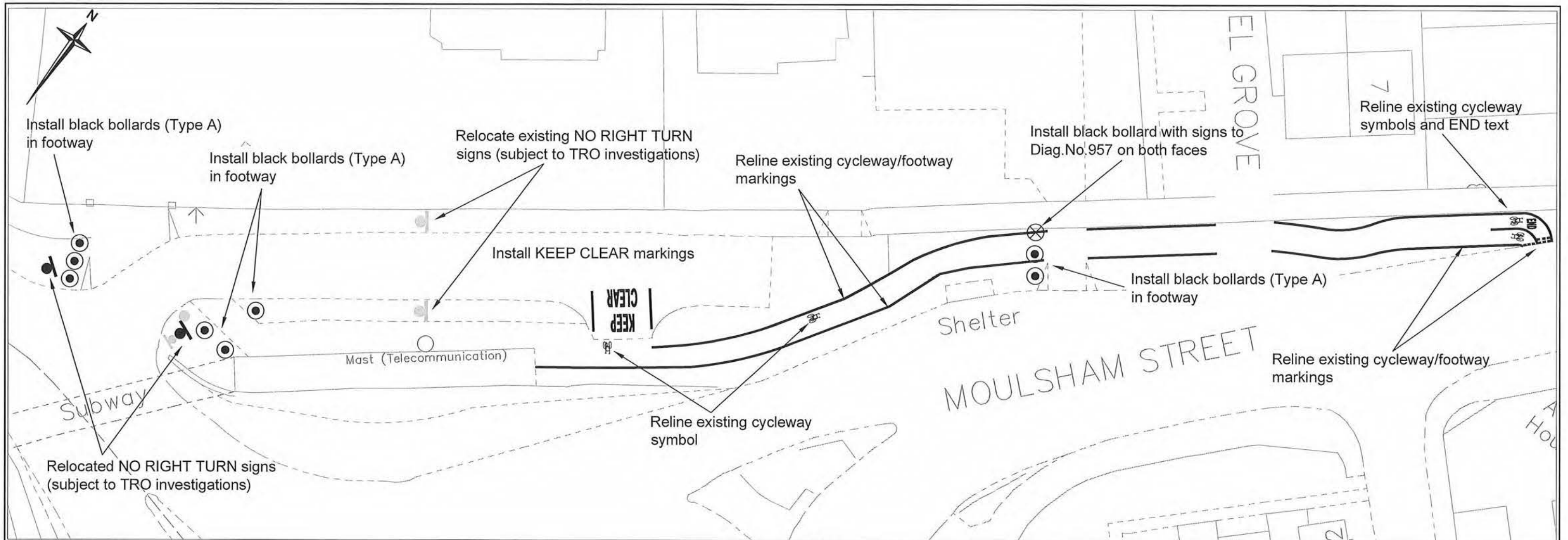
LCHE141005 – B1008 Chelmsford Road, Ford End to Barnston

Casualty Reduction Site Report

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Casualty Reduction Site Report 2015/16 – A1060 Parkway near j/w Moulsham Street Chelmsford

Casualty Reduction Site Report – Initial Report



Site Plan - Scale 1:250



Proposed Bollard Type A



Proposed Bollard B - to be black in colour (with segregated Cycleway/Footway roundel on both sides)

Notes

1. Do not scale. This drawing is to be read in conjunction with all other contract drawings and documents.
2. All works to be in accordance with the Department for Transport Specification for Highway Works and Essex County Council Specifications and Standard Construction Drawings.
3. All traffic signs and lines are to comply with The Traffic Signs Regulations and General Directions 2002.
4. All existing signs to be retained unless stated otherwise. Existing signs to be cleaned and any overhanging trees or bushes to be lopped or trimmed to maintain proper visibility to signs. Any defects to existing signs and/or posts noted by the Contractor during the works to be reported to the Engineer.
5. Drawings of existing Statutory Undertakers plant have been obtained and are included in the drawings provided to the Contractor. The Contractor shall be responsible for ensuring that all Statutory Undertakers plant is located prior to commencing works and the protection of such plant is required.
6. Posts to be painted black in colour as signs will be located within a designated conservation area.
7. Allowed working times:
09:30 - 15:30 Monday to Friday

Key

-  Existing Sign
-  Proposed Sign
-  Proposed Bollard
-  Proposed Cycle/Footway Bollard

Rev	Date	Description of revision	Drawn	Checked	Reviewed	Approved

DRAWING STATUS
PRELIMINARY



Ringway Jacobs working in partnership with Essex County Council
Mark Rowe, Service Director, Essex Highways
County Hall, Chelmsford, CM1 1QH
Tel: 0845 6037631 © Essex County Council

SCHEME TITLE
**MOULSHAM GRANGE
LONDON ROAD**

DRAWING TITLE
FOOTWAY WORKS

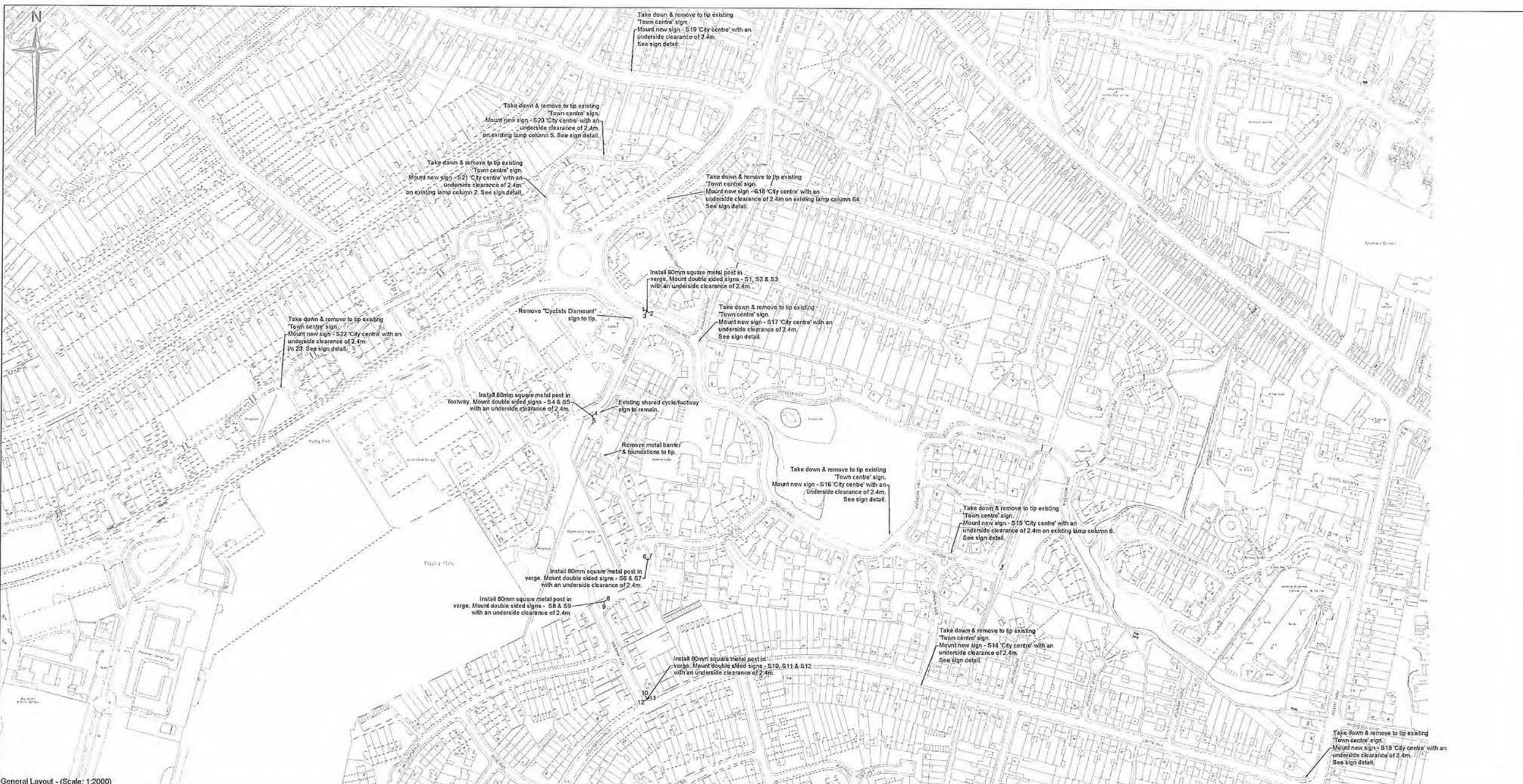
DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
TS	TS			
DATE	DATE	DATE	DATE	DATE
12/12/14	12/12/14			

DRAWING UNITS U.N.O.
DIMENSIONS IN MILLIMETRES
LEVELS IN METRES

SCALE AT A2 (594x420mm)
AS SHOWN

DRAWING No. **DC1-3021-12-001** REV. -

WORKING COPY



- Notes**
- DO NOT SCALE FROM THIS DRAWING.
 - All diagram numbers refer to the Traffic Signs Regulations and General Directions 2002 and any amendment thereto.
 - Mounting height of all signs to be a minimum of 1.2m in verge or 2.1m in footway or 2.4m in cycleways, unless otherwise stated.
 - Sign posts shall not protrude above the top of the sign face unless supporting an external luminaire or final marker in which case the protrusion shall be kept to a minimum. All posts to be capped.
 - Lateral clearance of all signs and bollards to be 0.45m min. from the edge of carriageway, unless otherwise stated.
 - Any disturbance to existing grassed areas is to be made good with topsoil and seed. Any disturbance to surfaced footways/carriageways to be made good with same material.
 - The contractor shall be responsible for ensuring that all Statutory Undertakers plant are located prior to commencing works and protection of such plant is required.
 - All posts are to leave enough room for a final marker.

- Key**
- DHAZ Ref - For all new posts excavate trial hole to ensure no conflict with statutory undertakers apparatus
 - Existing metal barrier to be removed.
 - Existing post/sign
 - Proposed post/signs locations & directions.

General Layout - (Scale: 1:2000)

REV.	DATE	AMENDMENT DESCRIPTION	DRAWN	CHECKED

DRAWING STATUS
FOR CONSTRUCTION



Ringway Jacobs working in partnership with Essex County Council

Mark Rowe, Service Director, Essex Highways
County Hall, Chelmsford, CM1 1QH
Tel: 0845 6037631 © Essex County Council

SCHEME TITLE
**LHP - Cycle Chelmsford
Various Locations
LCHE134008**

DRAWING TITLE
**Shared Cycle/Footway signing
Improvements
General Arrangement**

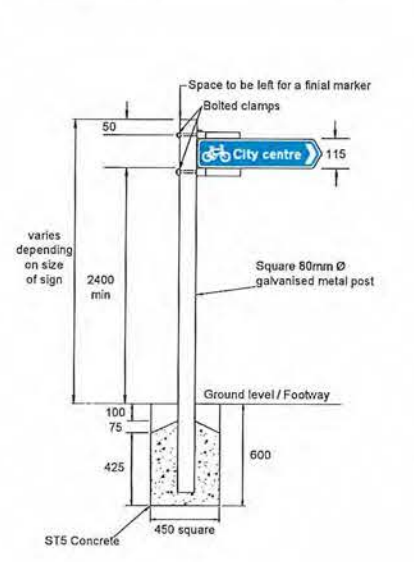
DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
LMP	LMP	MBS	LMP	PH
DATE	DATE	DATE	DATE	DATE
MAR 14	NOV 14	NOV 14	NOV 14	NOV 14

DRAWING UNITS U.K.D.
DIMENSIONS IN MILLIMETRES
LEVELS IN METRES

SCALE AT A1 (1189x841mm)
AS SHOWN

DRAWING No.	REV.
DC1-3091-00-001	-

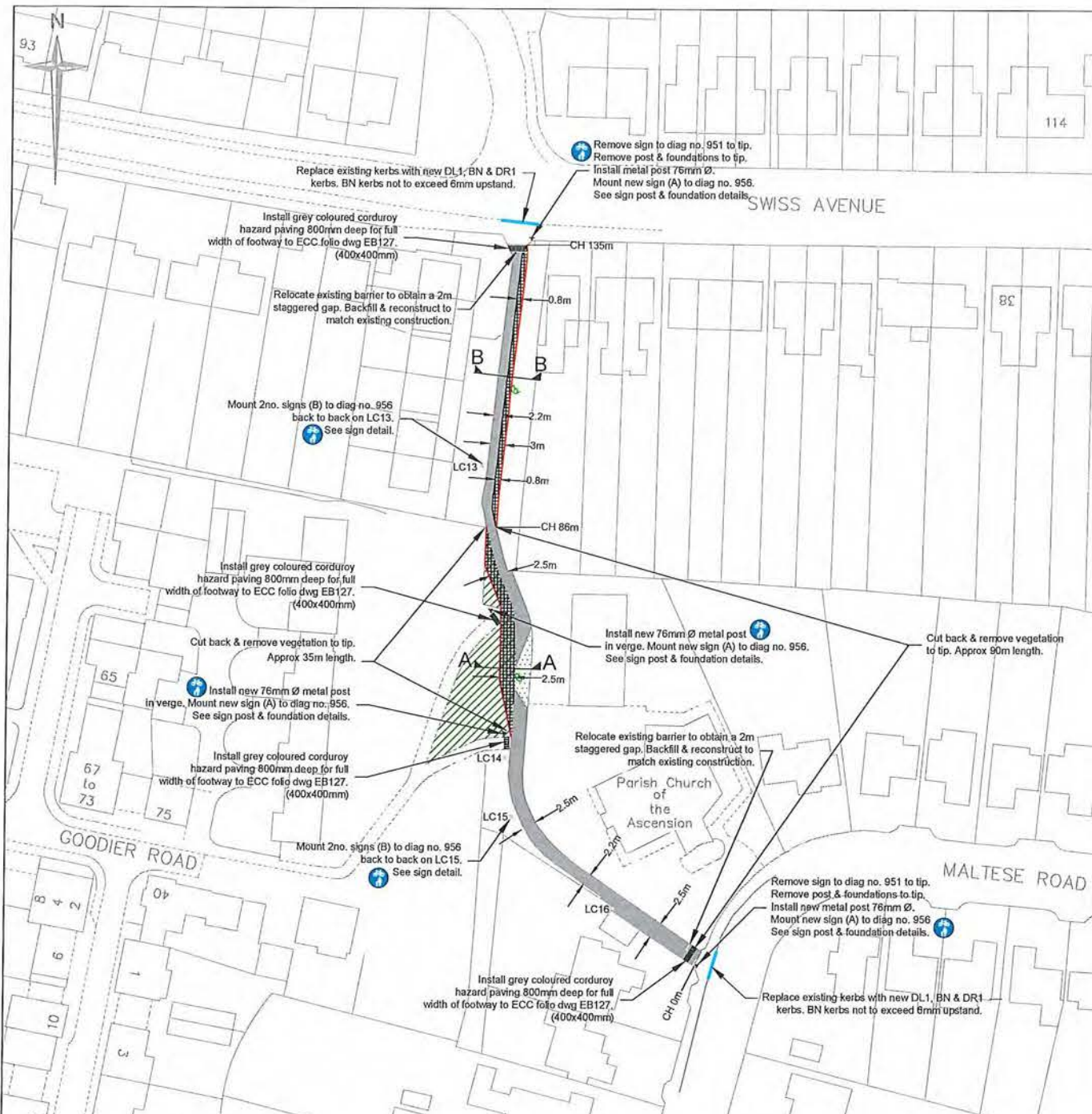
EXAMPLE - SQUARE PUBLIC FOOTPATH POST & FOUNDATIONS



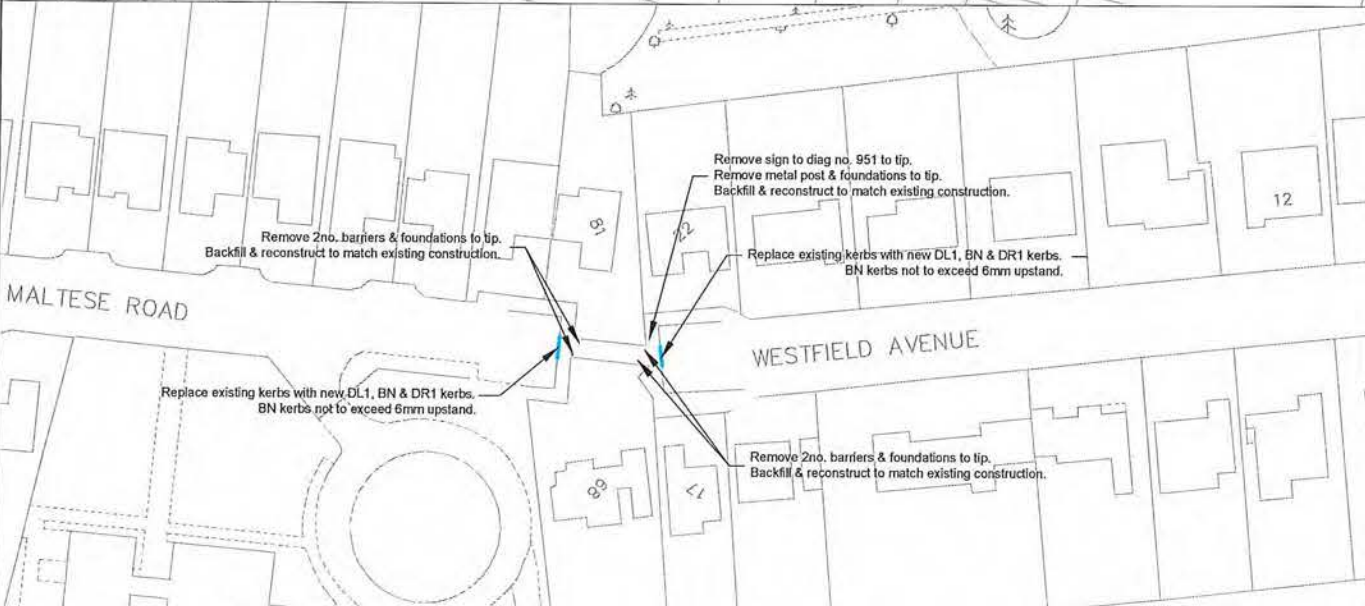
SIGN SCHEDULE - SINGLE & DOUBLE-SIDED SIGNS

Sign Reference	Sign Description	Sign Reference	Sign Description	Sign Reference	Sign Description	Sign Reference	Sign Description
S1	Double sided (Points North-Westwards) City centre	S2	Double sided (Points South-Eastwards) Great Baddow	S7	Single sided (Sign to be located on North side of post) Moulsham Lodge shops	S10	Double sided (Points North-Westwards) City centre
S3	Double sided (Points South-Westwards) Moulsham Lodge shops	S4	Double sided (Points North-Eastwards) City centre	S8	Single sided (Points North-Eastwards) City centre	S11	Double sided (Points North-Eastwards) Great Baddow
S5	Double sided (Points South-Eastwards) Moulsham Lodge shops	S6	Single sided (Sign to be located on South side of post) City centre	S9	Single sided (Points South-Westwards) Moulsham Lodge shops	S12	Double sided (Points South-Westwards) Moulsham Lodge shops
S13	Double sided (Points North-Westwards) City centre	S14	Double sided (Points North-East) City centre	S15	Single sided (Points West) City centre	S16	Single sided (Points Southwest) City centre
S17	Double sided (Points West) City centre	S18	Double sided (Points North-Westwards) City centre	S19	Single sided (Points Westwards) City centre	S20	Double sided (Points North) City centre
S21	Single sided (Points North-Eastwards) City centre	S22	Single sided (Sign to be located on southwest side of post) City centre				

NTS
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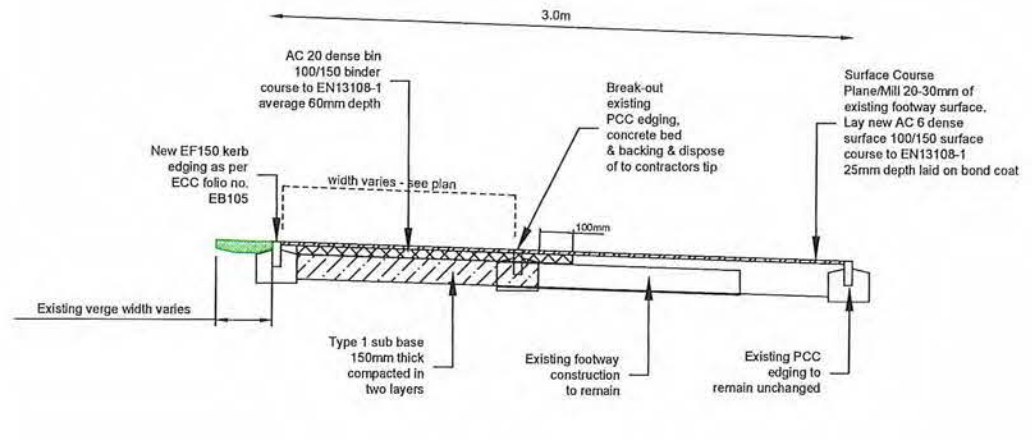


General Layout - (Scale: 1:500)

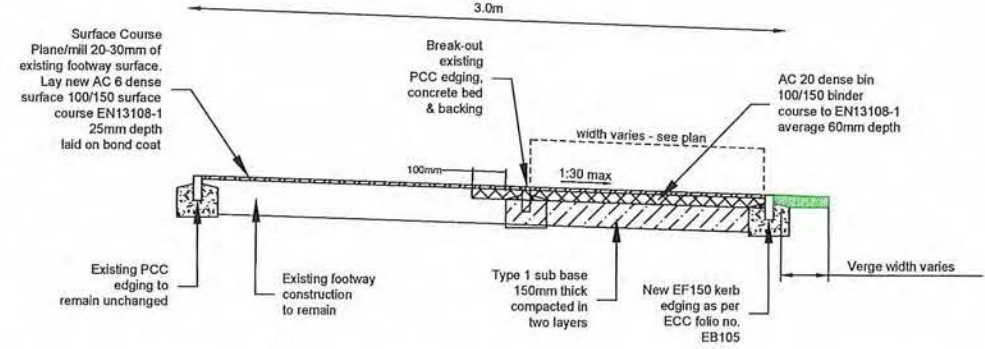


General Layout - (Scale: 1:500)

Typical shared cycle / footway construction details - Section A-A - NTS



Typical shared cycle / footway construction details - Section B-B - NTS



- Notes**
- DO NOT SCALE FROM THIS DRAWING.
 - This drawing is to be read in conjunction with the other contract documents.
 - All diagram numbers refer to the Traffic Signs Regulations and General Directions 2002 and any amendment thereto.
 - Mounting height of all signs to be a minimum of 1.2m in verge or 2.1m in footway or 2.4m in cycleways, unless otherwise stated.
 - Sign posts shall not protrude above the top of the sign face unless supporting an external luminaires in which case the protrusion shall be kept to a minimum. All posts to be capped.
 - Lateral clearance of all signs and bollards to be 0.45m min. from the edge of carriageway, unless otherwise stated.
 - Any disturbance to existing grassed areas is to be made good with topsoil and seed.
 - Works to be carried out under a footway closure and in the school holidays to minimise disruption to the public.

- Key**
- Proposed new EF150 edging kerb laid in accordance with ECC folio drawing EB105.
 - Proposed New dropped crossing point comprising of 1 No. DL1 kerb 1.8m length of BN dropped kerb & 1 No. DR1 kerb. Footway to rear to be reconstructed & reprofiled to create new dropped crossing. Longfall not to exceed 1 in 14 (7%) neatly tying into existing surface. Construction materials to be the same as proposed cycle/footway construction detail.
 - Proposed new footway (various widths). Existing grass verge area & footway to be made up to new construction. (See footway construction detail)
 - Existing large mature trees - Hand excavation required here.
 - LC Existing lamp column.
 - Existing footway - Plane/mill 20-30mm of existing footway surface. Lay new AC 6 dense surface 100 / 150 surface course EN13108-1 25mm depth laid on bond coat.
 - Existing grass verge.
 - Existing pedestrian guardrails.
 - Proposed new grey corduroy hazard paving laid on 30mm sharp sand bed & 100mm ST1 mix concrete base.
 - Convert existing footway to verge. Excavate existing bound course approx depth 100mm & replace with imported class 5B topsoil & seed.

REV.	DATE	AMENDMENT DESCRIPTION	DRAWN	CHECKED
A	12.11.14	Amended in line with RSA report.	LMP	PH

FOR CONSTRUCTION

Sign Posts & Foundation Detail



Sign Reference	956
Height	450mm
Width	450mm
Area *	0.10sq.m
Material	Class Ref 2 (BS DI 12899-1:2007)
Mount Height	2400

POST(S) & FOUNDATIONS			
Mounting Height	2400mm	Bases	Individual
Number	1	Base Width	600mm
Size	76mm	Base Length	600mm
Length	3550mm	Base Depth	600mm
Centres	N/A	Base Vol. o/a	0.216 m ³
Illumination	No	Earth Cover	100mm



Sign Reference	956
Height	300mm
Width	300mm
Area *	0.07 sq.m
Material	Class RA2 (12899-1:2007)
Mount Height	2400

POST(S) & FOUNDATIONS			
Mounting Height	2400mm	Bases	Individual
Number	1	Base Width	600mm
Size	76mm	Base Length	600mm
Length	3200mm	Base Depth	600mm
Centres	N/A	Base Vol. o/a	0.216 m ³
Illumination	No	Earth Cover	100mm

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Essex Highways

Ringway Jacobs working in partnership with Essex County Council

Mark Rowe, Service Director, Essex Highways
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Tel: 0845 6037631 © Essex County Council

SCHEME TITLE
LHP - Maltese Road / Westfield Avenue / Swiss Avenue, Chelmsford LCHE134004

DRAWING TITLE
Proposed Shared Foot/Cycleway Route Improvements General Arrangement

DESIGNED	DRAWN	CHECKED	REVIEWED	APPROVED
LMP	LMP	MBS	LMP	PH

DATE	DATE	DATE	DATE	DATE
NOV 14	NOV 14	NOV 14	NOV 14	NOV 14

DRAWING UNITS U.S.G. DIMENSIONS IN MILLIMETRES LEVELS IN METRES SCALE AT A1 (1:1500) AS SHOWN

DRAWING No. **DC1-3092-11-001** REV. **A**

FEASIBILITY REPORT – DC3130

**DC3130 – A132 Burnham Road & B1012 Woodham Road, South Woodham Ferrers
Speed Review - Feasibility Study**

1.0 **Brief**

This report has been initiated by Essex Highways Local Highway Panel for the Chelmsford Area.

The request is to investigate a proposal for reducing the current national speed limit to 40mph on:

1. A132 Burnham Road south westwards from the RAB at its junction with Ferrers Road and Willow Grove.
2. B1012 Woodham Road eastwards from the RAB at its junction with Ferrers Road

2.0 **Site Description**

A132 Burnham Road

The A132 Burnham Road passes through the parishes of Rettendon and South Woodham Ferrers, and is approximately 3.77 kilometres in length. It runs from its junction with the A1245 Chelmsford Road at Rettendon Turnpike and Hawk Hill Roundabouts in the west to the roundabout at its junction with Ferrers Road and Willow Grove in the east. The section of Burnham Road under review is an approximately 215m stretch from its junction with the roundabout at its junction with Ferrers Road and Willow Grove, (the start of the existing 40mph speed limit) in a south westerly direction. It is currently subject to the national speed limit.

Burnham Road is a designated PR1 route on the County Roads Network which means this route forms part of an essential traffic management distributary function linking Wickford, Chelmsford and Southend to the west, with South Woodham Ferrers, Burnham on Crouch, Maldon and the Dengie Peninsular to the east.

The section of Burnham Road identified for a reduction in the speed limit is for the most part dualled, except for a short 20m section at its south western end. It is a straight section of road which forms a junction with Wickford Road to the west, at approximately the mid point of the dualled section where a right turn facility is incorporated in the road layout.

There is an advance direction sign prior to the junction with Wickford Road, and a local advance direction sign immediately after this junction prior to the roundabout. There is a side road ahead warning sign (Dia 506.1) 'REDUCE SPEED NOW' sign (Dia 511), a yellow backed roundabout ahead warning sign (Dia 510), and 'REDUCE SPEED NOW' sign (Dia 511) also in advance of Wickford Road. (See photo's 4 and 5).

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B1012 Woodham Road

The B1012 passes through the parishes of South Woodham Ferrers and North Fambridge, and is approximately 6.76 kilometres in length. It runs from its junction with the A132 Burnham Road roundabout at its junction with Ferrers Road and Willow Grove in the west, eastwards to its junction with the B1010 Lower Burnham Road.

The section under review (Woodham Road) is a 120m stretch from its junction with junction with Burnham Road, Ferrers Road and Hamberts Road at the roundabout, in an easterly direction. It is currently subject to the national speed limit.

Woodham Road is a designated PR1 route on the County Roads Network which means this route forms part of an essential traffic management distributary function linking Wickford, Chelmsford and Southend to the west, with South Woodham Ferrers, Burnham on Crouch, Maldon and the Dengie Peninsular to the east.

The section of Woodham Road (B1012) identified is a single carriageway road; it has no roadside development except for the Garden of Remembrance and its access road which are both situated on its southern side.

The only signage on this section of road is an advance direction sign, and signs opposite the Garden of Remembrance entrance.



Photo 1: Existing 40mph terminal signs on A132 Burnham Road



Photo 2: Existing Town Nameplates on B1012. Start point of requested 40mph speed limit.

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Site Location Plans

A132 Burnham Road



B1012 Woodham Road



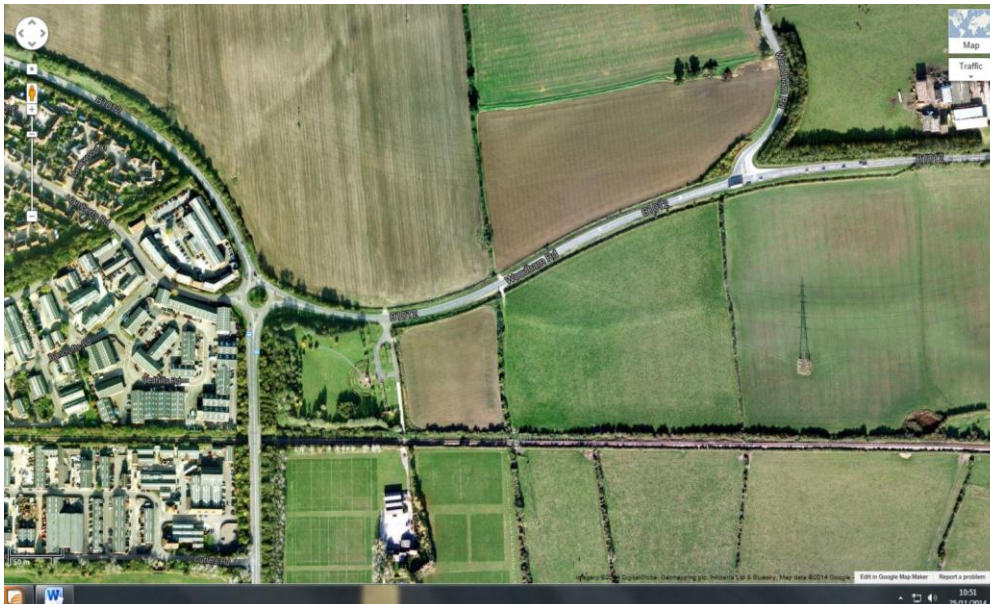
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4.0 **Aerial Photography**

A132 Burnham Road



B1012 Woodham Road



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5.0 **Site Observations**

A132 Burnham Road & B1012 Woodham Road

A site visit was made on 22nd August 2014 between 11:00 hrs. and 12.15 hrs. Weather conditions were clear and dry. The following observations were made:-

- 5.1 Both sections of road under review are on a rural/semi rural part of the road network and are illuminated by a system of street lights. Traffic flows were low to medium, (approx. 5.3 vehicles per minute on Woodham Road), no figures available for Burnham Road.
- 5.2 I do not have any recent vehicle speed data for either road; however from a recent site inspection, vehicle speeds appeared to be appropriate for both road layouts, I would estimate that a large number of these were travelling at 50mph or less on Burnham Road and 40mph or less on Woodham Road. These speeds reduced as drivers approached each roundabout.
- 5.3 All signs were free from damage, however the main advance direction sign on Burnham Road was partly obscured by vegetation. This sign had also been used as a location for tributes to a young motorcycle rider who had been involved in a fatal crash at this site, a number of wreaths and photographs had been attached to the sign and posts.
- 5.4 On visual inspection the carriageway surface condition appeared sound on each section of road, with no potholes or damaged areas and only minor crazing in some areas – nothing apparently detrimental to the safe passage of vehicles.
- 5.5 The centre line and edge markings appeared for the most part to be in good condition, a number of marks demarking the edge of the edge of the centre hatching on Burnham Road appeared to have been overlaid, and short sections of edge of carriageway marking were found to be worn and in need of remarking. Some hatched marking on Woodham Road on the gyratory section of the roundabout were also found to be worn, as were a number of SLOW carriageway markings on both roads.
Road studs were present on each section of road, however as this survey was conducted during daylight hours it was not possible to assess their operation and effectiveness.
None of these findings were considered to be a concern at this time.
- 5.6 There were no signs of flooding or water/drainage issues.
- 5.7 The site visit was undertaken on 22nd August, therefore it is likely that most of the seasons growth had taken place by that date.
- 5.8 Both roads are used as part of a bus route.

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Collision Data

November 2009 – November 2014

On the A132 Burnham Road, collision data has been examined over the section of road in question. This has revealed that 8 separate injury accidents were recorded during the 5 year period above. 2 fatal, 3 serious and 3 slight injury accidents.

On the B1012 Woodham Road, no collisions were recorded during the 5 year period above.

6.0 **Considerations required to extend the existing 40mph speed limit**

A132 Burnham Road

The estimated cost of extending the 40mph speed limit on A132 Burnham Road amounts to approximately £10,000.00 This is made up from:

- The making the Traffic Regulation Order (advertising an intention and has made notice), two adverts in all.
- The disconnection of power to an existing sign.
- The disconnection of power/make safe to an existing lighting unit, and its removal.
- The removal of an existing post and sign
- The removal of existing sign plates
- The raising of existing signs on existing posts
- Installation of new posts, terminal signs, and lighting units
- The connection of power to new terminal signs from the nearest available source
- The installation of new repeater signs (6 no)
- Multiple sets of traffic management will be required to undertake these works (estimated 3)
- Staff costs

This quote is based upon current rates and the final cost of this scheme, should it receive funding and be successful, may be higher or lower than the figure quoted.

At this stage we have no understanding of the views / opinions of local residents and the general public to any of the proposals. A detailed design will be prepared at the consultation stage should this be selected for a future scheme.

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<p>7.0</p>	<p><u>Conclusions</u></p> <p>7.1 There are no speed survey results available for either A132 Burnham Road or B1012 Woodham Road, however from a recent site inspection vehicle speeds appeared to be appropriate for both road layouts.</p> <p>7.2 Collision data determines this is not a location that requires safety measures as it would appear vehicle speeds, although above the 30mph speed limit, are befitting for this stretch of road.</p> <p>7.3 A visual inspection of this section of road, has determined the road surface is in good condition.</p> <p>7.4 It is felt that a permanent 40mph speed limit extension on A132 Burnham Road will have an effect on vehicle speeds, as some drivers will reduce their speeds earlier than they do at present when approaching Wickford Road, Ferrers Road and Willow Grove at the roundabout.</p> <p>7.5 It is felt that a permanent 40mph speed limit on B1012 Woodham Road would have little if any effect on vehicle speeds and may even be detrimental, as many drivers appear to be travelling under 40mph when approaching the roundabout.</p>
<p>8.0</p>	<p><u>Recommendations</u></p> <p><u>A132 Burnham Road</u></p> <p>The A132 Burnham Road is currently restricted to the National Speed Limit of 70mph on the dual carriageway section, and 60mph on the single carriageway. The terminal point of the current 40mph speed limit is currently situated at its junction with Ferrers Road and Willow Grove at the roundabout. The Town Council have in recent months relocated their town nameplate from a point just north of its junction with Wickford Road, to a point south west of the duelled section of carriageway.</p> <p>Our records show 8 collisions have been recorded on the section of road in question, resulting in 2 fatal, 3 serious and 3 slight injury accidents. In order to try and reduce the number of collisions occurring and the overall speeds of vehicles on this section of road, it is recommended that an extension to the existing 40mph speed limit to a point in line with the new town boundary signs should be approved by the Local Highway Panel for a future scheme.</p> <p><u>B1012 Woodham Road</u></p> <p>The section of B1012 Woodham Road is currently restricted to the National Speed Limit of 60mph; it extends past the Garden of Remembrance across the roundabout and to the north of South Woodham Ferrers en route to Wickford. Hamberts Road also leads from this roundabout and is restricted to 30mph, as does Ferrers Road which is restricted to 40mph.</p>

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The request to reduce the current speed limit on the B1012 to 40mph on this short section of Woodham Road between the town signs and the roundabout is considered inappropriate. This is the main trafficked route from south Maldon through to Wickford and the A130. It would prove nonsensical as it is only approximately 190 metres in length, it does not link in with an existing speed limit or community and drivers would not identify with its purpose. No collisions have been recorded over the past 5 year period, and it would be unlikely to achieve a reduction in vehicle speeds as many drivers appear to be travelling under this speed. It is felt therefore that the current National Speed Restriction should be retained as it is more appropriate for this section of road.

Prepared by:	Andy Dellar	Date:	25 November 2014
Revision A by:	Andy Dellar	Date:	12 January 2015
Section about costs added to report.			

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Appendix A - SITE PHOTOGRAPHS

A132 Burnham Road on the approach to the roundabout, showing the dualled section.



Photo 3

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A132 Burnham Road on the approach to the dualled section, showing the advance warning for Wickford Road



Photo 4

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B1012 Woodham Road junction with the roundabout



Photo 5

FEASIBILITY REPORT – DC3130

B1012 Woodham Road showing the existing town boundary signs



Photo 6

Road Safety Assessment

(BR326) Buttsbury Bridge, Stock Lane (Ingatestone Road) east of Ingatestone



Document Control Sheet

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Report Title	Road Safety Assessment - (BR326) Buttsbury Bridge, Stock Lane (Ingatestone Road) east of Ingatestone
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1 Introduction

1.1 Justification (extract from scheme validation dated 11/12/2013)

Stock Parish Council believes that there is not adequate protection to Buttsbury bridge, Buttsbury, Stock. The Parish Council has said that the bridge has been damaged on numerous occasions and a significant amount of disruption and inconvenience is caused by the closure of Ingatestone Road while repair works are carried out. The Parish Council is concerned that without a long term solution to protect the bridge, further damage will occur and consequently more costs associated with bridge repairs will be incurred in the future. A suggestion from the Parish Council/a parishioner is to put up signs at Buttsbury Bridge stating the width of the bridge to prevent lorries trying to cross and hitting the bridge.

1.2 Site description

Stock Lane is classified PR2 route subject to the national speed limit (60mph for a two way single carriageway road). Buttsbury bridge is located approximately 1.5km south-east of Ingatestone.

The bridge is approximately 3.1m wide and is controlled by priority working with priority given to north-westbound vehicles travelling towards Ingatestone.



According to the Mouchel technical report dated 2011, the bridge structure is Grade II Listed therefore any improvements in the immediate vicinity of the bridge will require planning approval.

The main issues raised in the validation report dated 11/12/13 are that vegetation obscures forward visibility along the route. Mouchel report from 2011 also states that the hump and the size of the brick parapet also obstruct visibility to oncoming traffic and that water was flowing down the channels due to blocked ditches.

Following a site visit undertaken for this assessment it was noted that visibility of northbound vehicles is obstructed by the western bridge parapet and vegetation bounding the western side of the road north of the bridge. Realistically, it will not be possible to remove this vegetation as it forms part of the boundary with the adjacent land owner. It was also noted that there was a lot of vegetation and other obstructions in the ditches which is likely to significantly reduce the flow rate and therefore increase the risk of flooding.

2 Collision Analysis

A ten-year review of Personal Injury Collisions ending 31st October 2014 within a 250m radius of the bridge showed 10 collisions recorded with 1 being serious and 9 being slight . There was only one collision which occurred at the bridge (September 2008) which is summarised below:

Vehicle 1, which has right of way on bridge (northbound). Driver of vehicle 2 travelling in opposite direction brakes due to oncoming vehicle 1, loses control and collides with a tree.

The most recent collision occurred on 8th November 2012; there was a four year gap between this and the collision in September 2008.

Four of the 10 collisions occurred on a wet / damp road surface; one of which also occurred during the hours of darkness. In total two collisions occurred during the hours of darkness.

Five years (01/11/09-31/10/14) 'damage only' information has been provided by Essex Police (note that this only includes collisions reported to the Police). This identified one collision dated 01/03/2010 at approximately 07:30hrs which involved a Volvo Artic truck. No other vehicle was involved and unfortunately no other information is available.

Further information relating to damage to the bridge was provided by Essex County Councils Structures Team.

In summary, there were 5 collisions resulting in damage to the bridge. Unfortunately, there is little information regarding the circumstances of the collisions however it is noted that the first incident in 2010 occurred on the same date as the 'damage only' collision recorded by Essex Police. Three of the collisions occurred in 2012, two of which occurred in November.

3 Traffic Assessment

Two seven-day Automatic Traffic Counts were carried out at the beginning of March 2013, one immediately either side of the bridge, both measuring volumes, speed and vehicle type in both directions.

The majority of vehicle speeds were recorded between 20-40mph however it was noted that speeds were slightly higher on the exit side of the bridge (both directions). This indicates that once drivers are on the bridge they tend to accelerate.

It is also worth noting that 6% of vehicles were recorded as 2-axle truck or bus. Everything else was classified as car, taxi, four wheel drive or motorcycle.

The proportion of vehicles travelling south-eastbound between 30-40mph is slightly less than the opposing direction which is expected as vehicles travelling in this direction should give way.

During the site visit there were a number of larger vehicles observed crossing the bridge including refuse vehicles. Realistically, this means that any narrowing would have to leave sufficient width for these types of vehicle, which would reduce its effectiveness in slowing vehicle speeds, or vehicles should be banned from using this route which will increase journey times therefore is likely to be met with some resistance. This has been agreed with Network Management however it will require further investigation and liaison with relevant parties.

4 Mouchel 2011 Options Study

Mouchel technical report dated November 2011 proposed three options which are summarised below.

According to the report Option 2 and 3 will almost certainly require liaison with the local planning department as they require changes in the immediate vicinity of the bridge. The report also states that the verge on the approaches to the bridge is soft and therefore may require some strengthening to support the mass of bell bollards (Option 2) and kerb works (Option 3).

None of the options appeared to have been pursued following the study however it was noted during the site visit that the wooden fences have been painted white and reflectors added to them. Google image from January 2009 shows posts not painted.

Drawings are also available for information. The three options were reviewed at the site visit and comments provided under each option below.

4.1 Option 1 – Low cost

This option may be considered the low cost option and involves:

- Replace existing damaged wooden fence, paint it white and add reflectors.
- Refresh all white lines with exaggerated narrowing through the bridge.
- Place a width restriction of 2.3m (7'6") on the bridge, including provision of width restriction signage at either end of the route.
- Place warning signs on yellow backing boards.
- Refresh SLOW markings.

(Extract from 2011 report) The intention is to divert larger vehicles away from the bridge through use of a width restriction and use road markings and warning signs to raise driver awareness of the hazard and guide them through the narrow structure. At 3.07m wide the width restriction could be 2.9m/9'6" however this only allows 150mm clearance so a restriction of 2.3m/ 7'6" is recommended (giving a clearance of 707mm). It is not proposed to provide a physical narrowing with this option.

Option 1 is estimated to cost £6,500 and will not require a road closure to undertake the works.

Review of Option 1 at this assessment

Speed and forward visibility are considered two of the main causation factors as to why vehicles collide with the bridge therefore as the number of larger vehicles is relatively low and that the type of vehicles causing the damage to the bridge is unknown, a physical narrowing which forces road users to slow down in advance of the bridge is considered to be the most appropriate option.

4.2 Option 2

This option involves:

- Replace existing damaged wooden fence, paint it white and add reflectors.
- Refresh all white lines with exaggerated narrowing through the bridge.
- Place a width restriction of 2.3m (7'6") on the bridge.
- Place warning signs on yellow backing boards.
- Remove 2.5m of existing fence and install four 600mm diameter 'Bell Bollards' on each approach to the bridge.
- Refresh SLOW markings.

(Extract from 2011 report) This option uses cast iron Bell Bollards to narrow the carriageway to 2.67m. The intention is that vehicles too wide for the bridge will strike their tyres on the bollard before reaching the bridge. This may not be effective for wide bodied farm vehicles. The foundations for the bollards are 800mm x 800mm x 600mm deep and their installation may require some work to build up and strengthen the adjacent verge.

Option 2 is estimated to cost £8,800 and will require a road closure for two days to install the bollards. Such a closure will also give the opportunity to repair the bridge.

Review of Option 2 at this assessment

The use of Bell Bollards is likely to be more effective than placing the kerb lines proposed in Option 3. It is proposed to use 600mm deep foundations for the bollards therefore the verge may need to be strengthened and a structural assessment of the bridge undertaken to see whether this is practicable. In Option 2 and 3 it is proposed to narrow the bridge to 2.3m; width of Ford Focus is 1.9m leaving approximately 0.4m additional room. Bell bollards will provide a greater level of protection to the bridge. These would be cast iron, probably painted white to maximise the visibility, however it

should be noted that if they were hit by an errant vehicle or at speed then the likelihood of the occupants sustaining serious injuries is likely to be much greater. Furthermore, there is a greater risk that a larger vehicle might become stuck therefore causing further disruption/congestion. This is also likely to be the least preferred option from a planning perspective. There is less risk of this occurring by narrowing using a kerb line however, if a vehicle were to strike the kerb there is a greater risk that the vehicle might be deflected into the opposite parapet.

4.3 Option 3

This option involves:

- Refresh all white lines with exaggerated narrowing through the bridge.
- Place a width restriction of 2.3m (7'6") on the bridge.
- Place warning signs on yellow backing boards.
- Refresh SLOW markings.
- Construct a new kerb line on the approach to the bridge which narrows the road down from approximately 5.5m to 2.47m at the immediate approach to the bridge.
- Take down existing fence and erect new fence 450mm behind kerb face, new fence to be painted white and have reflectors attached.

(Extract from 2011 report) As the bridge is a listed structure, works on its surface are unlikely to be permitted therefore it is proposed that a 125mm kerb face is provided on the immediate approach. The kerbs will need to be of granite or artificial granite in keeping with the status of the bridge. It is thought that the vertical kerb face will give drivers a reference point to guide them through the bridge. It will also be more forgiving to errant vehicles than the Bell Bollards used in Option 2.

Option 3 is estimated to cost £17,100 and will require a road closure for up to 6 days to install the kerbing and refinish the adjacent carriageway. Such a closure will also give the opportunity to repair the bridge.

Review of Option 3 at this assessment

Hatching is provided to the nearside of both approaches to the bridge mimicking the approximate kerb line in Option 3. This is considered less likely to reduce vehicle speeds as they will be lower level therefore less visible to motorists than Bell bollards. There is also a risk of a secondary collision if a vehicle collides with a kerb and

rebounds into the opposite parapet. Consideration was also given to trief kerbs (taller higher containment kerb) however again this is likely to be rejected on planning grounds.

4.4 Recommendations

The recommendations from the Mouchel report are summarised below:

1. Option 1 implemented; and
2. Option 2 and 3 considered as part of long term strategy after monitoring period.

It does not appear that any of the options have been progressed any further other painting the wooden fence white and adding reflectors as previously mentioned.

5 Site visit & Observations

The carriageway north of the bridge has been surface dressed (May 2014). The carriageway south of the bridge also appears to be relatively new and in good condition. The surface on the bridge deck is in a fair condition although it was much more worn than the approaches and there is some evidence of cracking therefore creating potential for ingress of water which could damage the surface further / bridge structure.

'Road narrows on both sides of road' warning signs are provided on both approaches to the bridge however, it only narrows on the nearside (see Image 1 below). This is not considered to be a major issue. There was some minor encroachment of vegetation however signs were clearly visible.



Image 1 – Northbound approach to bridge (road narrows on nearside; also see detriutus on nearside)

There is a lot of leafage of the carriageway outside Riverside Farm on the nearside (see Image 1 above) which indicates the line most vehicle take approaching the bridge. In most cases northbound vehicles had already crossed the centre line before the road starts to narrow at the bridge.

Although northbound traffic has priority there is very little see-through to oncoming vehicles. It is noted that LTN01/07 states that priority working should be only be used where opposing users have clear sight of one another and speeds are not high. There is also a large amount of vegetation which bounds the road north-west of the bridge which in addition to the size of the parapet obscures advanced visibility (see Image 2 below). If vegetation were removed it would increase visibility to oncoming vehicles

however it could also lead to an increase in speeds where visibility is that much greater thus increasing the risk of a vehicle striking the bridge.



Image 2 – See through between parapet and sign

'Priority must be given to vehicles from the opposite direction' signs to diagram 615 are provided slightly in advance of the bridge. The nearside sign is located in the lay-by (see Image 3 overleaf). During the site visit the sign post had been struck and the sign face removed. The post was leaning towards the north therefore it would appear that it was hit by a northbound vehicle most likely entering the layby. This sign should be replaced as a high priority although it is appreciated that this is a well known 'rat run' therefore most road users will be familiar with the existing layout. This sign is also duplicated on the offside although it is not visible due to the alignment and vegetation until much closer to the bridge.



Image 3 – Southbound approach to bridge (road narrows from nearside only and damaged sign)

During the site visit, the priority system at the bridge appeared to be very effective in slowing vehicle speeds. However, where there was nothing coming in the opposite direction road users maintained their speed over the bridge.

6 Further Remedial Options

Solid white lines are provided on both sides of the carriageway across the bridge deck. As the bridge is only 3.1m wide it is not possible to provide additional protection to the parapet in the form of a safety fence therefore slowing vehicles down is more likely to be the only genuine option.

A number of lower cost options including signing, road markings and road studs have been considered however none of these were considered likely to reduce vehicle speeds enough to significantly reduce the risk of bridge strikes.

Option 4 (Options 1-3 in Mouchel report) - One potential option maybe to provide a narrowing on both approaches to the bridge to significantly reduce speeds (<20mph) in the form of a pinch point. This approach is similar to Option 2 and 3 except that the pinch point is located away from the bridge therefore mitigating any risk of secondary collisions. According to LTN01/07 pinch points maybe used on 40mph roads so would not be appropriate. However, speed survey data shows current speeds are not too dissimilar, therefore providing appropriate signage and changes to the layout are provided this may provide a suitable option. Although this is against policy it has been agreed in principal with Vicky Duff, Network Manager for Essex Highways. There was a street light mounted on the telegraph pole north of the bridge and although this was non-operational, there is potential to utilise this if some powered connection is needed. The post is marked as BT but it is presumed that it may act as part of an overhead supply (further investigation would be required to confirm this).

Option 5 and 6 - Two higher cost options would be to either replace the bridge making it wider or to have the narrowed section controlled under two way lights.

Realistically, as the bridge is Grade II listed there is very little chance that the bridge could be widened or replaced and the cost will be significant which is unlikely to be justifiable given current budgetary restraints.

Traffic signal control has been used at a number of other locations in the county such as Rectory Road in Ashingdon, and A1124 Fordstreet Hill over the River Colne, although admittedly these areas are both generally more built up and subject to greater flows. Both directions show red to approaching users. When a vehicle approaches the bridge in either direction and is stationary the light changes to green. In this scenario the priority system is removed. Cost, including power supply is likely to be the main issue. Furthermore, where one direction has priority over the other any vehicles following through behind would not have to give-way therefore will still be able to maintain greater speed over the bridge.

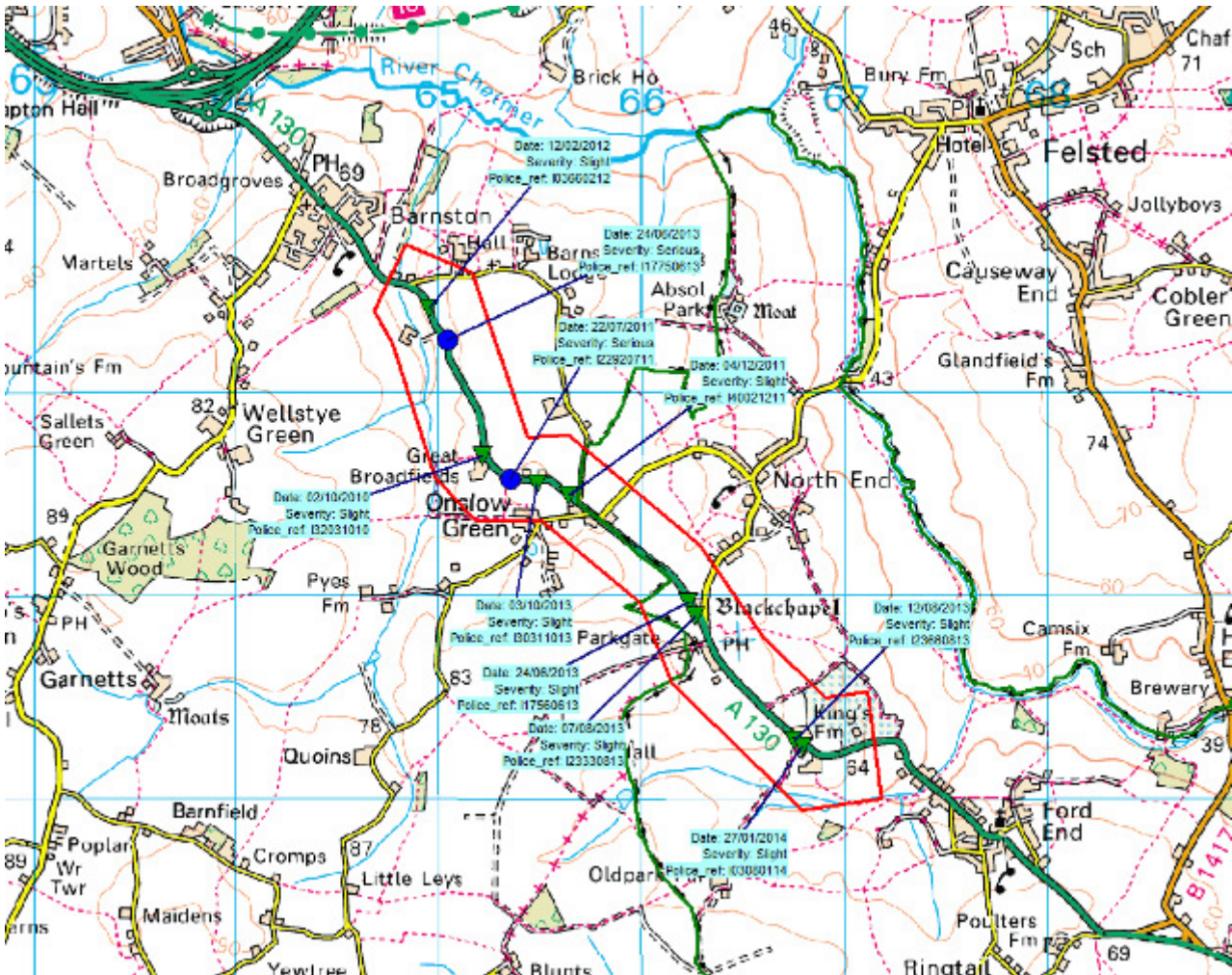
7 Conclusions & Recommendations

1. The scheme validation (2013) states that vegetation and drainage are two problems. These issues have been registered on Confirm to be picked up by Essex Highways maintenance team, and customer team to take up with respective land owners as appropriate where there is an obligation to maintain vegetation and free flowing watercourses on their property.
2. Although the existing warning signs advise road users that the bridge narrows, the sign face itself is fairly common so motorists might not appreciate the severity of the narrowing and therefore maintain a higher speed which increases the risk of them misjudging the width and colliding with the parapet. Width restriction signage was proposed at either end of Stock Lane as part of Options 1-3. However, once road users are on the road they are unlikely to appreciate the localised narrowing at the bridge therefore the signs are unlikely to adjust behaviour or reduce the number of strikes. It is therefore recommended that additional width restriction signage is provided on both approaches to the bridge in order to reinforce this message with drivers. One potential issue is where a larger vehicle turns around if they are unable to pass the width restriction. The carriageway on both sides of the bridge is a fair width therefore adequate advanced signing will be key.
3. Carry out Option 1 as per 2011 Mouchel report. It is recommended not to use yellow backing to existing road narrows signs at this location although it is recognised that there have been a number of collisions at this location. The existing warning signs were clearly visible and as the signs do not state the width of the narrowing road users are likely to misjudge the available room as road narrows sign face is quite common.
4. Carry out detailed design of Option 4 to include pinch points at the two way sections on both sides of the bridge. This should be installed so that pinch points are provided on both sides of the road to prevent road users bypassing the pinch point on the wrong side of the road or causing unnecessary disruption if one vehicle is unable to pass through the width restriction. Appropriate signing will be required as well as amendments to existing signage. Pinch points will need to be passively safe, reflectorized and well signed as well as catering for farm equipment. This scenario means that wider vehicles, such as refuse vehicles, will not be permitted to use the bridge. This will need to be confirmed with Essex Highways Network Management / Structures Teams.



Location: B1008 between Barnston and Ford End
District: Uttlesford/Chelmsford
Collision Investigation Period: 01/03/2009 – 28/02/2014

1.0 Site Plan with Collision Plot



2.0 Site Description & Observations

Details	Description/Observations
Road Name (s)	B1008
Speed Limit	The majority of route is subject to a 60mph speed limit with the exception of a short section between near Kiln Farm and Barnston which is subject to a 40mph limit.
Street Lit	No
Carriageway type	Two way single carriageway.
Gradient	The section between Kiln Farm and Barnston is subject to a number of changes in vertical gradient. The remainder of the route is relatively level.
Traffic Management	N/A

Road Surface	Generally good however there are areas where the verge has failed due to over-run of heavy goods vehicles which could pose a significant hazard to road users.
Signing	OK but is very inconsistent and lacking in some locations.
Road Markings	Good
Visibility	Varied. The route is subject to a number of horizontal curves where the presence of vegetation does obstruct visibility to the layout ahead and any oncoming vehicles.
Vegetation	Yes
Other	None

3.0 Personal Injury Collision Analysis

Collision details	Number
Total no. of Collisions	10 collisions (2 serious and 8 slight)
Total no. of Casualties	16 casualties (2 serious and 14 slight)
Number of collisions in hours of darkness	2 (20%)
Number of collisions in wet/damp conditions	2 wet (20%) and 1 frost/ice
Collisions involving vulnerable road users	1 motorcycle

Identified Collision Pattern(s)	No of Collisions
Kiln Farm south of Parsonage Lane – single vehicle loss of control	2 (20%)
North of Bennetts Lane – loss of control, one single vehicle	3 (30%)
Kings Farm near Wall Chase – loss of control, one single vehicle allegedly involving an animal crossing the road	2 (20%)

4.0 Site Photographs



	
<p>Image 1 – B1008 south of Parsonage Ln (southbound)</p>	<p>Image 2 – B1008 south of Parsonage Ln (northbound)</p>



Image 3 – B1008 north of Bennetts Ln (southbound)



Image 4 – B1008 north of Bennetts Ln (northbound)



Image 5



Image 6

5.0 Recommendations

Remedial Measures

- 1) Replace existing / erect new bend ahead warning signs and chevrons on yellow backing and provide edge of carriageway delineators at location identified from collision analysis.
- 2) Investigate localised widening of carriageway in order to prevent over-run.

6.0 Estimated Costs

Detailed design	£2000
Road Safety Audit and Project Management costs	£1000
Total	£3000

7.0 Scheme Approval

Safety Engineering Team:	Tel No.	Date
Safety Engineer: Simon Stubbings	01245 342901	26/03/2014

Senior Safety Engineer: Jenny Hill	01245 342902	26/03/2014
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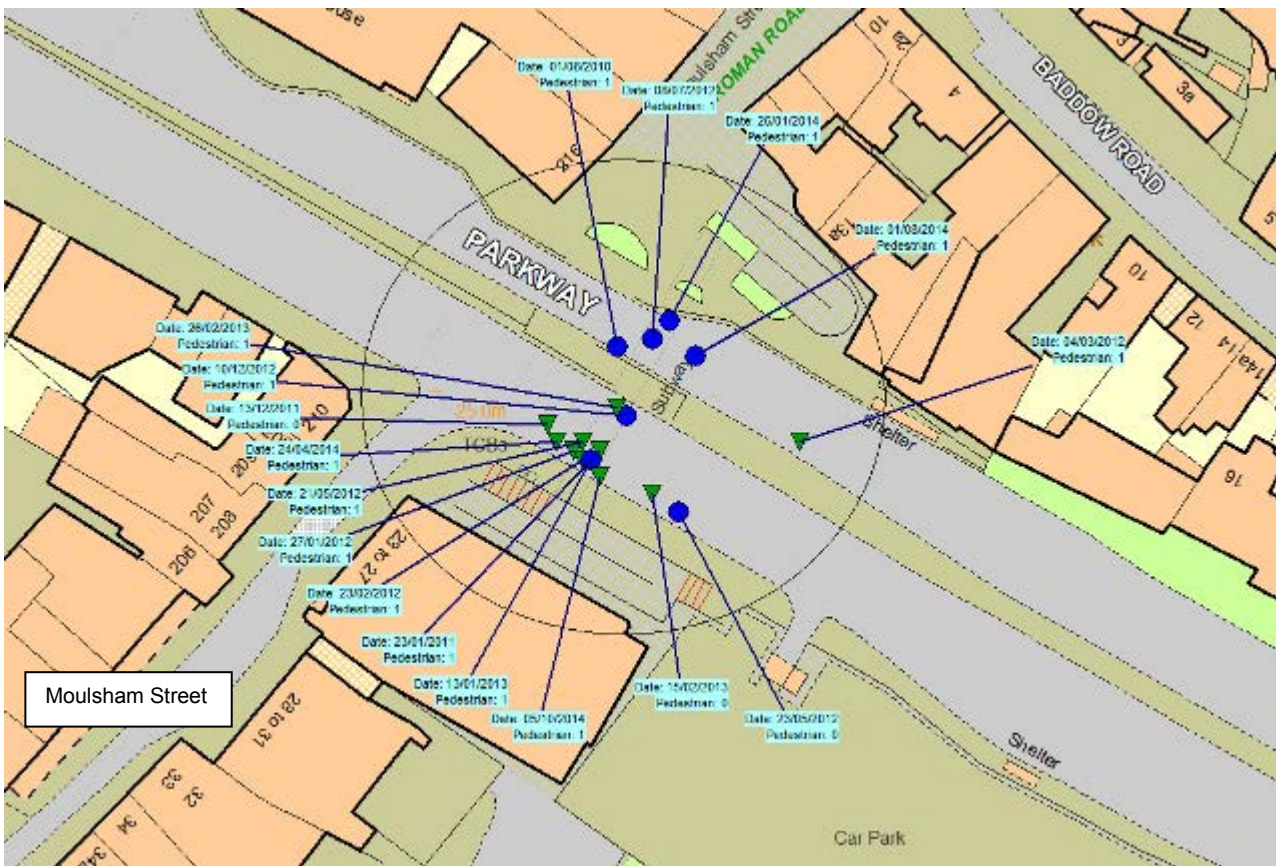
Site Report Essex Highways Casualty Reduction Site
Report 2015/16



Location: A1060 Parkway near j/w Moulsham Street, Chelmsford
District: Chelmsford

Collision Investigation Period: 01/01/2010 – 31/12/2014

1.0 Site Plan with Collision Plot



2.0 Site Description & Observations

Details	Description/Observations
Road Name (s)	A1060 Parkway south-east of junction with Moulsham Street
Speed Limit	<p>Current speed limit 40mph</p> <p>Speed survey results showed good compliance to the 40mph.</p> <p>Since the 'at grade' crossing was installed in 2002 most of the incidents involving pedestrians occurred on the red man so the pedestrian was likely to be at fault.</p> <p>A reduction in speed limit to 30mph is not considered to be appropriate as speeds during peak hours are less than this anyway because of</p>

	<p>congestion and any reduction outside of peak hours would require speed enforcement and is unlikely to have a significant impact on the collision trends here.</p>
Street Lit	<p>Yes although low level.</p> <p>The signals heads were also upgraded with LEDs but this seemed to have a detrimental impact as the glare they produced meant that anyone standing by the side of the crossing was almost invisible. These have been converted to a dimmable setup which has improved the situation markedly.</p> <p>The existing lighting does not make the crossing stand out therefore reducing the conspicuity of any pedestrians approaching the crossing.</p>
Carriageway type	<p>Dual carriageway, two lanes south-east bound, three lanes north-west bound.</p> <p>Off carriageway bus lay-by on the nearside of the north-westbound carriageway located to the south of the crossing</p> <p>Lay-by prior to the crossing on the south-eastbound carriageway cannot be removed which is used by Rayleigh Hi-Fi. Although this does impact on visibility to the crossing approach it is not considered to have a severe detrimental impact on the safety of the crossing.</p> <p>The car park on the Moulsham Street side of Parkway exits on to the main road approximately 14m before the crossing.</p>
Gradient	<p>Ramps to the subway are not DDA compliant and the 'at grade' crossing connects the two parts of the High Street therefore there is strong political will to keep the crossing.</p>
Traffic Management	<p>The crossing is a hybrid type Puffin / Pelican.</p> <p>The crossing was originally installed with Puffin pedestrian nearside signals but these were replaced in 2007 with the current 'far side' pedestrian signals.</p> <p>Each crossing approach has two primary and two secondary vehicle signal heads mounted at standard height above ground level. Consideration was given to high level signals as provided at Van Diemens however, the collision statistics indicate that the main issue is not drivers being unaware of the crossing therefore this is unlikely to provide a return on the significant investment.</p> <p>Each crossing point has two pedestrian 'far side' signal heads situated on the opposite side to enhance pedestrian visibility of the red and green man signals over the wider crossing width.</p> <p>The signal sequence includes a 'blackout' clearance period following termination of the green man signal and before the appearance of the red man. The signals are operated by SCOOT, an adaptive traffic control system which is designed to maximise traffic flow, during the peak due to the proximity of the New London Road junction.</p>

Road Surface	<p>Buff coloured High Friction Surfacing is provided on both approaches to crossing.</p> <p>SCRIM data shows the south-eastbound lanes as Below Investigatory Level. North-westbound lanes are shown as good.</p>
Signing	<p>Yellow backed warning signing is provided on both approaches to the crossing but is not lit. There are also temporary pedestrian information signs are erected at the crossing.</p> <p>A large temporary diversion route sign is located in the central reserve but is due to be removed in 2015-16 financial year as part of an LHP scheme subject to funding.</p>
Road Markings	<p>Fair but are starting to wear and are even less visible given the presence of the buff coloured High Friction Surfacing.</p> <p>The vehicle stop line is offset from the crossing by approximately 1.5m (minimum distance permitted). During peak periods this often results in vehicles crowding the crossing. A maximum distance of 10m is allowed.</p>
Visibility	<p>Good however there are a number of planters mounted to the pedestrian guard rail in the central reservation which may obstruct visibility to pedestrians tracking across the island.</p> <p>During the off peak there is plenty of opportunity to cross without using the crossing but due to inattention pedestrians are failing to observe approaching vehicles. This is a particular problem on the three lane carriageway inbound as quite often lane 3 remains free flowing.</p> <p>The outbound two lane section also feels very narrow particularly as pedestrians stand right up to the edge of the carriageway. However, the collision stats did not highlight this as a problem.</p>
Vegetation	Planters mounted to the pedestrian guardrail in central reserve.
Other	None.

3.0 Personal Injury Collision Analysis

Collision details (latest five years)	Number
Total no. of Collisions	17 (7 serious, 10 slight)
Total no. of Casualties	17 (7 serious, 10 slight)
Number of collisions in hours of darkness	9 dark (52.9%)
Number of collisions in wet/damp conditions	3 wet/damp (17.6%)
Collisions involving vulnerable road users	14 pedestrians (82.3%), 1 motorcycle (5.8%)

Identified Collision Pattern(s)	No of Collisions
Total number of collisions involving pedestrians	
Occurred between midnight and 04:00hrs	6 (42.9%)

Pedestrian under the influence of alcohol	6 (42.9%)
Northbound vehicle / eastbound ped	5 (35.7%)
Northbound vehicle / westbound ped	3 (21.4%)
Southbound vehicle / westbound ped	3 (21.4%)
Pedestrian masked by stationary vehicle	3 (21.4%)
Pedestrian other	2 (14.3%)
Tail end shunt	3 (21.4%)

A review of the collision history shows two dominant patterns. The first is pedestrians under the influence of alcohol attempting to cross Parkway against the red man. The split of incidents occurring between midnight and 4am is approximately 50/50 male to female as is the distribution between carriageways although visually there are a greater number of collisions recorded on the north-westbound carriageway but a greater severity on the south-eastbound carriageway.

The second is pedestrians crossing during the remaining part of the day where they fail to wait for the signals despite the journey time whether using the subway or 'at grade' crossing being similar.

The presence of the New London Road junction undoubtedly has an impact throughout the day as this causes congestion back to the crossing whereby some lanes of traffic are moving and others stationary. This tends to result in vehicles crowding the crossing carpet making it more difficult to judge whether it is safe to cross or not. Two of the contributory factors appear to be safety in numbers mentality and once pedestrians have started to cross they rarely double check for oncoming vehicles despite crossing multiple lanes of traffic.

4.0 Site Photographs (Images from Google dated July 2014)



Image 1 – North-westbound approach to crossing (off carriageway bus stop on nearside)



Image 2 – North-westbound approach (exit from car park on nearside and planters mounted to guardrail on offside)



Image 3 – North-westbound carriageway crossing (Lane 1 and 2 normally static in AM peak whereas lane 3 normally remains more fluent)



Image 4 – South-eastbound approach to crossing



Image 5 – South-eastbound approach (parked vehicles masking pedestrians approaching the crossing and temporary diversion route sign on central reserve)



Image 6 – South-eastbound carriageway crossing

5.0 Recommendations

Remedial Measures

- 1) Undertake new SCRIM assessment and replace HFS if necessary.
- 2) Undertake lighting review and upgrade as necessary preferably to a high pressure system.
- 3) Relocate stop line to 5m from crossing studs and highlight crossing carpet with red surface.
- 4) All road markings refreshed with high glass bead content to improve retro-reflectivity.
- 5) Investigate closure of crossing for 3-4 hour period on Friday, Saturday and Sunday nights between approx. midnight and 3am. Measures consist of switching off traffic signals and mechanically operated barrier across crossing. It is also strongly recommended that if the crossing is closed over night that improvements to the subway are also undertaken i.e. lighting, mirrors, CCTV cameras linked to monitors at the top of the ramps, information signs stating CCTV manned 24/7, etc.
- 6) Shorten the pedestrian waiting time by using Vehicle Actuated instead of SCOOT although this will only be possible outside of peak hours.

Although separation of traffic and pedestrians and forcing pedestrians to use a substandard subway is far from ideal it should be noted that this is a very targeted measure as a means to stop pedestrians crossing the road without using the signalised crossing in the middle of the night. It is recognised that some pedestrians may attempt to climb the barrier however the collision stats suggests that the demographics of our target group will be less of a problem than what happened at Coval Lane, whereby crossing pedestrians were largely commuters

It should be noted that we do not believe that either the increased offset of the stop line nor temporary closure of the crossing has been used in the UK before. During early discussions with ITS (our team that manage permanent traffic signals/crossings within Essex) we believe it is possible to close the crossing as the signal equipment is more similar to that used at junctions where it is possible to have part-time operation. However, given that the proposals are untested it is recommended that we undertake further investigation from both an ITS and legal standpoint and that it should only go ahead if the crossing is physically closed off.

For information we have looked at a range of different options which included commissioning ITS to undertake a review of the crossing and suggest possible improvements to the signals, one of the options considered was Pedestrian Countdown timers.

Pedestrian countdown timers are now authorised by the Department for Transport (DfT) for installation at crossings with far side pedestrian red/green man signals. The countdown is displayed immediately after the end of the green man and shows the time left before the red man appears (i.e. the blackout period) and therefore the time remaining for pedestrians to complete crossing the road.

Trials undertaken by Transport for London (TfL) have shown that countdown timers have a high level of acceptance by both able-bodied and mobility-impaired pedestrians. The key benefits include pedestrians feeling less rushed and having sufficient time to cross. The trial also showed that the crossing sites where countdown timers are installed are no less safe than before installation.

Countdown timers would be compatible for use on both carriageways of the Parkway crossing as this already has far side pedestrian signals with a blackout period between the end of the green man and the start of the red man.

It should be stressed that the Traffic Signs Regulations and General Directions only permits countdown timers in the UK to count down the blackout period, not the wait time before the appearance of the green man. It would therefore not address the observed tendency of pedestrians at the Parkway crossing to cross the road before the green man appears if they judge a gap in the flow to be sufficient to cross.

Both the investigations undertaken by ITS and Road Safety suggest that the use of countdowns at the crossing would have very little benefit therefore it is recommended to the panel that these are not installed as they are unlikely to provide value for money or achieve any reduction in casualties.

6.0 Scheme Approval

Safety Engineering Team:	Tel No.	Date
Safety Engineer: Simon Stubbings	01245 342901	13/01/2015
Senior Safety Engineer: Jenny Hill	01245 342902	15/01/2015

Chelmsford City LHP Approved Works Programme - Completed/Cancelled Schemes

Scheme Key	Completed	Cancelled
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* RAG confidence in achieving finish date

Ref.No.	RAG *	Design Reference Number	Task Name	Parish	Finish	CMA Approved	Cost Code	Works Description	Allocated Budget	Comments
2012/13 Budget										
1		DC1208	Waltham Road Bends, Boreham	Boreham	10/05/2013	17/07/2012	LCHE001001	Safer Roads	£63,500.00	Completed
2			Sainsbury's Address, Colchester Road, Boreham	Boreham	12/03/2014	04/12/2012	LCHE005002	Bus Stop Improvements	£2,500.00	Completed
3		DC	Main Road Waltham Road Boreham	Boreham	11/04/2014	01/03/2013	LCHE002002	Junction improvement	£5,000.00	Completed
4		DC1259	Broomfield Road	Broomfield	31/10/2014	15/04/2012	LCHE002012	Traffic Management Improvements (TMI)	£2,000.00	Completed
5		DC1404E	Broomfield Primary School	Broomfield	14/08/2014	26/09/2012	LCHE006001	SCP/Site Improvements	£2,950.00	Completed
6		DC1316	9 Broomfield Footpath	Broomfield	15/11/2013	26/09/2012	LCHE008001	Drainage and surface improvements	£3,500.00	Completed
7			A114 Van Diemens Approach to Parkway RAB	Chelmsford Non Parished	28/05/2013	17/07/2012	LCHE001002	Yellow backed pedestrian crossing warning sign	£21,500.00	Completed
8		DC1258	Odeon Roundabout, Chelmsford DESIGN ONLY	Chelmsford Non Parished	22/02/2013	17/07/2012	LCHE007001	Signage and Left Turn lane	£4,000.00	Completed
9		DC1259	Parkway jw Broomfield Road, Chelmsford	Chelmsford Non Parished	05/03/2014	17/07/2012	LCHE007002	Traffic Appraisal	£13,000.00	Completed
10		DC	New London Road jw Writtle Road and Elm Road	Chelmsford Non Parished	n/a	14/08/2012	LCH001009	Safer Roads	£10,500.00	Cancelled
11		DC1404F	Melbourne Park Primary School	Chelmsford Non Parished	20/02/2014	26/09/2012	LCHE006001	SCP/Site Improvements	£2,500.00	Completed
12			Hole in Hedge Shelter	Chelmsford Non Parished	06/09/2013	04/12/2012	LCHE005010	Bus Stop Improvements	£7,500.00	Completed
13			Waveney Drive Shelter - Blackwater close	Chelmsford Non Parished	23/08/2013	04/12/2012	LCHE005005	Bus Stop Improvements	£4,000.00	Completed
14			Kings Road Address, Broomfield Road	Chelmsford Non Parished	n/a	04/12/2012	LCHE005001	Bus Stop Improvements	£4,000.00	Cancelled
15			Galleywood Road opposite and adjacent Russell Gardens	Chelmsford Non Parished	01/04/2013	04/12/2012	LCHE005008	Bus Stop Improvements	£2,000.00	Completed
16			Bus stop - Eden Way, Address - Avon way	Chelmsford Non Parished	28/02/2014	04/12/2012	LCHE005009	Bus Stop Improvements	£7,500.00	Completed
17		DC1537	Melbourne Park Primary School Melbourne Avenue Chelmsford	Chelmsford Non Parished	18/02/2014	04/12/2012	LCHE006003	SCP/Site Improvements	£5,000.00	Completed
18		DC1538	Cathedral CE Primary School Victoria Road Chelmsford	Chelmsford Non Parished	10/01/2014	04/12/2012	LCHE006004	SCP/Site Improvements	£5,000.00	Completed
19		DC1685	Avon Road, Chelmsford - FEASIBILITY ONLY v1	Chelmsford Non Parished	09/04/2014	01/03/2013	LCHE001018	Minor Schemes - Verge Parking	£2,000.00	Completed
20			ITS0006 7F01 Army and Navy flyover	Chelmsford Non Parished	11/09/2014	01/03/2013	LCHE001015	Vegetation clearance	£23,000.00	Completed
21		DC1758	Gloucester Avenue Lucas Lane Chelmsford	Chelmsford Non Parished	n/a	01/03/2013	LCHE002005	VAS	£5,000.00	Cancelled
22		DC1761	Trinity Road Chelmsford	Chelmsford Non Parished	n/a	01/03/2013	LCHE002009	VAS	£5,000.00	Cancelled
23		DC1818	Market Road Bus Station Access	Chelmsford Non Parished	20/12/2013	01/03/2013	LCHE002003	Access Improvements	£5,000.00	Completed
24		DC1765	Odeon Subway to Rochford Road Chelmsford	Chelmsford Non Parished	31/03/2014	01/03/2013	LCHE003003	Cycling	£15,480.00	Completed
25		DC1827	Parkway jw Tesco Home Store	Chelmsford Non Parished	28/03/2014	01/03/2013	LCHE003007	Casualty Reduction	£3,000.00	Completed
26		DC1759	Chignal Smealy	Chignal	n/a	01/03/2013	LCHE002006	VAS	£5,000.00	Cancelled
27		DC1404B	St Michaels C of E Junior School	Galleywood	10/12/2014	26/09/2012	LCHE006001	SCP/Site Improvements	£2,000.00	Completed
28		DC1386	62 Galleywood	Galleywood	01/10/2013	26/09/2012	LCHE008002	Resurface alleyway	£6,000.00	Completed
29			Galleywood Road Bus Stops	Galleywood	06/02/2013	04/12/2012	LCHE005008	Bus Stop Improvements	£2,000.00	Completed
30		DC1687	St Michaels CE Primary School	Galleywood	n/a	19/12/2012	LCHE002001	Traffic Management Improvements (TMI)	£2,000.00	Completed
31		DC1760	Souther Cross Road Good Easter	Good Easter	n/a	01/03/2013	LCHE002007	VAS	£5,000.00	Cancelled
32		DC1686	Ford End - FEASIBILITY ONLY	Great Leighs	04/04/2014	01/03/2013	LCHE002001	Safer Roads	£5,000.00	Cancelled
33		DC1388	108 Gt Waltham	Great Waltham	21/03/2014	26/09/2012	LCHE001011 LCHE008004	Drainage and surface improvements	£15,000.00	Completed
34			22 Margaretting Bridleway	Margaretting	31/03/2014	26/09/2012	LCHE008005	Anti-Slip Surfacing	£15,000.00	Completed
35		DC1526	Main Road Margaretting DESIGN ONLY	Margaretting	18/07/2013	04/12/2012	LCHE003002	Walking	£30,000.00	Completed
36		DC1212	Main Road jw South Hanningfield Road Rettendon	Rettendon	n/a	17/07/2012	LCHE001005	Safer Roads	£9,250.00	Cancelled
37			Bus stop - Downham Road_ Address - Brock Hill_ Runwell	Runwell	20/03/2013	04/12/2012	LCHE005011	Bus Stop Improvements	£7,500.00	Completed
38		DC1755	Hulls Lane Sandon DESIGN ONLY	Sandon	Nov-13	01/03/2013	LCHE001017	Safety improvements investigation	£1,000.00	Completed
39		DC1688	Woodhill Road nr Sandon School Sandon DESIGN ONLY	Sandon	21/02/2014	01/03/2013	LCHE003006	Footway design	£2,000.00	Completed
40		DC1390	1 St Hanningfield	South Hanningfield	21/03/2014	26/09/2012	LCHE008006 LCHE001012	Drainage and surface improvements	£15,000.00	Completed
41		DC1391	57 St Hanningfield	South Hanningfield	18/02/2014	14/01/2013	LCHE008007 LCHE001013	Drainage and surface improvements	£12,000.00	Completed
42		DC1662	Heath Road Ramsden Heath	South Hanningfield	03/12/2013	01/03/2013	LCHE002010	Cycling	£500.00	Completed
43		DC	Mill Lane South Hanningfield	South Hanningfield	cancelled	01/03/2013	LCHE002008	Lining / signing improvements	£5,000.00	Cancelled
44		DC1539	Elmwood Primary School Hullbridge Road South Woodham Ferrers	South Woodham Ferrers	27/01/2014	04/12/2012	LCHE006005	SCP/Site Improvements	£5,000.00	Completed
45		DC1210	Cuton Hall Roundabout, Springfield	Springfield	29/03/2013	17/07/2012	LCHE001003	Safer Roads	£7,750.00	Completed
46		DC1404C	The Bishops CE RC Primary School	Springfield	10/12/2014	26/09/2012	LCHE006001	SCP/Site Improvements	£1,180.00	Completed
47			Henniker Gate Shelter	Springfield	22/07/2013	04/12/2012	LCHE005003	Bus Stop Improvements	£7,500.00	Completed
48			Beeleigh Link Shelter	Springfield	28/08/2013	04/12/2012	LCHE005007	Bus Stop Improvements	£7,500.00	Completed
49			TA Centre Shelter	Springfield	05/04/2013	04/12/2012	LCHE005004	Bus Stop Improvements	£7,500.00	Completed
50			Outside B & Q Address - Colchester Road, Springfield	Springfield	01/04/2013	04/12/2012	LCHE005006	Bus Stop Improvements	£2,000.00	Completed
51		DC281	New Nabbots Way, Springfield DESIGN ONLY	Springfield	31/07/2013	19/12/2012	LCHE001014	Zebra Crossing	£3,000.00	Completed
52		DC1757	Lawn Lane Springfield	Springfield	n/a	01/03/2013	LCHE002004	VAS	£10,000.00	Cancelled
53		DC1766	Chelmer Village Retail Park	Springfield	06/05/2014	01/03/2013	LCHE003004	Cycling	£63,752.00	Completed
54		DC1767	White Hart Lane Springfield	Springfield	20/11/2014	01/03/2013	LCHE003005	Cycling	£38,304.00	Completed
55		DC1403	St Marys_Ingatstone Road, Stock	Stock	30/01/2014	26/09/2012	LCHE001010	Safer Roads	£27,000.00	Completed
56		DC1540	45 River Wid	Stock	n/a	04/12/2012	LCHE008008	No bridge and ford too deep to cross.	£15,000.00	Cancelled
57		DC1387	37 Stock	Stock	27/11/2012	14/01/2013	LCHE008009 LCHE008003	Drainage and surface improvements	£9,000.00	Completed
58		DC1215	A414 Writtle Garden Centre	Writtle	23/04/2013	17/07/2012	LCHE001008	Junction improvement	£8,000.00	Completed
59		DC1404A	Writtle Infant_ Junior School	Writtle	06/03/2014	26/09/2012	LCHE006001	SCP/Site Improvements	£6,770.00	Completed
2013/14 Approved										
60			Court Rd nr j/w Hosp. Appr, Broomfield	Broomfield	19/11/2014	04/02/2014	LCHE132066c	Kerbing and wooden bollards, to alleviate damage to verges	£5,500.00	Completed since last Panel meeting
61		DC1756	Chignal Road (Avon Road jw Newland Spring) Chelmsford	Chelmsford Non Parished	n/a	08/04/2013	LCHE001021	VAS	£8,500.00	Cancelled
62		DC1754	Navigation Road Springfield Road Chelmsford FEASIBILITY STUDY	Chelmsford Non Parished	02/12/2013	08/04/2013	LCHE001020	Feasibility Study	£2,000.00	Completed
63		DC1689	Linnet Drive jw Plane Tree Close_ Chelmsford	Chelmsford Non Parished	01/05/2014	08/04/2013	LCHE003009	Walking	£2,000.00	Completed
64			Oliver Way jw Copperfield Rd (post design phase)	Chelmsford Non Parished	20/03/2014	10/07/2013	LCHE131028	Safer Roads	£5,000.00	Completed
65			Linnet Drive	Chelmsford Non Parished	31/03/2014	10/07/2013	LCHE341050	Bus Stop Improvements	£12,000.00	Completed

Ref.No.	RAG *	Design Reference Number	Task Name	Parish	Finish	CMA Approved	Cost Code	Works Description	Allocated Budget	Comments
2013/14 Approved (Continued)										
66			Springfield Green Chelmsford	Chelmsford Non Parished	20/12/2013	10/07/2013	LCHE135001	Bus Stop Improvements	£8,500.00	Completed
67		DC	Kings Road Prim School Broomfield Road	Chelmsford Non Parished	31/03/2014	26/07/2013	LCHE136002	SCP/Site Improvements	£3,000.00	Completed
68			Citywide	Chelmsford Non Parished	13/08/2014	12/09/2013	LCHE134003	Cycle stands working with external organisation -Park That Bike, locations to be advised	£4,800.00	Completed
69			Maltese Road/Ridgewell Avenue, Swiss Avenue, Chelmsford	Chelmsford Non Parished	13/11/2014	12/09/2013	LCHE134004	CH44 - Design only of cycling scheme (£35k)	£4,000.00	Design available in Feasibility Study/Design Report, scheme funded under LCHE144004
70			Waltham Glen, Chelmsford	Chelmsford Non Parished	18/11/2014	12/09/2013	LCHE134008	CH1 - Design only of Cycling scheme (£5k)	£1,500.00	Design available in Feasibility Study/Design Report, scheme funded under LCHE144003
71			Broomfield Road nr Skerry Rise, Chelmsford	Chelmsford Non Parished	03/09/2014	12/11/2013	LCHE135011	New bus shelter	£8,500.00	Completed
72			Stop 3407605 Nabbott Rd, Beeches Rd	Chelmsford Non Parished	24/07/2014	04/02/2014	LCHE135018	Bus stop improvement - Bus build out	£1,500.00	Cancelled
73		DC	Dyers Hall _ The Cricket Ground Chignal Smealy - FEASIBILITY STUDY	Chignal	16/05/2014	08/04/2013	LCHE001022	Passing Places - feasibility	£2,000.00	Completed
74			Bicknacre Road Gay Bowers Rd (post design phase)	Danbury	21/02/2014	10/07/2013	LCHE131030	Safer Roads	£5,250.00	Completed
A			Main Road nr j/w rectory Farmhouse Lane, Danbury FEASIBILITY	Danbury	04/09/2014	12/09/2013	LCHE132029	Feasibility study into prevent vehicles obstructing sight lines, to provide options	£1,000.00	Cancelled - As a Conservation Area planting on verge is preferred option, licence to cultivate.
76			Butts Lane j/w Little Baddow Road, Danbury	Danbury	10/12/2014	12/11/2013	LCHE132052	Junction improvements - "bell bollard" to prevent vehicles over running the verge	£2,000 (Bollard and £500 (Design))	Completed since last Panel meeting
77			Rothmans avenue GB	Great Baddow	08/02/2014	26/07/2013	LCHE135004	Bus Stop Improvements	£900.00	Completed
78			Rothmans Avenue	Great Baddow	06/02/2014	26/07/2013	LCHE135003	Bus Stop Improvements	£1,500.00	Completed
79		DC1213	Baddow Road , Meadgate Avenue, Chelmsford	Great Baddow	30/04/2014	12/09/2013	LCHE001006	Casualty Reduction Scheme 2012/13 for pedestrian crossing improvements - 2013/14 Top up £5k required for scheme	£16,000.00	Completed
80		DC1603	A131 Moulsham Hall Lane Roundabout Great Leighs DESIGN ONLY	Great Leighs	31/03/2014	29/04/2013	LCHE001026	Safer Roads	£16,000.00	Completed
81			The Black Bull	Margaretting	20/12/2013	10/07/2013	LCHE135005	Bus Stop Improvements	£8,500.00	Completed
82			The Red Lion, Margaretting	Margaretting	30/04/2014	12/11/2013	LCHE135013	Relocate shelter from Black Bull	£3,000.00	Completed
83			Dowsetts Lane	Ramsden heath	27/02/2014	10/07/2013	LCHE135006	Bus Stop Improvements	£1,000.00	Completed
84			Stop ID 08002002 Hoe Lane, Rettendon	Rettendon	14/03/2014	12/11/2013	LCHE135012	New wooden shelter	£10,000.00	Completed
85		DC1214*	A132 _A130 _B1012 Hawk Hill Roundabout, Battlesbridge	Rettendon	30/07/2013	17/07/2012 01/03/2013	LCHE001007 LCHE002011	Safer Roads	£16,200.00	Completed
86		DC	Runwell Comm Prim Sch _ Swan Lane	Runwell	06/03/2014	26/07/2013	LCHE136001	SCP/Site Improvements	£2,950.00	Completed
87		DC1599	A1060 Maldon Road jw Brick Kiln Road_ Sandon	Sandon	13/03/2014	29/04/2013	LCHE001025	Safer Roads	£5,000.00	Completed
88			Heath Road, South Hanningfield	South Hanningfield	10/12/2014	12/11/2013	LCHE132078	30 mph and 40 mph roundel road markings	£1,500 (Road markings) and £500 (Design)	Completed since last Panel meeting
89		DC	Springfield Road (nr Oasis Court) FEASIBILITY STUDY	Springfield	09/04/2014	08/04/2013	LCHE001023	Ped crossing - feasibility	£2,000.00	Completed
90			New Bowers Way Springfield	Springfield	28/02/2014	10/07/2013	LCHE135007	Bus Stop Improvements	£8,700.00	Completed
91			Barlows reach	Springfield	14/11/2013	10/07/2013	LCHE135008	Bus Stop Improvements	£8,500.00	Completed
92			Havengore	Springfield	25/02/2014	10/07/2013	LCHE135509	Bus Stop Improvements	£6,000.00	Completed
93			A130, White Hart Lane, Springfield	Springfield	22/07/2014	12/11/2013	LCHE132063	KEEP CLEAR road markings at Shardelow Ave/New Nabbotts Way and Beaulieu Way/New Bowyers Way roundabouts	£4,000 (Road markings) and £500 (Design)	Completed
94			New Hall Sch, White Hart Ln, Springfield	Springfield	28/07/2014	04/02/2014	LCHE132070c	Improved signage to school	£750.00	Completed
95		DC1601	B1007 Stock Road jw Downham Road, Stock (Design Only)	Stock	n/a	29/04/2013	LCHE001024	Walking	£5,000.00	Cancelled
96		DC	B1007 Stock Rd_ Downham Rd (Implementation)	Stock	n/a	16/07/2013	LCHE131034	Safer Roads	£3,000.00	Cancelled
97			B1007 Stock Road j/w Bakers Lane, Stock	Stock	06/02/2014	03/12/2013	LCHE131031	Casualty reduction scheme to be delivered 2013/14 - Signing/Lining improvements at junction. Previous Scheme ID incorrect	£5,000.00	Completed
98			B1007 Stock Road j/w Downham Road, Stock	Stock	03/02/2014	03/12/2013	LCHE131034	Casualty reduction scheme to be delivered 2013/14 - Signing/Lining improvements at junction. Previous Scheme ID incorrect	£3,000.00	Completed
99		DC	Hylands School Writtle FEASIBILITY STUDY	Writtle	31/03/2014	08/04/2013	LCHE003008	Ped crossing - feasibility	£2,000.00	Completed
2014/15 Approved										
100			Opp Maltings Rd Hawk Hill	Battlesbridge	25/07/2014	24/04/2014	LCHE145003	New bus shelter/hard stand	£8,500.00	Completed
101			The Angle Broomfield Rd	Broomfield	29/08/2014	24/04/2014	LCHE145004	New bus shelter/hard stand	£8,500.00	Completed
102			A1060 Parkway at Moulsham St	Chelmsford Non Parished	23/05/2014	24/04/2014	LCHE141003	Investigation into pedestrian crossing improvements	£5,420.00	Completed
103			Chelmsford Mkt Bus Int Market Rd	Chelmsford Non Parished	17/12/2014	24/04/2014	LCHE145002	Upgraded passenger transport information and new shelters as part of bus interchange enhancement scheme	£42,000.00	Completed since last Panel meeting
104			The Street/Vicarage Road, Roxwell	Roxwell	10/12/2014	24/04/2014	LCHE142010	Design of bend improvements - signing and lining	£1,000.00	Completed
105			St Mary's Church Runwell Rd	Runwell	23/07/2014	24/04/2014	LCHE145005	New bus shelter/hard stand	£8,500.00	Completed
106			A132 Burnham Rd nr Wickford RAB	South Woodham Ferrers	28/11/2014	24/04/2014	LCHE142011	Feasibility study into repositioning town nameplates/SLOW road markings/extension of existing 40 mph speed limit	£4,000.00	Design available in Feasibility Study/Design Report, scheme added to Highway Improvements - Minor Schemes list as LCHE142079
107			New Bowers Way jw Petunia Cres Opp Rubens Gate	Springfield	10/10/2014	24/04/2014	LCHE145001	Formalise bus stop with shelter/timetable information	£5,000.00	Completed since last Panel meeting
108			Buttsbury Bridge, Stock Lane, Stock	Stock	24/11/2014	09/07/2014	LCHE142042	Safety assessment of traffic management on bridge	£500.00	Safety Assessment available in Feasibility Study/Design Report
2013/14 Revenue Schemes										
109		Revenue	Bicknacre Road, Bicknacre	Bicknacre	27/11/2013	12/09/2013	LCHE132024	Request for 20 mph speed limit - speed surveys required for validation	£1,000.00	Completed
110		Revenue	Broomfield Parade, Broomfield Road, Chelmsford	Broomfield	n/a	12/11/2013	LCHE132051	Feasibility study into parking provisions o/s parade of shops (lay-by, echelon etc.)	£2,500.00	Cancelled
111		Revenue	Sandford Mill Road, Chelmer Village	Chelmer Village	12/12/2013	12/09/2013	LCHE132027	Scheme Validation for reduction in speed from 60 to 30 mph requires speed survey	£210.00	Completed

Ref.No.	RAG *	Design Reference Number	Task Name	Parish	Finish	CMA Approved	Cost Code	Works Description	Allocated Budget	Comments
2013/14 Revenue Schemes (Continued)										
112		Revenue	Pollards Green, Chelmer Village	Chelmer Village	13/12/2013	12/11/2013	LCHE132064	Speed survey to feed into 20mph speed limit request	£210.00	Completed
113		Revenue	New London road /Writtle Road/ Elm Road	Chelmsford Non Parished	Sep-13	26/09/2012	LCHE001009	12 hour turning movement count	£1,000.00	Completed
114		Revenue	Kings Road & Swiss Avenue, Chelmsford	Chelmsford Non Parished	31/10/2013	10/07/2013	LCHE132021	Speed Surveys (x2) to assist with Scheme validation	£400.00	Completed
115		Revenue	A1060 Roxwell Road, west of j/w Chignal Road, Chelmsford	Chelmsford Non Parished	27/11/2013	12/09/2013	LCHE131035	Request for speed survey to aid Casualty Reduction Investigation	£210.00	Completed
116		Revenue	Church Road j/w Middlemead	Chelmsford Non Parished	12/12/2013	24/09/2013	LCHE132044	Speed surveys (x2) to feed into scheme validation	£420.00	Completed
117		Revenue	North Avenue north of j/w Kings Road, Chelmsford	Chelmsford Non Parished	17/12/2013	12/09/2013	LCHE132048	Scheme Validation for pedestrian crossing requires PV ² Survey	£890.00	Completed
118		Revenue	Old Moulsham (Moulsham Dr/Lady Ln/Hamlet Rd/St Johns Rd/Vicarage Rd/Moulsham St), Chelmsford	Chelmsford Non Parished	18/12/2013	12/11/2013	LCHE132057	Seven speed surveys to feed into 20 mph zone/limit validation	£1,470.00	Completed
119		Revenue	Railway Bridge, arbour Lane, Chelmsford	Chelmsford Non Parished	13/12/2013	12/11/2013	LCHE132058	Two speed surveys to feed into validation of footway improvements across bridge	£420.00	Completed
120		Revenue	Penny Royal Road (Mayes Lane to Woodhill Road) Danbury	Danbury	n/a	12/11/2013	LCHE132053	Feasibility study to look at provision of footway to link village	£3,500.00	Cancelled
121		Revenue	Barnard Road, Galleywood	Galleywood	12/12/2013	12/09/2013	LCHE132015	Scheme validation for 20 mph speed limit o/s school requires speed survey	£210.00	Completed
122		Revenue	B1002 main Road, Wantz Road/Writtle Road, Margarettng	Margarettng	13/12/2013	12/09/2013	LCHE132059	Scheme validation for reduction in speed from 40 to 30 mph requires speed surveys	£420.00	Completed
123		Revenue	Heath Road, Ramsden Heath	Ramsden Heath	19/12/2013	12/09/2013	LCHE132020	Scheme validation for extension of existing 30 mph speed limit requires speed survey	£210.00	Completed
124		Revenue	Heath Road, South Hanningfield	South Hanningfield	22/01/2014	12/11/2013	LCHE132067	Two speed surveys to feed into VAS validation	£420.00	Completed
125		Revenue	A132 Burnham Road nr Wickford RAB, South Woodham Ferrers B1012 Woodham Road nr RAB with Burnham Road, South Woodham Ferrers	South Woodham Ferrers	n/a	12/11/2013	LCHE132038 LCHE132039	Feasibility study into repositioning Town nameplates/SLOW road markings /extension of 40 mph speed limits	£4,000.00	Cancelled
126		Revenue	Main Road, Woodham Ferrers	Woodham Ferrers	27/11/2013	12/09/2013	LCHE132023	Request for 20 mph speed limit - speed surveys required for validation	£1,000.00	Completed
2014/15 Revenue Schemes										
127		Revenue	Copperfield Road nr Oliver Way	Chelmsford Non Parished	24/06/2014	24/04/2014	LCHE142012	Two automatic traffic counts (seven day speed/volume), data to feed into scheme validation	£420.00	Completed
128		Revenue	Lady Lane/Hamlet Road	Chelmsford Non Parished	24/06/2014	24/04/2014	LCHE142015	Two automatic traffic counts (seven day speed/volume), data to feed into scheme validation	£630.00	Completed
129			North Avenue j/w Kings Road, Chelmsford	Chelmsford Non Parished	26/09/2014	09/07/2014	LCHE142037	Degree of pedestrian conflict survey (PV ²) to feed into scheme validation of junction improvements	£890.00	Completed
130			56 Main Road, Danbury	Danbury	20/11/2014	24/09/2014	LCHE142054	Automatic Traffic Count (x1) - to feed into validation process looking at reports of vehicles leaving carriageway	£210.00	Completed - Results of automatic traffic count in ATC Summary Report
131			The Common, East Hanningfield	East Hanningfield	19/11/2014	24/09/2014	LCHE142022	Automatic Traffic Count (x2)- to feed into validation process looking at traffic management improvements	£420.00	Completed - Results of automatic traffic count in ATC Summary Report

Chelmsford City Local Highways Panel

Highway Improvement Scheme Proposals

The attached report details those highway improvement schemes brought forward for the consideration of the Panel. Each scheme has been prioritised against set criteria and given a RAG status, showing its priority.

The Chelmsford City Local Highways Panel has now recommended its 2014/15 Capital budget of £1,000,000. This included £50,000 which the Panel can still use to make recommendations towards budget top-ups for any existing schemes, at the last Panel meeting a top-up recommendation from this of £7,000 was made against scheme LCHE142049 for the provision of WigWag signage at Hylands School.

In addition the Panel has a 2014/15 Revenue Budget of £129,000, there is an estimated Highway Rangers cost of £84,000 from this budget and after the existing Panel Revenue recommendations there remains £43,010 further pre-construction feasibility/design/survey works.

Summary of current Highway Improvement Schemes, where identified –

Summary of Highway Improvement Schemes					
Scheme Type	Pre-Construction			Construction	
	Feasibility /Design study	Speed Survey	PV ²	Civil Works	Design/ Supervision
Minor	£3,000			£53,500	
Bus Stop Improvement				£98,000	
Cycling				£345,000	
PROW					
Casualty Reduction				£3,000	
	£3,000			£499,500	
Total	£3,000			£499,500	

Detailed summaries by Scheme Type –

Minor

Scheme				Pre-Construction			Construction	
Scheme Type	No.	Reference	RAG	Feasibility /Design study	Speed Survey	PV ²	Civil Works	Design/ Supervision
Minor	1	LCHE132025	TBC	Awaiting results of feasibility study due back 27/02/15				
Minor	2	LCHE142008	TBC	Awaiting results of feasibility study due back 31/03/15				
Minor	3	LCHE142006	TBC	Awaiting results of feasibility study due back 27/02/15				
Minor	4	LCHE142020	TBC	Awaiting results of feasibility study due back 27/02/15				
Minor	5	LCHE132056	TBC	Awaiting results of design due back 30/01/15				
Minor	6	IT135	A	Validation waiting on EITS and developer's proposals				
Minor	7	LCHE132057	G				£26,500	
Minor	8	LCHE142012	R	Scheme validation - not to proceed				
Minor	9	LCHE132090						
Minor	10	LCHE142045	TBC	Awaiting results of feasibility study due back 27/02/15				
Minor	11	LCHE142007	TBC	Awaiting results of feasibility study due back 27/02/15				
Minor	12	LCHE132015	Red	Initial Scheme validation - not to proceed				
Minor	13	LCHE142038	TBC	Awaiting results of feasibility study due back 27/02/15				
Minor	14	LCHE142039	TBC	Awaiting results of feasibility study due back 27/02/15				
Minor	15	LCHE142040	TBC	Awaiting results of feasibility study due back 27/02/15				
Minor	16	LCHE142009	TBC	Awaiting results of feasibility study due back 10/03/15				
Minor	17	LCHE132059	TBC	Scheme validation - speed survey data being reviewed				
Minor	18	LCHE142019	TBC	Awaiting results of feasibility study due back 27/02/15				
Minor	19	LCHE142013	TBC	Awaiting results of feasibility study due back 18/02/15				
Minor	20	LCHE142079	G				£10,000	
Minor	21	LCHE132064	TBC	Awaiting results of validation				
Minor	22	LCHE132042	G	£3,000				
Minor	23	LCHE132043						
Minor	24	LCHE142080	G				£6,500 Option 1	
			G				£8,800 Option 2	
			G				£17,700 Option 3	
Minor	25	LCHE142014	TBC	Awaiting results of feasibility study due back 27/02/15				
				£3,000			£53,500*	
				£3,000			£53,500*	

* Total Includes Scheme 24 Option 3 costs

Bus Stop Improvements

Scheme				Pre-Construction			Construction	
Scheme Type	No.	Reference	RAG	Feasibility /Design study	Speed Survey	PV ²	Civil Works	Design/ Supervision
Bus Stop Improvement	1	LCHE145010	G				£11,000	
Bus Stop Improvement	2	LCHE145006	G				£20,000	
Bus Stop Improvement	3	LCHE145011	G				£9,500	
Bus Stop Improvement	4	LCHE145012	G				£8,500	
							£49,000	
							£98,000	

Cycling

Scheme				Pre-Construction			Construction	
Scheme Type	No.	Reference	RAG	Feasibility /Design study	Speed Survey	PV ²	Civil Works	Design/ Supervision
Cycling	1	LCHE144009	G				£225,000	
Cycling	2	LCHE134006	TBC				£25,000	Awaiting design
Cycling	3	LCHE134009	TBC				£95,000	Awaiting design
Cycling	4	LCHE144011	TBC				TBC	Awaiting design
							£345,000	

PROW

Scheme				Pre-Construction			Construction	
Scheme Type	No.	Reference	RAG	Feasibility /Design study	Speed Survey	PV ²	Civil Works	Design/ Supervision
PROW	1	LCHE148002	TBC	Awaiting results of feasibility study due back 31/03/15				
PROW	2	LCHE148001	TBC	Awaiting results of feasibility study due back 31/03/15				

Casualty Reduction

Scheme				Pre-Construction			Construction	
Scheme Type	No.	Reference	RAG	Feasibility /Design study	Speed Survey	PV ²	Civil Works	Design/ Supervision
Casualty Reduction	1	LCHE141001	TBC	Design due back 27/02/15				
Casualty Reduction	2	LCHE141004	TBC	Design due back 06/03/15				
Casualty Reduction	3	LCHE141005	G				£3,000	
							£3,000	
							£3,000	

Ref	ID	Parish or Town Council	Location	Scheme	Problem	Justification / Comments	Requested By	Estimated Cost (£)	Estimated Timescale	RAG	Recommended by LHP
1	LCHE132025	Bicknacre	Lodge Road	Feasibility study on-going into provision of passing bays	Narrow road	Awaiting result of feasibility study	Parish Council	TBC	Study due back 27/02/15	TBC	
2	LCHE142008	Boreham	Hammonds Road/Church Road, Little Baddow	Feasibility study on-going into flood warning improvements	Flooding	Awaiting result of feasibility study	Parish Council	TBC	Study due back 31/03/15	TBC	
3	LCHE142006	Broomfield	Broomfield Parade, Broomfield Road	Feasibility study on-going into parking provision outside parade of shops	Parking	Awaiting result of feasibility study	Councillor	TBC	Study due back 27/02/15	TBC	
4	LCHE142020	Chelmer Village	Chelmer Village Way nr j/w Brook End Road	Feasibility study on-going into crossing facilities/pedestrian refuge island	Lack of formal crossing point	Awaiting result of feasibility study	Parish Council	TBC	Study due back 27/02/15	TBC	
5	LCHE132056	Chelmsford Non Parished	West End of Chelmsford	Design on-going of improved signage to West End of Chelmsford	Lack of signage	Awaiting result of design	Business Association	TBC	Design due 30/01/15	TBC	
6	IT134	Chelmsford Non Parished	Broomfield Road & Patching Hall Lane/Broomfield Parade	Improved traffic management - review of traffic light priorities - traffic lights at junction. Issues egressing Broomfield parade	Junction/signal improvement	Investigation for signals optimisation. Maybe review on street parking on approach to Broomfield Parade exit. Feasibility study into parking improvements funded under LCHE132051	Historic - Origin Unknown	£40k	6 months	Amber	
7	LCHE132057	Chelmsford Non Parished	Old Moulsham (Moulsham Dr/Lady Ln/Hamlet Rd/St Johns Rd/Vicarage Rd/Moulsham St)	20 mph zone/limit	Speed/volume of traffic	Scheme Validation original 20 mph zone can be progressed, additional roads will require new speed surveys	Councillor	£26,500	TBC	Green	
8	LCHE142012	Chelmsford Non Parished	Copperfield Road nr Oliver Way	Traffic management improvements	Speed/volume of traffic	Copperfield Road - East - Volume 55,355 and 7 day average speed 28.7 mph and West - Volume 49,739 and 7 day average speed 30.4 mph. this Road is part of the highway network and reduces congestion on main routes through the City. Also any traffic calming would affect traffic trying to join from side roads.	Councillor	TBC	TBC	Red	
9	LCHE132090	Chelmsford Non Parished	Copperfield Road	Traffic Management Improvements	Speed/volume of traffic						
10	LCHE142045	Chelmsford Non Parished	Railway Bridge, Arbour Lane	Feasibility study on-going into footway widening works	Narrow footway	Awaiting result of feasibility study	Parish Council	TBC	Study due back 27/02/15	TBC	

Ref	ID	Parish or Town Council	Location	Scheme	Problem	Justification / Comments	Requested By	Estimated Cost (£)	Estimated Timescale	RAG	Recommended by LHP
11	LCHE142007	Danbury	Penny Royal Road/Mayes Lane to woodhill Road	Feasibility study on-going into provision of footway to link two parts of the Village	Lack of footway	Awaiting result of feasibility study	Parish Council	TBC	Study due back 27/02/15	TBC	
12	LCHE132015	Galleywood	Barnard Road	20 mph speed limit outside school	Speed/volume of traffic	Speed data - posted speed 30 mph, north bound 12 hr mean speed 23.9mph, southbound 22.0 mph - excellent compliance, road speeds in line with posted speed limit.	Parish Council	TBC	TBC	Red	
13	LCHE142038	Highwood	Highwood Road, Loves Green	Feasibility study on-going into traffic management improvements	Speed of traffic	Awaiting result of feasibility study	Parish Council	TBC	Study due back 27/02/16	TBC	
14	LCHE142039	Highwood	Highwood Road, Edney Common	Feasibility study on-going into traffic management improvements	Speed of traffic	Awaiting result of feasibility study	Parish Council	TBC	Study due back 27/02/17	TBC	
15	LCHE142040	Highwood	Highwood Road, Edney Common to Loves Green	Feasibility study on-going into providing pedestrian link between hamlets	Lack of footway	Awaiting result of feasibility study	Parish Council	TBC	Study due back 27/02/18	TBC	
16	LCHE142009	Little Baddow	Paper Mill Bridge, North Hill j/w Moden Hall Lane	Feasibility study on-going into flood warning improvements	Flooding	Awaiting result of feasibility study	Parish Council	TBC	Study due back 10/03/15	TBC	
17	LCHE132059	Margaretting	B1002 Main Road, Wantz Road/Writtle Road	Reduction in speed from 40 mph to 30 mph	Speed/volume of traffic	Results of speed surveys to feed into validation process	Parish Council	TBC	TBC	TBC	
18	LCHE142019	Rettendon	A1245/A132 Roundabout Rettendon	Feasibility study on-going into marking of lanes on roundabout	Lack of lane markings	Awaiting result of feasibility study	Parish Council	TBC	Study due back 27/02/15	TBC	
19	LCHE142013	South Woodham Ferres	King Edwards Road	Feasibility study on-going into traffic management calming options suitable le for bus service	Lack of lane markings	Awaiting result of feasibility study	Parish Council	TBC	Study due back 18/02/15	TBC	
20	LCHE142079	South Woodham Ferres	A132 Burnham Road	Repositioning town nameplates/SLOW road markings/extension of existing 40 mph speed limit	Speed/volume of traffic	Following results of feasibility study	Town Council	£10,000	TBC	Green	

Ref	ID	Parish or Town Council	Location	Scheme	Problem	Justification / Comments	Requested By	Estimated Cost (£)	Estimated Timescale	RAG	Recommended by LHP
21	LCHE 132064	Springfield	Pollards Green	20 mph speed limit	Speed/volume of traffic	Results of speed surveys shows good compliance, two further speed surveys being carried out on adjacent roads to feed into validation process	Parish Council	TBC	TBC	TBC	
22	LCHE132042	Stock	High Street	20 mph speed limit in narrow section of High Street	Reduction from 30 mph to 20 mph	Scheme validation - recommends Route Study to look at road safety improvements	Parish Council	£3,000	TBC	Green	
23	LCHE132043	Stock	High Street	Average speed cameras/traffic management (chicanes) at either end of High Street	Speeding traffic		Parish Council		TBC		
24	LCHE142080	Stock	Buttsbury Bridge, Stock	Bridge safety assessment of traffic management on bridge	Bridge frequently damaged by vehicles	Option 1 - No road closure - refresh road markings/fencing improvements/width restriction signage/yellow backed warning signs	Parish Council	£6,500	TBC	Green	
						Option 2 - 2 day road closure - as Option 1 plus bell bollards on each bridge approach		£8,800	TBC	Green	
						Option 3 - 6 day road closure - as Option 1 plus kerbing on approaches to bridge to narrow approaches to bridge		£17,700	TBC	Green	
25	LCHE142014	Writtle	Ongar Road/Lordship Road	Route enhancement study into footway/carriageway surfacing, lining, signing, lighting.	Speed/Volume of traffic	Awaiting result of feasibility study	Parish Council	TBC	Study due back 2702/15	TBC	

RAG Key

Green	A high priority scheme against strategic criteria
Amber	A low priority scheme against strategic criteria
Red	A scheme which is against Essex Policy or there is no appropriate engineering solution.
Pending validation	

ID	Parish or Town Council	Location	Type of Scheme	Details of Scheme	Issues / Comments / Reason for Scheme	Scheme Origination	Approx. Timescale	Estimated Cost	Priority (RAG)	Recommended by LHP
1	Chelmsford Non Parished	Broomfield Road (Opp Skerry Rise) Stop ID 3402206	Bus Stop Improvement	Real time Passenger Information	Heavily used stop with a frequent service into city centre. Update - It is advised that Chelmsford First will not have equipment on their vehicles to connect to the RFTPI until early 2015	Officer recommendation	TBC	£11,000	Green	
2	Roxwell	Boyton Cross Bus Stops, Stop ID's IM1148 & IM1148b	Bus Stop Improvement	Raised kerbs at both stops and dropped kerbs at one. Also replacement wooden shelter/extend hard stand at stop opposite The India lounge	Rural area where passengers need shelter to wait for a bus and a safe place to board/alight. Update - (1) Stop IM1148 The shelter belongs to Roxwell Parish Council and is often used by School Children. The shelter is old and has no viewing panel to see when the bus is coming. Passenger Transport team has now received a request form a resident expressing concerns about the safety of the shelter. The Parish Council has asked for financial help in replacing the shelter and at the same time it would be cost effective to install raised kerbs.(2) Stop IM1148b Request here is for raised kerbs and hard stand, the stop is mostly used for alighting so no shelter is required but currently existing stop does get very muddy in bad weather.	Parish Council	TBC	£20,000	Green	
3	Roxwell	Green Lane, Roxwell	Bus Stop Improvement	Replace old Parish Shelter, remove existing flag/pole, new shelter to remain property of Parish	Rural area passenger need shelter and safe place to board/alight. Also used by School Children. A larger shelter is needed. Update - Parish would like LCHE145006 considered before this scheme.	Parish Council	TBC	£9,500	Green	
4	Roxwell	A1060 Roxwell Road, Opp The Hare, Roxwell	Bus Stop Improvement	Replace old Parish Shelter, remove existing flag/pole, new shelter to remain property of Parish	Rural area passenger need shelter and safe place to board/alight. Also used by School Children. A larger shelter is needed. Update - Parish would like LCHE145006 considered before this scheme.	Parish Council	TBC	£8,500	Green	

RAG Key

Green	A high priority scheme against passenger transport criteria
Amber	A low priority scheme against passenger transport criteria
Red	A scheme which is against Essex Policy or there is no appropriate engineering solution.
Pending Validation	

	ID	Parish or Town Council	Location	Scheme	Problem	Scheme sponsor	Estimated Cost (£)	Timescale	RAG	Recommended by LHP
1	LCHE144009	Chelmsford Non Parished	Westway	CH35 - Off Road route on western footway between A141 and Writtle Road - design previously funded estimated scheme cost £225,000. Cycling team looking at sources of funding.	Lack of Cycle Network to Widford employment area	ECC Cycling Team/LTP	£225,000	TBC	Green	
2	LCHE134006	Chelmsford Non Parished	Melbourne Avenue	CH17 - Panel has funded design to convert southern footway between Chignal Road and North Avenue - widen near West Avenue	Lack of off-road cycle paths in area	ECC Cycling Team/LTP	£25,000 exact costs TBC following design works	Design due 30/01/15	TBC	
3	LCHE134009	Chelmsford Non Parished	Princess Road	CH34 - Panel has funded design to convert and widen footway Opposite Moulsham School to Lidl.	Lack of cycle route to School/College	ECC Cycling Team/LTP	£95,000 exact costs TBC following design works	Design due 16/02/15	TBC	
4	LCHE144011	Chelmsford Non Parished	High Street	Panel has funded feasibility study into south-north cycling through Chelmsford avoiding High Street - study results awaited	Cycling improvements	ECC Cycling Team/LTP	TBC	Design awaiting programme date	TBC	

RAG Key

Green	A high priority scheme against strategic criteria
Amber	A low priority scheme against strategic criteria
Red	More information required.
	Pending validation

Ref	ID	Parish or Town Council	PROW Number	Status	Scheme	Problem	By	Timescale	Cost (£)	Notes	RAG	Recommended by LHP
1	LCHE148002	Chelmsford Non Parished	95	Footpath	Investigation on-going into installing drainage in existing surfaced city centre footpath	Flooding	PROW team	Study due back 31/03/15	TBC	TBC	TBC	
2	LCHE148001	Good Easter	13	Footpath	Investigation on-going into revetment between River Ccan and existing footpath	Flooding	PROW team	Study due back 31/03/15	TBC	TBC	TBC	

RAG Key

Green
Amber
Red

A high priority scheme against strategic criteria

A low priority scheme against strategic criteria

A scheme which is against Essex Policy or there is no appropriate engineering solution.

Pending validation

Ref No.	ID	Parish or Town Council	Location	Proposed Solution	Timescale	Cost (£)	RAG	Recommended by LHP
1	LCHE141001	Bicknacre	Near Leighams Farm, Leighams Road	Design on-going for signage and road marking improvements - awaiting results of design	Design due back 27/02/15	TBC	TBC	
2	LCHE141004	Citywide	Various	Design of Casualty Reduction Sites for 2015/16 schemes	Designs due back 06/03/15	TBC	TBC	
3	LCHE141005	Great Waltham	B1008 Chelmsford Road, Ford End to Barnston	Improvements to existing bend ahead warning signs and investigation of carriageway widening	TBC	£3,000	Green	

Green	A high priority based on Collision history
Amber	A medium priority based on Collision History
Red	A scheme which is against Essex Policy or there is no appropriate engineering solution.
	Scheme pending Validation

Chelmsford City Local Highways Panel

Potential Scheme Proposals - Revised

The attached report details those potential schemes brought forward for the consideration of the Panel. Each scheme has been prioritised against set criteria and given a RAG status, showing its priority.

The Chelmsford City Local Highways Panel has now recommended its 2014/15 Capital budget of £1,000,000. This included £50,000 which the Panel can still use to make recommendations towards budget top-ups for any existing schemes, at the last Panel meeting a top-up recommendation from this of £7,000 was made against LCHE142049 and the provision of WigWag signage at Hylands School.

In addition the Panel has a 2014/15 Revenue Budget of £129,000, there is an estimated Highway Rangers cost of £84,000 from this budget and after the existing Panel Revenue recommendations there remains £43,010 further pre-construction feasibility/design/survey works.

Summary of current Potential Schemes, where identified –

Scheme				Pre-Construction				Construction	
Scheme Type	No.	Reference	RAG	Feasibility /Design study	Safety Assessment	Speed Survey	PV ²	Civil Works	Design/ Supervision
Minor	1	LCHE142058	G					£1,000	
Minor	2	LCHE142055	G			£690			
Minor	3	LCHE142057	G			£460			
Minor	4	LCHE132069	TBC	Scheme validation waiting on EITS and developers proposals					
Minor	5	LCHE142081	G		£500				
Minor	6	LCHE142023	G					£40,000	
Minor	7	LCHE142063	G					£3,000	
Minor	8	LCHE142064	TBC	Scheme being validated					
Minor	9	LCHE142068	G				£900		
Minor	10	LCHE142069	G					£3,000	
Minor	11	LCHE142050	G					£2,500 Option 1	
			G					£7,000 Option 2	
Minor	12	LCHE142054	TBC	Site being reviewed by Casualty Reduction team					
Minor	13	LCHE142052	G	£7,500					
Minor	14	LCHE142022	TBC	Scheme validation - speed survey data under review					
Minor	15	LCHE142067	TBC	Scheme being validated					
Minor	16	LCHE142082	G			£460			
			G				£900		
Minor	17	LCHE142079	G			£920			
Minor	18	LCHE142070	G			£230			
Minor	19	LCHE142071	G			£230			
Minor	20	LCHE142051	G	£3,000					
Minor	21	LCHE142047	G					£1,000	
Minor	22	LCHE142065	G					£10,500	
Minor	23	LCHE142060	G				£900		
Minor	24	LCHE142061	G	Scheme being validated					
Minor	25	LCHE142066	G			£1,610			
Minor	26	LCHE142056	G			£460			
Minor	27	LCHE142062	G			£230			
				£10,500	£500	£5,060	£2,700	£65,500*	
				£18,760				£65,500*	

*Total includes Scheme 10 Option 2 costs

	ID	Parish or Town Council	Location	Scheme	Problem	Justification / Comments	Requested By	Estimated Cost (£)	Estimated Timescale	RAG	Recommended by LHP
1	LCHE142058	Bicknacre	Priory Road	Bend warning signs	Lack of signs	Scheme validated - additional bend warning sign required	Parish Council	£1,000	TBC	Green	
2	LCHE142055	Boreham	Hammonds Road/Church Road, Little Baddow to Boreham	Traffic management improvements	Several single vehicle road traffic accidents	Scheme validation requires three speeds surveys	Councillor	£690	TBC	Green (speed surveys)	
3	LCHE142057	Boreham	Generals Lane to New Hall School	Traffic management improvements - widening road/passing bays and speed limit reduction	One of the main accesses to the school with high levels of traffic	Scheme validation requires two speeds surveys	Councillor	£460	TBC	Green (speed surveys)	
4	LCHE132069	Broomfield	Patching Hall Lane j/w B1008 Broomfield Road	Signal upgrade to allow left turnout/right turn in phase and extension of two lane section	Congestion	Scheme validation waiting on EITS and developers proposals	Councillor	TBC	TBC	TBC	
5	LCHE142081	Broomfield	Main Road near junction with Erick Avenue	Pedestrian crossing improvements	Safety concerns around crossing	Safety assessment required	Parish Council	£500	TBC	Green (Safety Assessment)	
6	LCHE142023	Chelmsford Non Parished	Various Entry Points to City	Improved City Entry Point signage	Signage improvements	Panel previously recommended funding towards Brown Entry Point Signage, decision not signed off by Cabinet Member. This request is for improved Black/White entry point signage/posts.	City Council	£40,000	TBC	Green	
7	LCHE142063	Chelmsford Non Parished	County High School, Broomfield Road	Pedestrian guard rail	Lack of pedestrian guard rail opposite pedestrian exit of school	Scheme validation - addition of pedestrian guard rail feasible	Councillor	£3,000	TBC	Green	

ID	Parish or Town Council	Location	Scheme	Problem	Justification / Comments	Requested By	Estimated Cost (£)	Estimated Timescale	RAG	Recommended by LHP	
8	LCHE142064	Chelmsford Non Parished	Gunson Gate -bus gateway off Loftin Road	Review of bus gateway	Issues around location of gateway and adjacent bus stops	Scheme being validated	Councillor	TBC	TBC	TBC	
9	LCHE142068	Chelmsford Non Parished	Sandford Road	Pedestrian crossing facility	Lack of pedestrian crossing facility	Scheme validation requires PV ² survey	Councillor	£900	TBC	Green (PV ² survey)	
10	LCHE142069	Chelmsford Non Parished	Sandford Allied Lyons Estate,(Sandford Rd/Chelmer Rd/Springfield Rd/Hill Rd/Navigation Rd) Chelmsford	Improved 20 mph signage/roundels	Improved 20 mph signage/roundels	Scheme validation - additional 20 mph road markings throughout zone	Councillor	£3,000	TBC	Green	
11	LCHE142050	Chelmsford Non Parished	Our Lady Immaculate School, New London Road	Pedestrian access improvements - pedestrian guard rail/raise kerbs	Lack of pedestrian guard rail outside pedestrian exit of school	Option 1 - Install two panels of pedestrian guard rail	Councillor & School	£2,500	TBC	Green	
						Option 2 - Raise dropped kerbs/adjust gradient of footway/install pedestrian guard rail	Councillor & School	£7,000	Tab	Green	
12	LCHE142054	Danbury	56 Main Road	Vehicles leaving carriageway onto verge	Damage being caused to adjacent garden	Speed survey to feed into scheme validation - site currently being reviewed by Casualty Reduction team	Parish Council	TBC	TBC	TBC	0
13	LCHE142052	Danbury	Danbury Vale	Flood alleviation works	Regular flooding	Feasibility study required to cover existing statutory undertakers apparatus in vicinity of issue, Ground investigation, Infiltration testing to determine minimum number and size of soakaways	Flood Team	£7,500	TBC	Green (Study)	

	ID	Parish or Town Council	Location	Scheme	Problem	Justification / Comments	Requested By	Estimated Cost (£)	Estimated Timescale	RAG	Recommended by LHP
14	LCHE142022	East Hanningfield	The Common	Traffic management improvements	Speed/volume of traffic	Speed surveys to feed into scheme validation	Parish Council	TBC	TBC	TBC	
15	LCHE142067	Galleywood	Stock Road/Watchouse Road	Signs to Heritage Centre	Lack of directional signage	Scheme to be validated	Parish Council	TBC	TBC	TBC	
16	LCHE142082	Galleywood	Galleywood Road, nr Fowler Court	Reduction in speed from 40 mph to 30 mph	Speed/volume of traffic	Scheme Validation requires two speed surveys	Councillor/ Residents	£460	TBC	Green (Speed survey)	
				Pedestrian Crossing (Vicinity of Fowler Court)		Scheme validation requires degree of pedestrian conflict survey (PV ²)		£900	TBC	Green (PV ² survey)	
17	LCHE142079	Great Leighs	Glovers Estate - Brickbarns, Castlefield, Glovers and Pearmains	20 mph speed limit	Speed of traffic	Scheme validation requires four speed surveys	Councillor/ Residents	£920	TBC	Green (Speed survey)	
18	LCHE142070	Great Waltham	Main Road, Howe Street	Speed Indicator Device socket/pole	To allow rotation of SID to reinforce speed limit	Scheme validation requires speed survey	Parish Council	£230	TBC	Green (Speed surveys)	
19	LCHE142071	Great Waltham	Chelmsford Road, Minnow End	Speed Indicator Device socket/pole	To allow rotation of SID to reinforce speed limit	Scheme validation requires speed survey	Parish Council	£230	TBC	Green (Speed survey)	
20	LCHE142051	Highwood	Nr St Peters Church, Highwood Road	Footway extension	Lack of footway to church	Scheme validation recommends a feasibility study	Parish Council	£3,000	TBC	Green	

ID	Parish or Town Council	Location	Scheme	Problem	Justification / Comments	Requested By	Estimated Cost (£)	Estimated Timescale	RAG	Recommended by LHP	
21	LCHE142047	Margaretting	B1002 Main Road/Maldon Road/Wantz Road	Improved signage to Village Hall on Wantz Road	Lack of signs to Village Hall	Request from Parish Council to help visitors find the Village Hall as not signed from main road.	Parish Council	£1,000	TBC	Green	
22	LCHE142065	Sandon	Woodhill Road side of the Sandon School	Bollards to prevent parking on footway	Parked cars obstructing footway	Scheme validated - bollards and conversion of back of verge to footway	Parish Council	£10,500	TBC	Green	
23	LCHE142060	Springfield	Springfield Green	Pedestrian crossing facility	Lack of crossing between Old School Field and Exeter Road	Scheme validation requires degree of pedestrian conflict survey (PV ²)	Councillor	£900	TBC	Green (PV ² survey)	
24	LCHE142061	Springfield	Stump Lane	Pedestrian crossing facility	Lack of crossing between The Heythorpe and Green Close	Scheme validation requires site visit to assess sight lines	Councillor	TBC	TBC	TBC	
25	LCHE142066	Springfield	Tyrells School	Traffic management improvements/20 mph zone	Speed of traffic	Scheme validation requires seven speed surveys	Parish Council	£1,610	TBC	Green (speed surveys)	
26	LCHE142056	Stock	Honeypot Lane	Speed reduction from 60 mph top 40 mph	Single track road, reduction to improve road safety	Scheme validation requires two speeds surveys	Parish Council	£460		Green (speed surveys)	
27	LCHE142062	Writtle	Lordship Road	Extension of existing 30 mph speed limit	Improved road safety	Scheme validation - speed survey required data to feed into validation	Parish Council	£230	TBC	Green (speed survey)	

RAG Key

Green	A high priority scheme against strategic criteria
Amber	A low priority scheme against strategic criteria
Red	A scheme which is against Essex Policy or there is no appropriate engineering solution.
	Scheme pending validation

Chelmsford City Highway Rangers - Works Summary October to December 2014

Ref No.	Job No.	Date	Parish	Street	Works	Date Completed
1	525	29/09/14	Writtle	O/s 106 Ongar Road	Cut back vegetation obstructing footway	01/10/14
2	CCC Raised		South Woodham Ferrers	Quarter Gate & Leeward Road	Cut back vegetation obstructing footway	01/10/14
3	CCC Raised		Woodham Ferrers	Woodham Ferrers Village Green	Install/Repair name plate sign	01/10/14
4	CCC Raised		Roxwell	Boyton Cross Lane	Cut back/strimmed vegetation around railings	02/10/14
5	CCC Raised		Chelmsford	Works Depot	Repairs to work tools	02/10/14
6	CCC Raised		Chelmsford	City wide	Removal of flyposting	03/10/14
7	CCC Raised		Springfield	B1137 (Pump Lane to Aldi Store)	Side footway	06/10/14
8	CCC Raised		Magaretting	Ivy Barn Lane	Strim back footway	06/10/14
9	CCC Raised		Chelmsford	Margaretting Road	Cut back sight lines	06/10/14
10	CCC Raised		Chelmsford	Hurrells Lane	Cut back tree blocking highway	07/10/14
11	CCC Raised		Little Baddow	Parish Wide	Sign maintenance - clean/repair	08/10/14
12	CCC Raised		Little Baddow	Parish Wide	Sign maintenance - clean/repair	09/10/14
13	CCC Raised		Chelmsford	Market Road	Remove litter bin	13/10/14
14	CCC Raised		Chelmsford	City wide	Sign maintenance - clean/repair	13/10/14
15	CCC Raised		Margaretting	adj. 41 Orton Close	Cut back vegetation	14/10/14
16	CCC Raised		Margaretting	Various roads	Removal of debris	14/10/14
17	526	10/10/14	Great Leighs	Opp. 6 School Lane	Cut back vegetation around signs & obstructing footway	14/10/14
18	CCC Raised		Chelmsford	Freighter House	Training - HIAB/Crane	15-16/10/14
19	CCC Raised		Chelmer Village	Chelmer Village Way	Cut back vegetation from footway/bus stop	17/10/14
20	CCC Raised		South Woodham Ferrers	Burnham Road j/w Hullbridge Road	Overgrown vegetation requires flailing	17/10/14
21	CCC Raised		Springfield	Uplands Drive/Mayne Crest/Pump Lane	Cut back/strim overhanging vegetation	20/10/14

Chelmsford City Highway Rangers - Works Summary October to December 2014

Ref No.	Job No.	Date	Parish	Street	Works	Date Completed
22	CCC Raised		Springfield	New Bower way to Martingale	Cut back/strim overhanging vegetation	23/10/14
23	CCC Raised		Springfield	New Bower way to Martingale	Cut back/strim overhanging vegetation	24/10/14
24	CCC Raised		South Woodham Ferrers	9-11 Roding Leigh	Cut back/strim overhanging vegetation	27/10/14
25	CCC Raised		Rettendon	Main Road	Cut back/strim overhanging vegetation around road signs	27/10/14
26	CCC Raised		South Woodham Ferrers	Town Centre	Litter bin maintenance - oil/check/repair hinges, new keys	27/10/14
27	CCC Raised		Sandon	Hall Lane to Rectory Chase	Cut back vegetation obstructing footway	28/10/14
28	CCC Raised		Writtle	Lodge Road	Cut back/strim overhanging vegetation around signs/posts	28/10/14
29	527	28/10/14	Chelmsford	Waterhouse Lane j/w Beeches Road	Cut back vegetation obstructing sight line	29/10/14
30	528	28/10/14	Great Baddow	O/s Baddow Tandoori	Cut back vegetation obstructing signs/posts	29/10/14
31	CCC Raised		Chelmsford	Chelmer Bridge	Litter bin maintenance - remove damaged bin & replace	29/10/14
32	CCC Raised		Springfield	Bracken Drive to Gaiger Close	Cut back vegetation obstructing footway	30/10/14
33	CCC Raised		Boreham	Main Road j/w Hurell Down	Cut back vegetation	31/10/14
34	530	30/10/2014	Chelmsford	Princes road/van Diemen's road	Cut back/strim overhanging vegetation	11/11/2014
35	CCC Raised		Stock	The square	Cut back/strim overhanging vegetation	06/11/2014
36	CCC Raised		Stock	Common Road play area	unable to do. access blocked	06/11/2014
37	CCC Raised		Springfield	Martingale Drive	Cut back/strim overhanging vegetation	14/11/2014
38	CCC Raised		Chelmsford	Duke Street /Train Station	Remove bus shelters /finger posts	17/11/2014
39	531	03/11/14	Ford End	Main Road Opp Primary School	Cut back/strim overhanging vegetation	18/11/2014
40	CCC Raised		South Woodham Ferrers	Ferrers Rd Shaw Farm to Lookers	Cut back/strim overhanging vegetation	19/11/2014
41	CCC Raised		Springfield	Rembrant Close/Bonnington Chase	Cut back/strim overhanging vegetation	20/11/2014
42	CCC Raised		Springfield	Rembrant Grove	Cut back/strim overhanging vegetation	20/11/2014

Chelmsford City Highway Rangers - Works Summary October to December 2014

Ref No.	Job No.	Date	Parish	Street	Works	Date Completed
43	CCC Raised		Springfield	Montrose Road	Strimm /cut back / litterpick /sweep footway	20/11/2014
44	CCC Raised		Springfield	Wells Court	Repair street name plate	20/11/2014
45	CCC Raised		Chelmsford	Van Diemens Rd layby outside no 13	Litterpick/sweep	21/11/2014
46	CCC Raised		South Woodham Ferrers	Haylard Reach to Marsh Farm Rd	Cut back/strim overhanging vegetation	21/11/2014
47	CCC Raised		South Woodham Ferrers	Trinity Square outside Spar shop	Re-install litter bin	21/11/2014
48	CCC Raised		Springfield	Rushleydale to The Ray	Cut back hedges impeding footway.	24/11/2014
49	CCC Raised		Chelmsford	Chelmer Road	Litterpick road	24/11/2014
50	CCC Raised		Chelmsford	Petunia Crescent	Replace street name plate near hedge	5.5h 25/11/2014
51	CCC Raised		Chelmsford	Petunia Crescent	Replace street name plate near hedge	5.5h 26/11/2014
52	CCC Raised		Chelmsford	Waterson Vale	Install street name plate nos 131-139 141-145	27/11/2014
53	CCC Raised		Chelmsford	Marlborough Terrace	Install street name plate to railings 1-10	2.5h 27/11/2014
54	CCC Raised		Chelmsford	Dukes Walk	Install 2 x street name plates onto wall	27/11/2014
55	CCC Raised		Chelmsford	Chelmer Road	Side footway	01/12/2019
56	CCC Raised		Good Easter	Farmbridge End Rd/Wares Rd	Install sign	02/12/2014
57	CCC Raised		Stock	Play area Stock Common Road	Cut back overgrown hedge in play area	02/12/2014
58	CCC Raised		Stock	Rectory Hall High Street	Clear leaves from footway outside rectory hall & drain	02/12/2014
59	CCC Raised		Great Baddow	The Ridge	Replace street name plate	03/12/2014
60	CCC Raised		Chelmsford	Longstomps Avenue/nr Princes Road	Replace street name plate	03/12/2014
61	CCC Raised		South Woodham Ferrers	Troubridge Close/Collingwood School	Sweep cut back weeds in footway	04/12/2014
62	CCC Raised		South Woodham Ferrers	Guild Way	Repair litter bin and install safely	04/12/2014
63	CCC Raised		Chelmsford	Welland Avenue j/w Avon Rd/Cherwell	Replace 3 x street name plates	04/12/2014

Chelmsford City Highway Rangers - Works Summary October to December 2014

Ref No.	Job No.	Date	Parish	Street	Works	Date Completed
64	CCC Raised		Danbury	Well lane	Cut around sign	05/12/2014
65	CCC Raised		Danbury	Parish Wide	Sign cleaning	05-10/12/2014
66	CCC Raised		Springfield	Cartwright Walk	Install replacement dog bin old one removed h/s	09/12/2014
67	CCC Raised		Springfield	Wells Court	Repair street name plate	10/12/2014
68	CCC Raised		Chelmsford	Pottery Lane off Broomfield Rd	Clean bollards/footway pigeon mess	10/12/2014
69	CCC Raised		South Woodham Ferrers	Hawthorn Walk	Clear overgrown footpath	11/12/2014
70	CCC Raised		Chelmsford	Drovers Wat	Clear footway cut back /sweep	11/12/2014
71	CCC Raised		Boreham	B1137 Main/Boreham Road	Reclaim footway/cut back vegetation	12/12/2014
72	CCC Raised		Chelmsford	Ravensbourne Drive	Install street name plate	12/12/2014
73	CCC Raised		Springfield	Chelmer Village	Cut back vegetation on footpath	15/12/2014
74	CCC Raised		Chelmsford	Chelmer Road	Cut back vegetation on footpath	16-17/12/2014
75	CCC Raised		Chelmsford	Riverside, Waterloo Lane	Clean drains, car park	18/12/2014
76	CCC Raised		South Woodham Ferrers	SWF/Runwell area	Take down fly posters	19/12/2015
77	CCC Raised		Chelmsford	Chelmer Road	Cut back vegetation on footpath	19/12/2014
78	CCC Raised		South Woodham Ferrers	Creekview Road	Remove and install new dog bin (damaged)	22/12/2014
79	CCC Raised		Chelmsford	Springfield ref street cleaning	Cut back vegetation along footway	22/12/2014
80	CCC Raised		Chelmsford	Rainsford Lane/ Coval Lane	Cut back footway	23/12/2014
81	CCC Raised		Chelmsford	North Springfield	Cut back footway	23/12/2014
82	CCC Raised		Gt Waltham/Gt Leighs	Parish Wide	Remove fly posting	24/12/2014
83	CCC Raised		Chelmsford	North Springfield	Cut back vegetation along footpaths	24/12/2014
84	CCC Raised		Chelmsford	Waterhouse lane	Clean drains in car park	29/12/2014

Chelmsford City Highway Rangers - Works Summary October to December 2014

Ref No.	Job No.	Date	Parish	Street	Works	Date Completed
85	CCC Raised		Chelmsford	Springfield	Sweep, litter pick, footway clear rubbish	30/12/2014
86	CCC Raised		Chelmsford/Rettendon	Chelmsford/Rettendon	Take down fly posters	31/12/2014

Chelmsford City Local Highways Panel

Traffic Survey Results

1. LCHE142054 – Main Road, Danbury

Page 2 to 4

Project 14566 Danbury

Automatic Traffic Count (7 day speed/volume) – results show reasonable compliance with existing speed limit, these results will now feed into the Scheme Validation process.

Ref	Location	Posted Speed Limit	Direction	Average Daily Speed
ATC01	A414 Main Road	30 mph	Northeast bound	27.1 mph
ATC02	A414 Main Road	30 mph	Southwest bound	27.1 mph

2. LCHE142022 – The Common, East Hanningfield

Page 5 to 10

Project 14567 East Hanningfield

Automatic Traffic Count (7 day speed/volume) – results show Good compliance with existing speed limit, Scheme Validation process now to look at existing speed limit and its extent.

Ref	Location	Posted Speed Limit	Direction	Average Daily Speed
ATC01	The Common (North) - 222m north of Bicknacre Road	30 mph	South bound	31.0 mph
			North bound	30.9 mph
ATC02	The Common (South) - 93m north of Bicknacre Road	30 mph	South bound	29.7 mph
			North bound	30.5 mph

PROJECT 14566 DANBURY
LOCATION ATC01 - A414 Main Road, Danbury
LOC. DESC. 118m SE of The Griffin PH
START DATE Tue 04 Nov, 2014
END DATE Mon 10 Nov, 2014
SPEED LIMIT 30mph
BUS ROUTE Yes
SURVEY TYPE 7-day ATC, 15min periods, 10 veh. classes



A 7-day automatic traffic count on A414 Main Road, Danbury, commencing Tue 04 Nov 2014, recorded 67,628 vehicles travelling northeastbound and 61,541 southwestbound vehicles. The posted speed limit of 30mph was exceeded by 9.6% of northeastbound vehicles and 13.6% of southwestbound vehicles. The seasonally adjusted, combined AADT value is 20,547 vehicles.

SUMMARY

COMBINED

Total recorded volume	129,169.0
Avg daily volume (based on 7 days)	18,452.7
Average daily speed (7 days)	27.1mph
Average daily 85%ile (7 days)	29.3mph
AA DT (annual average daily traffic)	20,547
Avg weekday volume (Mon-Fri, 24hrs)	19,529.0
Avg weekday speed (Mon-Fri, 24hrs)	26.8mph
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	25.3mph

The combined summary on the left shows the total volumes, average speeds, AADT and 85%iles recorded in both directions (northeastbound & southwestbound) from all the recorded data.

Speeding vehicles are defined as those travelling 31mph and above.

The summaries below provide directionalised details including speeding percentages and potential PSV traffic.

NORTHEASTBOUND

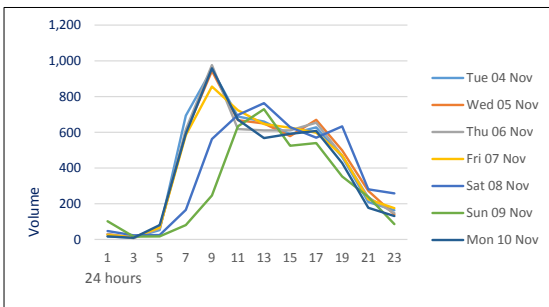
Total recorded volume	67,628.0
Avg daily volume (based on 7 days)	9,661.1
Average daily speed (7 days)	27.1mph
Average daily 85%ile (7 days)	29.4mph
% of vehicles exceeding 30mph	9.6%
Avg weekday volume (Mon-Fri, 24hrs)	10,235.8
Avg weekday speed (Mon-Fri, 24hrs)	26.9mph
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	25.7mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	28.5mph
Percentage of HGVs	1.1%

SOUTHWESTBOUND

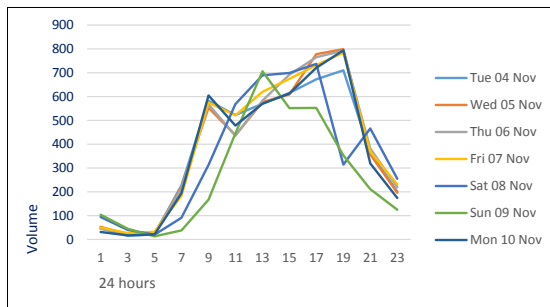
Total recorded volume	61,541.0
Avg daily volume (based on 7 days)	8,791.6
Average daily speed (7 days)	27.1mph
Average daily 85%ile (7 days)	29.2mph
% of vehicles exceeding 30mph	13.6%
Avg weekday volume (Mon-Fri, 24hrs)	9,293.2
Avg weekday speed (Mon-Fri, 24hrs)	26.7mph
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	24.8mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	27.7mph
Percentage of HGVs	1.1%

DAILY VOLUMES

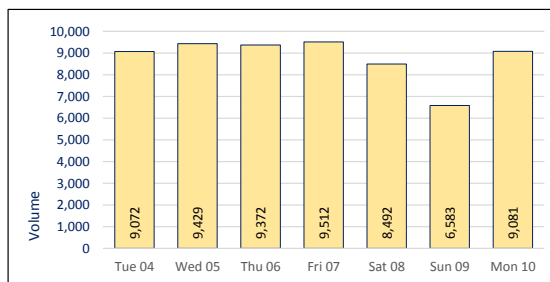
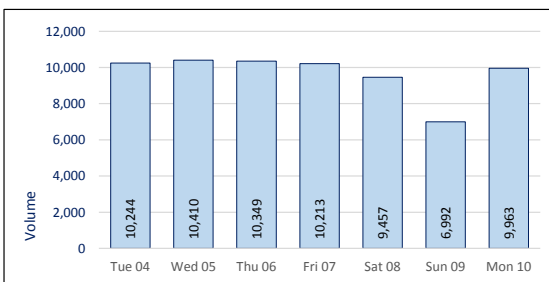
NORTHEASTBOUND



SOUTHWESTBOUND



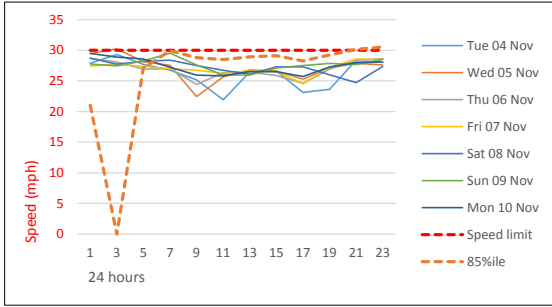
Hourly northeastbound and southwestbound traffic volumes over each 24hr period for 7 days from all available data.



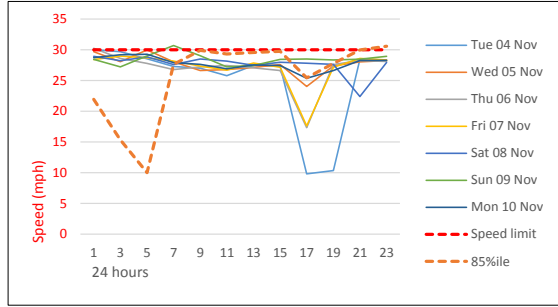
Daily northeastbound and southwestbound traffic volumes over 7 consecutive days from all available data.

DAILY SPEEDS

NORTHEASTBOUND



SOUTHWESTBOUND



Average daily northeastbound and southwestbound speeds (solid thin colours) and 85%ile (dashed orange) compared against 30mph posted speed limit (dashed red). The 85%ile is the speed at which 85% of all vehicles are observed to travel under free flowing conditions. A minimum of ten vehicles per speed bin is required for this calculation, hence the overnight 85%ile values may be zero.

VEHICLE CLASSES

NORTHEASTBOUND

TIME	Motor cycles	Cars / Taxis	LGV / MGW	HGV Rigid	HGV / Artic	TOTAL
0000	0	35	3	0	1	38
0100	0	16	3	0	1	19
0200	0	9	3	0	0	12
0300	0	15	5	0	2	22
0400	0	38	11	0	3	52
0500	2	192	26	0	3	223
0600	4	424	43	1	3	476
0700	6	751	45	4	4	809
0800	4	729	43	5	4	785
0900	3	692	45	4	5	749
1000	2	609	47	5	8	671
1100	4	599	44	4	4	656
1200	4	599	48	3	6	661
1300	3	569	35	4	6	617
1400	4	539	42	5	4	593
1500	4	575	31	2	5	617
1600	4	575	24	3	3	609
1700	8	535	15	0	2	560
1800	3	456	14	0	1	474
1900	1	344	14	1	1	361
2000	2	223	9	0	0	234
2100	0	174	7	0	1	182
2200	1	149	7	0	1	157
2300	1	76	7	0	1	85
12hr TTL	48	7227	433	39	52	7800
24hr TTL	60	8922	570	42	68	9661
	1%	92%	6%	0%	1%	

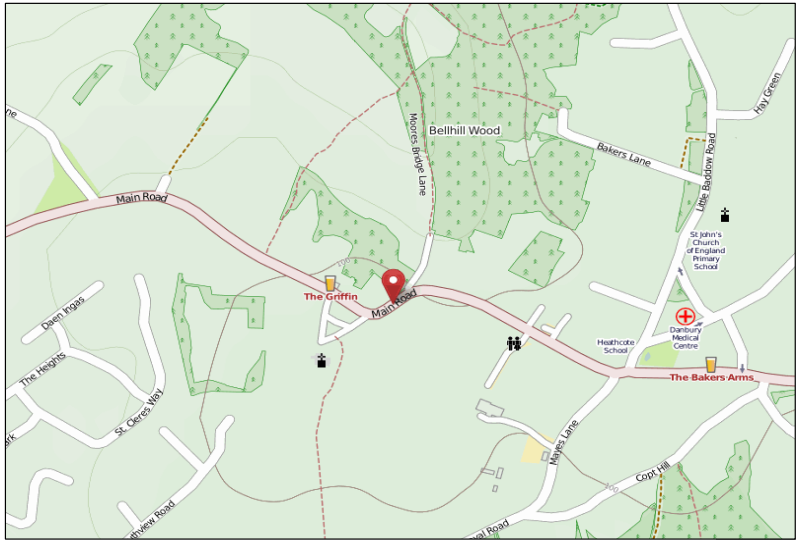
SOUTHWESTBOUND

TIME	Motor cycles	Cars / Taxis	LGV / MGW	HGV Rigid	HGV / Artic	TOTAL
0000	1	56	3	0	0	61
0100	0	32	4	0	0	37
0200	1	22	3	0	1	27
0300	0	13	2	0	0	15
0400	0	20	2	0	1	23
0500	0	44	11	0	3	57
0600	1	137	19	3	6	167
0700	2	340	32	1	3	378
0800	2	445	26	3	4	480
0900	3	441	29	3	3	480
1000	2	444	33	3	4	487
1100	3	509	36	3	5	556
1200	1	572	37	2	4	616
1300	2	566	33	3	4	607
1400	4	588	37	3	4	636
1500	2	646	38	3	5	694
1600	3	674	26	2	4	708
1700	3	637	24	1	6	670
1800	3	627	18	0	2	650
1900	4	481	14	0	1	501
2000	1	338	12	0	1	353
2100	1	255	7	0	1	265
2200	1	191	7	0	1	200
2300	1	118	6	0	1	125
12hr TTL	29	6489	369	26	49	6962
24hr TTL	40	8197	459	30	66	8792
	0%	93%	5%	0%	1%	

Average daily northeastbound and southwestbound volumes by class (condensed to the AQMA scheme), including totals for 0700-1900 and overall average percentages. Calculated from all available data over 7 days.



SITE LOCATION



Location	A414 Main Road, Danbury
Desc.	118m SE of The Griffin PH
OSGR	578029, 205213
Lat, lng.	51.717389, 0.575806
Site no.	ATC01
PSL	30mph

The survey location was on a bus route, so the 6,884 recorded vehicles classed as '2-axle truck/bus' during this period is likely to include scheduled PSVs.

Generated Thu 20 Nov 2014



METHODOLOGY

Equipment & methodology

Automatic traffic counts are undertaken using a pair of pneumatic tubes installed securely across the carriageway, one metre apart, recording air pulses to determine vehicle speed, class and volume. The ATC equipment generally remains in place for a consecutive seven day period, and the data analysed post-survey.

In queuing conditions, the accuracy of ATC recording equipment will reduce as follows;

- 20 – 30mph: potential reduction of 9% accuracy in volume values
- 10 – 20mph: potential reduction of 26% accuracy in volume values
- 00 – 10mph: potential reduction of 39% accuracy in volume values

These figures are based on multiple ATC results compared against accepted reference values from resilient manual counts.

AADTs are calculated using the seasonal COBA methodology.

Weather & environmental

Inclement conditions during winter months or outbreaks of unseasonable weather may affect survey data collection. This can result in distorted traffic flows or unusable data and should be considered prior to survey approval. Although forecast checks are made prior to the survey commencing, Essex Highways cannot be held responsible for the forecast accuracy.

Equipment damage & failure

Although checked intermittently the equipment remains unmanned for much of the duration of the survey, and can potentially be interfered with, vandalised, damaged or stolen and Essex Highways cannot be held responsible for any periods where data has not been captured.

The equipment is located in accordance with the details provided by the client and Essex Highways cannot be held responsible for the accuracy of the data or loss of equipment due to theft and vandalism.

Roadworks & events

Where possible, roadworks checks are made 10 days before, and 48 hours before, the survey commences. Additionally, influencing major local events are also monitored, covering the immediate vicinity of the surveys and any routes likely to affect the outcome of the survey.

CLASS	ABBREV.	DESCRIPTION	LENGTH	AQMA	MANUAL
1	MC	Motorcycle	SHORT Up to 5.5m	MC	MC
2	SV	Cars, taxis, 4WD, vans		CAR	CAR & LGV1
3	SVT	Class 2 plus trailer	MEDIUM 5.5m to 14.5m	LGV & MG	LGV2 & PSV
4	TB2	2 axle truck / bus		MGV & PSV	MGV & PSV
5	TB3	3 axle truck / bus		HGV RIGID	HGV1
6	T4	4 axle truck	LONG 11.5m to 19.0m	HGV ARTIC	HGV2
7	ART3	3 axle articulated			
8	ART4	4 axle articulated			
9	ART5	5 axle articulated			
10	ART6	6+ axle articulated			

Vehicle classifications

Vehicles recorded by the ATC are placed into one of ten classes based on axle spacing and pattern. This scheme is based on the AustRoad 94 algorithm and modified for UK traffic, referred to as ARX. The table on the left aligns the ARX classifications with the AQMA (air quality management standard) and the Essex 9-class, as used in manual junction counts undertaken by Essex Highways.

Disclaimer

Although every attempt is made to achieve accuracy, neither Essex County Council nor Essex Highways may be held liable for errors of fact or interpretation.



PROJECT 14567 EAST HANNINGFIELD
LOCATION ATC01 - The Common (north), East Hanningfield
LOC. DESC. 222m N of Bicknacre Rd
START DATE Tue 04 Nov, 2014
END DATE Mon 10 Nov, 2014
SPEED LIMIT 30mph
BUS ROUTE Yes
SURVEY TYPE 7-day ATC, 15min periods, 10 veh. classes



A 7-day automatic traffic count on The Common (north), East Hanningfield, commencing Tue 04 Nov 2014, recorded 13,772 vehicles travelling southbound and 12,775 northbound vehicles. The posted speed limit of 30mph was exceeded by 47.6% of southbound vehicles and 52.5% of northbound vehicles. The seasonally adjusted, combined AADT value is 4,303 vehicles.

SUMMARY

COMBINED

Total recorded volume	26,547.0
Avg daily volume (based on 7 days)	3,792.4
Average daily speed (7 days)	30.9mph
Average daily 85%ile (7 days)	34.1mph
AA DT (annual average daily traffic)	4,303

Avg weekday volume (Mon-Fri, 24hrs)	4,240.2
Avg weekday speed (Mon-Fri, 24hrs)	30.9mph
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	29.6mph

SOUTHBOUND

Total recorded volume	13,772.0
Avg daily volume (based on 7 days)	1,967.4
Average daily speed (7 days)	31.0mph
Average daily 85%ile (7 days)	33.8mph
% of vehicles exceeding 30mph	47.6%

Avg weekday volume (Mon-Fri, 24hrs)	2,192.4
Avg weekday speed (Mon-Fri, 24hrs)	31.0mph
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	29.5mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	33.4mph
Percentage of HGVs	0.6%

The combined summary on the left shows the total volumes, average speeds, AADT and 85%iles recorded in both directions (southbound & northbound) from all the recorded data.

Speeding vehicles are defined as those travelling 31mph and above.

The summaries below provide directionalised details including speeding percentages and potential PSV traffic.

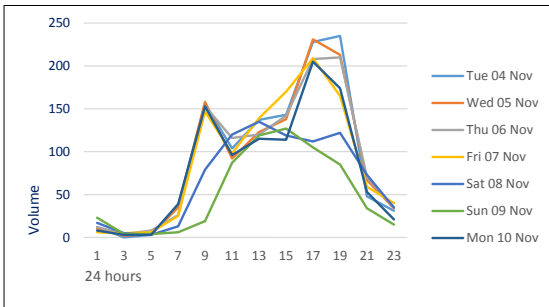
NORTHBOUND

Total recorded volume	12,775.0
Avg daily volume (based on 7 days)	1,825.0
Average daily speed (7 days)	30.9mph
Average daily 85%ile (7 days)	34.4mph
% of vehicles exceeding 30mph	52.5%

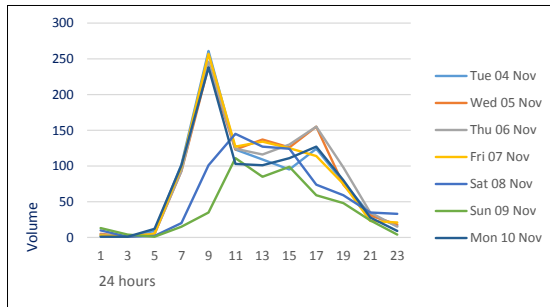
Avg weekday volume (Mon-Fri, 24hrs)	2,047.8
Avg weekday speed (Mon-Fri, 24hrs)	30.9mph
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	29.8mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	33.9mph
Percentage of HGVs	0.2%

DAILY VOLUMES

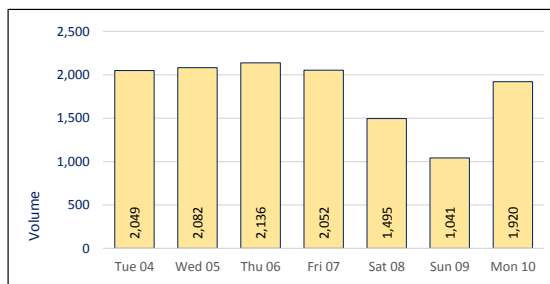
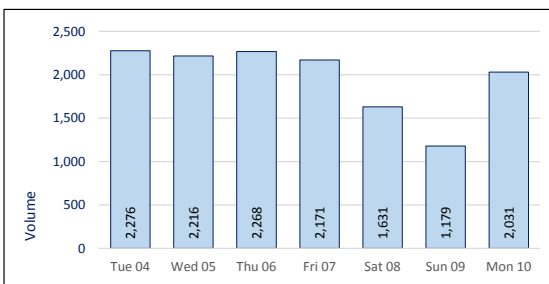
SOUTHBOUND



NORTHBOUND



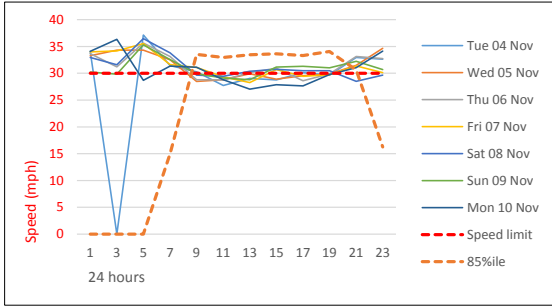
Hourly southbound and northbound traffic volumes over each 24hr period for 7 days from all available data.



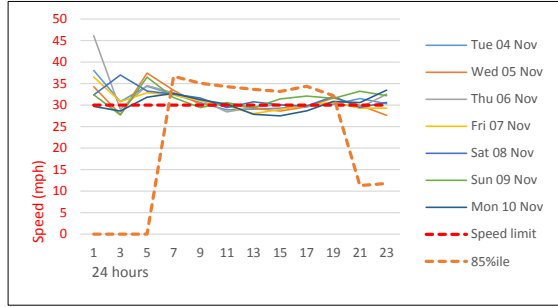
Daily southbound and northbound traffic volumes over 7 consecutive days from all available data.

DAILY SPEEDS

SOUTHBOUND



NORTHBOUND



Average daily southbound and northbound speeds (solid thin colours) and 85%ile (dashed orange) compared against 30mph posted speed limit (dashed red). The 85%ile is the speed at which 85% of all vehicles are observed to travel under free flowing conditions. A minimum of ten vehicles per speed bin is required for this calculation, hence the overnight 85%ile values may be zero.

VEHICLE CLASSES

SOUTHBOUND

TIME	Motor cycles	Cars / Taxis	LGV / MGV	HGV / Rigid	HGV / Artic	TOTAL
0000	0	11	1	0	0	13
0100	0	5	1	0	0	6
0200	0	3	0	0	0	3
0300	1	3	0	0	0	4
0400	0	4	1	0	0	4
0500	0	8	3	0	0	11
0600	0	23	3	0	0	26
0700	1	73	7	1	0	82
0800	1	114	7	1	0	124
0900	1	91	12	1	0	105
1000	2	89	10	1	0	102
1100	2	98	12	1	0	114
1200	1	114	10	1	0	127
1300	2	114	10	0	0	126
1400	1	122	11	1	0	136
1500	2	148	14	1	0	164
1600	3	165	16	1	0	185
1700	2	214	12	1	0	230
1800	1	164	7	0	0	172
1900	1	83	3	0	0	87
2000	1	55	2	0	0	58
2100	0	38	1	0	0	39
2200	0	28	1	0	0	30
2300	0	18	1	0	0	20
12hr TTL	20	1507	130	8	2	1667
24hr TTL	23	1786	147	9	2	1967
	1%	91%	7%	0%	0%	

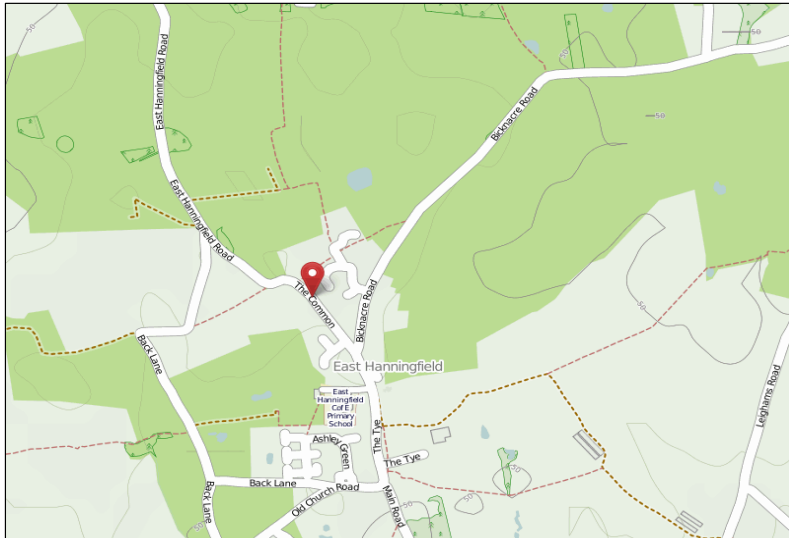
NORTHBOUND

TIME	Motor cycles	Cars / Taxis	LGV / MGV	HGV / Rigid	HGV / Artic	TOTAL
0000	0	5	0	0	0	5
0100	0	2	0	0	0	3
0200	0	1	0	0	0	1
0300	0	1	1	0	0	2
0400	0	5	1	0	0	6
0500	1	31	2	0	0	34
0600	1	67	6	0	0	75
0700	4	208	12	0	0	224
0800	3	179	14	0	0	197
0900	2	131	8	0	0	142
1000	3	110	10	0	0	122
1100	2	101	9	0	0	112
1200	2	103	11	0	0	116
1300	1	105	9	0	0	116
1400	1	106	8	0	0	116
1500	2	121	9	0	0	133
1600	1	106	8	0	0	115
1700	1	97	6	0	0	104
1800	1	69	3	0	0	73
1900	0	49	3	0	0	53
2000	0	28	1	0	0	30
2100	1	19	1	0	0	21
2200	0	16	1	0	0	17
2300	0	10	0	0	0	10
12hr TTL	23	1436	106	2	2	1569
24hr TTL	25	1672	123	2	2	1825
	1%	92%	7%	0%	0%	

Average daily southbound and northbound volumes by class (condensed to the AQMA scheme), including totals for 0700-1900 and overall average percentages. Calculated from all available data over 7 days.



SITE LOCATION



Location	The Common (north), East Hanningfield
Desc.	222m N of Bicknacre Rd
OSGR	576864, 201508
Lat, lng.	51.684472, 0.557083
Site no.	ATC01
PSL	30mph

The survey location was on a bus route, so the 1,818 recorded vehicles classed as '2-axle truck/bus' during this period is likely to include scheduled PSVs.

Generated Wed 19 Nov 2014



METHODOLOGY

Equipment & methodology

Automatic traffic counts are undertaken using a pair of pneumatic tubes installed securely across the carriageway, one metre apart, recording air pulses to determine vehicle speed, class and volume. The ATC equipment generally remains in place for a consecutive seven day period, and the data analysed post-survey.

In queuing conditions, the accuracy of ATC recording equipment will reduce as follows;

- 20 – 30mph: potential reduction of 9% accuracy in volume values
- 10 – 20mph: potential reduction of 26% accuracy in volume values
- 00 – 10mph: potential reduction of 39% accuracy in volume values

These figures are based on multiple ATC results compared against accepted reference values from resilient manual counts.

AADTs are calculated using the seasonal COBA methodology.

Weather & environmental

Inclement conditions during winter months or outbreaks of unseasonable weather may affect survey data collection. This can result in distorted traffic flows or unusable data and should be considered prior to survey approval. Although forecast checks are made prior to the survey commencing, Essex Highways cannot be held responsible for the forecast accuracy.

Equipment damage & failure

Although checked intermittently the equipment remains unmanned for much of the duration of the survey, and can potentially be interfered with, vandalised, damaged or stolen and Essex Highways cannot be held responsible for any periods where data has not been captured.

The equipment is located in accordance with the details provided by the client and Essex Highways cannot be held responsible for the accuracy of the data or loss of equipment due to theft and vandalism.

Roadworks & events

Where possible, roadworks checks are made 10 days before, and 48 hours before, the survey commences. Additionally, influencing major local events are also monitored, covering the immediate vicinity of the surveys and any routes likely to affect the outcome of the survey.

CLASS	ABBREV.	DESCRIPTION	LENGTH	AQMA	MANUAL
1	MC	Motorcycle	SHORT Up to 5.5m	MC	MC
2	SV	Cars, taxis, 4WD, vans		CAR	CAR & LGV1
3	SVT	Class 2 plus trailer	MEDIUM 5.5m to 14.5m	LGV & MG	LGV2 & PSV
4	TB2	2 axle truck / bus		MGV	MGV & PSV
5	TB3	3 axle truck / bus		HGV RIGID	HGV1
6	T4	4 axle truck	LONG 11.5m to 19.0m	HGV ARTIC	HGV2
7	ART3	3 axle articulated			
8	ART4	4 axle articulated			
9	ART5	5 axle articulated			
10	ART6	6+ axle articulated			

Vehicle classifications

Vehicles recorded by the ATC are placed into one of ten classes based on axle spacing and pattern. This scheme is based on the AustRoad 94 algorithm and modified for UK traffic, referred to as ARX. The table on the left aligns the ARX classifications with the AQMA (air quality management standard) and the Essex 9-class, as used in manual junction counts undertaken by Essex Highways.

Disclaimer

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PROJECT 14567 EAST HANNINGFIELD
LOCATION ATC02 - The Common (south), East Hanningfield
LOC. DESC. 93m N of Bicknacre Rd
START DATE Tue 04 Nov, 2014
END DATE Mon 10 Nov, 2014
SPEED LIMIT 30mph
BUS ROUTE Yes
SURVEY TYPE 7-day ATC, 15min periods, 10 veh. classes



A 7-day automatic traffic count on The Common (south), East Hanningfield, commencing Tue 04 Nov 2014, recorded 13,558 vehicles travelling southbound and 12,508 northbound vehicles. The posted speed limit of 30mph was exceeded by 33.3% of southbound vehicles and 50.0% of northbound vehicles. The seasonally adjusted, combined AADT value is 4,221 vehicles.

SUMMARY

COMBINED

Total recorded volume	26,066.0
Avg daily volume (based on 7 days)	3,723.7
Average daily speed (7 days)	30.1mph
Average daily 85%ile (7 days)	33.2mph
AADT (annual average daily traffic)	4,221

Avg weekday volume (Mon-Fri, 24hrs)	4,154.2
Avg weekday speed (Mon-Fri, 24hrs)	30.1mph
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	28.8mph

The combined summary on the left shows the total volumes, average speeds, AADT and 85%iles recorded in both directions (southbound & northbound) from all the recorded data.

Speeding vehicles are defined as those travelling 31mph and above.

The summaries below provide directionalised details including speeding percentages and potential PSV traffic.

SOUTHBOUND

Total recorded volume	13,558.0
Avg daily volume (based on 7 days)	1,936.9
Average daily speed (7 days)	29.7mph
Average daily 85%ile (7 days)	32.2mph
% of vehicles exceeding 30mph	33.3%

Avg weekday volume (Mon-Fri, 24hrs)	2,154.2
Avg weekday speed (Mon-Fri, 24hrs)	29.6mph
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	28.0mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	31.8mph
Percentage of HGVs	0.3%

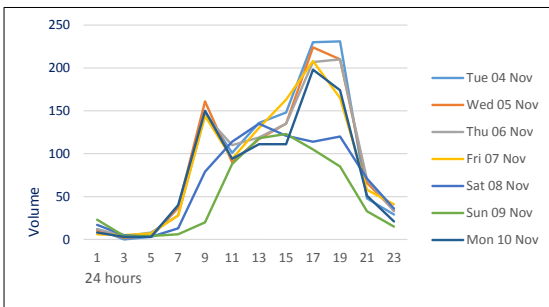
NORTHBOUND

Total recorded volume	12,508.0
Avg daily volume (based on 7 days)	1,786.9
Average daily speed (7 days)	30.5mph
Average daily 85%ile (7 days)	34.2mph
% of vehicles exceeding 30mph	50.0%

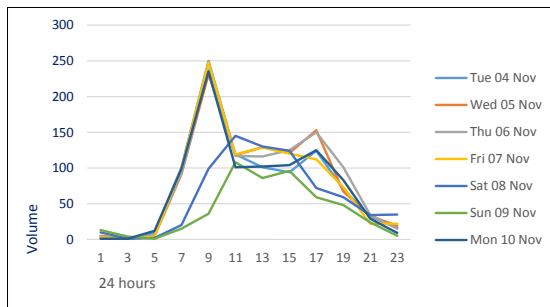
Avg weekday volume (Mon-Fri, 24hrs)	2,000.0
Avg weekday speed (Mon-Fri, 24hrs)	30.5mph
Avg 12hr weekday speed (Mon-Fri, 0700-1900)	29.6mph
Avg 12hr weekday 85%ile (Mon-Fri, 0700-1900)	33.8mph
Percentage of HGVs	0.2%

DAILY VOLUMES

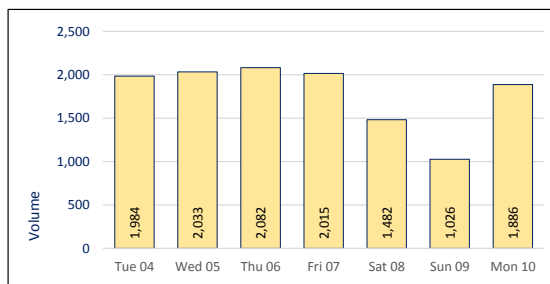
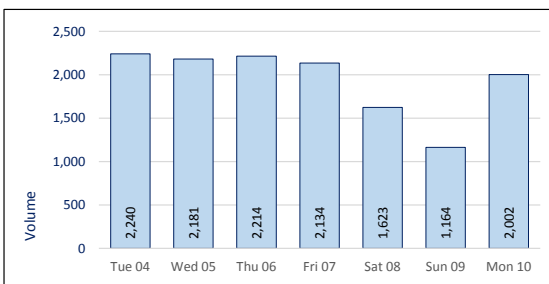
SOUTHBOUND



NORTHBOUND



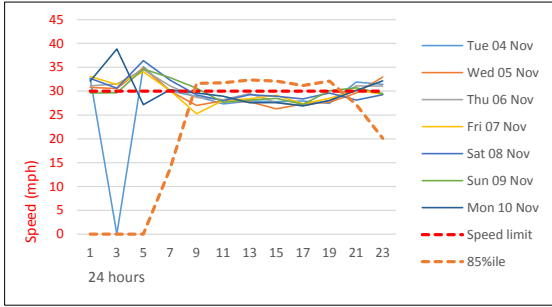
Hourly southbound and northbound traffic volumes over each 24hr period for 7 days from all available data.



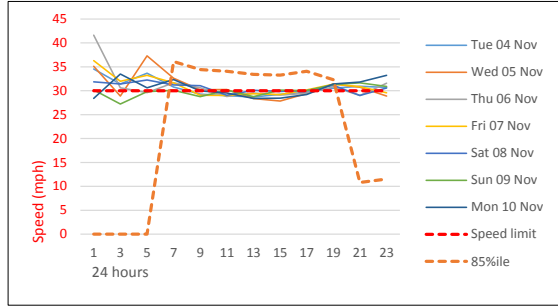
Daily southbound and northbound traffic volumes over 7 consecutive days from all available data.

DAILY SPEEDS

SOUTHBOUND



NORTHBOUND



Average daily southbound and northbound speeds (solid thin colours) and 85%ile (dashed orange) compared against 30mph posted speed limit (dashed red). The 85%ile is the speed at which 85% of all vehicles are observed to travel under free flowing conditions. A minimum of ten vehicles per speed bin is required for this calculation, hence the overnight 85%ile values may be zero.

VEHICLE CLASSES

SOUTHBOUND

TIME	Motor cycles	Cars / Taxis	LGV / MGV	HGV / Rigid	HGV / Artic	TOTAL
0000	0	11	1	0	0	13
0100	0	5	1	0	0	6
0200	0	3	0	0	0	3
0300	1	3	0	0	0	4
0400	0	4	1	0	0	5
0500	0	8	3	0	0	11
0600	0	24	3	0	0	27
0700	1	69	9	0	0	80
0800	1	112	8	0	0	121
0900	1	86	14	0	0	101
1000	2	85	11	0	0	99
1100	2	98	12	0	0	113
1200	2	111	11	0	0	124
1300	2	111	10	0	0	123
1400	2	121	10	0	0	134
1500	2	146	15	0	0	163
1600	3	166	14	0	0	184
1700	2	211	11	0	0	225
1800	1	163	6	0	0	171
1900	1	82	3	0	0	86
2000	1	54	2	0	0	57
2100	0	38	1	0	0	39
2200	0	29	1	0	0	30
2300	0	19	1	0	0	20
12hr TTL	21	1480	132	2	2	1637
24hr TTL	24	1760	148	2	2	1937
	1%	91%	8%	0%	0%	

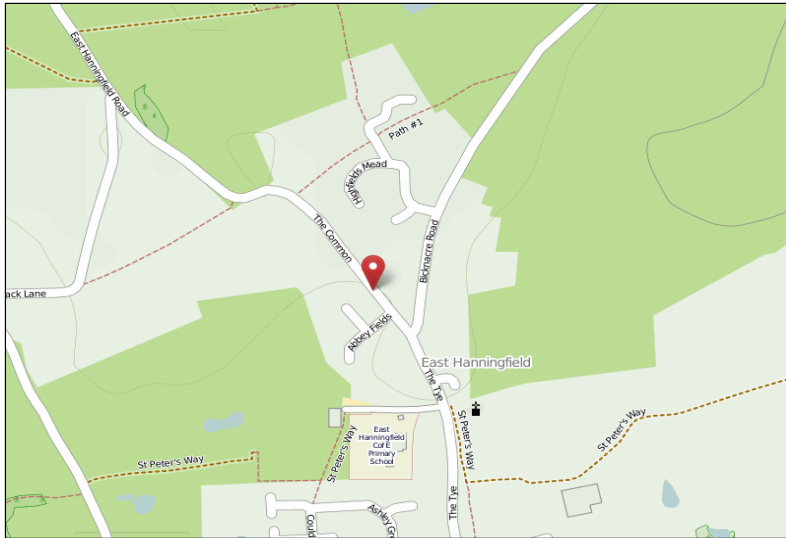
NORTHBOUND

TIME	Motor cycles	Cars / Taxis	LGV / MGV	HGV / Rigid	HGV / Artic	TOTAL
0000	0	5	0	0	0	5
0100	0	2	0	0	0	3
0200	0	1	0	0	0	1
0300	0	1	1	0	0	2
0400	0	5	1	0	0	6
0500	1	31	2	0	0	34
0600	1	67	6	0	0	74
0700	4	203	14	0	0	221
0800	3	173	15	0	0	191
0900	2	126	9	0	0	137
1000	3	105	10	0	0	118
1100	2	94	10	0	0	106
1200	2	100	11	0	0	113
1300	1	103	9	0	0	113
1400	1	102	8	0	0	112
1500	2	119	9	0	0	131
1600	1	104	8	0	0	114
1700	1	93	7	0	0	101
1800	1	68	3	0	0	72
1900	0	52	3	0	0	55
2000	0	28	1	0	0	30
2100	1	20	1	0	0	21
2200	0	17	1	0	0	17
2300	0	10	0	0	0	10
12hr TTL	22	1391	111	1	2	1528
24hr TTL	25	1632	127	1	2	1787
	1%	91%	7%	0%	0%	

Average daily southbound and northbound volumes by class (condensed to the AQMA scheme), including totals for 0700-1900 and overall average percentages. Calculated from all available data over 7 days.



SITE LOCATION



Location	The Common (south), East Hanningfield
Desc.	93m N of Bicknacre Rd
OSGR	576941, 201402
Lat, lng.	51.683500, 0.558139
Site no.	ATC02
PSL	30mph

The survey location was on a bus route, so the 1,888 recorded vehicles classed as '2-axle truck/bus' during this period is likely to include scheduled PSVs.

Generated Wed 19 Nov 2014



METHODOLOGY

Equipment & methodology

Automatic traffic counts are undertaken using a pair of pneumatic tubes installed securely across the carriageway, one metre apart, recording air pulses to determine vehicle speed, class and volume. The ATC equipment generally remains in place for a consecutive seven day period, and the data analysed post-survey.

In queuing conditions, the accuracy of ATC recording equipment will reduce as follows;

- 20 – 30mph: potential reduction of 9% accuracy in volume values
- 10 – 20mph: potential reduction of 26% accuracy in volume values
- 00 – 10mph: potential reduction of 39% accuracy in volume values

These figures are based on multiple ATC results compared against accepted reference values from resilient manual counts.

AADTs are calculated using the seasonal COBA methodology.

Weather & environmental

Inclement conditions during winter months or outbreaks of unseasonable weather may affect survey data collection. This can result in distorted traffic flows or unusable data and should be considered prior to survey approval. Although forecast checks are made prior to the survey commencing, Essex Highways cannot be held responsible for the forecast accuracy.

Equipment damage & failure

Although checked intermittently the equipment remains unmanned for much of the duration of the survey, and can potentially be interfered with, vandalised, damaged or stolen and Essex Highways cannot be held responsible for any periods where data has not been captured.

The equipment is located in accordance with the details provided by the client and Essex Highways cannot be held responsible for the accuracy of the data or loss of equipment due to theft and vandalism.

Roadworks & events

Where possible, roadworks checks are made 10 days before, and 48 hours before, the survey commences. Additionally, influencing major local events are also monitored, covering the immediate vicinity of the surveys and any routes likely to affect the outcome of the survey.

CLASS	ABBREV.	DESCRIPTION	LENGTH	AQMA	MANUAL
1	MC	Motorcycle	SHORT Up to 5.5m	MC	MC
2	SV	Cars, taxis, 4WD, vans		CAR	CAR & LGV1
3	SVT	Class 2 plus trailer	MEDIUM 5.5m to 14.5m	LGV & MG	LGV2 & PSV
4	TB2	2 axle truck / bus		MGV & PSV	MGV & PSV
5	TB3	3 axle truck / bus		HGV RIGID	HGV1
6	T4	4 axle truck	LONG 11.5m to 19.0m	HGV ARTIC	HGV2
7	ART3	3 axle articulated			
8	ART4	4 axle articulated			
9	ART5	5 axle articulated			
10	ART6	6+ axle articulated			

Vehicle classifications

Vehicles recorded by the ATC are placed into one of ten classes based on axle spacing and pattern. This scheme is based on the AustRoad 94 algorithm and modified for UK traffic, referred to as ARX. The table on the left aligns the ARX classifications with the AQMA (air quality management standard) and the Essex 9-class, as used in manual junction counts undertaken by Essex Highways.

Disclaimer

Although every attempt is made to achieve accuracy, neither Essex County Council nor Essex Highways may be held liable for errors of fact or interpretation.

