Appendix A – Glossary

Term	Description
Base Model Scenario	For NHTM represents 2013 conditions and is consistent with the year of initial data collection (traffic surveys, planning data etc.) for the model.
Committed Development (aka Hard Commitments)	Sites where planning approval has been granted and the development funded and programmed. Within NHTM these will be included as 100% developed within all scenarios in accordance with expected development timeframe.
Hard Commitments	see Committed Development
MDM	**M**ain **D**emand **M**odel (part of the NHTM model suite) Predicts when (time of day), where (destination choice) and how (choice of mode) journeys are made.
Permissible Development (aka Soft Commitments)	Those locations identified (by Local Planning Authorities) as suitable for future development but have not yet been subject to planning approval. The location and maximum land use quantum of the permissible sites are tied to the inputs originally provided by each Local Planning Authority during model development (2010). In NHTM Reference Cases the take up of permissible developments is determined by LEIM based on the local conditions (the relative 'attractiveness' of the development). In scheme specific NHTM scenarios the actual take up of permissible development can be specified.
PTM	**P**ublic **T**ransport **M**odel (part of the NHTM model suite) Determines routes and services chosen by public transport passengers (Bus and Rail).
Reference Case Scenario	A future year scenario that includes for Completed, Committed and Permissible development and Completed and Committed transport infrastructure schemes. Four, year specific, Reference Case NHTM scenarios are available: 2019, 2026, 2031, 2036
RTM	**R**oad **T**raffic **M**odel (part of the NHTM model suite) Determines the routes taken by vehicles through the road network and journey times, accounting for congestion.
Soft Commitments	see Permissible Development
TEMPRO	**T**rip **E**nd **M**odel Presentation **Pro**gram Provides pre-processed trip-end, journey mileage, car ownership and population/workforce planning data from the National Trip End Model (NTEM). The pre-processed data is itself the output from a series of models developed and run by the TASM division of DfT. TEMPRO can also be used to provide summaries of traffic growth using data from the National Transport Model (NTM).

Term	Description
WebTAG	**Web T**ransport **A**nalysis **G**uidance Is the Department for Transport's website for guidance on the conduct of transport studies. The guidance is a requirement for all projects/studies that require government approval. For projects/studies that do not require government approval TAG serves as a best practice guide.

Appendix B – Reference Case Committed Schemes

NHTM Reference Cases (as at March 2015):

Note: Only committed (funded) Highway/ PT schemes are included in the Reference Cases

Model Year	Major Developments (% complete)	Major Highway Schemes	Major PT Schemes
2013 Base	Existing 2013	Existing 2013	Existing 2013
2019 Ref	As 2013 Base plus: 1. Basingstoke Golf Club (0%) 2. Kennels Farm (100%) 3. Manydown North (15%) 4. Manydown Central (10%) 5. Manydown SW (0%) 6. Manydown SE (0%) 7. Land North of Popley Fields (70%) 8. Razors Farm (60%) 9. Cufaude Farm (0%) 10. East of Basingstoke (33%) 11. Redlands (66%) 12. Swing Swang Lane (100%) 13. Park Prewett North (100%) 14. Aldermarston Rd Triangle (100%)	As 2013 Base plus: 1. M3 Smart Motorway (J2-4a) 2. Black Dam Roundabout 3. A30 Hartford Bridge Flats 4. A325 Queens Roundabout (Farnborough) 5. A3 Ham Barn Roundabout 6. M3 J9 Easton Lane Signals	As 2013 Base

Model Year	Major Developments (% complete)	Major Highway Schemes	Major PT Schemes
	15. A339 Newbury Rd “Trumpet” Junction (100%) 16. Merton Rise/ North of Popley (95%) 17. Whitehill Bordon: • Quebec Barracks (100%) • Louisberg Barracks (50%) • Bordon Garrison (10%)		
2026 Ref	As Central 2019 Reference plus: 1. Basingstoke Golf Club (60%) 2. Kennels Farm (100%) 3. Manydown North (100%) 4. Manydown Central (66%) 5. Manydown SW (15%) 6. Manydown SE (0%) 7. Land North of Popley Fields (100%) 8. Razors Farm (100%) 9. Cufaude Farm (100%) 10. East of Basingstoke (100%) 11. Redlands (100%)	As Central 2019 Reference	As 2013 Base

Model Year	Major Developments (% complete)	Major Highway Schemes	Major PT Schemes
	12. Swing Swang Lane (100%) 13. Park Prewett North (100%) 14. Aldermarston Rd Triangle (100%) 15. A339 Newbury Rd "Trumpet" Junction (100%) 16. Merton Rise/ North of Popley (100%) 18. Whitehill Bordon: • Quebec Barracks (100%) • Louisberg Barracks (100%) • Bordon Garrison (65%)		
2031 Ref	As Central 2026 Reference plus: 1. Basingstoke Golf Club (100%) 2. Kennels Farm (100%) 3. Manydown North (100%) 4. Manydown Central (100%) 5. Manydown SW (100%) 6. Manydown SE (100) 7. Land North of Popley Fields (100%) 8. Razors Farm (100%)	As Central 2019 Reference	As 2013 Base

Model Year	Major Developments (% complete)	Major Highway Schemes	Major PT Schemes
	9. Cufaude Farm (100%) 10. East of Basingstoke (100%) 11. Redlands (100%) 12. Swing Swang Lane (100%) 13. Park Prewett North (100%) 14. Aldermarston Rd Triangle (100%) 15. A339 Newbury Rd “Trumpet” Junction (100%) 16. Merton Rise/ North of Popley (100%) 17. Whitehill Bordon: • Quebec Barracks (100%) • Louisberg Barracks (100%) • Bordon Garrison (100%)		
2036 Ref	As Central 2031 Reference	As Central 2019 Reference	As 2013 Base

Appendix C – Rushmoor Development Sites by Model Zone and Raw Data

Residential Floor Space FS1 (HHs)	Zone	Total
	215	1
	216	51
	217	0
	218	0
	219	0
	220	40
	221	1
	222	0
	223	0
	224	0
	225	0
	226	0
	227	0
	228	0
	229	0
	230	4
	231	3
	232	0
	233	14
	234	3
	235	0
	236	0
	237	0
	238	5
	239	0
	240	0
	241	3
	242	145
	243	0
	244	-1
	245	4
	246	224
	247	6
	248	14
	249	0
	250	22
	251	127
	252	12
	253	0
	254	224
	255	0
	256	2
	257	21
	258	167
	259	2
	260	0
	261	0
	262	41
	263	16
	264	74
	265	17
	266	59
	267	6
	268	1
	269	7
	270	6
	271	82
	272	48
	273	5
	274	2
	275	43
	276	29
	277	140
	278	39
	279	0
	280	39
	281	10
	282	12
	283	0
	284	0
	852	3830
	853	0
		5600

Office Floor Space B1 FS3 (Sqm)	Zone	Total
	215	0
	216	0
	217	0
	218	0
	219	0
	220	0
	221	0
	222	4295
	223	3619
	224	0
	225	0
	226	0
	227	0
	228	0
	229	0
	230	0
	231	0
	232	0
	233	0
	234	0
	235	0
	236	0
	237	0
	238	0
	239	0
	240	0
	241	0
	242	20110
	243	0
	244	0
	245	0
	246	0
	247	0
	248	0
	249	41630
	250	0
	251	0
	252	0
	253	0
	254	25099
	255	0
	256	0
	257	0
	258	0
	259	0
	260	9293
	261	0
	262	0
	263	0
	264	0
	265	0
	266	0
	267	0
	268	0
	269	0
	270	0
	271	125
	272	0
	273	0
	274	0
	275	0
	276	0
	277	0
	278	1389
	279	0
	280	0
	281	604
	282	0
	283	0
	284	0
	852	0
	853	3660
		109824

Industrial Floor Space B2 FS4 (Sqm)	Zone	Total
	215	0
	216	0
	217	0
	218	0
	219	0
	220	0
	221	0
	222	1996
	223	0
	224	0
	225	0
	226	0
	227	0
	228	0
	229	0
	230	0
	231	0
	232	0
	233	0
	234	0
	235	0
	236	0
	237	0
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	250	0
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	258	0
	259	0
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	261	0
	262	0
	263	0
	264	0
	265	0
	266	0
	267	0
	268	0
	269	0
	270	0
	271	85
	272	0
	273	0
	274	0
	275	0
	276	0
	277	0
	278	938
	279	0
	280	0
	281	0
	282	0
	283	0
	284	0
	852	0
	853	970
		3989

Warehousing Floor Space B8 FS5 (Sqm)	Zone	Total
	215	0
	216	0
	217	0
	218	0
	219	0
	220	0
	221	0
	222	1798
	223	0
	224	0
	225	0
	226	0
	227	0
	228	0
	229	0
	230	0
	231	0
	232	0
	233	0
	234	0
	235	0
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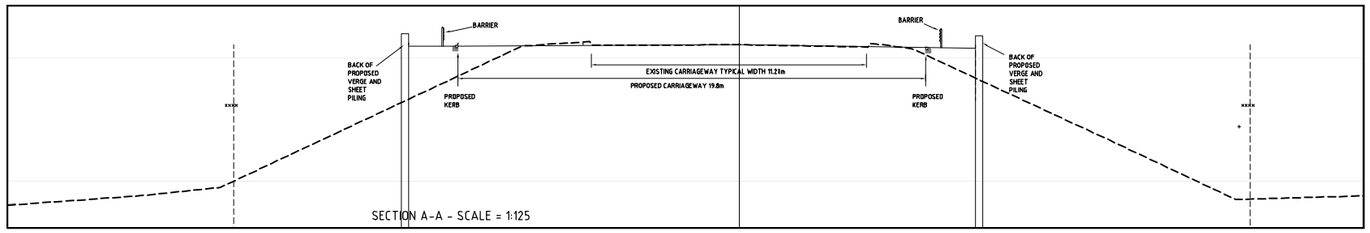
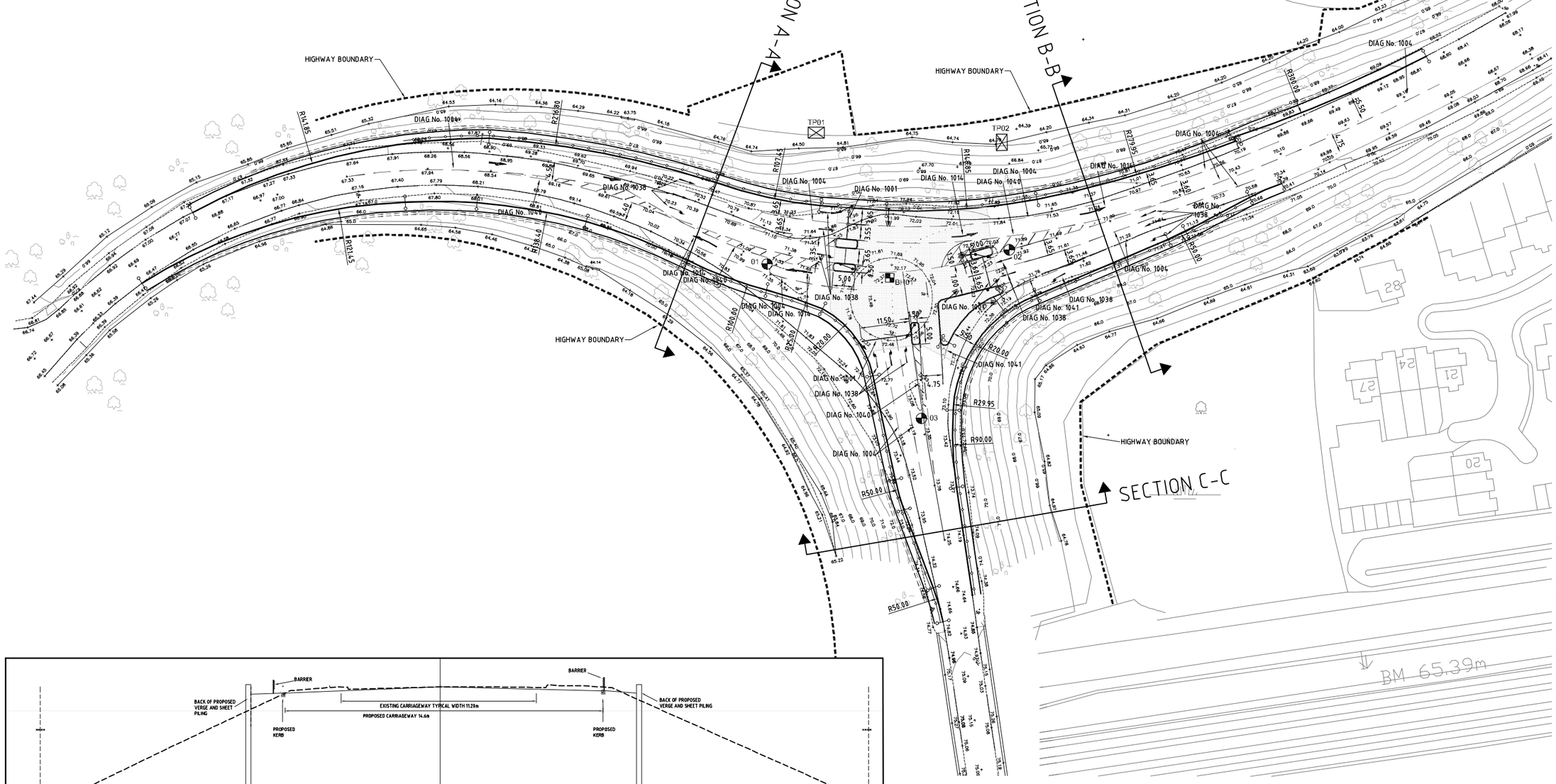
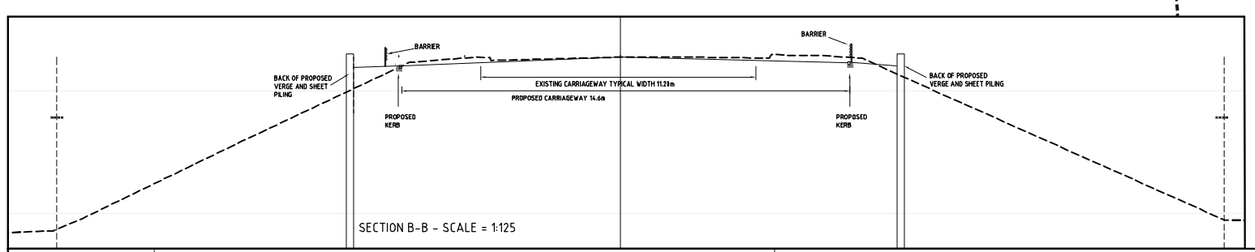
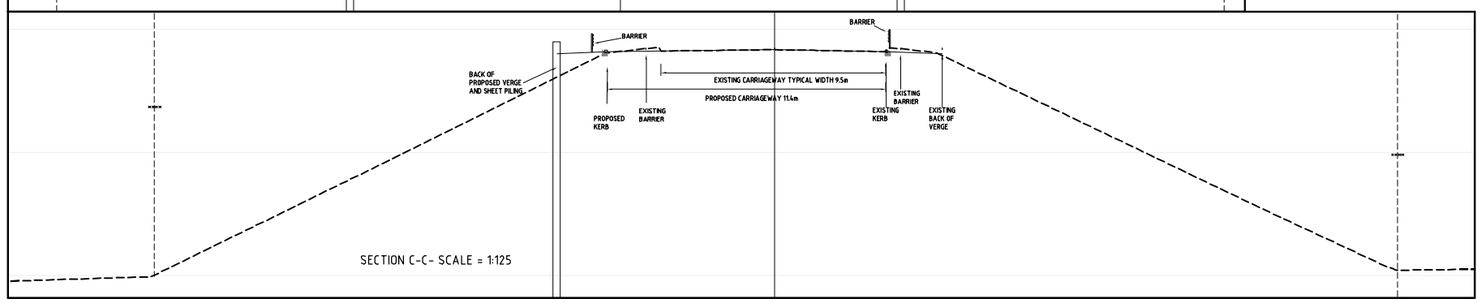
	240	0
	241	0
	242	0
	243	0
	244	0
	245	0
	246	0
	247	0
	248	0
	249	0
	250	0
	251	0
	252	1293
	253	0
	254	0
	255	0
	256	0
	257	0
	258	0
	259	0
	260	0
	261	0
	262	0
	263	0
	264	0
	265	0
	266	0
	267	0
	268	0
	269	0
	270	0
	271	76
	272	0
	273	0
	274	0
	275	0
	276	0
	277	1858
	278	845
	279	200
	280	0
	281	7220
	282	0
	283	0
	284	0
	852	0
	853	1770
		15060

Appendix D – Rushmoor Do Minimum Highway Schemes









GENERAL DESIGN ASSUMPTIONS - DMRB TD50/04

1. A327 SUMMIT AVENUE LINK 85TH PERCENTILE 60KPH - 30MPH
2. DESIRABLE MINIMUM STOPPING SIGHT DISTANCE 90m
3. ONE STEP BELOW DESIRABLE MINIMUM STOPPING SIGHT DISTANCE 70m

NOTES:

1. ALL DIMENSIONS ARE IN METERS, LEVELS ARE IN METRES A.O.D. (ABOVE ORDNANCE DATUM).

2. THE EXISTING TREES ARE SHOWN WHERE CLOSEST TO THE EXISTING ROAD. THE PRESENCE OF FURTHER TREES BEYOND THOSE SHOWN SHALL BE ANTICIPATED.

3. NO ACCOUNT HAS BEEN MADE FOR EARTHWORKS SLOPES AT THIS STAGE IN DESIGN.

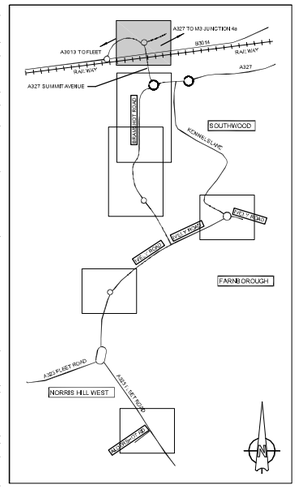
4. ALL HIGHWAY DESIGN INFORMATATION IS SUBJECT TO LOCAL AUTHORITY APPROVAL.

5. FOR SWEPT PATHS SEE DRG. No. 9556407-929

KEY

- HIGHWAY BOUNDARY
- TP(No.) TRIAL PIT
- (No.) ROAD CORE
- EXTENT OF SHEET PILING
- INTERVISIBILITY ZONE

SHEET KEYPLAN - SCALE = 1:20,000



Rev.	Amendment	Dm	Chkd	Date
P3	Sheet Piling Information	JB	SH	10/01/07
P2	Draft Preliminary Issue	JB	SH	11/12/06
P1	Drawn	AJB	SH	27/02/06

Drg Status: Preliminary

AKSWard
CONSTRUCTION CONSULTANTS
Jonsen House
43 Commercial Road
Poole
BH14 0HU
Tel: 01202 722 244
Fax: 01202 723 398
e-mail: poole@aksward.com
web: www.aksward.com

- London
- Oxford
- Winchester
- Poole
- Sherborne

Client/Architect: **Astral Developments Ltd**
MSA Architects

Project: **Section 278**
Highway Improvements
Hartland Park, Farnborough

Title: **General Arrangement**
A327 Summit Avenue Link
Signalised Junction

Scales	A1	1:500	A3	1:1000
Reviewed Scheme	SH		Date	11/12/06
Reviewed Final			Date	

Project No.	Drg No.	Rev.
P556407	901	P3

Enterprise M3 Local Transport Body
Application Form

LTA/ Proposer:	Hampshire County Council	**Scheme name & [District/ Borough]:**	AUE Access Works Rushmoor Borough
Contact details:	Tim Wall Tim.wall@hants.gov.uk	**Partners [in joint submissions]:**	Grainger Plc
WHAT & WHERE – Outline description & maps			

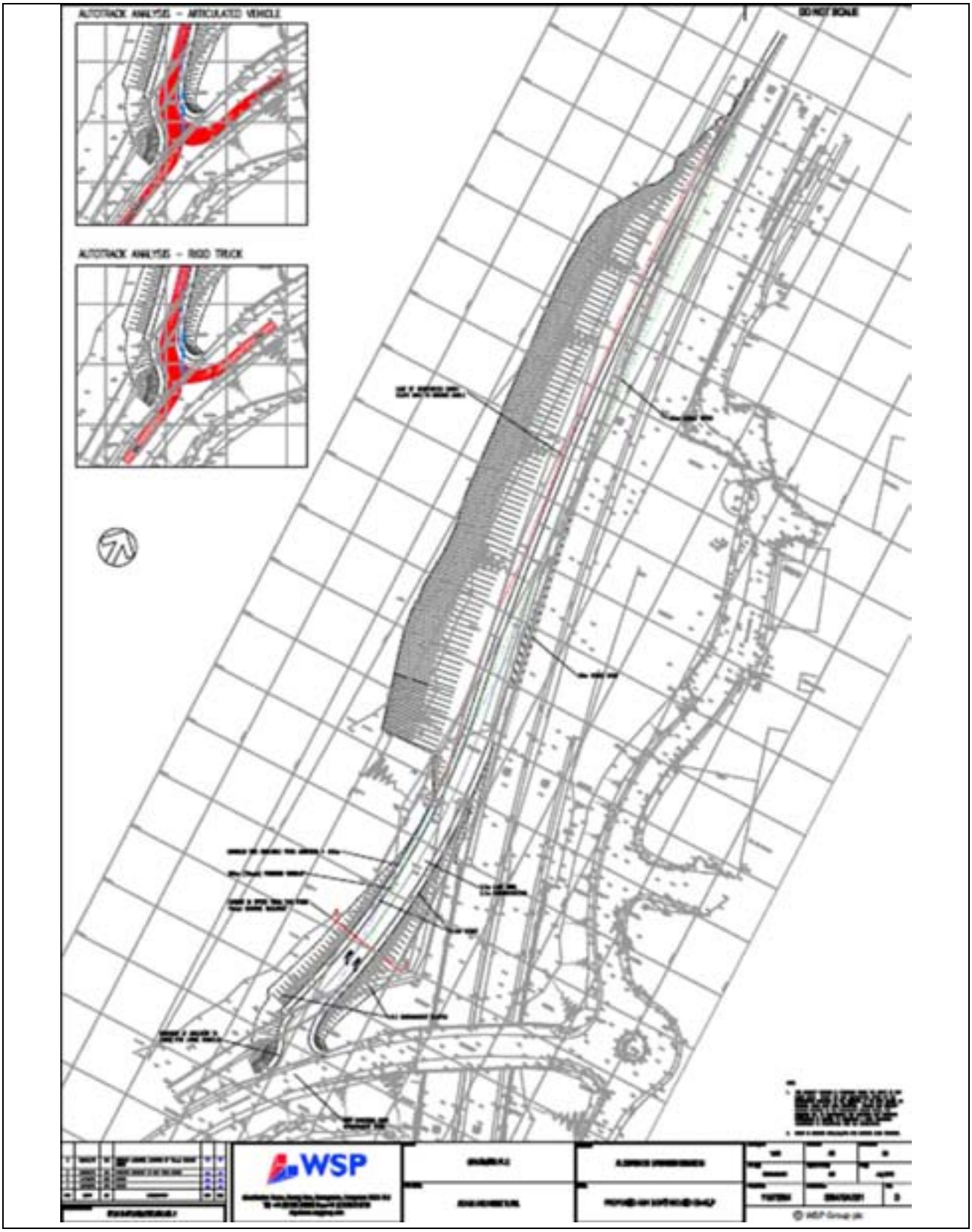
- The Aldershot Urban Extension (Wellesley) will deliver major regeneration and housing growth over the next 20 years in Rushmoor. In order to enable successful development, investment in transport infrastructure is needed at an early stage of the development process.

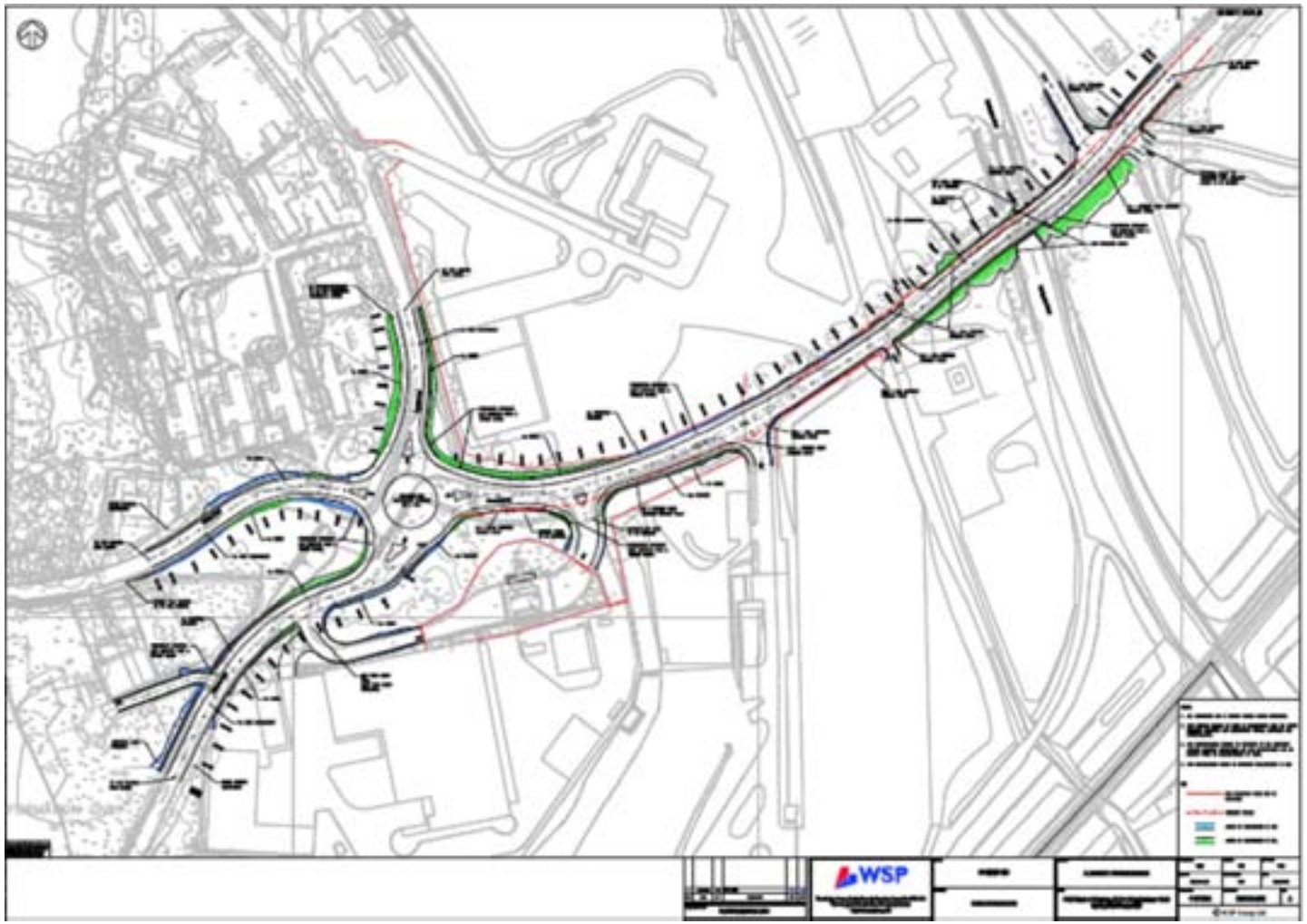
- The scheme of works will deliver direct strategic highway access from the site to the A331 Blackwater Valley Road, through the delivery of a new northbound on-slip junction and associated corridor improvements to Government Road and Ordnance Road. This will provide a route for new and existing traffic to access the Strategic Road Network (the M3) and will provide additional capacity to mitigate the development, whilst at the same time reducing traffic impacts and congestion on other local primary roads, helping to support business retention and growth and supporting the local economy. The works comprise;

  - Construction of a new north-bound on-slip to the A331 Blackwater Valley Road
  - Improvement to Government Road, to include construction of a new bridge over the Basingstoke canal
  - Construction of a new roundabout at Government Road / Alison's Road / Gallwey Road junction
  - Provision of improved pedestrian and cycle facilities along Government Road and Ordnance Road
  - Construction of a mini-roundabout at the Ordnance Road / Louis Margaret Road junction

Maps


HMOOR DISTRICT
North Camp
Montgomery Lines
ALDERSHOT
Barracks
Government House
Danger Hill
Queen's Parade
(Recreation Ground)
Wharf Bridge
Canal
Sports Ground
TENNIS CENTRE
SKI CENTRE
Aldershot Services Grounds
Duke's Park
Sewage Works
Gold Farm
Round Hill
Pesked Hill
Cemetery
North Town
A323
A331
A3011
87


AUTOTRACK ANALYSIS – ARTICULATED VEHICLE
AUTOTRACK ANALYSIS – RIGID TRUCK
DO NOT SCALE
WSP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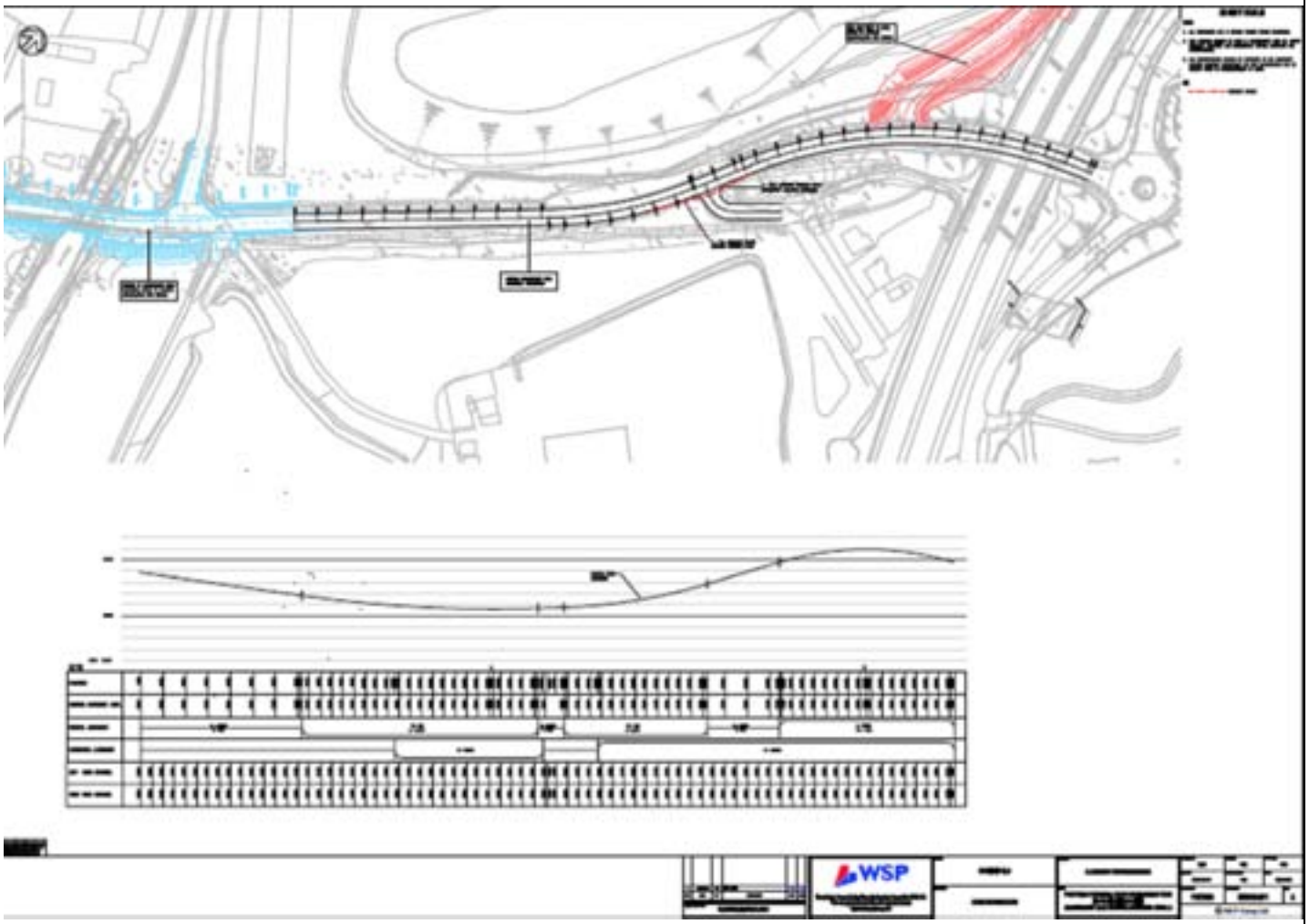


HOW MUCH & WHEN – Estimated construction costs and construction timetable			
Est. Costs:	£6m (£1.5m Grant / £4.5m Loan)	**Start construction by:**	2015
Funding expectations:	Funding of scheme is expected from the following sources: • Grant from Enterprise M3 LTB - £1.5m • Future re-payment funding from Grainger PLC - £4.5m The works are a requirement of the Aldershot Urban Extension development (Wellesley) and represent the critical element of the transport strategy, without which the development would not be considered acceptable. The developer, Grainger PLC, have undertaken to deliver the works in order to mitigate the impact of the development. Owing to other infrastructure requirements on the development, particularly the need to deliver education facilities and SANG facilities at an early stage in the development, the development financing does not allow delivery of these critical transport works until later in the development. Funding is sought from the LTB to forward finance the works which will allow them to be delivered at an earlier point in the programme. Grainger would be willing to repay a significant majority of the funding provided, and to enter detailed discussion with the LTB about how that process may be delivered.		

WHY IT SHOULD BE FUNDED

Summary of the Key Scheme Benefits

- The scheme facilitates major residential and employment development in the borough and promotes growth, both directly through the delivery of significant new employment opportunities and indirectly by enhancing the labour pool and significantly improving transport conditions on the local road network. This addresses directly a barrier to growth.
- The enhanced road conditions will contribute to the retention of existing businesses in the area and promote further inward investment, linking directly to the Enterprise M3 LEP's Strategy for Growth. Reducing congestion and improving journey time reliability contributes to the conditions necessary to ensure Rushmoor remains an attractive location for business location.
- The scheme also plays a major role in contributing to regeneration of Aldershot, providing improvement to areas of deprivation. Strategic transport improvements will re-define the movement profile in the area, reducing traffic on local roads and freeing up capacity on the main arterial roads that serve Aldershot.
- The works also seek to address accessibility and severance issues, by delivering physical improvements to the built transport network and improving conditions on principal roads.

Outline business case of key criteria (based on DfT's EAST approach) ***[maximum score = 5 per criteria]***	
Expected economic benefits [*transport and scheme related*]: To consider: • BCR (if known) • Expected impact on journey times and reliability • Expected impact on cost of travel • Expected impact on accidents • Valuing public realm	**[Scheme Score = 5]** • Initial appraisal of the scheme costs and benefits identifies that the scheme will deliver 'High' Value for Money, with a BCR expected to exceed 2:1. • Delivery of works at an early stage in development will deliver short, medium and longer term improvements to journey time and journey time reliability on the main principal roads in Rushmoor, particularly the A3011 Lynchford Road, A323 Ash Road and A325 Farnborough Road, by providing a dedicated vehicular access to the A331 from the site and the southern part of Aldershot. • The works will have a positive impact on travel costs by reducing travel times and congestion impacts of the development traffic but also the wider community, including the important business communities in Aldershot and Farnborough. • Early delivery of the works will reduce total traffic volumes on local roads including those travelling through sensitive residential areas, including North Town. This will reduce the likelihood and severity of potential accidents. Early delivery of these improvements will also offer a suitable route for use by Construction traffic (including HGV's) associated with the site, but also wider HGV's associated with the businesses at Hollybush Lane, improving road safety. • The early delivery of the works will improve public realm by reducing local traffic levels in local communities. The improvements would also directly improve the pedestrian environment on two key corridors.

Expected economic benefits *[economic growth]*: To consider: • Support for retention of jobs • Contribution to GVA • Encouragement of new businesses • Expected jobs created • Expected housing delivered	**[Scheme Score = 5]** • This scheme is part of the critical infrastructure that is essential to deliver the housing and jobs on the AUE site. The AUE proposals will deliver 3,850 dwellings and nearly 850 long-term jobs, and are the cornerstone of the RBC Local Plan for growth in the Borough over the next 15 - 20 years. The AUE development itself proposes some 20,000 sqm of employment space to comprise a local centre, retail development, commercial development including offices, industrial land and other employment generating uses including a new HWRC, two new primary schools and the re-development of the Cambridge Military Hospital. These works will ensure that this development comes forward in a satisfactory manner. • In delivering some 832 direct jobs on the site, the AUE is contributing to the local economy. The GVA of the development itself is £21,500,000, or £25,800 per job. Whilst this relates to the wider development site, the works subject to this bid are key to delivering the development and in accelerating growth. • In addition to the direct jobs delivered by the proposals, the increased population delivered, as well as the employment space provided on the site, will deliver a number of indirect jobs (estimated at 1,300 jobs). The development will be constructed over the next 20 years, and will generate regular and ongoing construction jobs. Whilst the scheme of highway works is not directly responsible for the generation of this employment, it is a critical part of the infrastructure necessary to deliver the conditions to support the growth. • The scheme itself would also involve significant construction, and so generate its own construction led employment, estimated at 75 temporary FTE jobs. • The early delivery of the works will directly support the retention of jobs in the area, particularly on Farnborough Business Park and Aerospace Boulevard (which are home to national companies including BAE Systems and Fleur) through the improvement of transport conditions and the reduction in local congestion, particularly on the

	A3011 Lynchford Road. The development of AUE itself will also support local job retention by enhancing the labour pool in the local area, supporting the regeneration of Aldershot. • The early delivery of the access works would contribute towards removing local transport barriers to growth, and encourage new businesses to invest in the local area, increasing jobs on Farnborough Business Park, Aerospace Boulevard, and at Queensgate, as well as supporting employment within Aldershot Town Centre.
Social Distributional Impact: To consider: • Expected regeneration & deprivation impact • Expected impact on severance, physical activity, accessibility	**[Scheme Score = 5]** • The works will directly contribute to the regeneration of Aldershot. The AUE development is a regeneration-led scheme, which is focussed on delivering complimentary uses to the wider Aldershot Town, and in strengthening the town centre vitality and viability. The early delivery of the transport works, in addition to the improved pedestrian and cycle links to be delivered through the Activation Aldershot successful Growing Enterprise Fund Bid, will strengthen further the links between the site and the town, and will improve movement in the town, reducing existing transport barriers. This also supports the County Council's work as part of the Hampshire Sustainable Travel Towns projects. • These works will have a major positive impact on the district and will help to address deprivation issues. Some 14 Rushmoor Wards feature in the highest 20% of deprivation in Hampshire, when considered against the Index of Multiple Deprivation, including particularly the North Town ward in the south of Aldershot (6th highest in Hampshire). The early deliver of the works will help to contribute towards the improvement of the area, and the reduction in deprivation by reducing traffic flows from North Town, particularly those HGVs which use North lane, leading to an environmental improvement of the area, reducing severance, and improving air quality. This would help to support the existing regeneration that is taking place in the area.

	• The early delivery of the works will improve local accessibility on Ordnance Road, Government Road and Alison's Road, through provision of new and improved facilities, including designated road crossings. The works will also indirectly improve severance and accessibility issues by reducing base traffic flows on a number of local roads, including North Lane, A3011 Lynchford Road and A323 Ash Road. • The physical delivery of improved non-motorised facilities will seek to encourage walking and cycling, improving levels of physical activity, so improving public health outputs. This would be supported by the wider package of mitigation that Grainger PLC will deliver, including particularly the Travel Plan for the new development which will deliver a package of measures designed to encourage the use of active travel modes.
Environmental impact: To consider: • Expected impact on carbon emissions • Expected impact on air quality • Expected impact on noise/natural and urban environment	**[Scheme Score = 4]** • The wider development will generate additional traffic, which will result in increased carbon emissions. However, these works specifically seek to reduce wider congestion which will result in a lessening of congestion effects and resultant carbon emissions on a number of local roads, particularly A3011 Lynchford Road and A323 Ash Road. The works also seek to draw traffic away from residential areas, providing potential benefits to those communities. • Air Quality impacts have not been specifically assessed but the works are likely to improve air quality by providing a direct route for traffic from the development and the wider Aldershot area to access the Strategic Road Network. This will reduce traffic levels on other local roads that travel through sensitive receptors, including North Lane, improving air quality. • Noise impacts not assessed but likely to be positive as a result of reducing traffic through local residential areas. Noise assessment would be considered during the detailed design phase.

	• The works are likely to have a neutral impact on the natural and urban environment. The scheme will result in a different pattern of traffic levels, and in some areas, particularly Ordnance Road, will result in a different urban environment. Other areas will benefit from reduced traffic flows. The works do not require land from sensitive natural environments and do not impact on any local or national designation areas.
Scheme feasibility and deliverability: To consider: • State of scheme – feasibility detailed design • Scheme within the public highway • If land is required, is this secured • Public acceptability of scheme [if known] • Risks to deliverability [if known]	**[Scheme Score = 5]** • Preliminary design has been undertaken for the scheme. This has been considered by Hampshire County Council as the local highway authority, and the works are considered to be feasible and deliverable. • The land necessary to carry out the works is contained to either land controlled by the project partners (Granger / DIO) or public highway. No land acquisition is required to deliver the works outlined. Grainger PLC are seeking to acquire further land on Ordnance Road to improve the quality of the scheme in that area and that is subject to ongoing discussions. This does not however prevent the scheme progressing. • The works are a key component of the Aldershot Urban Extension development proposals which have been subject to extensive consultation, through the formation of the SPD and Core Strategy policy documents until the current application. Whilst there are some concerns about the traffic impact of the development (as is the case with any large development), there is general support for the transport strategy outlined, including the works subject to this bid. There is strong local support, including political support, for these works to be delivered at an early stage of the development rather than the later phases. The works are also identified in the Hampshire County Council Rushmoor Transport Statement, which was subject to public consultation in 2012.

	• The main risk to the deliverability of the scheme is the need for planning consent. However, this risk is minimised through the adoption by RBC of a Core Strategy which relies upon the delivery of AUE for its housing supply, the adoption of a site specific SPD for the AUE and significant local engagement. A planning application has been submitted for the site and is due to be determined by Rushmoor Borough Council in July 2013. The works are a critical element of those proposals.
Links to policy support To consider: • Local Transport Plan • District/Borough Local Plans • LEP Strategy for Growth • Other relevant policies	**[Scheme Score = 5]** • The AUE development is identified in the Hampshire County Council Local Transport Plan which identifies supporting the regeneration of Aldershot, including the AUE, as a key challenge. The LTP identifies the local constraints, particularly the congestion on key local routes, and supports the delivery of targeted measures to address capacity issues in the area, and measures to mitigate the impact of development. • The Rushmoor District Statement, which sits beneath the LTP, provides further detail on the challenges facing the area, particularly those resulting from growth generated by the AUE. This identifies the additional travel demands that will be generated by the AUE, and identifies that these impacts need to be managed in a sustainable manner. The document identifies as its first objective the need to develop targeted measures to address capacity issues, particularly on the A3011 corridor, and the third objective of the Statement is to enable improved access to the AUE through improvements to the A3011, A323 and A331. The works subject to this funding bid seek to directly achieve these objectives and are one of the strategic schemes lists in the document's action plan. • The County Council's East of Aldershot Study considered different strategies to improve access to Aldershot and the AUE, and identified the works that are now being progressed by Grainger PLC. As a result they are fully compliant with this study.

	• The Rushmoor Core Strategy provides the key development plan document, and places at its heart the AUE as the key element of growth in the Borough over the next 20 years. Providing transport infrastructure improvements to support the AUE is critical to the Core Strategy Policies (particularly SP1). The Core Strategy is supported by an SPD for the AUE development itself, which includes guidance on how the development will be brought forward. Managing traffic impacts the development is an important element of the guidance provided and the scheme of works identifies directly supports the proposals in the Core Strategy and is complaint with the SPD. • The works also link to the Aldershot Town Access Plan and the Aldershot Town SPD, helping to deliver the conditions necessary to support the town's regeneration. • The works support the Enterprise M3 LEP's 'Strategy for Growth' through increasing GVA, enhancing employment directly and indirectly and through providing conditions that will help to attract new businesses to the area.
Local Indicators: To consider: • Any key aspects of these indicators	The bullet points below summarise those Local Indicators where Rushmoor Borough was ranked top, in second place and in third place respectively out of the six districts in the Hampshire part of the EM3 LEP. 1st Place Rankings in: ▪ % of economically active population claiming Job Seekers Allowance (April 2013) ▪ % of people stating Bus, Rail or Underground/ Tram as main mode of travel to work (2011 Census) ▪ Planned amount of new commercial floorspace per year* (average number of additional square metres of new floorspace planned per year over whole lifespan of LDF) ▪ Index of Multiple Deprivation average score for District (English Indices of Deprivation 2010)

	2nd Place Rankings in: ▪ Business survival rates (1 year) (2011) ▪ % of people stating Walking and Cycling as main mode of travel to work (2011 Census) ▪ Total number of Rail Station Entries/ Exits at all stations (2011/12 ORR data) ▪ Congestion (Number of links [all roads] within districts ranked in top 50 most congested in Hampshire 2010-11 for AM and PM peaks 3rd Place Rankings in: ▪ Total number of people not in employment, education or training (NEETs) count; aged 16-18 (July 2012) ▪ Planned new housing units per year (average number of new housing units per year over whole lifespan of LDF)
SCORE SUMMARY	
Primary: Key criteria score [max 25]	23
The 'key criteria score' is the **Primary** score and is to be used in relative ranking of schemes for funding considerations.	
Secondary: Policy linkage score [max 5]	5
The 'policy linkage score' is **Secondary** and is to be used in deciding between schemes with equivalent 'key criteria score'.	

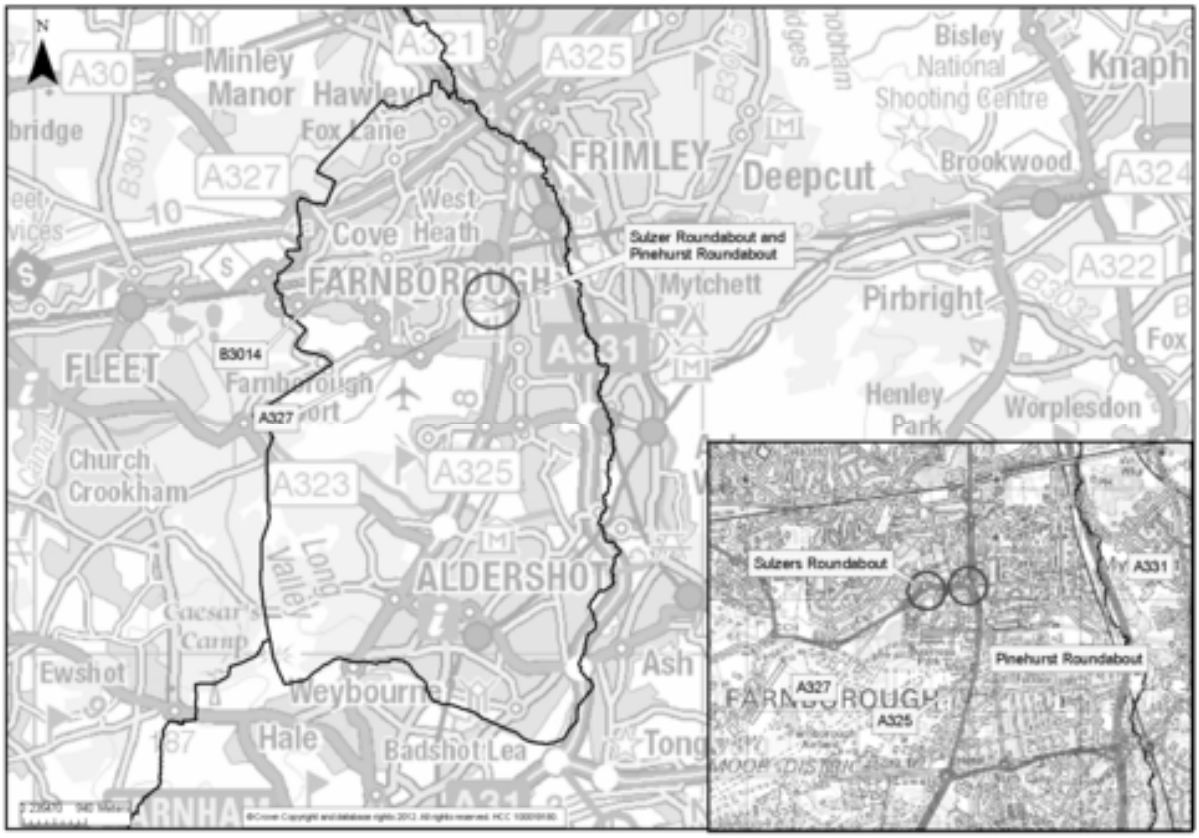
Enterprise M3 Local Transport Body
Proposed template/ Application Form

LTA/ Proposer:	Hampshire County Council	**Scheme name & [District/ Borough]:**	A325/A327Pinehurst and A327 Sulzers roundabouts, Farnborough
Contact details:	James Gagg James.Gagg@hants.gov.uk	**Partners [in joint submissions]:**	None

WHAT & WHERE – Outline description & maps

- The scheme consists of improvements to two major roundabouts 300 metres apart that provide access to Farnborough town centre and key employment areas nearby.
- Pinehurst Roundabout consists of four arms and forms the intersection between the A325 running north to the M3 junction 4 and to south; and the A327 from the west, which provides access to the M3 junction 4a. In addition to these A roads, the Kingsmead arm gives access to Farnborough town centre. The A325 arm, called Meudon Avenue, is of dual carriageway standard and connects Pinehurst to Sulzers roundabout.
- Sulzers Roundabout is on the A327 and has 5 arms giving access to Farnborough Business Park (IQ), Solartron Road retail park (including Europe's second largest B&Q store) a local supermarket and beyond to the town centre and the A325.
- Area wide modelling work, undertaken as part of a series of local Transport Assessments in the area, has predicted significant peak time congestion at the A325/A327 Pinehurst roundabout as a result of the planned and permitted development. Committed development from Farnborough Business Park, the redeveloped town centre, the Cinema and several housing sites will add significantly to the existing traffic flows at the roundabout and other junctions in the area including Sulzers roundabout.
- In addition to these flow increases, there is further potential impact with flows generated by the Aldershot Urban Extension. The increased queuing and delay resulting from these flows will have a detrimental impact on highway traffic, the environment and the economic vitality of Farnborough. Improvement to the Pinehurst and Sulzers roundabouts are therefore considered important to accommodate future traffic flows and to ensure that the local network continues to operate efficiently and safely.
- Enhancements to the layout of the two junctions, to include:
    - Pinehurst roundabout - signalisation of all arms and carriageway widening to create additional lanes on the western side of the roundabout and on the A327 approach arm to the roundabout.
    - Sulzers- feasibility work has started on a scheme to signalise the roundabout.

Plan 1 Location Plan



HOW MUCH & WHEN – Estimated construction costs and construction timetable			
Est. Costs:	£ 3 million.	**Start construction by:**	Financial year 2017/18
Funding expectations:	Funding of scheme is expected from the following sources: • Full grant from Enterprise M3 LTB;		

WHY IT SHOULD BE FUNDED

Summary of the Key Scheme Benefits

There are a number of key employment sites near to the Pinehurst and Sulzers roundabouts, as well as an area of major employment growth at the Farnborough Business Park, which is immediately to the south.

Sulzers roundabout provides one of the main accesses to Farnborough Business Park from the north and the west . This Business Park includes new development comprising 31000m^2 of B1 and 13000m^2 of A1 uses and it is identified in the Rushmoor Plan Core Strategy as one of the key employment sites in the area. Other nearby developments about 1 km. to the south include Queens Gate (4100m^2 of B1 – B8) and the Civil Enclave (25,100m^2 of B1) at the Aerospace Park.

All these developments are likely to be in place by 2015 and further development is planned for the area. The Aldershot Urban Extension (3850 homes and 2.4 hectares of employment land), will begin to impact on the roundabout by 2020.

This scheme will help the strategic highway network accommodate traffic from these new developments which will in turn help the achievement of the 3 LEP headline targets: by increasing the number of businesses, the number of people employed and by helping GVA to increase.

Outline business case of key criteria (based on DfT's EAST approach)
[maximum score = 5 per criteria]

Expected economic benefits [*transport and scheme related*]: **To consider:** • **BCR (if known)** • **Expected impact on journey times and reliability** • **Expected impact on cost of travel** • **Expected impact on accidents**	**[Scheme Score = 5]** • Initial assessment of the scheme costs and benefits identifies that the scheme is expected to deliver 'High' Value for Money, with a Benefit : Cost ratio (BCR) exceeding 2:1. • For Pinehurst roundabout in the AM peak the scheme would lead to large reductions in delay on the most heavily delayed arms in 2026. In the PM peak in 2026 the long queues on the A327 approach are much reduced. • The scheme would generate cost savings for private

• **Valuing public realm**	and business travel.
	• It is expected that accidents at the two roundabouts proposed for signalisation could be significantly reduced based on an analysis of incidents over the last 5 years:
	  • Pinehurst roundabout had 5 personal injury accidents (PIAs) and could benefit from a reduction of 1 PIA or 20%.
	  • Sulzers roundabout had 6 PIAs and could benefit from a reduction 3 PIAs or 50%.
	• The delivery of this scheme will improve the public realm by reducing the incentive for traffic to seek short cuts on less suitable roads through local communities to avoid delays on the A325 and A327. Facilities for pedestrians and cyclists on the western side of Sulzers roundabout could also be provided as part of the scheme**.**

Expected economic benefits *[economic growth]*: **To consider:** • **Support for retention of jobs** • **Contribution to GVA** • **Encouragement of new businesses** • **Expected jobs created** • **Expected housing delivered**	**[Scheme Score = 5]** • The scheme would support retention of 13,200 jobs in the area, including 2,300 in the professional, scientific and technical section and 1000 in the manufacturing sector, calculated to contribute £631.4 million GVA to the economy (2011 figures) • It is estimated that the scheme would help enable creation of up to 7,576 full time equivalent jobs (excluding temporary construction jobs), 4,845 of which would be net additional to the economy (including 1,202 indirect jobs), with over half these in the financial, professional and administrative sectors. It is calculated that this could contribute £318.8 million GVA to the economy (£205.4 million in net additional contribution, 2011 values) • The main residential development planned near to the roundabouts is the Aldershot Urban Extension, with an estimated 3,850 homes proposed . This roundabout improvement will significantly improve journey times for residents, and others, and will impact on the attractiveness of the location for households (both home buyers and those renting).
Social Distributional Impact: **To consider:** • **Expected regeneration & deprivation impact** • **Expected impact on**	• **[Scheme Score = 4]** • There are seven Lower Super Output areas in Farnborough which are amongst the 20% most deprived in Hampshire. These areas have a total population of about 10,000 people. This scheme will

severance, physical activity, accessibility	facilitate job creation and improve access to those jobs by these local residents. • At present pedestrians and cyclists use shared underpasses around and in to the middle of the roundabouts (which are laid out as car parks) which means they can largely avoid having to use the two roundabouts themselves to reach nearby town centre facilities. However, on the western side of Sulzers roundabout there is an at grade crossing of Elles Road (A327) and the scheme will look to make provision for an uncontrolled pedestrian crossing here, including improving sightlines for pedestrians and realignment of road markings.
Environmental impact: **To consider:** • **Expected impact on carbon emissions** • **Expected impact on air quality** • **Expected impact on noise/natural and urban environment**	**[Scheme Score = 3]** • Reduced delays and queuing of traffic at the two junctions should lead to a reduction in carbon emissions from traffic. • The scheme is not currently in an Air Quality Management Area. Air quality has not been fully assessed through modelling at this time however a detailed Construction Environmental Management Plan (CEMP) would be expected to limit air quality impacts of construction traffic. Reductions in concentrations of Nitrogen Dioxide and Particulate matter could occur at these junctions as a result of reduced delays and queuing. Detailed assessment would form part of updated preliminary and detailed design processes. • Noise has not been considered in detail at this time. Noise modelling would form part of updated preliminary and detailed design processes. Local disturbance to nearby residents, if any, may require noise mitigation measures.
Scheme feasibility and deliverability: **To consider:** • **State of scheme – feasibility detailed design** • **Scheme within the public highway** • **If land is required, is this secured** • **Public acceptability of**	**[Scheme Score = 3]** • Pinehurst has feasibility level design and this has been considered by Hampshire County Council as the local highway authority, and the works are considered to be feasible and deliverable. Sulzers feasibility design is underway. • The Pinehurst roundabout improvement entails the widening of the A327 Meudon Avenue entry arm to accommodate a 10 vehicle flare, which would require a 60 metre long piece of land just outside the highway boundary, which is currently being investigated. Land

scheme [if known] • **Risks to deliverability [if known]**	requirements for Sulzers will be assessed as part of the current study. • It is envisaged that there would be public acceptance of the scheme given the current delays and queuing at these two roundabouts. These two proposals were included in the public consultation on the Rushmoor Borough Transport Statement and in its forerunner the Farnborough Town Access Plan, with general positive feedback received as part of these consultations. • Key risks are the impact on utility services, which will require further consultation and assessment during the detailed design stage, and the need to ensure effective traffic management and diversions during construction. This may require some work to take place outside normal hours.
Links to policy support **To consider:** • **Local Transport Plan** • **District/Borough Local Plans** • **LEP Strategy for Growth** • **Other relevant policies**	**[Scheme Score = 5]** • The transport strategy for the north of Hampshire as referred to in LTP provides a clear focus on mitigating the impact of worsening congestion attributed to planned growth on the strategic and local highway network. The adopted Rushmoor Borough Transport Statement (Sep 2012) includes Pinehurst and Sulzers roundabouts as Strategic Transport Improvements. • Rushmoor Borough Council's Core Strategy which was adopted in October 2011 identifies capacity improvements on several junctions on the A325 Farnborough Road, including Pinehurst, and the A327 link to the M3 as strategic priorities. • This scheme will support the Enterprise M3 LEP's 'Strategy for Growth' through increasing Gross Value Added (GVA), enhancing employment directly and indirectly and through providing conditions that will help to attract new businesses to the area.
Local Indicators: **To consider:** • **Any key aspects of these indicators**	The following local indicators are of significance for Rushmoor Borough: The bullet points below summarise those Local Indicators where Rushmoor Borough was ranked top, in second place and in third place respectively out of the six districts in the Hampshire part of the EM3 LEP.

	1st Place Rankings in: ▪ % of economically active population claiming Job Seekers Allowance (April 2013) ▪ % of people stating Bus, Rail or Underground/ Tram as main mode of travel to work (2011 Census) ▪ Planned amount of new commercial floorspace per year* (average number of additional square metres of new floorspace planned per year over whole lifespan of LDF) ▪ Index of Multiple Deprivation average score for District (English Indices of Deprivation 2010) 2nd Place Rankings in: ▪ Business survival rates (1 year) (2011) ▪ % of people stating Walking and Cycling as main mode of travel to work (2011 Census) ▪ Total number of Rail Station Entries/ Exits at all stations (2011/12 ORR data) ▪ Congestion (Number of links [all roads] within districts ranked in top 50 most congested in Hampshire 2010-11 for AM and PM peaks 3rd Place Rankings in: ▪ Total number of people not in employment, education or training (NEETs) count; aged 16-18 (July 2012) ▪ Planned new housing units per year (average number of new housing units per year over whole lifespan of LDF)

SCORE SUMMARY	
Primary: Key criteria score [max 25]	**20**
The 'key criteria score' is the Primary score and is to be used in relative ranking of schemes for funding considerations.	
Secondary: Policy linkage score [max 5]	**5**
The 'policy linkage score' is Secondary and is to be used in deciding between schemes with equivalent 'key criteria score'.	

3 MODEL FORECASTING, TRIP GENERATION AND TRIP DISTRIBUTION

3.1 Forecast Year

3.1.1 The model forecast year is 2031. This is consistent with work either being done or undertaken recently for other Surrey planning authorities. When modelling to 2031, it is assumed that the development proposed in the Waverley Local Plan is all built, occupied and operational by 2031.

3.2 Forecast Scenarios

3.2.1 It was not possible for Waverley Borough Council to provide planning data for all commercial developments within the borough. To make sure commercial developments were accounted for in this study from a consistent source, 2009 to 2016 and 2017 to 2031 job forecasts were obtained from TEMPRO (Trip End Model Program) version 6.2.

3.2.2 TEMPRO supplied by the Department of Transport is based on the National Trip End Model (NTEM) used to derive forecast trip ends. Consequently TEMPRO was utilised to obtain 2009 to 2016 job forecasts to be included in the do-minimum and 2017 to 2031 job forecasts to be included in all to do-something scenarios.

3.2.3 Therefore, the study contains forecasts detailing both residential and commercial (job) forecasts, sourced from Waverley Borough Council and TEMPRO.

3.2.4 To identify the traffic impacts of potential development sites, both Waverley and Guildford Borough Councils have requested two development scenarios to be assessed, along with four additional scenarios. Scenario 4 has been omitted from the analysis in the borough of Waverley as the improvements do not directly affect Waverley, but apply to Guildford borough. A summary of the do-minimum and do-something scenarios are provided below:

- 2031 do-minimum scenario 1 includes all commercial and residential development sites that have received planning permission within the borough of Waverley along with all residential planning permissions and the most likely strategic development sites identified by Guildford Borough Council in their proposed Local Plan;
- 2031 do-something scenario 2 is a continuation of 2031 do-minimum scenario 1 with the addition of the most likely strategic development sites identified by Waverley Borough Council in their proposed Local Plan;
- 2031 do-something scenario 3 is a continuation of do-something scenario 2 but with the addition of local mitigation schemes to the local road network in both Waverley and Guildford boroughs;
- 2031 do-something scenario 4 is a continuation of 2031 do-something scenario 3 with the addition of the Highways England strategic improvements to M25 junction 10, as well as between junctions 10 and 16;
- 2031 do-something scenario 5 is a continuation of scenario 2031 do-something scenario 4 but with the addition of widening the A3 to dual three lanes between the A31 and A320, together with improvements to the Tesco and Cathedral junctions; and

3.2.5 The proposed local mitigation schemes in both Waverley and Guildford, that are included in scenarios 3, 4 and 5, are set out below:

- Conversion of A281 Bramley roundabout to signals;

- Conversion of A281 Horsham Road with A248 Kings Road priority junction to a roundabout;
- Improvements to the signalised junction of Nanhurst crossroads;
- Improvements to the Shepherd & Flock roundabout;
- Improvements to Hickley's Corner;
- Improvements to Coxbridge roundabout;
- Conversion of A325 Wrecclesham Hill with B3384 Echo Barn Lane priority junction to a mini-roundabout;
- A3 with Egerton Road roundabout improvements;
- A31 Hog's Back with proposed Blackwell Farm development access road facilitated by signals;
- Proposed Blackwell Farm development spine road;
- A320 Woking Road alterations associated with SARP;
- A31 Hog's Back with A331 Blackwater Valley Road roundabout improvement to partial signals;
- A31 Hog's Back with B3000 Puttenham Hill junction improvements;
- A323 Ash level crossing replacement bridge scheme;
- Proposed Gosden Hill development access via a roundabout with southbound off and on slips to the A3;
- A3 Ockham interchange improvements;
- Old Lane converted to one-way northbound between the Wisley access and common car park;
- Effingham junction staggered priority junction converted to double mini-roundabouts; and
- A3 southbound off slip and northbound on slip at Burntcommon accompanied by traffic management through Ripley.

3.2.6 Scenario 1 acts as a reference case, i.e. is the do-minimum, for the forecast 2031 do-something scenarios 2 and 3. 2031 scenario 1 contains all development permitted by planning permission, whereas the do-something forecasts contain planning options for growth in the boroughs of Waverley and Guildford within their proposed Local Plan timescales, as well as local and strategic mitigation schemes.

3.2.7 A diagrammatic view of the scenarios is shown in **Figure 3.1.**

Appendix E – Rushmoor Local Plan Development by model zone

Residential Floor Space FS1 (HHs)	Zone	Total
	215	0
	216	0
	217	0
	218	0
	219	6
	220	0
	221	0
	222	0
	223	0
	224	0
	225	0
	226	0
	227	5
	228	0
	229	0
	230	0
	231	0
	232	10
	233	5
	234	159
	235	0
	236	10
	237	0
	238	0
	239	0
	240	0
	241	175
	242	1111
	243	0
	244	0
	245	0
	246	41
	247	0
	248	0
	249	8
	250	0
	251	16
	252	0
	253	0
	254	230
	255	0
	256	40
	257	0
	258	0
	259	0
	260	0
	261	0
	262	20
	263	385
	264	243
	265	232
	266	9
	267	0
	268	0
	269	24
	270	0
	271	31
	272	0
	273	6
	274	0
	275	0
	276	0
	277	0
	278	0
	279	0
	280	31
	281	0
	282	9
	283	0
	284	0
	852	0
	853	0
		2806

Office Floor Space B1 FS3 (Sqm)	Zone	Total
	215	0
	216	0
	217	0
	218	0
	219	0
	220	0
	221	0
	222	0
	223	0
	224	0
	225	0
	226	0
	227	0
	228	0
	229	0
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	275	0
	276	0
	277	0
	278	0
	279	0
	280	0
	281	0
	282	0
	283	0
	284	0
	852	0
	853	0
		0

Industrial Floor Space B2 FS4 (Sqm)	Zone	Total
	215	0
	216	0
	217	0
	218	0
	219	0
	220	0
	221	0
	222	0
	223	0
	224	0
	225	0
	226	0
	227	0
	228	0
	229	0
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	279	0
	280	0
	281	0
	282	0
	283	0
	284	0
	852	0
	853	0
		0

Warehousing Floor Space B8 FS5 (Sqm)	Zone	Total
	215	0
	216	0
	217	0
	218	0
	219	0
	220	0
	221	0
	222	0
	223	0
	224	0
	225	0
	226	0
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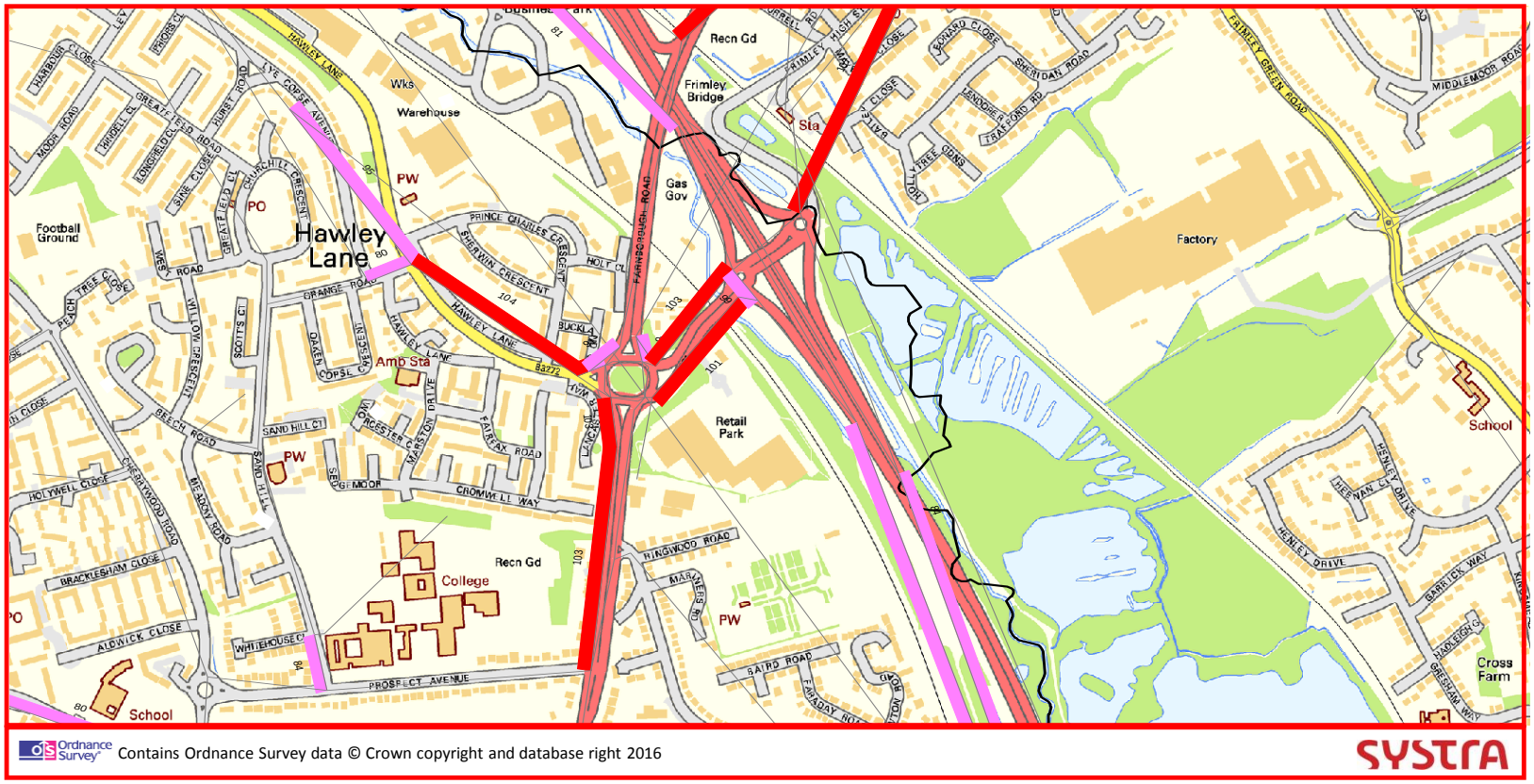
	276	0
	277	0
	278	0
	279	0
	280	0
	281	0
	282	0
	283	0
	284	0
	852	0
	853	0
		0

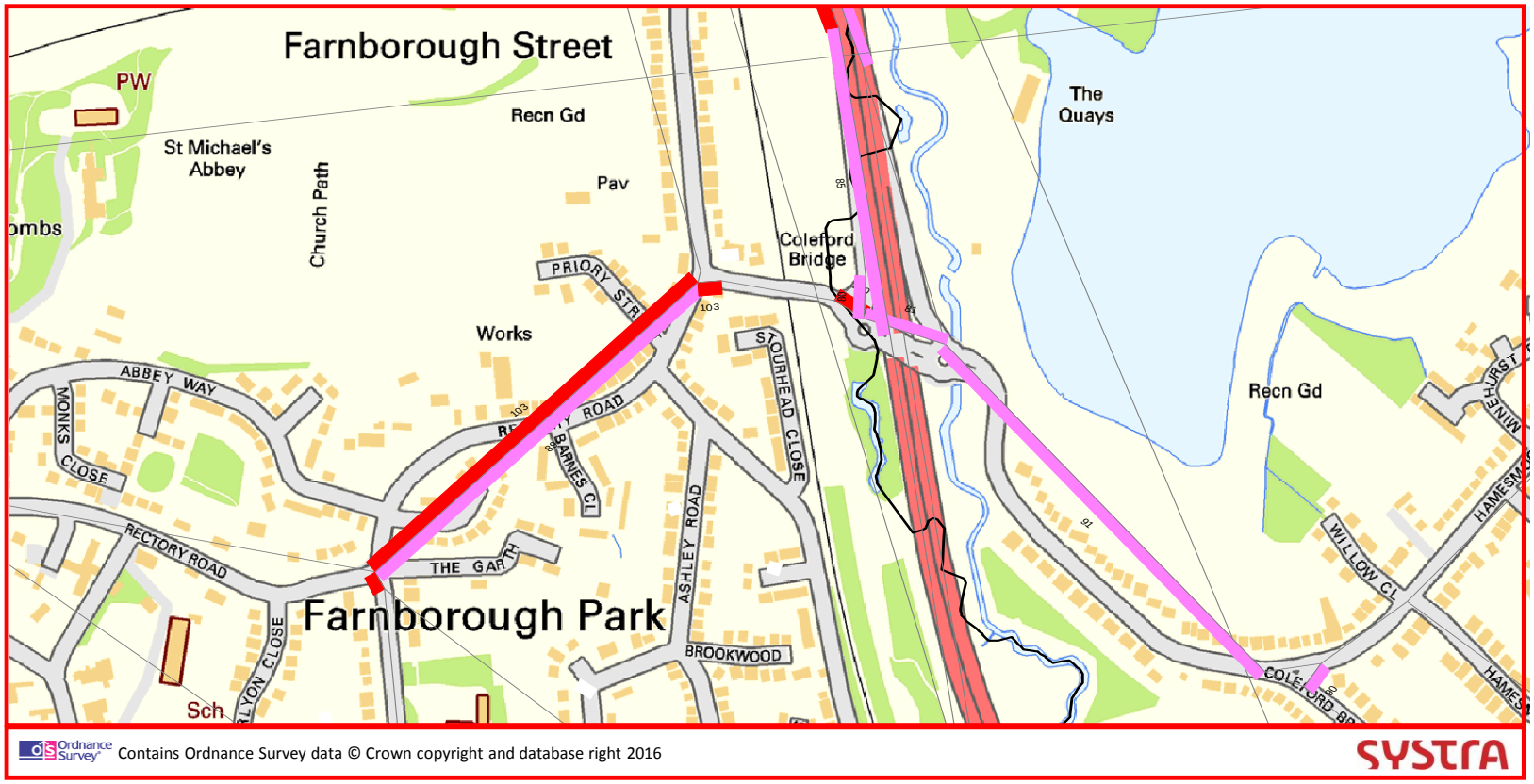
Appendix F – Additional Capacity Hotspot Plots

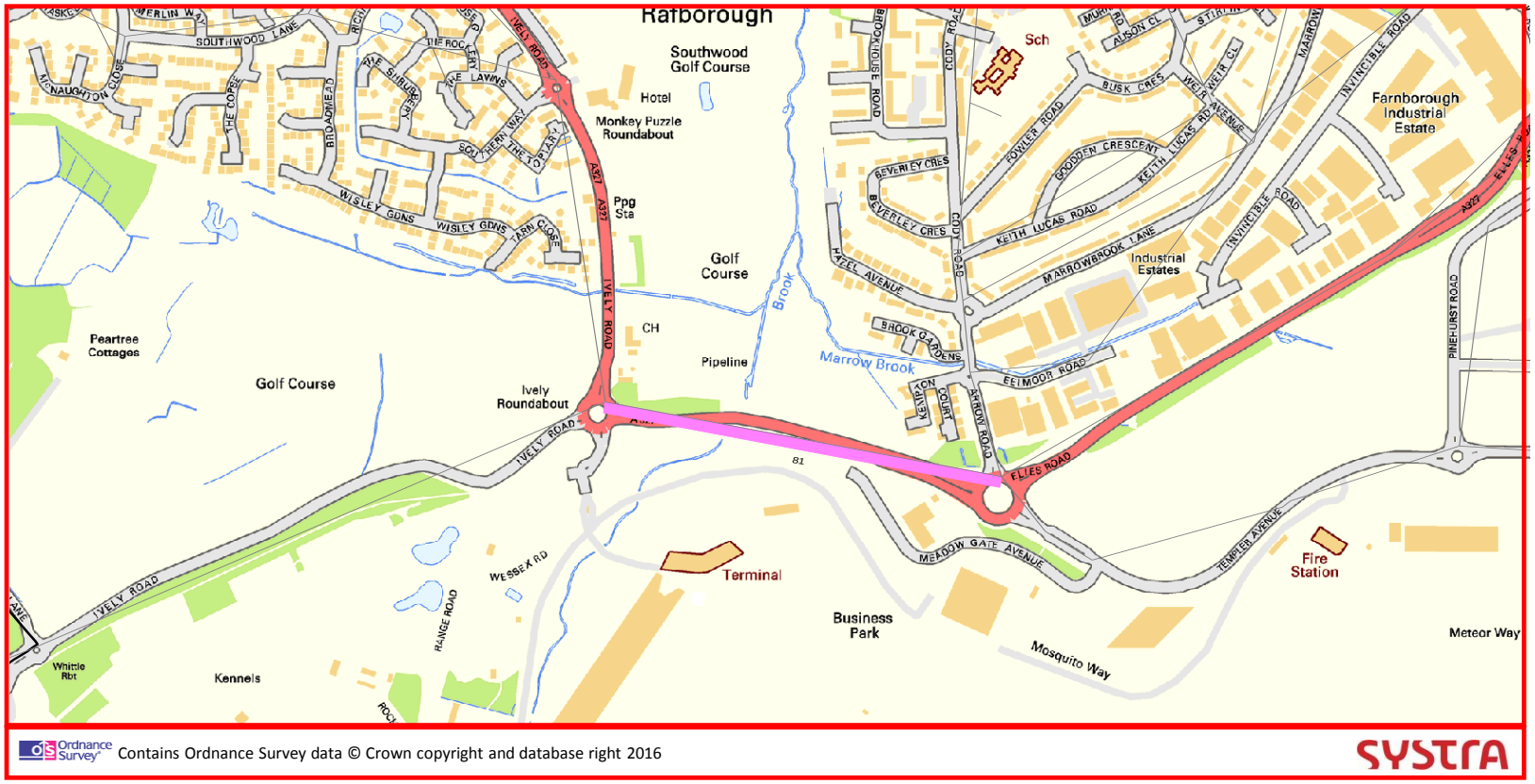
Do Minimum 2031

AM

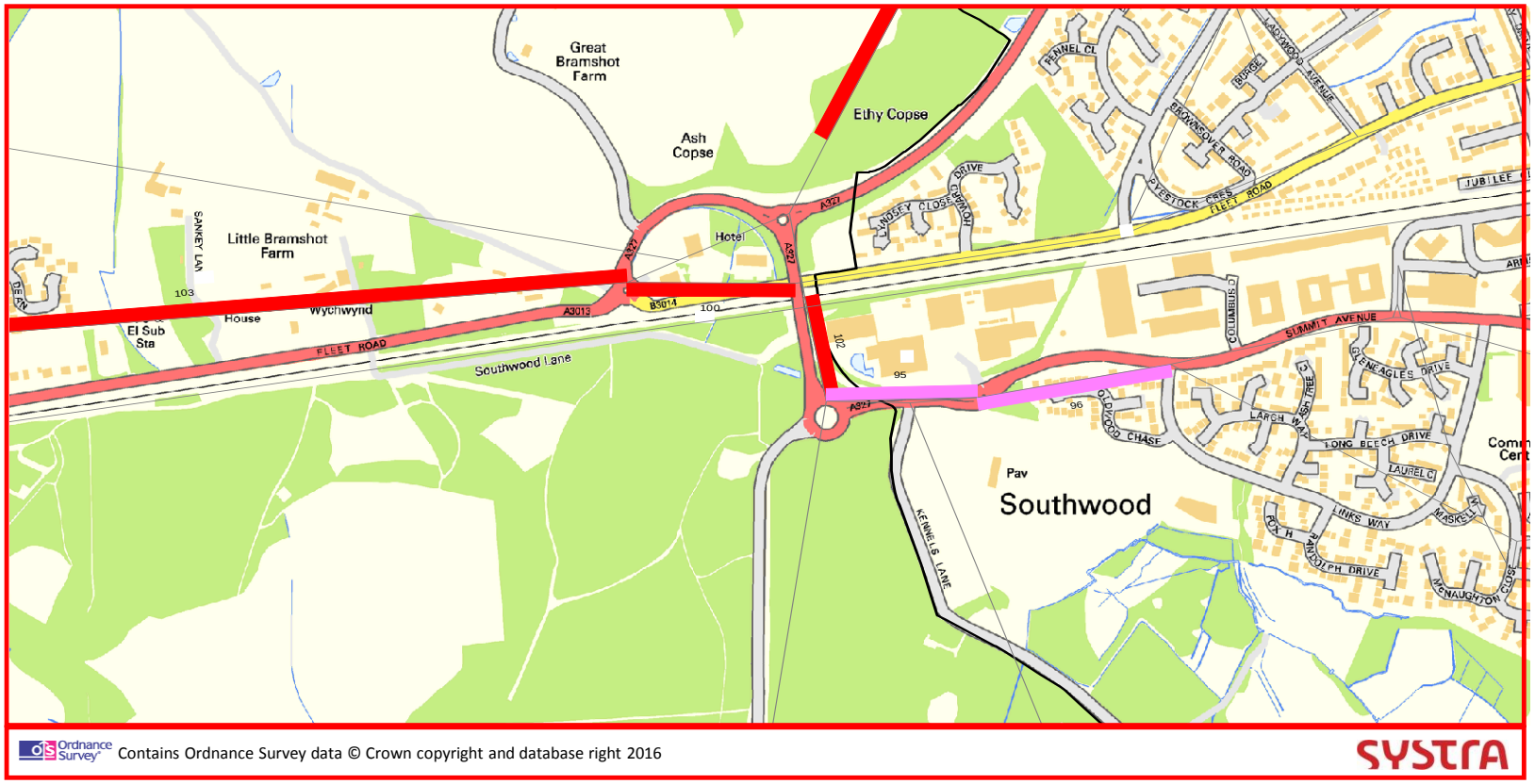


SYSTRA


Farnborough Street
PW
St Michael's Abbey
Church Path
Recn Gd
Pav
The Quays
Coleford Bridge
PRIORY STR
Works
ABBEY WAY
MONKS CLOSE
RECTORY ROAD
THE GARTH
BARNES CL
SOURHEAD CLOSE
ASHLEY ROAD
BROOKWOOD
Farnborough Park
Sch
WILLOW CL
Recn Gd
Contains Ordnance Survey data © Crown copyright and database right 2016
SYSTRA



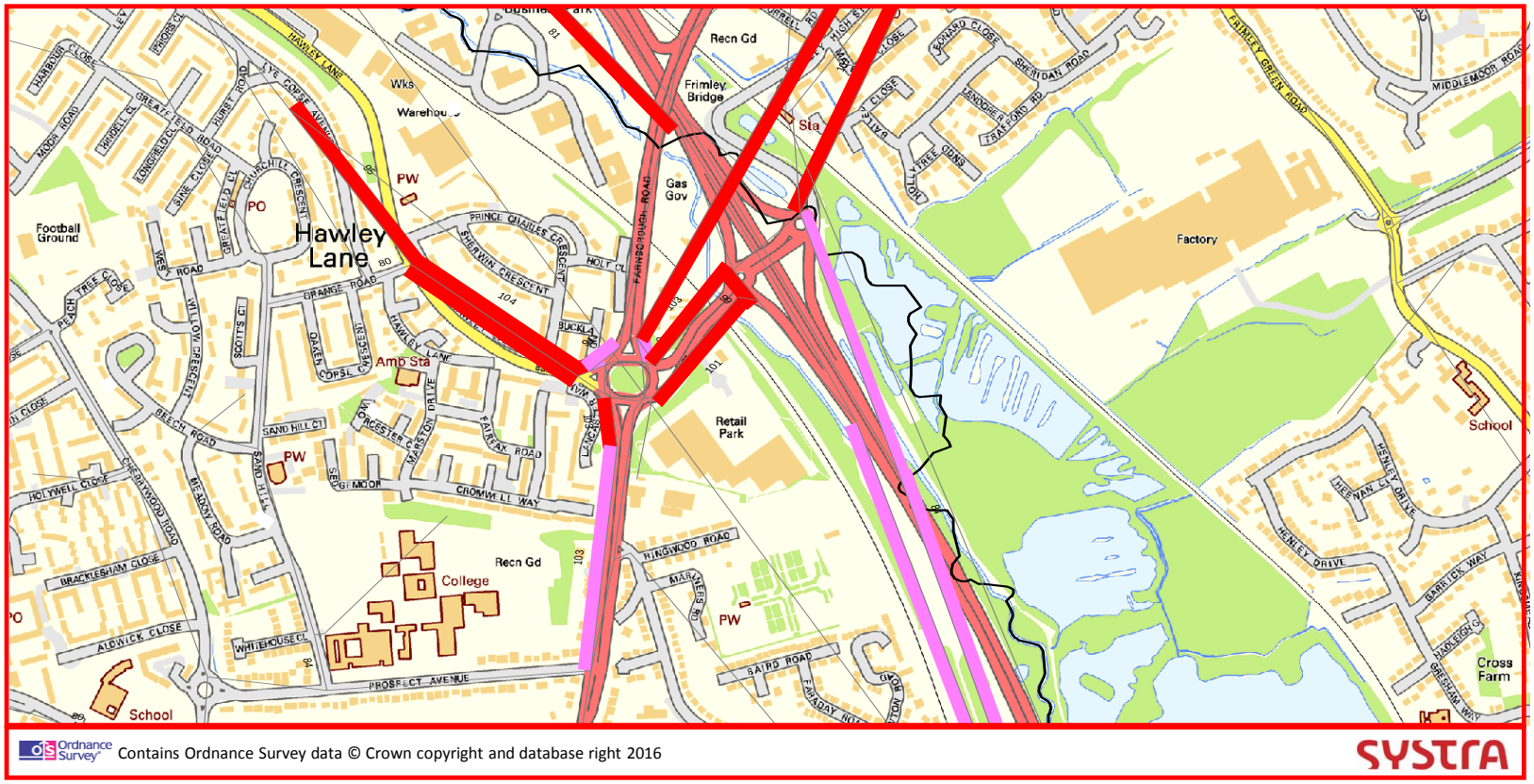
SYSTRA



SYSTRA

Do Minimum 2031

PM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HAWLEY LANE
PRINCE CHARLES CRESCENT
SHERWIN CRESCENT
ORANGE ROAD
BEECH ROAD
SAND HILL CT
FAIRFAX ROAD
CROMWELL WAY
HOLYWELL CLOSE
BRACKLESHAM CLOSE
ALDWICK CLOSE
WHITEHOUSE CL
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FARNLEY GREEN ROAD
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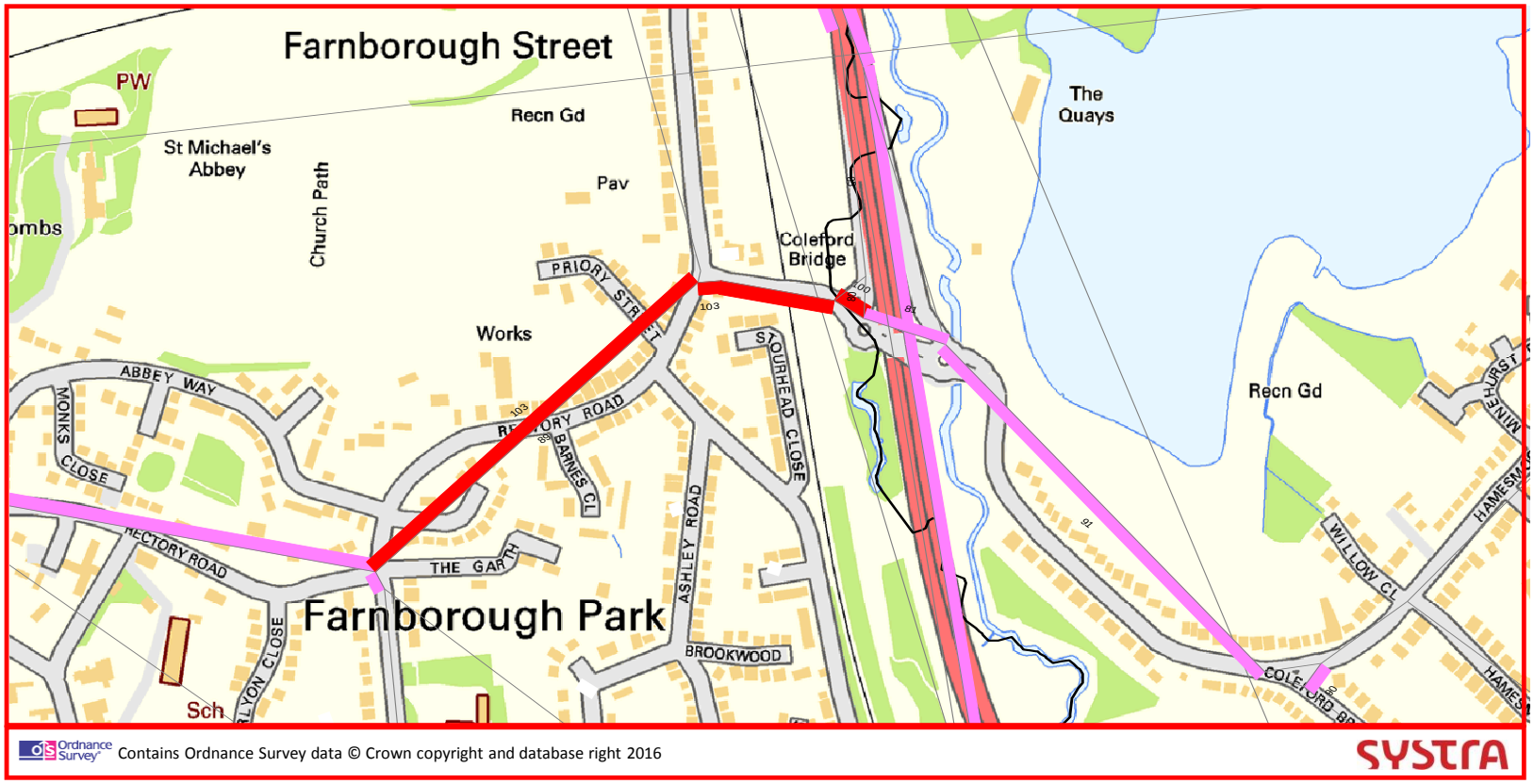
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RECTORY ROAD
BARNES CL
SOURHEAD CLOSE
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Recn Gd
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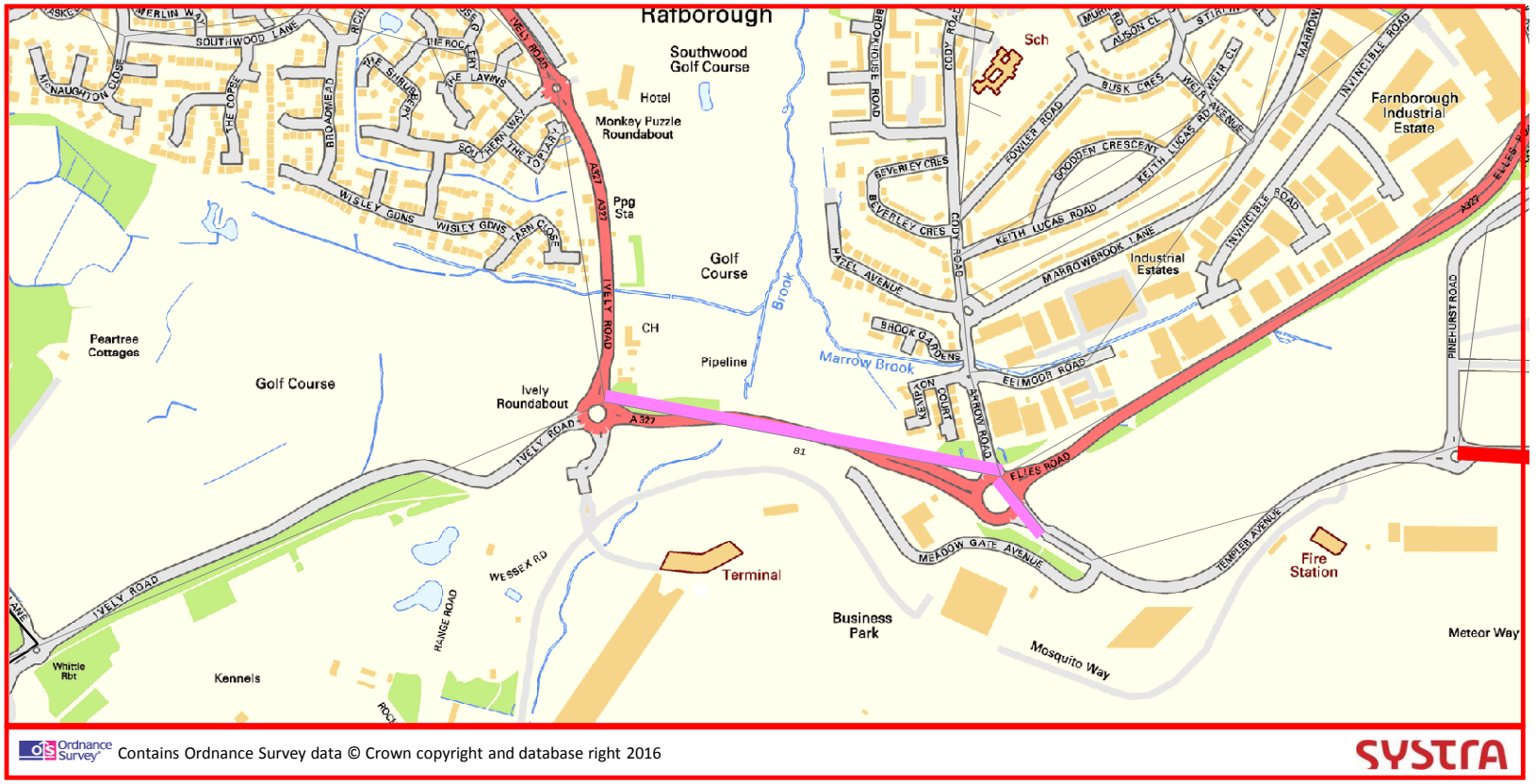

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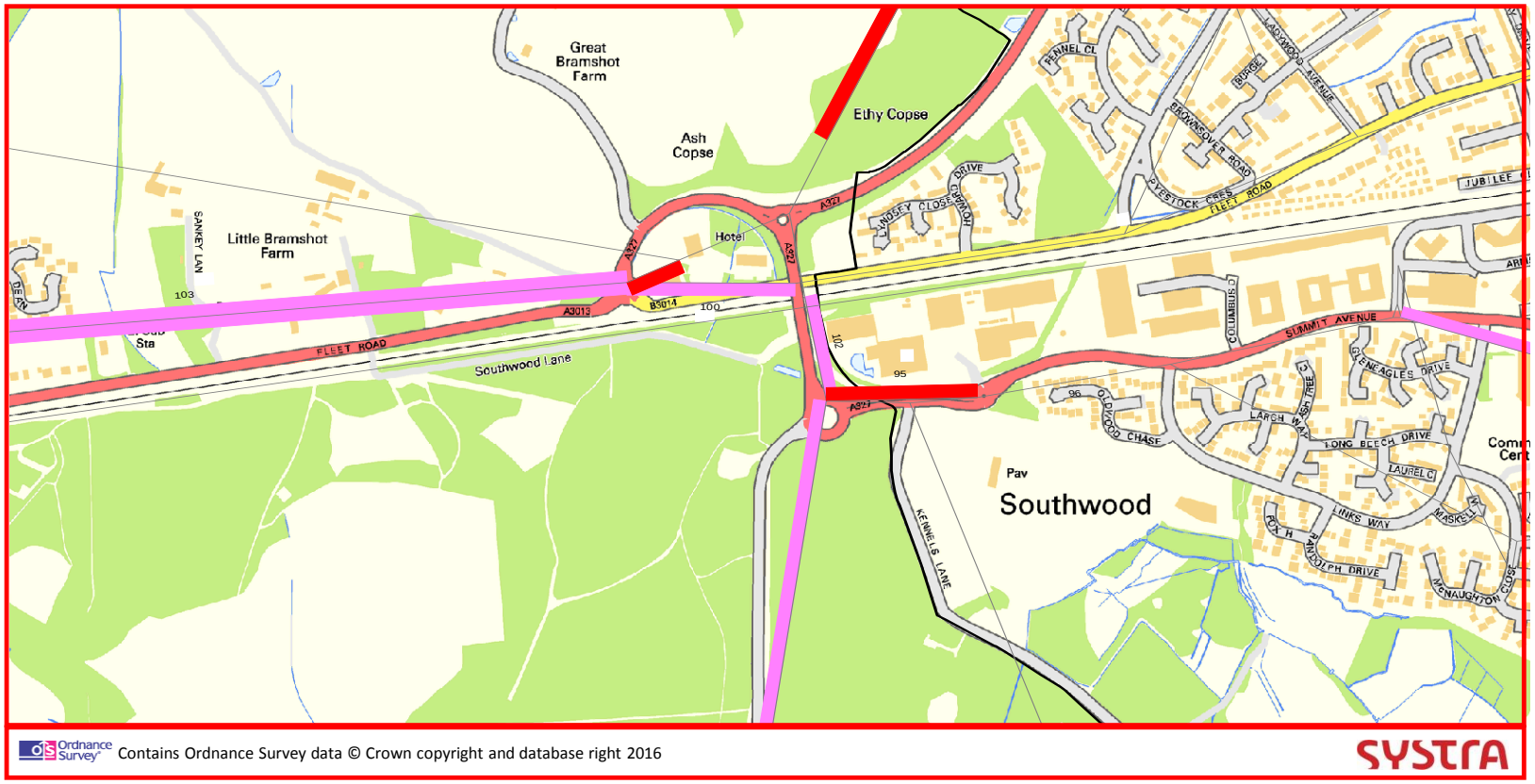
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100
102
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96
Pav
Southwood
KENNELS LANE
SUMMIT AVENUE
GLENEAGLES DRIVE
LONG BEECH DRIVE
LAUREL CL
LINKS WAY
MENAUGHTON CLOSE
OLDWOOD CHASE
LARCH WAY
ASH TREE
FENNEL CL
LADYWOOD AVENUE
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BROWNSOVER ROAD
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JUBILEE
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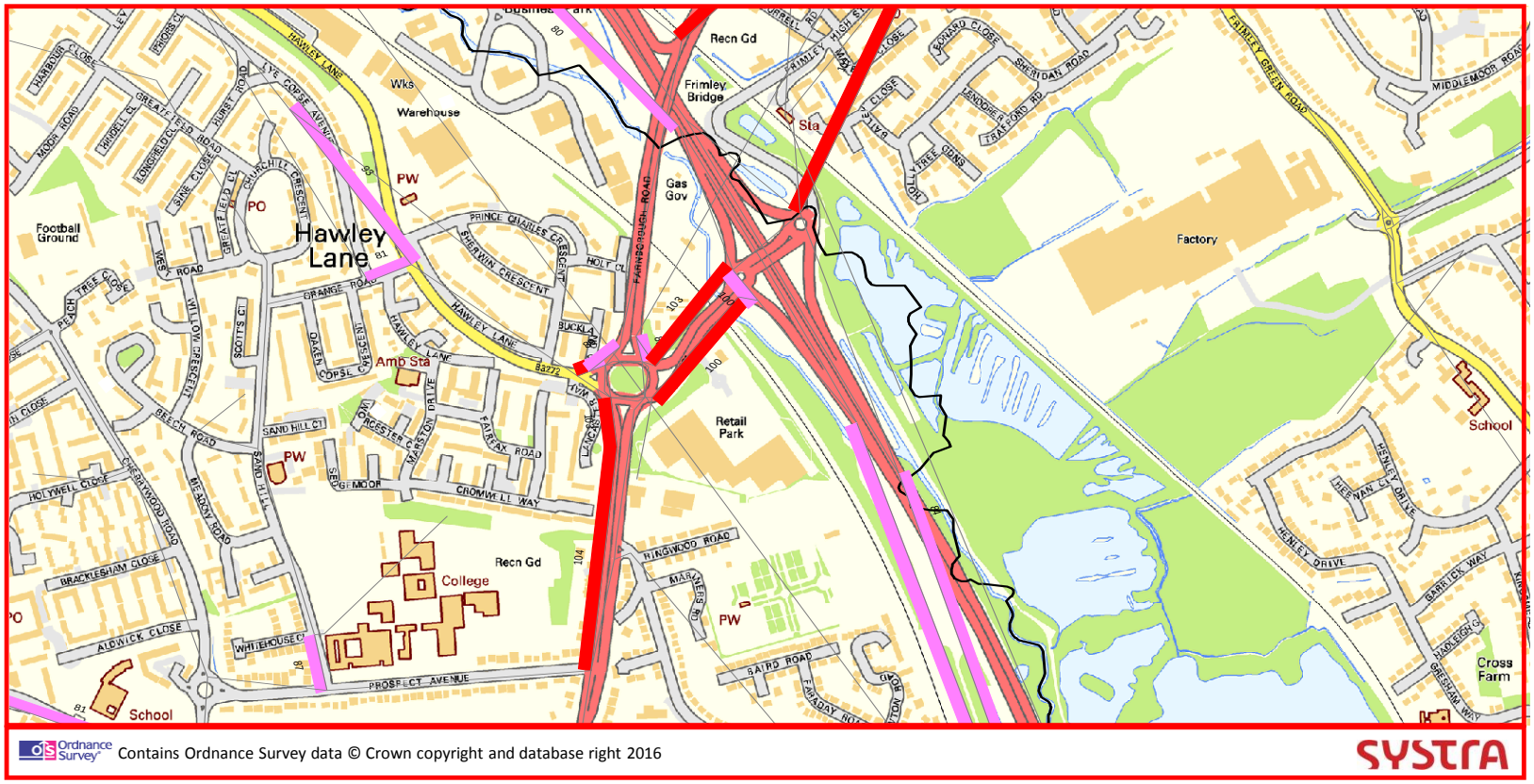

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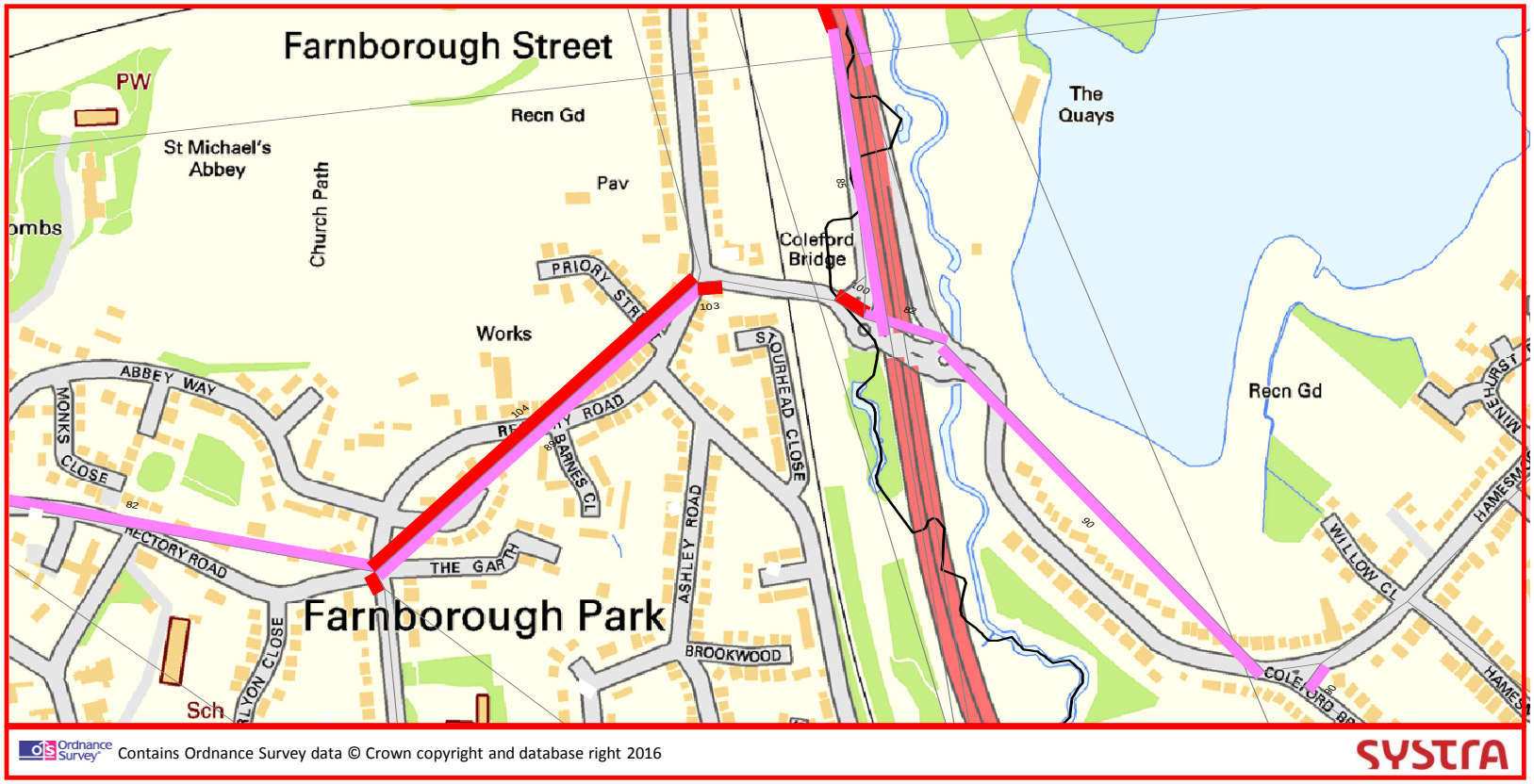
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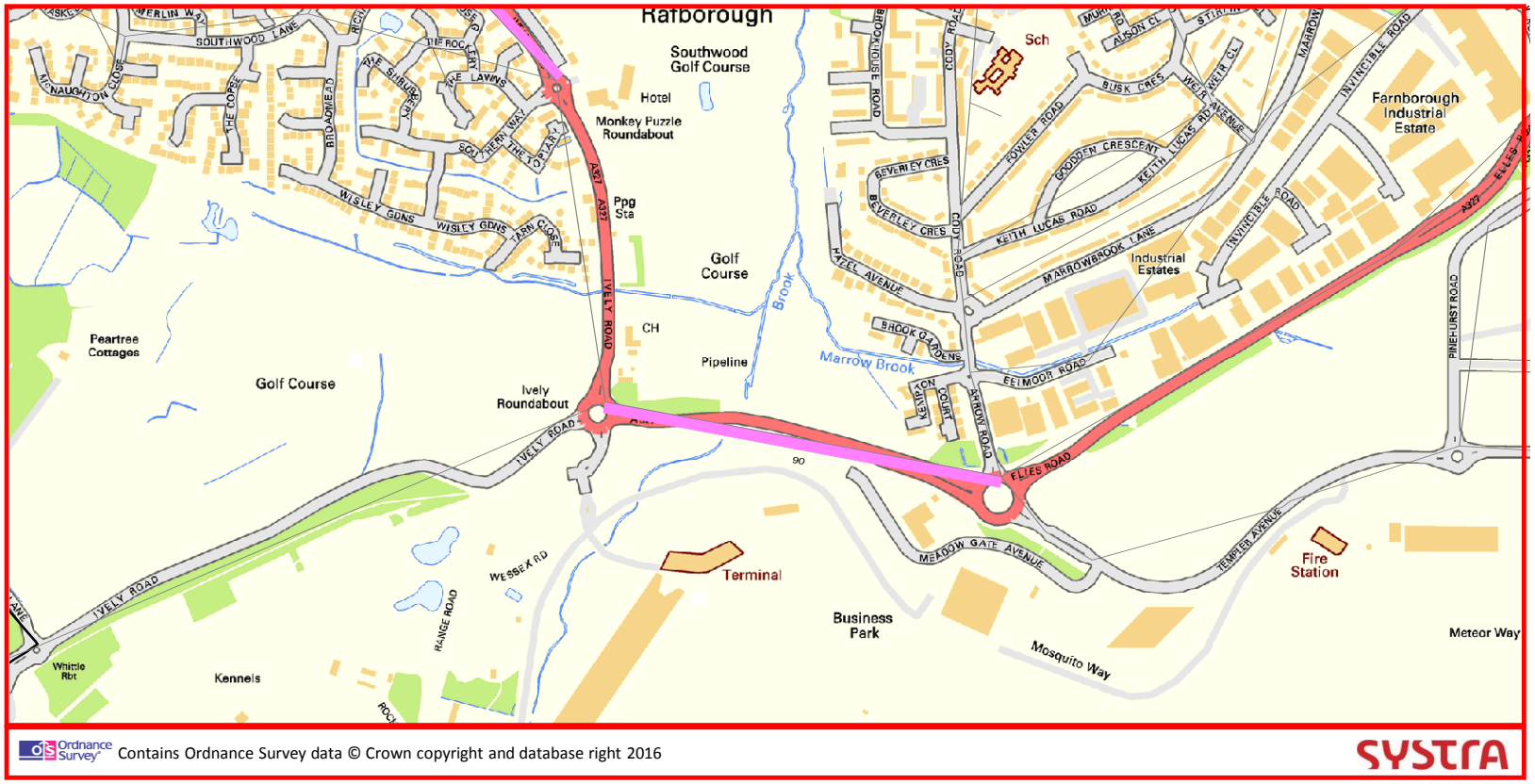

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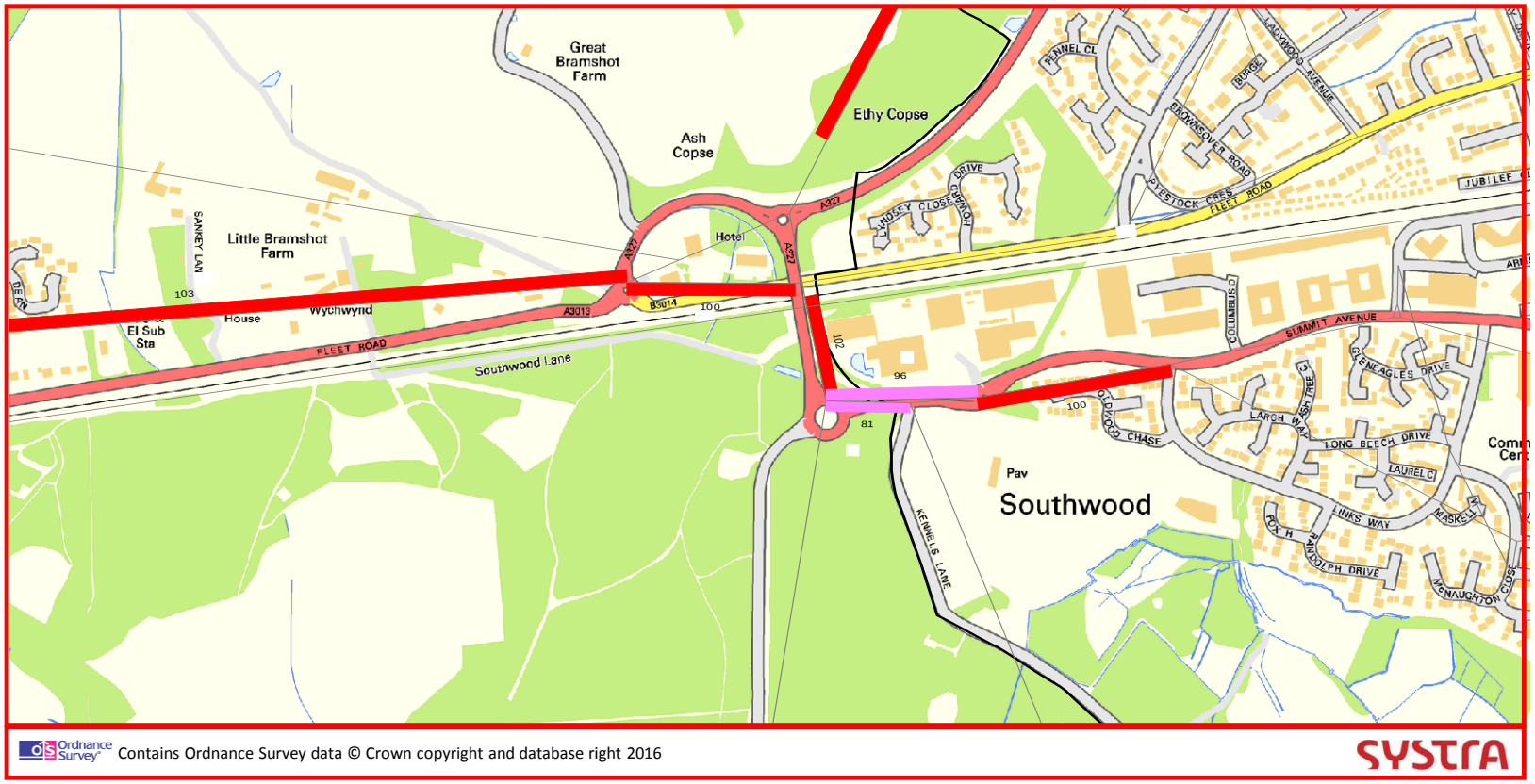

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Local Plan 2031

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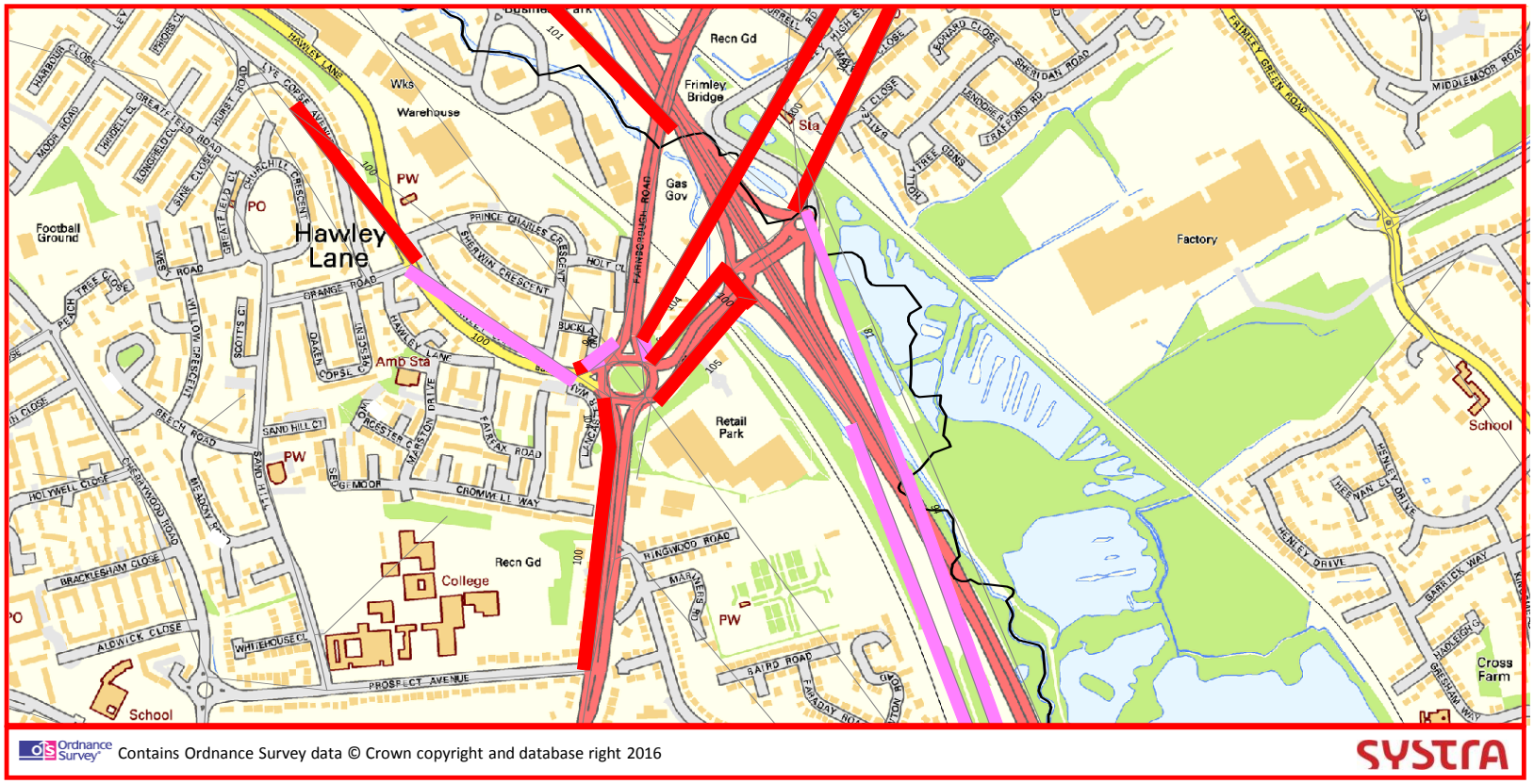
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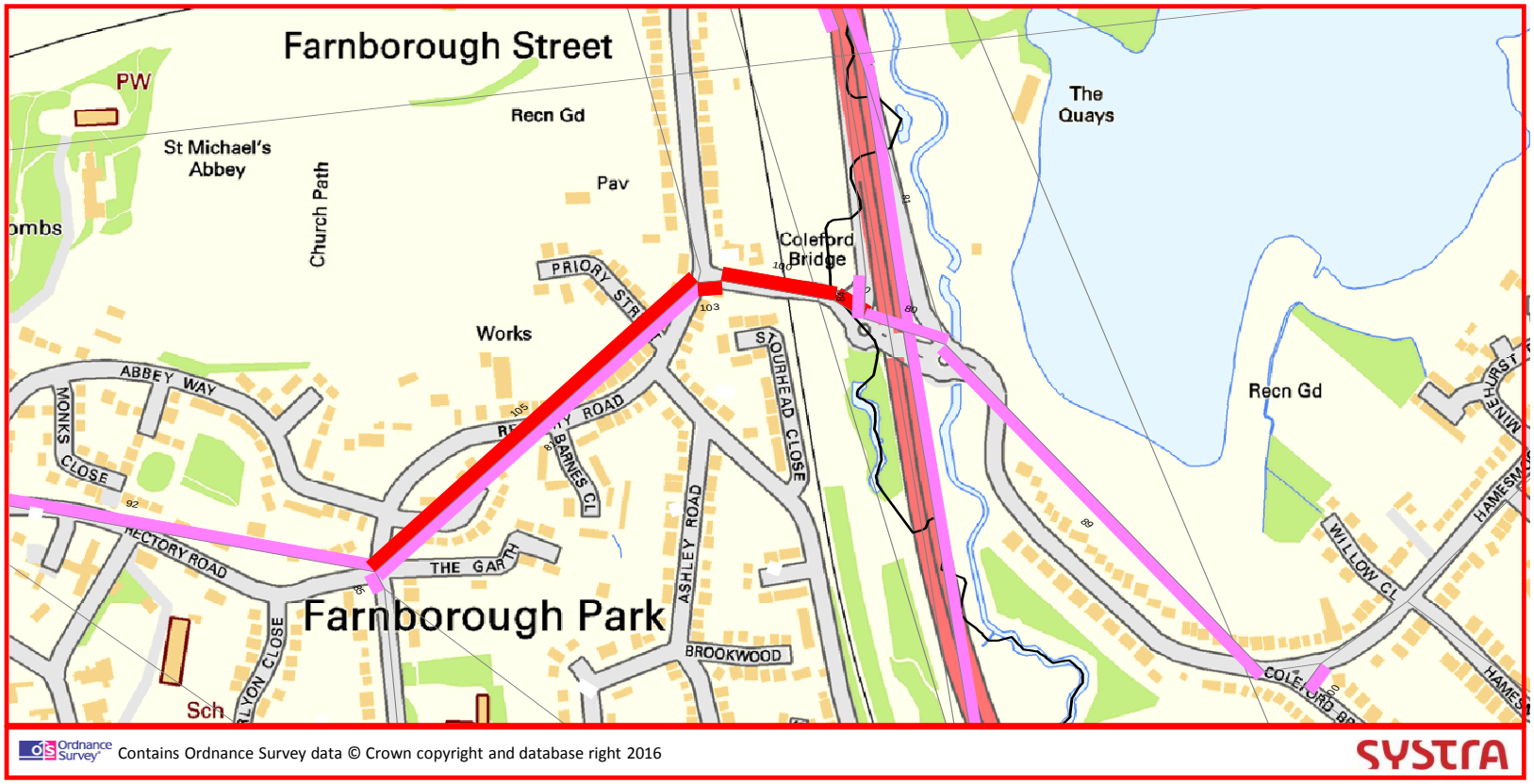
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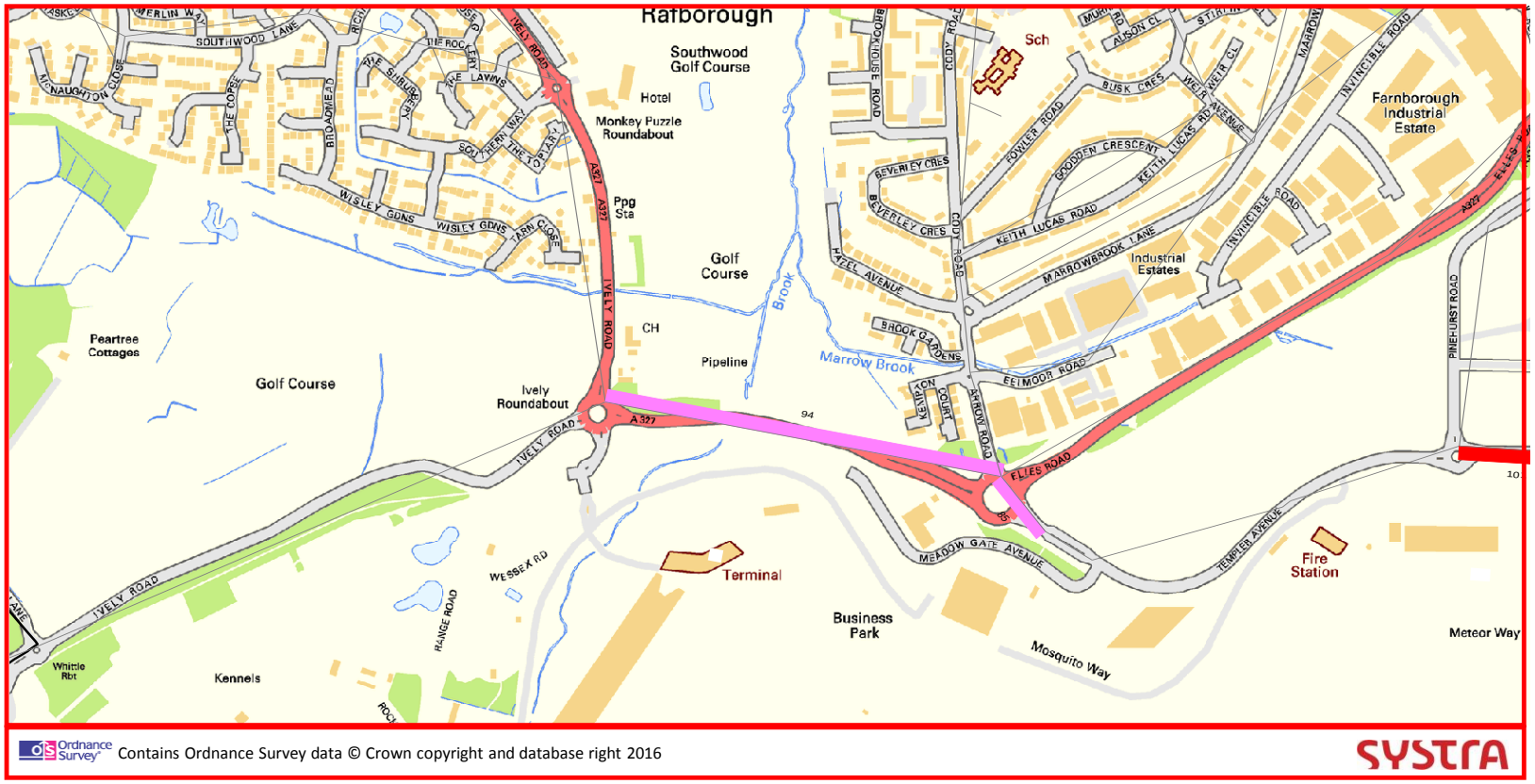

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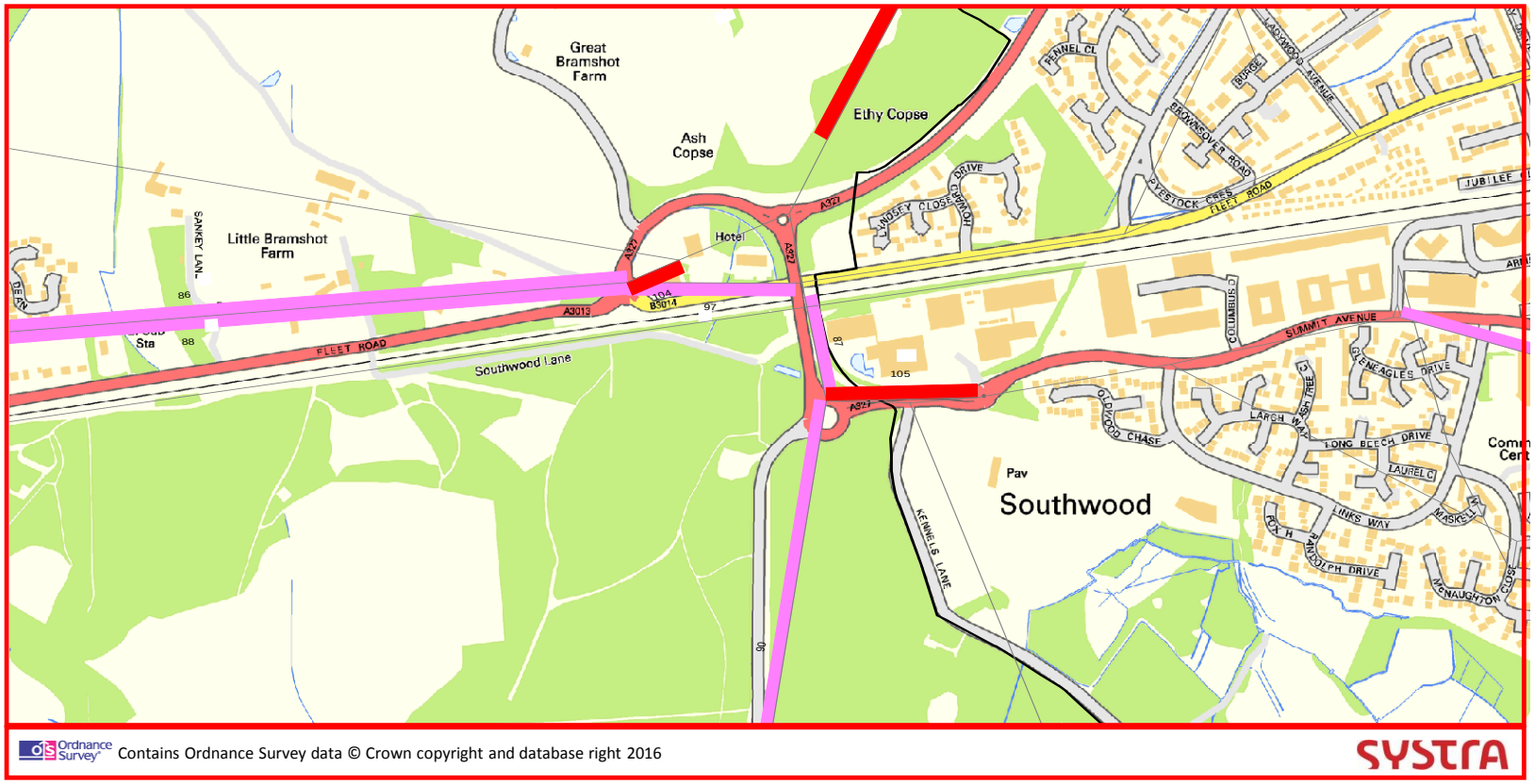

SYSTRA

Appendix G – Mitigated Junction Performance Summary

			SATURN														SATURN			JUNCTION 9			SATURN			JUNCTION 9		
			2013	2031	2031	2031	2013	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031	2031
			BASE	DM	LP	MIT	BASE	DM	LP	MIT	DM	LP	MIT	DM	LP	MIT	DM	LP	MIT	DM	LP	MIT	DM	LP	MIT	DM	LP	MIT
			AM	AM	AM	AM	PM	PM	PM	PM	AM	AM	AM	PM	PM	PM	AM	AM	AM	AM	AM	AM	PM	PM	PM	PM	PM	PM
ID	Junction Name	Approach Arm	PCU	PCU	PCU	PCU	PCU	PCU	PCU	PCU	Delay (s)	Delay (s)	Delay (s)	Delay (s)	Delay (s)	Delay (s)	V/C (%)	V/C (%)	V/C (%)	V/C (%)	V/C (%)	V/C (%)	V/C (%)	V/C (%)	V/C (%)	V/C (%)	V/C (%)	V/C (%)
1	M3-J4a North RBT	A327 Minley Rd [NW]	774	832	805	844	483	963	968	790	17	14	6	106	83	6	0.93	0.90	0.71	0.88	0.85	0.53	1.04	1.03	0.66	0.82	0.81	0.54
1		Sun Park Link Road [N]	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.07	0.07	0.06	*	*	*	0.28	0.29	0.27
1		M3 EB Off-Slip [SE]	549	613	619	859	445	596	599	607	8	8	4	7	7	4	0.62	0.62	0.57	0.58	0.58	0.39	0.55	0.55	0.39	0.53	0.53	0.36
1		A327 Motorway Bridge [S]	1145	1156	1152	1614	1151	1309	1314	1704	126	122	3	134	143	3	1.06	1.06	0.47	0.99	0.99	0.69	1.07	1.07	0.44	1.03	1.03	0.71
2	M3-J4a South RBT	A327 Motorway Bridge [N]	798	759	820	1209	525	828	834	935	55	210	14	30	53	8	1.01	1.09	0.90	0.87	0.87	0.38	0.98	1.01	0.67	0.85	0.87	0.38
2		A327 [S]	1421	1247	1256	1614	1372	1299	1304	1660	203	210	64	275	261	64	1.11	1.11	1.03	1.06	1.07	0.47	1.14	1.14	1.03	1.06	1.06	0.45
2		M3 WB Off-Slip [W]	736	1804	1815	1876	1052	1866	1818	1868	77	74	70	12	14	15	1.03	1.03	1.02	0.77	0.77	0.77	0.93	0.96	0.93	0.72	0.75	0.75
3	M3-J4 North RBT	A331 [N]	1426	1426	1423	1962	1434	1776	1779	2679	173	170	6	328	325	145	1.08	1.08	0.72	0.93	0.93	0.47	1.16	1.16	1.05	1.06	1.04	0.53
3		A331 [SE]	2228	2108	2231	3132	2088	2518	2516	3112	221	340	13	171	178	277	1.10	1.16	0.77	0.83	0.84	0.54	1.07	1.08	1.03	0.91	0.89	0.63
3		M3-J4 EB Off-Slip [SW]	1299	1220	1230	1409	1133	1268	1261	1351	27	26	10	99	103	40	0.81	0.82	0.77	1.14	1.20	0.62	0.85	0.86	0.98	1.20	1.21	0.78
8	A325 Farnborough Road / B3008 Cranmore Ln	A325 [S]	863	875	873	1014	774	895	891	1004	61	56	7	26	33	7	1.03	1.02	0.69	0.91	0.91	0.53	1.01	1.01	0.68	0.91	0.91	0.53
8		A325 [N]	519	637	649	711	792	832	838	897	10	10	10	15	14	10	0.76	0.77	0.51	0.74	0.75	0.48	0.97	0.96	0.63	0.96	0.94	0.59
8		B3008 Cranmore Lane [E]	189	161	160	145	111	136	135	127	10	10	10	10	10	10	0.25	0.25	0.23	0.24	0.24	0.24	0.23	0.23	0.22	0.22	0.22	0.23
11	A327 Elles Rd / Ively Rd RBT	A327 [N]	594	712	759	849	398	529	516	554	9	10	10	8	8	8	0.71	0.76	0.80	0.53	0.57	0.57	0.51	0.52	0.55	0.37	0.39	0.39
11		A327 Elles Road [E]	575	844	928	976	692	723	701	907	10	12	9	9	9	9	0.81	0.90	0.74	0.81	0.91	0.58	0.60	0.62	0.62	0.60	0.61	0.40
11		Wessex Road [S]	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	0.14	0.16	0.16	*	*	*	0.17	0.19	0.19
11		Ively Rd [W]	442	383	385	379	377	639	600	612	11	11	11	11	11	12	0.41	0.42	0.40	0.30	0.32	0.32	0.63	0.68	0.71	0.48	0.52	0.52
14R	Rectory Rd	Rectory Road [N]	220	288	302	257	310	458	432	335	1	1	49	1	1	58	0.16	0.17	0.92	0.00	0.00	0.69	0.23	0.24	0.98	0.00	0.00	0.92
14R		Coleford Bridge Road [E]	712	734	740	906	582	658	636	906	75	75	48	39	95	38	1.03	1.03	1.02	1E+10	1E+10	0.73	1.00	1.03	1.01	1E+10	1E+10	0.64
14R		Rectory Road [S]	1069	1050	1052	928	1021	1004	1012	906	73	96	161	98	112	169	1.03	1.04	1.08	1.95	1.95	1.01	1.04	1.05	1.08	1.92	1.92	0.96
15	A325 Farnborough Road / A323 Wellington Ave RBT	Wellesley Road [W]	338	505	504	508	740	647	650	619	27	27	23	45	156	154	0.93	0.92	0.90	0.52	0.52	0.52	1.00	1.06	1.06	0.62	0.62	0.62
15		A325 Farnborough Rd [N]	905	1149	1166	1292	1096	1538	1478	1645	16	17	5	35	39	31	0.56	0.57	0.48	0.67	0.68	0.55	0.81	0.84	0.73	0.93	0.97	0.78
15		A323 Wellington Av [E]	638	1112	1124	1121	416	745	737	726	23	26	34	9	9	12	0.90	0.92	0.95	0.83	0.84	0.84	0.57	0.57	0.62	0.53	0.53	0.53
15		A235 Farnborough Rd [S]	889	834	834	866	698	830	827	912	59	63	92	6	6	8	1.01	1.01	1.03	0.89	0.89	0.89	0.68	0.69	0.78	0.67	0.67	0.67

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