

TOWN AND COUNTRY PLANNING ACT 1990

MELTON PARISH COUNCIL

(HEREINAFTER REFERRED TO AS “THE COUNCIL”)

SUBMISSIONS IN RESPONSE TO THE

MELTON NEIGHBOURHOOD PLAN (DECEMBER 2016)

(HEREINAFTER REFERRED TO AS THE

“NEIGHBOURHOOD PLAN”)

ON BEHALF OF CHRISTCHURCH LAND & ESTATES LIMITED

(HEREINAFTER REFERRED TO AS “CHRISTCHURCH”)

APRIL 2017

MELTON NEIGHBOURHOOD PLAN

REGULATION 16 CONSULTATION

REPRESENTATIONS – APRIL 2017

APPENDICES

Appendix 1	Site Location Plan YOR.2251.010
Appendix 2	Masterplan YOR.2251.014.G
Appendix 3	Local Facilities Plan YOR.2251.012.B
Appendix 4	Ecology Report
Appendix 5	Residential Travel Plan
Appendix 6	Transport Assessment
Appendix 7	Habitat Regulations Assessment
Appendix 8	Dukes Park Appeal
Appendix 9	Swan Quay Judgement
Appendix 10	Stonegate Judgement
Appendix 11	DLA Delivery Judgement
Appendix 12	Ashdown Forest Judgement
Appendix 13	SEA Regulations 2004

1.0 INTRODUCTION

- 1.1 These representations are submitted on behalf of Christchurch Land and Estates Ltd, (hereafter referred to ‘Christchurch’), by way of further update to the Regulation 16 consultation representations submitted on 8 March 2017.

1.2 They should be read alongside the earlier Regulation 14 consultation submission submitted on 27.02.15 and 22.09.16 and in which, we set out objections to the Neighbourhood Plan.

1.3 In those two earlier submissions, we set out why the Plan fails to meet the basic conditions under paragraph 8(2) of Schedule 4B of the Town and Country Planning Act 1990, notably because:

8(2)(a): It is not appropriate to make the Neighbourhood Plan having regard to national planning policy and guidance;

8(2)(d): The Neighbourhood Plan does not contribute to sustainable development and instead will serve to frustrate it;

8(2)(e): The Neighbourhood Plan is not in conformity, general or otherwise, with strategic policies in the adopted development plan documents, namely the Core Strategy and the Site Allocations DPD;

8(2)(f): The Neighbourhood Plan's Strategic Environmental Assessment is in breach of the Environmental Assessment of Plans and Programmes Regulations 2004 ("the SEA Regulations") because it fails to assess reasonable alternatives to the policies and single allocation;

8(2)(f): The Neighbourhood Plan's Habitats Regulatory Assessment

1.3 We have set out already that the Neighbourhood Plan should be withdrawn forthwith, in view of the above legal and practical flaws.

- 1.4 However, should the Neighbourhood Plan proceed to examination before an Examiner appointed by the Local Planning Authority, then it is submitted that that Examiner should conclude that the Neighbourhood Plan does not meet the basic conditions and should therefore not proceed to referendum under paragraphs 10 and 12 of Schedule 4B.
- 1.5 We also request that the Neighbourhood Plan be the subject of an examination hearing pursuant to paragraph 9 of Schedule 4B, so that the above issues can be the subject of further submission, including by reference to the current and emerging case law and planning policy.
- 1.6 The Local Planning Authority and Examiner will be well aware that where neighbourhood plans seek to allocate land and to prevent other land from being developed, that gives rise to important legal obligations and any error of law in either the process or the substance of such a document can be challenged by way of judicial review.

Chronology

- 1.7 Christchurch engaged with Melton Parish Council with regard to the redevelopment of the Yarmouth Road site in September 2015. The Parish Council responded on the 24 February 2016 confirming that:

‘the housing/care provision for the elderly is certainly something that we are keen on seeing more of’.

On the 27 February 2015 Christchurch submitted formal representations to the NP process.

On the 22 September 2016 Christchurch submitted formal representations to the NP process.

As indicated further representations were made on the 8 March 2017.

- 1.8 On November 2015, we wrote to the Neighbourhood Plan Steering Group recommending the allocation of land at Yarmouth Road, the site was identified by a red line location plan.
- 1.9 Between November 2015 and the commencement of Regulation 14 consultation, there was no assessment of the Yarmouth Road site, either for the purposes of site assessment against identified criteria (as required by Paragraph: 042 Reference ID: 41-042-20140306) or for the purposes of strategic environmental assessment (as required by Regulation 12(2) of the SEA Regulations.
- 1.10 In our Regulation 14 representations we again directly referred to the Site and the planning application reference DC/16/4770/OUT, but no action was taken.
- 1.11 In December 2016, the document that is presented as being a Strategic Environmental was published for the very first time, setting out what purported to be the environmental assessment exercise.
- 1.12 Neither MEL1 nor MEL21 examine the development of land at Yarmouth Road as an alternative. The only alternative provided to each policy is the absence of that policy.
- 1.13 Paragraph 7.29 on page 58 refers in passing to the Site, but no equivalent assessment is provided. The only reasons given for rejecting the Site include the separation of the Site, the scale of growth (undescribed) and alleged pressure on the Deben Estuary SPA and detrimental impact upon the Melton Hill Air Quality Management Area.
- 1.14 The present situation is that the Plan therefore proceeds on the basis of having essentially ignored an available and deliverable housing site.

1.15 Christchurch submitted a planning application for residential development and extra care accommodation planning reference number DC/16/4770/OUT which has recently been refused by the Local Planning Authority (LPA) the Notice is dated the 11th April 2017. Essentially the LPA consider that they have a 5 year land supply and that therefore they have an up to date development plan, therefore this site being outside the settlement boundary, there is no planning policy justification to enable the grant of planning permission. We consider that there is a significant land supply deficiency and that therefore paragraph 14 of the Framework is engaged. The technical reasons for refusal relating to transport and ecology are considered in the attached Transport Assessment and HRA report. It is considered that the site is sustainably located and suitable for development. The refusal notice will be the subject of a S78 appeal the outcome of which it is intended to make the Inspector aware of when the decision letter is issued

2.0 ISSUE 1: SITE ASSESSMENT

2.1 The PPG Paragraph: 042 Reference ID: 41-042-20140306 makes clear that decisions to allocate must be based upon a robust site assessment process, properly appraising all available options:

“A neighbourhood plan can allocate sites for development. A qualifying body should carry out an appraisal of options and an assessment of individual sites against clearly identified criteria. Guidance on assessing sites and on viability.”

2.2 This requirement is also made clear at Paragraph: 080 Reference ID: 41-080-20150209: referring to Stage 2: *“talk to land owners and the development industry // identify and assess options”*.

- 2.3 As set out above, there no site assessment or appraisal of options is recorded in the Evidence Base section of this Neighbourhood Plan, as is normally the case with neighbourhood plans that seek to allocate housing.
- 2.4 Within the Submission version of the Neighbourhood Plan itself, there is no reference to site assessment in the document itself. This absence is particularly notable at Chapter 4: Physical Limits Boundaries, which contains MEL1 and its supporting text and Chapter 10: Land Off Wilford Bridge Road, which contains MEL2 and its supporting text. There is a single reference to the definition of “Strategic Housing Land Availability Assessment” on page 55, but the SHLAA is then not referred to anywhere else in the document.
- 2.5 The Basic Conditions Statement makes no reference to the Planning Practice Guidance, including to Paragraph 042, nor to any site assessment process.
- 2.6 Searching through the Consultation Statement, there is some limited evidence of a basic questionnaire-based process at the outset using the SHLAA map, for example in Appendix G, pages 40-41, and a publication consultation exercise using stickers and maps at Appendix O at pages 216-219. However, again it appears clear that at no stage was any form of appraisal of options carried out.
- 2.7 The Minutes of the Working Group from 2012 up to August 2016 (NB this is incomplete, as it ends prior to the publication of several documents in November and December 2016).
- 2.8 The Strategic Environmental Assessment Document, page 58, paragraph 7.29 refers to an invitation to landowners, although this does not appear to be documented in the evidence base. It then provides only the following text:

“[Land at Yarmouth Road] is detached from the physical limits boundary and the scale of growth that the site would potentially accommodate would put significant additional pressure on the Deben Estuary SPA. It would also have the potential to have a detrimental impact on the Melton Hill Air Quality Management Area.”

- 2.9 As set above, the Steering Group were alerted to the availability of Land at Yarmouth Road as long ago as November 2015. They were again made aware of the site’s availability including a forthcoming planning application. And yet, no action was taken by the Steering Group to assess the site on any equivalent basis to Land Off Wilford Bridge.
- 2.10 There was therefore no attempt to identify whether the site was preferable in respect of effect on the Deben Estuary SPA or the AQMA.
- 2.11 More seriously, there was simply no attempt to identify what the characteristics of the site were, namely to identify any technical evidence on ecology, flooding/hydrology, air quality and highways matters.
- 2.12 In summary, there has therefore been a clear failure to have regard to a pivotal paragraph of the PPG, amounting to a breach of basic condition 8(2)(a): it is not appropriate to make a neighbourhood plan that has not undertaken any guidance-compliant site assessment. There has also been a breach of basic condition 8(2)(d), a plan that lacks such an assessment does not contribute to sustainable development.

3.0 ISSUE 2: STRATEGIC ENVIRONMENTAL ASSESSMENT

- 3.1 Regulation 12(2) of SEA Regulations provides:

“12.— Preparation of environmental report

(2) The report shall identify, describe and evaluate the likely significant effects on the environment of—

(a) implementing the plan or programme; and

(b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.”

3.2 Regulation 16(4)(e) underscores this, requiring that members of the public are provided with:

“(e) the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with;”

3.3 Schedule 2, paragraph 8 then requires that the Report must contain:

“An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.”

3.4 In the absence of a lawful environmental report, the neighbourhood plan cannot be “made” (Regulation 8(1) and (3)). Such a plan would breach and/or be incompatible with EU obligations for the purpose of basic condition 8(2)(f), for the purposes of paragraph 10(4). An LPA would also be prohibited from sending the plan for referendum by the operation of paragraph 12(10).

3.5 The above provisions closely match those of the SEA Directive (Directive 2001/42/EC), Articles 5, 8 and 9 (which are not copied here for sake of brevity).

- 3.6 In the most recent Court of Appeal level judgment on this matter, *Ashdown Forest v Wealden DC* [2015] EWCA Civ 681, Richards LJ noted:

42 ... the identification of reasonable alternatives is a matter of evaluative assessment for the local planning authority, subject to review by the court on normal public law principles, including Wednesbury unreasonableness. In order to make a lawful assessment, however, the authority does at least have to apply its mind to the question."

- 3.7 In *R(Stonegate Homes Ltd) v Horsham DC* [2016] EWHC 2512 (Admin), Patterson J noted the terms of the Planning Practice Guidance and the older but still extant 2001 guidance [with emphasis added]:

26 Planning practice guidance on neighbourhood planning provides that:

"Proportionate, robust evidence should support the choices made and the approach taken. The evidence should be drawn upon to explain succinctly the intention and rationale of the policies in the draft neighbourhood plan or the proposals in an order."

27 On strategic environmental assessments the advice is that:

"The strategic environmental assessment should identify, describe and evaluate the likely significant effects on environmental factors using the evidence base ... reasonable alternatives must be considered and assessed in the same level of detail as the preferred approach intended to be taken forward in the neighbourhood plan (the preferred approach). Reasonable alternatives are the different realistic options considered while developing the policies in the draft plan ... the strategic environmental assessment should outline the reasons the alternatives were selected, the reasons the rejected options were

not taken forward and the reasons for selecting the preferred approach in light of the alternatives ... the development and appraisal of proposals in the neighbourhood plan should be an iterative process with the proposals being revised to take account of the appraisal findings. This should inform the selection refinement and publication of the preferred approach for consultation."

28 In a practical guide to the Strategic Environmental Assessment Directive (SEA) published by the Office of the Deputy Prime Minister (ODPM) there is advice at B3 on predicting the effects of the plan or programme including alternatives. Paragraph 5.B.9 says that authorities should predict effects by identifying the changes to the environmental baseline which are predicted to arise from the plan or programme, including alternatives, which can be compared with each other and with no "plan or programme" and/or "business as usual" scenarios, where these exist, and against the SEA objectives. It continues at paragraph 5.B.10 that predictions do not have to be expressed in quantitative terms. Qualitative predictions can be equally valid and appropriate but qualitative does not mean "guessed" (see 5.B.11). Section B4 on evaluating the effect of the draft plan or programme including alternatives advises that evaluation involves forming a judgment on whether or not a predicted effect will be environmentally significant.

29 EU policy advice is contained in 'Implementation of Directive 2001/42 on the assessment of certain plans and programmes on the environment'. Under the heading 'Alternatives' it reads, where relevant:

"On alternatives it indicates that the obligation to identify, describe and evaluate reasonable alternatives must be read in the context of the objective of the Directive which

is to ensure that the effects of implementing plans and programmes are taken into account during their preparation and before their adoption." (see 5(11)).

It continues:

"...it is essential that the authority or parliament responsible for the adoption of the plan or programme as well as the authorities and the public consulted are presented with an accurate picture of what reasonable alternatives there are and why they are not considered to be the best option. The information referred to in Annex I should thus be provided for the alternatives chosen." (see 5.12)

- 3.8 In the *Stonegate* case, at paragraphs 72-78, observed that it was necessary to assess technical matters by reference to robust evidence (in the context of highways evidence in that case, but in terms that are plainly of universal application):

73 Here, anyone reading the HNP would be of the view that significant development on the western side of Henfield would lead to unsustainable pressure on the local road system. Beyond assertion by local residents who had made the same point at the West End Lane appeal when it had been rejected, there was no evidence to support the view expressed for the rejection of option C in the HNP. Although the Office of the Deputy Prime Minister's Practical Guide to Strategic Environmental Assessment Directive advises that predictions do not have to be expressed in quantitative terms as quantification is not always practicable and qualitative predictions can be equally valid and appropriate it goes on to say in paragraph 5.B.11:

"However, qualitative does not mean 'guessed'. Predictions need to be supported by evidence, such as references to any research, discussions or consultation which helped those carrying out the SEA to reach their conclusions."

74 The problem here is that the absolute nature of the rejection of option C is unsupported by anything other than guesswork. At the very least, having received the Barratt decision letter the plan-making authority, the parish council could have contacted the highways authority to obtain their views on the capacity of the broader local highways network in the western part of Henfield. There is no evidence that that was done. There is no evidence that anything was done when the highways objections to residential development on the Sandgate Nursery site was withdrawn either. Until it is, the outcome of significant development on the western side of Henfield on the local road network is unknown. What is known is that the permitted site and the appealed site together do not provide any insuperable highways objections. Without further highways evidence though, the reason for rejecting option C as set out in paragraph 4.19 of the HNP is flawed, based as it is upon an inadequate, if that, evidence base. The requirement, under the Directive, that the alternatives are to be assessed in a comparable manner and on an accurate basis was simply not met.

- 3.9 Paragraph 7.29 is a short paragraph of bare assertion. It does not assess Land at Yarmouth Road with the assistance of any technical information, for example in respect of Ecology (impact on the Deben Estuary SPA) by reference to actual correspondence with the relevant statutory body, Natural England (or even the LPA), in respect of Air Quality by reference to the LPA's Environmental Health Officers. The same applies to Highways, which appears to have been another particular concern of the community, per Chapter 4 of the Plan. Had these concerns been set out in a transparent manner through a site assessment document, then it would have

allowed Christchurch through its representatives to address the absence of any technical objection. Instead, it has apparently been thought sufficient simply to dismiss the site in a single paragraph within the SEA.

3.10 As to the specific policies, both MEL1 Physical Limits Boundaries and MEL21 Land Off Woodbridge Road should have been assessed alongside the reasonable alternatives of allocating Land at Yarmouth for residential development either in its own right, or additional to MEL21.

3.11 The wording of MEL1 Option A (page 37 of the Final SEA Report) does not correctly describe the nature and effect of the policy and contains a circular/doubled-up final test:

“To have a NP policy that identifies where most forms of development are most sustainably located”

3.12 MEL1’s Physical Limits does not identify sustainable location of development, it simply confines development within a specific area, without examining the underlying environmental or technical qualities of those areas.

3.13 The apparent contention that such sites are “most sustainably” located doubles up the assessment, by assuming that sustainable has been proven.

3.14 Option B is simply not to include the policy and rely on the development plan.

3.15 The Summary refers to expanding the boundary, and thus providing more opportunity for development. But there is no assessment of the locations to which it has been expanded.

3.16 A reasonable alternative in this case would have been the allocation of the Land at Yarmouth Road site, first in the alternative to the Land Off Woodbridge Road and second, additional to it.

3.17 The assessment of MEL21 suffers from the same fundamental flaw. Option A is simply Allocation, whilst Option B is No Allocation.

3.18 At no stage did the authors of the SEA apply their mind to any alternative beyond no policy. That is a serious deficiency in the SEA process and invalidates the SEA exercise.

3.19 In summary, the Neighbourhood Plan does not meet basic condition 8(2)(f).

4.0 ISSUE 3: POLICY MEL1: PHYSICAL LIMITS BOUNDARY

4.1 In seeking to impose a “Physical Limits Boundary”, the Plan has repeatedly failed to recognise or state that the boundary is not based on meeting full objectively assessed needs and is not based on the most up-to-date assessment of housing needs. It is noted from the appeal decision dated the 12 April 2017 appeal reference 3165730 relating to land off Dukes Park Woodbridge at paragraph 25 that the Inspector confirms the significant land supply deficiency in the district he states

‘I think that a current supply of about 3 years is realistic based on the evidence given’

4.2 We have set out in the earlier representations how MEL1 is not in conformity with the Core Strategy’s Strategic Policies SP19 and SP26 because it seeks to impose a limit on development at a time when the Core Strategy should have been subject to further review to identify full objectively assessed need and that review is now long overdue.

- 4.3 In the supporting text to MEL1 the references to SP19 and SP27 are partial. They do not consider the text of those policies within the full context of the Core Strategy, including Objective 2 (CS, page 25) and Policy SP2 which specifies an early review, commencing with the Issues and Options document in 2015.
- 4.4 The Site Allocations DPD does not undertake that early review, it seeks to provide only for the 7,900 figure, putting off the FOAN exercise to a later date.
- 4.5 There is no current statutory provision for review or modification of a neighbourhood plan, and even current statutory reforms in the Neighbourhood Plan Bill prevent this from being undertaken where it would materially alter the plan.
- 4.6 The authors of the Plan have therefore proceeded on the apparent misconception that they can fix a boundary for the full neighbourhood plan, without taking into account the need the evidence generated by the early review.
- 4.7 The PPG prohibits this, with PPG Paragraph: 009 Reference ID: 41-009-20160211 specifying that where a forthcoming DPD is being prepared, then there must be an active discussion between the LPA and the PC to ensure that the policies do not actively restrict the delivery of strategic need:

“Where a neighbourhood plan is brought forward before an up-to-date Local Plan is in place the qualifying body and the local planning authority should discuss and aim to agree the relationship between policies in:

- *the emerging neighbourhood plan*
- *the emerging Local Plan*

- *the adopted development plan*

with appropriate regard to national policy and guidance.

The local planning authority should take a proactive and positive approach, working collaboratively with a qualifying body particularly sharing evidence and seeking to resolve any issues to ensure the draft neighbourhood plan has the greatest chance of success at independent examination.

The local planning authority should work with the qualifying body to produce complementary neighbourhood and Local Plans. It is important to minimise any conflicts between policies in the neighbourhood plan and those in the emerging Local Plan, including housing supply policies. This is because section 38(5) of the Planning and Compulsory Purchase Act 2004 requires that the conflict must be resolved by the decision maker favouring the policy which is contained in the last document to become part of the development plan. Neighbourhood plans should consider providing indicative delivery timetables, and allocating reserve sites to ensure that emerging evidence of housing need is addressed. This can help minimise potential conflicts and ensure that policies in the neighbourhood plan are not overridden by a new Local Plan.”

- 4.8 It appears that the first time and only time the Council raised concerns was in the Regulation 14 representation where they recorded against paragraph 4.6 (Consultation Statement, page 33-331):

“Have the boundaries been re-looked at to see if the old boundaries are still appropriate? If they have then this should be stated. It is a useful confirmation and a question which gets asked at appeal hearings.

Need to clarify that the neighbourhood plan will re-assess that the neighbourhood plan will re-assess the physical boundaries for Melton village and for that part which forms part of greater Woodbridge."

4.9 In response, the Parish Council responded: "Noted, Change made." That is incorrect. No change has been made to the text.

4.10 In summary, it is clear that the use of a physical limits boundary was pre-determined at an early stage in the neighbourhood plan process, seeking to fix the total number of units in the plan area without any flexibility, contrary to the requirements of SP27 (and SP19) that required careful assessment of whether opportunities within defined physical limits are severely limited, as they are here.

5.0 ISSUE 4: POLICY MEL17

5.1 The Parish Council submitted in their consultation response in respect of the application that development of land at Yarmouth Road would breach draft Policy MEL17. This is incorrect, as the Proposals Map is clear that the policy is limited to the demarcated areas.

5.2 It will however be necessary to underscore this in the accompanying text on pages 40 and 41, that the policy does not apply outside the shaded areas to avoid any repeat of this confusion.

6.0 ISSUE 5: COMMUNITY FACILITIES

6.1 The Melton Neighbourhood Plan 2016-2029 Consultation Statement published October 2016 contains feedback from a household questionnaire. 12% of respondents requested provision of

special needs housing. In this context mention was made of sheltered bungalows, sheltered flats, care homes and dementia care.

- 6.2 The Ipswich Housing Market Area (including and Suffolk Coast District Council) Strategic Housing Market Assessment, updated in 2012, states that meeting the housing needs of an increasing elderly population is a priority. Persons over 65 years of age represent 22.5% of the population in Suffolk, with this percentage predicted to rise to 26% by 2025.
- 6.3 The 2013 Suffolk Coastal District Local Plan - Core Strategy and Development Management Policies mention within the main body of the text the need for ‘... suitable accommodation for older people to remain within their communities or close by, potentially freeing up larger family housing will be important’.
- 6.4 The Suffolk County Council Adult Social Care (ASC) Policy Framework 2015 recognises that the suitability of living accommodation is a significant factor in promoting positive “wellbeing”. The Council’s ASC Market Position Statement (MPS) 2015 – 2016 confirms that housing is formally recognised as a key component in ensuring good health and wellbeing outcomes. It underlines the need for a balanced supply of housing options to ensure that the increasing number of older people can find suitable accommodation. ASC would like to see an increase in provision and diversity of specialist accommodation for older people.
- 6.5 The MPS confirms a long term needs gap at 2015 in the Suffolk Coastal area for both enhanced sheltered and extra care units. The over 75’s population is widely accepted as the threshold age of entry to residential and nursing care. The recorded rise in nursing home occupancy rates and the ageing population profile confirm the expectation that demand for nursing home places will increase.

6.6 The land at Yarmouth Road provides an opportunity to help address the strategic needs of both the District and County whilst increasing the local housing and care options for older people already residing in Melton who wish to remain living in the area. A special needs housing development providing a continuum of care would provide choice for older persons, cater for changing care needs over time, and also help overcome the under occupancy of owner occupied properties in Melton.

7.0 ISSUE 6: AFFORDABLE HOUSING

7.1 Page 9 of the MNP confirms in the socio-economic profile that only 11% of housing is affordable tenure, this being all social rent. Para 14 of MNP Appendix A states that the ownership profile of these dwellings reinforces the profile of Melton as an area of predominantly private ownership. The proportion of people owning their property is higher than the district average, whereas the proportion in social rented accommodation is low.

7.2 At sub paragraph 10.2 the MNP states: Meeting housing needs, particularly needs for affordable housing, is a strategic objective in Suffolk Coastal District. Delivery of the new housing development in the quantity and form necessary is fundamental to the policies of the Suffolk Coastal Local Plan. Key drivers for these policies are the demographic trends at work in the district, the evidence of need for affordable housing set out in the strategic housing market assessment, and the needs of individual towns and villages for additional housing of a range of costs and tenures as part of their development as communities and more sustainable places.

7.3 The District wide requirement for affordable housing is set out in the Ipswich Housing Market Area SHMA Report, August 2012. This research confirms a backlog of over 4,000 households in need of a suitable and affordable home in the Ipswich HMA. The supply of new affordable

homes and the reuse of existing stock are not sufficient to meet this need. Need within Suffolk Coastal is the second highest, of the four local authority areas researched, at 355 affordable homes per annum.

7.4 The Suffolk Coastal Adopted Core Strategy & Development Management Policies (July 2013) specify a target of one in three affordable housing. The Suffolk Coastal Local Plan – Annual Monitoring Report (2014 -2015) confirms the affordable housing completions achieved both in the reporting year and the three previous years. The average annual new affordable provision, for the 4 year period, is 55 dwellings, equating to approximately 18% of the average annual dwelling completions. This demonstrates that there is a significant shortfall against the Policy target of one in three (33.3%). As the need of 355 affordable homes per annum has not been met in recent years there is an accruing deficit in the District.

7.5 Melton has only 11% affordable homes, these being all social rent with no intermediate tenure recorded. The land at Yarmouth Road provides an opportunity for more affordable homes in the area to address both existing need and future need arising from emerging households.

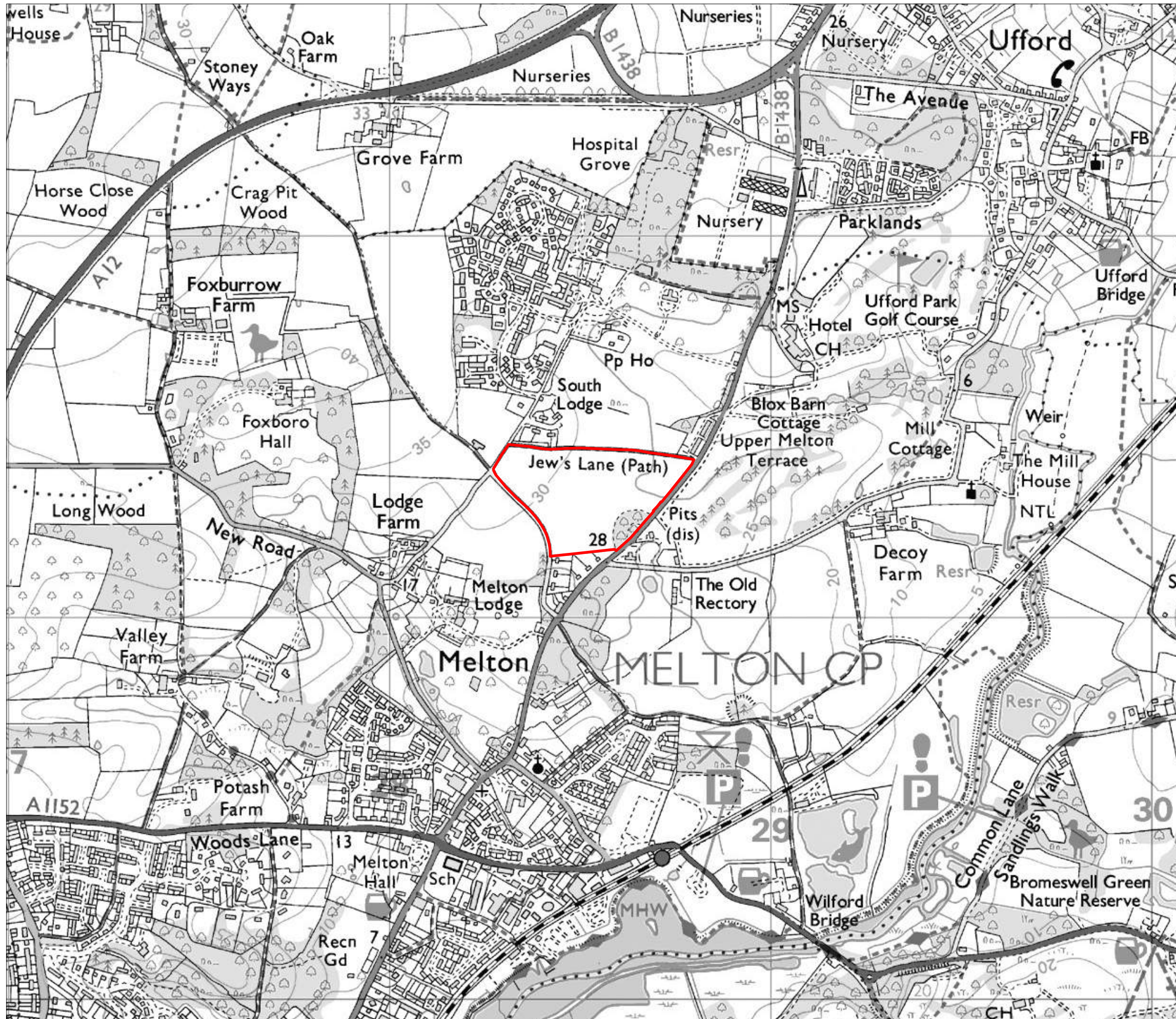
8.0 CONCLUSION

8.1 It is considered that the NP fails to meet the basic conditions and should therefore be withdrawn forthwith

Richard Brown Msc

Richard Brown Planning Ltd

13th April 2017




Christchurch Land and Estates (Melton) Ltd.

Land off Yarmouth Road, Melton

Site Location Plan

KEY

 Application site boundary



Date: 05.06.2014

YOR.2251.010

Drawn by: SE

Checked by: JB



Pegasus Group

Scale: 1:10,000 at A3

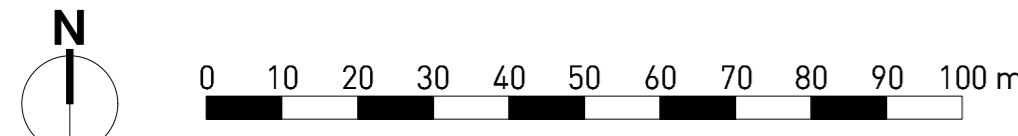


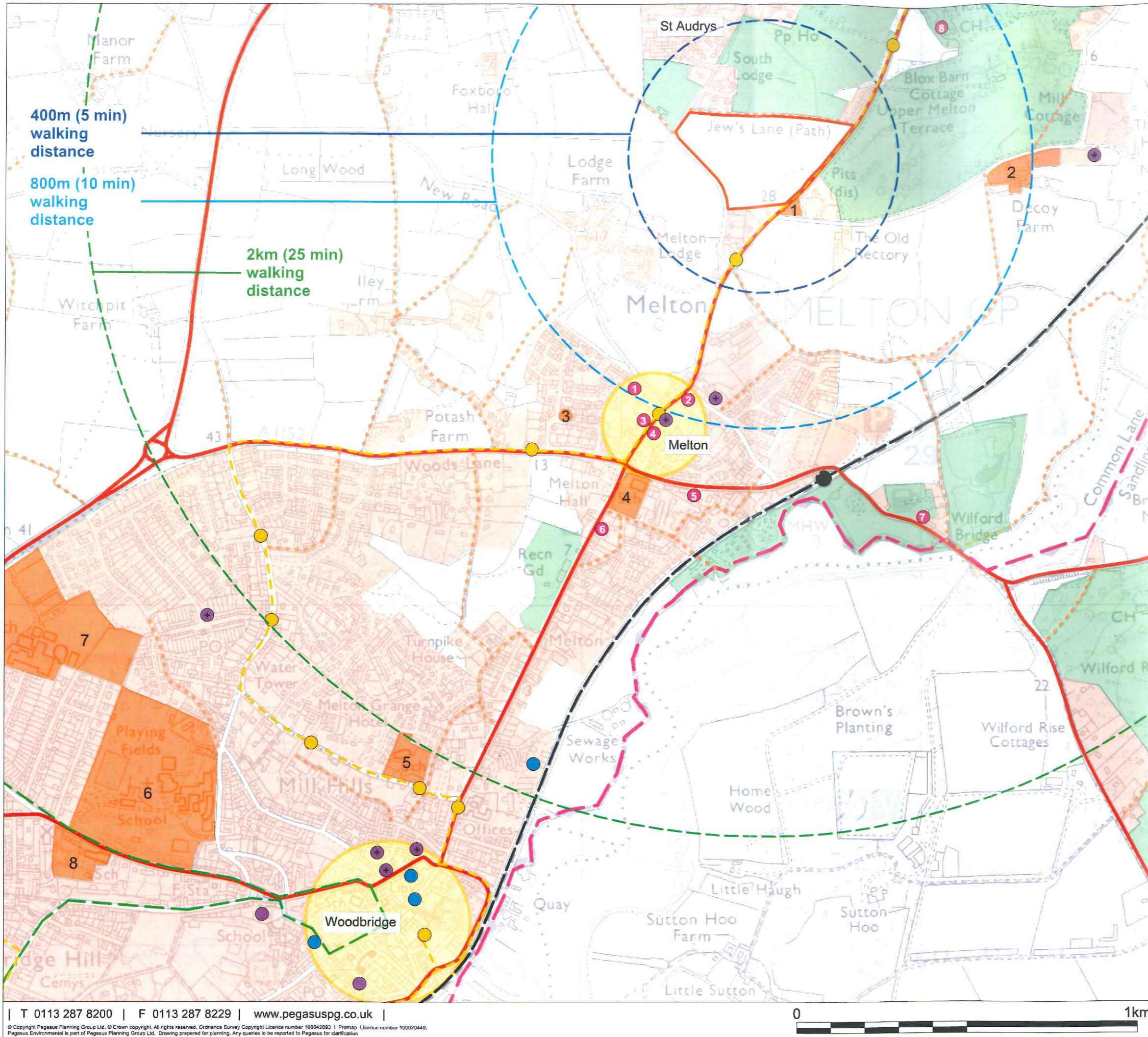
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- KEY**
- Site boundary (9.8 ha)
 - Existing trees to be retained
 - Sustainable drainage basins
 - Proposed allotment / community orchard
 - Proposed POS over former quarry. Quarry to be part filled.
 - Railings around former quarry
 - Proposed footpath links
 - Nursing home
 - Main site access off Yarmouth Road
 - Public Open Space (POS)
 - Feature plots
 - Pumping station

- HOUSING MIX**
- Open Market (66% of development)**
- 23 x 2 bed
 - 37 x 3 bed
 - 32 x 4 bed
- Affordable (33% of development)**
- 12 x 1 bed
 - 22 x 2 bed
 - 12 x 3 bed
- TOTAL: 138 Units**





Christchurch Land and Estates (Melton) Ltd.

Land off Yarmouth Road, Melton

Local Facilities and Access

- KEY**
- Application site boundary
 - 400m (5 minutes walking distance)
 - 800m (10 minutes walking distance)
 - 1.5km (5 minutes cycling distance)
 - Settlement / Residential
 - Recreation / Leisure / Outdoor Amenity / Sports
 - Education / Child Care
 - 1. Melton Day Nursery
 - 2. Rectory Garden Montessori School
 - 3. Melton Under Fives Pre-School
 - 4. Melton Community Primary School
 - 5. Woodbridge Primary School
 - 6. Woodbridge School and Sixth Form
 - Abbey Junior School
 - Queens House Preparatory School
 - 7. Farlingaye High School
 - 8. St Mary's C of E Aided Primary School
 - Woodbridge Town / Melton Village Centres
 - Medical and Healthcare Services
 - Places of Worship
 - Community Facilities
 - 1. The Lindos Centre (community hall, meeting room and psychotherapy centre)
 - 2. Melton Fish Bar
 - 3. McColl's convenience store
 - 4. Burness Parish Rooms (village hall, activity centre and venue)
 - 5. Wilford Bridge Spur business park (including veterinary surgery and garage)
 - 6. Coach & Horses public house
 - 7. The Wilford Bridge public house
 - 8. Ufford Park Hotel
 - Bus Routes and Bus Stops
 - Railway and Station
 - Main Roads
 - National Cycle Network Route
 - Long Distance Footpath

Local Public Right of Way
 Date: 09.09.2014 YOR.2251.012.revB

Drawn by: SE Checked by: JB

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**Extended Phase 1 Habitat Survey of
Land off Yarmouth Road,
Melton, Suffolk**



Cotswold Wildlife Surveys

September 2016



CONTENTS

	Page
SUMMARY	3
1. INTRODUCTION	7
1.1 Background and survey objectives	7
1.2 Site description	7
1.3 Proposed works	8
2. METHODOLOGY	9
2.1 Desk study.....	9
2.2 Habitat survey.....	9
2.3 Protected species survey	9
2.3.1 Badgers	9
2.3.2 Bats	11
2.3.3 Birds	12
2.3.4 Great Crested Newts.....	12
2.3.5 Otters	13
2.3.6 Reptiles	14
2.3.7 Water Voles.....	14
2.4 Constraints.....	15
3. RESULTS	16
3.1 Desk study.....	16
3.1.1 Designated sites	16
3.1.2 Protected species.....	16
3.1.3 Invasive species.....	17
3.2 Habitat survey.....	18
3.2.1 Habitat descriptions	18
3.2.2 Flora	21
3.3 Protected species survey	22
3.3.1 Badgers	22
3.3.2 Bats	22
3.3.3 Birds	23
3.3.4 Great Crested Newts.....	23
3.3.5 Otters	23
3.3.6 Reptiles	23
3.3.7 Water Voles.....	23
3.3.8 Invertebrates.....	23
3.3.9 Other species	24
4. CONCLUSIONS AND RECOMMENDATIONS	25
4.1 Site evaluation	25
4.2 Possible impacts of proposed work and recommendations	25
4.3 Further surveys	28
4.4 Biodiversity enhancements	28
5. REFERENCES	33
APPENDICES.....	34
Appendix 1: Phase 1 Habitat Survey Map	35

Appendix 2: Target Notes.....	36
Appendix 3: Plant species list.....	37
Appendix 4: Bird species list.....	38
Appendix 5: Relevant legislation.....	39
5.1 – Badgers.....	39
5.2 – Bats.....	39
5.3 – Birds.....	40

Cotswold Wildlife Surveys Ltd (CWS) has prepared this report in accordance with the instructions of Richard Brown Planning, on behalf of Christchurch Land and Estates (Melton) Limited ("the Client"), by email dated 24th March 2014 and under the terms of appointment for CWS. This report is confidential and non-assignable by the Client and CWS shall not be responsible for any use of the report or its contents for any purpose other than that for which it was prepared and provided. Should the Client require to pass copies of the report to other parties for information, the whole of the report should be so copied, but no professional liability or warranty shall be extended to other parties by CWS in this connection without the explicit written agreement thereto by CWS. The report may be assigned by the Client by way of absolute legal assignment to a purchaser of all or part of the site to which the report refers ("The Site") without the consent of CWS being required and such assignment shall be effective upon written notice thereof being given to CWS. No further assignment shall be permitted. In the event of the Client entering into a legal joint venture to develop The Site, the report can be regarded as having been issued by CWS jointly in favour of the Client and the joint venture partner, and in respect of the report CWS would owe the joint venture partner the same duty of care that we owed to the Client when we were instructed to prepare the report subject to all the matters contained or referred to in the report.

SUMMARY

On land off Yarmouth Road in Melton, Suffolk, planning permission is to be sought for a residential development.

In March 2014, Cotswold Wildlife Surveys was instructed to carry out an Extended Phase 1 Habitat Survey of the site. This was undertaken to determine the presence of any important habitats or species which might be impacted on by potential development of the site.

Ecological data provided by Suffolk Biological Records Centre revealed the presence of no statutory and three non-statutory nature conservation sites within a 1.0 km radius of the land.

Due to the distance between the sites and the land, the presence of barriers such as roads, and the lack of any direct connectivity, the proposed development is unlikely to impact adversely on any of the citation species or habitats within the sites.

The data also revealed a small number of records of Protected, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species from within a 1.0 km radius of the site.

No records came from the land itself, however there were a number of bat records in the search area, these including Serotine *Eptesicus serotinus*, Barbastelle *Barbastella barbastellus*, Brown Long-eared *Plecotus auritus* and Common Pipistrelle *Pipistrellus pipistrellus*. This suggests that the land or specific features upon the land might be used by foraging bats in the area.

Other mammal records included West European Hedgehog *Erinaceus europaeus* and Brown Hare *Lepus capensis*.

Other species identified included a wide range of birds such as Common Kingfisher *Alcedo atthis*, Great Bittern *Botaurus stellaris*, Curlew Sandpiper *Calidris ferruginea*, Eurasian Curlew *Numenius arquata*, Common Cuckoo *Cuculus canorus* and Common Nightingale *Luscinia megarhynchos*, amongst many others.

Invertebrate species were also well represented, and included Grayling *Hipparchia semele*, Wall *Lasiommata megera*, Small Heath *Coenonympha pamphilus*, Mottled Rustic *Caradrina morpheus* and Stag Beetle *Lucanus cervus*.

There was only a single record of reptiles within the search area, this a Grass Snake *Natrix natrix*. There were no records of Great Crested Newts *Triturus cristatus* or other amphibians.

The initial Phase 1 survey took place on 23rd June 2014, in warm and bright conditions with no wind. A second visit was undertaken on 2nd October 2015, again in bright, warm and still conditions.

The site comprised a large triangular shaped field, which was under continuous cultivation for arable crops and intensively managed.

A small block of woodland stood in the southeastern corner of the field where the site bordered Yarmouth Road. This was lined with dense scrub and tall ruderal vegetation.

Narrow strips of scattered scrub and tall ruderal vegetation ran along the southern and western margins of the field, whilst a wider strip of poor semi-improved grassland bordered Yarmouth Road at the northeastern corner of the site.

Trimmed intact hedgerows and hedges with trees bordered the site.

No rare vascular plants were found, and all species recorded were common and widespread. There were no invasive or notifiable species.

A total of six species of bird were observed during the visit, all of which were species of Low Conservation Concern (RSPB Green list). It was considered likely that some birds could use the woodland, hedges and trees for nesting purposes during the breeding season.

Since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal should be undertaken outside the period 1st March to 31st August inclusive. If this time frame cannot be avoided, a close inspection of the trees and hedges to be removed should be undertaken prior to clearance. Work should not be carried out within a minimum of 5.0 metres of any in-use nest, although this distance could be more depending on the species.

Three of the trees within the curtilage of the site supported features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered suitable for bat roosting and/or hibernation.

The majority of the site provided relatively low value habitat to foraging or commuting bats, this due to much of the field being dominated by arable crops.

However, the small block of woodland and hedges with trees provided foraging and commuting habitats for bats, so these will be retained.

The woodland also contained an active Badger *Meles meles* sett, this consisting of four entrances.

With an absence of any ponds or other still water wetland features on the land itself, the site had no potential for breeding amphibians.

However, there were five ponds within 500 of the site, although none were accessible due to being on private land. Irrespective of this all five lay at least 400-450 m away, beyond local and main roads, the latter a significant barrier to newt dispersal.

Given the absence of records in the area, and the barriers to dispersal, it was considered unlikely that Great Crested Newts would be present, and no further surveys are required.

The majority of the site was also considered unlikely to support reptiles, as there were no obvious refugia or hibernacula, relatively poor foraging and limited basking areas.

Although no evidence of reptiles or amphibians was found, the potential for them to be present on site still exists, thus care should be taken at all times during any vegetation removal and topsoil stripping, with dismantling by hand of any potential refugia such as log or rubble piles. Any common amphibians, reptiles or small mammals disturbed or uncovered should either be caught by hand and relocated to a safe area, or left to vacate the work site in their own time.

Since much of the site was dominated by arable land, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan. However, the field margins provided attractive habitat for common invertebrate species, and a number of butterflies including Meadow Brown *Maniola jurtina*, Peacock *Aglais io* and Small Tortoiseshell *Aglais urticae* were recorded during the survey.

The majority of the site was concluded to be of low value to wildlife, with just the block of woodland and the hedges with trees providing better quality habitat for a range of species, potentially including foraging and/or commuting bats. These will be retained.

Furthermore, in order to comply with paragraph 125 of the National Planning Policy Framework, the development will aim to limit the impact of light pollution on bats by maintaining dark routes for commuting and foraging where possible.

As such any lighting installed will follow the guidance provided by the Bat Conservation Trust and the Institute of Lighting Engineers.

Any trees not to be removed as part of the proposed works should be given adequate protection during the works, in accordance with British Standard *BS5837:2012 Trees in relation to Design, Demolition and Construction – Recommendations*. Protection should be installed on site prior to the commencement of any works on site.

If excavations are to be undertaken, it should be noted that open trenches could potentially trap wildlife, especially if these fill up with water. If trenches cannot be infilled immediately then they should either be covered overnight or escape routes should be provided. These can be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

A wide variety of biodiversity enhancements have been proposed and are detailed in Section 4.4.

1. INTRODUCTION

1.1 Background and survey objectives

In April 2014, Cotswold Wildlife Surveys was instructed to carry out an Extended Phase 1 Habitat Survey of land off Yarmouth Road in Melton, Suffolk. This was undertaken to determine the presence of any important habitats or species which might be impacted on by potential development of the site.

Ecological data supplied by the Suffolk Biological Record Centre revealed the presence of no statutory and three non-statutory nature conservation sites within a 1.0 km radius of the site, along with a number of records of Protected Species, Section 41 species and Biodiversity Action Plan priority species.

1.2 Site description

The site bordered Yarmouth Road to the east and St Audry's Road to the west. St Audry's Golf Course bordered the site to the north.

The Ordnance Survey Grid Reference is TM 28510 51321, centred on the middle of the site.

The land comprised a large triangular shaped field which was under continuous cultivation and intensively managed.

A small block of woodland stood on the site of a disused pit in the southeastern corner of the field where the site bordered Yarmouth Road. The woodland comprised a number of mature trees that included Pedunculate Oak *Quercus Robur*, Ash *Fraxinus excelsior*, Sycamore *Acer pseudoplatanus*, Sweet Chestnut *Castanea sativa*, Common Beech *Fagus sylvatica*, Hawthorn *Crataegus monogyna*, Wild Cherry *Prunus avium* and Elder *Sambucus nigra*.

This woodland edge was lined with dense Bramble *Rubus fruticosus* scrub and tall ruderal vegetation, which included Common Nettle *Urtica dioica*, Creeping Thistle *Cirsium arvense* and Common Cleavers *Galium aparine*.

Narrow strips of scattered Bramble scrub and tall ruderal vegetation consisting of Common Nettle, Creeping Thistle, Common Cleavers, Hogweed *Heracleum sphondylium* and Alexander's *Smyrniololus atrum* ran along the southern and western margins of the field.

A wider strip (8-10 metres) of poor semi-improved grassland bordered Yarmouth Road at the north-eastern corner of the field.

The grassland was dominated by tall grass species which included meadow-grasses *Poa Spp.*, False Oat-grass *Arrhenatherum elatius*, Common Couch *Elymus repens* and Perennial Ryegrass *Lolium perenne*.

Amongst the sward were a small number of forbs including Cow Parsley *Anthriscus sylvestris*, White Clover *Trifolium repens*, Red Clover *T. pratense*, Sainfoin *Onobrychis viciifolia*, Red Campion *Silene dioica*, Common Mallow *Malva sylvestris*, Evening Primrose *Oenothera biennis* and Curled Dock *Rumex crispus*.

The hedgerows with trees which bordered the site perimeter comprised predominantly of Hawthorn and Blackthorn *Prunus spinosa* with some Elder and Bramble. The trees within the hedges were generally mature and included Ash, Pedunculate Oak, Sycamore, Sweet Chestnut and Common Beech.

1.3 Proposed works

A residential development is proposed for the site, as shown in the Indicative Masterplan below (Plan 1).



Plan 1 Indicative Masterplan

2. METHODOLOGY

2.1 Desk study

A detailed desk study was undertaken to determine the nature conservation designations and protected species that had been recorded within a 1.0 km radius of the site. This involved contacting statutory and non-statutory organisations, and then assimilating and reviewing the data provided.

The consultees for the desk study were:

- ❑ Multi Agency Geographic Information (MAGIC) website www.magic.gov.uk;
- ❑ National Biodiversity Network Gateway website;
- ❑ Suffolk Biological Records Centre.

2.2 Habitat survey

An Extended Phase 1 Habitat Survey was carried out across the whole of the survey site. It was conducted using standard JNCC (2003) techniques and methodologies.

The initial Phase 1 visit took place on 23rd June 2014, in warm, bright conditions with no wind.

A second visit was undertaken on 2nd October 2015, again in bright, warm and still conditions.

2.3 Protected species survey

During the surveys the potential for other protected and important species was assessed. This included European Protected Species, legally protected species and Local Biodiversity Action Plan Species (and habitats).

2.3.1 Badgers

Badgers are generally nocturnal and evidence of their presence in an area often comes from field signs rather than sightings of the animals. Useful field signs include:

- ❑ Setts (main, outlying, annex or subsidiary)
- ❑ Tufts of hair caught on barbed wire fences;
- ❑ Conspicuous Badger paths;

- Footprints;
- Latrines – small excavated pits in which droppings are deposited;
- 'Snuffle holes' – small scrapes where Badgers have searched for insects and plant tubers;
- Day nests – bundles of grass and other vegetation where Badgers may sleep above ground;
- Scratch marks on trees (usually near the sett).

Daytime surveys looking for field signs can be carried out at any time of the year, and should be non-intrusive, but nocturnal surveys of setts (if required), are only likely to be effective from April to November, when Badgers are most active, and any cubs present will have emerged.

Main setts

These usually have a large number of holes with large spoil heaps, and the sett generally looks well used. They usually have well used paths to and from the sett and between sett entrances. Although normally the breeding sett is in continual use, it is possible to find a main sett that has become disused because of excessive digging or for some other reason, in which case it is recorded as a disused main sett.

Annex setts

These are always close to a main sett, usually less than 150 m away, and are usually connected to the main sett by one or more obvious, well worn paths. They consist of several holes, but are not necessarily in use all the time, even if the main sett is very active.

Subsidiary setts

These often these have only a few holes, are usually at least 50 m from a main sett, and do not have an obvious path connecting them with another sett. They are not continuously active.

Outlying setts

These usually only have one or two holes, often have little spoil outside the hole, have no obvious path connecting them with another sett, and are only used sporadically. When not in use by badgers, they are often taken over by foxes or even rabbits. However, they can still be recognised as badger setts by the shape of the tunnel (not the entrance hole), which is at least 250 mm in diameter and rounded or flattened oval in shape.

A search for evidence of Badger presence on site was undertaken as part of the Extended Phase 1 Habitat Survey.

2.3.2 Bats

In order to fully assess bat occupation of a particular site, the Bat Conservation Trust (2016) recommends that information gathered from a desk study of known bat records, and a daytime site walkover, is used to inform the type and extent of future bat survey work, potentially including nocturnal surveys.

The diurnal walkover provides an opportunity to check for signs of occupancy, such as droppings, scratch marks, feeding remains, carcasses, or even animals in residence, whilst nocturnal surveys (if required) allow numbers and species of bats to be confirmed. The latter are also used to determine the presence or absence of bats, where signs of bat activity are indeterminate or absent but the suitability for bat roosting is considered to be low, medium or high.

Roosting places vary depending on the species. Pipistrelles usually inhabit narrow cracks or cavities around the outside of buildings, but they will roost in similar niches inside larger barns. Typical sites include soffit spaces, gaps behind fascia boards and end rafters, crevices around the ends of projecting purlins, under warped or lifted roof and ridge tiles, or in gaps in stone and brickwork where mortar has dropped out.

Larger species such as Brown Long-eared Bats *Plecotus auritus*, Myotis bats (Natterer's *Myotis nattereri* and Whiskered/Brandt's *M. mystacinus*/*M. brandtii*), and Lesser Horseshoes *Rhinolophus hipposideros*, like to roost in the roof voids of buildings, and can often be found hanging singly or in small groups from ridge boards or roof timbers, especially where these butt up against gable walls or chimney breasts. They especially favour older structures with timber frames. Here they squeeze into tight crevices making them difficult to observe.

Diurnal walkovers can be carried out at any time of the year, but nocturnal surveys, if required, should only be undertaken when bats are out of hibernation and in their summer roosts. The recommended period is from May to September inclusive, with May to August optimum and September sub-optimum. The season can be extended into October, although particularly cold weather will render this inadvisable. Indeed, the air temperature at the start of each survey must be at least 10°C or above.

On the land off Yarmouth Road the trees were inspected for any gaps in the bark, patches of exfoliating bark, fissures, splits, cracks and cavities, including woodpecker holes that might provide potential roosting and/or hibernation places.

Where appropriate, cavities and crevices were inspected with a penlight, whilst 10x42 Nikon binoculars and a Clulite CB2 torch were used for the inaccessible/unreachable areas.

2.3.3 Birds

Most resident and migrant birds breed in the spring and summer, although Woodpigeons *Columba palumbus* and Collared Doves *Streptopelia decaocto* nest throughout the year, and as a result could be on eggs in almost any month.

In season, signs of breeding include singing males, display and copulation, birds gathering nesting materials, adults carrying food, calling chicks, etc.

In winter none of these activities may be occurring, so a survey for old nests and/or nest holes is the most reliable method of determining the presence or absence of breeding birds.

This was carried out during the Phase 1 Habitat Survey, along with a general site walkover to identify the presence of foraging birds.

2.3.4 Great Crested Newts

A survey for Great Crested Newts (GCN) may be indicated when background information on distribution suggests that they may be present. More detailed indicators are:

- Any historical records of Great Crested Newts on the site or in the general area
- A pond on or near the site (within around 500 m), even if it holds water only seasonally
- Sites with refuges (such as piles of logs or rubble), grassland, scrub, woodland or hedgerows within 500 m of a pond.

There are several field survey methods which can be employed depending on the time of year:

- Bottle or funnel trapping – adults ideally February to May, with June and July sub-optimal, and August to September for detection of larvae (i.e. young)
- Egg search – April to June ideally, with March and July sub-optimal
- Torch survey – March to May for adults, with February and June to July sub-optimal, and August to September for larvae
- Netting – March to May for adults, with February and June to July sub-optimal, and August to September for larvae
- Pitfall trapping – March to May and September for adults, with February, June to August and October sub-optimal
- Refuge search – April to September ideally, with March and October sub-optimal.

The latter two methods involve terrestrial habitats, the others aquatic habitats, for which a minimum of 4 visits per year are recommended, with at least 2 visits between mid-April and mid-May to record peak numbers (English Nature, 2001).

There were five ponds within 500 of the site, none of which were accessible due to being on private land (Plan 2). However, all five lay at least 400-450 m away beyond local and main roads, the latter a significant barrier to newt dispersal.



Plan 2 Ponds within 500 m of the land off Yarmouth Road

Centre of 500 m radii ★

2.3.5 Otters

Otters are nocturnal and are active all year round. They are large with an adult male reaching up to 1.2 m from nose to tail, and weighing about 10 kg.

Feeding mainly on fish and amphibians, Otters live by undisturbed waters where there is plenty of cover, mostly by freshwater lakes, rivers and quiet small streams as well as some coasts.

An Otter may use over 40 km of river and needs many resting places throughout this range. A female otter will give birth to 1 to 3 cubs in a natal holt, which is often away from the main river and must be completely undisturbed. Field signs include:

- Prints in soft mud;
- Spraints (faeces);
- Holts.

A search for evidence of Otter presence on site was undertaken as part of the Extended Phase 1 Habitat Survey.

2.3.6 Reptiles

Commoner reptiles which may be encountered in rural areas include Grass Snake, Slow-worm *Anguis fragilis*, and Common Lizard *Zootoca vivipara*.

During the winter months, from mid-October to late February or early March, they are in hibernation, usually deep in underground hibernacula, such as holes and cracks in the ground, among rocks or the roots of large trees, down animal burrows, or in piles of rubble or stone.

In the spring and summer they live above ground in well-vegetated places, with Grass Snakes often near or in water. Being cold-blooded all reptiles like to bask, and can often be found in open places.

There are very few signs of reptile presence, but these include:

- Shedded skin (snakes);
- Eggs (but not Common Lizard which gives birth to live young).

All potential refugia on site were checked where possible as part of the Extended Phase 1 Habitat Survey.

2.3.7 Water Voles

The Water Vole *Arvicola amphibius* is the largest of the British voles. It lives in a series of holes or burrows at the water's edge and can be found along the banks of ditches, streams, rivers, lakes and canals.

Although Water Voles live in colonies, the breeding females are territorial, each defining their contiguous territory with latrines during the breeding season. This lasts from March to October.

The Water Vole is herbivorous, feeding primarily on the lush aerial stems and leaves of waterside plants. Its activity is normally confined to the area within two metres of the watercourse, the bankside vegetation in this area not only essential for food, but also for cover from predators.

Water Vole activity can be assessed by looking for the following signs:

- Burrows;
- Faeces and latrines;
- Feeding stations;
- Runs;
- Paw prints in areas of soft mud;
- Feeding 'lawns';
- Predator field signs.

A search for evidence of Water Vole presence on site was undertaken as part of the Extended Phase 1 Habitat Survey.

2.4 Constraints

There were no constraints, as the initial survey was carried out at the optimal time of the year.

3. RESULTS

3.1 Desk study

3.1.1 Designated sites

Statutory Sites

There were no statutory sites within the search area.

Non-Statutory Sites

There were three non-statutory sites within the search area; Hospital Grove CWS (County Wildlife Site) located approximately 500 metres north of the site, Melton Picnic site CWS located 900 metres south of the site and Foxburrow Farm Suffolk Wildlife Trust Nature Reserve which is located within 100 metres of the site to the west.

Due to the distance between the sites and the land, the presence of barriers such as roads, and the lack of any direct connectivity, the proposed development is unlikely to impact adversely on any of the citation species or habitats in this site.

3.1.2 Protected species

The data also revealed a small number of records of Protected, UK Biodiversity Action Plan (UKBAP) and Local Biodiversity Action Plan (LBAP) species from within a 1.0 km radius of the site.

No records came from the land itself, however there a number of bat species records in the search area, including Serotine, Barbastelle, Brown Long-eared and Common Pipistrelle. This suggests that the land or specific features upon the land might be used by foraging bats in the area.

Other mammal records included West European Hedgehog and Brown Hare.

Additional species identified included a wide range of birds such as Common Kingfisher, Great Bittern, Curlew Sandpiper, Eurasian Curlew, Common Cuckoo and Common Nightingale amongst many others. Invertebrate species were also well represented and included Grayling, Wall, Small Heath, Mottled Rustic and Stag Beetle.

There was only one record of reptiles within the search area, this a Grass Snake.

3.1.3 Invasive species

A small number of invasive species records were present in the search area including Himalayan Balsam *Impatiens glandulifera* and Giant Hogweed *Heracleum mantegazzianum*, although no records came from or adjacent to the site itself.

3.2 Habitat survey

3.2.1 Habitat descriptions

The following habitats were recorded across the site:

- ❑ Woodland;
- ❑ Dense and scattered scrub;
- ❑ Poor semi-improved grassland;
- ❑ Tall ruderal vegetation;
- ❑ Hedge with trees;
- ❑ Arable.

These habitats are described below and are shown on the Phase 1 Habitat Survey map in Appendix 1, with the target notes (where applicable) in Appendix 2.

Woodland

A small block of woodland stood on the site of a disused pit in the southeastern corner of the field, where the site bordered Yarmouth Road (Figs. 1 and 2). The woodland consisted of a number of mature trees that included Pedunculate Oak, Ash, Sycamore, Sweet Chestnut, Common Beech, Hawthorn, Wild Cherry and Elder.



Figs. 1 & 2 Block of woodland

Scattered scrub

Pockets of dense and scattered Bramble scrub were present around the woodland edge and along parts of the field margins (Figs. 3 and 4).



Figs. 3 & 4 Scattered scrub

Poor semi-improved grassland

A strip of poor semi-improved grassland bordered Yarmouth Road at the northeastern corner of the field (Figs. 5 and 6). The grassland was dominated by tall grass species that included meadow-grasses, False Oat-grass, Common Couch and Perennial Ryegrass.



Figs. 5 & 6 Poor semi-improved grassland

Amongst the sward were a small number of forbs that included Cow Parsley, White Clover, Red Clover, Sainfoin, Red Campion, Common Mallow, Evening Primrose and Curled Dock.

Tall ruderal vegetation

Stands of tall ruderal vegetation including Common Nettle, Creeping Thistle and Common Cleavers lined the woodland edge whilst stands comprising Common Nettle, Creeping Thistle, Common Cleavers, Hogweed and Alexander's were present along the field margins (Figs. 7 and 8).



Figs. 7 & 8 Tall ruderal vegetation

Hedge and trees

The hedgerows with trees which bordered the site perimeter comprised predominantly of Hawthorn and Blackthorn with some Elder and Bramble. The trees within the hedges were generally mature and included Ash, Pedunculate Oak, Sycamore, Sweet Chestnut and Common Beech (Figs. 9 and 10).



Figs. 9 & 10 Hawthorn hedges with trees

Arable

The site was dominated by intensively managed arable farmland under continuous cultivation (Figs. 11 and 12).



Figs. 11 & 12 Arable

3.2.2 Flora

The botanical composition of each habitat was typical, and all species recorded were common and widespread.

No rare vascular plants were found, and there were no invasive or notifiable species.

A list of species observed is presented in Appendix 3.

3.3 Protected species survey

3.3.1 Badgers

Within the woodland in the disused pit area, there was a small active Badger sett consisting of four entrances (Figs. 13 and 14 – Target Note 1).



Figs. 13 & 14 Active Badger sett in woodland area

Paths led from the sett into the woodland, and southwest towards neighbouring gardens.

No latrines were found on the site, or any signs of foraging behaviour, this not surprising given the continuous cultivation of the main area of land.

3.3.2 Bats

Three of the trees within the curtilage of the site supported features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered suitable for bat roosting and/or hibernation (Figs. 15 and 16 – Target Notes 2, 3 and 4).



Figs. 15 & 16 Holes in trees

The majority of the site provided relatively low value habitat to foraging or commuting bats, this due to much of the field being dominated by arable crops. However, the small block of woodland and hedges with trees provided foraging and commuting habitats for bats.

3.3.3 Birds

A total of six species of bird were observed during the visit, all of which were species of Low Conservation Concern (RSPB Green list). It was considered likely that some birds could use the woodland, hedges and trees nesting purposes during the breeding season.

A full list of species noted is given in Appendix 4.

3.3.4 Great Crested Newts

The presence of Great Crested Newts was considered unlikely. Any suitable refugia were checked, but no evidence of Great Crested Newts or any other newt species was found.

3.3.5 Otters

A survey for Otter was undertaken as part of the Extended Phase 1 Habitat Survey, but this identified no evidence of Otter activity.

3.3.6 Reptiles

Any suitable refugia on site were checked during the Extended Phase 1 Habitat Survey, but no reptiles, or evidence of reptiles, was found.

3.3.7 Water Voles

A survey for Water was undertaken as part of the Extended Phase 1 Habitat Survey. This identified no evidence of Water Vole.

3.3.8 Invertebrates

Since much of the site was dominated arable land, it was concluded that there was low potential for invertebrate assemblages, in particular those species listed as a priority in the UK Biodiversity Action Plan and/or Local Biodiversity Action Plan. However, the field margins provided attractive habitat for common invertebrate species, and a number of butterflies including Meadow Brown, Peacock and Small Tortoiseshell were observed during the survey.

3.3.9 Other species

Rabbits *Oryctolagus cuniculus* were present in fairly large numbers, and a family of Foxes *Vulpes vulpes* was disturbed in the woodland during the initial survey. Indeed, well-worn mammal paths led to an earth within the woodland (Figs. 17 and 18 – Target Note 5).



Figs. 15 & 16 Mammal path and Fox earth in woodland

4. CONCLUSIONS AND RECOMMENDATIONS

4.1 Site evaluation

The majority of the site was concluded to be generally of low wildlife value, this due to much of the land being dominated by arable crops with very little floral diversity.

The strip of poor semi-improved grassland offered a relatively limited floristic diversity with a small number of common and widespread species, and it was rather limited in extent.

The woodland and the hedges with trees provided cover for nesting and feeding habitat for birds, whilst also offering foraging and commuting habitat for bats. However, the majority of the site provided relatively low value habitat to foraging or commuting bats, this due to much of the field being dominated by arable crops.

A small active Badger sett was present in the woodland area on the site of the former pit, and a Fox earth was also noted nearby.

The marginal strips and woodland edge habitat which comprised a mosaic of tall ruderal vegetation and scrub provided attractive habitat for common invertebrates and also offered cover for small mammals.

4.2 Possible impacts of proposed work and recommendations

The main impact of any development will be on the semi-natural habitat noted above, in particular the woodland and the hedges with trees.

It was considered likely that some birds could use woodland and hedges and trees for nesting purposes during the breeding season. Since all in-use bird's nests and their contents are protected from damage or destruction, any tree and shrub removal should be undertaken outside the period 1st March to 31st August inclusive.

If this time frame cannot be avoided, a close inspection of the trees and shrubs to be removed should be undertaken prior to clearance. Work should not be carried out within a minimum of 5.0 metres of any in-use nest, although this distance could be more depending on the species.

However, the trees and hedgerows are to be retained, so there will continue to be opportunities for bird nesting on the site.

Three of the trees within the curtilage of the site supported features such as decay cavities, woodpecker holes, fissures and exfoliating bark, that would be considered suitable for bat roosting and/or hibernation. These are to be retained and there will be no impact upon them. As such, no further surveys or inspections will be required.

Furthermore, in order to comply with paragraph 125 of the National Planning Policy Framework, the development should aim to limit the impact of light pollution on bats by maintaining dark routes for commuting and foraging where possible. As such any lighting installed will follow the guidance provided by the Bat Conservation Trust and the Institute of Lighting Engineers.

Any trees not to be removed as part of the proposed works will be given adequate protection during the works, in accordance with British Standard *BS5837:2012 Trees in relation to Design, Demolition and Construction – Recommendations*. Protection will be installed on site prior to the commencement of any works on site.

The protection measures will include Protective Barrier Fencing (PBF). The PBF is to remain in situ for the entire duration of the construction phase, unless otherwise agreed in writing by the Local Authority. The type of fence to be used is shown in Fig. 19 below.

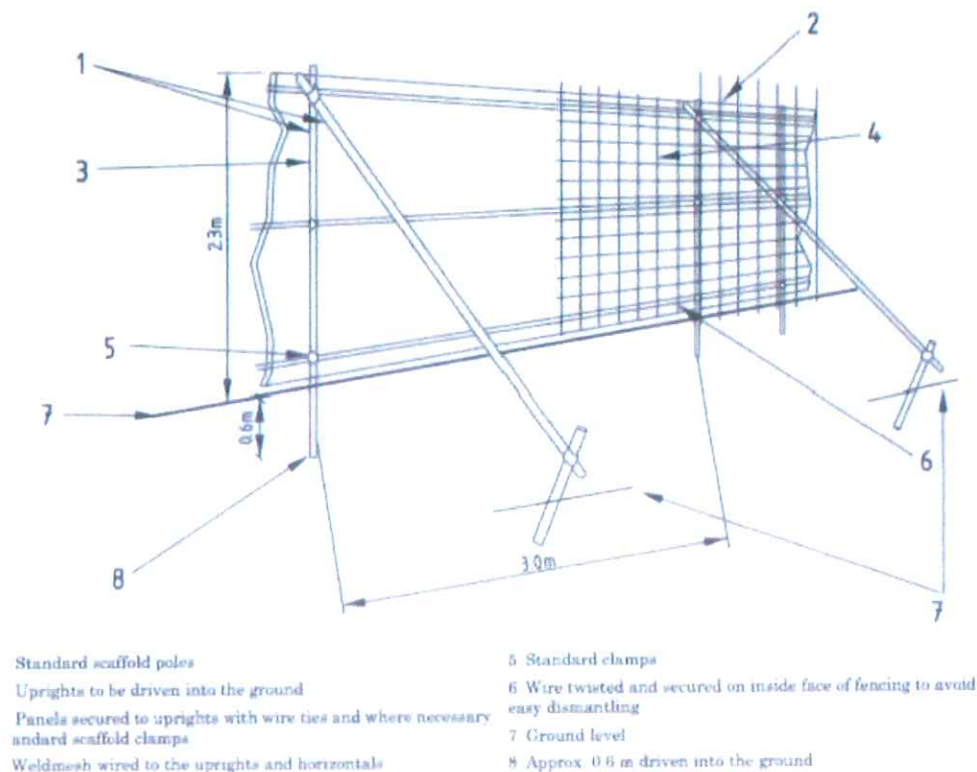


Fig. 19 Protective Barrier Fencing

The PBF, due to the degree and proximity of work taking place around the trees, is to consist of "a vertical and horizontal (scaffold) framework, well braced to resist impacts, with the vertical tubes spaced at a maximum of 3m. Onto this, weld mesh panels should be securely fixed with wire or scaffold clamps. Weldmesh panels on rubber or concrete feet are not resistant to impact and should not be used.

Tree protection signage denoting the words "TREE PROTECTION ZONE – KEEP OUT" is to be fixed onto every other panel of the PBF (Fig. 20).



Fig. 20 Example of signage

With an absence of any ponds or other still water wetland features on the site itself, there was no potential for breeding amphibians.

There were five ponds within 500 of the site, none of which were accessible due to being on private land. However, all five lay at least 400-450 m away beyond local and main roads, the latter a significant barrier to newt dispersal.

Given the absence of records in the area, and the barriers to dispersal, it was considered unlikely that Great Crested Newts would be present, and no further surveys are considered necessary.

The majority of the site was also considered unlikely to support reptiles, as there were no obvious refugia or hibernacula, relatively poor foraging and limited basking areas.

Although no evidence of reptiles or amphibians was found, the potential for them to be present on site still exists, thus care should be taken at all times during any vegetation removal and topsoil stripping, with dismantling by hand of any potential refugia such as log or rubble piles. Any common amphibians, reptiles or small mammals disturbed or uncovered should either be caught by hand and relocated to a safe area, or left to vacate the work site in their own time.

The Badger sett and Fox earth lie within the woodland area which will be protected as part of the proposed development. Although there will be some partial infilling of the disused pit, this will not impact on the sett or earth, and the works will be undertaken sensitively to ensure that the animals are not disturbed or their tunnels obstructed or collapsed.

Furthermore, if excavations are to be undertaken, it is noted that open trenches could potentially trap wildlife, especially if these fill up with water. If trenches cannot be infilled immediately then they will either be covered overnight or escape routes will be provided.

These will be in the form of branches or boards placed on the bottom of the trench, with their upper ends above ground level and touching the sides, or sloping ends left in trenches.

All contractors on site will also be briefed about the nearby presence of Badgers before works commence.

4.3 Further surveys

If any tree or hedge removal cannot be timed appropriately to avoid the bird nesting period (considered to be March to August inclusive), then further surveys of the trees and/or hedge to be removed will be necessary.

4.4 Biodiversity enhancements

In addition to the retention of the boundary trees and hedgerows, it is intended to fence off and protect the woodland area on the site of the disused pit. This will maintain the opportunities for breeding birds and any foraging bats, and will minimise disturbance to the Fox earth.

A variety of boxes will also be erected on trees in the woodland and retained trees around the site boundaries.

For bats this will include ten Schwegler 2F boxes (Fig. 21). Schwegler woodcrete boxes have the highest rates of occupation of all box types. The 75% wood sawdust, concrete and clay mixture allows natural respiration, stable temperature, and durability.

They are extremely long lasting and rot- and predator-proof, and will hang from a tree branch near the trunk, or can be fixed to a trunk. The 2F is the most popular general purpose box, particularly attractive to the smaller British bats. It has a simple design with a narrow entrance slit on the front.



Fig. 21 Schwegler 2F bat box

All the boxes will be at least 5.0 m above ground level and clear of any overhanging branches or wires. They will face anywhere from SE to SW to provide differing aspects to suit different weather conditions.

For birds it is proposed to erect five each of two types of Schwegler tit nest boxes: 1B (26 mm) and 1B (32 mm), four Schwegler 2H open-fronted boxes, and two Schwegler 1SP House Sparrow terraces, the latter installed under the eaves of the care home. These are shown in Figs. 22 and 23 below.



Figs. 22 & 23 Schwegler bird nest boxes 1B (26 mm), 2H and 1B (32 mm) & 1SP

Woodcrete Nest Boxes come with a 25 year guarantee against rot, weather and natural damage.

The 1B is available with a 26 mm hole for the tit *Parus spp* family and a 32 mm hole suitable for sparrows *Passer spp*.

The 2H is open-fronted for a variety of species such as Robin *Erithacus rubecula*, Wren *Troglodytes troglodytes*, Spotted Flycatcher *Muscicapa striolatum* and Pied Wagtail *Motacilla alba*.

The Sparrow Terrace (1SP) has been designed to help redress the balance of falling House Sparrow *Passer domesticus* numbers. It provides ideal nesting opportunities for three families, and may also occasionally attract tits and Spotted Flycatchers.

The terrace can be fixed on to the surface of a suitable wall or incorporated into the wall. It is suitable for all types of houses in built-up areas, and on industrial and agricultural buildings such as barns, sheds and factories. Due to its weight (15kg), it is not suitable for fences or garden sheds.

The terraces will be placed at least two metres or more above the ground and installed on the surface of the wall using the plugs and screws provided, or installed directly into the wall. Cleaning is advisable but not necessary. The front panel can be removed by turning the screw hook. The Sparrow Terrace is available in either Stone or Brown.

In addition, the care home will incorporate a Schwegler 1 FR bat tube for pipistrelles, this on a gable end facing the woodland boundary to the north of the site.

The Schwegler 1FR bat tube (Fig. 24) is a long box that can be installed within brick masonry, beneath plasterwork or wood panelling, or incorporated into concrete structures such as factory buildings or bridges. Inside it contains a woodcrete surface, a roughened wood board, and a metal mesh, providing a choice of roosting areas depending on the weather conditions and the bats' habits. This box is maintenance-free as the entrance slit is at the bottom.

The dimensions are 47.5 cm high x 20 cm wide x 12.5 cm deep, with an entrance 15 cm wide x 2 cm deep. The weight is 13 kg. No painting is required, but if necessary a natural breathable paint can be used.

An example of a fitted bat tube is shown in Fig. 25.



Fig. 24 Schweger 1 FR bat tube Fig. 25 Bat tube installed in gable end

The surface water attenuation ponds/swale will not be permanent ponds, but will contain water following rainfall. These ephemeral wetland features will be functional but will attract wildlife such as birds, dragonflies, foraging bats, and a wide variety of invertebrates.

Native species planting around the edge and the bottom of the ponds/swale will include emergents such as Common Reed *Phragmites australis*, Bog Bean *Menyanthes trifoliata*, Arrowhead *Sagittaria sagittifolia*, Common Water Crowfoot *Ranunculus aquatilis*, and Water Speedwell *Veronica anagallis-aquatica*.

The grassland around the attenuation ponds and across the public areas of the site will be enriched with native wildflowers typical of neutral soils.

Additionally, any new tree planting will use native broadleaved species, these selected and positioned to take account of the spatial constraints of the site.

Although no further surveys are considered necessary, to protect amphibians which may venture onto the site, a briefing to contractors will be made prior to works commencing. This will include advice on the dismantling and lifting by hand of any potential refugia, care taken during vegetation removal and excavations of the topsoil, and storage of building materials on pallets and/or bare ground.

If any amphibians (or small mammals) are encountered they will be carefully captured and released nearby, or allowed to move out of the area on their own accord.

Log piles will be provided in the woodland area, along with a large subterranean refuge/hibernaculum. The latter will take account of the tree root systems, and where possible no digging will take place, as the disused pit is lower lying than surrounding land areas. Equally no soil will be heaped around the base of the tree trunks, as that may cause the root collars to decay.

Finally, the design of the scheme has allowed any potential bat flight corridors around the boundaries to be retained, but also represents a significant improvement in terms of habitat connectivity and green infrastructure. Indeed, the central part of the site will be a corridor of grassland and trees, this linking the woodland to the north with the main attenuation pond and the woodland block on the site of the disused pit. This will provide bats, birds and invertebrates such as butterflies and bees with new foraging opportunities, and will allow small mammals such as Hedgehogs *Erinaceus europeae* to pass safely through the site.

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APPENDICES

Appendix 1: Phase 1 Habitat Survey Map

Appendix 2: Target Notes

Appendix 3: Plant species list

Appendix 4: Bird species list

Appendix 5: Relevant legislation

Appendix 1: Phase 1 Habitat Survey Map



Not to scale

Legend

- | | | |
|-------------------------|---------------------------------|-------------------------|
| Survey boundary | SI Poor semi-improved grassland | Intact hedge with trees |
| Scattered scrub | Dense scrub | A Arable |
| Tall ruderal vegetation | Broadleaved woodland | Target Note |

Appendix 2: Target Notes

Target Number	Notes
1	Active Badger sett
2	Hole in tree with potential for bats.
3	Hole in tree with potential for bats.
4	Hole in tree with potential for bats.
5	Fox earth in woodland

Appendix 3: Plant species list

Latin name	Common name
<i>Quercus robur</i>	Pedunculate Oak
<i>Fraxinus excelsior</i>	Ash
<i>Fagus sylvatica</i>	Common Beech
<i>Castanea sativa</i>	Sweet Chestnut
<i>Acer pseudoplatanus</i>	Sycamore
<i>Prunus avium</i>	Wild Cherry
<i>Crataegus monogyna</i>	Hawthorn
<i>Prunus spinosa</i>	Blackthorn
<i>Rubus fruticosus</i>	Bramble
<i>Heracleum sphondylium</i>	Hogweed
<i>Smyrniolum olusatrum</i>	Alexander's
<i>Galium aparine</i>	Common Cleavers
<i>Urtica dioica</i>	Common Nettle
<i>Cirsium arvense</i>	Creeping Thistle
<i>Sambucus nigra</i>	Elder
<i>Onobrychis viciifolia</i>	Sainfoin
<i>Trifolium pratensis</i>	Red Clover
<i>Trifolium repens</i>	White Clover
<i>Anthriscus sylvestris</i>	Cow Parsley
<i>Silene dioica</i>	Red Campion
<i>Oenothera biennis</i>	Evening Primrose
<i>Malva sylvestris</i>	Common Mallow
<i>Rumex crispus</i>	Curled Dock
<i>Lolium perenne</i>	Perennial Ryegrass
<i>Elymus repens</i>	Common Couch
<i>Arrhenatherum elatius</i>	False Oat-grass
<i>Poa annua</i>	Annual Meadow-grass
<i>Poa pratensis</i>	Smooth Meadow-grass

Appendix 4: Bird species list

Common name	Latin name
Magpie	<i>Pica pica</i>
Carrion Crow	<i>Corvus corone corone</i>
Woodpigeon	<i>Columba palumbus</i>
Blackbird	<i>Turdus merula</i>
Great Tit	<i>Parus major</i>
Chaffinch	<i>Fringilla coelebs</i>

Appendix 5: Relevant legislation

5.1 - Badgers

Badgers are protected in Britain by the Protection of Badgers Act 1992. The purpose of this Act is to protect the animals from deliberate cruelty and from the incidental effects of lawful activities which could cause them harm. Under this legislation it is an offence to:

- ❑ Wilfully kill, injure, take, possess or cruelly ill-treat a Badger, or attempt to do so;
- ❑ Interfere with a sett by damaging or destroying it;
- ❑ Obstruct access to, or any entrance of, a Badger sett;
- ❑ Disturb a Badger when it is occupying a sett.

Note that if any of the above resulted from a person being *reckless*, even if they had no intention of committing the offence, their action would still be considered an offence. A person is not guilty of an offence if it can be shown that the act was '*the incidental result of a lawful operation and could not have been reasonably avoided*'; only a court can decide what is 'reasonable' in any set of circumstances.

Penalties for offences under this legislation can be up to six months in prison and a fine of up to £5,000 for each offence.

A Badger sett is defined in the Act as '*any structure or place which displays signs indicating current use by a Badger*'. This can include culverts, pipes and holes under sheds, piles of boulders, old mines and quarries, etc.

'Current use' does not simply mean 'current occupation' and for licensing purposes it is defined as '*any sett within an occupied Badger territory regardless of when it may have last been used*'. A sett therefore, in an occupied territory, is classified as in current use even if it is only used seasonally or occasionally by Badgers, and is afforded the same protection in law.

5.2 - Bats

In England, Scotland and Wales, all bat species are fully protected under the Wildlife and Countryside Act 1981 (WCA) (as amended), through inclusion in Schedule 5. In England and Wales this Act has been amended by the Countryside and Rights of Way Act 2000 (CRoW), which adds an extra offence, makes species offences arrestable, increases the time limits for some prosecutions, and increases penalties.

All bats are also included in Schedule 2 of the Conservation (Natural Habitats, & c.) Regulations 1994, (or Northern Ireland 1995) (the Habitats Regulations), which defines 'European protected species of animals'.

The above legislation can be summarised thus (Mitchell-Jones and McLeish, 2004):

- ❑ *Intentionally or deliberately kill, injure or capture (or take) bats;*
- ❑ *Deliberately disturb bats (whether in a roost or not);*
- ❑ *Recklessly disturb roosting bats or obstruct access to their roosts;*
- ❑ *Damage or destroy roosts;*
- ❑ *Possess or transport a bat or any part of a part of a bat, unless acquired legally;*
- ❑ *Sell (or offer for sale) or exchange bats, or parts of bats.*

The word 'roost' is not used in the legislation, but is used here for simplicity. The actual wording is 'any structure or place which any wild animal...uses for shelter or protection' (WCA), or 'breeding site or resting place' (Habitats Regulations). As bats generally have both a winter and a summer roost, the legislation is clear that all roosts are protected whether bats are in residence at the time or not.

5.3 - Birds

In Britain, all wild birds, their nests and eggs are protected under the Wildlife & Countryside Act 1981. There are penalties for:

- ❑ *Killing, injuring or capturing them, or attempting any of these;*
- ❑ *Taking or damaging the nest whilst in use;*
- ❑ *Taking or destroying the eggs.*

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Land off Yarmouth Road, Melton, Suffolk – Extended Phase 1 Habitat Survey

To: Christchurch Land and Estates (Melton) Limited

Report Number: 1644-CWS-01

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Land at Yarmouth Road, Melton, Woodbridge, Suffolk

Residential Travel Plan

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Contents

1	INTRODUCTION.....	3
2	TRAVEL PLANNING POLICY AND GUIDANCE.....	7
	Introduction.....	7
	National Policy Guidance.....	7
	Local Policy Guidance.....	9
	Summary.....	9
3	SITE ASSESSMENT.....	11
	Site Location.....	11
	Existing Land Uses and Access.....	12
	Local Highway Network.....	12
	Public Transport.....	13
	Walking and Cycling.....	14
4	PROPOSED DEVELOPMENT.....	17
	Overview.....	17
	Development Details.....	17
	Proposed Access Arrangements.....	18
	Car & Cycle Parking.....	18
5	PROJECTED TRAVEL PATTERNS.....	19
	Introduction.....	19
	Projected Baseline Mode Split.....	19
6	OBJECTIVES AND SMART TARGETS.....	21
	Residential Travel Plan Vision.....	21
	Objectives.....	21
	Targets Overview.....	22
	Action Targets.....	22
	Aim Targets.....	23
7	TRAVEL PLAN MEASURES.....	24
	Introduction.....	24
	Design and Layout.....	24
	Promotion and Marketing.....	25
	Provision of Information.....	25
	Measures to Promote Walking and Cycling.....	27
	Measures to Promote Public Transport Use.....	28
	Measures to Promote Efficient Car Use.....	29



	Summary.....	30
8	TRAVEL PLAN STRATEGY.....	32
	Travel Plan Management	32
	Travel Plan Implementation	33
9	MONITORING AND REVIEW.....	34
10	SECURING, FUNDING AND REMEDIAL ACTION PLAN	36
	Securing	36
	Funding	36
	Remedial Action Plan.....	36

Tables

	Table 3.3: Local Bus Services.....	13
	Table 3.3: Local Bus Services.....	17
	Table 5.1: Projected Baseline Mode Share	19
	Table 6.1: 'Aim' Targets Summary.....	23
	Table 7.1: Summary of Travel Plan Measures.....	31
	Table 8.1: Implementation Plan	33
	Table 9.1: Monitoring Timescales	35
	Table 10.1: Remedial Action Plan	37

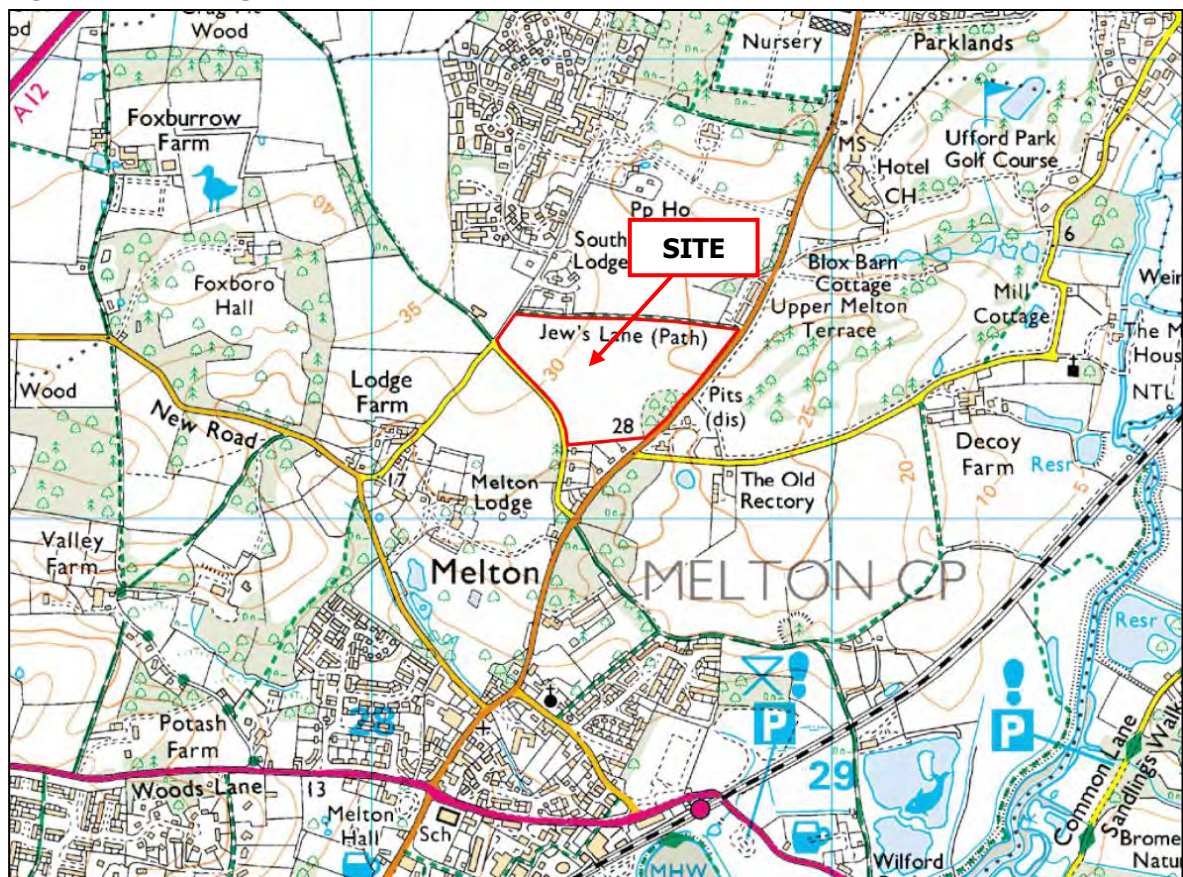
Figures

	Figure 1.1 Strategic Site Location Plan.....	3
	Figure 3.1: Site Location.....	11
	Figure 3.2 Cycle Routes Near the Site.....	16

1 Introduction

- 1.1 WYG is commissioned by Christchurch Land & Estates Ltd (the 'Applicant') to prepare a Transport Assessment (TA) and Residential Travel Plan (RTP) to accompany an outline planning application for proposed development of land at Yarmouth Road, Melton, Suffolk (the 'Site').
- 1.2 The Site is located north of the village of Melton, west of the B1438 Yarmouth Road and east of the A12 Grove Road. The Site is situated approximately 17km to the north-east of Ipswich in the Suffolk Coastal District of the county.
- 1.3 The Site is bound to the west by Lodge Farm Lane, to the south-west by Saint Audrys Road, to the south by the rear of residential properties, to the east by the B1438 Yarmouth Road, and to the north by Saint Audrys Golf Club and residential properties. The strategic site location is shown in **Figure 1.1** below.

Figure 1.1 Strategic Site Location Plan



- 1.4 Proposals at the Site consist of a new residential development, comprising up to 138 residential units, a 60 bedroom nursing home and 50 assisted living apartments with associated on-site parking provision. This will also include open space and will be accessed off Yarmouth Road.



1.5 The Local Planning Authority is Suffolk Coastal District Council (SCDC) Planning. The Local Highways Authority is Suffolk County Council (SCC) Highways.

Travel Plan Requirement

1.6 Department for Transport (DFT) document entitled 'Guidance on Transport Assessment' (March 2007) prescribes that **any development likely to "have significant transport and related environmental impacts"** should be supported by a **Transport Assessment and Travel Plan**. The definition of this impact is highlighted in Appendix B of the Guidance, which prescribes thresholds **for transport assessments**. For 'C3 Dwelling houses' the Guidance suggests that **any development** in excess of 80 units should be supported by a Transport Assessment and Travel Plan on submission of the application.

Travel Plan Aims

- 1.7 The primary aim of this RTP is to define the Travel Plan process. It sets out:
- i. the scope and objectives of the Plan;
 - ii. measures and initiatives which will assist in promoting accessibility by sustainable travel modes which are incorporated into the development by design;
 - iii. the scheme Plan targets;
 - iv. the role and requirement for the Travel Plan Coordinator; and
 - v. the requirements for monitoring and reviewing targets through distribution of information to residents.
- 1.8 Travel Plans are a dynamic process and evolve over their framework (usually three to five years) in accordance with the changing circumstances of end-users, organisations and the local environment. As such, this RTP should not be viewed as a one-off process to be undertaken and completed, rather it is the catalyst for a managed approach, which takes responsibility for travel and its impacts.

Travel Plan Objectives

1.9 The key objectives of a typical Travel Plan are to ensure that appropriate locations are chosen for development, minimising additional demand for private car travel, particularly single occupancy vehicle (SOV) travel, and securing appropriate measures to maximise the opportunities for travel by alternative means.



1.10 The Site complies with this key objective as it is located in an accessible location, within reasonable walking and cycling distance of local employment, leisure and retail destinations. Access to public transport is achievable within satisfactory walking distances.

1.11 In summary, the objectives of this RTP are to:-

- Reduce the impact and frequency of single-occupancy car travel on the local community;
- Encourage greater use of sustainable transport in preference to the use of the private car, including walking and cycling for local journeys;
- Increase accessibility of the Site to a wide range of people, including those who are less mobile;
- Protect and enhance the environment in and around the Site;
- Provide a unique selling tool, promoting the Site; and
- Promote healthy and sustainable living amongst residents.

Travel Plan Targets

1.12 The Applicant will seek to achieve the objectives of the RTP by aiming to meet SMART targets, which will be discussed and agreed with SCC Travel Plan Officers following submission of the outline planning application. Suggested SMART targets are set out as follows:-

- to achieve a **9% reduction in SOV trips within five years** from the date of the baseline travel survey;
- **to increase the number of people walking by 6%** within five years, based on surveyed occupancy at baseline;
- **to increase the number of people cycling by 6%** within five years, based on surveyed occupancy at baseline;
- **to increase the number of people using public transport by 6%** within five years, based on surveyed occupancy at baseline; and
- to achieve an **80 % awareness rate** of the Travel Plan **within three years** of initial occupation.



1.13 The above targets have been considered in the context of Site location, projected travel patterns and SCC's **sustainable travel aspirations highlighted in local transport policy**. A detailed explanation of the targets is set out in **Chapter 6**.

Travel Plan Benefits

1.14 Travel Plans present the opportunity to raise awareness of the consequences of travel choices, the benefits of alternatives and the opportunity to minimise the impact of motorised travel on the environment. The scope of this RTP will lead to a Full Travel Plan being developed, which will subsequently benefit the individual and the home occupier through:

- Improved health;
- reduced stress;
- cost savings;
- enhanced social inclusion and sense of community;
- improved choice of travel options and reduced congestion.



2 Travel Planning Policy and Guidance

Introduction

- 2.1 The sustainability of new development has become of paramount importance and a significant amount of guidance has been prepared, which promotes lower carbon transport options such as walking, cycling and public transport, whilst advocating a reduction of the use of the private car. This chapter outlines the national and local policy context and best practice guidance under which this RTP has been prepared.

National Policy Guidance

National Planning Policy Framework (NPPF) (DCLG, March 2012)

- 2.2 The final version of the National Planning Policy Framework (NPPF) was published on 27 March 2012. It seeks to reduce the perceived complexity of previous planning policy guidance notes/statements and improve the accessibility of the planning system, whilst protecting the environment and encouraging sustainable growth.
- 2.3 Transport forms one of the 12 core land use planning principles set out by the NPPF. This directs that locations which are sustainable or can be made sustainable should become the focus for significant development. Opportunities to utilise sustainable modes to their fullest, such as public transport, walking and cycling should actively taken and these considerations were made in the preparation of the Transport Assessment, which has since been approved.
- 2.4 Paragraph 36 of NPPF recognises that Travel Plans are key tools for facilitating sustainable development and for promoting sustainable development, it states:
- "All developments which generate significant amounts of movements should be required to provide a Travel Plan."*
- 2.5 This Travel Plan supports the proposals and ensures that the transport strategy is monitored and managed.



Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen (DfT White Paper, 2011)

- 2.6 The Government’s Transport White Paper entitled ‘Creating growth, cutting carbon: Making sustainable local transport happen’ sets out the Government’s vision for a sustainable local transport system that supports the economy and reduces carbon emissions.
- 2.7 The Paper states that action taken locally is best placed to support economic growth and deliver near term reduction in transport-related carbon emissions. This can be achieved by providing people with options to choose sustainable modes for everyday local transport choices to, for example, help boost economic growth by facilitating access to local jobs.
- 2.8 Travel Plans are noted as being a key means for promoting travel choices to a wide audience and encouraging change in travel behaviour towards greater use of sustainable modes of travel.

Good Practice Guidelines: Delivering Travel Plans through the Planning System (DfT, 2009)

- 2.9 This guidance document defines a travel plan as:
- *“A long-term management strategy for an occupier or site that seeks to deliver sustainable transport objectives through positive action and is articulated in a document that is regularly reviewed”.*
- 2.10 The purpose of reviewing the document is to ensure that it remains relevant and effective.
- 2.11 Travel Plans are important for new development in order to:
- Promote sustainable travel and help to reduce single occupancy car use;
 - Encourage effective use of current transport networks;
 - Support increased choice of travel modes;
 - Promote and achieve access by sustainable modes;
 - Respond to growing concern about the environment, congestion, pollution and poverty of access; and
 - Promote a partnership between the authority and the developer in creating and shaping ‘place’.



Local Policy Guidance

Suffolk Coastal District Council (SCDC) Local Plan – Core Strategy and Development Management Policies (2013)

- 2.12 The Core Strategy (CS) of the SCDC Local Plan (LP) is the central document of the Local Plan, and will guide development across the district until 2027. Policy DM20 of the CS justifies the need for effective Travel Plans to be prepared and submitted for all developments of a certain scale, including residential developments.

Development Management Policy DM20 – Travel Plans

'Proposals for new development that would have significant transport implications should be accompanied by a "green travel plan". It is not necessarily the size of the development that would trigger the need for such a plan but more the nature of the use and would include:

- a) New employment sites employing over 10 people;*
- b) A use which is aimed at the public (e.g. retail); or*
- c) Major residential development.*

The travel plans should seek to reduce the use of private cars by:

- i. Encouraging car sharing;*
- ii. Provide links to enable the use of public transport;*
- iii. Improve road safety for pedestrians and cyclists; and*
- iv. Identify any mitigation works to be funded by the developer in conjunction with the proposal, such as improvements of facilities at the nearest transport interchanges.*

A condition or legal agreement will be imposed to ensure implementation of the travel plan.

Summary

- 2.13 The purpose of this chapter has been to present the key elements of the national and local policy framework that will be supported by the introduction of the RTP at the Yarmouth Road development.
- 2.14 National, regional and local policies emphasise the need to promote sustainable travel and reduce the number of trips undertaken by private car for all journey purposes. They encourage developments to provide the opportunities for residents and employees to travel by public transport, cycle or walk for everyday trips.



2.15 Travel planning at Yarmouth Road will directly contribute to both national and regional planning and transport policy objectives for promoting a range of travel options for access to new developments. This will actively contribute towards delivering sustainable communities and **improving people’s accessibility to local services and amenities by non-car modes of transport.**



3 Site Assessment

Site Location

- 3.1 The Site is situated to the north of the village of Melton, north-east of the town of Woodbridge, east of the A12 Grove Road and approximately 17km to the north-east of Ipswich in the county of Suffolk.
- 3.2 The Site is bound to the west by Lodge Farm Lane, to the south-west by Saint Audrys Road, to the south by the rear of residential properties, to the east by the B1438 Yarmouth Road, and to the north by Saint Audrys Golf Club and residential properties.
- 3.3 A detailed Site location plan, showing the location of the Site in relation to Melton, is shown in **Figure 3.1**.

Figure 3.1: Site Location





Existing Land Uses and Access

- 3.4 The land where the Site is located occupies approximately 9.8 hectares (24 acres) of agricultural land.

Local Highway Network

- 3.5 **The A12 Grove Road is a County 'A' road which is owned and maintained by SCC Highways. It runs in a north-south direction to the west of the Site and connects Ipswich and Felixstowe (via the A14) to the south with Lowestoft and Great Yarmouth to the north. In the immediate vicinity of the Site the A12 is a dual-carriageway with two lanes per direction of traffic, subject to the 70mph national maximum speed limit to the north of its junction with Woods Lane and subject to a 40mph maximum speed limit to the south of the junction, as it passes alongside the town of Woodbridge.**
- 3.6 **The B1438 Yarmouth Road is a County 'B' road; it is a two-way single carriageway road with a single lane per direction of traffic and is subject to a 30mph maximum speed limit. The B1438 runs in a north-south direction connecting the A12 and the town of Woodbridge to the south with the town of Wickham Market in the north.**
- 3.7 Saint Audrys Road is a minor county road that runs south-east to north-west and connects Yarmouth Road with Lodge Farm Lane. It is a two-way single carriageway road, varying in width between approximately 4 and 6 metres. The speed limit on this road is 30mph. Lodge Farm Lane is similar in characteristics to Saint Audrys Road, running north to south and providing local residential access.
- 3.8 The Yarmouth Road / Saint Audrys Road junction is located approximately 200m to the south of the **Site and is in the form of a priority 'T' junction. Further to the south, at approximately 800m from the Site, there is the Yarmouth Road / Station Road / The Street junction, a priority 'T' junction** where Station Road is the minor arm. Further to the latter junction, the B1438 is called The Street and at approximately 1.2km to the south of the Site, there is the Woods Lane junction / The Street / Wilford Bridge Road / Melton Road junction, which is signalised. Woods Lane is a two-directional **single carriageway 'A' road subject to a 40mph maximum speed limit that runs east-west** and connects Yarmouth Road to the A12 Grove Road.
- 3.9 Located approximately 1km to the north of the Site, there are a series of priority junctions connecting the B1438 Yarmouth Road to a separate division of the B1438 which subsequently links to the A12 to the west.



Public Transport

Bus Services

- 3.10 The nearest bus stops to the Site are located along Yarmouth Road, adjacent to its junctions with **Saint Audrys Road to the south of the Site ('Tollgate Cottages' bus stop)** and with **Saint Audrys Park Road to the north of the Site ('Melton Park' bus stop)**. These stops are located at approximately 400m to the proposed primary road access/egress to the Site (approximately 5 minutes walking distance); and they are served by bus routes 62, 64 and 963. It is to be noted that only the southbound bus stop located opposite to the Yarmouth Road / Saint Audrys Road junction benefits from sheltered seating and public transport information.
- 3.11 In addition, further to the south on The Street (B1438), at approximately 900m of the proposed primary road access/egress to the Site (approximately 11 minutes walking distance), there are additional bus stops, which are served by bus routes 65, 71, 72 (as well as 62, 64 and 963).
- 3.12 Details of the above bus routes, including typical frequencies during weekdays and at weekends, are provided in **Table 3.1** below.

Table 3.1: Local Bus Services

Route	Route Description	Frequency	
		Weekday (Daytime)	Saturday
62	Martlesham - Woodbridge - Framliham	4 daily services (approximately every 4 hours)	-
64	Saxmundham - Woodbridge - Ipswich	Approximately every 60 minutes	
65	Aldeburgh - Rendlesham - Woodbridge - Ipswich	Approximately every 60 minutes	
71	Orford - Woodbridge - Bealings - Ipswich	2 daily services, one in the AM and one in the PM	2 daily services, one in the AM and one in the PM
72 (Tuesdays and Thursdays only)	Orford - Woodbridge - Bealings - Ipswich	2 daily services, one in the AM and one in the PM	2 daily services, one in the AM and one in the PM
963	Woodbridge - Framliham	One AM-PM daily service on School days only	-



Rail Services

- 3.13 The nearest train station to the Site is Melton Station. Melton Station is located approximately 1.2km south of the Site (approximately 15minutes walking distance).
- 3.14 The station is located on the East Suffolk Line and served by a regional service operated by Greater Anglia (Abellio). Trains serve the station on an hourly basis in each direction and provide access to key commuter and leisure destinations including Ipswich and Lowestoft. There is one train per day to Harwich International.
- 3.15 The station is operated by Suffolk County Council and is open 24 hours a day, seven days a week. Facilities at the Melton Station include **27 'free' car** parking spaces and four covered cycle parking spaces in the form of Sheffield Cycle Stands.

Walking and Cycling

Walking

- 3.16 Walking offers a realistic option for the journey to work or study for many and is generally considered a viable travel choice for short distances of around 800m and offers the greatest potential to replace car trips less than 2km.
- 3.17 According to the 2011 Census, walking represents approximately 11.3% of all journeys to work on a national scale and 8.6% of journeys to work in the Melton & Ufford Ward, where the Site is located (according to the 2011 **Census 'Method of Travel to Work' dataset**).
- 3.18 In terms of journey purpose, local trips on foot are likely to relate to short shopping trips, access to leisure facilities, trips to school, local visiting and trips to bus stops as part of linked trips to destinations further afield.
- 3.19 In the immediate vicinity of the Site, and in the stretch of road that extends towards the north, a single footway / cycleway of approximately 1m wide is provided on the eastern side of the carriageway. However, in the stretch of road towards the south, a single footway separated from the carriageway by a grass verge and of approximately 1m in width is provided on the western side of the road. Additionally, as the road approaches the residential area and the village of Melton to the south, footways are provided on both sides of the road. These footways are illuminated by street lighting.
- 3.20 Informal pedestrian crossing facilities are provided along Yarmouth Road. Furthermore pedestrian accessibility is addressed in the design of the proposed Site access and as part of the mitigation strategy.



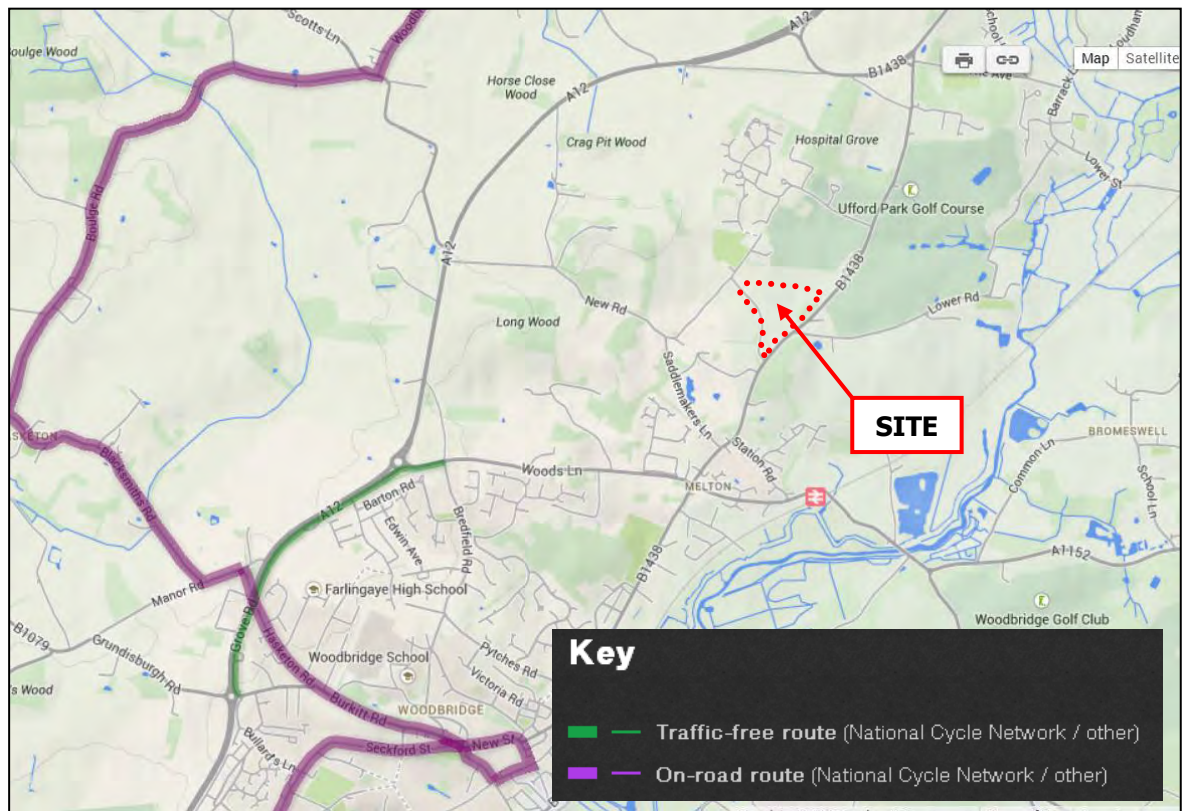
- 3.21 Local amenities include a convenience store, public house, takeaway and place of worship located on Yarmouth Road. These amenities are located within one kilometre from the Site and are accessible in approximately 12 minutes on foot.
- 3.22 The Site is also located in close proximity to a number of educational establishments including Melton Community Primary School, which is located on the south-eastern corner of the Woods Lane / The Street / Wilford Bridge Road / Melton Road junction, at approximately 1.1km / 14 minutes walking distance to the south of the Site. Additionally, Melton Day Nursery is located on Yarmouth Road (at less than 200m from the site, approximately 2-3 minutes walking distance); and Melton Under Fives is located on Hall Farm Road (approximately 1.3km/16 minutes walking distance). Moreover, there are two Montessori Schools located nearby the Site: Melton Lodge on Saint Audrys Park Road, approximately 500m / 6 minutes walking distance to the north of the Site; and Rectory Garden on Lower Road, approximately 950m/12minutes walking distance to the east of the Site.

Cycling

- 3.23 Cycling represents approximately 3% of all journeys to work on a national scale and 3.6 % of journeys to work in the Melton & Ufford Ward.
- 3.24 Cycle use is considered a feasible means of transport over short to medium distances, typically journeys less than five kilometres. Cycling is influenced by many the same factors as walking but will also be influenced by route conditions, route topography, traffic levels and secure cycle parking at destination.
- 3.25 A review of Sustrans website shows the locations of cycle routes in the vicinity of the site, which are shown in **Figure 3.2**.



Figure 3.2 Cycle Routes Near the Site



Source: Sustrans website (accessed on 12th September 2014).

- 3.26 **Figure 3.2** shows the location of the existing traffic-free cycle route that runs alongside the eastern boundary of the A12 Grove Road. The cycle route is approximately 1.5km in length and starts at the junction of Bredfield Road / Woods Lane and terminates at the A12 / Grundisburgh Road roundabout. Lane markings, signage and dropped kerbs are present to assist cyclists. The route provides access to Farlingaye High School, Woodbridge School and surrounding residential areas.
- 3.27 The closest route to the Site with national designation is National Cycle Route (NCR) 1 which connects Dover and the Shetland Islands. On a regional scale, NCR1 connects Woodbridge with Martlesham Heath and Ipswich to the southwest and villages to north. NCR 1 can be accessed at the A12 Grove Road / Manor Road junction. A staggered Toucan crossing provides cyclists with safe passage across the A12.



4 Proposed Development

Overview

4.1 This chapter of the RTP outlines the development proposals for the Site. It includes a description of the proposed land use, access arrangements by all modes and parking provision.

Development Details

4.2 The proposed development includes a nursing home, assisted living units and two distinct areas of residential development around a green corridor creating a central hub of open / play space.

4.3 In terms of residential units, the proposals include 138 dwellings (Use Class C3) comprising a mix of terraced, semi-detached and detached houses over approximately 5.12 ha (which equates to approximately 27 dwellings per hectare). Of these 138 units, it is anticipated that up to 41 dwellings (approximately 30%) will be made available as affordable housing. The amount of the latter will be submitted at Reserved Matters Stage after consultation with the Planning Authority and provisions will be contained within the Section 106 Agreement.

4.4 In regard to the care facilities, an area of approximately 1.19 ha is proposed to be included within the development. This is to include a 60 bedroom nursing home and 50 assisted living apartments set around a communal garden for residents' use.

Table 4.1: Local Bus Services

Weekday (Daytime)	Saturday
4 Bedroom Detached	34
3 Bedroom Detached	35
3 Bedroom Semi-Detached	26
3 Bedroom Terrace	9
2 Bedroom Detached	1
2 Bedroom Semi-Detached	16
2 Bedroom Terrace	17
Assisted Living Apartments	50
Total No. of Units	188



Proposed Access Arrangements

- 4.5 It is proposed that vehicular access to the proposed development will be taken via Yarmouth Road in roughly the same location as an existing field access. This would be a simple priority controlled T-junction, with a 3.5m wide ghost right turn island to accommodate southbound vehicles turning into the Site and prevent these vehicles from blocking northbound 'through' traffic on Yarmouth Road. A second access point for emergency vehicles only would be provided off Saint Audry's Road to the south-west of the Site.
- 4.6 The proposed access arrangement includes a new bus stop opposite the Site access for southbound public bus services towards Melton. Additionally, a new lay-by as well as bus stop for northbound services is proposed, which is to be located approximately 25m north of the Site access.

Car & Cycle Parking

- 4.7 The level of parking will be determined at the reserve matters stage and will be provided in a way which acknowledges the SCC's adopted parking standards at the time of submission of the detailed planning applications. The parking provision will be a mix of 'on' and 'off' plot, and will be provided to ensure that it is sufficient to serve the development and ensure that excessive on-street parking does not occur.



5 Projected Travel Patterns

Introduction

- 5.1 Guidance on Travel Plans highlights the importance of baseline travel data to enable provisional targets and measures to be Site and land use specific. Projected travel patterns for the proposed development have been calculated in the Transport Assessment (TA), which accompanies this RTP with the detailed planning submission.
- 5.2 This chapter of the RTP summarises the mode share projections set out in the TA and is based on TRICS trip rate data for similar existing residential sites.

Projected Baseline Mode Split

- 5.3 **Table 5.1** presents the projected mode split based on the TRICS information data used in the TA. The mode split for the AM Peak hour is likely to cover the majority of commuter trips, which this RTP seeks to target. As such, the AM Peak mode split forms the baseline and is presented in **Table 5.1**.

Table 5.1: Projected Baseline Mode Share

Travel Mode	Projected Baseline Mode Share
Car Driver	75%
Car Passenger	4%
Train	4%
Bus	3%
Cycle	4%
Motorcycle	1%
Walk	9%
Taxi	0%
Total	100%

Source: WYG Transport Assessment / TRICS

- 5.4 The projected mode split has been used as the initial baseline mode split for the development and subsequent target-setting purposes. The TRICS estimations are similar to the mode split derived



from 2011 Census 'Method of Travel to Work' mode split for the Melton and Ufford Ward, and is therefore considered robust.

- 5.5 The baseline mode split will be reviewed following the results of Baseline Travel Survey, to be undertaken at the trigger date of 75% occupation of the development or within six months of initial occupation of the Site, whichever is soonest.



6 Objectives and SMART Targets

Residential Travel Plan Vision

- 6.1 The overarching scope of this Plan is to assist in reducing the amount of car travel to and from the Site, particularly during the peak hours of the local highway network. This will in turn reduce traffic impacts in the surrounding highway network, to the benefit of lower congestion, improved air quality and road safety in the local area.
- 6.2 The measures proposed within this document will not only bring associated benefits to the Yarmouth Road development Site and its future residents, but will also help to mitigate the impacts of the development on the wider local community.

Objectives

- 6.3 In pursuit of this vision, and in light of the aims prescribed in national and local policy, the RTP will be supported by a number of outcome objectives, as set out below:
- Reduce the impact and frequency of single-occupancy car travel on the local community;
 - Encourage greater use of sustainable transport in preference to the use of the private car, including walking and cycling for local journeys;
 - Increase accessibility of the Site to a wide range of people, including those who are less mobile;
 - Protect and enhance the environment in and around the Site;
 - Provide a unique selling tool, promoting the Site; and
 - Promote healthy and sustainable living amongst residents.
- 6.4 The objectives will work towards the vision of the RTP by informing a package of measures that focus on promoting access to the Site by sustainable travel modes as alternatives to the private car **from the outset. It is intended that this will develop residents' and visitors behaviours to** consider sustainable travel alternatives for everyday trips, instead of single occupancy car travel.



Targets Overview

6.5 Targets are measurable goals by which the progress of the Plan will be assessed. Targets are essential for monitoring the progress and success of the Plan and have been designed to be 'SMART' (Specific, Measureable, Achievable, Realistic and Time-bound).

- **Specific** – the targets will aim to specifically promote walking and cycling to those residents working within a reasonable distance of the Site. Those that can combine public transport travel will be actively encouraged. The targets will be set using the travel mode results from the Baseline Travel Survey.
- **Measureable** – the targets would be measurable, based on the results of the Baseline Travel Survey and review surveys thereafter, to be carried out at key milestones over the lifecycle of the Travel Plan.
- **Achievable and Realistic** – the targets should be achievable and not unrealistic, they should be set in relation to the results of the Baseline Travel Survey.
- **Time-bound** – the RTP will have a five-year timeframe, with surveys and targets required at annual intervals and full reviews at Years 1, 3 and 5. Thereafter, the Site will continue to observe the general aims and objectives of the RTP.

6.6 Targets come in two forms – 'Action' and 'Aim' targets. Action targets are non-quantifiable actions that need to be achieved by a certain milestone, whereas Aim targets are quantifiable and generally relate to the degree of modal shift the Travel Plan seeks to achieve.

Action Targets

6.7 The key Action targets for the RTP are set out below:

- To appoint the Travel Plan Coordinator at least one month in advance of initial occupation;
- To install physical travel plan measures (see **Chapter 7**) in advance of initial occupation;
- To agree the scope of the multi-modal baseline travel survey with SCC and undertake this survey within one month of the 100th unit being occupied (approximately 75% occupancy);
- To undertake monitoring surveys within one month of the anniversary of the baseline survey in each 'full review' year i.e. 1, 3 and 5 years after the baseline survey; and
- To collate and submit monitoring survey results to SCC, within one month of survey date, for review and consideration.



Aim Targets

6.8 Provisional Aim targets for the RTP have been set and will be used to measure the progress of the Plan towards objectives over the five-year framework. The Aim targets should be achieved in full by Year 5, with interim targets to be reached by Year 3, i.e. three years on from the 'baseline' travel survey. **Table 6.1** sets out provisional Aim targets and how they relate to the outcome objective over the framework of the Plan. Baseline mode split figures are taken from the projected mode split, as detailed in **Chapter 5**.

Table 6.1: 'Aim' Targets Summary

Outcome Objectives	Targets	Timescale			
		Baseline	Year 1	Year 3	Year 5
Reduce drive alone commuting and increase sustainable travel.	Main modal share target				
	Car Driver	75%	72%	69%	66%
	Sustainable modal share targets				
	Walking journeys	9%	11%	13%	15%
	Cycling journeys	4%	6%	8%	10%
	Public Transport journeys	7%	9%	11%	13%

6.9 The targets set in **Table 6.1** are intended to form a reasonable benchmark for the monitoring of the RTP at this early stage and will be reviewed following the completion of the Baseline Travel Survey, after occupation of 100th unit (75% occupancy). Final targets will then be agreed with SCC and SCDC using the survey results and identification of the true base modal split for the development.

6.10 A general Aim type target will be to:-

- Achieve an 80 percent awareness rate of the Travel Plan within three years of initial occupation.

6.11 This will be monitored through the travel questionnaire issued to residents as part of the RTP monitoring process.



7 Travel Plan Measures

Introduction

- 7.1 This chapter of the RTP outlines a variety of measures that will be implemented at Yarmouth Road Site in order to achieve the RTP vision, objectives and targets set out in **Chapter 6**.
- 7.2 Whilst some measures are 'physical' in nature, others are more orientated towards promotion and management once the development is completed. It is considered that a combination of both approaches will contribute towards achieving the desired modal split and ultimately offer future residents and visitors a greater choice of sustainable travel options to and from the Site.
- 7.3 The Applicant will appoint an overarching Travel Plan Coordinator (TPC) who will take overall responsibility for the RTP and ensure direct implementation of the proposed measures, as well as ensuring the collation of information required for the promotional material. Details on the management of this RTP are provided in **Chapter 8 'Travel Plan Strategy'**.
- 7.4 The following sections outline a selection of measures that will be implemented at Yarmouth Road to ensure that a variety of suitable, easily accessible alternatives to single occupancy car use are available and attractive to future residents and their visitors. With the proposed measures in place, the development will help to contribute towards national and local sustainability objectives.
- 7.5 The proposed initiatives are not exhaustive. Travel Plans are expected to evolve in response to new travel and transport issues as they arise, and as such, future changes will require a review of current measures if this RTP is to remain effective.
- 7.6 To encourage sustainable travel amongst residents of the development, the measures used must be considered attractive and convenient. The key elements of encouraging sustainable travel, to be delivered through the Yarmouth Road RTP, are detailed below.

Design and Layout

- 7.7 The internal layout of the development, the provision of safe, well lit, pedestrian and cycle routes and alternative leisure routes within the development all encourage the use of non-car based modes of travel. Referring back to the Travel Plan Pyramid, these are the foundation of this pyramid.



Promotion and Marketing

- 7.8 In order to promote the sustainable transport choices that will be available to residents living at the SCC, sales staff will be fully competent in explaining the measure that will be put in place as part of the RTP. Therefore, sales staff will promote the RTP and the sustainable location of the development from the outset, ensuring early buy-in from residents.
- 7.9 Sales and marketing literature aimed at prospective home buyers will also highlight the sustainable nature of the development in terms of its location and connectivity to facilities in the surrounding local area. The health benefits associated with walking and cycling will also be advertised.
- 7.10 A Travel Plan information board will be located within the sales office and later in a communal/central area of the occupied development. The information on display will help raise awareness of alternative travel choices available to residents and visitors and highlight further the benefits of sustainable travel associated with the development location.
- 7.11 The TPC will set up a Travel Plan Forum to promote the success of the RTP and to evoke a sense of involvement amongst residents. Positive and negative feedback from the Forum will be used by the TPC to monitor the progress of this group and assess what is and what is not working for the development. Subsequent Travel Plan initiatives will then be communicated and promoted to the Forum.
- 7.12 To involve the **local community, in combination with the resident's forum, the TPC will organise two** sustainable travel events a year for the 5 years following occupation of the 100th dwelling. These events will be linked with national sustainable travel events.

Provision of Information

- 7.13 A key objective of the RTP is to inform residents of alternatives to driving their cars to and from the development. In order to encourage the use of sustainable travel modes, it is essential that residents are provided with information on these modes upon initial occupation of the Site.
- 7.14 In addition to promotion and marketing, residents could also be made aware of sustainable travel choices and events through a range of mediums, which will ensure that the widest possible audience is engaged. Sources of travel information for residents will include the following:

Yarmouth Road Development Website

- 7.15 The Applicant will be responsible for the creation of a dedicated website for the development, which will focus on providing appropriate, up-to-date information on sustainable travel options available for accessing the Site.



7.16 **The website will serve as a 'one-stop-shop' for the dissemination of site-wide sustainable travel information to residents, as well as acting as a source of information for visitors. Information to be displayed on the website will include local public transport routes, local amenities and facilities, walking and cycling maps and links to online car share databases and sustainable travel events.**

Residents Welcome Packs

7.17 **Upon occupation of the development, residents will receive a 'Sustainable Travel Information Welcome Pack'. Through the information provided in the welcome pack, residents of the development will be in a better position to make informed choice regarding how they choose to travel to and from the development. The welcome pack will include:**

- An overview of the objectives and structure of the RTP, the importance of the Travel Plan and what advice is available with regards to sustainable travel options in the area;
- A summary of the benefits that a Travel Plan brings to individuals, the community and to the environment;
- Details of incentives being offered to residents to encourage sustainable travel;
- Contact details of the TPC, should residents have any transport or travel problems, or ideas they wish to discuss;
- Up to date public transport timetables;
- Details on how to access and register with local car-share schemes;
- Pedestrian and cycle route maps between the development and surrounding areas, particularly routes to school, doctors and dentist surgeries etc;
- Details of local taxi companies;
- Details of how to get involved in the Travel Plan Forum;
- Summary of local School Travel Plans, including any noteworthy initiatives that have been implemented and within which parents could become involved e.g. walking school bus, park and stride etc;
- **Details of the Bicycle User Group and Lincolnshire Cyclists' Touring Club (CTC);**
- Information on supermarkets offering online grocery shopping deliveries to the area and associated discounts; and
- Information on broadband providers serving the Site.



7.18 Welcome packs will be provided to each new occupier for the first five years following initial Site occupation, this will include new occupiers to dwellings which are sold within this period.

Personalised Travel Planning

7.19 sustainable travel options available for everyday journeys. A variety of advisory leaflets will be provided in the Welcome Pack to explain to new residents the available sustainable travel options advocated in the RTP.

7.20 To help residents understand and make the best use of the information, within 3 months of initial occupation, residents will be visited by the TPC who will explain the RTPs aims and measures and offer a personalised journey planning service, based on individual lifestyles and in light of

7.21 It is hoped that this process will make residents consider how they currently travel and promote alternative methods for their journeys to work, school and when accessing local amenities. It may also make residents who might not otherwise use public transport, realise there are local services available that can suit their needs.

Measures to Promote Walking and Cycling

7.22 The detailed masterplan for the Site will be prepared in consideration of the principles set out in Manual for Streets (MfS) and MfS2, ensuring that the needs of pedestrians and cyclists are considered from the earliest possible stage. Site design and reduced vehicle speeds will help provide priority to these road users and improve safety and security. A connected network of pedestrian and cycle routes will be provided along key desire lines. In particular, these routes will link with those external to the Site and to public transport facilities.

Walking Measures

7.23 In order to promote walking for local journeys to and from the Yarmouth Road development, the following measures are proposed:

- Information on walking routes and maps will be provided to each household upon occupation. This information will be distributed as part of a 'Sustainable Travel Welcome Pack' for each household;
- Provision of a network of new footways and cycleways feeding into the existing network;
- The TPC will liaise with the relevant Suffolk Coastal District Council Officers to ensure that off-Site pedestrian routes are appropriately maintained; and



- Where possible, provision will be made for less mobile and disabled user access within the development.

Cycling Measures

- 7.24 The proposed development aims to be 'bike friendly' and will offer cyclists good accessibility to the surrounding areas and the wider community via the measures outlined below.
- 7.25 With regard to provision of cycle parking, secure and covered cycle parking spaces will be proposed in the form of cycle stores for residents of the apartments. Cycle parking for private dwellings will be provided within the curtilage of their respective plots. The level of provision will accord with the SCC minimum cycle parking standards.
- 7.26 Information on safer routes and cycle lanes, as well as local public transport operators/services that accept bicycles will be provided **within residents' welcome packs, and displayed on the travel information board**. This will help promote cycling for regular use as well as recreational activities.
- 7.27 As part of the on-going operation of the Travel Plan, a review of the use of the provided cycle **parking spaces will be undertaken. This will coincide with a residents' questionnaire to identify level of cycle ownership across the Site**. The results of such survey will be discussed with SCC and SCDC. If the results show that there is a shortfall in on-site cycle parking, particularly for flatted developments, or suppressed desire to own a cycle due to a lack of facilities, remedial action will be discussed in consultation with SCC / SCDC.
- 7.28 In addition to the above, the following cycle measures will be implemented:
- The TPC will include information leaflets within the Sustainable Travel Welcome Packs on the benefits of cycling, SCC cycle promotions and cycle routes in the wider Lincolnshire area;
 - Sustrans and other cycling campaign websites will be actively marketed to all residents of Yarmouth Road Site development via the community notice board and household letter
 - It is considered that the above measures will ensure that residents of the proposed development will be consistently encouraged to take up cycling and will help to sustain the level of interest in cycling beyond the Applicant's **commitment to the implementation** and monitoring of the RTP.

Measures to Promote Public Transport Use

Public Transport Promotion



- 7.29 As part of the Personalised Travel Planning service, the TPC will offer residents the provision of public transport information specifically tailored to their daily journeys/commute. This could have the potential to significantly reduce unnecessary car-based journeys from the Site arising from the lack of public transport information.

Measures to Promote Efficient Car Use

Car Parking Provision

- 7.30 The implementation of a wide range of potential measures at the SCC will have an impact on reducing the need for residents to undertake journeys by car and actively encourage the use of more sustainable modes. Any future detailed planning application for the Site will provide car parking at a level that is generally in accordance with SCDC/SCC residential vehicular parking standards, but will also recognise the specific characteristics of the Site.

Car Sharing

- 7.31 Car sharing aims to eliminate single-occupancy vehicle trips and thus reduce the number of vehicles on the road network. Benefits of car sharing include less congestion and possible reductions in vehicle based CO2 emissions.
- 7.32 Usually, shared journeys between residents are mostly associated with commuting purposes, or for **undertaking the 'school run' for those with children. Car sharing schemes can work in two ways:**
- Informal encouragement – at this level, car sharing occurs on its own, between neighbours with common interests or travel destinations. However, to help actively encourage this, information regarding car sharing will be provided within welcome packs for new residents from first occupation. Residents will be encourage to car share with their neighbours in this way.
 - Formal Schemes – where individuals sign up to a central car sharing database, providing details of journeys they wish to undertake. Then they are matched up with people planning similar journeys, for an opportunity to share the journey in a single car.
- 7.33 An advisory leaflet will be provided to encourage residents to car share with their neighbours on an informal basis, and also provide instruction on how they can gain access to register for local car-share service. The TPC will be on hand to help residents who may require assistance with registering on the database.



7.34 Alternatively, a private car-sharing network could be established. This may offer the advantage of helping residents of the Site to feel safer in joining a community-based scheme and will also allow for collecting and monitoring data directly relevant to the residents of the development. The TPC will use the annual travel survey to evaluate the resident demand for a dedicated car sharing scheme.

Residential Broadband Connections

7.35 The Applicant will provide all new houses with high speed broadband compatible telephone connection points, which will enable residents to subscribe to broadband services. This will help facilitate home-working, internet shopping and assist in indentifying car share companions. The availability of local shopping outlets that offer a home delivery service will be communicated to residents through the welcome pack.

Summary

7.36 This section has outlined a range of measures, which will be implemented for the Yarmouth Road Site development in seeking to achieve the vision and objectives the plan. As summary of the proposed travel plan measures in set out in **Table 7.1**.



Table 7.1: Summary of Travel Plan Measures

Objective	Measure	Target Area
Information Provision	<ul style="list-style-type: none"> • Sustainable Travel Information Packs for all new residents • Development website • Personalised Travel Planning (PTP) • Training of sales and marketing staff 	All
Promotion of Walking and Cycling	<ul style="list-style-type: none"> • Provision of local pedestrian and cycle routes maps – including access routes to local facilities • Provision of on-site cycle parking/storage • Provision of cycle training • Provision of connected and convenient on-site routes for pedestrians and cyclists 	Increase walk and cycle mode share, decrease car driver mode share
Promotion of Public Transport	<ul style="list-style-type: none"> • Promotion through marketing, PTP and resident welcome packs 	Increase public transport mode share and decrease car driver mode share
Promotion of Efficient Car Use	<ul style="list-style-type: none"> • Promotion of car sharing and regional car sharing organisations • Promotion of home shopping and home working • Provision of internet broadband connects to each dwelling 	Increase car passenger and 'work from home' mode share and decrease car driver mode share



8 Travel Plan Strategy

Travel Plan Management

8.1 The Travel Plan will require the support of the Applicant in order to be a success. Any future Developer of the Site will be made fully aware of the importance and significance of developing a detailed Travel Plan for the Site and will allocate adequate resources and funding of measures and monitoring in order to ensure it is fully implemented and therefore achieves maximum impact.

Travel Plan Co-ordinator Appointment

8.2 It is the responsibility of the Applicant to appoint the Travel Plan Co-ordinator (TPC) three months in advance of first occupation of the Site and notify the **SCC's Travel Plan Officer of this** appointment. Should the TPC change over the life of the RTP, the Applicant will inform SCC of this.

8.3 It is expected that the TPC will be a member of the on-Site Sales and Marketing Team in the first instance, then a member of the Site Management Company thereafter.

Travel Plan Co-ordinator Responsibilities

8.4 The TPC will be responsible for overseeing the RTP, the primary roles and responsibilities of this role are set out below:

- Being the main point of contact for residents for the RTP;
- Offering advice and information on travel and transport-related topics to Yarmouth Road Site residents;
- To run the day-to-day management of the RTP, ensuring delivery of measures and initiatives;
- Undertaking monitoring and reporting on progress of the RTP to SCC and SCDC to agreed targets.

8.5 The TPC will report to the Developer on the progress of introducing the measures identified through the RTP, the annual monitoring process and on-going progress against targets. This will establish a formal internal review procedure of the RTP and allow for management approval in the decision-making process on funding and implementation of any further travel planning measures.



Travel Plan Implementation

8.6 The proposed travel planning measures for Yarmouth Road Site has been outlined in **Chapter 7**. In the majority of cases, the delivery of measures will be led by the appointed TPC, with funding responsibility lying with Yarmouth Road Developer. **Table 8.1** summarises the timescales for implementation of the proposed RTP measures.

Table 8.1: Implementation Plan

Proposed Measure	Responsibility of...	Timescale	Indicator of Success
Appointment of Travel Plan Coordinator (TPC)	The Promoter	3 months in advance of planned first occupation of Site.	Submission of details to SCC Travel Plan Officer
Provision of connected and convenient on-site walk and cycle routes.	The Promoter	Prior to first occupation of Site.	Feedback from residents
Provision of on-site cycle parking	The Promoter	Prior to first occupation of Site.	Utilisation surveys
Provision of broadband connections to each dwelling	The Promoter	Prior to first occupation of Site.	No. of dwellings signed up to broadband services
Training of Sales and Marketing staff	TPC	2 weeks in advance of first occupation of Site.	Residents' awareness of Travel Plan
Sustainable Travel Information Packs for new residents	The Promoter / TPC	Prior to first occupation of Site.	Number of welcome packs delivered
Development website/page including travel information	The Promoter	Prior to first occupation of Site.	Number of website/page hits
Provision of local pedestrian and cycle maps	TPC	Upon first occupation	Travel survey mode share results for walking and cycling
Promotion of car sharing and Lincoln BIG Car-share scheme	TPC	Upon first occupation	Travel survey mode share results car sharing
Promotion of home shopping and working	TPC	Upon first occupation	Monitoring of retail and employment choices
Personalised Travel Planning (PTP) advice	TPC	To commence at 10% Site occupation	Questionnaire on travel choices before and after PTP
Provision of cycle training	TPC	To commence at 10% Site occupation	Number of children applying for cycle training



9 Monitoring and Review

- 9.1 The RTP requires monitoring, review and revision to ensure that it remains relevant to the individual residential units and their visitors. This chapter sets out the proposals for monitoring and review of the Plan.
- 9.2 All monitoring will follow the most up-to-date SCC best practice guidance on travel planning and will be the responsibility of the TPC with support from the Developer.
- 9.3 The monitoring programme will begin with the initial Baseline Travel Survey, to be undertaken upon reaching a trigger of 75% occupation of the residential units or within six months of initial occupation, whichever is soonest. Details of the travel survey will be discussed and agreed with SCC and will be designed to be able to monitor the success of the RTP in meeting the agreed targets.
- 9.4 The monitoring schedule for the RTP is set out in **Table 9.1** and assumes that the Lincoln Eastern Bypass will be constructed and the full 138 unit scheme will be delivered. The monitoring timescales will form the main technical analysis to be included within the RTP monitoring report and will specifically include:
- Annual resident travel surveys to identify current modal split; and
 - Annual Automatic Traffic Counts (ATC) at the Site entrances, to identify trip rates.
- 9.5 Following each monitoring event, the TPC will prepare a brief monitoring report for submission to SCC Travel Plan Officers. The report will include:
- An overview of the RTP objectives and targets;
 - A monitoring methodology – setting out how the data was gathered;
 - A summary of the results – presented in relation to the agreed targets;
 - A discussion on the progress against each target; and
 - Proposed remedial measures to get the Plan back on track, if considered necessary.



Table 9.1: Monitoring Timescales

Timescale	Monitoring Process	Responsibility of...
Construction Phase – prior to initial Site occupation	<ul style="list-style-type: none"> Preparation of Baseline Travel Survey and methodology. 	Yarmouth Road Site Promoter / Travel Plan Coordinator
At 75% occupancy (100 th dwelling)	<ul style="list-style-type: none"> Traffic survey (scope to be agreed) Resident surveys Collation of patronage data from bus operator Distribute results to residents Prepare Travel Plan Monitoring Report Submit TPMR to SCC / SCDC Agreement of additional measures / intervention for way forward 	Travel Plan Coordinator
Annually (for first 5 years) from anniversary of occupation of 100 th dwelling	<ul style="list-style-type: none"> Traffic survey (scope to be agreed) Resident surveys Collation of patronage data from bus operator Prepare Travel Plan Monitoring Report Submit TPMR to SCC / SCDC Agreement of additional measures / intervention with SCC / SCDC 	Travel Plan Coordinator
Post 5 years of monitoring	<ul style="list-style-type: none"> Consultation with SCC / SCDC to determine progress against targets and identify and agree how monitoring should be continued into the future. 	Travel Plan Coordinator

9.6 The monitoring and review of the RTP will be managed by the TPC and reported to the Yarmouth Road Site promoter, thereafter a monitoring report will be submitted to SCC / SCDC. The TPC in consultation with residents will then provide input into what new measures or intervention may be required should targets not be met. It may also be necessary to review targets at this stage and new issues that arise.



10 Securing, Funding and Remedial Action Plan

Securing

- 10.1 The provision of this RTP, which has been prepared in accordance with current Guidance on Travel Plans, together with the implementation of 'action' type targets, will be secured through its incorporation into a signed S106 agreement for the development.
- 10.2 The specification of residential targets will be reserved for agreement with the Local Planning Authority/SCC Travel Plan Officers within one month of the initial baseline travel survey being undertaken, i.e. upon 75% occupation.

Funding

- 10.3 The Applicant is committed to ensuring the sustainability of the development and, subject to the on-going viability assessment of the scheme, will commit to appropriate financial contributions within a S106 Agreement to ensure delivery of the measures identified in this RTP.
- 10.4 Appropriate triggers for contributions and provision of obligations will need to be established with SCC as part of wider S106 discussions.

Remedial Action Plan

- 10.5 The provisional SMART targets will be reviewed and revised following the results of the Baseline Travel Survey, to be agreed with SCC and SCDC.
- 10.6 Regardless of the exact levels for the targets, the RTP requires a Remedial Action Plan, which can be put in action following each monitoring phase, should there be a likelihood that the agreed targets are not going to be met. **Table 10.1** is the proposed Remedial Action Plan for the RTP.



Table 10.1: Remedial Action Plan

Order to be taken	Remedial Action
1	Notification of potential failure to meet agreed target.
2	TPC to arrange a meeting with SCC/SCDC to discuss way forward and agreement of remedial measures.
3	Implement remedial measure(s) e.g. pursue bus and cycle discounts for residents, pursue offer of Personalised Travel Planning to all residents, particularly those who did not participate originally or review surveys to establish measures most likely to encourage residents to alter their travel habits in favour of sustainable modes.
4	Continue to monitor progress of measures against targets.
5	TPC to report progress to SCC and where necessary arrange a follow-up meeting with SCC/SCDC to discuss impact of remedial measure(s) and consider potential further measures and possible revision of future targets.



Christchurch Land & Estates Ltd

Yarmouth Road, Melton

Transport Assessment Report

September 2015

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Contents

1	INTRODUCTION.....	4
	Background and Site Location	4
2	POLICY REVIEW.....	6
	National Policy	6
	Regional Policy.....	10
	Local Policy.....	10
	Summary.....	12
3	EXISTING CONDITIONS	13
	Introduction.....	13
	Site Location and Description	13
	Public Transport.....	14
	Walking and Cycling	17
	Accessibility to Local Services and Facilities.....	18
	Local Highway Network	22
	Traffic Survey Data	23
	Road Accident Analysis	25
	Summary of Baseline Conditions	30
4	DEVELOPMENT PROPOSALS	31
	Introduction.....	31
	Development Details	31
	Access Arrangements	32
	Car & Cycle Parking Standards (A Review).....	35
5	MULTI-MODAL TRIP ASSESSMENT AND TRAFFIC DISTRIBUTION	39
	Introduction.....	39
	Assessment Approach and Methodology	39
	TRICS Survey Site Selection.....	39
	Traffic Distribution and Assignment.....	43
6	HIGHWAY IMPACT ASSESSMENT	45
	Introduction.....	45
	Assessment Periods.....	45
	Base Year Traffic Data.....	45
	Traffic Growth.....	46
	Committed Development	47



Total Forecast Base (2020) Traffic Data.....	47
Total Forecast Future Year (2020) Traffic Data	47
Junction Assessment Results.....	48
Woods Lane / The Street / Wilford Bridge Road / Melton Road – Signalised Crossroads Junction	48
B1438 / B1438 Yarmouth Road / The Avenue – Priority Junctions	50
Yarmouth Road / Proposed Site Access – Priority ‘T’ Junction.....	52
Modelling Conclusion	52
7 SUSTAINABILITY AND CONNECTIVITY OVERVIEW	54
The Sustainable Transport Strategy.....	54
Travel Awareness & Marketing	56
Summary.....	56
8 SUMMARY AND CONCLUSIONS	57
Summary.....	57
Conclusion	58

Tables

Table 3.1 Local Bus Services	15
Table 3.2 Accessible Public Services and Facilities	20
Table 3.3 Two-Way Traffic Flows on Yarmouth Road.....	24
Table 3.4 Average Speed on Yarmouth Road (mph)	25
Table 3.5 85th Percentile Weather Speeds on Yarmouth Road at Inter-peak Period.....	25
Table 3.6 Accident Data Summary – Total Number of Accidents Recorded (May 2010 – May 2015).....	28
Table 3.7 Type of Vehicles Involved in Each Accident	29
Table 3.8 Type of Casualty involved in Each Collision	29
Table 4.1 Dwelling Types as Shown on Indicative Masterplan	32
Table 4.2: SCC Parking Standards for Use Class: C2	36
Table 4.3: SCC Parking Standards for Use Class: C3	37
Table 5.1 Peak Hour Trip Rates and Person Trip Generation for Housing Element of the Development (138 Units)	41
Table 5.2 Peak Hour Trip Rates and Person Trip Generation for Assisted Living Element of the Development (50 Apartments plus 60 Bedroom Nursing Home).....	41
Table 5.3 Total Weekday All Mode Trip Generation for Full Development.....	41
Table 5.4 Peak Hour Vehicle Trip Rates and Trip Generation for Housing Element of the Development (138 Units)	42
Table 5.5 Peak Hour Vehicle Trip Rates and Trip Generation for Assisted Living Element of the Development (50 Apartments plus 60 Bedroom Nursing Home)	42
Table 5.6 Total Peak Hour Vehicle Trip Generation for Full Development	43
Table 6.1 TEMPRO Local Growth Factors (2013-2015 and 2014-2015).....	46
Table 6.2 TEMPRO Local Growth Factors (2015 to 2020)	47
Table 6.3: Woods Lane with Melton Road Signalised Junction – 2015 Base Traffic Flows	49
Table 6.4 Woods Lane with Melton Road Signalised Junction – Total Forecast 2020 Base and Total Forecast 2020 Base plus Development Traffic Flows – AM Peak.....	49
Table 6.5 Woods Lane with Melton Road Signalised Junction – Total Forecast 2020 Base and Total Forecast 2020 Base plus Development Traffic Flows – PM Peak	50



Table 6.6 B1438 / B1438 Yarmouth Road / The Avenue – 2014 Base Traffic Flows	51
Table 6.7 B1438 / B1438 Yarmouth Road / The Avenue – 2020 Base Traffic Flows	51
Table 6.8 B1438 / B1438 Yarmouth Road / The Avenue – 2020 Base + Development Traffic Flows.....	52
Table 6.9 Yarmouth Road / Proposed Site Access – 2020 Development Traffic Flows	52

Figures

Figure 1.1 Strategic Site Location Plan.....	4
Figure 3.1 Detailed Site Location Plan.....	14
Figure 3.2 Bus Route Plan.....	16
Figure 3.3 Cycle routes near the Site	18
Figure 3.4: 800m and 2km Isochrones	21
Figure 3.5 Yarmouth Road in the vicinity of the Site	22
Figure 3.6 Average Weekday 2-Way Traffic Flow on Yarmouth Road	24
Figure 3.7 Study Area Collision Data Plot	27
Figure 4.1 Indicative Masterplan	31
Figure 4.2 Proposed Layout of Site Access Junction (WYG Drawing A087076_011E).....	33
Figure 5.1 Development Traffic Distribution	44

Appendices

APPENDIX A	Scoping Correspondence
APPENDIX B	Bus Timetable Information
APPENDIX C	Rail Timetable Information
APPENDIX D	Collision Data Report
APPENDIX E	Proposed Site Masterplan
APPENDIX F	Proposed Site Access
APPENDIX G	Highway Boundary Information
APPENDIX H	Swept Path Analysis
APPENDIX I	Road Safety Audit
APPENDIX J	TRICS Output
APPENDIX K	Traffic Distribution Calculations
APPENDIX L	Development Traffic Flow Diagrams
APPENDIX M	Base (2015) Traffic Flow Diagrams
APPENDIX N	Committed Development (Woods Lane) Traffic Flow Diagrams
APPENDIX O	Total Forecast Base (2020) Traffic Flow Diagrams
APPENDIX P	Total Forecast Base (2020) + Development Traffic Flow Diagrams
APPENDIX Q	Woods Lane / The Street / Wilford Bridge Road / Melton Road LinSig Output
APPENDIX R	Yarmouth Road / B1438 / The Avenue PICADY Output
APPENDIX S	Site Access / Yarmouth Road PICADY Output



1 Introduction

Background and Site Location

- 1.1 WYG Transport has been appointed by the Christchurch Land & Estates Ltd (the 'Applicant') to prepare a Transport Assessment (TA) to support an outline planning application for the proposed development of land located adjacent to Yarmouth Road in Melton, Suffolk (the 'Site').
- 1.2 The Site is located approximately 0.9km north of the village of Melton, west of the B1438 Yarmouth Road and east of the A12 Grove Road. Furthermore, the Site is situated at approximately 17km to the north-east of Ipswich in the Suffolk Coastal District of the county.
- 1.3 The Site is bound to the west by Lodge Farm Lane, to the south-west by Saint Audrys Road, to the south by the rear of residential properties, to the east by the B1438 Yarmouth Road, and to the north by Saint Audrys Golf Club and residential properties. A Strategic Site Location plan, showing the location of the Site in relation to Melton and Woodbridge, is shown in **Figure 1.1** below.

Figure 1.1 Strategic Site Location Plan





- 1.4 This TA considers the traffic and transportation implications of the proposal which includes the creation of a new residential development comprising up to 138 new homes and a 60 bedroom nursing home with 50 assisted living units and associated on-site parking provision. This will also include open space and will be accessed off Yarmouth Road.
- 1.5 The Local Planning Authority is Suffolk Coastal District Council (SCDC) Planning. The Local Highways Authority is Suffolk County Council (SCC) Highways.
- 1.6 The TA has been prepared in accordance with the previous Guidance on Transport Assessment (DfT, 2007) and the current Transport Evidence Bases in Plan Making (DfT, 2013).
- 1.7 A scoping document was submitted to SCC in May 2014. SCC has commented regarding the trip generation and distribution, which have been agreed. At present, SCC have not provided correspondence relating to other issues. It should be noted, however, that the scope of this report has been discussed with SCC, and discussion are continuing throughout the scoping process.
- 1.8 A copy of the scoping report and subsequent correspondence can be found in **Appendix A**.

Report Structure

- 1.9 Following this introductory chapter, the remainder of this TA is structured as follows:
 - **Chapter 2: Policy Review** – provides a review of national and local development and transport planning policy relevant to the location, scale and type of the proposal.
 - **Chapter 3: Existing Conditions** – provides an outline review of the existing transport conditions prevailing at the development Site and in the immediate surrounding area, including a review of the most recently available Personal Injury Accident (PIA) data statistics;
 - **Chapter 4: Development Proposals** – sets out the development proposals including existing and proposed land uses, access arrangements and parking provision;
 - **Chapter 5: Multi-Modal Trip Assessment and Distribution** – presents the results of the trip generation assessment and mode split relative to the proposal;
 - **Chapter 6: Highway Impact Assessment** – presents capacity testing of highway junction models in close vicinity of the site and whether they have sufficient capacity with the additional development traffic flows;
 - **Chapter 7: Sustainable Transport Strategy** – consideration is given to how the site is accessed by public transport and other non-car mode's; and
 - **Chapter 8: Summary and Conclusions** – Provides a summary and conclusion by highlighting the key points raised within the report.
- 1.10 All technical Appendices are included at the end of this TA for information.



2 Policy Review

Introduction

- 2.1 This chapter of the TA examines the context of the site and how this relates to relevant planning policies and guidelines. It provides an overall spatial and planning context for the development proposal.
- 2.2 The current agenda regarding transport and development is moving away from one of providing significant new highway capacity, through 'predict and provide' schemes. Instead, policies have been adopted in national guidelines such as the most recent Transport White Paper (2011) that seeks to encourage more sustainable modes than the car and a planning system which places more emphasis on the link between transport and land use planning policies.
- 2.3 The following planning documents have been reviewed:

National Policy

- The Transport White Paper (2011);
- The National Planning Policy Framework (NPPF) (2012);
- National Planning Practice Guidance (NPPG) (2014);

Regional Policy

- Suffolk Local Transport Plan 2011-2031 (2011); and

Local Policy

- SCDC Local Plan – Core Strategy & Development Management Policies (2013).

National Policy

The Transport White Paper (2011)

- 2.4 The government's vision for the local transport system is set out in the January 2011 Transport White paper "*Creating Growth, Cutting Carbon – Making Sustainable Local Transport Happen*".
- 2.5 The White Paper acknowledges that transport provision is essential for economic growth if the Government is to improve the economic deficit that it is currently facing. However, The Paper also recognises that the current levels of carbon emissions from transport cannot be sustained if the nation is to meet its national commitment on climate change as well as creating a safer and cleaner environment in which to live. With this in mind, the Government highlights sustainable transport



solutions as a means by which the economy can grow which will also see a positive impact on the local environs.

- 2.6 Whilst the Paper outlines the funding options which will be available for sustainable transport schemes, it also recognises that investment alone will not be enough and that help needs to be given to people to ensure that the transport choices they make are good for society as a whole. The Paper recognises that it is at the local level where most can be done to encourage sustainable transport modes and implement sustainable transport schemes. Solutions should be developed for the places they serve, tailored for the specific needs and behaviour patterns of individual communities.
- 2.7 Within the Paper, sustainable transport considers more than just public transport, walking and cycling schemes and acknowledges that it is not feasible for some trips to be undertaken by these modes. There is therefore a realisation that the car will continue to be an important mode of transport and focus should be given to making car travel greener through electric and other low emission vehicles.

The National Planning Policy Framework (2012)

- 2.8 The Government's National Planning Policy Framework (NPPF) replaced the majority of previous Planning Policy Statement (PPS) and Planning Policy Guidance Note (PPG) documents on 27 March 2012. It sets out the Government's expectations and requirements from the planning system. It is meant as high level guidance for local councils to use when defining their own personal local and neighbourhood plans. This approach allows the planning system to be customised to reflect the needs and priorities of individual communities.
- 2.9 The NPPF defines the delivery of sustainable development through three roles:
1. Planning for prosperity (an economic role);
 2. Planning for people (a social role); and
 3. Planning for places (an environmental role).
- 2.10 It notes that to achieve sustainable development, these roles should be sought jointly and simultaneously through the planning system.
- 2.11 At the heart of the NPPF is a presumption in favour of sustainable development which *'should be seen as a golden thread running through both plan-making and decision-taking.'* (para. 14). In paragraph 15, it goes on to say that: *'Policies in Local Plans should follow the approach of the presumption in favour of sustainable development so that it is clear that development which is sustainable can be approved without delay.'*



Transport - Promoting Sustainable Transport

2.12 The NPPF recognises that transport policies have an important role to play in wider sustainability and health objectives as well as their direct influence on development. In paragraph 29 it states that *'the transport system needs to be balanced in favour of sustainable transport modes giving people a real choice about how they travel.'*

2.13 Paragraph 32 states that, 'All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment. Plans and decisions should take account of whether:

- *'the opportunities for sustainable transport modes have been taken up depending on the nature and location of the site, to reduce the need for major transport infrastructure;*
- *safe and suitable access to the site can be achieved for all people; and*
- *improvements can be undertaken within the transport network that cost effectively limit the significant impacts of the development. Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are **severe**.'*

2.14 Paragraph 34 seeks to ensure that, 'developments that generate significant movement are located where the need to travel will be minimised and the use of sustainable transport modes can be maximised.'

2.15 It notes, however, that this needs to take account of policies set out elsewhere in this Framework. It goes on to mention that: *'Plans should protect and exploit opportunities for the use of sustainable transport modes for the movement of goods or people.'* Therefore, developments should be located and designed where practical to:

- *'accommodate the efficient delivery of goods and supplies;*
- *give priority to pedestrian and cycle movements, and have access to high quality public transport facilities; and*
- *create safe and secure layouts which minimise conflicts between traffic and cyclists or pedestrians, avoiding street clutter.*
- *incorporate facilities for charging plug-in and other ultra-low emission vehicles; and*
- *consider the needs of people with disabilities by all modes of transport.'*

The National Planning Policy Guidance (2014)

2.16 The Government's National Planning Practice Guidance (NPPG) was launched on 6th March 2014 by the Department for Communities and Local Government (DCLG) as a web-based resource.



2.17 Within the NPPG, the 'Travel Plans, Transport Assessments and Statements in Decisions-Taking' guidance provides advice on when transport assessments and transport statements are required, what they are and what they should contain.

2.18 Paragraph 6 sets the importance of the Travel Plans (TPs), Transport Assessments (TAs) and Transport Statements (TSs) saying that they can positively contribute to:

- *"encouraging sustainable travel;*
- *lessening traffic generation and its detrimental impacts;*
- *reducing carbon emissions and climate impacts;*
- *creating accessible, connected, inclusive communities;*
- *improving health outcomes and quality of life;*
- *improving road safety; and*
- *reducing the need for new development to increase existing road capacity or provide new roads."*

2.19 The NPPG then goes on saying that the key principles that should be taken into account in preparing a TP, Ta or TS should be:

- *"proportionate to the size and scope of the proposed development to which they relate and build on existing information wherever possible;*
- *established at the earliest practicable possible stage of a development proposal;*
- *be tailored to particular local circumstances (other locally-determined factors and information beyond those which are set out in this guidance may need to be considered in these studies provided there is robust evidence for doing so locally);*
- *be brought forward through collaborative ongoing working between the Local Planning Authority/ Transport Authority, transport operators, Rail Network Operators, Highways Agency where there may be implications for the strategic road network and other relevant bodies. Engaging communities and local businesses in Travel Plans, Transport Assessments and Statements can be beneficial in positively supporting higher levels of walking and cycling (which in turn can encourage greater social inclusion, community cohesion and healthier communities)."*

2.20 In determining whether a TA or TS will be needed for a proposed development, the NPPG states on Paragraph 13 that:

"Local planning authorities should take into account the following considerations:

- *the Transport Assessment and Statement policies (if any) of the Local Plan;*
- *the scale of the proposed development and its potential for additional trip generation (smaller applications with limited impacts may not need a Transport Assessment or Statement);*



- *existing intensity of transport use and the availability of public transport;*
- *proximity to nearby environmental designations or sensitive areas ;*
- *impact on other priorities/ strategies (such as promoting walking and cycling);*
- *the cumulative impacts of multiple developments within a particular area; and*
- *whether there are particular types of impacts around which to focus the Transport Assessment or Statement (e.g. assessing traffic generated at peak times)."*

Regional Policy

Suffolk's Local Transport Plan 2011-2013

- 2.21 The Local Transport Plan (LTP) sets out the county council's ambitions and objectives for transport. The current LTP is the third the county council have produced, and is a 20-year strategy that highlights the county council' long-term ambitions for the transport network.
- 2.22 The council's key priorities with regards to transport are:
- *'a prosperous and vibrant economy;*
 - *creating the greenest county;*
 - *safe, healthy and inclusive communities (protect vulnerable people and reduce inequalities) and*
 - *learning and skills for the future (transform learning and skills)*

Local Policy

Suffolk Coastal District Council (SCDC) Local Plan - Core Strategy and Development Management Policies (July 2013 to 2027 and beyond)

- 2.23 The Core Strategy (CS) of the Suffolk Coastal District Local Plan (LP) is the first and central part of the new Local Plan (formally known as the Local Development Framework) and will guide development across the District until 2027 and beyond. It was formally adopted as planning policy, along with the Development Management Policies (DMPs), on 5th July 2013.
- 2.24 The CS replaces a number of 'saved' policies from the former Suffolk Coastal Local Plan and has become the Development Plan for the District and planning applications are expected to accord with it.
- 2.25 The CS will be followed by other specific and more detailed area-based documents that will constitute the remainder of the LP for SCD.



- 2.26 CS Strategic Policy SP10 – A14 and A12 is set out on page 45 of the Adopted Core Strategy and Development Management Policies. With regards to the A12, it states that:

'The A12 is a valuable artery running north to south through the district connecting the rural areas with the primary route network and the rest of the country. It is essential to the local economy as a tourist route and to serve the low carbon energy corridor between Sizewell and Lowestoft but journey times are hampered by stretches of single carriageway north of Woodbridge and reduced speed limits, necessary to maintain quality of life for those living immediately alongside the route, all of which need continuing enhancement.'

- 2.27 CS Strategic Policy SP11 – Accessibility is set out on page 46 the Adopted Core Strategy & Development Management Policies and states:

'In order to make the best use of capacity within the local and strategic road and rail networks serving the district, to support the District's strategic economic role both within the sub-region and nationally to maintain quality of life and to contribute to reducing the impact of CO2 on climate change, the District Council will work with neighbouring authorities, the highway authority, public transport providers, developers and other to maximise opportunities for local journeys to be made by means other than the private motor car.

In relation to public transport this will include improving both the quantity and quality of the service on offer. In relation to foot and cycle provision this will mean securing safe and easy access to local facilities where walking or cycling offers a realistic alternative for most people.

Where new services and facilities are to be provided by means of developer contributions in association with new development their timely provision will be secured by means of conditions, legal agreements and/or through the Community Infrastructure Levy (CIL) (once charging schedule has been adopted).'

- 2.28 Development Management Policy DM19 – Parking Standards is set out on page 103 of the policy document and prescribes:

'Proposals for all types of new development will be required to conform to the District Council's adopted parking standards as set out in the Supplementary Planning Document (SPD).'



Summary

- 2.29 The Site is considered to be compliant with the respective policy documents by proposing safe access for sustainable travel modes and will provide an appropriate level of parking provision in accordance with the SPD.
- 2.30 The proposed development is in accordance with and conforms to the aims and objectives of the SCDC Local Plan as they apply to transport.
- 2.31 It is considered that the proposed development will provide safe and suitable access for all people and make provision for pedestrian and cyclist connectivity.



3 Existing Conditions

Introduction

- 3.1 The previous chapter of the report sets out the relevant policy background in which the development will be considered. In this chapter the existing transport conditions are considered, including public transport, walking, cycling, highways and traffic.
- 3.2 A review of road safety along links and at key junctions in the vicinity of the site has also been undertaken and is included further within this chapter.
- 3.3 It is important that baseline conditions are accurately established so that the context of any potential future development at the Site, and its potential impact on the surrounding transport and highway networks, can be fully understood.
- 3.4 This baseline study was informed by a site visit undertaken by WYG as well as a detailed desk-top based research exercise.

Site Location and Description

- 3.5 The Site is located approximately 0.9km north of the village of Melton, west of the B1438 Yarmouth Road and east of the A12 Grove Road. Furthermore, the Site is situated at approximately 17km to the north-east of Ipswich in the Suffolk Coastal District of the county.
- 3.6 The land where the Site is located occupies approximately 9.8 hectares (24 acres) of agricultural land and is bound to the west by Lodge Farm Lane, to the south-west by Saint Audrys Road, to the south by the rear of residential properties, to the east by the B1438 Yarmouth Road, and to the north by Saint Audrys Golf Club and residential properties.
- 3.7 A strategic site location plan, showing the Site in the context of the wider surrounding area, is provided in included within Chapter 1 of this Report. Furthermore, a detailed site location plan is provided in **Figure 3.1**.



Figure 3.1 Detailed Site Location Plan



Public Transport

Bus Services

- 3.8 The nearest bus stops to the Site are located along Yarmouth Road, adjacent to its junctions with Saint Audrys Road to the south of the Site ('Tollgate Cottages' bus stop) and with Saint Audrys Park Road to the north of the Site ('Melton Park' bus stop), as shown in **Figure 3.2**.
- 3.9 These stops are located at approximately 400m to the proposed primary road access/egress to the Site (approximately 5 minutes walking distance); and they are served by bus routes 62, 64 and 963. It is to be noted that the southbound bus stop located opposite to the Yarmouth Road / Saint Audrys Road junction benefits from sheltered seating and public transport information.
- 3.10 In addition, further to the south on The Street (B1438), approximately 900m of the proposed primary road access/egress to the Site (approximately 11 minutes walking distance), there are additional bus stops, which are served by bus routes 65, 71, 72 (as well as 62, 64 and 963).



3.11 Details of the above bus routes, including typical frequencies during weekdays and at weekends, are provided in **Table 3.1** below. A full printout of the timetables is provided in **Appendix B** for information.

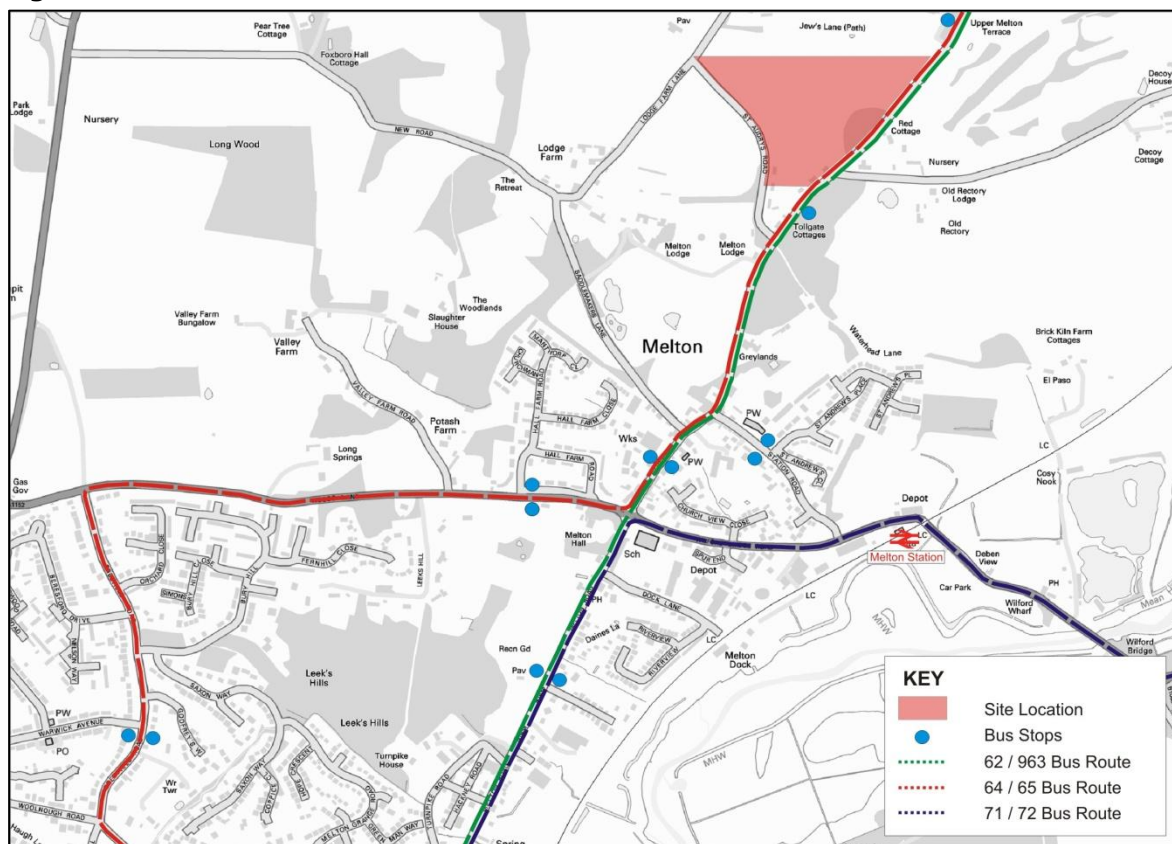
Table 3.1 Local Bus Services

Route	Route Description	Frequency	
		Weekday (Daytime)	Saturday
62	Martlesham - Woodbridge - Framliham	4 daily services (approximately every 4 hours)	-
64	Saxmundham - Woodbridge - Ipswich	Approximately every 60 minutes	
65	Aldeburgh - Rendlesham - Woodbridge - Ipswich	Approximately every 60 minutes	
71	Orford - Woodbridge - Bealings - Ipswich	2 daily services, one in the AM and one in the PM	2 daily services, one in the AM and one in the PM
72 (Tuesdays and Thursdays only)	Orford - Woodbridge - Bealings - Ipswich	2 daily services, one in the AM and one in the PM	2 daily services, one in the AM and one in the PM
963	Woodbridge - Framliham	One AM-PM daily service on School days only	-

3.12 A plan of the existing bus stops and routes within the vicinity of the Site, as detailed above, is provided in **Figure 3.2**.



Figure 3.2 Bus Route Plan



Rail Services

- 3.13 The nearest train station to the Site is Melton Station. Melton Station is located approximately 1km south of the Site (approximately 15 minutes walking / 7 minutes cycle distance). The location of the Station in relation to the Site is shown in **Figure 3.2** above.
- 3.14 The station is located on the East Suffolk Line and served by a regional service operated by Greater Anglia (Abellio). Trains serve the station on an hourly basis in each direction and provide access to key commuter and leisure destinations including Ipswich and Lowestoft. There is one train per day to Harwich International.
- 3.15 The station is operated by Suffolk County Council and is open 24 hours a day, seven days a week. Facilities at the Melton Station include 27 'free' car parking spaces and four covered cycle parking spaces in the form of Sheffield Cycle Stands.
- 3.16 A timetable of rail services operating from Melton Station, as provided by Abellio Greater Anglia, is included at **Appendix C** for information.



Walking and Cycling

Walking

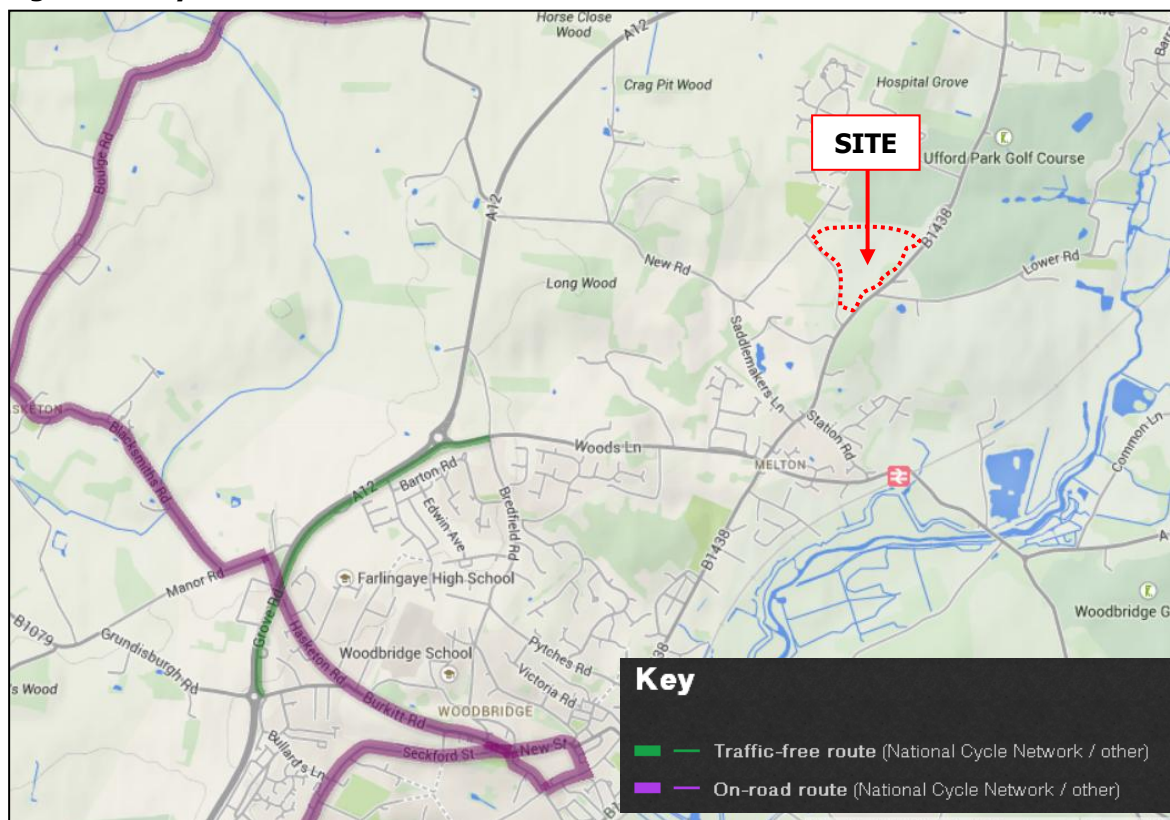
- 3.17 Walking offers a realistic option for the journey to work or study for many and is generally considered a viable travel choice for short distances of around 800m and offers the greatest potential to replace car trips less than 2km.
- 3.18 According to the 2011 Census, walking represents approximately 11.3% of all journeys to work on a national scale and 8.6% of journeys to work in the Melton & Ufford Ward, where the Site is located (according to the 2011 Census 'Method of Travel to Work' dataset).
- 3.19 In terms of journey purpose, local trips on foot are likely to relate to short shopping trips, access to leisure facilities, trips to school, local visiting and trips to bus stops as part of linked trips to destinations further afield.
- 3.20 At present there is no footway adjacent to the Site on the western side of Yarmouth Road. However, there is a footway on the eastern side of Yarmouth Road. This footway continues southwards to a point opposite St Audrys Road. On the west side of Yarmouth Road, a footway starts south of the Site at a point opposite Lower Road and continues southwards into Melton.
- 3.21 Pedestrian accessibility is addressed in the design of the proposed Site access and as part of the mitigation strategy.

Cycling

- 3.22 Cycling represents approximately 3% of all journeys to work on a national scale and 3.6 % of journeys to work in the Melton & Ufford Ward.
- 3.23 Cycle use is considered a feasible means of transport over short to medium distances, typically journeys less than five kilometres. Cycling is influenced by many the same factors as walking but will also be influenced by route conditions, route topography, traffic levels and secure cycle parking at destination.
- 3.24 A review of Sustrans website shows the locations of cycle routes in the vicinity of the site, which are shown in **Figure 3.3**.



Figure 3.3 Cycle routes near the Site



Source: Sustrans website (accessed on 12th August 2015).

3.25 **Figure 3.3** shows the location of the existing traffic-free cycle route that runs alongside the eastern boundary of the A12 Grove Road. The cycle route is approximately 1.5km in length and starts at the junction of Bredfield Road / Woods Lane and terminates at the A12 / Grundisburgh Road roundabout. Lane markings, signage and dropped kerbs are present to assist cyclists. The route provides access to Farlingaye High School, Woodbridge School and surrounding residential areas.

3.26 The closest route to the Site with national designation is National Cycle Route (NCR) 1 which connects Dover and the Shetland Islands. On a regional scale, NCR1 connects Woodbridge with Martlesham Heath and Ipswich to the southwest and villages to north. NCR 1 can be accessed at the A12 Grove Road / Manor Road junction. A staggered Toucan crossing provides cyclists with safe passage across the A12.

Accessibility to Local Services and Facilities

3.27 There are a number of key services and facilities that should exist within walking and / or cycling distance of a residential development Site in order to minimise car journeys and promote



sustainable travel. According to guidelines issued by the Institute of Highways and Transportation, 2km is considered to be within a sensible walking distance of the Site. With regards to cycling, relevant guidance states that cycling has the potential to substitute car journeys under 5km. For the purposes of this assessment, a distance of 2km has been used for both walking and cycling accessibility, which is well within relevant guidelines.

3.28 Services within a reasonable walking and / or cycling distance of a residential development should include:

- community buildings / local meeting places;
- education and library services;
- leisure and sports facilities;
- health and social care services;
- shop / market selling food and fresh groceries;
- communication services, such as public internet access and post office;
- bank and / or cash machine;
- public house;
- places of worship; and
- access to public transport, pedestrian walkways and cycle networks.

3.29 Local amenities include a convenience store, public house, takeaway and place of worship located on Yarmouth Road. These amenities are located within one kilometre from the Site and are accessible in approximately 12 minutes on foot. Melton Railway Station is located approximately 1km from the Site, and is therefore accessible by foot and by cycle.

3.30 The Site is also located in close proximity to a number of educational establishments including Melton Community Primary School, which is located on the south-eastern corner of the Woods Lane / The Street / Wilford Bridge Road / Melton Road junction, at approximately 1.1km / 14 minutes walking distance to the south of the Site. Additionally, Melton Day Nursery is located on Yarmouth Road (at less than 200m from the site, approximately 2-3 minutes walking distance); and Melton Under Fives is located on Hall Farm Road (approximately 1.3km/16 minutes walking distance). Moreover, there are two Montessori Schools located nearby the Site: Melton Lodge on Saint Audrys Park Road, approximately 500m / 6 minutes walking distance to the north of the Site; and Rectory Garden on Lower Road, approximately 950m/12minutes walking distance to the east of the Site.

3.31 A summary of services and facilities located within an accessible distance from the Site is provided in **Table 3.2**.



Table 3.2 Accessible Public Services and Facilities

Service / Facility	Within 800m of the Site	Within 2km of the Site	Accessible by Public Transport
Community Buildings (e.g. Woodbridge Police Station)	No	Yes	Yes
Education and Library Services			
Primary School (Woodbridge Primary)	No	Yes	Yes
Secondary School (Farlingaye High School)	No	No	Yes
Library Services (Woodbridge Library)	No	No	Yes
Leisure and Sports Facilities (Ufford Park Golf Club)	Yes	Yes	Yes
Health and Social Care Services			
GP Services (Dr Taylor and Partners)	No	Yes	Yes
Pharmacy (Boots)	No	Yes	Yes
Dentist (ADP Woodbridge)	No	Yes	Yes
Food and Fresh Groceries (Country Fayre)	Yes	Yes	Yes
Nursery / Crèche Facilities (Melton Day Nursery)	Yes	Yes	Yes
Communication Services (Woodbridge Post Office)	No	No	Yes
Bank and Cash Machines (ATM, The Street, Melton)	Yes	Yes	Yes
Public House (The Coach and Horses)	Yes	Yes	Yes
Places of Worship (Saint Andrews, Melton)	Yes	Yes	Yes

3.32 **Table 3.2** demonstrates that there are numerous public services and facilities available within a reasonable walking or cycling distance of the Site. As previously noted, this is deemed by the Chartered Institute of Highways (CIHT) and Transportation to be a sensible walking distance. It is also well within the relevant guidelines for distances where cycling journeys are likely to replace those made by car.

3.33 Woodbridge Primary School is within the guideline 2km walking distance, and is also accessible via bus routes serving Yarmouth Road. Woodbridge Library, although outside the 2km threshold, is also served by the local bus routes and is accessibly by bicycle from the Site.

3.34 It is noted that Farlingaye High School falls outside of the 2km walking distance. Anyone travelling to the School from the Site can use either the 64/65 bus service from outside the Site on Yarmouth

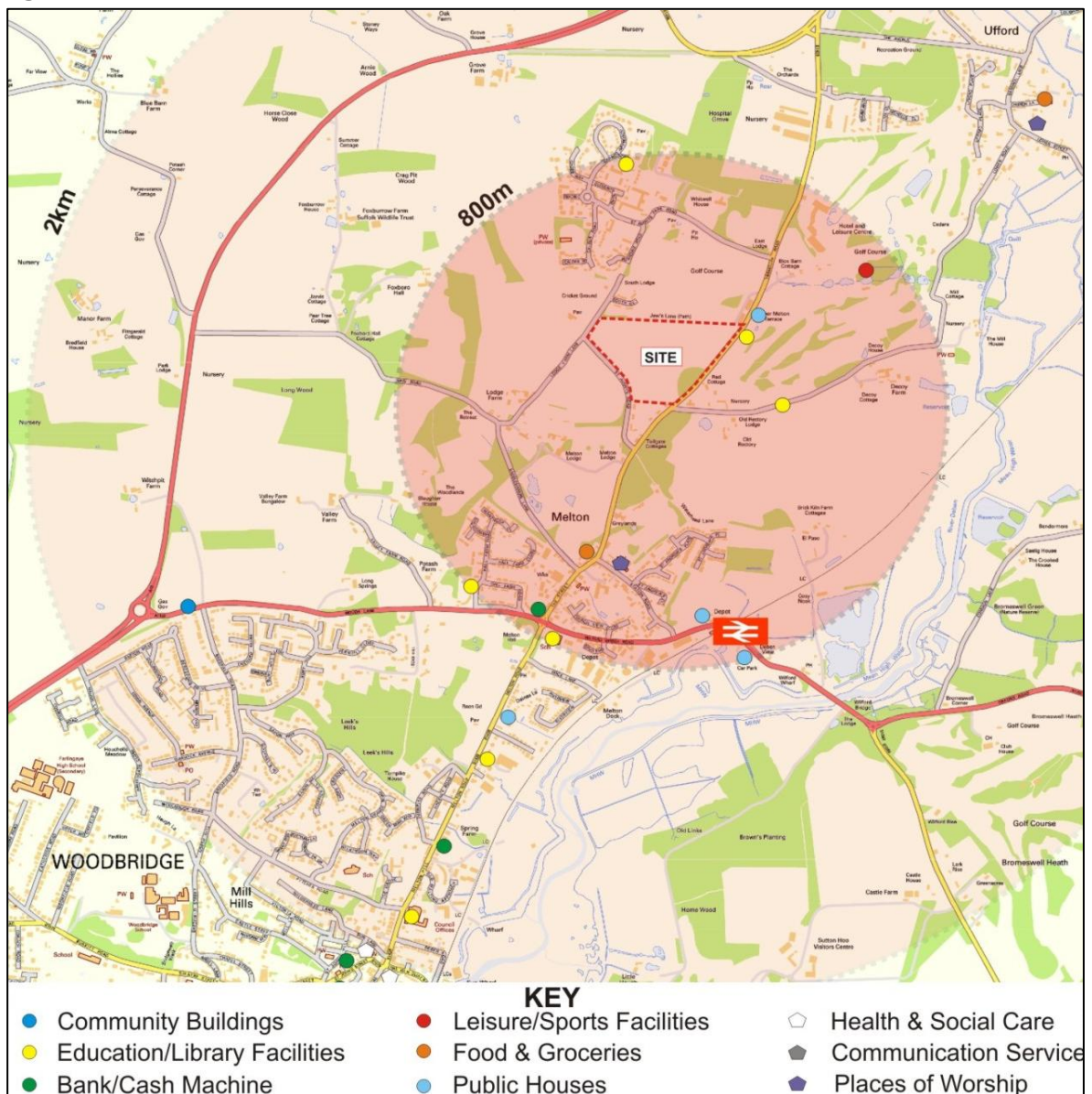


Road to the junction of Bredfield Road / Warwick Avenue. From here there is a direct pedestrian route approximately 750m in length.

3.35 Farlingaye High School is also within an acceptable cycle distance of the Site. The cycle route between the Site and the School, via Woods Lane and the segregated cycle path along the A12, is 3.8km in length (approximately 14 minutes cycle distance).

3.36 An isochrones map, which shows the location of the Site in relation to aforementioned services and facilities within 800m and 2km, is also provided in **Figure 3.4**.

Figure 3.4: 800m and 2km Isochrones





3.37 As **Figure 3.4** demonstrates, there are numerous services and facilities available within 800m and 2km of the Site. The 2km isochrones boundary lies at the edge of the main retail and service district of Woodbridge town centre; the majority of facilities not available within 2km of the Site lie just outside the 2km boundary.

Local Highway Network

B1438 Yarmouth Road

3.38 The B1438 Yarmouth Road is, as previously noted, a 'B' road owned and maintained by SCC Highways. It is a two-way single carriageway road of over 6 metres in width with a single lane per direction of traffic and is subject to a 30mph maximum speed limit along the section adjacent to the eastern side of the Site. The B1438 runs in a north-south direction connecting the A12 and the town of Woodbridge to the south with the town of Wickham Market in the north.

3.39 In the vicinity of the Site, the B1438 provides access to the A12 at two separate points. To the north via a left in left out junction; and to the south via the A1152 Woods Lane. The latter A12 Grove Road / A1152 Woods Lane junction is in the form of a three arm roundabout.

3.40 There is an existing footway on the eastern side of Yarmouth Road. There is no footway on the western side of Yarmouth Road in the vicinity of the Site.

3.41 **Figure 3.5** below shows the B1438 Yarmouth Road in the immediate vicinity of the Site.

Figure 3.5 Yarmouth Road



St Audrys Road

3.42 St Audrys Road is a minor county road that runs south-east to north-west and connects Yarmouth Road with Lodge Farm Lane. It is a two-way single carriageway road, varying in width between approximately 4 and 6 metres. The speed limit on this road is 30mph. Lodge Farm Lane is similar



in characteristics to Saint Audrys Road, running north to south and providing local residential access. There are no footways on St Audrys Road; pedestrians share the carriageway with vehicles.

A12 Grove Road

- 3.43 As noted above, the A12 Grove Road is owned and maintained by SCC Highways and is a main route through Suffolk, ending at Lowestoft and Great Yarmouth to the north. Speed enforcement cameras are present on the A12 indicating some speeding / road safety issues previously.
- 3.44 Alongside the A12 in the vicinity of the Site are footpaths separated from the carriageway by a grass verge.
- 3.45 The Yarmouth Road / Saint Audrys Road junction is located approximately 200m to the south of the Site and is in the form of a priority 'T' junction. Further to the south, at approximately 800m from the Site, there is the Yarmouth Road / Station Road / The Street junction, a priority 'T' junction where Station Road is the minor arm. Further to the latter junction, the B1438 is called The Street and at approximately 1.2km to the south of the Site, there is the Woods Lane junction / The Street / Wilford Bridge Road / Melton Road junction, which is signalised. Woods Lane is a two-directional single carriageway 'A' road subject to a 40mph maximum speed limit that runs east-west and connects Yarmouth Road to the A12 Grove Road.
- 3.46 Located approximately 1km to the north of the Site, there are a series of priority junctions connecting the B1438 Yarmouth Road to a separate division of the B1438 which subsequently links to the A12 to the west.

Traffic Survey Data

Traffic Flows

- 3.47 An automatic traffic counter (ATC) unit was installed on Yarmouth Road at the approximate location of the proposed Site access in order to determine the profile of traffic flows along the link. The ATC was installed on Friday 30th May 2014 with data recorded for a period of seven days thereafter. A summary of the two way flows along this link are provided in **Table 3.3** and have been used to identify the AM and PM peak hour for the local road network.
- 3.48 A summary of the traffic data for Yarmouth Road is provided below:
- The ATC data shows the average weekday daily traffic flow to be 5,402 vehicles in both directions;
 - on a weekday, the AM peak is identified as being between 08:00 – 09:00 hours with an average two-way flow of 428 vehicles; and



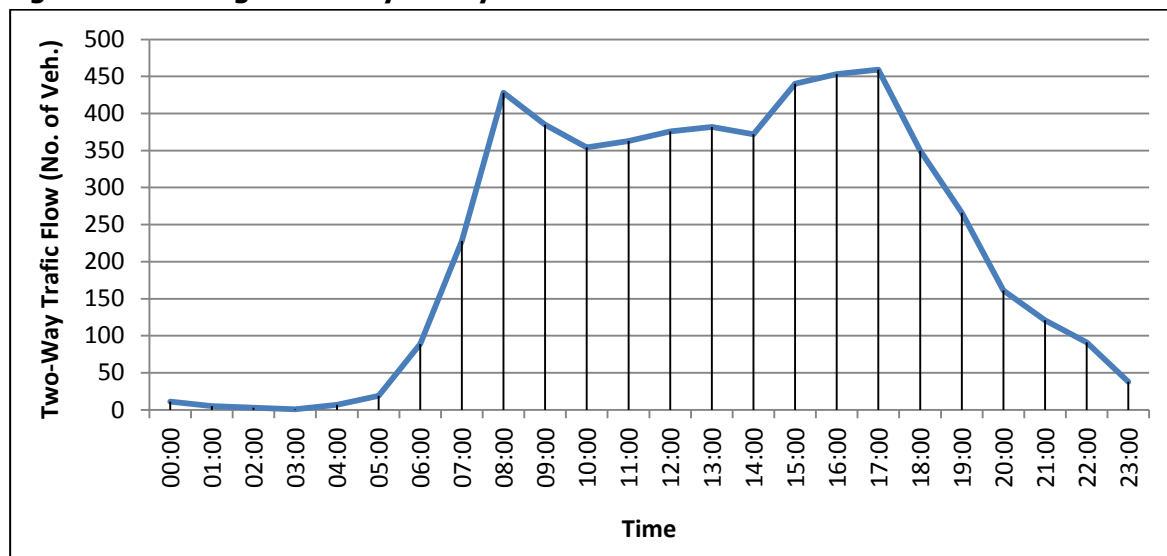
- the weekday PM peak is identified as being between 17:00 – 18:00 hours, with an average two-way flow of 459 vehicles.

Table 3.3 Two-Way Traffic Flows on Yarmouth Road

Time Begin	Friday	Saturday	Sunday	Monday	Tuesday	Wednesday	Thursday	5-Day Weekday Average	7-Day Average
08:00-09:00	334	191	119	473	460	423	449	428	350
17:00-18:00	451	302	215	427	507	445	466	459	402
07:00-19:00	4784	3719	2762	4546	4684	4417	4519	4590	4204
06:00-22:00	5407	4226	3135	5138	5323	5071	5196	5227	4784
06:00-24:00	5575	4417	3217	5248	5435	5202	5318	5356	4915
0:00-24:00	5624	4502	3299	5282	5483	5247	5377	5402	4973

3.49 The 24 hour average weekday daily flows are shown in **Figure 3.6** Average Weekday 2-Way Traffic Flow on Yarmouth Road 6.

Figure 3.6 Average Weekday 2-Way Traffic Flow on Yarmouth Road



Traffic Speeds

3.50 As stated above, Yarmouth Road is subject to a 30mph maximum speed limit along the section adjoining the eastern side of the Site, however, it is to be noted that approximately 150m to the north of the eastern boundary of the Site, the maximum speed limit is raised to 40mph.

3.51 The average speed recorded by the ATC was 36.2mph northbound and 34.1mph southbound in the AM peak and 36.5mph northbound and 35.1mph southbound in the PM peak hour. Mean speeds for Yarmouth Road are shown in **Table 3.4**.



Table 3.4 Average Speed on Yarmouth Road (mph)

Direction	08:00 – 09:00	17:00 – 18:00
Yarmouth Road Northbound	36.2	36.5
Yarmouth Road Southbound	34.1	35.1
Average 2-Way	35.2	35.8

- 3.52 The mean speed suggests that most vehicles exceed the speed limit of Yarmouth Road (30mph), which could be due to the speed limit being increased to 40mph on the nearby section towards the north.
- 3.53 The average 85thile two-way speed was recorded as 40.1mph in the AM peak hour and 41.1mph in the PM peak hour which is above the speed limit for the road. For the purposes of calculating appropriate visibility splays for the proposed site access junction (see paragraph 4.8 onwards), 85th percentile wet weather speeds on Yarmouth Road have been utilised. In accordance with DMRB (Volume 5 Section 1 Chapter 3 Paragraph 3.4), a correction factor of minus 4kph has been applied to the surveyed dry weather speeds to calculate wet weather speeds on north and southbound approaches to the proposed Site access. This has been calculated using weekday 85th percentile speeds during the inter-peak period (between 10:00 and 16:00) when there are free-flow conditions on the network. The results are shown in **Table 3.5**.

Table 3.5 85th Percentile Weather Speeds on Yarmouth Road at Inter-peak Period

Direction	Inter-peak Period (10:00 – 16:00) Average 85 th Percentile Speeds		
	Recorded Dry Weather Speeds (mph)	Recorded Dry Weather Speeds (kph)	Corrected Wet Weather Speeds (kph)
Yarmouth Road Northbound	40.7	65.4	61.4
Yarmouth Road Southbound	39.2	63.0	59.0
Two-Way Average	39.9	64.2	60.2

Road Accident Analysis

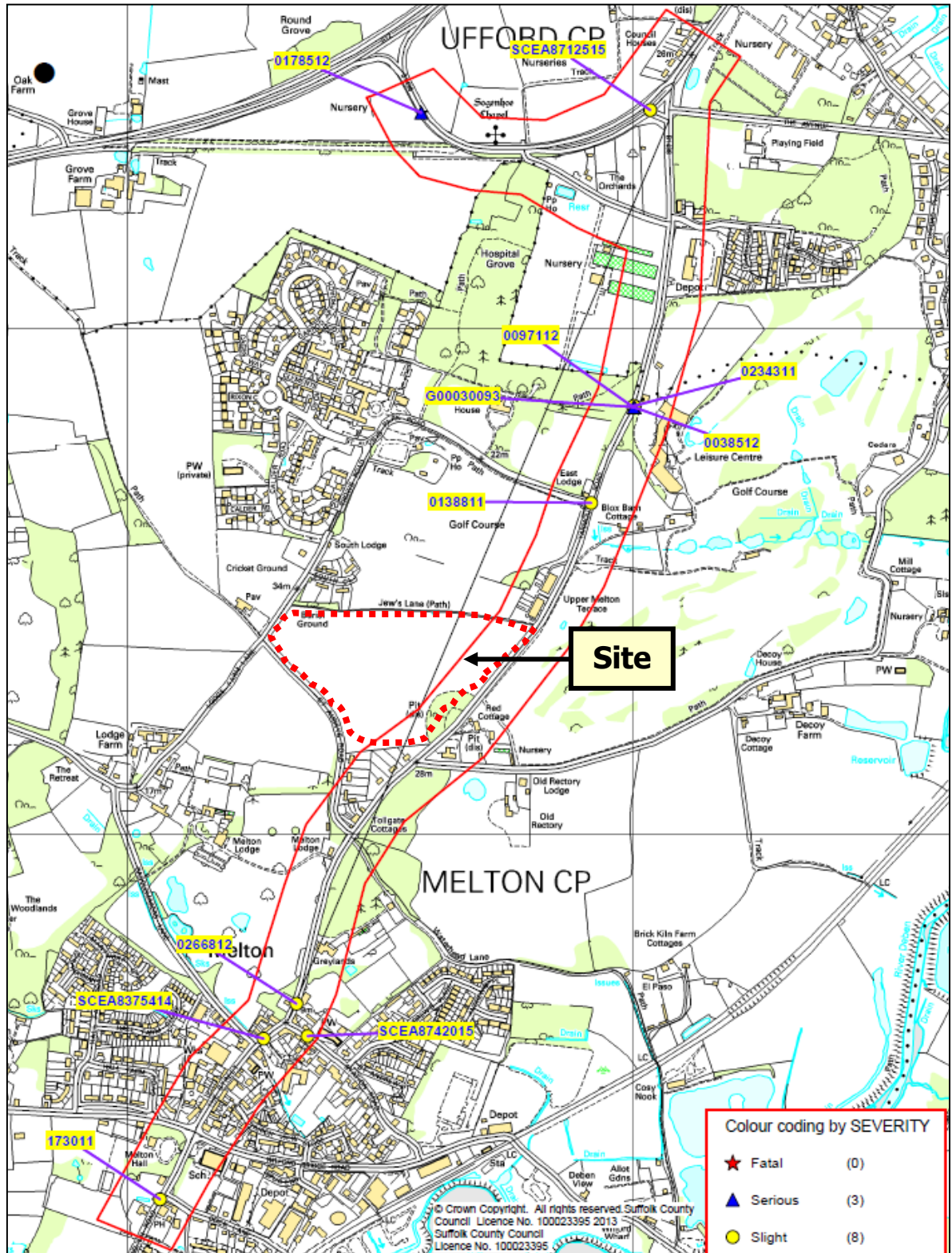
- 3.54 Personal injury accident (PIA) data for the most recent five-year period (60 months up to May 2015) has been obtained from SCC. The extent of the accident data study area was agreed with SCC Highways at the scoping stage and includes links and junctions anticipated to be most affected by traffic generated by the proposal.



3.55 Accident data along the B1438 Yarmouth Road has been assessed. The study area included the section from the Yarmouth Road / B1438 junction to the north to the B1438 Melton Road / Dock Lane junction to the south. Furthermore, an area of approximately 100m to either side of the carriageway along this section was included within the study area. This can be seen on **Figure 3.7**, which also shows the number of PIA recorded during the 5 year period coded by severity. The full accident data plot, as obtained from Suffolk County Council, is provided in **Appendix C**.



Figure 3.7 Study Area Collision Data Plot



Source: Suffolk County Council, August 2015.



3.56 The accident data has been summarised according to severity and chronologically by year and this is presented in **Table 3.6**. Full printouts of the PIA data obtained from SCC are included in **Appendix C** for reference.

Table 3.6 Accident Data Summary – Total Number of Accidents Recorded (May 2010 – May 2015)

Year	Number of Accidents by Severity			
	Slight	Serious	Fatal	Total
05/2010 – 04/2011	3	0	0	3
05/2011 – 04/2012	1	3	0	4
05/2012 – 04/2013	1	0	0	1
05/2013 – 04/2014	0	0	0	0
05/2014 – 04/2015	3	0	0	3
Total	8	3	0	11

Source: Suffolk County Council, August 2015.

3.57 Over the most recent five-year period a total of 11 accidents have been recorded in the study area, 8 'slight' and 4 'serious'. No 'fatal' accidents have been recorded.

3.58 As it can be seen in Figure 3.7 above, the majority of the recorded accidents were spread over the study area, with a single small cluster found at the Yarmouth Road / Ufford Park Golf Course access priority T-junction, which included 4 accidents over the study period, 2 'slight' and 2 'serious'. No accidents were recorded in the area directly surrounding the Site boundaries.

3.59 Three 'slight' accidents occurred on the Woods Lane / The Street / Wilford Bridge Road / Melton Road signalised junction over the five year study period.

3.60 **Table 3.7** summarises the collision data according to the number of and types of vehicles involved in each collision, as well as the number and types of casualties involved over the five year study period.



Table 3.7 Type of Vehicles Involved in Each Accident

Type of Vehicles Involved	Number of Accidents by Severity			
	Fatal	Serious	Slight	Total
Motor Vehicles Only (excl. 2-wheels)	0	3	6	9
2-Wheeled Motor Vehicles	0	0	1	1
Pedal Cycles	0	0	1	1
Horses & Other	0	0	0	0
Total Accidents	0	3	8	11

Source: Suffolk County Council, August 2015.

- 3.61 **Table 3.7** above shows that 10 of the collisions involved motor vehicles, one collision involved a two-wheeled motor vehicle and one collision involved a pedal cycle.
- 3.62 A summary of the type of casualties involved in each collision occurring over the five year period is provided in **Table 3.8** below.

Table 3.8 Type of Casualty involved in Each Collision

Type of Casualty Involved	Number of Casualties by Severity			
	Fatal	Serious	Slight	Total
Vehicle Driver	0	3	6	9
Vehicle Passenger	0	0	5	5
Motorcyclist	0	0	1	1
Cyclist	0	0	1	1
Pedestrian	0	0	1	1
Other	0	0	0	0
Total No. of Casualties	0	3	14	17

Source: Suffolk County Council, August 2015.

Accident / Collision Summary

- 3.63 A total of 11 accidents have been recorded in the study area over the past five year period up to May 2015. Out of the 11 accidents, 8 were recorded as 'slight' and 3 as 'serious', with no 'fatal' accidents being recorded during the study period.
- 3.64 Analysis of the time and day of the accidents reveals no identifiable trends relating to the occurrence of accidents to a specific time of day or day of the week other than what is considered normal variation in traffic volume.



- 3.65 The majority of the recorded accidents were spread over the study area, with a single small cluster found at the Yarmouth Road / Ufford Park Golf Course access priority T-junction, which included 4 accidents over the study period, 2 'slight' and 2 'serious'. No accidents were recorded in the area directly surrounding the Site boundaries.
- 3.66 In summary, the number of accidents recorded over the past five year period is not significant considering the volume of traffic along Yarmouth Road. Furthermore, analysis of the accident data indicates that the accidents are a result of driver error and are not attributed to the design or layout of the existing highway network.

Summary of Baseline Conditions

- 3.67 The Site has been identified as well connected in highway terms; Woods Lane to the south and the B1438 to the north of the Site provide access to Grove Road (A12), a strategic route providing access to Ipswich, a regional employment centre.
- 3.68 The nearest bus stops to the Site are located along Yarmouth Road, adjacent to its junctions with Saint Audrys Road to the south of the Site ('Tollgate Cottages' bus stop) and with Saint Audrys Park Road to the north of the Site ('Melton Park' bus stop), as illustrated on **Figure 3.2**.
- 3.69 These stops are located at approximately 400m to the proposed primary road access/egress to the Site (approximately 5 minutes walking distance). In addition, further to the south on Yarmouth Road, at approximately 900m of the proposed primary road access/egress to the Site (approximately 11 minutes walking distance), there are additional bus stops. The Site is considered to have a relatively good level of public transport accessibility.
- 3.70 Single footways exist along the B1438 Yarmouth Road, both towards the north and south of the Site, providing a safe passage for pedestrians to reach local amenities.
- 3.71 Accident/collision records show that only 11 accidents have been recorded on the local highway network for the previous five years, 8 classified as 'slight' and 3 as 'serious', with no 'fatal' accidents recorded.

4 Development Proposals

Introduction

- 4.1 This section of the TA introduces and outlines the development proposals for the Site. It includes a description of the proposed land use and proposed access arrangements by all modes.

Development Details

- 4.2 The proposed development includes a nursing home, assisted living units and two distinct areas of residential development around a green corridor creating a central hub of open / play space. The proposed masterplan layout is illustrated within the Design and Access report submitted by Pegasus and is presented in **Figure 4.1**. The full resolution drawing is included at **Appendix D**.

Figure 4.1 Indicative Masterplan



- 4.3 In terms of residential units, the proposals include 138 dwellings (Use Class C3) comprising a mix of terraced, semi-detached and detached houses over approximately 5.12 ha (which equates to approximately 27 dwellings per hectare). Of these 138 units, it is anticipated that up to 46 dwellings (approximately 1 in 3) will be made available as affordable housing. The amount of the



latter will be submitted at Reserved Matters Stage after consultation with the Planning Authority and provisions will be contained within the Section 106 Agreement.

4.4 **Table 4.1** presents the proposed schedule of accommodation.

Table 4.1 Dwelling Types as Shown on Indicative Masterplan

Dwelling Type		Number
Open Market (66% of development)	2 bed	23
	3 bed	37
	4 bed	32
	Sub Total	92
Affordable (33% of development)	1 bed	12
	2 bed	22
	3 bed	12
	Sub Total	46
Total Housing Units		138
Assisted Living Apartments		50
Total No. of Units		188

4.5 In regard to the care facilities, an area of approximately 1.19 ha is proposed to be included within the development. This is to include a 60 bedroom nursing home and 50 assisted living apartments (Use Class C2) set around a communal garden for residents' use.

Access Arrangements

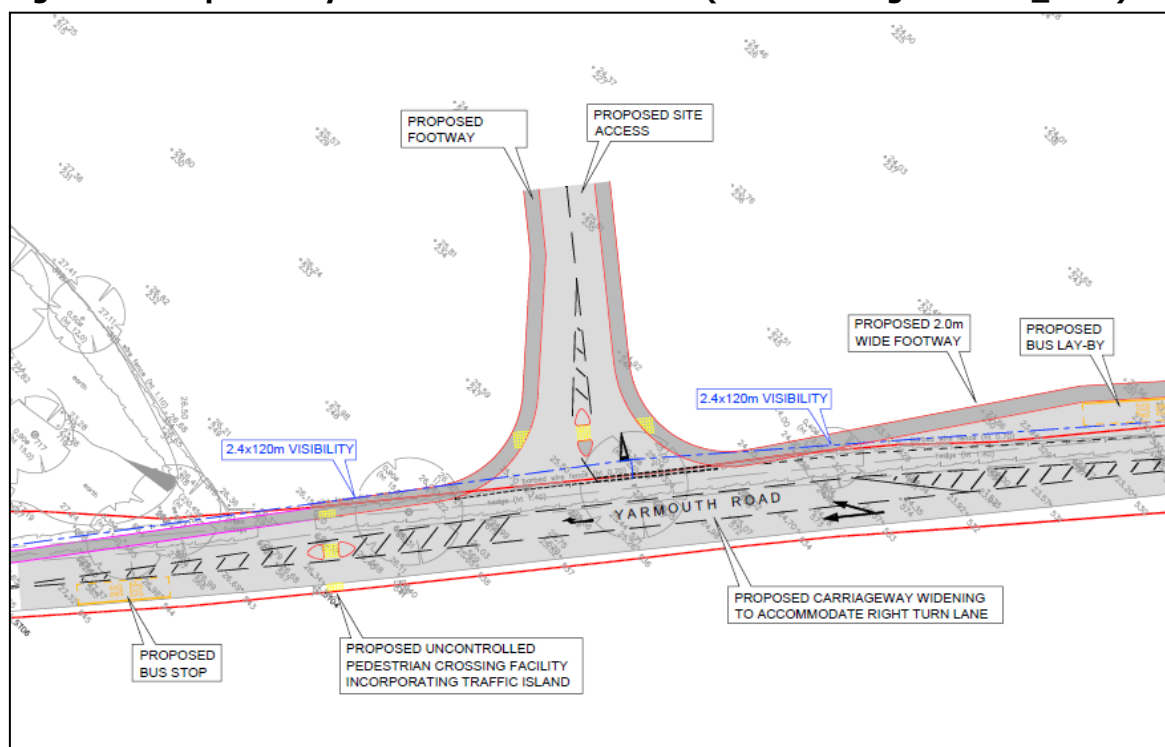
Vehicle Access

4.6 It is proposed that vehicular access to the proposed development will be taken via Yarmouth Road in roughly the same location as an existing field access. This would be a simple priority controlled T-junction, with a 3.5m wide ghost right turn island to accommodate southbound vehicles turning into the Site and prevent these vehicles from blocking northbound 'through' traffic on Yarmouth Road. A second access point for emergency vehicles only can be provided off Saint Audry's Road to the south-west of the Site.

4.7 The proposed access arrangement includes a new bus stop opposite the Site access for southbound public bus services towards Melton. Additionally, a new lay-by as well as bus stop for northbound services is proposed, which is to be located approximately 25m north of the Site access.

4.8 A screenshot of WYG's proposed Site access drawing (Drawing No. A087076_011E) is shown in **Figure 4.2**. A full resolution scaled drawing is provided in **Appendix E** for information.

Figure 4.2 Proposed Layout of Site Access Junction (WYG Drawing A087076_011E)



- 4.9 The visibility splay for the Site access has been based on the DMRB guidance. The ATC speed data (see **Table 3.5**) shows that the average weekday two-way 85th percentile wet weather speed is 37.4mph (60.2kph) during the weekday inter-peak period (10:00 to 16:00). Therefore, based on a 70A (40mph, 64kph) design speed, a desirable minimum sight stopping distance of 120m.
- 4.10 Existing adopted highway boundary plan information has been obtained from SCC for the section of Yarmouth Road along which the proposed access is to be located, a copy of which is provided in **Appendix G** and can also be seen in red in **Figure 4.2** above. The plan demonstrates that 120m visibility splays can be achieved to the east and west from the minor arm.
- 4.11 Drawing A087076_004 in **Appendix H** presents the results of the swept path analysis of a 2.5m x 11.35m refuse vehicle and demonstrates that the vehicle tracks can be accommodated within the layout of the proposed access junction.

Pedestrians and Cycle Access

- 4.12 Access to the Site by walking and cycling has been incorporated into the design of the proposed site access junction on Yarmouth Road.
- 4.13 An uncontrolled crossing point with refuge island is proposed across the minor arm of the proposed Site access junction in the form of dropped kerbs and tactile paving. Footways are proposed alongside both sides of the access road, which will link into the existing network.



- 4.14 A further uncontrolled crossing point with refuge island is proposed across Yarmouth Road approximately 30m to the south-west of the proposed access road. This pedestrian crossing facility will provide access to the existing footway and proposed bus stop on the eastern side of Yarmouth Road.
- 4.15 Although a footway is already provided on the eastern side of Yarmouth Road, it would be more convenient for residents if a footway were also provided on the western side. The highway boundary information indicates that a footway could be provided within the public highway between the Site and the western footway at Lower Road. It is therefore proposed that a footway be implemented as part of the development proposals.
- 4.16 All of the above access facilities are shown on Drawing No. A087076_011D in **Appendix F** and can also be seen in **Figure 4.2**.
- 4.17 The following measures are proposed in order to provide safe and convenient routes through the Site by foot and cycle:
- Provision of pedestrian/cycle routes through the site linking to Yarmouth Road, St Audry's Road, and Jews Lane;
 - Provision of footways and a safe pedestrian crossing point with refuge island, linking to the footway on the western side of Yarmouth Road and the new bus stop on the eastern side of Yarmouth Road;
 - Internal road layout designed to ensure low traffic speeds. The design will promote safe walking and high permeability through the site, and limit potential for anti-social behaviour;
 - Particular attention to be paid to surface quality, suitability for use by disabled people, and sufficient 'overlook' to provide a sense of safety and security for users;
 - Appropriate signage and crossing points of roads through the development, to include dropped kerbs, tactile paving and guardrails as appropriate; and
 - No excessive height change between pavements and internal roads allows a person with impaired mobility to cross any public space and to enter any building without encountering steps or significant changes in level.

Stage 1 Safety Audit

- 4.18 WYG commissioned The Safety Forum (TSF) to carry out a Stage 1 Road Safety Audit (RSA) of the proposed access junction arrangements. TSF is a forum of independent experts specialising in RSAs.



- 4.19 TSF carried out the audit between the 20th October 2014 using the WYG drawing (A087076-11 Rev C) of the proposed access junction arrangements (including proposed bus stops, proposed uncontrolled pedestrian crossing, new footways), ATC data and accident data for Yarmouth Road. TSF raised some issues with the design of the junction arrangements that required consideration. These issues are highlighted in TSF's Stage 1 RSA report, which is provided in **Appendix I** for reference, along with a copy of the WYG Designer's Response.
- 4.20 Following the road safety audit undertaken by TSF, WYG made amendments to the junction arrangements, which are incorporated into Drawing A087076-11 Rev E. Alterations to the junction involved relocation of the uncontrolled pedestrian crossing, and modification to the Bus Stop in order to achieve 120m forward visibility to the signal heads for westbound approaching traffic.

Car & Cycle Parking Standards (A Review)

- 4.21 Parking spaces and their layout often influence the masterplan of a new development and therefore some initial advice has been provided in this chapter. It provides a review of SCC specific parking standards and design guidance. It also provides a review of current SCC parking standards for cars, motorcycles and bicycles, including design requirements, which would need to be taken into account in the development of the masterplan for the Site.

SCC Car Parking Standards

- 4.22 The SCC 'Suffolk Guidance for Parking 2014' Supplementary Planning Guidance (SPG) (November 2014) provides policy advice to those considering planning applications for new developments and sets out 'advisory levels of parking' for particularly types of developments. It states that:

"Local planning authorities will take into account this technical guidance in their planning decisions; as such it will be a material document in planning considerations."

- 4.23 The SPG was adopted by the Suffolk local planning authorities, including SCDC Planning, in 2014.
- 4.24 Chapter 4 of the SPG (p.19) relates to residential parking design and states that:

"When planning residential parking, consideration of the type and scale of the development should be taken into account. Layouts should provide safe and secure parking for all vehicle modes and ideally where cars can be seen by owners. Layouts must also accommodate the safe passage of highway users including vulnerable users (e.g. pedestrians, cyclists, mobility vehicles) and emergency, delivery and refuse collection vehicles."

It is necessary to provide adequate parking at people's homes that uses land efficiently. It is recognised that people may wish to own a car to use for longer journeys, despite



the emphasis of transport policy to encourage and enable people to switch to more sustainable modes where possible.”

4.25 Parking standards for cars, cycles, powered two-wheelers (PTW) and disabled parking are included in the guidance. Developments relevant to the proposals at the Site have been included in this review for consideration.

4.26 Parking standards for Use Class C2, which applies to residential care homes and nursing homes, are provided in **Table 4.2**.

Table 4.2: SCC Parking Standards for Use Class: C2

Use	Vehicle Maximum	Cycle Minimum	PTW Minimum	Disabled Minimum
Residential Care Home	1 space per full time equivalent staff + 1 visitor space per 3 beds	1 stand per 5 staff	1 space + 1 per 20 car spaces (for 1 st 100 car spaces), the 1 space per 30 car spaces (over 100 car spaces)	Dependent on actual development, on individual merit, although expected to be significantly higher than business or recreational development requirements

4.27 Notes for Use Class C2 parking standards:

- Retirement / Warden Controlled Developments
 - a) Many residents are car owners and parking should be provided for each unit unless there is the evidence base to support a reduction in the standard;
 - b) Consideration should be given to safe storage and charging point locations for mobility scooters;
 - c) Electric vehicle recharging points to be provided to support the use of low emission vehicles;
 - d) Cycle parking provision should be secure, overlooked, covered and lit where appropriate to improve security and encourage use by staff and visitors;
- Parking standards for retirement developments that are warden assisted yet provide independent living should fall under Class C3.

4.28 Parking standards for Use Class C3, which relates to all other residential proposals at the Site, are provided in **Table 4.3**.



Table 4.3: SCC Parking Standards for Use Class: C3

Use	Vehicle Minimum	Cycle Minimum	PTW Minimum	Disabled Minimum
1 bedroom	1 space per dwelling	2 secure covered spaces per dwelling (satisfied if garage or secure area is provided within cartilage of dwelling to minimum dimensions)	N/A	N/A if parking is in cartilage of dwelling, otherwise as visitor / unallocated
2 bedrooms	1.5 spaces (1 allocated and 1 shared between 2 units for flexible use)			
	2 spaces per dwelling when provided within cartilage (or where sharing a space between 2 units is not practical)			
3 bedrooms	2 spaces per dwelling			
4+ bedrooms	3 spaces per dwelling			
Retirement Developments (e.g. warden assisted independent living accommodation)	1 space per dwelling	1 stand per 8 units (visitors)	2 PTW spaces and 1 space per 2 dwellings for mobility scooters	
Visitor / Unallocated	0.25 spaces per dwelling (unallocated)	If no garage or secure area is provided within cartilage of dwelling then 1 covered and secure stand per dwelling in a communal area for residents plus 1 stand per 8 dwellings for visitors		

4.29 Although generally considered as Use Class C2, assisted independent living accommodation is included within Class C3 standards in the SCC Technical guidance. For the purposes of providing an assessment of Site parking arrangements, the 50 assisted living units proposed are considered as Use Class C3.

4.30 In relation to C3 parking standards, the guidance notes that:

'Dwellings are predominantly travel origins as opposed to destinations. It is now recognised that providing a reduced number of parking spaces at a travel origin does not effectively discourage people from owning a car unless heavily restricted and



alternative modes are available. Therefore parking standards for origins should be used as a minimum standard.'

Recommended Parking Provision

- 4.31 The provision of car, cycle, motorcycle and disabled parking for all use classes on Site will be in line with the parking standards detailed in the previous section.



5 Multi-Modal Trip Assessment and Traffic Distribution

Introduction

- 5.1 A multi-modal trip generation assessment has been undertaken to assess the potential impact of the proposed development and demonstrate that it can be accommodated on the existing highway network. The trip generation for the proposed residential development has been calculated using trip rates from the industry standard TRICS trip rate database for the UK.

Assessment Approach and Methodology

- 5.2 For the purposes of assessing the likely trip generation characteristics of the proposed development, potential person trip rates and percentage (%) mode splits have been identified to be applied to the proposed development described in Chapter 4, to identify trip generation characteristics.
- 5.3 Owing to the residential nature (Use Class C3) and care home and assisted living apartments (Use Class C2) of the proposal; WYG has undertaken a review of the industry-standard TRICS trip rate database (Version 7.1.3, 2014), the latest available, in order to derive trip rates from survey sites with similar characteristics (e.g. sites excluding Greater London and those with similar numbers of units/beds). This review was in accordance with TRICS Good Practice Guide 2013.
- 5.4 The approach and methodology followed in the multi-modal trip assessment is consistent with the DfT / DCLG *Guidance on Transport Assessment (GTA)*, revised version, published in April 2010.

TRICS Survey Site Selection

- 5.5 The proposals include 138 dwellings comprising a mix of terraced, semi-detached and detached houses over approximately 5.12 ha (which equates to approximately 27 dwellings per hectare); this will be treated hereinafter as the 'housing' element of the development.
- 5.6 Additionally, the proposed development includes 50 assisted living apartments and a 60 bedroom nursing home (Use Class C2), which will be hereinafter referred to as the 'assisted living' element of the development.
- 5.7 The site selection for 'Houses-Privately Owned' has been used in order to reflect survey sites of a similar type to the housing element of the development. It is to be noted that, although approximately 1 in 3 of the housing units are to be made available as affordable housing, only houses privately owned have been selected within TRICS in order to provide a more robust



assessment and a worst-case scenario in terms of traffic generation. Furthermore, land use 05 - 'Health', category F – 'Care Home (Elderly Residential)' as been used to represent the assisted living element of the development.

5.8 A total of six survey sites have been used to calculate the trip rates to reflect the housing element of the development, which were obtained applying the following rules during the selection process:

- Survey sites located in England only (excluding Greater London region);
- Weekday (Monday - Friday) surveys only;
- Residential survey sites ranging between 75 and 300 houses only;
- Population within 1 miles restricted to 25,000 or less;
- Population within 5 miles restricted to 125,000 or less; and
- Suburban Area and Edge of Town sites only.

5.9 With regard to the assisted living element of the development, a total of three survey sites have been used to calculate the trip rates. The following rules were applied during the selection process:

- Survey sites located in England, Wales or Scotland (excluding Greater London region);
- Weekday (Monday - Friday) surveys only;
- Population within 1 miles restricted to 25,000 or less;
- Population within 5 miles restricted to 125,000 or less; and
- Edge of Town Centre, Suburban Area and Edge of Town sites only.

5.10 Full printouts of the TRICS data for both 'Housing Privately Owned' and 'Care Home (Elderly Residential)' are included in **Appendix J** for information.

Total People (All Mode) Trip Generation

5.11 WYG has extracted Total People (all modes) trip rates for the two elements of the scheme. Trip rates and traffic generation estimates for the AM and PM peak hours and the 7am-7pm 12 hour peak period are provided in **Table 5.1** and

5.12 **Table 5.2** for the 138 houses and 50 apartments and 60 bedroom nursing home respectively.



Table 5.1 Peak Hour Trip Rates and Person Trip Generation for Housing Element of the Development (138 Units)

Time	Housing Element Trip Rates			All Mode Trip Generation*		
	In	Out	Total	In	Out	Total
08:00-09:00	0.261	0.759	1.02	36	105	141
17:00-18:00	0.588	0.36	0.948	81	50	131
07:00-19:00	4.016	4.149	8.165	554	574	1,128

(*) Based on 138 houses.

Note: Potential arithmetic errors due to rounding.

Table 5.2 Peak Hour Trip Rates and Person Trip Generation for Assisted Living Element of the Development (50 Apartments plus 60 Bedroom Nursing Home)

Time	Assisted Living Trip Rates			All Mode Trip Generation*		
	In	Out	Total	In	Out	Total
08:00-09:00	0.198	0.198	0.396	22	22	44
17:00-18:00	0.122	0.176	0.298	13	19	33
07:00-19:00	2.202	2.151	4.353	227	228	456

* Based on 50 assisted living apartments plus a 60 bedroom nursing home.

Note: Potential arithmetic errors due to rounding.

5.13 Projected person (all mode) trip generations for the housing and assisted living elements of the proposed development have been combined to calculate the total persons trips generated by the development at AM and PM peak hours, plus the 12 hour peak period between 07:00 and 19:00 hours. Total person trip generation associated with the full proposed development is presented in **Table 5.3**.

Table 5.3 Total Weekday All Mode Trip Generation for Full Development

Time	Total People / All mode Trip Generation		
	In	Out	Total
08:00-09:00	58	127	185
17:00-18:00	94	69	164
07:00-19:00	781	802	1,584

(*) Based on full development comprising of 138 houses, 50 assisted living apartments and a 60 bedroom nursing home.

Note: Potential arithmetic errors due to rounding.

5.14 **Table 5.3** shows that the proposed 138-unit plus 50 assisted living apartments and a 60 bedroom nursing home development would generate 1,584 two-way trips by all modes between 07:00 and



19:00 hours. In the AM peak hour, a development of this scale would be expected to generate 58 arrivals and 127 departures. In the PM peak hour, 94 arrivals and 69 departures are projected.

Vehicle Trip Generation

- 5.15 Vehicle trip rates have been extracted from the same TRICS survey sites used above for the housing and assisted living elements of the Site. As stated above, full printouts of the TRICS data for both 'Housing Privately Owned' and 'Care Home (Elderly Residential)' are included in **Appendix J** for information.
- 5.16 The projected vehicle trip generation for the residential and assisted living elements of the development are summarised in **Table 5.4** and **Table 5.5** respectively.

Table 5.4 Peak Hour Vehicle Trip Rates and Trip Generation for Housing Element of the Development (138 Units)

Time	Trip Rates			Vehicle Trip Generation*		
	In	Out	Total	In	Out	Total
08:00-09:00	0.172	0.414	0.573	24	57	81
17:00-18:00	0.390	0.242	0.632	54	33	87
07:00-19:00	2.562	2.621	5.183	354	362	715

(*) Based on 138 residential units.
Note: Potential arithmetic errors due to rounding.

Table 5.5 Peak Hour Vehicle Trip Rates and Trip Generation for Assisted Living Element of the Development (50 Apartments plus 60 Bedroom Nursing Home)

Time	Trip Rates			Vehicle Trip Generation*		
	In	Out	Total	In	Out	Total
08:00-09:00	0.099	0.092	0.191	11	10	21
17:00-18:00	0.076	0.145	0.221	8	16	24
07:00-19:00	1.16	1.154	2.314	128	127	255

(*) Based on 50 assisted living units and 60 bedroom care home.
Note: Potential arithmetic errors due to rounding.

- 5.17 Projected vehicular trip generations for the housing and assisted living elements of the proposed development have been combined to calculate the total vehicular trips generated by the development at AM and PM peak hours, plus the 12 hour peak period between 07:00 and 19:00. Total vehicular trip generation associated with the full proposed development is presented in **Table 5.6**.



Table 5.6 Total Peak Hour Vehicle Trip Generation for Full Development

Time	Vehicle Trip Generation*		
	In	Out	Total
08:00-09:00	35	67	102
17:00-18:00	62	49	111
07:00-19:00	482	489	970

(*) Based on 138 residential units, 50 assisted living units and 60 bedroom care home.
Note: Potential arithmetic errors due to rounding.

5.18 **Table 5.6** shows that the development would be likely to generate 35 vehicle arrivals / 66 departures in the AM peak hour and 62 arrivals / 49 departures in the PM peak hour.

Traffic Distribution and Assignment

5.19 This section of the report describes the methodology used to determine the distribution of development traffic across the local road network study area, which comprises the proposed access onto Yarmouth Road and the junctions between The Street (B1438) and the A1152 Woods Lane / Wilford Bridge Road to the south as well as with the B1438 to the north.

Source of Information

- 5.20 The distribution of development traffic has been based on UK Travel Flows (Mid-layer Super Output Area - MSOA) data extracted from the 2011 Census via Nomis, the official labour market statistics provider.
- 5.21 In addition to modal split information, the UK Travel Flows datasets provide information on the origins of trips to work (i.e. where people who work in a particular MSOA live) and the destination of work trips from home (i.e. where people who live in a particular MSOA work). As such, it has been possible to determine travel to work flows between a specific MSOA and all other MSOAs.

Methodology

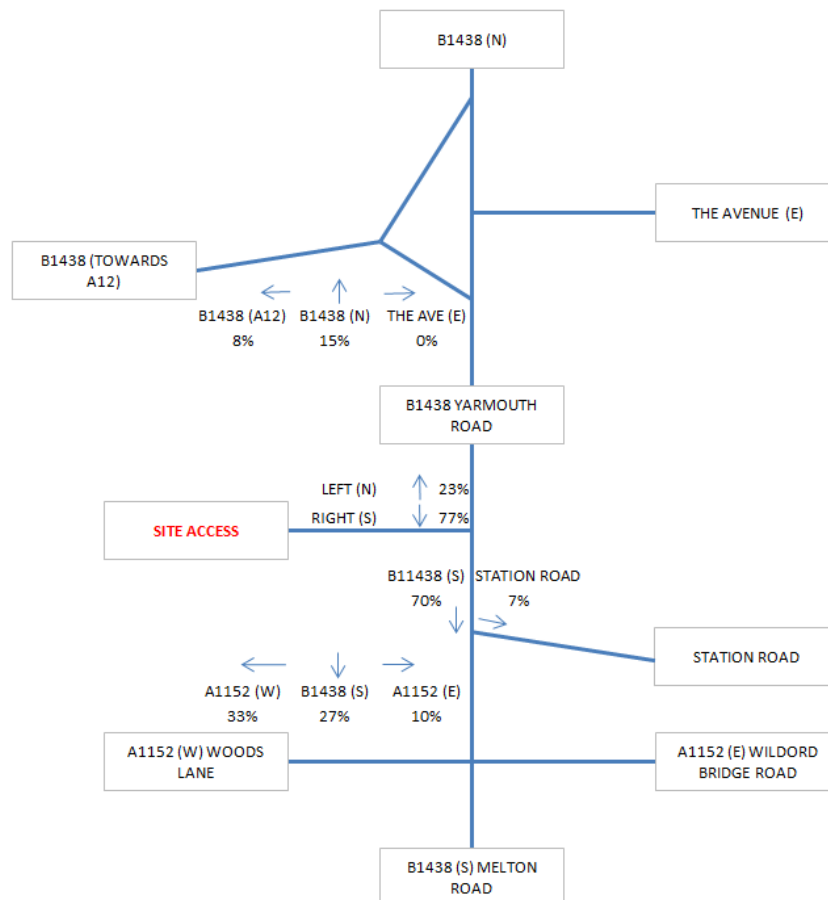
- 5.22 'Suffolk Coastal 005' (SC005) was chosen for the area of residence (origin) and 'All MSOAs' in the UK were chosen for the workplace areas (destinations). Data was exported from the database for all 'car driver' trips between the origin and destinations. This includes 'all usual residents aged 16 and over in employment the week before the Census'. This methodology has been accepted by SCC and HA.
- 5.23 For the purposes of this assessment, routes between SC005 MSOA and the top 30 workplace destinations only have been assessed. Trips made to the top 30 workplace destinations used in this



assessment account for 85% (1,605 out of a total of 1,878) of all reported car driver trips originating from SC005 MSOA during the 2011 Census and therefore is considered to provide a representative sample for analysis.

- 5.24 The quickest (most desirable) routes between the proposed development Site and other MSOA destinations has been determined using route-planning software and recorded in journey stages and the assumed route choice.
- 5.25 The calculation process has been included in **Appendix K** for information, where it can be seen the number of car driver trips to each of the destinations, the percentage this represents and the assumed route choice (including both strategic and local levels). This data has been used to determine the percentage of development traffic anticipated to route through each of the study area junctions and associated turning proportions.
- 5.26 The resulting development traffic distribution, showing the percentage distribution of development traffic through local study area junctions, is provided in **Figure 5.1**. A detailed traffic flow diagram, displaying the distribution of development traffic, is included at **Appendix L**.

Figure 5.1 Development Traffic Distribution





6 Highway Impact Assessment

Introduction

- 6.1 As part of the highway capacity assessment, a number of junctions have been surveyed and modelled to identify the potential future traffic impact of the proposed residential development in the future year of 2020.
- 6.2 The following junctions were assessed:
- A1152 Woods Lane / B1438 The Street / Wilford Bridge Road / B1438 Melton Road – signalised crossroads junction;
 - B1438 Yarmouth Road / B1438 / The Avenue – series of priority junctions; and
 - B1438 Yarmouth Road / proposed Site access – priority 'T' junction.

Assessment Periods

- 6.3 It is proposed to undertake junction models for both morning (AM) and evening (PM) peak periods for a neutral weekday. The traffic survey data described in the following paragraphs was used to identify the current peak hours of the local road network. The flows on the B1438 indicate that the AM peak hour is 07:45-08:45 and the PM peak hour is 16:45-17:45.
- 6.4 Therefore, the peak periods for the junction assessments are:
- Weekday (AM network peak) – 07:45-08:45; and
 - Weekday (PM network peak) – 16:45-17:45.

Base Year Traffic Data

- 6.5 A series of traffic surveys were carried out by independent third party surveyor companies. A concise description of these along with the time periods recorded is included in the following:
- a Manual Classified Count (MCC) junction survey and queue length survey at the A1152 Woods Lane / B1438 The Street / Wilford Bridge Road / B1438 Melton Road signalised junction undertaken by MHC Traffic Ltd on Tuesday 22nd October 2013, including both the AM (0700-1000) and PM (1600-1900) periods;



- a MCC junction survey including the priority junctions at the B1438 Yarmouth Road / B1438 / The Avenue crossroads undertaken by K&M Traffic Surveys on Tuesday 20th May 2014, recording data during both the AM (0700-1000) and PM (1600-1900) periods; and
- an Automatic Traffic Count (ATC) two-way survey on Yarmouth Road situated at the approximate location of the proposed Site access, which was undertaken by K&M Traffic Surveys, and recorded volume and speed traffic data for a period of seven days starting Friday 30th May 2014.

6.6 It is to be noted that all surveys were undertaken in neutral months as well as days, outside of the school holidays, in order to obtain representative traffic flow data for the area.

Traffic Growth

6.7 According to an outline planning application for a housing development at a land north of Woods Lane submitted previously, it has been agreed with SCC Highways in the past that junction capacity assessments should also be carried out at a future year five years on from the date of the planning submission. Assuming that the planning application is submitted in 2015, the future year considered for the capacity assessment would be 2020.

6.8 Local growth factors (LGFs) from TEMPRO v6.2 / NTM AF06 Dataset 6.2 have been applied to the 2013 surveyed traffic flows at the Woods Lane / The Street / Wilford Bridge Road / Melton Road junction, and the 2014 surveyed traffic flows at the B1438 Yarmouth Road / B1436 / The Avenue junction.

6.9 Both the 2013 and 2014 surveys have been factored up to 2015 to represent 2015 base traffic flows. **Table 6.1** below presents the LGF for both urban/principal and rural/principal road types for the geographical area definition of Woodbridge (level 42UG4), for both 2013-2015 and 2014-2015 growth periods.

Table 6.1 TEMPRO Local Growth Factors (2013-2015 and 2014-2015)

Time Period		Road Type: Urban / Rural Principal
2013-2015	AM Peak Hour	1.0106
	PM Peak Hour	1.0122
2014-2015	AM Peak Hour	1.0053
	PM Peak Hour	1.0061

6.10 Further to **Table 6.1**, **Table 6.2** shows the LGFs for the five year period between 2015 and 2020 for the same road types and geographical area definition (Woodbridge, level 42UG4).



Table 6.2 TEMPRO Local Growth Factors (2015 to 2020)

Time Period	Road Type	
	Urban Principal	Rural Principal
AM Peak Hour	1.0812	1.0858
PM Peak Hour	1.0857	1.0904

6.11 The 2015 base data for the weekday AM peak (07:45-08:45) and the weekday PM peak (16:45-17:45) are presented on traffic flow diagrams located in **Appendix M**.

Committed Development

6.12 Further to discussions with SCC Highways during November 2013 in regards to the outline planning application for a housing development at a land north of Woods Lane, it was agreed that there were no significant committed developments in the local area.

6.13 On 4th September 2015, the proposed residential development at Woods Lane (175 units) was granted planning permission. As a result, it has been included as the only committed development.

6.14 Traffic flow diagrams, showing the distribution of the Woods Lane traffic on the local highway network, are provided at **Appendix N**.

Total Forecast Base (2020) Traffic Data

6.15 The surveyed traffic flows, factored to 2015, have again been factored up to the future assessment year of 2020 using the LGFs presented in **Table 6.2**. The traffic flows from the Woods Lane committed development have also been added to provide the total forecast (2020) base.

6.16 The Total Forecast Base traffic flows (i.e. without development traffic added) are presented on traffic flow diagrams in **Appendix O**.

Total Forecast Future Year (2020) Traffic Data

6.17 The assigned development traffic flows (included in **Appendix L**) have been added to the future year base traffic flows and the committed development traffic flows (included in **Appendix N** and **Appendix O**) to determine the Total Forecast traffic flows, which are presented on flow diagrams included in **Appendix P** for the AM and PM peak assessment periods.



Junction Assessment Results

6.18 This section of the TA considers the off-site junction implications of the proposed development at Yarmouth Road, Melton. The following junctions have been considered for testing:

- A1152 Woods Lane / B1438 The Street / Wilford Bridge Road / B1438 Melton Road – signalised crossroads junction;
- B1438 Yarmouth Road / B1438 / The Avenue – series of priority junctions; and
- B1438 Yarmouth Road / proposed Site access – priority 'T' junction.

6.19 Junction capacity assessments were undertaken under the loading of current traffic flows (2014) and the design year 2020 (with applied traffic growth factors as extracted from Tempro). The following scenarios were tested:

- 2013/2014 Surveyed traffic flows;
- Base (2015) traffic flows;
- Total forecast base (2020) traffic flows (without development); and
- Total forecast (2020) traffic flows (with development).

Woods Lane / The Street / Wilford Bridge Road / Melton Road – Signalised Crossroads Junction

6.20 The signalised junction of Woods Lane and Melton Road has been modelled using LINSIG v3. The full output results are contained in **Appendix Q** and are summarised in the following in **Table 6.3** to **Table 6.5**.



Table 6.3: Woods Lane with Melton Road Signalised Junction – 2015 Base Traffic Flows

Arm	2013 Base (Surveyed) Traffic Flows				2015 Base Traffic Flows			
	AM Peak (07:45-08:45)		PM Peak (16:45-17:45)		AM Peak (07:45-08:45)		PM Peak (16:45-17:45)	
	DoS (%)	Queue (pcu)	DoS (%)	Queue (pcu)	DoS (%)	Queue (pcu)	DoS (%)	Queue (pcu)
Woods Lane	70.4	13	66.0	12	71.1	13	66.7	12
B1438 The Street	81.3	8	63.2	5	83.4	8	64.1	5
Wilford Bridge Road	87.2	18	81.5	15	88.1	19	82.4	15
B1438 Melton Road	41.9	3	83.7	11	42.4	3	84.5	11
Practical Reserve Capacity (%)	3.2		7.6		2.2		6.5	

6.21 **Table 6.3** presents the assessment of the surveyed (2013) traffic flows as well as the 2015 Base traffic flows, and results indicate that the junction operates within capacity. It is notable that Woods Lane and Wilford Bridge Road have a mean max queue in excess of 10 passenger car units (pcu's) over the respective AM and PM Peak.

Table 6.4 Woods Lane with Melton Road Signalised Junction – Total Forecast 2020 Base and Total Forecast 2020 Base plus Development Traffic Flows – AM Peak

Arm	Total Forecast 2020 Base Traffic Flows		Total Forecast 2020 Base plus Development Traffic Flows	
	DoS (%)	Queue (pcu)	DoS (%)	Queue (pcu)
Woods Lane	76.8	15	82.6	18
B1438 The Street	89.9	10	92.8	13
Wilford Bridge Road	95.0	24	97.4	29
B1438 Melton Road	45.7	4	46.3	4
Practical Reserve Capacity (%)	-5.6		-8.2	



Table 6.5 Woods Lane with Melton Road Signalised Junction – Total Forecast 2020 Base and Total Forecast 2020 Base plus Development Traffic Flows – PM Peak

Arm	Total Forecast 2020 Base Traffic Flows		Total Forecast 2020 Base plus Development Traffic Flows	
	DoS (%)	Queue (pcu)	DoS (%)	Queue (pcu)
Woods Lane	72.3	13	78.3	15
B1438 The Street	69.2	6	81.9	8
Wilford Bridge Road	89.3	19	93.6	22
B1438 Melton Road	91.4	15	96.3	20
Practical Reserve Capacity (%)	-1.6		-7.0	

- 6.22 The future year scenario with and without development is assessed in **Table 6.4** and **Table 6.5** above. The results indicate that the junction is approaching capacity during the Weekday AM peak and PM peak period in both the total forecast base and total forecast base plus development scenarios. The development has a minimal impact on the operation of the junction, with a maximum of five vehicles added to the queues.
- 6.23 In order for the Total Forecast 2020 Base with Development scenario in the AM peak hour to remain within capacity, it was necessary to increase the cycle time from 90 to 96 seconds. Given that this scenario still assumes that the pedestrian stage is called at every cycle throughout the peak, which is unlikely given the level of pedestrians using the crossing, this is considered to provide a robust assessment.

B1438 / B1438 Yarmouth Road / The Avenue – Priority Junctions

- 6.24 There are two continuous priority junctions between the B1438, Yarmouth Road and The Avenue, which have been modelled using PICADY 5. The priority 'T' junction between the B1438 and Yarmouth Road includes a dedicated right turn lane for traffic coming from the A12 and turning right into Yarmouth Road. Furthermore, the B1438 / Yarmouth Road / The avenue crossroads is in the form of a staggered priority junction.
- 6.25 The full output results are contained in **Appendix R** and are summarised in **Table 6.6 - 6.8**.



Table 6.6 B1438 / B1438 Yarmouth Road / The Avenue – 2014 Base Traffic Flows

Arm	2014 Base (Surveyed) Traffic Flows				2015 Base Traffic Flows			
	AM Peak (07:45-08:45)		PM Peak (16:45-17:45)		AM Peak (07:45-08:45)		PM Peak (16:45-17:45)	
	RFC	Queue (veh)	RFC	Queue (veh)	RFC	Queue (veh)	RFC	Queue (veh)
The Avenue – B1438 South	0.095	<1	0.043	<1	0.096	<1	0.043	<1
B1438 South – The Avenue	0.002	<1	0.008	<1	0.002	<1	0.008	<1
B1438 South – Yarmouth Road	0.172	<1	0.118	<1	0.172	<1	0.119	<1
Yarmouth Road – B1438 North	0.016	<1	0.069	<1	0.016	<1	0.069	<1

6.26 **Table 6.6** presents the assessment of the surveyed traffic flows at the junction, and the factored up 2015 base traffic flows. The results indicate that the junction currently operates well within capacity, with no evidence of queuing at the junction.

Table 6.7 B1438 / B1438 Yarmouth Road / The Avenue – 2020 Base Traffic Flows

Arm	AM Peak		PM Peak	
	RFC	Queue (veh)	RFC	Queue (veh)
The Avenue – B1438 South	0.104	<1	0.047	<1
B1438 South – The Avenue	0.002	<1	0.008	<1
B1438 South – Yarmouth Road	0.188	<1	0.130	<1
Yarmouth Road – B1438 North	0.018	<1	0.075	<1

6.27 **Table 6.7** presents the assessment of the projected 2020 base traffic flows at the junction. The results indicate that the junction operates well within capacity, with no evidence of queuing at the junction.



Table 6.8 B1438 / B1438 Yarmouth Road / The Avenue – 2020 Base + Development Traffic Flows

Arm	AM Peak		PM Peak	
	RFC	Queue (veh)	RFC	Queue (veh)
The Avenue – B1438 South	0.105	<1	0.048	<1
B1438 South – The Avenue	0.002	<1	0.008	<1
B1438 South – Yarmouth Road	0.194	<1	0.142	<1
Yarmouth Road – B1438 North	0.018	<1	0.075	<1

6.28 **Table 6.8** presents the assessment of the projected 2020 base traffic flows at the junction, as well as the projected traffic flows associated with the development. The results indicate that the junction will operate well within capacity, with no evidence of queuing at the junction, even when considering the additional development traffic.

Yarmouth Road / Proposed Site Access – Priority ‘T’ Junction

6.29 The proposed access to the development Site from Yarmouth Road has been modelled using PICADY 5. The full output results are contained in **Appendix S** and are summarised in **Table 6.9**.

Table 6.9 Yarmouth Road / Proposed Site Access – 2020 Development Traffic Flows

Arm	AM Peak		PM Peak	
	RFC	Queue (veh)	RFC	Queue (veh)
Site Access – Yarmouth Road (N)	0.029	<1	0.022	<1
Site Access – Yarmouth Road (S)	0.126	<1	0.096	<1
Yarmouth Road (N) – Site Access	0.013	<1	0.024	<1

6.30 The results indicate that the proposed site access junction is below capacity during both the AM and PM peak periods.

Modelling Conclusion

6.31 The local highway junctions in the vicinity of the proposed Yarmouth Road development have been tested for capacity and impact on delay under the loading of the base (2015) traffic flows, the total forecast base (2020) traffic flows and the total forecast (2020) traffic flows with the development traffic.



6.32 The assessment concludes that all of the junctions tested operated within capacity, at both AM and PM peaks and in all scenarios, including the 2020 traffic flows with the added development traffic. Traffic flows increase slightly at all junctions as a result of the proposed development, although not to a level that is considered significant, and not to a level that will have a detrimental impact on the capacity or operation of junctions near the Site.



7 Sustainability and Connectivity Overview

- 7.1 This section of the report outlines the sustainable transport strategy ('the Strategy') for the proposed development which will help ensure the safe, efficient and sustainable movement of people. The Strategy ensures that the site is connected to existing facilities and the surrounding area by modes other than the private car.
- 7.2 It seeks to promote safe, convenient and feasible access to and from the Site and to encourage the use of more sustainable modes of travel in order to reduce private car usage. It also seeks to create a safe environment within the Site and minimise conflict between road users and pedestrians.
- 7.3 The Strategy recognises the opportunity and the importance for Site users to benefit from the Site's proximity to key services in Melton and Woodbridge.
- 7.4 Key measures to increase the uptake of sustainable travel modes will include:
- Adequate and secure space for the storage of pedal cycles in dwellings or garages associated with dwellings;
 - Provision of new bus stops adjacent to proposed vehicle access on Yarmouth Road to facilitate access to local bus services;
 - Provision of an uncontrolled pedestrian crossing facility incorporating a traffic island on Yarmouth Road south of the proposed Site access to facilitate pedestrian desire lines to the bus stops;
 - Provision of new footway outside the Site to connect to pedestrian links into Melton; and
 - Operation of long term travel management strategy in the form of a Travel Plan.

The Sustainable Transport Strategy

Public Transport Users

- 7.5 The Strategy includes the following 'hard' and 'soft' measures to encourage residents to use local public transport services:
- Provision of new bus stops on Yarmouth Road for east and westbound services;
 - Provision of a new uncontrolled pedestrian crossing and footway on the eastern side of Yarmouth Road for access to the proposed southbound bus stop;



- Promotion of public transport usage and awareness of the accessibility of the Site by public transport through marketing material distributed to new residents on occupation; and
- Promotion of the benefits of public transport usage in comparison to private car use in terms of financial and environmental benefits.

Pedestrians

7.6 The proposed development includes the following interventions and measures to promote safe and convenient access to the Site by walking:

- Provision of a new pedestrian crossing on Yarmouth Road to facilitate safe passage for pedestrians;
- Provision of a new footway adjacent to the development to provide a continuous pedestrian link to Melton;
- Provision of dropped kerbs and tactile paving to form an uncontrolled crossing across the proposed site access junction;
- Provision of high quality, safe pedestrian routes throughout the internal layout of the development, including good quality materials for footway construction, lighting columns and tactile paving;
- Promotion of walking and awareness of pedestrian routes through and close to the Site through information packs distributed to residents on occupation; and
- Promotion of the health and environmental benefits of walking compared with other modes of transport.

Cyclists

7.7 The proposed development includes the following interventions and measures to promote safe and convenient access to the Site by cycling:

- Provision of adequate space for the storage of cycles within dwellings or provision of space within garages;
- Provision of an uncontrolled crossing on Yarmouth to enable safe passage between the Site and nearby cycle routes;
- Promotion of cycling and awareness of cycle routes close to the Site through information packs distributed to residents on occupation; and
- Promotion of the health and environmental benefits of cycling compared to private car usage.



Car Users

7.8 The strategy caters for safe and efficient car and vehicle access to and from the Site. It is recognised that for disabled residents, who may find it difficult to access bus services, car travel will remain the most viable option for certain trips. The Strategy, while promoting and supporting sustainable modes, also takes into account the needs of a car owner.

7.9 The Strategy includes the following measures for car based travel:

- Dedicated access from Yarmouth Road in the form of an all movement priority junction with ghost right-turn lane for vehicles approaching from the east;
- Providing secure car parking in the form of small parking courts for flats or driveways and garages for larger homes; and
- Provide an appropriate number of disabled parking spaces where required.

Travel Awareness & Marketing

7.10 The physical measures used to provide for different means of transport will be underpinned and supported by a number of “soft” measures aimed at increasing awareness of more sustainable modes of travel. This information will be available to all residents at the site. These will include:

- Provision of up-to-date information regarding public transport facilities, including route maps, timetables and pricing information; and
- Provision of up-to-date information on cycling and pedestrian facilities at the Site, including maps and destinations within reasonable walking distance.

Summary

7.11 This section of the TA shows that there are sustainable travel modes on offer for residents at the site. The site will be designed with sustainable travel modes in mind, including walking and cycling through the site.

7.12 Travel awareness and marketing will be promoted at the proposed development to ensure that residents are fully informed about sustainable travel in the local area.



8 Summary and Conclusions

Summary

- 8.1 WYG Transport has been appointed by the Christchurch Land & Estates Ltd (the 'Applicant') to prepare a Transport Assessment (TA) to support an outline planning application for the proposed development of land at Yarmouth Road in Melton, Suffolk (the 'Site').
- 8.2 The Site is located approximately 0.9km north of the village of Melton, west of the B1438 Yarmouth Road and east of the A12 Grove Road. Furthermore, the Site is situated at approximately 17km to the north-east of Ipswich in the Suffolk Coastal District of the county.
- 8.3 The applicant proposed a development of 138 residential units, 50 assisted living units and a 60 bed care home, together with associated works to the site access and surrounding environs. The proposed development will also incorporate modifications to the pedestrian network with a new uncontrolled pedestrian crossing on Yarmouth Road.
- 8.4 Opportunities for non car based travel to and from the site, by bus, train, bicycle or on foot has been considered. The surrounding area of the Site is served by public transport with a regular frequency of buses servicing the locality. New bus stops will be located at the site access on Yarmouth Road to minimise walking distances to public transport, demonstrating that the site has good public transport accessibility.
- 8.5 In addition, it is proposed to provide new sections of footway and an uncontrolled pedestrian crossing facility that link into existing footways on Yarmouth Road. This will enable pedestrians from the development to walk into Melton, Woodbridge, and the numerous services that are available there within an accessible distance. Melton Railway Station is located 1km south of the Site and can be reached on foot in approximately 15 minutes, or approximately seven minutes by cycle. Covered cycle parking is also available at the Station.
- 8.6 Car and cycle parking provision for the site will be broadly in line with Policy DM19 of SCDC's Development Management Policies.
- 8.7 Car parking provision for the Site will be broadly in line with the SCC 'Suffolk Guidance for Parking 2014' Supplementary Planning Guidance (SPG) (November 2014), which provides policy advice to those considering planning applications for new developments and sets out 'advisory levels of parking' for particularly types of developments.
- 8.8 The TRICS database was used to quantify the additional generated trips. The calculated traffic arising from the proposed development is considered to represent a robust assessment.



- 8.9 The local highway junction capacity has been considered for the following scenarios providing an assessment of both with development and without development related traffic. This has enabled a comparison to be made between the impacts of the development:
- Surveyed (2013 & 2014) Traffic Flows;
 - Base (2015) Traffic Flows;
 - Total Forecast Base (2020) Traffic Flows (without development traffic); and
 - Total Forecast (2020) Traffic Flows (with development traffic).
- 8.10 The capacity analysis results illustrate the proposed impact the development will have on the surrounding network, in junction capacity terms and queuing capacity, respectively. The impact of the development has been shown to be very minor. The capacity analysis concluded that all junctions tested currently operate within capacity with minor queuing, and will continue to do so with the Total Forecast (2020) Traffic Flows with development traffic.

Conclusion

- 8.11 Through the course of the preparation of the Transport Assessment, WYG has demonstrated that the proposed development at Yarmouth Road is consistent with sustainable objectives of national transport planning policy guidance and with those of Suffolk Coastal's Core Strategy.
- 8.12 The Site is well connected to local facilities and public transport, existing and is within walking and cycling distance of key services including schools, retail and leisure facilities.
- 8.13 No highway capacity issues have been raised in this report and a robust assessment has demonstrated that development traffic will have a negligible impact on existing junctions in the vicinity of the Site.
- 8.14 It is concluded that the proposed development at Yarmouth Road will present a negligible impact on the local highway network, and is therefore acceptable on highways and transport terms.



Appendices



Appendix A

Scoping Correspondence

Land at Yarmouth Road, Melton

Revised Scoping Note for Transport Statement

6th September 2015

Introduction

- 1 This note provides details of the development proposals for the Land at Yarmouth Road, Melton and sets out the proposed scope of the Transport Assessment (TA) that will be prepared to support a planning application.
- 2 The Site is situated to the north of the town of Melton, which is located approximately 6km north of Felixstowe and 16km south-east of Ipswich in Suffolk. It is currently unoccupied. The Site is bounded to the north by Ufford Park Golf Course and east by the B1438 Yarmouth Road, to the south are residential dwellings and to the west is St. Audrys Road. A location plan is shown in **Figure 1**.

Figure 1 – Site Location Plan



- 3 The Local Planning Authority is Suffolk Coastal District Council (SCDC) Planning. The Local Highways Authority is Suffolk County Council (SCC) Highways.

Surrounding Road Network

- 4 Yarmouth Road is classified a 'B' road; it has a two-directional single carriageway and is subject to a 30 mph maximum speed limit.
- 5 Further to the north, there are a series of priority junctions connecting Yarmouth Road to the B1438 which subsequently links to the A12.



Public Transport Services

- 6 The nearest bus stops are located on Yarmouth Road opposite Tollegate Cottages approximately 200m south-west of the site access. The bus stops are served by bus route 62/64, operated by First in Norfolk and Suffolk, which runs a local service between Ipswich and Aldeburgh. The existing bus route runs along Yarmouth Road with an operating frequency of two buses per hour, Monday to Friday, with a reduced service on Saturday. There is no Sunday or bank holiday services.

Development Proposals

- 7 It is proposed to accommodate the creation of a new residential development comprising up to 138 new homes and a 60 bedroom nursing home with 50 assisted living units and associated on-site parking provision. This will also include open space and will be accessed off Yarmouth Road. These would be mainly houses ranging from one to five bedrooms in size. Market housing would represent in the region of one in three of the total accommodation with affordable and shared ownership.
- 8 The site would be served from a new single access point in the form of a priority junction. The proposed layout is shown **Appendix A**.
- 9 The visibility splay for the Site access has been based on the DMRB guidance. The ATC speed data shows that the average weekday two-way 85th percentile wet weather speed is 37.4mph (60.2kph) during the weekday inter-peak period (10:00 to 16:00). Therefore, based on a 70A (40mph, 64kph) design speed, a desirable minimum sight stopping distance of 120m. The scheme has been audited by the Safety Forum, and will be included in the Transport Assessment.
- 10 Existing adopted highway boundary plan information has been obtained from SCC for the section of Yarmouth Road along which the proposed access is to be located, and is located in **Appendix B**. The plan demonstrates that 120m visibility splays can be achieved to the east and west from the minor arm.
- 11 It is further proposed to introduce a pedestrian refuge adjacent to the new access point to assist pedestrians from the development travelling south towards Melton.
- 12 It is noted that SCC 'Suffolk Advisory Parking Standards' Supplementary Planning Guidance (SPG) (April 2002) sets out 'advisory levels of parking' for particular types of developments. In rural or suburban locations where off peak public transport services are less than three buses per hour, a maximum of two car parking spaces for three bedroom properties and a maximum of three spaces for four bedroom properties is considered appropriate.
- 13 Cycle parking standards will be met with a minimum of one cycle parking space per dwelling plus visitor parking for the flats.

Trip Generation Assessment

- 14 A multi-modal trip generation assessment has been undertaken to assess the potential impact of the proposed development and demonstrate that it can be accommodated on the existing highway network. The trip generation for the proposed residential development has been calculated using trip rates from the industry standard TRICS trip rate database for the UK.



Assessment Approach and Methodology

- 15 For the purposes of assessing the likely trip generation characteristics of the proposed development, potential person trip rates and percentage (%) mode splits have been identified to be applied to the proposed development, and is consistent with the trip rates used on Woods Lane (recently granted approval in September 2015).

- 16 Owing to the residential nature (Use Class C3) and care home and assisted living apartments (Use Class C2) of the proposal; WYG has undertaken a review of the industry-standard TRICS trip rate database (Version 7.1.3, 2014), the latest available, in order to derive trip rates from survey sites with similar characteristics (e.g. sites excluding Greater London and those with similar numbers of units/beds). This review was in accordance with TRICS Good Practice Guide 2013.

- 17 The approach and methodology followed in the multi-modal trip assessment is consistent with the DfT / DCLG Guidance on Transport Assessment (GTA), revised version, published in April 2010.



TRICS Survey Site Selection

- 18 The proposals include 138 dwellings comprising a mix of terraced, semi-detached and detached houses over approximately 5.12 ha (which equates to approximately 27 dwellings per hectare); this will be treated hereinafter as the 'housing' element of the development.
- 19 Additionally, the proposed development includes 50 assisted living apartments and a 60 bedroom nursing home (Use Class C2), which will be hereinafter referred to as the 'assisted living' element of the development.
- 20 The site selection for 'Houses-Privately Owned' has been used in order to reflect survey sites of a similar type to the housing element of the development. It is to be noted that, although approximately 30% of the housing element is to be made available as affordable housing, only houses privately owned have been selected within TRICS in order to provide a more robust assessment and a worst-case scenario in terms of traffic generation. Furthermore, land use 05 - 'Health', category F - 'Care Home (Elderly Residential)' as been used to represent the assisted living element of the development.
- 21 A total of six survey sites have been used to calculate the trip rates to reflect the housing element of the development, which were obtained applying the following rules during the selection process:
 - Survey sites located in England only (excluding Greater London region);
 - Weekday (Monday - Friday) surveys only;
 - Residential survey sites ranging between 75 and 300 houses only;
 - Population within 1 miles restricted to 25,000 or less;
 - Population within 5 miles restricted to 125,000 or less; and
 - Suburban Area and Edge of Town sites only.
- 22 With regard to the assisted living element of the development, a total of three survey sites have been used to calculate the trip rates. The following rules were applied during the selection process:
 - Survey sites located in England, Wales or Scotland (excluding Greater London region);
 - Weekday (Monday - Friday) surveys only;
 - Population within 1 miles restricted to 25,000 or less;
 - Population within 5 miles restricted to 125,000 or less; and
 - Edge of Town Centre, Suburban Area and Edge of Town sites only.
- 23 Full printouts of the TRICS data for both 'Housing Privately Owned' and 'Care Home (Elderly Residential)' are included in Appendix G for information.



Total People (All Mode) Trip Generation

- 24 WYG has extracted Total People (all modes) trip rates for the two elements of the scheme. Trip rates and traffic generation estimates for the AM and PM peak hours and the 7am-7pm 12 hour peak period are provided in
- 25 Table and
- 26 Table for the 138 houses and Table 2 for 50 apartments and 60 bedroom nursing home respectively.

Table 1 Peak Hour Trip Rates and Person Trip Generation for Housing Element of the Development (138 Units)

Time	Housing Element Trip Rates			All Mode Trip Generation *		
	In	Out	Total	In	Out	Total
08:00-09:00	0.261	0.759	1.02	36	105	141
17:00-18:00	0.588	0.36	0.948	81	50	131
07:00-19:00	4.016	4.149	8.165	554	574	1,128

(*) Based on 138 houses.

Note: Potential arithmetic errors due to rounding.

Table 2 Peak Hour Trip Rates and Person Trip Generation for Assisted Living Element of the Development (50 Apartments plus 60 Bedroom Nursing Home)

Time	Assisted Living Trip Rates			All Mode Trip Generation *		
	In	Out	Total	In	Out	Total
08:00-09:00	0.198	0.198	0.396	22	22	44
17:00-18:00	0.122	0.176	0.298	13	19	33
07:00-19:00	2.202	2.151	4.353	227	228	456

* Based on 50 assisted living apartments plus a 60 bedroom nursing home.

Note: Potential arithmetic errors due to rounding.

- 27 Projected person (all mode) trip generations for the housing and assisted living elements of the proposed development have been combined to calculate the total persons trips generated by the development at AM and PM peak hours, plus the 12 hour peak period between 07:00 and 19:00 hours. Total person trip generation associated with the full proposed development is presented in **Table .**

Table 3 Total Weekday All Mode Trip Generation for Full Development

Time	Total People / All mode Trip Generation		
	In	Out	Total
08:00-09:00	58	127	185
17:00-18:00	94	69	164



07:00-19:00	781	802	1,584
-------------	-----	-----	-------

(*) Based on full development comprising of 138 houses, 50 assisted living apartments and a 60 bedroom nursing home.
 Note: Potential arithmetic errors due to rounding.

28 Table shows that the proposed 138-unit plus 50 assisted living apartments and a 60 bedroom nursing home development would generate 1,584 two-way trips by all modes between 07:00 and 19:00 hours. In the AM peak hour, a development of this scale would be expected to generate 58 arrivals and 127 departures. In the PM peak hour, 94 arrivals and 69 departures are projected.

Vehicle Trip Generation

29 Vehicle trip rates have been extracted from the same TRICS survey sites used above for the housing and assisted living elements of the Site. As stated above, full printouts of the TRICS data for both 'Housing Privately Owned' and 'Care Home (Elderly Residential)'.

30 The projected vehicle trip generation for the residential and assisted living elements of the development are summarised in Table 4 and Table 5 respectively.

Table 4 Peak Hour Vehicle Trip Rates and Trip Generation for Housing Element of the Development (138 Units)

Time	Trip Rates			Vehicle Trip Generation*		
	In	Out	Total	In	Out	Total
08:00-09:00	0.172	0.414	0.573	24	57	81
17:00-18:00	0.390	0.242	0.632	54	33	87
07:00-19:00	2.562	2.621	5.183	354	362	715

(*) Based on 138 residential units.

Table 5 Peak Hour Vehicle Trip Rates and Trip Generation for Assisted Living Element of the Development (50 Apartments plus 60 Bedroom Nursing Home)

Time	Trip Rates			Vehicle Trip Generation*		
	In	Out	Total	In	Out	Total
08:00-09:00	0.099	0.092	0.191	11	10	21
17:00-18:00	0.076	0.145	0.221	8	16	24
07:00-19:00	1.16	1.154	2.314	128	127	255

(*) Based on 50 assisted living units and 60 bedroom care home.

Note: Potential arithmetic errors due to rounding.

31 Projected vehicular trip generations for the housing and assisted living elements of the proposed development have been combined to calculate the total vehicular trips generated by the development at AM and PM peak hours, plus the 12 hour peak period between 07:00 and 19:00. Total vehicular trip generation associated with the full proposed development is presented in Table 6.



Table 6 Total Peak Hour Vehicle Trip Generation for Full Development

Time	Vehicle Trip Generation*		
	In	Out	Total
08:00-09:00	35	67	102
17:00-18:00	62	49	111
07:00-19:00	482	489	970

(*) Based on 138 residential units, 50 assisted living units and 60 bedroom care home.

Note: Potential arithmetic errors due to rounding.

- 32 Table 6 shows that the development would be likely to generate 35 vehicle arrivals / 67 departures in the AM peak hour and 62 arrivals / 49 departures in the PM peak hour.

Traffic Distribution and Assignment

- 33 This section of the report describes the methodology used to determine the distribution of development traffic across the local road network study area, which comprises the proposed access onto Yarmouth Road and the junctions between The Street (B1438) and the A1152 Woods Lane / Wilford Bridge Road to the south as well as with the B1438 to the north.

Source of Information

- 34 The distribution of development traffic has been based on UK Travel Flows (Mid-layer Super Output Area - MSOA) data extracted from the 2011 Census via Nomis, the official labour market statistics provider.
- 35 In addition to modal split information, the UK Travel Flows datasets provide information on the origins of trips to work (i.e. where people who work in a particular MSOA live) and the destination of work trips from home (i.e. where people who live in a particular MSOA work). As such, it has been possible to determine travel to work flows between a specific MSOA and all other MSOAs.

Methodology

- 36 'Suffolk Coastal 005' (SC005) was chosen for the area of residence (origin) and 'All MSOAs' in the UK were chosen for the workplace areas (destinations). Data was exported from the database for all 'car driver' trips between the origin and destinations. This includes 'all usual residents aged 16 and over in employment the week before the Census'. This methodology has been accepted by SCC and HA.
- 37 For the purposes of this assessment, routes between SC005 MSOA and the top 30 workplace destinations only have been assessed. Trips made to the top 30 workplace destinations used in this assessment account for 85% (1,605 out of a total of 1,878) of all reported car driver trips originating from SC005 MSOA during the 2011 Census and therefore is considered to provide a representative sample for analysis.
- 38 The quickest (most desirable) routes between the proposed development Site and other MSOA destinations has been determined using route-planning software and recorded in journey stages and the assumed route choice.

Traffic Assignment

- 39 For completeness, traffic will be assigned on the local highway network using Census Origin-Destination UK Travel Flows between 'Melton and Ufford,' the Ward within which the Site is located (the Origin) and all other Wards (the Destinations).

Scope of Transport Assessment

- 40 The Transport Assessment will be prepared in accordance with the general requirements of the Department for Transport (DfT) / Department for Communities and Local Government (DCLG) *Guidance on Transport Assessment* (GTA) (March 2007).

Traffic Capacity Assessment

- 41 As part of the highway capacity assessment, a number of junctions have been surveyed and modelled to identify the potential future traffic impact of the proposed residential development in the future year of 2020.

- 42 The following junctions were assessed:

- A1152 Woods Lane / B1438 The Street / Wilford Bridge Road / B1438 Melton Road – signalised crossroads junction;
- B1438 Yarmouth Road / B1438 / The Avenue – series of priority junctions; and
- B1438 Yarmouth Road / proposed Site access – priority 'T' junction.

Assessment Periods

- 43 It is proposed to undertake junction models for both morning (AM) and evening (PM) peak periods for a neutral weekday. The traffic survey data described in the following paragraphs was used to identify the current peak hours of the local road network. The flows on the B1438 indicate that the AM peak hour is 07:45-08:45 and the PM peak hour is 16:45-17:45.

- 44 Therefore, the peak periods for the junction assessments are:

- Weekday (AM network peak) – 07:45-08:45; and
- Weekday (PM network peak) – 16:45-17:45.

Traffic Growth and Committed Development

- 45 According to the consented planning permission for the development at a land north of Woods Lane, it has been agreed with SCC Highways in the past that junction capacity assessments should also be carried out at a future year five years on from the date of the planning submission. Assuming that the planning application is submitted in 2015, the future year considered for the capacity assessment would be 2020.

- 46 Local growth factors (LGFs) from TEMPRO v6.2 / NTM AF06 Dataset 6.2 have been applied to the 2013 surveyed traffic flows at the Woods Lane / The Street / Wilford Bridge Road / Melton Road junction, and the 2014 surveyed traffic flows at the B1438 Yarmouth Road / B1436 / The Avenue junction.

- 47 Woods Lane will be included as the only committed development site. SCC previously confirmed that there was no committed development.



Junction Capacity Assessment

48 Junction capacity assessments were undertaken under the loading of current traffic flows (2014) and the design year 2020 (with applied traffic growth factors as extracted from Temprow). The flowing scenarios were tested :

- 2013/2014 Surveyed traffic flows;
- Base (2015) traffic flows;
- Total forecast base (2020) traffic flows (without development) with committed development; and
- Total forecast proposed (2020) traffic flows (with development).

Transport Assessment Report

49 The following scope of work and report format is proposed:

- i **Introduction**
- ii **Existing Situation** – description of local roads, access to public transport services, distances to key destinations, review of 3 year accident data, traffic flow data on Yarmouth Road.
- iii **Policy Review** – review of national, regional and local policy including parking standards.
- iv **Development Proposals** – description of site access, number of units, type and tenure, car and cycle parking, servicing and deliveries.
- v **Trip Generation & Assignment** – multimodal trip generation assessment using the TRICS database. Trips will be assigned base on Census data. No junction capacity modelling is proposed.
- vi **Highway Mitigation** – any physical mitigation measures proposed will be detailed and their benefits quantified.
- vii **Travel Plan Statement** – a residential Travel Plan statement will be prepared setting out pre-occupation and post-occupation measures over a five year period.

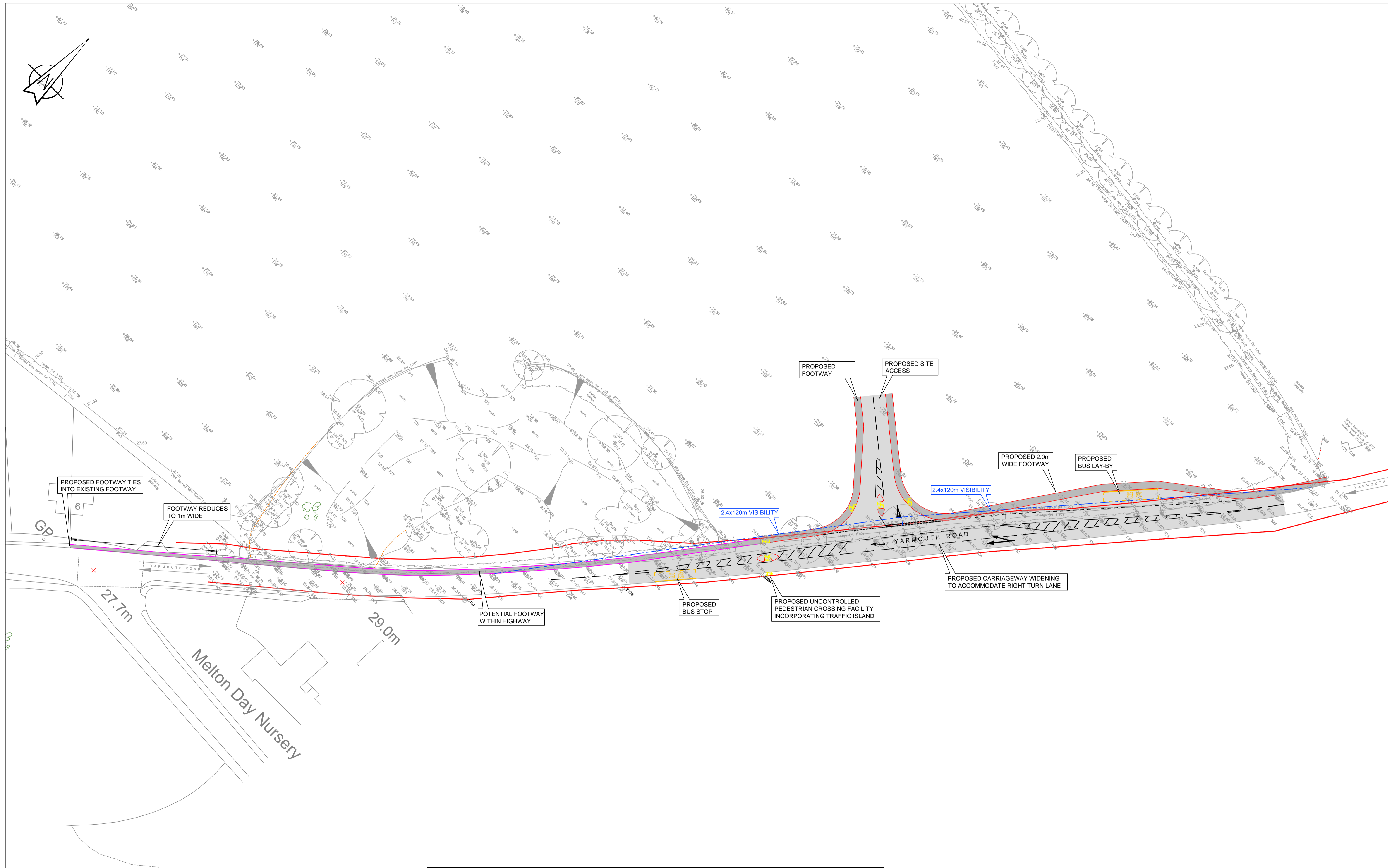
50 Agreement to the above scope of works is sought from SCC.



Appendices



Appendix A



YARMOUTH ROAD, MELTON
PROPOSED RIGHT TURN LANE ACCESS
SCALE 1:500 AT A1

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Appendix B



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Scale 1:2000

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Yarmouth Road, Melton

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Appendix B

Bus Timetable Information

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service	62	62	62	963	62
Operator	PF	PF	PF	FNS	PF
Service Restrictions	Sch				
Notes	1	1	1	1	1
Framlingham, o/s Thomas Mills School	—	—	—	1556	—
Framlingham, opp Pembroke Road	—	—	—	1557	—
Framlingham, adj Shelter	0706	1003	1415	1558	1810
Parham, adj Marietta	0712	1009	1421	1605	1816
Hacheston, adj Phoenix House	0714	1011	1423	1608	1818
Hacheston, Village Hall (S-bound)	0714	1011	1423	1609	1818
Wickham Market, opp Market Square	0720	1016	1428	1616	1823
Campsey Ash, opp Railway Station	0726s	—	—	—	—
Pettistree, opp Three Tuns	—	1019	1431	1617	1826
Ufford, adj Crown	—	1021	1433	1621	1828
Melton, adj Chapel	—	1024	1436	1626	1831
Woodbridge, opp Warwick Avenue	—	—	—	1630	—
Woodbridge, adj Council Offices	—	1027	1439	1633	1834
Woodbridge, Turban Centre (S-bound)	arr	—	1031	1443	1635
Woodbridge, Turban Centre (S-bound)	dep	—	—	—	1636
Woodbridge, adj Pembroke Avenue	—	—	—	1641	—
Martlesham Heath, o/s Tesco	—	—	—	1650	—

Saturdays

no service

Sundays

no service

Service Restrictions: Sch - School Days Only

Notes: 1 - Sponsored by Suffolk County Council
 s - sets down only
 FNS - First in Norfolk & Suffolk
 PF - PF Travel

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service	963	62	62	62	
Operator	FNS	PF	PF	PF	
Service Restrictions	Sch				
Notes	1	1	1	1	
Ipswich, Old Cattle Market Bus Station (Stand N)	—	0845	—	—	
Rushmere, opp Gordon Road	—	0852	—	—	
Rushmere, adj The Lawns	—	0855	—	—	
Rushmere St Andrew, adj The Chapel	—	0857	—	—	
Playford, adj Brook Lane	—	0900	—	—	
Boot Street, adj Grundisburgh Road	—	0905	—	—	
Little Bealings, opp Admirals Head	—	0910	—	—	
Little Bealings, adj Beacon Hill Crossroads	—	0912	—	—	
Martlesham, adj Water Bridge	—	0915	—	—	
Woodbridge, Duke of York (E-bound)	—	0917	—	—	
Woodbridge, Railway Station (S-bound)	—	—	1343	1740	
Woodbridge, Turban Centre (N-bound)	arr	0920	1345	1742	
Woodbridge, Turban Centre (N-bound)	dep	0800	0921	1345	1742
Woodbridge, opp Council Offices	0801	0924	1348	1745	
Woodbridge, adj Warwick Avenue	0803	—	—	—	
Melton, opp Chapel	0808	0927	1351	1748	
Ufford, opp Crown	0812	0930	1354	1751	
Pettistree, adj Three Tuns	0816	0932	1356	1753	
Wickham Market, adj Market Square	0818	0935	1400	1755	
Hacheston, Village Hall (N-bound)	0827	0940	1405	1800	
Parham, opp Marietta	0830	0942	1407	1802	
Framlingham, adj Shelter	—	0949	1413	1809	
Framlingham, o/s White Horse	0837	—	—	—	
Framlingham, adj Pembroke Road	0838	—	—	—	
Framlingham, o/s Thomas Mills School	0840	—	—	—	

Saturdays

no service

Sundays

no service

Service Restrictions: Sch - School Days Only

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NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
sufgpjdj	Framlingham, o/s Thomas Mills School	B1119	390060365
sufgpjdm	Framlingham, Mount Pleasant (E-bound)	Pembroke Road	390060366
sufjtjgm	Framlingham, opp Pembroke Road	College Road	390071051
sufgpjgd	Framlingham, adj Shelter	Bridge Street	390060371
sufjmadw	Framlingham, opp Victoria Mill Road	Station Road	390060916
sufgpjgm	Broadwater, opp Old Crossing	Woodbridge Road	390060373
sufgpdmj	Parham, o/s Bus Shelter	Main Road	390060282
sufgpdmt	Parham, adj Marietta	Main Road	390060284
sufmdada	Hacheston, Easton Lane (SE-bound)		390061168
sufgpdmd	Hacheston, adj Phoenix House	The Street	390060280
sufmdadj	Hacheston, Village Hall (S-bound)		390061171
sufgpdja	Wickham Market, Fiveways (S-bound)	Main Road	390060272
sufgpdgt	Wickham Market, adj Spring Lane	High Street	390060270
sufgpdaw	Wickham Market, opp Market Square	Market Square	390060264
sufgpdgp	Wickham Market, opp Spring Lane	High Street	390060269
sufgpdgw	Wickham Market, Fiveways (N-bound)	Main Road	390060271
sufgpdjg	Campsey Ash, opp Railway Station	Ash Road	390060274
sufgpdap	Pettistree, opp Three Tuns		390060262
sufjmadm	Ufford, opp Spring lane	Yarmouth Road	390060913
sufgtajm	Ufford, adj Crown	B1438	390060569
sufgtajt	Ufford, opp Council Houses	B1438	390060571
sufgtaja	Ufford, adj Parklands	B1438	390060566
sufgtagw	Melton, opp Melton Park	B1438	390060565
sufgtaj	Melton, adj Tollgate Cottages	Yarmouth Road	390060603
sufgtawp	Melton, adj Chapel	The Street	390060599
sufjtatm	Melton, opp Hall Farm Road	Woods Lane	390061133
sufgtgdp	Woodbridge, adj Bury Hill	Bredfield Road	390060661
sufgtgdm	Woodbridge, opp Warwick Avenue	Bredfield Road	390060660
sufgtgda	Woodbridge, adj Melton Grange	Pytches Road	390060657
sufjtapg	Woodbridge, adj The Grove	Pytchers Road	390061130
sufgtgdp	Melton, o/s Coach And Horses	Melton Road	390060612
sufgtgdj	Woodbridge, adj Jenners Close	Melton Road	390060610
sufgtgga	Woodbridge, adj Council Offices	Melton Hill	390060608
sufgtdaw	Woodbridge, Turban Centre (S-bound)	Hamblin Road	390060607
sufgtcja	Woodbridge, adj Deben Pool	Station Road	390060615
sufgtcjg	Woodbridge, adj Cherry Tree	Ipswich Road	390060617
sufgtcpw	Woodbridge, opp Hillyfields	Warren Hill Road	390060635
sufgtcmw	Woodbridge, adj Clare Avenue	Old Barrack Road	390060628
sufgtcpd	Woodbridge, adj The Shops	Old Barrack Road	390060630
sufgtcwg	Woodbridge, opp Bullards Lane	Bullards Lane	390060645
sufgtcta	Woodbridge, adj Pembroke Avenue	Peterhouse Crescent	390060636
sufgtctj	Woodbridge, opp Queens Drive	Peterhouse Crescent	390060639
sufgtctm	Woodbridge, adj Nursery	Newnham Avenue	390060640
sufgtcpj	Woodbridge, adj Duke of York	Old Barrack Road	390060632
sufgtagd	Martlesham, opp Nursery	Top Street	390060560
sufgtadw	Martlesham, opp Water Bridge		390060558
sufgtadm	Martlesham, adj Felixstowe Road	Main Road	390060555
sufgpwtp	Martlesham Heath, o/s Tesco	Internal Road	390060550

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SMS Code	Stop Name	Street	ATCO Code
sufamgww	Ipswich, Old Cattle Market Bus Station (Stand N)	Old Cattle Market	390030249
sufapwgm	Ipswich, adj Cafe Nero	Upper Brook Street	390030688
sufapwda	Ipswich, adj Northgate Street	Great Colman Street	390030678
sufamdwm	Ipswich, Cobden Place (Stop 1)	Woodbridge Road	390030127
sufapadt	Ipswich, adj Lacey Street	Woodbridge Road	390030382
sufapaga	Ipswich, adj Medical Centre	Woodbridge Road	390030384
sufapmaw	Rushmere, adj Rivers Street		390030579
sufapmpw	Rushmere, adj Khartoum Road	Woodbridge Road	390030607
sufapmpm	Rushmere, opp Nelson Road	Woodbridge Road	390030605
sufjdwgd	Rushmere, opp Gordon Road	Woodbridge Road	390031007
sufapmtj	Rushmere, opp Schreiber Road	Rushmere Road	390030611
sufapmwt	Rushmere, adj Bramley Chase	Rushmere Road	390030621
sufapjgt	Rushmere, adj The Lawns	Rushmere Road	390030543
sufapjmd	Rushmere, adj Thornley Road	Rushmere Road	390030546
sufapjmg	Rushmere, o/s 237 Rushmere Road	Rushmere Road	390030547
sufjtmtm	Rushmere St Andrew, adj Church	Rushmere Street	390061162
sufjtmgt	Rushmere St Andrew, opp YMCA Rugby Club	Rushmere Street	390061160
sufjtmpw	Rushmere St Andrew, adj The Limes	Rushmere Street	390061157
sufgpwdp	Rushmere St Andrew, adj The Chapel	Rushmere Street	390060514
sufgpwdw	Rushmere St Andrew, opp The Chestnuts	Rushmere Street	390060516
sufgpwdm	Rushmere St Andrew, opp Sports Club	Rushmere Street	390060513
sufgpwgd	Rushmere St Andrew, adj The Falcon	Playford Road	390060518
sufgpwjp	Playford, adj Brook Lane	Butts Road	390060528
sufgpwja	Boot Street, adj Grundisburgh Road	Boot Street	390060526
sufgpwjt	Great Bealings, adj Post Office	Lower Street	390060524
sufgpwgt	Little Bealings, opp Admirals Head	The Street	390060522
sufgpwgp	Little Bealings, adj Beacon Hill Crossroads		390060521
sufgtadt	Martlesham, adj Water Bridge		390060557
sufgtaga	Martlesham, o/s Nursery	Top Street	390060559
sufgtdmj	Woodbridge, Duke of York (E-bound)	Ipswich Road	390060625
sufgtdjp	Woodbridge, o/s Ipswich Road	Ipswich Road	390060619
sufgtdjd	Woodbridge, adj Notcutts	Ipswich Road	390060616
sufgtdgw	Woodbridge, opp Deben Pool	Station Road	390060614
sufjpwam	Woodbridge, Railway Station (S-bound)	Forecourt	390060605
sufgtdat	Woodbridge, Turban Centre (N-bound)	Hamblin Road	390060606
sufgtdgd	Woodbridge, opp Council Offices	Melton Hill	390060609
sufgtdgm	Woodbridge, opp Jenners Close	Melton Road	390060611
sufgtdgt	Melton, opp Coach And Horses	Melton Road	390060613
sufgtdg	Woodbridge, opp Melton Grange	Pytches Road	390060658
sufgtdj	Woodbridge, adj Warwick Avenue	Bredfield Road	390060659
sufgtdt	Woodbridge, opp Bury Hill	Bredfield Road	390060662
sufjtatj	Melton, adj Hall Farm Road	Woods Lane	390061132
sufgtawt	Melton, opp Chapel	The Street	390060600
sufgtdam	Melton, opp Tollgate Cottages	Yarmouth Road	390060604
sufgtagt	Melton, adj Melton Park	B1438	390060564
sufgtajd	Ufford, opp Parklands	B1438	390060567
sufgtajp	Ufford, adj Council Houses	B1438	390060570
sufgtajg	Ufford, opp Crown	B1438	390060568
sufjmadj	Ufford, adj Spring Lane	Yarmouth Road	390060912
sufgpdam	Pettistree, adj Three Tuns		390060261
sufgpdat	Wickham Market, adj Market Square	Market Square	390060263
sufgpdgp	Wickham Market, opp Spring Lane	High Street	390060269
sufgpdgw	Wickham Market, Fiveways (N-bound)	Main Road	390060271
sufmdadm	Hacheston, Village Hall (N-bound)		390061170
sufgpdmg	Hacheston, opp Phoenix House	The Street	390060281
sufmdadg	Hacheston, Easton Lane (NW-bound)		390061169
sufgpdmw	Parham, opp Marietta	Main Road	390060285
sufgpdmp	Parham, opp Bus Shelter	Main Road	390060283
sufgpjgj	Broadwater, adj Old Crossing	Woodbridge Road	390060372
sufjmaga	Framlingham, adj Victoria Mill Road	Station Road	390060917
sufgpjgd	Framlingham, adj Shelter	Bridge Street	390060371
sufgpjga	Framlingham, o/s White Horse	College Road	390060370
sufjtjgj	Framlingham, adj Pembroke Road	College Road	390071050
sufgpjdp	Framlingham, Mount Pleasant (W-bound)	Saxtead Road	390060367
sufgpj dj	Framlingham, o/s Thomas Mills School	B1119	390060365

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Saxmundham, opp Street Farm Road	—	0700	0757	—	0930		30		1730	1815	
Farnham, adj David Hope Caravans	—	0708	0805	—	0938		38		1738	1823	
Wickham Market, opp Market Square	—	0720	0817	0910	0950		50		1750	1835	
Ufford, adj Crown	—	0725	0822	0915	0955		55		1755	1840	
Melton, adj Chapel		0710	0730	0827	0920	1000	then	00	1800	1845	
Woodbridge, opp Warwick Avenue		0714	0734	0831			at				
Woodbridge, Turban Centre (S-bound)	arr	0718	0738	0835	0925	1005	these	05	1805	1850	
Woodbridge, Turban Centre (S-bound)	dep	0720	0740	0837	0930	1007	mins	07	until	1807	1852
Woodbridge, adj Pembroke Avenue		0726	0746	0843	0936	1013	past	13		1813	1858
Martlesham, opp Black Tiles		0734	0754	0851	0944	1021	each	21		1821	1906
Grange Farm, opp Scopes Road		0740	0800	0856	0949	1026	hour	26		1826	1911
Rushmere, adj Hospital		0747	0807	0903	0956	1033		33		1833	1918
Rushmere, adj Gordon Road		0750	0810	0906	0959	1036		36		1836	1921
Ipswich, Tower Ramparts Bus Station (Stand FF)		0801	0821	0915	1008	1045		45		1845	1930
Ipswich, Old Cattle Market Bus Station (Stand B)				0920	1013	1050		50		1850	1935
Ipswich, Railway Station (Stand B)		0810	0830	—	—	—		—		—	—

Saturdays

		0657	0830		30		1730	1815
		0705	0838		38		1738	1823
		0717	0850		50		1750	1835
		0722	0855		55		1755	1840
		0727	0900	then	00		1800	1845
		0731		at				
		0735	0905	these	05		1805	1850
		0737	0907	mins	07	until	1807	1852
		0743	0913	past	13		1813	1858
		0751	0921	each	21		1821	1906
		0756	0926	hour	26		1826	1911
		0803	0933		33		1833	1918
		0806	0936		36		1836	1921
		0815	0945		45		1845	1930
		0820	0950		50		1850	1935

Sundays

no service

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Ipswich, Railway Station (Stand B)	—	—	—	—	1710	1810
Ipswich, Old Cattle Market Bus Station (Stand B)	0540	0750	50	1550	1620	1720 1820
Rushmere, opp Gordon Road	0547	0759	59	1559	1630	1732 1829
Rushmere, nr Hospital	0550	0802	02	1602	1634	1736 1832
Grange Farm, adj Scopes Road	0555	0808	08	1608	1640	1742 1838
Martlesham, nr Black Tiles	0600	0813	then at these mins past each hour	1613	1646	1748 1843
Woodbridge, opp Pembroke Avenue	0607	0821	21	1621	1654	1756 1851
Woodbridge, Turban Centre (N-bound)	arr 0612	0828	28	1628	1701	1803 1858
Woodbridge, Turban Centre (N-bound)	dep 0614	0830	30	1630	1703	1805 1859
Woodbridge, adj Warwick Avenue	0618	|	|	|	1707	1809 1903
Melton, opp Chapel	0622	0835	35	1635	1711	1813 1907
Ufford, opp Crown	0627	0840	40	1640	1716	1818 1912
Wickham Market, adj Market Square	0632	0845	45	1645	1721	1823 1917
Farnham, opp David Hope Caravans	0642	0855	55	1655	—	1833 1927
Saxmundham, adj Street Farm Road	0651	0905	05	1705	—	1843 1936

Saturdays

—	—	—	—	—	—
0750	50	1550	1720	1820	
0759	59	1559	1729	1829	
0802	02	1602	1732	1832	
0808	08	1608	1738	1838	
0813	then at these mins past each hour	1613	1743	1843	
0821	21	1621	1751	1851	
0828	28	1628	1758	1858	
0830	30	1630	1800	1859	until
|	|	|	1804	1903	
0835	35	1635	1808	1907	
0840	40	1640	1813	1912	
0845	45	1645	1818	1917	
0855	55	1655	1828	1927	
0905	05	1705	1838	1936	

Sundays

no service

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SMS Code	Stop Name	Street	ATCO Code
sufgmwtj	Saxmundham, opp Street Farm Road	High Street	390060205
sufjmamp	Saxmundham, opp Limes	Brook Farm Road	390060935
sufjtajw	Saxmundham, adj Felsham Rise	Brook Farm Road	390061123
sufjmamd	Saxmundham, o/s School	Brook Farm Road	390060932
sufjmama	Saxmundham, adj Ashfords Close	Brook Farm Road	390060931
sufjtamd	Saxmundham, opp Long Avenue	Brook Farm Road	390061125
sufjmajp	Saxmundham, adj Heron Road	Brook Farm Road	390060928
sufgmwpa	Farnham, adj David Hope Caravans	A12	390060195
sufgmwpa	Stratford St Andrew, o/s The Shelter	A12	390060196
sufgmwpj	Little Glemham, adj The Lion	A12	390060198
sufgpdjt	Marlesford, opp Old Station	A12	390060277
sufgpdja	Wickham Market, Fiveways (S-bound)	Main Road	390060272
sufgpdgt	Wickham Market, adj Spring Lane	High Street	390060270
sufgpdaw	Wickham Market, opp Market Square	Market Square	390060264
sufgpdap	Pettistree, opp Three Tuns		390060262
sufjmadm	Ufford, opp Spring lane	Yarmouth Road	390060913
sufgtajm	Ufford, adj Crown	B1438	390060569
sufgtajt	Ufford, opp Council Houses	B1438	390060571
sufgtaja	Ufford, adj Parklands	B1438	390060566
sufgtagw	Melton, opp Melton Park	B1438	390060565
sufgtdaj	Melton, adj Tollgate Cottages	Yarmouth Road	390060603
sufgtawp	Melton, adj Chapel	The Street	390060599
sufjtatm	Melton, opp Hall Farm Road	Woods Lane	390061133
sufgtgdp	Woodbridge, adj Bury Hill	Bredfield Road	390060661
sufgtgdm	Woodbridge, opp Warwick Avenue	Bredfield Road	390060660
sufgtgda	Woodbridge, adj Melton Grange	Pytches Road	390060657
sufjtapg	Woodbridge, adj The Grove	Pytchers Road	390061130
sufgtdgp	Melton, o/s Coach And Horses	Melton Road	390060612
sufgtdgj	Woodbridge, adj Jenners Close	Melton Road	390060610
sufgtdga	Woodbridge, adj Council Offices	Melton Hill	390060608
sufgtdaw	Woodbridge, Turban Centre (S-bound)	Hamblin Road	390060607
sufgtdja	Woodbridge, adj Deben Pool	Station Road	390060615
sufgtdjg	Woodbridge, adj Cherry Tree	Ipswich Road	390060617
sufgtdpw	Woodbridge, opp Hillyfields	Warren Hill Road	390060635
sufgtdmw	Woodbridge, adj Clare Avenue	Old Barrack Road	390060628
sufgtdpd	Woodbridge, adj The Shops	Old Barrack Road	390060630
sufgtdwg	Woodbridge, opp Bullards Lane	Bullards Lane	390060645
sufgtdta	Woodbridge, adj Pembroke Avenue	Peterhouse Crescent	390060636
sufgtdtj	Woodbridge, opp Queens Drive	Peterhouse Crescent	390060639
sufgtdtm	Woodbridge, adj Nursery	Newnham Avenue	390060640
sufgtdpj	Woodbridge, adj Duke of York	Old Barrack Road	390060632
sufgtagd	Martlesham, opp Nursery	Top Street	390060560
sufgtadw	Martlesham, opp Water Bridge		390060558
sufgtadm	Martlesham, adj Felixstowe Road	Main Road	390060555
sufgtadj	Martlesham, adj Crown Point	Main Road	390060554
sufgtada	Martlesham, opp Black Tiles	Main Road	390060552
sufgtgma	Martlesham, adj Police Headquarters	Main Road	390060671
sufgtgmg	Kesgrave, adj Dobbs Lane	Main Road	390060673
sufgtgmt	Kesgrave, adj Wards View	Main Road	390060676
sufgtgmw	Grange Farm, opp Fentons Way	Ropes Drive	390060677
sufgtgwg	Grange Farm, adj Stewart Young Grove	Fentons Way	390060694
sufgtgwj	Grange Farm, opp Scopes Road	Fentons Way	390060695
sufgtgtp	Grange Farm, adj Wolton Road	Fentons Way	390060690
sufgtgwt	Grange Farm, adj Community Centre	Ropes Drive	390060698
sufgtjmg	Kesgrave, adj Bell Lane	Main Road	390060722
sufgtjma	Kesgrave, adj Edmonton Road	Main Road	390060720
sufgtjgt	Kesgrave, o/s Fisheries	Main Road	390060718
sufgtjgj	Rushmere St Andrew, adj Linksfield	Woodbridge Road	390060715
sufatamj	Rushmere, opp Playford Road	Woodbridge Road	390030744
sufapwap	Rushmere, adj Hospital	Woodbridge Road	390030675
sufapwat	Rushmere, opp Lattice Barn PH	Woodbridge Road	390030676
sufaptmd	Rushmere, adj Howard Street	Woodbridge Road	390030651
sufaptmp	Rushmere, opp Phoenix Road	Woodbridge Road	390030654
sufjdwgj	Rushmere, adj Gordon Road	Woodbridge Road	390031008
sufapmpt	Rushmere, adj Nelson Road	Woodbridge Road	390030606
sufapmta	Rushmere, opp Khartoum Road	Woodbridge Road	390030608
sufapmda	Rushmere, opp Rivers Street		390030580
sufapagd	Ipswich, adj Duke of York	Woodbridge Road	390030385
sufamagj	Ipswich, adj Grove Lane	St Helens Street	390030040
sufajwgt	Ipswich, adj Dove Street	St Helens Street	390030001
sufajwja	Ipswich, o/s Majors Corner	St Helens Street	390030003
sufapmtm	Ipswich, Tower Ramparts Bus Station (Stand FF)		390030268
sufapwdj	Ipswich, Westgate Street		390030680
sufapwgd	Ipswich, opp Willis Building		390030686
sufapwdw	Ipswich, Willis Building (S-bound)	Princes Street	390030684
sufampdj	Ipswich, Old Cattle Market Bus Station (Stand B)	Old Cattle Market	390030238
sufamgtw	Ipswich, adj St Clare House	Princes Street	390030171
sufamgtm	Ipswich, opp Fire Station	Princes Street	390030169
sufamgtd	Ipswich, Railway Station (Stand B)	Forecourt	390030166

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sufamgtd	Ipswich, Railway Station (Stand B)	Forecourt	390030166
sufamgtj	Ipswich, o/s Fire Station	Princes Street	390030168
sufamgtp	Ipswich, opp St Clare House	Princes Street	390030170
sufapwgd	Ipswich, opp Willis Building		390030686
sufampdj	Ipswich, Old Cattle Market Bus Station (Stand B)	Old Cattle Market	390030238
sufapwda	Ipswich, adj Northgate Street	Great Colman Street	390030678
sufamdwm	Ipswich, Cobden Place (Stop 1)	Woodbridge Road	390030127
sufapadt	Ipswich, adj Lacey Street	Woodbridge Road	390030382
sufapaga	Ipswich, adj Medical Centre	Woodbridge Road	390030384
sufapmaw	Rushmere, adj Rivers Street		390030579
sufapmpw	Rushmere, adj Khartoum Road	Woodbridge Road	390030607
sufapmpm	Rushmere, opp Nelson Road	Woodbridge Road	390030605
sufjdwdg	Rushmere, opp Gordon Road	Woodbridge Road	390031007
sufaptmj	Rushmere, adj Phoenix Road	Woodbridge Road	390030653
sufaptmg	Rushmere, opp Howard Street	Woodbridge Road	390030652
sufapwaw	Rushmere, adj Lattice Barn PH	Woodbridge Road	390030677
sufatamp	Rushmere, nr Hospital	Woodbridge Road East	390030745
sufatamd	Rushmere, adj Playford Road	Woodbridge Road	390030742
sufgtjgm	Rushmere St Andrew, opp Linksfield	Woodbridge Road	390060716
sufgtjgp	Kesgrave, opp Elm Road	Woodbridge Road	390060717
sufgtjgw	Kesgrave, opp Fisheries	Main Road	390060719
sufgtjmd	Kesgrave, opp Edmonton Road	Main Road	390060721
sufgtjmj	Kesgrave, opp Bell Lane	Main Road	390060723
sufgtjwp	Grange Farm, opp Community Centre	Ropes Drive	390060697
sufgtjtp	Grange Farm, adj Wolton Road	Fentons Way	390060690
sufgtjwm	Grange Farm, adj Scopes Road	Fentons Way	390060696
sufgtjwd	Grange Farm, opp Stewart Young Grove	Fentons Way	390060693
sufgtjpa	Grange Farm, adj Fentons Way	Ropes Drive	390060678
sufgtjpa	Kesgrave, opp St Michaels Church	Main Road	390060727
sufgtjgm	Kesgrave, opp Bracken Avenue	Main Road	390060675
sufgtgmj	Kesgrave, opp Dobbs Lane	Main Road	390060674
sufgtgmd	Martlesham, opp Police Headquarters	Main Road	390060672
sufgpwtw	Martlesham, nr Black Tiles	Main Road	390060551
sufgtadg	Martlesham, opp Crown Point	Main Road	390060553
sufgtadt	Martlesham, adj Water Bridge		390060557
sufgtaga	Martlesham, o/s Nursery	Top Street	390060559
sufgtdpm	Woodbridge, opp Duke of York	Old Barrack Road	390060633
sufgtdtp	Woodbridge, opp Nursery	Newnham Avenue	390060641
sufgtdtg	Woodbridge, adj Queens Drive	Peterhouse Crescent	390060638
sufgtdtd	Woodbridge, opp Pembroke Avenue	Peterhouse Crescent	390060637
sufgtdwd	Woodbridge, adj Bullards Lane	Bullards Lane	390060644
sufgtdpg	Woodbridge, opp The Shops	Old Barrack Road	390060631
sufgtdpa	Woodbridge, opp Clare Avenue	Old Barrack Road	390060629
sufgtdpt	Woodbridge, adj Hillyfields	Warren Hill Road	390060634
sufgtdjd	Woodbridge, adj Notcutts	Ipswich Road	390060616
sufgtdgw	Woodbridge, opp Deben Pool	Station Road	390060614
sufgtdat	Woodbridge, Turban Centre (N-bound)	Hamblin Road	390060606
sufgtdgd	Woodbridge, opp Council Offices	Melton Hill	390060609
sufjtajp	Woodbridge, opp The Grove	Pytchers Road	390061131
sufgtgdg	Woodbridge, opp Melton Grange	Pytches Road	390060658
sufgtgdj	Woodbridge, adj Warwick Avenue	Bredfield Road	390060659
sufgtgdt	Woodbridge, opp Bury Hill	Bredfield Road	390060662
sufjtatj	Melton, adj Hall Farm Road	Woods Lane	390061132
sufgtdgm	Woodbridge, opp Jenners Close	Melton Road	390060611
sufgtdgt	Melton, opp Coach And Horses	Melton Road	390060613
sufgtawt	Melton, opp Chapel	The Street	390060600
sufgtdam	Melton, opp Tollgate Cottages	Yarmouth Road	390060604
sufgtagt	Melton, adj Melton Park	B1438	390060564
sufgtajd	Ufford, opp Parklands	B1438	390060567
sufgtajp	Ufford, adj Council Houses	B1438	390060570
sufgtajg	Ufford, opp Crown	B1438	390060568
sufjmadj	Ufford, adj Spring Lane	Yarmouth Road	390060912
sufgpdam	Pettistree, adj Three Tuns		390060261
sufgpdat	Wickham Market, adj Market Square	Market Square	390060263
sufgpdgp	Wickham Market, opp Spring Lane	High Street	390060269
sufgpdgw	Wickham Market, Fiveways (N-bound)	Main Road	390060271
sufgpdjp	Marlesford, adj Old Station	A12	390060276
sufgmwpm	Little Glemham, opp The Lion	A12	390060199
sufgmwpg	Stratford St Andrew, opp The Shelter	A12	390060197
sufgmwmm	Farnham, opp David Hope Caravans	A12	390060194
sufjmajt	Saxmundham, opp Heron Road	Brook Farm Road	390060929
sufjtama	Saxmundham, nr Long Avenue	Brook Farm Road	390061124
sufjmajw	Saxmundham, opp Ashfords Close	Brook Farm Road	390060930
sufjmamg	Saxmundham, opp School	Brook Farm Road	390060933
sufjtajt	Saxmundham, opp Felsham Rise	Brook Farm Road	390061122
sufjmamj	Saxmundham, adj The Limes	Brook Farm Road	390060934
sufgtjwj	Saxmundham, adj Street Farm Road	High Street	390060872

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Aldeburgh, opp Fort Green Car Park	—	0710	—	0945	45	1645	
Aldeburgh, opp Linden Close	—	0715	—	0952	52	1652	
Snape, adj The Crown	—	0724	—	1001	01	1701	
Snape, adj The Maltings	—	0726	—	1003	03	1703	
Tunstall, opp Green Man	—	0731	—	1008	08	1708	
Rendlesham, adj Spencer Road	0635	0735	0930	1012	12	1712	
Rendlesham, opp Sycamore Drive	0636	0736	0931	1013	then 13	1713	
Eye, opp Stores	0643	0743	0939	1020	at 20	1720	
Melton, adj Chapel	0650	0750	0947	1027	these 27	1727	
Woodbridge, opp Warwick Avenue	0654	0754	0952	1031	mins 31	1731	until
Woodbridge, Turban Centre (S-bound)	arr 0658	0758	0957	1035	past 35	1735	
Woodbridge, Turban Centre (S-bound)	dep 0700	0800	1000	1037	each 37	1737	
Woodbridge, adj Pembroke Avenue	0706	0806	—	1043	hour 43	1743	
Martlesham Heath, o/s Tesco	0714	0814	1010	1051	51	1751	
Kesgrave, opp High School	0720	0821	1016	1057	57	1757	
Rushmere, adj Hospital	0726	0828	1022	1103	03	1803	
Rushmere, adj Gordon Road	0729	0831	1025	1106	06	1806	
Ipswich, Tower Ramparts Bus Station (Stand FF)	0738	0842	1034	1115	15	1815	
Ipswich, Old Cattle Market Bus Station (Stand B)	—	0847	1039	1120	20	1820	
Ipswich, Railway Station (Stand B)	0747	—	—	—	—	—	

Saturdays

—	—	0845	—	—	45	1645	
—	—	0852	—	—	52	1652	
—	—	0901	—	—	01	1701	
—	—	0903	—	—	03	1703	
—	—	0908	—	—	08	1708	
0742	—	0912	—	—	12	1712	
0743	—	0913	then	—	13	1713	
0750	—	0920	at	—	20	1720	
0757	0827	0927	these	—	27	1727	
0801	0831	0931	mins	31	1731	until	
0805	0835	0935	past	35	1735		
0807	0837	0937	each	37	1737		
0813	0843	0943	hour	43	1743		
0821	0851	0951	—	—	51	1751	
0827	0857	0957	—	—	57	1757	
0833	0903	1003	—	—	03	1803	
0836	0906	1006	—	—	06	1806	
0845	0915	1015	—	—	15	1815	
0850	0920	1020	—	—	20	1820	

Sundays

no service

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service Restrictions	Sch	NSch							
Ipswich, Railway Station (Stand B)	—	—	—	—	—	—	—	1640	1740
Ipswich, Old Cattle Market Bus Station (Stand B)	0720	0720	0825	0920	20	—	1520	1650	1750
Rushmere, opp Gordon Road	0729	0729	0834	0929	29	—	1529	1702	1800
Rushmere, nr Hospital	0732	0732	0837	0932	32	—	1532	1706	1804
Kesgrave, o/s High School	0737	0737	0842	0937	37	—	1537	1711	1809
Martlesham Heath, o/s Tesco	0743	0743	0848	0943	43	—	1543	1718	1816
Woodbridge, opp Pembroke Avenue	0751	0751	0856	0951	then 51	—	1551	1726	1824
Woodbridge, Turban Centre (N-bound)	arr 0758	0758	0903	0958	at 58	—	1558	1732	1830
Woodbridge, Turban Centre (N-bound)	dep —	0800	0905	1000	these 00	—	1600	1734	1832
Woodbridge, adj Warwick Avenue	—	0804	0909	1004	mins 04	until	1604	1738	1836
Melton, opp Chapel	—	0808	0913	1008	past 08	—	1608	1742	1840
Eyke, adj Stores	—	0815	0920	1015	each 15	—	1615	1749	1847
Rendlesham, opp Spencer Road	—	0822	0927	1022	hour 22	—	1622	1756	1854
Tunstall, adj Green Man	—	0826	0931	1026	26	—	1626	1800	1858
Snape, opp The Maltings	—	0830	0935	1030	30	—	1630	1804	1902
Snape, opp The Crown	—	0832	0937	1032	32	—	1632	1806	1904
Aldeburgh, adj Linden Close	—	0841	0946	1041	41	—	1641	1815	1913
Aldeburgh, opp Fort Green Car Park	—	0850	0955	1050	50	—	1650	1824	1922

Saturdays

—	—	—	—	—	—	—	—	—	—
0720	20	1520	1630	1750	0729	29	1529	1639	1759
0732	32	1532	1642	1802	0737	37	1537	1647	1807
0743	43	1543	1653	1813	0751	then 51	1551	1701	1821
0758	at 58	1558	1708	1828	0800	these 00	1600	1710	1830
0804	mins 04	1604	1714	1834	0808	past 08	1608	1718	1838
0815	each 15	1615	1725	1845	0822	hour 22	1622	1732	1852
0826	26	1626	1736	1856	0830	30	1630	1740	1900
0832	32	1632	1742	1902	0841	41	1641	1751	1911
0850	50	1650	1800	1920					

Sundays

no service

Service Restrictions: NSch - Not School Days
Sch - School Days Only

For times of the next departures from a particular stop you can use **traveline-txt** - by sending the SMS code to **84268**. Add the service number after the code if you just want a specific service - eg: **buctdgt 60**. The return message from **traveline-txt** will show the next three departures, and it currently costs 25p plus any message sending charge. However it is free for all stops in Lincolnshire & in the SW region. Departure times will be real-time predictions where available, or scheduled departure times if not.

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NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
sufgmtmj	Aldeburgh, opp Fort Green Car Park	Slaughden Road	390060142
sufgmtmp	Aldeburgh, o/s Bus Shelter	High Street	390060143
sufjmapw	Aldeburgh, o/s Cinema	Main Street	390060944
sufgmwjt	Aldeburgh, adj Aldehouse Drive	A1094	390060186
sufgmwjpb	Aldeburgh, opp Police Station	B1122	390060185
sufgmwgv	Aldeburgh, opp Linden Close	Linden Road	390060180
sufgmwmd	Aldeburgh, adj Alde Lodge	Saxmundham Road	390060189
sufgmwdw	Knodishall, adj Blackheath Corner	A1094	390060173
sufgmtgw	Snape, opp Church	Church Road	390060131
sufgmtma	Snape, adj The Glebes	Church Road	390060139
sufgmtjp	Snape, adj The Crown	Bridge Road	390060136
sufgmtdg	Snape, adj The Maltings	B1069	390060119
sufgmtap	Tunstall, opp Green Man	Woodbridge Road	390060115
sufgmwap	Rendlesham, adj Spencer Road	Redwald Road	390060164
sufgmwaj	Rendlesham, opp Jayscroft Road	Redwald Road	390060162
sufgmwad	Rendlesham, opp Sparrows Croft	Redwald Road	390060160
sufjtdmt	Rendlesham, opp Sycamore Drive	Acer Road	390061139
sufjtdmj	Rendlesham, adj Magnolia Drive	Acer Road	390061137
sufjtdjp	Rendlesham, adj Doctors Surgery	Acer Road	390061135
sufgmtwj	Rendlesham, opp Fountain Road	Fountain Road	390060156
sufgmtwd	Rendlesham, adj Spring Close	Fountain Road	390060154
sufgmtpw	Rendlesham, Abbey Close (S-bound)	Fountain Road	390060152
sufgmtjp	Rendlesham, opp Tower Field Rd Shelter	Fountain Road	390060149
sufgmtja	Rendlesham, Red House (W-bound)	A1152	390060132
sufgtatm	Eyke, opp Stores	The Street	390060591
sufgtapw	Bromeswell, o/s Bus Shelter	Orford Road	390060586
sufgtawa	Melton, adj Railway Station	A1152	390060594
sufgtdag	Melton, opp St Andrews Place	Station Road	390060602
sufgtawp	Melton, adj Chapel	The Street	390060599
sufjtatm	Melton, opp Hall Farm Road	Woods Lane	390061133
sufgtgdp	Woodbridge, adj Bury Hill	Bredfield Road	390060661
sufgtgdm	Woodbridge, opp Warwick Avenue	Bredfield Road	390060660
sufgtgda	Woodbridge, adj Melton Grange	Pytches Road	390060657
sufjtapg	Woodbridge, adj The Grove	Pytchers Road	390061130
sufgtgda	Woodbridge, adj Council Offices	Melton Hill	390060608
sufgtdaw	Woodbridge, Turban Centre (S-bound)	Hamblin Road	390060607
sufgtcja	Woodbridge, adj Deben Pool	Station Road	390060615
sufgtcjd	Woodbridge, adj Cherry Tree	Ipswich Road	390060617
sufgtcjd	Woodbridge, opp Hillyfields	Warren Hill Road	390060635
sufgtcjd	Woodbridge, adj Clare Avenue	Old Barrack Road	390060628
sufgtcjd	Woodbridge, adj The Shops	Old Barrack Road	390060630
sufgtcjd	Woodbridge, opp Bullards Lane	Bullards Lane	390060645
sufgtcjd	Woodbridge, adj Pembroke Avenue	Peterhouse Crescent	390060636
sufgtcjd	Woodbridge, opp Queens Drive	Peterhouse Crescent	390060639
sufgtcjd	Woodbridge, adj Nursery	Newnham Avenue	390060640
sufgtcjd	Woodbridge, adj Duke of York	Old Barrack Road	390060632
sufgtcjd	Martlesham, opp Nursery	Top Street	390060560
sufgtcjd	Martlesham, opp Water Bridge		390060558
sufgtcjd	Martlesham, adj Felixstowe Road	Main Road	390060555
sufgpwtp	Martlesham Heath, o/s Tesco	Internal Road	390060550
sufgtgma	Martlesham, adj Police Headquarters	Main Road	390060671
sufgtgmg	Kesgrave, adj Dobbs Lane	Main Road	390060673
sufgtgmt	Kesgrave, adj Wards View	Main Road	390060676
sufjgwpd	Kesgrave, adj St Michaels Church	Main Road	390060896
sufgtjmw	Kesgrave, opp High School	Main Road	390060726
sufgtjmp	Kesgrave, adj St Olaves	Main Road	390060724
sufgtjmg	Kesgrave, adj Bell Lane	Main Road	390060722
sufgtjma	Kesgrave, adj Edmonton Road	Main Road	390060720
sufgtjgt	Kesgrave, o/s Fisheries	Main Road	390060718
sufgtjgj	Rushmere St Andrew, adj Linksfield	Woodbridge Road	390060715
sufatamj	Rushmere, opp Playford Road	Woodbridge Road	390030744
sufapwap	Rushmere, adj Hospital	Woodbridge Road	390030675
sufapwat	Rushmere, opp Lattice Barn PH	Woodbridge Road	390030676
sufaptdm	Rushmere, adj Howard Street	Woodbridge Road	390030651
sufaptmp	Rushmere, opp Phoenix Road	Woodbridge Road	390030654
sufjdwgj	Rushmere, adj Gordon Road	Woodbridge Road	390031008
sufapmpt	Rushmere, adj Nelson Road	Woodbridge Road	390030606
sufapmta	Rushmere, opp Khartoum Road	Woodbridge Road	390030608
sufapmda	Rushmere, opp Rivers Street		390030580
sufapagd	Ipswich, adj Duke of York	Woodbridge Road	390030385
sufamagj	Ipswich, adj Grove Lane	St Helens Street	390030040
sufajwgt	Ipswich, adj Dove Street	St Helens Street	390030001
sufajwja	Ipswich, o/s Majors Corner	St Helens Street	390030003
sufampmt	Ipswich, Tower Ramparts Bus Station (Stand FF)		390030268
sufapwdj	Ipswich, Westgate Street		390030680
sufapwgd	Ipswich, opp Willis Building		390030686
sufampdj	Ipswich, Old Cattle Market Bus Station (Stand B)	Old Cattle Market	390030238
sufamgtw	Ipswich, adj St Clare House	Princes Street	390030171
sufamgtm	Ipswich, opp Fire Station	Princes Street	390030169
sufamgtd	Ipswich, Railway Station (Stand B)	Forecourt	390030166

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SMS Code	Stop Name	Street	ATCO Code
sufamgtd	Ipswich, Railway Station (Stand B)	Forecourt	390030166
sufamgtj	Ipswich, o/s Fire Station	Princes Street	390030168
sufamgtp	Ipswich, opp St Clare House	Princes Street	390030170
sufapwgd	Ipswich, opp Willis Building		390030686
sufampdj	Ipswich, Old Cattle Market Bus Station (Stand B)	Old Cattle Market	390030238
sufapwda	Ipswich, adj Northgate Street	Great Colman Street	390030678
sufamdwm	Ipswich, Cobden Place (Stop 1)	Woodbridge Road	390030127
sufapadt	Ipswich, adj Lacey Street	Woodbridge Road	390030382
sufapaga	Ipswich, adj Medical Centre	Woodbridge Road	390030384
sufapmaw	Rushmere, adj Rivers Street		390030579
sufapmpw	Rushmere, adj Khartoum Road	Woodbridge Road	390030607
sufapmpm	Rushmere, opp Nelson Road	Woodbridge Road	390030605
sufjdwdg	Rushmere, opp Gordon Road	Woodbridge Road	390031007
sufaptmj	Rushmere, adj Phoenix Road	Woodbridge Road	390030653
sufaptmg	Rushmere, opp Howard Street	Woodbridge Road	390030652
sufapwaw	Rushmere, adj Lattice Barn PH	Woodbridge Road	390030677
sufatamp	Rushmere, nr Hospital	Woodbridge Road East	390030745
sufatamd	Rushmere, adj Playford Road	Woodbridge Road	390030742
sufgtjgm	Rushmere St Andrew, opp Linksfield	Woodbridge Road	390060716
sufgtjgp	Kesgrave, opp Elm Road	Woodbridge Road	390060717
sufgtjgw	Kesgrave, opp Fisheries	Main Road	390060719
sufgtjmd	Kesgrave, opp Edmonton Road	Main Road	390060721
sufgtjmj	Kesgrave, opp Bell Lane	Main Road	390060723
sufgtjmt	Kesgrave, o/s High School	Main Road	390060725
sufgtjpa	Kesgrave, opp St Michaels Church	Main Road	390060727
sufgtgmp	Kesgrave, opp Bracken Avenue	Main Road	390060675
sufgtgmj	Kesgrave, opp Dobbs Lane	Main Road	390060674
sufgtgmd	Martlesham, opp Police Headquarters	Main Road	390060672
sufgpwtp	Martlesham Heath, o/s Tesco	Internal Road	390060550
sufgtadp	Martlesham, o/s Crown Point	Felixstowe Road	390060556
sufgtadt	Martlesham, adj Water Bridge		390060557
sufgtaga	Martlesham, o/s Nursery	Top Street	390060559
sufgtdpm	Woodbridge, opp Duke of York	Old Barrack Road	390060633
sufgttdp	Woodbridge, opp Nursery	Newnham Avenue	390060641
sufgttdg	Woodbridge, adj Queens Drive	Peterhouse Crescent	390060638
sufgttdt	Woodbridge, opp Pembroke Avenue	Peterhouse Crescent	390060637
sufgttdw	Woodbridge, adj Bullards Lane	Bullards Lane	390060644
sufgtddp	Woodbridge, opp The Shops	Old Barrack Road	390060631
sufgtddpa	Woodbridge, opp Clare Avenue	Old Barrack Road	390060629
sufgtddt	Woodbridge, adj Hillyfields	Warren Hill Road	390060634
sufgtddj	Woodbridge, adj Notcutts	Ipswich Road	390060616
sufgtddw	Woodbridge, opp Deben Pool	Station Road	390060614
sufgtddat	Woodbridge, Turban Centre (N-bound)	Hamblin Road	390060606
sufgtddgd	Woodbridge, opp Council Offices	Melton Hill	390060609
sufjtaj	Woodbridge, opp The Grove	Pytchers Road	390061131
sufgtgdg	Woodbridge, opp Melton Grange	Pytches Road	390060658
sufgtgdj	Woodbridge, adj Warwick Avenue	Bredfield Road	390060659
sufgtgdt	Woodbridge, opp Bury Hill	Bredfield Road	390060662
sufjtaj	Melton, adj Hall Farm Road	Woods Lane	390061132
sufgtawt	Melton, opp Chapel	The Street	390060600
sufgtdad	Melton, adj St Andrews Place	Station Road	390060601
sufgtatw	Melton, opp Railway Station	A1152	390060593
sufgtata	Bromeswell, opp Bus Shelter	Orford Road	390060587
sufgtatj	Eyke, adj Stores	The Street	390060590
sufgmtjd	Rendlesham, Red House (E-bound)	A1152	390060133
sufjtmtp	Rendlesham, adj Tower Field Rd Shelter	Fountain Road	390060150
sufgmtpt	Rendlesham, Abbey Close (N-bound)	Fountain Road	390060151
sufgmtwa	Rendlesham, opp Spring Close	Fountain Road	390060153
sufgmtwg	Rendlesham, adj Fountain Road	Fountain Road	390060155
sufjtdjm	Rendlesham, opp Doctors Surgery	Acer Road	390061134
sufjtdmg	Rendlesham, opp Magnolia Drive	Acer Road	390061136
sufjtdmp	Rendlesham, adj Sycamore Drive	Acer Road	390061138
sufgmtwt	Rendlesham, adj Sparrows Croft	Redwald Road	390060159
sufgmwag	Rendlesham, adj Jayscroft Road	Redwald Road	390060161
sufgmwam	Rendlesham, opp Spencer Road	Redwald Road	390060163
sufgmtam	Tunstall, adj Green Man	Woodbridge Road	390060114
sufgmtda	Snape, opp The Maltings	B1069	390060118
sufgmtjt	Snape, opp The Crown	Bridge Road	390060137
sufgmtjw	Snape, opp The Glebes	Church Road	390060138
sufgmtgt	Snape, adj Church	Church Road	390060130
sufgmwga	Knodishall, opp Blackheath Corner	A1094	390060174
sufgmwma	Aldeburgh, opp Alde Lodge	Saxmundham Road	390060188
sufgmwja	Aldeburgh, adj Linden Close	Linden Road	390060181
sufgmwjm	Aldeburgh, o/s Police Station	B1122	390060184
sufgmwjw	Aldeburgh, opp Aldehouse Drive	A1094	390060187
sufjmata	Aldeburgh, opp Cinema	Main Street	390060945
sufgmtmt	Aldeburgh, opp Bus Shelter	High Street	390060144
sufgmtmj	Aldeburgh, opp Fort Green Car Park	Slaughden Road	390060142

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

	Service	71	72	62	62	72	71	62
	Operator	PF	SN	PF	PF	SN	PF	PF
Service Restrictions		TuTh				TuTh		
Sudbourne, adj School Lane	0700	—	—	—	—	—	—	—
Orford, adj Market Hill	0705	—	—	—	—	1650	—	—
Chillesford, adj Mill Lane	0712	—	—	—	—	1657	—	—
Butley, opp Oyster	0715	—	—	—	—	—	—	—
Butley, Oyster (S-bound)	—	—	—	—	—	1700	—	—
Hollesley, Water Tower (E-bound)	0721	—	—	—	—	—	—	—
Hollesley, adj Oak Hill	0723	—	—	—	—	—	—	—
Hollesley, opp Duck Corner	0726	—	—	—	—	—	—	—
Sutton Heath Estate, Turning Point	0731	—	—	—	—	—	—	—
Sutton Hoo, o/s Entrance	0734	—	—	—	—	—	—	—
Melton, adj Railway Station	0736	—	—	—	—	1708	—	—
Melton, adj Chapel	0738	—	1024	1436	—	1710	1831	—
Woodbridge, adj Council Offices	0741	—	1027	1439	—	1713	1834	—
Woodbridge, Turban Centre (S-bound)	0743	0917	1031	1443	—	1717	1837	—
Woodbridge, Railway Station (S-bound)	0744s	—	—	—	—	1718s	—	—
Woodbridge, Duke of York (W-bound)	0746	0920	—	—	—	1720	—	—
Martlesham, opp Water Bridge	0748	0922	—	—	—	1722	—	—
Martlesham Heath, o/s Tesco	—	0925	—	—	1417	1725	—	—
Little Bealings, opp Beacon Hill Crossroads	0752	0929	—	—	1421	—	—	—
Little Bealings, o/s Admirals Head	0754	0931	—	—	1423	—	—	—
Boot Street, opp Grundisburgh Road	0757	0934	—	—	—	—	—	—
Playford, opp Brook Lane	0800	0937	—	—	1428	—	—	—
Rushmere St Andrew, opp The Falcon	0804	0941	—	—	1432	—	—	—
Rushmere St Andrew, adj The Chestnuts	0807	0944	—	—	1434	—	—	—
Rushmere, opp The Lawns	0809	0946	—	—	1436	—	—	—
Rushmere, adj Gordon Road	0811	0948	—	—	1438	—	—	—
Ipswich, Tower Ramparts Bus Station (Stand FF)	0831	0956	—	—	1447	—	—	—
Ipswich, Old Cattle Market Bus Station (Stand N)	0835	—	—	—	—	—	—	—

Saturdays

	71	72	72	71
	PF	SN	SN	PF
0700	—	—	—	—
0705	—	—	1650	—
0715	—	—	1657	—
0715	—	—	—	—
—	—	—	1700	—
0721	—	—	—	—
0723	—	—	—	—
0726	—	—	—	—
0731	—	—	—	—
0734	—	—	—	—
0736	—	—	1708	—
0738	—	—	1710	—
0741	—	—	1713	—
0743	0917	—	1717	—
0744s	—	—	1718s	—
0746	0920	—	1720	—
0748	0922	—	1722	—
—	0925	1417	1725	—
0752	0929	1421	—	—
0754	0931	1423	—	—
0757	0934	—	—	—
0800	0937	1428	—	—
0804	0941	1432	—	—
0807	0944	1434	—	—
0809	0946	1436	—	—
0811	0948	1438	—	—
0831	0956	1447	—	—
0835	—	—	—	—

Sundays

no service

All journeys are sponsored by Suffolk County Council.

Service Restrictions: TuTh - Tuesdays and Thursdays

Notes: s - sets down only
PF - PF Travel
SN - Suffolk Norse

Direction of stops: where shown (eg: W-bound) this is the compass direction towards which the bus is pointing when it stops

Mondays to Fridays

Service	62	62	72	71	71	62	72	71
	PF	PF	SN	PF	PF	PF	BE	PF
Operator								
Service Restrictions								
			TuTh	Sch	NSch			
Ipswich, Old Cattle Market Bus Station (Stand D)	0845	—	—	—	—	—	—	—
Ipswich, Old Cattle Market Bus Station (Stand N)	—	—	1345	—	—	—	1715	—
Rushmere, opp Gordon Road	0852	—	1353	—	—	—	1723	—
Rushmere, adj The Lawns	0855	—	1356	—	—	—	1726	—
Rushmere St Andrew, adj The Chapel	0857	—	1358	—	—	—	1728	—
Playford, adj Brook Lane	0900	—	1404	—	—	—	1734	—
Boot Street, adj Grundisburgh Road	0905	—	1407	—	—	—	1737	—
Little Bealings, opp Admirals Head	0910	—	1410	—	—	—	1740	—
Little Bealings, adj Beacon Hill Crossroads	0912	—	1412	—	—	—	1742	—
Martlesham Heath, o/s Tesco	—	—	1416	—	—	—	1746	—
Martlesham Heath, o/s Tesco	—	—	—	—	—	—	1735	—
Waldringfield, opp Primary School	—	—	—	—	—	—	1752s	—
Newbourne, opp Fox	—	—	—	—	—	—	1755s	—
Kirton, adj Rectory Lane	—	—	—	—	—	—	1802s	—
Bucklesham, School (W-bound)	—	—	—	—	—	—	1805s	—
Bucklesham, adj Shannon	—	—	—	—	—	—	1807s	—
Martlesham, adj Water Bridge	0915	—	—	—	—	—	1738	—
Woodbridge, Duke of York (E-bound)	0917	—	—	—	—	—	1741	—
Woodbridge Rail Station	—	—	—	—	—	—	1743	—
Woodbridge, Turban Centre (N-bound)	arr 0920	—	—	—	—	—	1745	—
Woodbridge, Turban Centre (N-bound)	dep 0921	1345	—	1545	1600	1742	—	1745
Woodbridge, opp Council Offices	0924	1348	—	—	1601	1745	—	1746
Woodbridge, o/s Farlingaye School	—	—	—	1555	—	—	—	—
Melton, opp Chapel	0927	1351	—	1607	1607	1748	—	1751
Melton, opp Railway Station	—	—	—	1609	1609	—	—	1753
Sutton Hoo, opp Entrance	—	—	—	1611	1611	—	—	1755
Sutton Heath Estate, Turning Point	—	—	—	1614	1614	—	—	1758
Hollesley, Duck Corner	—	—	—	1618	1618	—	—	1803
Hollesley, opp Oak Hill	—	—	—	1620	1620	—	—	1805
Hollesley, Water Tower (W-bound)	—	—	—	1622	1622	—	—	1806
Boyton, opp Old Bell	—	—	—	1623s	1623s	—	—	1807s
Capel St Andrew, opp Village Notice Board	—	—	—	1627	1627	—	—	1811s
Butley, adj Oyster	—	—	—	1630	1630	—	—	1814s
Chillesford, opp Mill Lane	—	—	—	1633	1633	—	—	1817s
Orford, adj Market Hill	—	—	—	1640	1640	—	—	1824s
Sudbourne, opp School Lane	—	—	—	1650s	1650s	—	—	1834s

Saturdays

71	72	71	71
PF	SN	PF	PF
—	—	—	—
0845	1345	—	—
0852	1353	—	—
0855	1356	—	—
0857	1358	—	—
0900	1404	—	—
0905	1407	—	—
0910	1410	—	—
0912	1412	—	—
—	1416	—	—
—	—	—	1735
—	—	—	1752s
—	—	—	1755s
—	—	—	1802s
—	—	—	1805s
0915	—	—	1738
0917	—	—	1741
—	—	—	1743
0920	—	—	1745
—	—	1600	1745
—	—	1601	1746
—	—	—	—
—	—	1607	1751
—	—	1609	1753
—	—	1611	1755
—	—	1614	1758
—	—	1618	1803
—	—	1620	1805
—	—	1622	1806
—	—	1623s	1807s
—	—	1627	1811s
—	—	1630	1814s
—	—	1633	1817s
—	—	1640	1824s
—	—	1650s	1834s

Sundays

no service

The 0845 journey continues as Service 62 for onward travel to Framlingham after Melton. All journeys are sponsored by Suffolk County Council.

Service Restrictions: NSch - Not School Days
Sch - School Days Only
TuTh - Tuesdays and Thursdays

Notes: s - sets down only
BE - Beestons
PF - PF Travel
SN - Suffolk Norse

For times of the next departures from a particular stop you can use **traveline-txt** - by sending the SMS code to **84268**. Add the service number after the code if you just want a specific service - eg: **buctdgt 60**. The return message from **traveline-txt** will show the next three departures, and it currently costs 25p plus any message sending charge. However it is free for all stops in Lincolnshire & in the SW region. Departure times will be real-time predictions where available, or scheduled departure times if not.

You can also get the same information by using the SMS code at www.nextbuses.mobi (only normal browsing charges apply) or through several iPhone or Android apps that offer access to **NextBuses**.

NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
sufgmtw	Sudbourne, adj School Lane	Snape Road	390060124
sufgptpw	Sudbourne Park, opp Five Ways	Sudbourne Road	390060495
sufgptwd	Orford, opp School	Front Street	390060497
sufgptwj	Orford, adj Market Hill	Market Hill	390060499
sufgptwa	Orford, o/s School	Mundays Lane	390060496
sufgptpj	Chillesford, adj Mill Lane	B1084	390060492
sufgptpg	Butley, adj Orford Road	The Street	390060491
sufgptpa	Butley, opp Oyster	Church Road	390060489
sufgptmt	Butley, Oyster (S-bound)	The Street	390060487
sufgptwt	Butley Abbey, opp Abbey Corner	Church Road	390060502
sufgpwad	Capel St Andrew, o/s Village Notice Board	Unclassified	390060503
sufgpwam	Boyton, o/s Old Bell	Dock Farm Road	390060506
sufgpwaw	Boyton, Church (SW-bound)	Dock Farm Road	390060509
sufjjpg	Hollesley, Water Tower (E-bound)		390061064
sufgpwda	Hollesley, adj Oak Hill	College Road	390060510
sufgpgmj	Hollesley, adj Prison	College Road	390060331
sufgpgmg	Hollesley, opp Duck Corner	The Street	390060330
sufjpmwg	Hollesley, opp Picnic Site	Woodbridge Road	390061080
sufgtamj	Sutton Heath Estate, Turning Point		390060576
sufgtapm	Sutton Hoo, o/s Entrance	Woodbridge Road	390060584
sufgptmj	Rendlesham Forest, adj Forest Centre	B1084	390060485
sufgptmg	Spratt's Street, opp Spratts Street	B1084	390060484
sufgtatd	Spratt's Street, opp Claypond Cottage	B1084	390060588
sufgtapw	Bromeswell, o/s Bus Shelter	Orford Road	390060586
sufgtawa	Melton, adj Railway Station	A1152	390060594
sufgtdag	Melton, opp St Andrews Place	Station Road	390060602
sufgtawp	Melton, adj Chapel	The Street	390060599
sufgtgdp	Melton, o/s Coach And Horses	Melton Road	390060612
sufgtgdj	Woodbridge, adj Jenners Close	Melton Road	390060610
sufgtgda	Woodbridge, adj Council Offices	Melton Hill	390060608
sufgtdaw	Woodbridge, Turban Centre (S-bound)	Hamblin Road	390060607
sufjpwam	Woodbridge, Railway Station (S-bound)	Forecourt	390060605
sufgtcja	Woodbridge, adj Deben Pool	Station Road	390060615
sufgtcjg	Woodbridge, adj Cherry Tree	Ipswich Road	390060617
sufgtcjm	Woodbridge, opp Ipswich Road	Ipswich Road	390060618
sufgtcjm	Woodbridge, Duke of York (W-bound)	Ipswich Road	390060624
sufgtagd	Martlesham, opp Nursery	Top Street	390060560
sufgtadw	Martlesham, opp Water Bridge		390060558
sufgtadm	Martlesham, adj Felixstowe Road	Main Road	390060555
sufgpwtp	Martlesham Heath, o/s Tesco	Internal Road	390060550
sufgtgma	Martlesham, adj Police Headquarters	Main Road	390060671
sufgpwgm	Little Bealings, opp Beacon Hill Crossroads		390060520
sufgpwgv	Little Bealings, o/s Admirals Head	The Street	390060523
sufgpwjd	Great Bealings, opp Post Office	Lower Street	390060525
sufgpwjm	Boot Street, opp Grundisburgh Road	Boot Street	390060527
sufgpwjt	Playford, opp Brook Lane	Butts Road	390060529
sufgpwgj	Rushmere St Andrew, opp The Falcon	Playford Road	390060519
sufgpwdj	Rushmere St Andrew, adj Sports Club	Rushmere Street	390060512
sufgpwga	Rushmere St Andrew, adj The Chestnuts	Rushmere Street	390060517
sufgpwdt	Rushmere St Andrew, adj The Willows	Rushmere Street	390060515
sufjmta	Rushmere St Andrew, opp The Limes	Rushmere Street	390061158
sufjmtmd	Rushmere St Andrew, adj YMCA Rugby Club	Rushmere Street	390061159
sufjmtmj	Rushmere St Andrew, opp Church	Rushmere Street	390061161
sufapjmj	Rushmere, opp 237 Rushmere Road	Rushmere Road	390030548
sufapjma	Rushmere, opp Thornley Road	Rushmere Road	390030545
sufapjgw	Rushmere, opp The Lawns	Rushmere Road	390030544
sufaptad	Rushmere, opp Bramley Chase	Rushmere Road	390030622
sufapmtm	Rushmere, adj Schreiber Road	Rushmere Road	390030612
sufjdwj	Rushmere, adj Gordon Road	Woodbridge Road	390031008
sufapmpt	Rushmere, adj Nelson Road	Woodbridge Road	390030606
sufapmta	Rushmere, opp Khartoum Road	Woodbridge Road	390030608
sufapmda	Rushmere, opp Rivers Street		390030580
sufapagd	Ipswich, adj Duke of York	Woodbridge Road	390030385
sufamagj	Ipswich, adj Grove Lane	St Helens Street	390030040
sufajwgt	Ipswich, adj Dove Street	St Helens Street	390030001
sufajwja	Ipswich, o/s Majors Corner	St Helens Street	390030003
sufapmtm	Ipswich, Tower Ramparts Bus Station (Stand FF)		390030268
sufapwdj	Ipswich, Westgate Street		390030680
sufapwgd	Ipswich, opp Willis Building		390030686
sufampgw	Ipswich, Old Cattle Market Bus Station (Stand N)	Old Cattle Market	390030249

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NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
sufampdp	Ipswich, Old Cattle Market Bus Station (Stand D)	Old Cattle Market	390030240
sufampgw	Ipswich, Old Cattle Market Bus Station (Stand N)	Old Cattle Market	390030249
sufapwgm	Ipswich, adj Cafe Nero	Upper Brook Street	390030688
sufapwda	Ipswich, adj Northgate Street	Great Colman Street	390030678
sufamdwm	Ipswich, Cobden Place (Stop 1)	Woodbridge Road	390030127
sufapadt	Ipswich, adj Lacey Street	Woodbridge Road	390030382
sufapaga	Ipswich, adj Medical Centre	Woodbridge Road	390030384
sufapmaw	Rushmere, adj Rivers Street		390030579
sufapmpw	Rushmere, adj Khartoum Road	Woodbridge Road	390030607
sufapmpm	Rushmere, opp Nelson Road	Woodbridge Road	390030605
sufjdwdg	Rushmere, opp Gordon Road	Woodbridge Road	390031007
sufapmtj	Rushmere, opp Schreiber Road	Rushmere Road	390030611
sufapmwt	Rushmere, adj Bramley Chase	Rushmere Road	390030621
sufapjgt	Rushmere, adj The Lawns	Rushmere Road	390030543
sufapjmd	Rushmere, adj Thornley Road	Rushmere Road	390030546
sufapjmg	Rushmere, o/s 237 Rushmere Road	Rushmere Road	390030547
sufjtmmt	Rushmere St Andrew, adj Church	Rushmere Street	390061162
sufjtmgt	Rushmere St Andrew, opp YMCA Rugby Club	Rushmere Street	390061160
sufjtmpw	Rushmere St Andrew, adj The Limes	Rushmere Street	390061157
sufgppwd	Rushmere St Andrew, adj The Chapel	Rushmere Street	390060514
sufgppdw	Rushmere St Andrew, opp The Chestnuts	Rushmere Street	390060516
sufgppdm	Rushmere St Andrew, opp Sports Club	Rushmere Street	390060513
sufgppgd	Rushmere St Andrew, adj The Falcon	Playford Road	390060518
sufgppwj	Playford, adj Brook Lane	Butts Road	390060528
sufgppwjg	Boot Street, adj Grundsburgh Road	Boot Street	390060526
sufgppja	Great Bealings, adj Post Office	Lower Street	390060524
sufgppwt	Little Bealings, opp Admirals Head	The Street	390060522
sufgppgp	Little Bealings, adj Beacon Hill Crossroads		390060521
sufgtgmd	Martlesham, opp Police Headquarters	Main Road	390060672
sufgppwt	Martlesham Heath, o/s Tesco	Internal Road	390060550
sufgtadp	Martlesham, o/s Crown Point	Felixstowe Road	390060556
sufgpjwd	Waldringfield, opp Primary School	Cliff Road	390060399
sufgpjwp	Newbourne, opp Fox	The Street	390060403
sufjmgmg	Newbourne, adj Hall	Mill Road	390061033
sufgpmag	Newbourne, opp Jacksons Road	Watermill Road	390060406
sufgpmaj	Newbourne, opp Chapel Road	Kirton Road	390060407
sufjgwm	Kirton, adj Park Lane	Bucklesham Road	390060884
sufjppj	Kirton, adj Rectory Lane	Falkenham Road	390061068
sufgpmdw	Kirton, opp Croxton Close	Falkenham Road	390060418
sufjppmd	Falkenham, opp Back Road	Falkenham Road	390061069
sufgpmaw	Bucklesham, School (W-bound)	A1094	390060411
sufgppmap	Bucklesham, adj Shannon	Bucklesham Road	390060409
sufgtadt	Martlesham, adj Water Bridge		390060557
sufgtaga	Martlesham, o/s Nursery	Top Street	390060559
sufgtdmj	Woodbridge, Duke of York (E-bound)	Ipswich Road	390060625
sufgtdjp	Woodbridge, o/s Ipswich Road	Ipswich Road	390060619
sufgtdjd	Woodbridge, adj Notcutts	Ipswich Road	390060616
sufgtdgw	Woodbridge, opp Deben Pool	Station Road	390060614
-	Woodbridge Rail Station		
sufgtdat	Woodbridge, Turban Centre (N-bound)	Hamblin Road	390060606
sufgtdgd	Woodbridge, opp Council Offices	Melton Hill	390060609
sufgtdgm	Woodbridge, opp Jenners Close	Melton Road	390060611
sufgtdgj	Woodbridge, adj Jenners Close	Melton Road	390060610
sufgtdgt	Melton, opp Coach And Horses	Melton Road	390060613
sufjtajp	Woodbridge, opp The Grove	Pytchers Road	390061131
sufgtdgd	Woodbridge, opp Melton Grange	Pytches Road	390060658
sufgtdgj	Woodbridge, adj Warwick Avenue	Bredfield Road	390060659
sufgtdgt	Woodbridge, opp Bury Hill	Bredfield Road	390060662
sufgtagp	Woodbridge, o/s Farlingaye School	On Site	390060563
sufjtaj	Melton, adj Hall Farm Road	Woods Lane	390061132
sufgtawt	Melton, opp Chapel	The Street	390060600
sufgtdad	Melton, adj St Andrews Place	Station Road	390060601
sufgtatw	Melton, opp Railway Station	A1152	390060593
sufgtapt	Sutton Hoo, opp Entrance	Woodbridge Road	390060585
sufgtamj	Sutton Heath Estate, Turning Point		390060576
sufjppmd	Hollesley, adj Picnic Site	Woodbridge Road	390061079
sufjppmt	Hollesley, Duck Corner		390061090
sufgppmp	Hollesley, opp Prison	College Road	390060332
sufgppwdg	Hollesley, opp Oak Hill	College Road	390060511
sufjppd	Hollesley, Water Tower (W-bound)		390061063
sufgppwat	Boyton, adj Church	Dock Farm Road	390060508
sufgppwap	Boyton, opp Old Bell	Dock Farm Road	390060507
sufgppwag	Capel St Andrew, opp Village Notice Board	Unclassified	390060504
sufgppwtp	Butley Abbey, adj Abbey Corner	Church Road	390060501
sufjgwtm	Butley, adj Oyster	Church Road	390060907
sufgpptd	Butley, opp Orford Road	The Street	390060490
sufgpptm	Chillesford, opp Mill Lane	B1084	390060493
sufgpptpw	Sudbourne Park, opp Five Ways	Sudbourne Road	390060495
sufgpptwd	Orford, opp School	Front Street	390060497

Continued on next page.

Continued from previous page.

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NOTE: SMS codes are different in each direction. Make sure you choose the right direction from these lists.

SMS Code	Stop Name	Street	ATCO Code
sufgptwj	Orford, adj Market Hill	Market Hill	390060499
sufgptwa	Orford, o/s School	Mundays Lane	390060496
sufgptpt	Sudbourne Park, adj Five Ways	Sudbourne Road	390060494
sufgmtga	Sudbourne, opp School Lane	Snape Road	390060125

Monday to Friday (Except Bank Holidays)

Operator FNS
 Service Restrictions Sch
 Notes 1

Woodbridge, Turban Centre (N-bound)	dep 0800
Woodbridge, Council Offices (opp)	0801
Woodbridge, Warwick Avenue (adj)	0803
Melton, Chapel (opp)	0808
Ufford, Crown (opp)	0812
Pettistree, Three Tuns (adj)	0816
Wickham Market, Market Square (adj)	0818
Hacheston, Village Hall (N-bound)	0827
Parham, Marietta (opp)	0830
Framlingham, White Horse (o/s)	0837
Framlingham, Pembroke Road (adj)	0838
Framlingham, Thomas Mills School (o/s)	0840

NOTES

Sch School Days Only

1 Sponsored by Suffolk County Council

OPERATORS

FNS First in Norfolk & Suffolk 08456 020 121

Saturday	Sunday
no service	no service
Spring Bank Holiday	Summer Bank Holiday
no service	no service

Suffolk 01/09/2013

Monday to Friday (Except Bank Holidays)

Operator FNS
 Service Restrictions Sch
 Notes 1

Framlingham, Thomas Mills School (o/s)	1556
Framlingham, Pembroke Road (opp)	1557
Framlingham, Shelter (adj)	1558
Parham, Marietta (adj)	1605
Hacheston, Phoenix House (adj)	1608
Hacheston, Village Hall (S-bound)	1609
Wickham Market, Market Square (opp)	1616
Pettistree, Three Tuns (opp)	1617
Ufford, Crown (adj)	1621
Melton, Chapel (adj)	1626
Woodbridge, Warwick Avenue (opp)	1630
Woodbridge, Council Offices (adj)	1633
Woodbridge, Turban Centre (S-bound)	arr 1635
Woodbridge, Turban Centre (S-bound)	dep 1636
Woodbridge, Pembroke Avenue (adj)	1641
Martlesham Heath, Tesco (o/s)	1650

NOTES

Sch School Days Only

1 Sponsored by Suffolk County Council

OPERATORS

FNS First in Norfolk & Suffolk 08456 020 121

	Saturday	Sunday
	no service	no service
	Spring Bank Holiday	Summer Bank Holiday
	no service	no service



Appendix C

Rail Timetable Information

Train timetable









Valid from 17 May 2015

Lowestoft and Felixstowe to Ipswich

Generic notes and symbols

Bold Times in bold are direct services operated by Abellio Greater Anglia
Italic Times in italics are connecting train services with one change of train.
Other connections may be available with further changes

0640 For the comfort and safety of all passengers, only folded cycles can be accommodated during busy times. Trains that these conditions apply to are highlighted throughout this timetable

 First Class accommodation available
 Seat reservations possible
 PlusBus operates from this station
 Bus link
 Connections with Ferry services
 Airport interchange
 Interchange with London Underground
 Trolley service

a Arrival time
d Departure time
x Stops on request

FO Fridays only
FX Mondays to Thursdays only
SO Saturdays only

All services are operated by Abellio Greater Anglia unless otherwise shown below:

EM Operated by East Midlands Trains
GN Operated by Great Northern
XC Operated by CrossCountry

Table 10: EM, GN and XC trains are included to show the full service available between Stansted Airport, Cambridge, Ely and Peterborough / Norwich. These times are correct at time of going to press but Abellio Greater Anglia cannot be held responsible for them

Notes and symbols

6 Lowestoft and Felixstowe to Ipswich

- b Thursdays and Fridays connection arrives 6 minutes earlier
 - c Fridays and Saturdays connection arrives 4 minutes earlier
 - e 17 May to 27 September connection arrives 14 minutes earlier
 - f Connection runs 17 May to 27 September
 - g Change at Ipswich
- A Service runs 17 May to 6 September



Lowestoft and Felixstowe to Ipswich

Mondays to Fridays

		□	□	□	□	□	□	□	□	□	□	□	
Norwich	🚋 d			0536	0627		0755	0855					
Lowestoft	🚋 d	0525	0614	0641	0727		0907	1007					
Oulton Broad South	d	0531	0620	0647	0733		0913	1013					
Beccles	a	0540	0629	0656	0742		0922	1022					
Beccles	d	0541	0630	0657	0743		0925	1025					
Brampton	d	0549x	0638x	0705x	0751x		0933x	1033x					
Southwold Kings Head	🚋 d				0725		0900	1000					
Halesworth	d	0556	0645	0712	0758		0941	1041					
Darsham	d	0605	0654	0721	0807		0949	1049					
Saxmundham	a	0613	0703	0729	0815		0957	1057					
Saxmundham	d	0613	0703	0729	0817		0957	1057					
Wickham Market	d	0623	0713	0739	0827		1007	1107					
Melton	d	0630	0720	0746	0834		1013	1113					
Woodbridge	d	0635	0725	0751	0839		1018	1118					
Felixstowe	d	0534	0636		0747	0854	0928	1028					
Trimley	d	0537	0639		0750	0857	0931	1031					
Derby Road	d	0547	0649		0800	0909	0941	1041					
Westerfield	d	0552	0654	0735	0801	0805	0914	0946	1046				
Ipswich	🚋 a	0601	0653	0702	0744	0809	0814	0857	0924	0954	1036	1054	1136
Harwich Int.	🚋 a	0727											
London Liverpool St	🚋 a	0727	0824	0904		0924	1019	1044	1119	1155	1219	1255	

		□	□	□	□	□	□	□	□	□	□	□	
Norwich	🚋 d	1005	1058		1205	1258	1405	1455					
Lowestoft	🚋 d	1107	1207		1307	1407	1507	1607					
Oulton Broad South	d	1113	1213		1313	1413	1513	1613					
Beccles	a	1122	1222		1322	1422	1522	1622					
Beccles	d	1125	1225		1325	1425	1525	1625					
Brampton	d	1133x	1233x		1333x	1433x	1533x	1633x					
Southwold Kings Head	🚋 d	1100	1200		1300	1400	1500	1600					
Halesworth	d	1141	1241		1341	1441	1541	1641					
Darsham	d	1149	1249		1349	1449	1549	1649					
Saxmundham	a	1157	1257		1357	1457	1557	1701					
Saxmundham	d	1157	1257		1357	1457	1557	1707					
Wickham Market	d	1207	1307		1407	1507	1607	1717					
Melton	d	1213	1313		1413	1513	1613	1723					
Woodbridge	d	1218	1318		1418	1518	1618	1728					
Felixstowe	d	1128	1228	1328	1428	1528	1628						
Trimley	d	1131	1231	1331	1431	1531	1631						
Derby Road	d	1141	1241	1341	1441	1541	1641						
Westerfield	d	1146	1246	1346	1446	1546	1646						
Ipswich	🚋 a	1154	1236	1254	1336	1354	1436	1454	1536	1554	1636	1654	1746
Harwich Int.	🚋 a												
London Liverpool St	🚋 a	1319	1355	1419	1455	1519	1555	1617	1655	1719	1758	1819	

		□	□	□	□	□	□	□	□	□	□	□
Norwich	🚋 d	1550	1658		1750	1900	2005					
Lowestoft	🚋 d	1702	1807		1907	2007	2107					
Oulton Broad South	d	1708	1813		1913	2013	2113					
Beccles	a	1717	1822		1922	2022	2122					
Beccles	d	1725	1825		1925	2025	2125					
Brampton	d	1733x	1833x		1933x	2033x	2133x					
Southwold Kings Head	🚋 d	1700	1800									
Halesworth	d	1741	1841		1941	2041	2141					
Darsham	d	1749	1849		1949	2049	2149					
Saxmundham	a	1757	1857		1957	2057	2157					
Saxmundham	d	1757	1857		1957	2057	2157					
Wickham Market	d	1807	1907		2007	2107	2207					
Melton	d	1813	1913		2013	2113	2213					
Woodbridge	d	1818	1918		2018	2118	2218					
Felixstowe	d	1728	1828	1928	2028	2128	2301					
Trimley	d	1731	1831	1931	2031	2131	2304					
Derby Road	d	1741	1841	1941	2041	2141	2314					
Westerfield	d	1746	1846	1946	2046	2146	2229	2319				
Ipswich	🚋 a	1754	1836	1854	1936	1954	2037	2054	2136	2154	2236	2327
Harwich Int.	🚋 a						2129					
London Liverpool St	🚋 a	1917	1955	2020	2055	2119	2155	2219	2255	2351b	0006c	

Lowestoft and Felixstowe to Ipswich



Saturdays

		□	□	□	□	□	□	□	□	□	□	□	
Norwich	🚋 d			0540	0650	0750	0855	1005					
Lowestoft	🚋 d	0607	0707	0807	0907	1007	1107						
Oulton Broad South	d	0613	0713	0813	0913	1013	1113						
Beccles	a	0622	0722	0822	0922	1022	1122						
Beccles	d	0625	0725	0825	0925	1025	1125						
Brampton	d	0633x	0733x	0833x	0933x	1033x	1133x						
Southwold Kings Head	🚋 d					0900	1000	1100					
Halesworth	d	0641	0741	0841	0941	1041	1141						
Darsham	d	0649	0749	0849	0949	1049	1149						
Saxmundham	a	0657	0757	0857	0957	1057	1157						
Saxmundham	d	0657	0757	0857	0957	1057	1157						
Wickham Market	d	0707	0807	0907	1007	1107	1207						
Melton	d	0713	0813	0913	1013	1113	1213						
Woodbridge	d	0718	0818	0918	1018	1118	1218						
Felixstowe	d	0628	0728	0828	0928	1028	1128						
Trimley	d	0631	0731	0831	0931	1031	1131						
Derby Road	d	0641	0741	0841	0941	1041	1141						
Westerfield	d	0646	0746	0846	0946	1046	1146						
Ipswich	🚋 a	0654	0736	0754	0836	0854	0936	0954	1036	1054	1136	1154	1236
Harwich Int.	🚋 a		0727										
London Liverpool St	🚋 a	0819	0855	0919	0955	1019	1055	1119	1155	1219	1255	1319	1355

		□	□	□	□	□	□	□	□	□	□	□	
Norwich	🚋 d			1058	1205	1258	1405	1458	1550				
Lowestoft	🚋 d	1207	1307	1407	1507	1607	1707						
Oulton Broad South	d	1213	1313	1413	1513	1613	1713						
Beccles	a	1222	1322	1422	1522	1622	1722						
Beccles	d	1225	1325	1425	1525	1625	1725						
Brampton	d	1233x	1333x	1433x	1533x	1633x	1733x						
Southwold Kings Head	🚋 d			1200	1300	1400	1500	1600	1700				
Halesworth	d	1241	1341	1441	1541	1641	1741						
Darsham	d	1249	1349	1449	1549	1649	1749						
Saxmundham	a	1257	1357	1457	1557	1657	1757						
Saxmundham	d	1257	1357	1457	1557	1657	1757						
Wickham Market	d	1307	1407	1507	1607	1707	1807						
Melton	d	1313	1413	1513	1613	1713	1813						
Woodbridge	d	1318	1418	1518	1618	1718	1818						
Felixstowe	d	1228	1328	1428	1528	1628	1728						
Trimley	d	1231	1331	1431	1531	1631	1731						
Derby Road	d	1241	1341	1441	1541	1641	1741						
Westerfield	d	1246	1346	1446	1546	1646	1746						
Ipswich	🚋 a	1254	1336	1354	1436	1454	1536	1554	1636	1654	1736	1754	1836
Harwich Int.	🚋 a												
London Liverpool St	🚋 a	1419	1455	1519	1555	1619	1655	1719	1755	1819	1855	1919	1955

		□	□	□	□	□	□	□	□	□	□	□
Norwich	🚋 d			1658	1750	1905	2005					
Lowestoft	🚋 d	1807	1907	2007	2107							
Oulton Broad South	d	1813	1913	2013	2113							
Beccles	a	1822	1922	2022	2122							
Beccles	d	1825	1925	2025	2125							
Brampton	d	1833x	1933x	2033x	2133x							
Southwold Kings Head	🚋 d			1800								
Halesworth	d	1841	1941	2041	2141							
Darsham	d	1849	1949	2049	2149							
Saxmundham	a	1857	1957	2057	2157							
Saxmundham	d	1857	1957	2057	2157							
Wickham Market	d	1907	2007	2107	2207							
Melton	d	1913	2013	2113	2213							
Woodbridge	d	1918	2018	2118	2218							
Felixstowe	d	1828	1928	2028	2128	2258						
Trimley	d	1831	1931	2031	2131	2301						
Derby Road	d	1841	1941	2041	2141	2311						
Westerfield	d	1846	1946	2046	2146	2229	2316					
Ipswich	🚋 a	1854	1936	1954	2036	2054	2136	2154	2236	2324		
Harwich Int.	🚋 a					2129						
London Liverpool St	🚋 a	2019	2055	2117	2155	2217	2301	2351	0010			



Lowestoft and Felixstowe to Ipswich

Sundays

		A											
		□	□					□	□				
Norwich	🚆 d		0858	1058				1258	1458				
Lowestoft	🚆 d	0805	1005	1205				1405	1605				
Oulton Broad South	d	0811	1011	1211				1411	1611				
Beccles	a	0820	1020	1220				1420	1620				
Beccles	d	0821	1021	1221				1421	1621				
Brampton	d	0829x	1029x	1229x				1429x	1629x				
Southwold Kings Head	🚆 d												
Halesworth	d	0836	1036	1236				1436	1636				
Darsham	d	0844	1044	1244				1444	1644				
Saxmundham	a	0852	1052	1252				1452	1652				
Saxmundham	d	0853	1053	1253				1453	1653				
Wickham Market	d	0902	1102	1302				1502	1702				
Melton	d	0909	1109	1309				1509	1709				
Woodbridge	d	0914	1114	1314				1514	1714				
Felixstowe	d	1025	1125	1225	1325		1425	1525	1625				
Trimley	d	1028	1128	1228	1328		1428	1528	1628				
Derby Road	d	1038	1138	1238	1338		1438	1538	1638				
Westerfield	d	0924	1043	1124	1143	1243	1324	1343	1443	1524	1543	1643	1724
Ipswich	🚆 a	0932	1050	1132	1150	1250	1332	1350	1450	1532	1550	1650	1732
Harwich Int.	🚆 a												
London Liverpool St	🚆 a	1103	1244	1303	1344	1444	1503	1544	1644	1703	1744e	1830	1903

		□											
Norwich	🚆 d	1605f	1658	1858									
Lowestoft	🚆 d	1705	1805	2005									
Oulton Broad South	d	1711	1811	2011									
Beccles	a	1720	1820	2020									
Beccles	d	1721	1821	2021									
Brampton	d	1729x	1829x	2029x									
Southwold Kings Head	🚆 d												
Halesworth	d	1736	1836	2036									
Darsham	d	1744	1844	2044									
Saxmundham	a	1752	1852	2052									
Saxmundham	d	1753	1853	2053									
Wickham Market	d	1802	1902	2102									
Melton	d	1809	1909	2109									
Woodbridge	d	1814	1914	2114									
Felixstowe	d	1725	1825	1925	2025								
Trimley	d	1728	1828	1928	2028								
Derby Road	d	1738	1838	1938	2038								
Westerfield	d	1743	1824	1843	1924	1943	2043	2124					
Ipswich	🚆 a	1750	1832	1850	1932	1950	2050	2132					
Harwich Int.	🚆 a			2105									
London Liverpool St	🚆 a	1944	2003	2044	2103	2144	2240	2303					

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Ipswich to Felixstowe and Lowestoft



Mondays to Fridays

		□										
London Liverpool St		0600	0700	0730	0755	0830	0900	0930				
Harwich Int.		0750										
Ipswich	d	0504	0604	0620	0714	0735	0825	0857	0917	0958	1017	1058
Westerfield	d	0510	0610	0626	0720	0741	0831	0903		1004		1104
Derby Road	d	0515	0615		0725		0836	0908		1009		1109
Trimley	d	0524	0624		0734		0845	0917		1018		1118
Felixstowe	a	0530	0630		0740		0851	0923		1024		1124
Woodbridge	d		0637			0753			0932			1032
Melton	d		0641			0757			0936			1036
Wickham Market	d		0648			0804			0943			1043
Saxmundham	a		0658			0814			0953			1053
Saxmundham	d				0744	0815			0954			1054
Darsham	d				0751	0821			1000			1100
Halesworth	d				0800	0831			1010			1110
Southwold Kings Head	a					0945			1045			1145
Brampton	d				0807x	0837x			1016x			1116x
Beccles	a				0815	0846			1025			1125
Beccles	d				0816	0846			1025			1125
Oulton Broad South	d				0825	0856			1035			1135
Lowestoft	a				0833	0906			1043			1143
Norwich	a				0935	1033			1133			1233

		□				□				□			
London Liverpool St		1000	1030	1100	1130	1200	1230	1300	1330	1400	1430	1530	
Harwich Int.													
Ipswich	d	1117	1158	1217	1258	1317	1358	1417	1458	1517	1554	1658	
Westerfield	d		1204		1304		1404		1504		1600	1604 1704	
Derby Road	d		1209		1309		1409		1509			1609 1709	
Trimley	d		1218		1318		1418		1518			1618 1718	
Felixstowe	a		1224		1324		1424		1524			1624 1724	
Woodbridge	d	1132		1232		1332		1432		1532		1618	
Melton	d	1136		1236		1336		1436		1536		1622	
Wickham Market	d	1143		1243		1343		1443		1543		1629	
Saxmundham	a	1153		1253		1353		1453		1553		1639	
Saxmundham	d	1154		1254		1354		1454		1554		1640	
Darsham	d	1200		1300		1400		1500		1600		1647	
Halesworth	d	1210		1310		1410		1510		1610		1656	
Southwold Kings Head	a	1245		1345		1445		1545		1658		1745	
Brampton	d	1216x		1316x		1416x		1516x		1616x		1703x	
Beccles	a	1225		1325		1425		1525		1625		1711	
Beccles	d	1225		1325		1425		1525		1625		1719	
Oulton Broad South	d	1235		1335		1435		1535		1635		1728	
Lowestoft	a	1243		1343		1443		1546		1643		1736	
Norwich	a	1333		1433		1533				1733		1833	

		□				□				□		□
London Liverpool St		1600	1632	1700	1730	1750	1830	1900	1930	2000	2100g	
Harwich Int.												
Ipswich	d	1717	1758	1813	1858	1917	1958	2017	2058	2117	2217	2228
Westerfield	d		1804	1819	1904		2004		2104			2234
Derby Road	d		1809		1909		2009		2109			2239
Trimley	d		1818		1918		2018		2118			2248
Felixstowe	a		1824		1924		2024		2124			2257
Woodbridge	d	1732		1830		1932		2032		2132		2232
Melton	d	1736		1834		1936		2036		2136		2236
Wickham Market	d	1743		1840		1943		2043		2143		2243
Saxmundham	a	1753		1851		1953		2053		2153		2253
Saxmundham	d	1754		1851		1954		2054		2154		2254
Darsham	d	1800		1858		2000		2100		2200		2300
Halesworth	d	1810		1907		2010		2110		2210		2310
Southwold Kings Head	a	1845										
Brampton	d	1816x		1914x		2016x		2116x		2216x		2316x
Beccles	a	1825		1925		2025		2125		2225		2325
Beccles	d	1825		1925		2025		2125		2225		2325
Oulton Broad South	d	1835		1935		2035		2135		2235		2335
Lowestoft	a	1843		1943		2043		2143		2243		2343
Norwich	a	1933		2045		2133		2235		2333		



Ipswich to Felixstowe and Lowestoft

Saturdays

						0534	0630	0700	0730	0800	0830	0900	0930	1000	1030
London Liverpool St	⊕ d														
Harwich Int.	⊕ d								0750						
Ipswich	⊕ d	0558	0658	0717	0758	0817	0858	0917	0958	1017	1058	1117	1158		
Westerfield	d	0604	0704		0804		0904		1004		1104		1204		
Derby Road	d	0609	0709		0809		0909		1009		1109		1209		
Trimley	d	0618	0718		0818		0918		1018		1118		1218		
Felixstowe	a	0624	0724		0824		0924		1024		1124		1224		
Woodbridge	d		0732		0832		0932		1032		1132				
Melton	d		0736		0836		0936		1036		1136				
Wickham Market	d		0743		0843		0943		1043		1143				
Saxmundham	a		0753		0853		0953		1053		1153				
Saxmundham	d		0754		0854		0954		1054		1154				
Darsham	d		0800		0900		1000		1100		1200				
Halesworth	d		0810		0910		1010		1110		1210				
Southwold Kings Head	a		0845		0945		1045		1145		1245				
Brampton	d		0816x		0916x		1016x		1116x		1216x				
Beccles	a		0825		0925		1025		1125		1225				
Beccles	d		0825		0925		1025		1125		1225				
Oulton Broad South	d		0835		0935		1035		1135		1235				
Lowestoft	⊕ a		0843		0943		1043		1143		1243				
Norwich	⊕ a		0933		1033		1133		1233		1333				

London Liverpool St	⊕ d	1100	1130	1200	1230	1300	1330	1400	1430	1500	1530	1600	1630		
Harwich Int.	⊕ d														
Ipswich	⊕ d	1217	1258	1317	1358	1417	1458	1517	1558	1617	1658	1717	1758		
Westerfield	d		1304		1404		1504		1604		1704		1804		
Derby Road	d		1309		1409		1509		1609		1709		1809		
Trimley	d		1318		1418		1518		1618		1718		1818		
Felixstowe	a		1324		1424		1524		1624		1724		1824		
Woodbridge	d	1232		1332		1432		1532		1632		1732			
Melton	d	1236		1336		1436		1536		1636		1736			
Wickham Market	d	1243		1343		1443		1543		1643		1743			
Saxmundham	a	1253		1353		1453		1553		1653		1753			
Saxmundham	d	1254		1354		1454		1554		1654		1754			
Darsham	d	1300		1400		1500		1600		1700		1800			
Halesworth	d	1310		1410		1510		1610		1710		1810			
Southwold Kings Head	a	1345		1445		1545		1645		1745		1845			
Brampton	d	1316x		1416x		1516x		1616x		1716x		1816x			
Beccles	a	1325		1425		1525		1625		1725		1825			
Beccles	d	1325		1425		1525		1625		1725		1825			
Oulton Broad South	d	1335		1435		1535		1635		1741		1835			
Lowestoft	⊕ a	1343		1443		1543		1643		1751		1843			
Norwich	⊕ a	1433		1533		1633		1733				1933			

London Liverpool St	⊕ d	1700	1730	1800	1830	1900	1930	2000	2100g	
Harwich Int.	⊕ d								2138	
Ipswich	⊕ d	1817	1858	1917	1958	2017	2058	2117	2217	2228
Westerfield	d		1904		2004		2104		2204	2234
Derby Road	d		1909		2009		2109		2209	2239
Trimley	d		1918		2018		2118		2218	2248
Felixstowe	a		1924		2024		2124		2224	2253
Woodbridge	d	1832		1932		2032		2132	2232	
Melton	d	1836		1936		2036		2136	2236	
Wickham Market	d	1843		1943		2043		2143	2243	
Saxmundham	a	1853		1953		2053		2153	2253	
Saxmundham	d	1854		1954		2054		2154	2254	
Darsham	d	1900		2000		2100		2200	2300	
Halesworth	d	1910		2010		2110		2210	2310	
Southwold Kings Head	a									
Brampton	d	1916x		2016x		2116x		2216x	2316x	
Beccles	a	1925		2025		2125		2225	2325	
Beccles	d	1925		2025		2125		2225	2325	
Oulton Broad South	d	1935		2035		2135		2235	2335	
Lowestoft	⊕ a	1943		2043		2143		2243	2343	
Norwich	⊕ a	2040		2133		2235		2333		

Ipswich to Felixstowe and Lowestoft



Sundays

A													
		□		□		□		□		□			
London Liverpool St	⊕ d	0930 1030		1130 1230		1330 1430		1530					
Harwich Int.	⊕ d	0830	0830										
Ipswich	⊕ d	0955	1002	1055	1155	1202	1255	1355	1402	1455	1555	1602	1655
Westerfield	d	1001	1008	1101	1201	1208	1301	1401	1408	1501	1601	1608	1701
Derby Road	d	1006		1106	1206		1306	1406		1506	1606		1706
Trimley	d	1015		1115	1215		1315	1415		1515	1615		1715
Felixstowe	a	1021		1121	1221		1321	1421		1521	1621		1721
Woodbridge	d		1019			1219			1419			1619	
Melton	d		1023			1223			1423			1623	
Wickham Market	d		1029			1229			1429			1629	
Saxmundham	a		1040			1240			1440			1640	
Saxmundham	d		1040			1240			1440			1640	
Darsham	d		1047			1247			1447			1647	
Halesworth	d		1056			1256			1456			1656	
Southwold Kings Head	⊕ a												
Brampton	d		1103x			1303x			1503x			1703x	
Beccles	a		1111			1311			1511			1711	
Beccles	d		1112			1312			1512			1721	
Oulton Broad South	d		1121			1321			1521			1730	
Lowestoft	⊕ a		1130			1330			1530			1739	
Norwich	⊕ a		1231			1431			1631			1831	

□												
		□		□		□		□		□		
London Liverpool St	⊕ d	1630 1730		1830 2030		2110						
Harwich Int.	⊕ d											
Ipswich	⊕ d	1755	1802	1855	1907	1955	2002	2202				
Westerfield	d	1801	1808	1901	1913	2001	2008	2208				
Derby Road	d	1806		1906		2006						
Trimley	d	1815		1915		2015						
Felixstowe	a	1821		1921		2021						
Woodbridge	d		1819		1924		2019	2219				
Melton	d		1823		1928		2023	2223				
Wickham Market	d		1829		1934		2029	2229				
Saxmundham	a		1840		1945		2040	2240				
Saxmundham	d		1840		1945		2040	2240				
Darsham	d		1847		1952		2047	2247				
Halesworth	d		1856		2001		2056	2256				
Southwold Kings Head	⊕ a											
Brampton	d		1903x		2008x		2103x	2303x				
Beccles	a		1911		2016		2111	2311				
Beccles	d		1912		2021		2112	2312				
Oulton Broad South	d		1921		2030		2121	2321				
Lowestoft	⊕ a		1930		2039		2130	2330				
Norwich	⊕ a		2031		2140f		2231	0013				

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Appendix D

Collision Data Report

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

G00030093 26/09/2010 Sunday Time 1120 Vehicles 2 Casualties 1 Slight
 Raining without high winds Road surface Wet/Damp Daylight: no street lighting
 Special Conditions None Road Type Single 2 lanes

VEH2 TRVG N.E. ON YARMOUTH RD IN DIRN OF UFFORD, FOLLOWED BY VEH1. VEH2 SLOWED DOWN AND STOPPED WAITING TO TURN RT ONTO THE ENTRANCE TO UFFORD PARK HOTEL. VEH1 FAILED TO STOP IN TIME, SKIDDED AND HIT THE REAR OF VEH2.

Occurred on B1438 YARMOUTH RD J/W ENTRANCE TO UFFORD PARK HOTEL

		Causation			
Factor:		Participant:		Confidence:	
1st:	Slippery road (due to weather)	Vehicle 1		Very Likely	
2nd:	Travelling too fast for conditions	Vehicle 1		Possible	
3rd:	Failed to judge other persons path or speed	Vehicle 1		Possible	
4th:	Distraction in vehicle	Vehicle 1		Possible	
5th:	Inexperienced or learner driver/rider	Vehicle 1		Very Likely	
6th:					

Vehicle Reference 1 Car

Skidded

Going ahead other

First point of impact Front

Age of Driver 17 Breath test Negative

Vehicle direction SW to NE

Journey Purpose: 6

Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Car

Waiting to turn right

No skidding, jack-knifing or overturning

First point of impact Back

Age of Driver 25 Breath test Negative

Vehicle direction SW to SE

Journey Purpose: 6

Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1

Age: 25

Female

Driver/rider

Severity: Slight

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

0138811 07/04/2011 Thursday Time 1900 Vehicles 2 Casualties 1 Slight
 Fine without high winds Road surface Dry Daylight: no street lighting
 Special Conditions None Road Type Single 2 lanes

V1 WAITING TO PULL OUT OF ST AUDREYS PARK RD ONTO YARMOUTH RD HAVING TURNED INTO THE JUNCTION TO TURN AROUND, HAS THEN PULLED OUT INTO THE PATH OF V2 TRAVELLING ALONG YARMOUTH RD. V1 DRIVER SUFFERED SLIGHT INJURY.

Occurred on B1438 YARMOUTH ROAD AT THE JUNCTION WITH ST AUDREY PARK ROAD, MELTON.

		Causation			
Factor:		Participant:		Confidence:	
1st:	Poor turn or manoeuvre	Vehicle 1		Very Likely	
2nd:	Failed to look properly	Vehicle 1		Very Likely	
3rd:	Fatigue	Vehicle 1			
4th:					
5th:					
6th:					
Vehicle Reference 1 Car		Turning right			
		No skidding, jack-knifing or overturning			
First point of impact	Offside	Age of Driver	58	Breath test	Negative
Vehicle direction	W to SE				
Journey Purpose: 6		Foreign registered vehicle: Not foreign registered vehicle			
Casualty Reference:	1	Age:	58	Female	Driver/rider
				Severity:	Slight
Vehicle Reference 2 Car		Going ahead other			
		No skidding, jack-knifing or overturning			
First point of impact	Front	Age of Driver	45	Breath test	Negative
Vehicle direction	S to N				
Journey Purpose: 6		Foreign registered vehicle: Not foreign registered vehicle			

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

173011 19/04/2011 Tuesday Time 1539 Vehicles 2 Casualties 1 Slight
 Fine without high winds Road surface Dry Daylight:street lights present
 Special Conditions Road works Road Type Single 2 lanes

VEH 1 WAS TRAVELLING ALONG SINGLE CARRIAGEWAY TOWARDS TRAFFIC LIGHTS IN REASONABLY HEAVY TRAFFIC. THE DRIVER OF VEH 1 WAS MOMENTARILY DITRACTED AND DID NOT SEE VEH 2 WHICH WAS PARKED ON THE NEARSIDE CARRIAGEWAY. VEH 1 STRUCK VEH 2 ON ITS NEAR O/SID E.

Occurred on APPROACHING TRAFFIC LIGHTS ON B1438, MELTON ROAD

		Causation			
Factor:		Participant:		Confidence:	
1st:	Failed to look properly	Vehicle 1		Very Likely	
2nd:	Distraction outside vehicle	Vehicle 1		Possible	
3rd:	Stationary or parked vehicle	Vehicle 2			
4th:					
5th:					
6th:					
Vehicle Reference 1 Car		Going ahead other			
		No skidding, jack-knifing or overturning			
First point of impact	Nearside	Age of Driver	48	Breath test	Negative
Vehicle direction	SW to NE				
Journey Purpose: 6		Foreign registered vehicle: Not foreign registered vehicle			
Casualty Reference:	1	Age:	9	Female	Passenger
				Severity:	Slight
Vehicle Reference 2 Car		Parked			
		No skidding, jack-knifing or overturning			
First point of impact	Offside	Age of Driver	60	Breath test	Not requested
Vehicle direction	S to N				
Journey Purpose: Commuting to/from work		Foreign registered vehicle: Not foreign registered vehicle			

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

0234311 14/06/2011 Tuesday Time 1437 Vehicles 2 Casualties 1 Slight
 Fine without high winds Road surface Dry Daylight: no street lighting
 Special Conditions None Road Type Single 2 lanes

V1 WAS AT A STANDSTILL WAITING TO TURN RIGHT INTO UFFORD PARK HOTEL, V1 THEN GOES TO TURN RIGHT PULLING AWAY INTO ONCOMING C/WAY COLLIDING WITH V2 HEAD ON.

Occurred on YARMOUTH ROAD OUTSIDE UFFORD PARK HOTEL, UFROD

		Causation	
Factor:		Participant:	Confidence:
1st:	Poor turn or manoevre	Vehicle 1	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 1	Possible
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car

Turning right
No skidding, jack-knifing or overturning

First point of impact Front

Age of Driver 29 Breath test Negative

Vehicle direction S to E

Journey Purpose: Journey as part of work

Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Motorcycle over 500cc

Going ahead other

Skidded

First point of impact Front

Age of Driver 65 Breath test Not requested

Vehicle direction N to S

Journey Purpose: 6

Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1

Age: 65 Male

Driver/rider

Severity: Slight

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

0038512 29/01/2012 Sunday Time 0050 Vehicles 1 Casualties 4 Serious
Fog or mist Road surface Frost/Ice Darkness: no street lighting
Special Conditions None Road Type Single 2 lanes

V1 HAS BEEN DRIVING ALONG YARMOUTH ROAD IN UFFORD TWDS MELTON DIRECTION. THE VEHICLE HAS THEN LOST CONTROL AND HAS MOUNTED THE N/S VERGE HITTING TREES. VEHICLE CONTAINED 5 MALES, MALE DRIVER SUFFERED A BROKEN ARM AND ANOTHER MALE SITTING IN O/S PASSENGER POSITION SUFFERED A SUSPECTED BROKEN COLLAR BONE. MALE DRIVER BREATH TESTED AND BLEW 54 AT ROADSIDE. MALE DRIVER DETAINED.

Occurred on YARMOUTH ROAD, UFFORD

		Causation	
Factor:	Participant:	Confidence:	
1st: Impaired by alcohol	Vehicle 1	Very Likely	
2nd:			
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car

Skidded

Going ahead other

First point of impact Front

Age of Driver 24 Breath test Positive

Vehicle direction N to S

Journey Purpose: 6

Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference:	Age:	Sex:	Role:	Severity:
1	24	Male	Driver/rider	Serious
2	26	Male	Passenger	Slight
3	25	Male	Passenger	Slight
4	27	Male	Passenger	Slight

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

0097112 11/03/2012 Sunday Time 1200 Vehicles 2 Casualties 1 Serious
 Fine without high winds Road surface Dry Daylight: no street lighting
 Special Conditions None Road Type Single 2 lanes

V2 TRAVELLING SOUTHERLY ALONG YARMOUTH RD HEADING TOWARDS WOODBRIDGE. V1 TRAVELLING IN OPPOSITE DIRECTION TURNS RIGHT INTO UFFORD PARK FOLLOWING ANOTHER VEH DOING SAME MANOUEVERE. V1 HAS NOT SEEN ONCOMING V2 AND V2 HAS BEEN UNABLE TO AVOID COLLISION AND HAS COME OFF MOTORCYCLE. V2 RIDER HAS SUFFERED CRACKED BONE IN HAND AS WELL AS BUMPS AND BRUISES.

Occurred on THE B1438 YARMOUTH RD AT THE J/W UFFORD PARK.

		Causation	
Factor:		Participant:	Confidence:
1st:	Failed to look properly	Vehicle 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car

Turning right
No skidding, jack-knifing or overturning

First point of impact Nearside
Vehicle direction S to E

Age of Driver 39 Breath test Negative

Journey Purpose: 6

Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Car

Going ahead other

Skidded

First point of impact Front
Vehicle direction N to S

Age of Driver 41 Breath test Negative

Journey Purpose: 6

Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 41 Male Driver/rider Severity: Serious

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

0178512 19/04/2012 Thursday Time 1829 Vehicles 1 Casualties 1 Serious
 Fine without high winds Road surface Dry Daylight: no street lighting
 Special Conditions None Road Type Single 2 lanes

SINGLE VEH RTC. V1 DRIVER HAS EXITED S/BOUND A12 AT THE UFFORD OFF SLIP WHICH IS LABELLED AS THE B1438. INITIAL ACCOUNT STATES THAT VEH HIT A KERB AND LOST CONTROL BUT SUBSEQUENT INTERVIEW SUGGESTS EXCESSIVE SPEED. V1 CROSSED THE ONCOMING LANE TO IMPACT WITH THE O/S EMBANKMENT. V1 DRIVER SUFFERED A BROKEN RIGHT HAND AND BACK PAIN.

Occurred on THE B1438 YARMOUTH RD ON SLIP ROAD LEADING FROM A12 IN UFFORD.

		Causation	
Factor:		Participant:	Confidence:
1st:	Poor turn or manoeuvre	Vehicle 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car Going ahead left bend
 Skidded
 First point of impact Nearside Age of Driver 80 Breath test Negative
 Vehicle direction N to S
 Journey Purpose: 6 Foreign registered vehicle: Not foreign registered vehicle
 Casualty Reference: 1 Age: 80 Female Driver/rider Severity: Serious

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

0266812 09/07/2012 Monday Time 1715 Vehicles 2 Casualties 1 Slight
 Fine without high winds Road surface Wet/Damp Daylight:street lights present
 Special Conditions None Road Type Single 2 lanes
 V1 O/TAKING P/CYCLIST, HAS SEEN ONCOMING VEHICLE (WITNESS) AND PULLED BACK SLIGHTLY LEFT AND SKIMMED FRONT WHEEL OF BIKE CAUSING BIKE TO GO OVER.

Occurred on B1438 YARMOUTH ROAD, MELTON. WEST OF ROSE COTTAGE

		Causation	
Factor:		Participant:	Confidence:
1st:	Passing too close to cyclist, horse rider or pedestrian	Vehicle 1	Very Likely
2nd:			
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car

Overtaking moving vehicle O/S
 No skidding, jack-knifing or overturning

First point of impact Nearside
 Vehicle direction NE to SW

Age of Driver 42 Breath test Negative

Journey Purpose: 6

Foreign registered vehicle: Not foreign registered vehicle

Vehicle Reference 2 Pedal Cycle

Going ahead other
 No skidding, jack-knifing or overturning

First point of impact Offside
 Vehicle direction NE to SW

Age of Driver 39 Breath test Not applicable

Journey Purpose: 6

Foreign registered vehicle: Not foreign registered vehicle

Casualty Reference: 1 Age: 39 Male Driver/rider Severity: Slight

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

SCEA8375414 03/09/2014 Wednesday Time 1600 Vehicles 2 Casualties 2 Slight
 Fine without high winds Road surface Dry Daylight
 Special Conditions None Road Type Single 2 lanes

V1 & V2 TRVG IN SAME DIRECTION V2 INDICATES TO TURN LEFT INTO A TIGHT DRIVEWAY IN DOING SO V2 HAS TO PULL TO THE RIGHT TO ENABLE ACCESS TO THE TIGHT DRIVEWAY. V1 HAS ASSUMED V2 IS TURNING RIGHT AND FAILS TO SEE INDICATION AND COLLIDES INTO THE SIDE OF V2

Occurred on THE STREET WOODBRIDGE

		Causation	
Factor:	Participant:	Confidence:	
1st: Failed to judge other persons path or speed	Vehicle 1	Very Likely	
2nd:			
3rd:			
4th:			
5th:			
6th:			

Vehicle Reference 1 Car
 First point of impact Front
 Vehicle direction SW to NE

Going ahead other
 No skidding, jack-knifing or overturning
 Age of Driver 43 Breath test Negative

Journey Purpose: Other/Not known

Casualty Reference: 1 Age: 43 Female Driver/rider Severity: Slight

Vehicle Reference 2 Car
 First point of impact Nearside
 Vehicle direction SW to NW

Turning left
 No skidding, jack-knifing or overturning
 Age of Driver 60 Breath test Negative

Journey Purpose: Other/Not known

Casualty Reference: 2 Age: 60 Male Driver/rider Severity: Slight

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

SCEA8712515 14/01/2015 Wednesday Time 1753 Vehicles 2 Casualties 3 Slight
 Fine without high winds Road surface Wet/Damp Darkness: no street lighting
 Special Conditions None Road Type Dual 2 lanes
 V1 TRVG ALONG B1438 PROCEEDED TO TURN RIGHT ACROSS PATH OF V2 WHO WAS TRVG IN OPPOSITE DIRECTION
 CAUSING COLLISION WITH V2 LEAVING C/WAY AND END UP ON THE GRASS VERGE

Occurred on YARMOUTH ROAD UFFORD

		Causation		Participant:		Confidence:	
Factor:							
1st:	Failed to look properly			Vehicle 1		Possible	
2nd:	Careless/Reckless/In a hurry			Vehicle 1		Possible	
3rd:							
4th:							
5th:							
6th:							
Vehicle Reference 1 Car		Turning right No skidding, jack-knifing or overturning					
First point of impact	Front	Age of Driver	45	Breath test	Negative		
Vehicle direction	SW to E						
Journey Purpose: 6							
Casualty Reference:	1	Age:	45	Female	Driver/rider	Severity:	Slight
Vehicle Reference 2 Car		Going ahead other No skidding, jack-knifing or overturning					
First point of impact	Front	Age of Driver	23	Breath test	Negative		
Vehicle direction	NE to SW						
Journey Purpose: 6							
Casualty Reference:	2	Age:	23	Male	Driver/rider	Severity:	Slight
Casualty Reference:	3	Age:	24	Male	Passenger	Severity:	Slight

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

Yarmouth Road, Melton

SCEA8742015 22/01/2015 Thursday Time 1715 Vehicles 1 Casualties 1 Slight
 Fine without high winds Road surface Wet/Damp Darkness: street lights present and lit
 Special Conditions None Road Type Single 2 lanes
 V1 DRIVING ALONG ROAD AND C1 HAS COME STRAIGHT OUT FROM NEARSIDE POSSIBLY WITHOUT LOOKING AS HIS FRIEND TOLD HIM THE ROAD WAS CLEAR C1 WAS A CHILD ON A SCOOTER

Occurred on C373 STATION ROAD MELTON

		Causation	Participant:	Confidence:
Factor:				
1st:	Failed to look properly		Casualty 1	Very Likely
2nd:	Failed to judge vehicles path or speed		Casualty 1	Very Likely
3rd:	Careless/Reckless/In a hurry		Casualty 1	
4th:				
5th:				
6th:				

Vehicle Reference 1 Car

Going ahead other
No skidding, jack-knifing or overturning

First point of impact Front

Age of Driver 63 Breath test Negative

Vehicle direction SE to NW

Journey Purpose: Other/Not known

Casualty Reference: 1 Age: 8 Male Pedestrian Severity: Slight
 Pedestrian Direction: N

Accidents between dates 01/05/2010 and 01/05/2015 (60) months

Selection:

Selected using Pre-defined Query : ** ACCIDENTS - ALL INJURIES **

Notes:

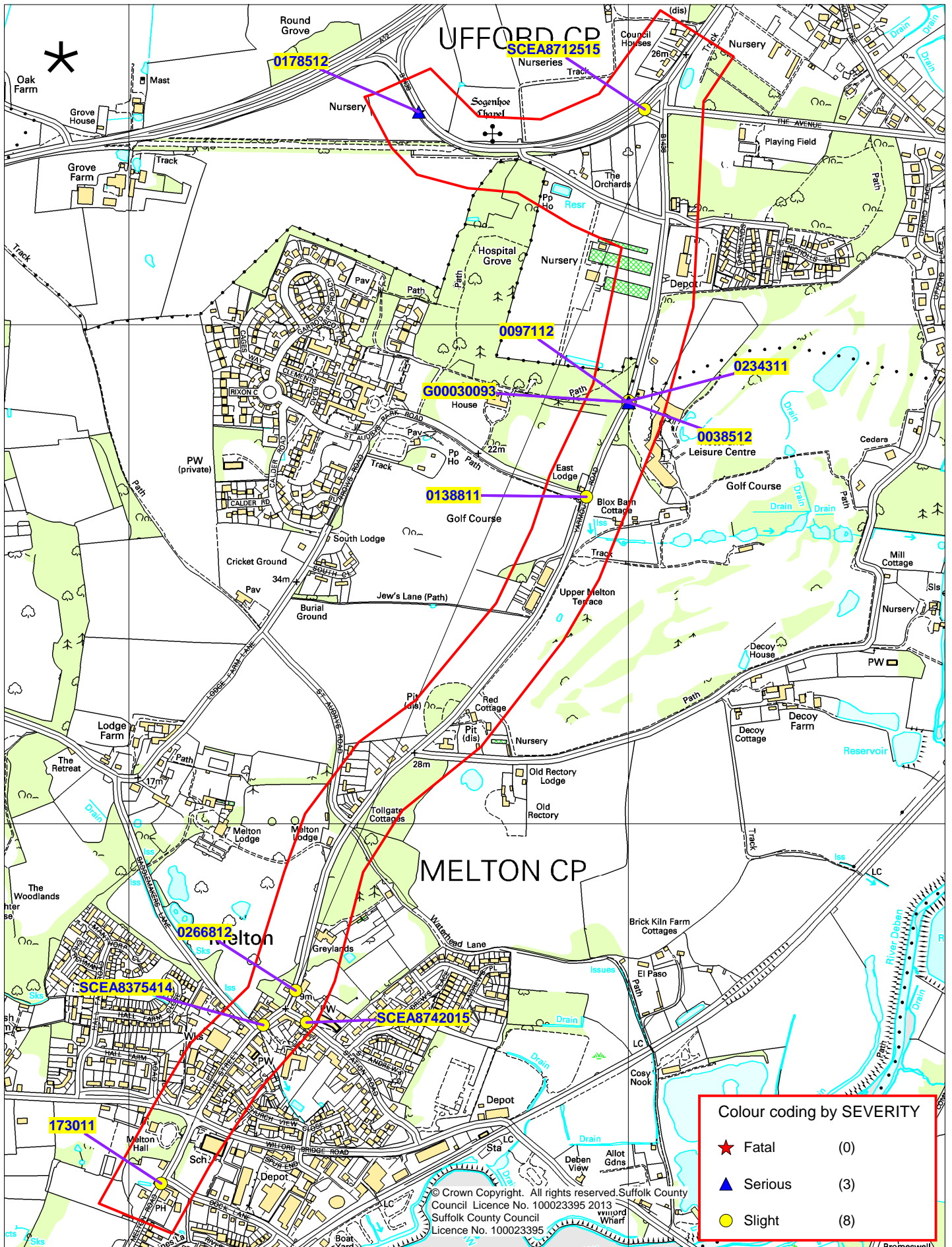
Yarmouth Road, Melton

Accidents involving:

	Fatal	Serious	Slight	Total
Motor vehicles only (excluding 2-wheels)	0	3	6	9
2-wheeled motor vehicles	0	0	1	1
Pedal cycles	0	0	1	1
Horses & other	0	0	0	0
Total	0	3	8	11

Casualties:

	Fatal	Serious	Slight	Total
Vehicle Driver	0	3	6	9
Passenger	0	0	5	5
Motorcyclist	0	0	1	1
Cyclist	0	0	1	1
Pedestrian	0	0	1	1
Other	0	0	0	0
Total	0	3	14	17



Colour coding by SEVERITY

- ★ Fatal (0)
- ▲ Serious (3)
- Slight (8)

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RDavies_Yarmouth Road Melton_010510-010515

Selected Range of Accidents between dates 01/05/2010 and 01/05/2015
Selected using Manual Selection

SCALE **1 : 10000**

DATE **24/08/2015**

DRAWING No.

DRAWN BY **SW**



Appendix E

Proposed Site Masterplan

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- HOUSING MIX**
- Open Market (66% of development)
 - 23 x 2 bed
 - 37 x 3 bed
 - 32 x 4 bed
 - Affordable (33% of development)
 - 12 x 1 bed
 - 22 x 2 bed
 - 12 x 3 bed
- TOTAL: 138 Units**

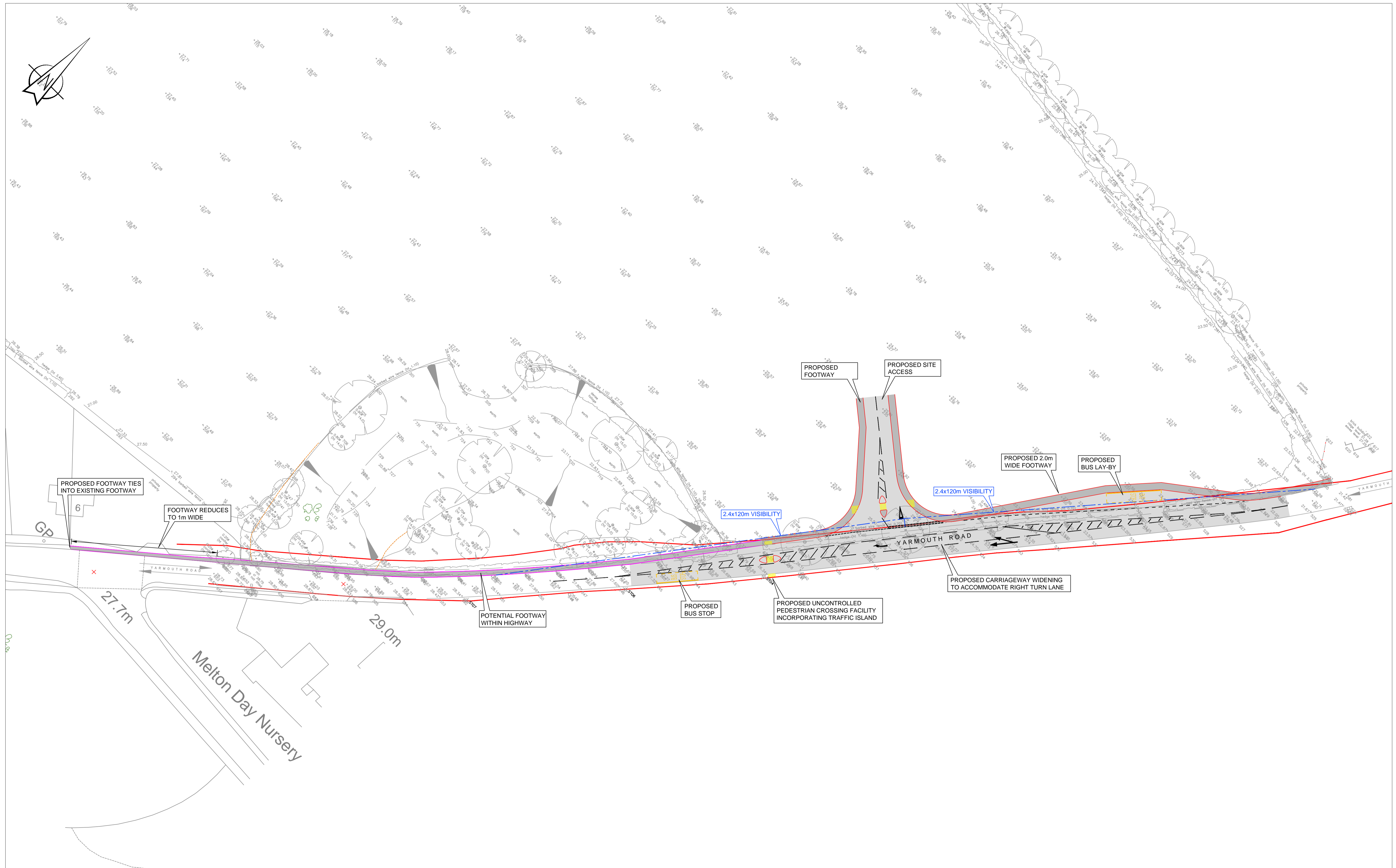
YARMOUTH ROAD, MELTON - ILLUSTRATIVE MASTERPLAN





Appendix F

Proposed Site Access



YARMOUTH ROAD, MELTON
PROPOSED RIGHT TURN LANE ACCESS
SCALE 1:500 AT A1

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Appendix G

Highway Boundary Information



Lucy Robinson, Director of Economy, Skills and Environment,
 Endeavour House, 8 Russell Road, Ipswich, Suffolk. IP1 2BX.

Scale 1:2000

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Yarmouth Road, Melton

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DATE



Lucy Robinson, Director of Economy, Skills and Environment,
 Endeavour House, 8 Russell Road, Ipswich, Suffolk. IP1 2BX.

Scale 1:2000

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Yarmouth Road, Melton

PRODUCED BY

CHECKED BY

DRAWING No.

DATE




Suffolk
County Council

Lucy Robinson, Director of Economy, Skills and Environment,
Endeavour House, 8 Russell Road, Ipswich, Suffolk. IP1 2BX.

Scale 1:2000

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Yarmouth Road, Melton

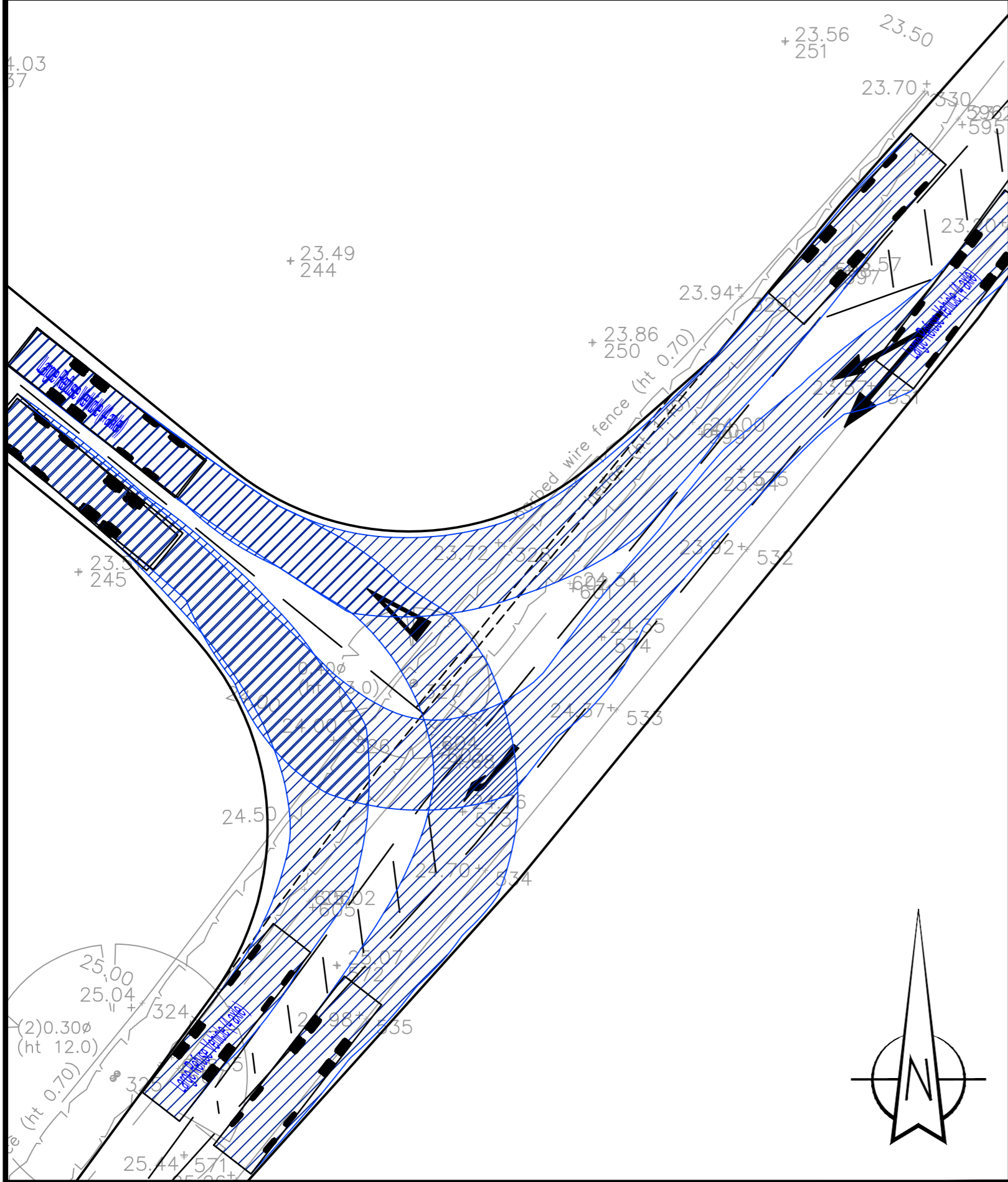
PRODUCED BY
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DRAWING No.
DATE



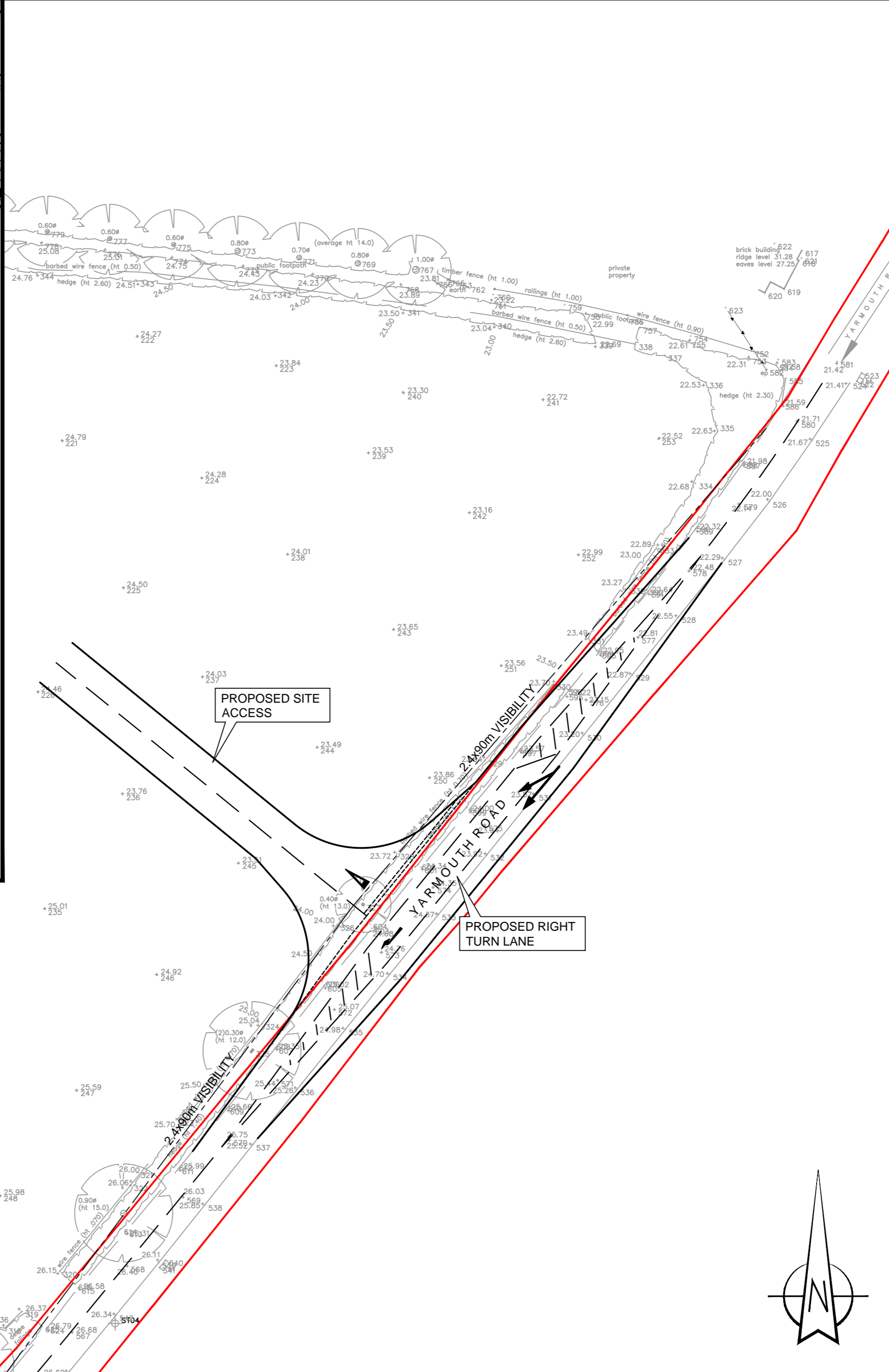
Appendix H

Swept Path Analysis

VEHICULAR SWEEP PATHS ANALYSIS (1:250)



GENERAL ARRANGEMENTS (1:500)



NOTES:

1. Do not scale from this drawing.
2. This drawing is for illustrative purposes only and not for construction.
3. This drawing is to be read and printed in colour.

VEHICLE DETAILS:

LARGE REFUSE VEHICLE (4 AXLE)

Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to Lock Time	6.00s
Wall to Wall Turning Radius	11.330m

KEY:

- EXISTING HIGHWAY BOUNDARY (INDICATIVE ONLY)

REV	DETAILS	DRAWN BY	CHECKED BY	DATE

CLIENT:
Christchurch Land and Estates Ltd

PROJECT:
Yarmouth Road, Melton

DRAWING TITLE:
Proposed Right Turn Lane Access

SCALES: **Var.** SHEET SIZE: **A2**

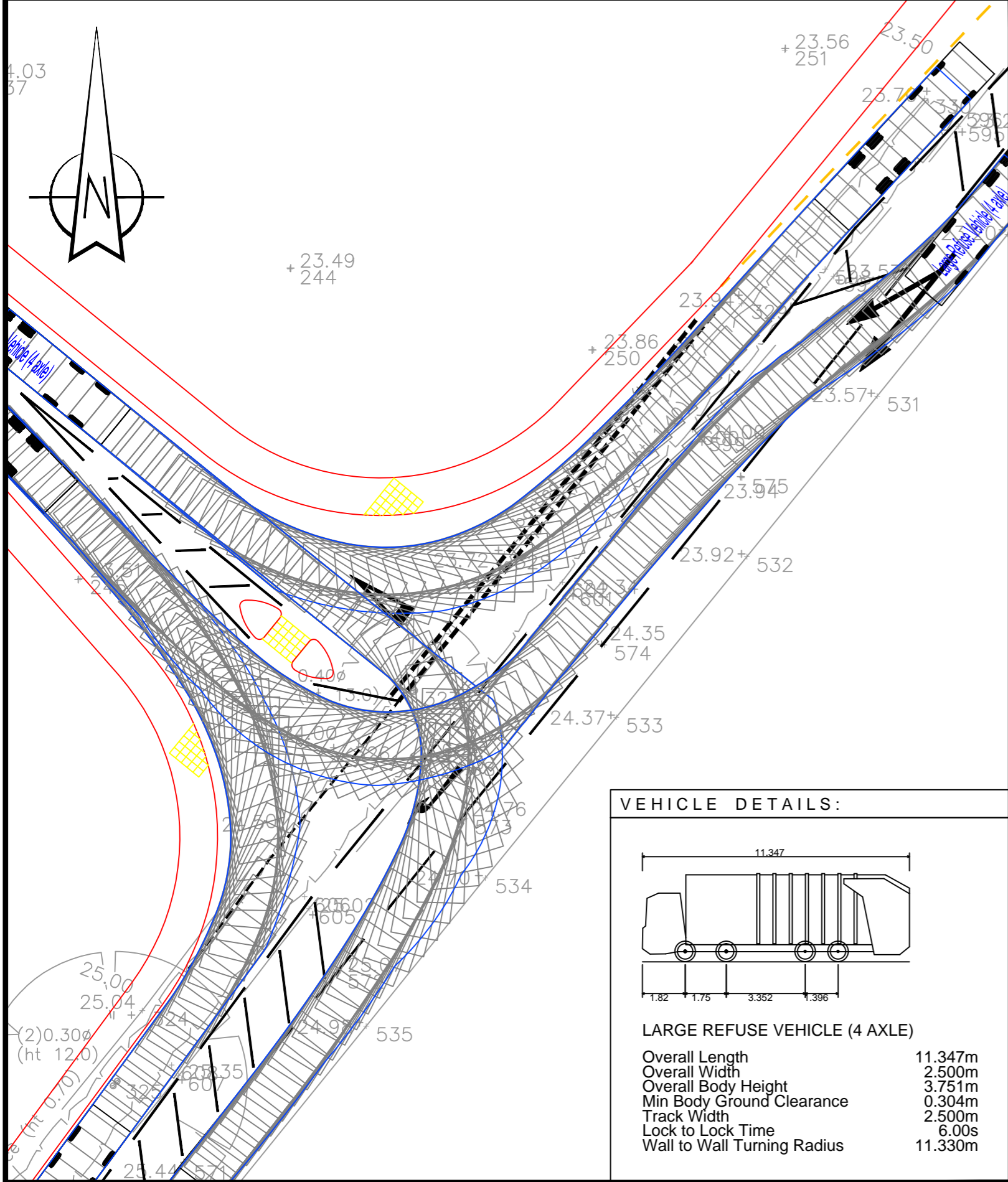
DRAWN: **DW** CHECKED: **DS** DATE: **01.05.2014**

WYG Transport
part of WYG group

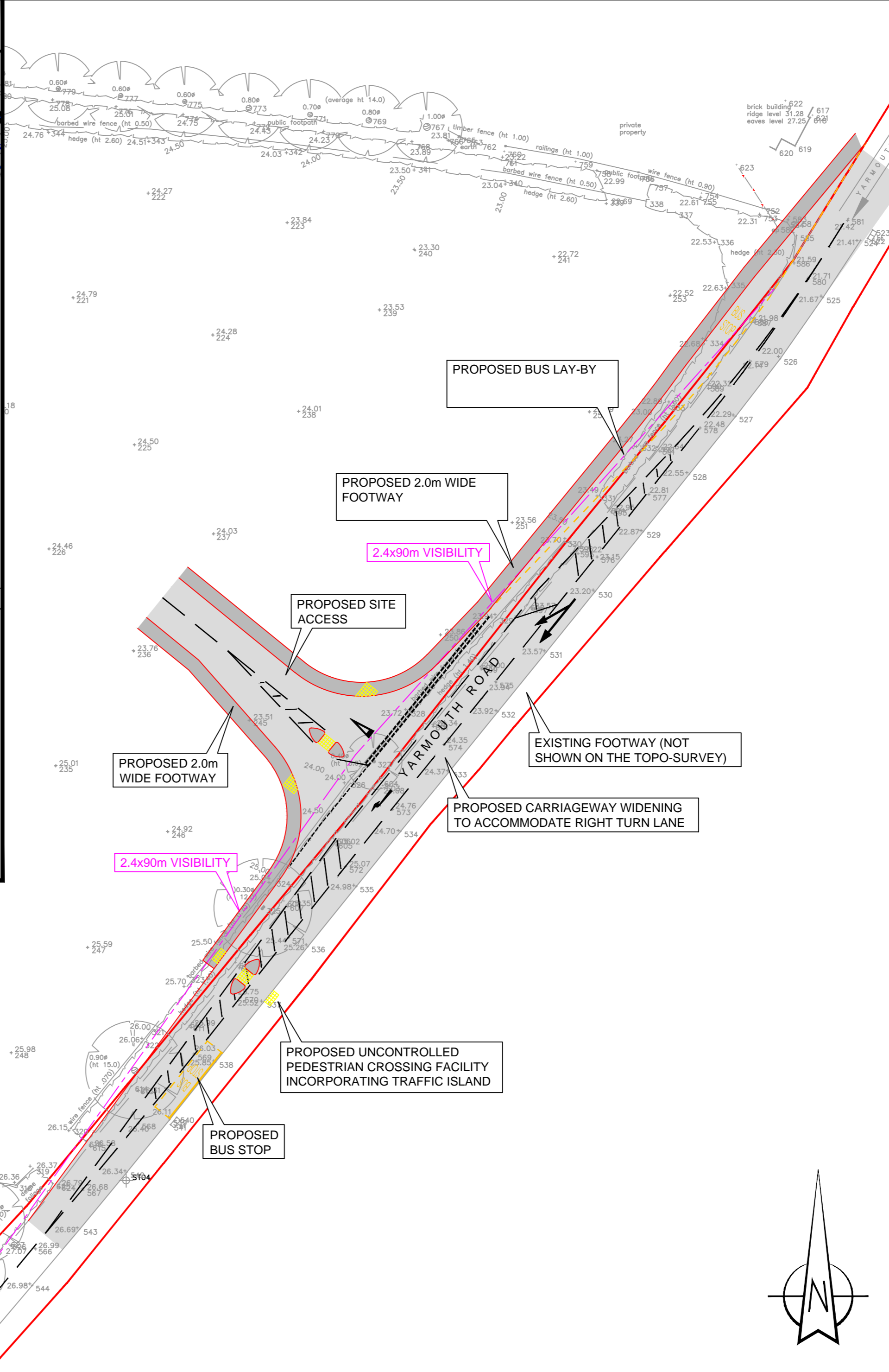
100 St. John Street London EC1M 4EH
t: 0207 250 7500 f: 0207 250 7501 e: transport@wyg.com

DRAWING NUMBER: **A087076_002** REVISION:

VEHICULAR SWEEP PATHS ANALYSIS (1:250)



GENERAL ARRANGEMENTS (1:500)



NOTES:

1. Do not scale from this drawing.
2. This drawing is for illustrative purposes only and not for construction.
3. This drawing is to be read and printed in colour.

KEY:

— EXISTING HIGHWAY BOUNDARY (INDICATIVE ONLY)

REV	DETAILS	DRAWN BY	CHECKED BY	DATE

CLIENT:
Christchurch Land and Estates Ltd

PROJECT:
Yarmouth Road, Melton

DRAWING TITLE:
Proposed Right Turn Lane Access (Bus Lay-by added)

SCALES: Var. **SHEET SIZE:** A2

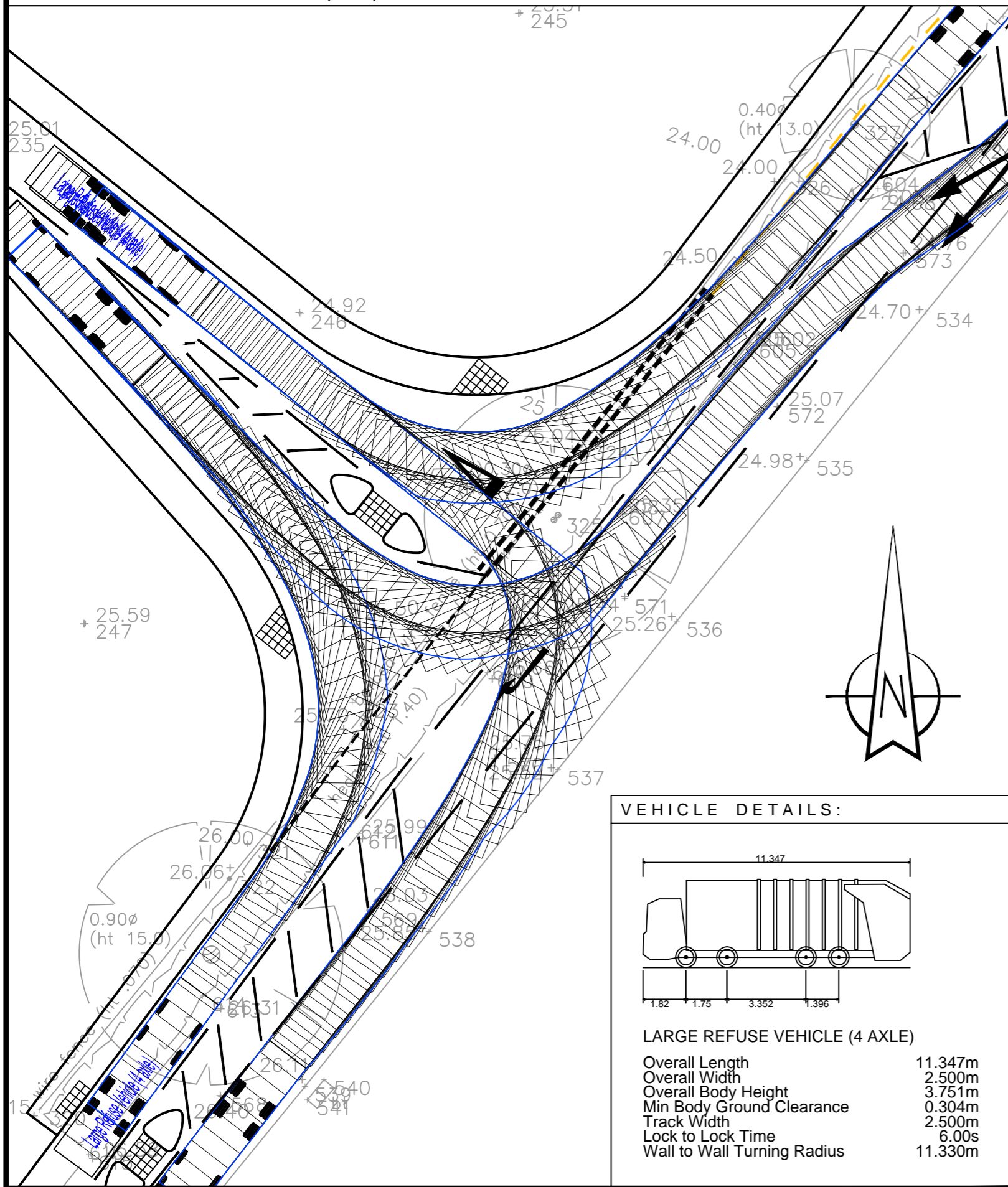
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WYG Transport
 part of WYG group

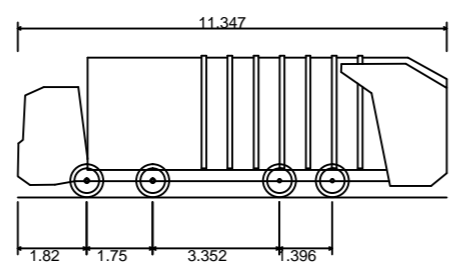
100 St. John Street London EC1M 4EH
 t: 0207 250 7500 f: 0207 250 7501 e: transport@wyg.com

DRAWING NUMBER: A087076_004 **REVISION:**

VEHICULAR SWEEP PATHS ANALYSIS (1:250)

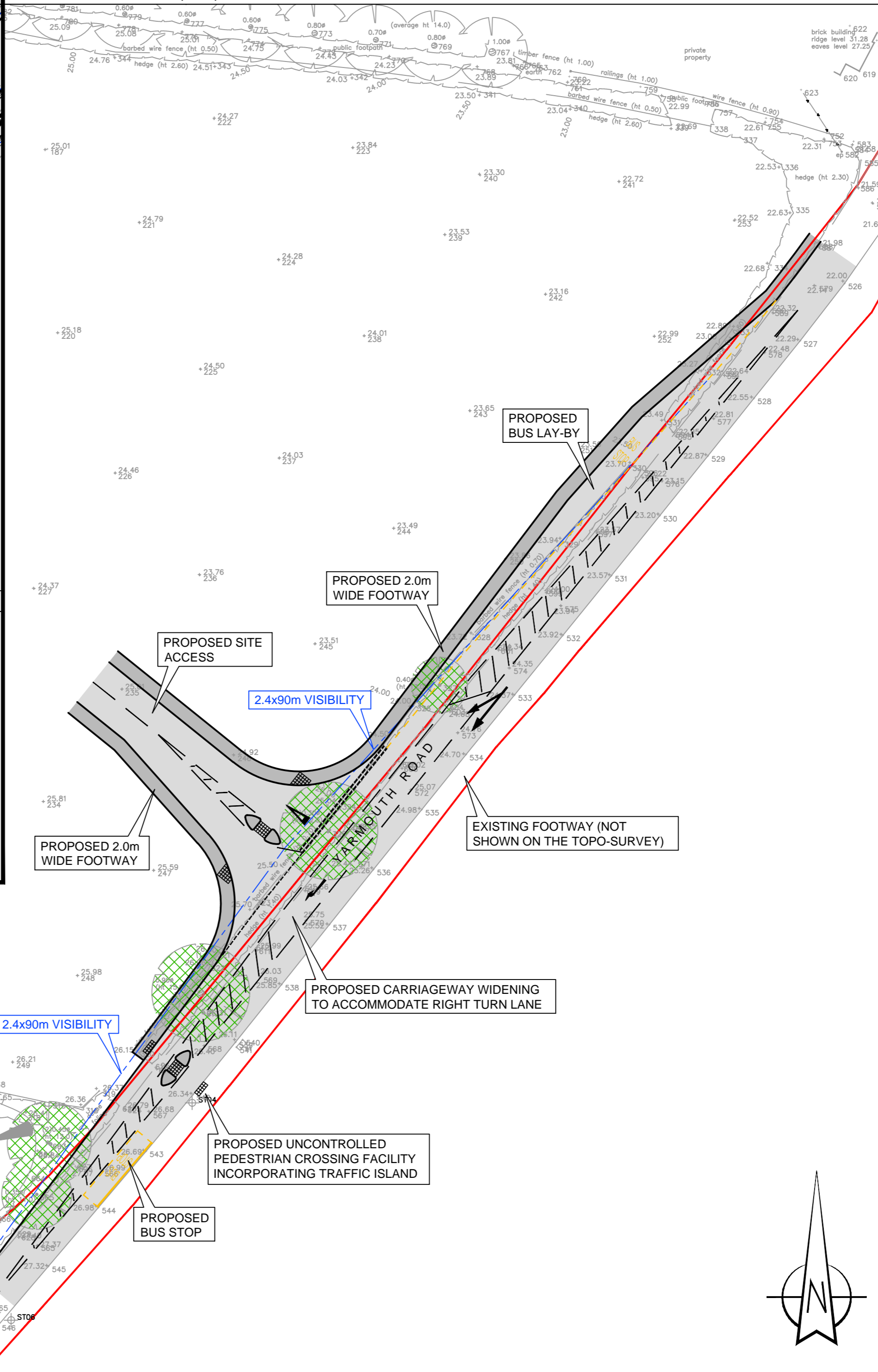


VEHICLE DETAILS:



LARGE REFUSE VEHICLE (4 AXLE)
 Overall Length 11.347m
 Overall Width 2.500m
 Overall Body Height 3.751m
 Min Body Ground Clearance 0.304m
 Track Width 2.500m
 Lock to Lock Time 6.00s
 Wall to Wall Turning Radius 11.330m

GENERAL ARRANGEMENTS (1:500)



NOTES:

1. Do not scale from this drawing.
2. This drawing is for illustrative purposes only and not for construction.
3. This drawing is to be read and printed in colour.

KEY:

	EXISTING HIGHWAY BOUNDARY (INDICATIVE ONLY)
	EXISTING TREES TO BE REMOVED

REV	DETAILS	DRAWN BY	CHECKED BY	DATE
-----	---------	----------	------------	------

CLIENT: **Christchurch Land and Estates Ltd**

PROJECT: **Yarmouth Road, Melton**

DRAWING TITLE: **Proposed Right Turn Lane Access**

SCALES: Var.	SHEET SIZE: A2
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DRAWN: DW	CHECKED: DS	DATE: 14.05.2014
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WYG Transport
 part of WYG group

100 St. John Street London EC1M 4EH
 t: 0207 250 7500 f: 0207 250 7501 e: transport@wyg.com

DRAWING NUMBER: **A087076_008** REVISION:



Appendix I

Road Safety Audit


YARMOUTH ROAD, MELTON, SUFFOLK

RESIDENTIAL DEVELOPMENT, SITE ACCESS ARRANGEMENTS AND SECTION 278 HIGHWAY IMPROVEMENTS ON B1116 YARMOUTH ROAD, MELTON

Stage 1 Road Safety Audit

October 2014

MJ/NC/14/0894/RSA1

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Original	Malcolm Jones	Nevil Calder		23 October 2014
Designer's Response				
Authority's Response				
Audit Response				

Client:
WYG Transport

100 St John Street,
London,
EC1M 4EH

Auditors:
The Safety Forum Ltd

PO Box 744
Godalming
Surrey
GU7 9DU

Date: 23 October 2014

TABLE OF CONTENTS

1.0	INTRODUCTION.....	3
2.0	ITEMS CONSIDERED	4
3.0	MATTERS ARISING FROM THIS STAGE 1 AUDIT	5
4.0	AUDITOR STATEMENT	8

APPENDIX A Key Plan

APPENDIX B Designers Response

1.0 INTRODUCTION

- 1.1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on Yarmouth Road, Melton, Suffolk, at the proposed residential development site
- 1.1.2 The RSA was carried out at the request of WYG Transport Ltd.
- 1.1.3 The Audit Team, which is established from THE SAFETY FORUM LTD (TSF) and independent of the project design team, has had no involvement with the project.
- 1.1.4 The Audit Team members for this Stage 1 RSA were:
- Malcolm Jones (TSF - Team Leader)
 - Nevil Calder (TSF - Team Member)
- 1.1.5 The Audit was carried out on Monday 20th October 2014 between 11:00 and 12:00 hours, in daylight conditions. The weather was dry and overcast.
- 1.1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/03.
- 1.1.7 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.
- 1.1.8 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.
- 1.1.9 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the *As Built* design pack to be provided and retained by the LHA on final completion.

2.0 ITEMS CONSIDERED

2.1 The Road Safety Audit was undertaken on the scheme detailed in the following WYG Transport Ltd documentation.

Dwg Number	Rev	Subject
A087076-11_C	-	Proposed Access
010109-010114	-	Accident Locations
YOR.2251.014	-	Illustrative Master Plan
-	-	Traffic Data Spreadsheet
-	-	Collision Summary
-	-	Accident Selection Results
-	-	Accident Interpreted Listing

2.2 No departure from standards or other information was submitted to the Audit Team.

3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT

3.1 PROBLEM

LOCATION: Whole scheme area.

SUMMARY: Inconsistent standard of lighting can create dark areas.

Street lighting is provided through most of the scheme, but it is inconsistent and of a level that can create pools of darkness. This can be hazardous to road users, particularly at the proposed pedestrian crossing point.



RECOMMENDATION

Upgrade the street lighting to a consistent standard throughout the junction. This will also mean that the repeater signs for the 30mph speed limit will not be needed, thus reducing sign clutter and maintenance costs, and allow smaller, internally illuminated bollards to be used on the refuge islands, reducing the chances of obscuring drivers' vision.

3.2 PROBLEM

LOCATION: Bus layby northeast of junction.

SUMMARY: Stationary bus will be within the visibility envelope.

The proposed bus layby to the northeast of the junction encroaches within the visibility envelope of drivers emerging from the junction, raising the potential of accidents due to them not seeing an approaching vehicle.

RECOMMENDATION

Increase the width of the layby such that a stationary bus is wholly outside the visibility splay.

3.3 PROBLEM

LOCATION: Bus stop southwest of the proposed junction.

SUMMARY: Stationary bus will prevent large vehicles passing on the correct side of the island.

The on-carriageway bus stop to the southwest of the proposed junction is located too close to the pedestrian refuge. This can result in the rear of a stationary bus being so close to the refuge that there is insufficient room for a vehicle to pass. Many drivers will get frustrated at this, with some taking the decision to pass to the off side of the island.

RECOMMENDATION

Relocate the bus stop further away from the island or provide a layby in the verge to allow busses to pull off the carriageway.

3.4 PROBLEM

LOCATION: New footway to northeast of the junction.

SUMMARY: New footway stops short of existing facility.

The drawings show a new footway provided in the northern verge, but it stops short of the nearby existing pedestrian facilities and rural footpath. This would force pedestrians to either walk in the road or cross over. Both of these choices present risks as there is a slight radius at this point and heavy hedge growth in the verge, both seriously reducing visibility.

RECOMMENDATION

Extend the footway to meet the existing path at Upper Melton Terrace. If this is not possible, the footway should be terminated at the bus stop and linked to the proposed path (shown in dotted yellow on the master plan) within the development.

3.5 PROBLEM

LOCATION: Approach to Give Way line on access road.

SUMMARY: Uphill approach to give way line can cause problems in winter.

The present topography suggests an uphill gradient for drivers approaching the give way line from the access road. This can create problems with traction as drivers try to make a hill start in icy conditions, leading to possible conflicts if they fail to proceed.

RECOMMENDATION

Take up any level change within the development, leaving a 10m level approach to the give way line.

4.0 AUDITOR STATEMENT

4.1 I certify that this audit has been carried out in accordance with HD 19/03.

AUDIT TEAM LEADER

Malcolm Jones, IEng, MCIHT, FIHE, MSoRSA
The Safety Forum Ltd
PO Box 744
Godalming
Surrey
GU7 9DU

Tel: 01483 860999

AUDIT TEAM MEMBER

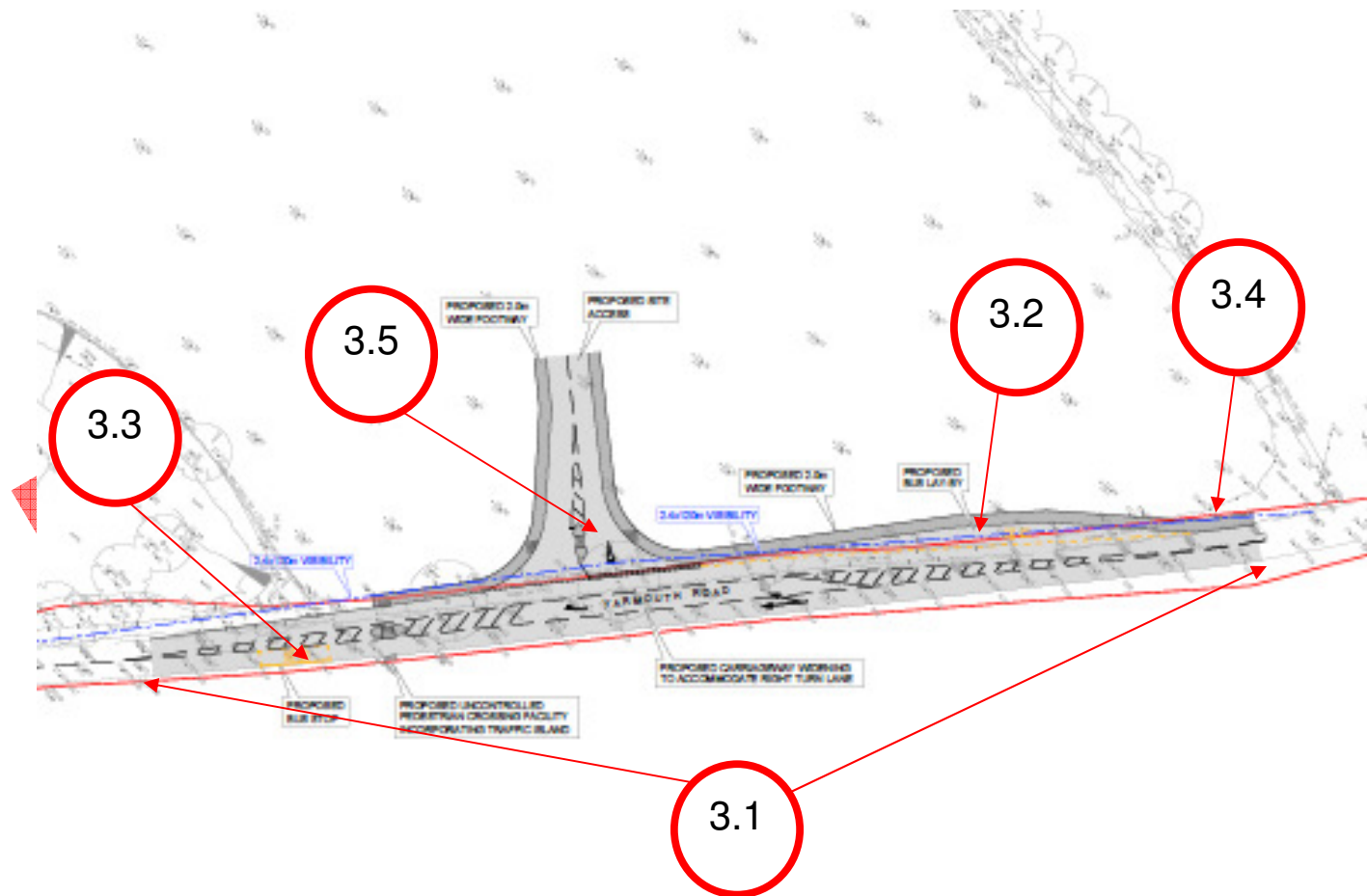
Nevil Calder BSc(Hons) CEng MICE MCIHT MSoRSA

Signed:

J M Jones

Date: 21th October 2014

APPENDIX A: KEY PLAN



APPENDIX B: DESIGNERS RESPONSE

Auditors: Malcolm Jones (Team Leader) and Nevil Calder (Team Member).

Scheme: Yarmouth Road, Melton, Suffolk (Residential Development) – Site Access and Section 278 Highway Works

Date Audit Completed: 20th October 2014.

This response is to a Stage 1 Road Safety Audit to the standard detailed within HD19/03 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

Problem no. in safety audit report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measure (detail description)
3.1	YES	YES – street lighting design will be looked at during detail design stage	N/A
3.2	YES	YES – bus lay-by widened to accommodate for a bus to stay clear of the visibility envelope	N/A
3.3	YES	YES – bus stop relocated further away from pedestrian island and vehicular swept paths analysis undertaken for large HGVs	N/A
3.4	YES	YES – new footway extended to connect with Upper Melton Terrace	N/A
3.5	YES	YES – existing levels indicate approx. approach gradient of 1:46 (measured over 20m). DMRB TD42 recommends an approach gradient no steeper than 2% (1:50) over 15m length. This is very achievable considering existing gradient of approx. 1:46. Vertical alignment design will be undertaken during detail design stage.	N/A

Principal Engineer’s Statement:

Scheme: Proposed Junction on Yarmouth Road, Melton, Suffolk (Residential Development) – Site Access and Section 278 Highway Works

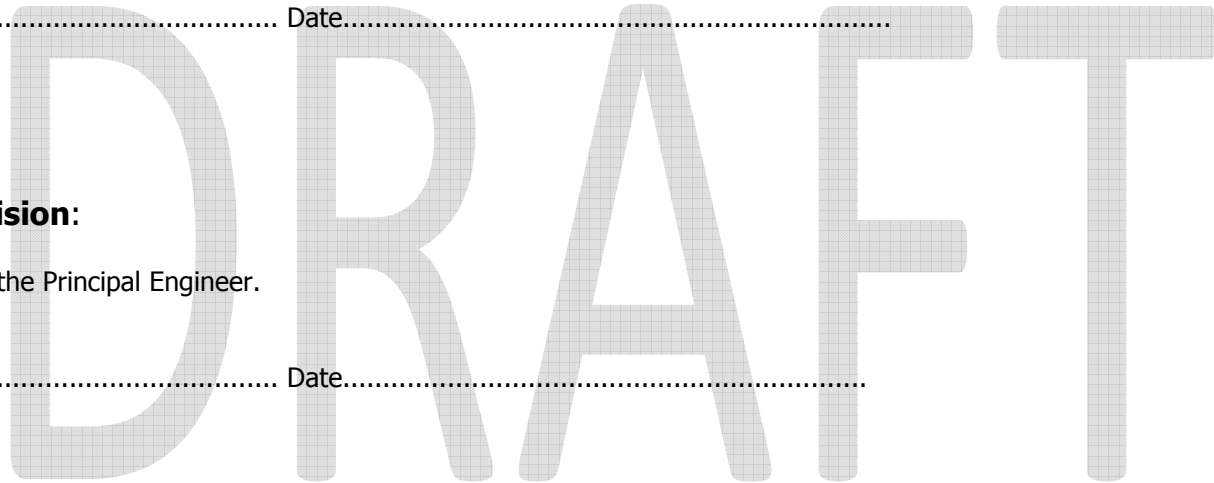
I certify that I have considered the items raised in the Stage 1 Road Safety Audit Report and I am content to accept all of its recommendations except for the ones listed above. I have stated my reasons for not accepting them and I seek the Chief Engineer’s endorsement of my proposals.

..... Date.....
Principal Engineer

Chief Engineer’s Decision:

I accept these proposals by the Principal Engineer.

..... Date.....
Chief Engineer





Appendix J

TRICS Output

Calculation Reference: AUDIT-705116-140916-0918

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH
 Category : F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL VEHICLES

Selected regions and areas:

05	EAST MIDLANDS	
	NR NORTHAMPTONSHIRE	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days
11	SCOTLAND	
	HI HIGHLAND	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of residents
 Actual Range: 32 to 55 (units:)
 Range Selected by User: 17 to 180 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/06 to 11/12/13

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Tuesday	1 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town Centre	1
Suburban Area (PPS6 Out of Centre)	1
Edge of Town	1

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	2
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:

Use Class:

C2 3 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

5,001 to 10,000 2 days
10,001 to 15,000 1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000 1 days
50,001 to 75,000 1 days
75,001 to 100,000 1 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0 2 days
1.1 to 1.5 1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 3 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	HI-05-F-01 CAWDOR ROAD	NURSING HOME		HIGHLAND
	NAIRN Edge of Town No Sub Category			
	Total Number of residents:	44		
	Survey date: TUESDAY	09/05/06		Survey Type: MANUAL
2	NR-05-F-01 ROCKINGHAM ROAD	NURSING HOME		NORTHAMPTONSHIRE
	CORBY Edge of Town Centre Residential Zone			
	Total Number of residents:	55		
	Survey date: FRIDAY	21/11/08		Survey Type: MANUAL
3	WK-05-F-01 CLARENDON SQUARE	NURSING HOME		WARWICKSHIRE
	LEAMINGTON SPA Suburban Area (PPS6 Out of Centre) Residential Zone			
	Total Number of residents:	32		
	Survey date: THURSDAY	25/10/12		Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL VEHICLES

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.084	3	44	0.061	3	44	0.145
08:00 - 09:00	3	44	0.099	3	44	0.092	3	44	0.191
09:00 - 10:00	3	44	0.084	3	44	0.015	3	44	0.099
10:00 - 11:00	3	44	0.069	3	44	0.115	3	44	0.184
11:00 - 12:00	3	44	0.069	3	44	0.069	3	44	0.138
12:00 - 13:00	3	44	0.099	3	44	0.061	3	44	0.160
13:00 - 14:00	3	44	0.153	3	44	0.092	3	44	0.245
14:00 - 15:00	3	44	0.145	3	44	0.168	3	44	0.313
15:00 - 16:00	3	44	0.076	3	44	0.107	3	44	0.183
16:00 - 17:00	3	44	0.122	3	44	0.122	3	44	0.244
17:00 - 18:00	3	44	0.076	3	44	0.145	3	44	0.221
18:00 - 19:00	3	44	0.084	3	44	0.107	3	44	0.191
19:00 - 20:00	2	38	0.066	2	38	0.092	2	38	0.158
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.226			1.246			2.472

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	32 - 55 (units:)
Survey date date range:	01/01/06 - 11/12/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL TAXIS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.008	3	44	0.008	3	44	0.016
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.000	3	44	0.000
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.015	3	44	0.015	3	44	0.030
15:00 - 16:00	3	44	0.000	3	44	0.000	3	44	0.000
16:00 - 17:00	3	44	0.008	3	44	0.008	3	44	0.016
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	2	38	0.000	2	38	0.000	2	38	0.000
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.031			0.031			0.062

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	32 - 55 (units:)
Survey date date range:	01/01/06 - 11/12/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL OGVS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	3	44	0.000	3	44	0.000
09:00 - 10:00	3	44	0.008	3	44	0.008	3	44	0.016
10:00 - 11:00	3	44	0.008	3	44	0.008	3	44	0.016
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.000	3	44	0.000
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.000	3	44	0.000	3	44	0.000
15:00 - 16:00	3	44	0.000	3	44	0.000	3	44	0.000
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	2	38	0.000	2	38	0.000	2	38	0.000
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.016			0.032

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	32 - 55 (units:)
Survey date date range:	01/01/06 - 11/12/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL PSVS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	3	44	0.008	3	44	0.008
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.008	3	44	0.008	3	44	0.016
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.008	3	44	0.000	3	44	0.008
15:00 - 16:00	3	44	0.000	3	44	0.008	3	44	0.008
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	2	38	0.000	2	38	0.000	2	38	0.000
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.024			0.040

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	32 - 55 (units:)
Survey date date range:	01/01/06 - 11/12/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL CYCLISTS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.015	3	44	0.000	3	44	0.015
08:00 - 09:00	3	44	0.000	3	44	0.015	3	44	0.015
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.000	3	44	0.000
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.000	3	44	0.008	3	44	0.008
15:00 - 16:00	3	44	0.000	3	44	0.000	3	44	0.000
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	2	38	0.000	2	38	0.000	2	38	0.000
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.015			0.023			0.038

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	32 - 55 (units:)
Survey date date range:	01/01/06 - 11/12/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.107	3	44	0.069	3	44	0.176
08:00 - 09:00	3	44	0.137	3	44	0.107	3	44	0.244
09:00 - 10:00	3	44	0.107	3	44	0.038	3	44	0.145
10:00 - 11:00	3	44	0.092	3	44	0.176	3	44	0.268
11:00 - 12:00	3	44	0.084	3	44	0.076	3	44	0.160
12:00 - 13:00	3	44	0.107	3	44	0.061	3	44	0.168
13:00 - 14:00	3	44	0.198	3	44	0.115	3	44	0.313
14:00 - 15:00	3	44	0.145	3	44	0.198	3	44	0.343
15:00 - 16:00	3	44	0.092	3	44	0.115	3	44	0.207
16:00 - 17:00	3	44	0.145	3	44	0.145	3	44	0.290
17:00 - 18:00	3	44	0.115	3	44	0.176	3	44	0.291
18:00 - 19:00	3	44	0.099	3	44	0.153	3	44	0.252
19:00 - 20:00	2	38	0.092	2	38	0.092	2	38	0.184
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.520			1.521			3.041

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	32 - 55 (units:)
Survey date date range:	01/01/06 - 11/12/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.061	3	44	0.031	3	44	0.092
08:00 - 09:00	3	44	0.061	3	44	0.069	3	44	0.130
09:00 - 10:00	3	44	0.061	3	44	0.023	3	44	0.084
10:00 - 11:00	3	44	0.076	3	44	0.061	3	44	0.137
11:00 - 12:00	3	44	0.008	3	44	0.023	3	44	0.031
12:00 - 13:00	3	44	0.069	3	44	0.069	3	44	0.138
13:00 - 14:00	3	44	0.038	3	44	0.084	3	44	0.122
14:00 - 15:00	3	44	0.115	3	44	0.099	3	44	0.214
15:00 - 16:00	3	44	0.069	3	44	0.061	3	44	0.130
16:00 - 17:00	3	44	0.038	3	44	0.053	3	44	0.091
17:00 - 18:00	3	44	0.008	3	44	0.000	3	44	0.008
18:00 - 19:00	3	44	0.023	3	44	0.008	3	44	0.031
19:00 - 20:00	2	38	0.026	2	38	0.000	2	38	0.026
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.653			0.581			1.234

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 32 - 55 (units:)
 Survey date date range: 01/01/06 - 11/12/13
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	3	44	0.008	3	44	0.008
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.008	3	44	0.000	3	44	0.008
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.000	3	44	0.000
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.008	3	44	0.000	3	44	0.008
15:00 - 16:00	3	44	0.000	3	44	0.008	3	44	0.008
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	2	38	0.000	2	38	0.000	2	38	0.000
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.016			0.032

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	32 - 55 (units:)
Survey date date range:	01/01/06 - 11/12/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL TRAIN PASSENGERS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	3	44	0.000	3	44	0.000
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.000	3	44	0.000
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.000	3	44	0.000	3	44	0.000
15:00 - 16:00	3	44	0.000	3	44	0.000	3	44	0.000
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	2	38	0.000	2	38	0.000	2	38	0.000
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.000			0.000

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 32 - 55 (units:)
 Survey date date range: 01/01/06 - 11/12/13
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	3	44	0.000	3	44	0.000
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.000	3	44	0.000	3	44	0.000
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.015	3	44	0.015
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.000	3	44	0.000	3	44	0.000
15:00 - 16:00	3	44	0.000	3	44	0.000	3	44	0.000
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	2	38	0.000	2	38	0.000	2	38	0.000
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.000			0.015			0.015

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 32 - 55 (units:)
 Survey date date range: 01/01/06 - 11/12/13
 Number of weekdays (Monday-Friday): 3
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.000	3	44	0.000	3	44	0.000
08:00 - 09:00	3	44	0.000	3	44	0.008	3	44	0.008
09:00 - 10:00	3	44	0.000	3	44	0.000	3	44	0.000
10:00 - 11:00	3	44	0.008	3	44	0.000	3	44	0.008
11:00 - 12:00	3	44	0.000	3	44	0.000	3	44	0.000
12:00 - 13:00	3	44	0.000	3	44	0.015	3	44	0.015
13:00 - 14:00	3	44	0.000	3	44	0.000	3	44	0.000
14:00 - 15:00	3	44	0.008	3	44	0.000	3	44	0.008
15:00 - 16:00	3	44	0.000	3	44	0.008	3	44	0.008
16:00 - 17:00	3	44	0.000	3	44	0.000	3	44	0.000
17:00 - 18:00	3	44	0.000	3	44	0.000	3	44	0.000
18:00 - 19:00	3	44	0.000	3	44	0.000	3	44	0.000
19:00 - 20:00	2	38	0.000	2	38	0.000	2	38	0.000
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.016			0.031			0.047

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	32 - 55 (units:)
Survey date date range:	01/01/06 - 11/12/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 05 - HEALTH/F - CARE HOME (ELDERLY RESIDENTIAL)

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 RESIDE

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate	No. Days	Ave. RESIDE	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	3	44	0.183	3	44	0.099	3	44	0.282
08:00 - 09:00	3	44	0.198	3	44	0.198	3	44	0.396
09:00 - 10:00	3	44	0.168	3	44	0.061	3	44	0.229
10:00 - 11:00	3	44	0.176	3	44	0.237	3	44	0.413
11:00 - 12:00	3	44	0.092	3	44	0.099	3	44	0.191
12:00 - 13:00	3	44	0.176	3	44	0.145	3	44	0.321
13:00 - 14:00	3	44	0.237	3	44	0.198	3	44	0.435
14:00 - 15:00	3	44	0.267	3	44	0.305	3	44	0.572
15:00 - 16:00	3	44	0.160	3	44	0.183	3	44	0.343
16:00 - 17:00	3	44	0.183	3	44	0.198	3	44	0.381
17:00 - 18:00	3	44	0.122	3	44	0.176	3	44	0.298
18:00 - 19:00	3	44	0.122	3	44	0.160	3	44	0.282
19:00 - 20:00	2	38	0.118	2	38	0.092	2	38	0.210
20:00 - 21:00	2	38	0.000	2	38	0.000	2	38	0.000
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.202			2.151			4.353

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	32 - 55 (units:)
Survey date date range:	01/01/06 - 11/12/13
Number of weekdays (Monday-Friday):	3
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

Calculation Reference: AUDIT-705116-140916-0912

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL
 Category : A - HOUSES PRIVATELY OWNED
MULTI-MODAL VEHICLES

Selected regions and areas:

04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	LN LINCOLNSHIRE	2 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	1 days

This section displays the number of survey days per TRICS® sub-region in the selected set

Filtering Stage 2 selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 101 to 186 (units:)
 Range Selected by User: 75 to 300 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/06 to 22/10/12

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Monday	2 days
Tuesday	2 days
Thursday	1 days
Friday	1 days

This data displays the number of selected surveys by day of the week.

Selected survey types:

Manual count	6 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Suburban Area (PPS6 Out of Centre)	4
Edge of Town	2

This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	3
Out of Town	1
No Sub Category	2

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

Filtering Stage 3 selection:**Use Class:**

C3	6 days
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This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

1,001 to 5,000	1 days
5,001 to 10,000	1 days
15,001 to 20,000	3 days
20,001 to 25,000	1 days

This data displays the number of selected surveys within stated 1-mile radii of population.

Population within 5 miles:

5,001 to 25,000	1 days
50,001 to 75,000	1 days
75,001 to 100,000	1 days
100,001 to 125,000	3 days

This data displays the number of selected surveys within stated 5-mile radii of population.

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	5 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No	6 days
----	--------

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

LIST OF SITES relevant to selection parameters

1	CH-03-A-06 CREWE ROAD	SEMI -DET./BUNGALOWS	129	14/10/08	CHESHIRE	Survey Type: MANUAL
	CREWE Suburban Area (PPS6 Out of Centre) No Sub Category					
	Total Number of dwellings: 129					
	Survey date: TUESDAY 14/10/08					
2	LN-03-A-01 BRANT ROAD BRACEBRIDGE LINCOLN	MIXED HOUSES	150	15/05/07	LINCOLNSHIRE	Survey Type: MANUAL
	Edge of Town Residential Zone					
	Total Number of dwellings: 150					
	Survey date: TUESDAY 15/05/07					
3	LN-03-A-02 HYKEHAM ROAD	MIXED HOUSES	186	14/05/07	LINCOLNSHIRE	Survey Type: MANUAL
	LINCOLN Suburban Area (PPS6 Out of Centre) Residential Zone					
	Total Number of dwellings: 186					
	Survey date: MONDAY 14/05/07					
4	NY-03-A-06 HORSEFAIR	BUNGALOWS & SEMI DET.	115	14/10/11	NORTH YORKSHIRE	Survey Type: MANUAL
	BOROUGHBRIDGE Suburban Area (PPS6 Out of Centre) Residential Zone					
	Total Number of dwellings: 115					
	Survey date: FRIDAY 14/10/11					
5	SF-03-A-03 BARTON HILL FORNHAM ST MARTIN BURY ST EDMUNDS	MIXED HOUSES	101	15/05/06	SUFFOLK	Survey Type: MANUAL
	Edge of Town Out of Town					
	Total Number of dwellings: 101					
	Survey date: MONDAY 15/05/06					
6	SH-03-A-04 ST MICHAEL'S STREET	TERRACED	108	11/06/09	SHROPSHIRE	Survey Type: MANUAL
	SHREWSBURY Suburban Area (PPS6 Out of Centre) No Sub Category					
	Total Number of dwellings: 108					
	Survey date: THURSDAY 11/06/09					

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

MANUALLY DESELECTED SITES

Site Ref	Reason for Deselection
CB-03-A-04	Not entirely compatible
WL-03-A-01	High Density

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLES

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.085	6	132	0.272	6	132	0.357
08:00 - 09:00	6	132	0.172	6	132	0.414	6	132	0.586
09:00 - 10:00	6	132	0.191	6	132	0.232	6	132	0.423
10:00 - 11:00	6	132	0.151	6	132	0.189	6	132	0.340
11:00 - 12:00	6	132	0.181	6	132	0.169	6	132	0.350
12:00 - 13:00	6	132	0.223	6	132	0.196	6	132	0.419
13:00 - 14:00	6	132	0.203	6	132	0.160	6	132	0.363
14:00 - 15:00	6	132	0.180	6	132	0.184	6	132	0.364
15:00 - 16:00	6	132	0.259	6	132	0.193	6	132	0.452
16:00 - 17:00	6	132	0.328	6	132	0.179	6	132	0.507
17:00 - 18:00	6	132	0.390	6	132	0.242	6	132	0.632
18:00 - 19:00	6	132	0.199	6	132	0.191	6	132	0.390
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.562			2.621			5.183

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 101 - 186 (units:)
Survey date date range: 01/01/06 - 22/10/12
Number of weekdays (Monday-Friday): 6
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TAXIS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.001	6	132	0.001	6	132	0.002
08:00 - 09:00	6	132	0.000	6	132	0.000	6	132	0.000
09:00 - 10:00	6	132	0.003	6	132	0.003	6	132	0.006
10:00 - 11:00	6	132	0.003	6	132	0.003	6	132	0.006
11:00 - 12:00	6	132	0.000	6	132	0.000	6	132	0.000
12:00 - 13:00	6	132	0.001	6	132	0.001	6	132	0.002
13:00 - 14:00	6	132	0.000	6	132	0.000	6	132	0.000
14:00 - 15:00	6	132	0.003	6	132	0.001	6	132	0.004
15:00 - 16:00	6	132	0.003	6	132	0.004	6	132	0.007
16:00 - 17:00	6	132	0.001	6	132	0.001	6	132	0.002
17:00 - 18:00	6	132	0.003	6	132	0.001	6	132	0.004
18:00 - 19:00	6	132	0.001	6	132	0.001	6	132	0.002
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.019			0.016			0.035

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 101 - 186 (units:)
Survey date date range: 01/01/06 - 22/10/12
Number of weekdays (Monday-Friday): 6
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL OGVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.004	6	132	0.001	6	132	0.005
08:00 - 09:00	6	132	0.004	6	132	0.005	6	132	0.009
09:00 - 10:00	6	132	0.005	6	132	0.003	6	132	0.008
10:00 - 11:00	6	132	0.005	6	132	0.005	6	132	0.010
11:00 - 12:00	6	132	0.003	6	132	0.003	6	132	0.006
12:00 - 13:00	6	132	0.008	6	132	0.004	6	132	0.012
13:00 - 14:00	6	132	0.001	6	132	0.008	6	132	0.009
14:00 - 15:00	6	132	0.001	6	132	0.005	6	132	0.006
15:00 - 16:00	6	132	0.003	6	132	0.001	6	132	0.004
16:00 - 17:00	6	132	0.003	6	132	0.000	6	132	0.003
17:00 - 18:00	6	132	0.000	6	132	0.003	6	132	0.003
18:00 - 19:00	6	132	0.000	6	132	0.000	6	132	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.037			0.038			0.075

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	101 - 186 (units:)
Survey date date range:	01/01/06 - 22/10/12
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PSVS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.000	6	132	0.000	6	132	0.000
08:00 - 09:00	6	132	0.001	6	132	0.001	6	132	0.002
09:00 - 10:00	6	132	0.000	6	132	0.000	6	132	0.000
10:00 - 11:00	6	132	0.000	6	132	0.000	6	132	0.000
11:00 - 12:00	6	132	0.001	6	132	0.001	6	132	0.002
12:00 - 13:00	6	132	0.000	6	132	0.000	6	132	0.000
13:00 - 14:00	6	132	0.000	6	132	0.000	6	132	0.000
14:00 - 15:00	6	132	0.000	6	132	0.000	6	132	0.000
15:00 - 16:00	6	132	0.000	6	132	0.000	6	132	0.000
16:00 - 17:00	6	132	0.000	6	132	0.000	6	132	0.000
17:00 - 18:00	6	132	0.000	6	132	0.000	6	132	0.000
18:00 - 19:00	6	132	0.000	6	132	0.000	6	132	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.002			0.002			0.004

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	101 - 186 (units:)
Survey date date range:	01/01/06 - 22/10/12
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL CYCLISTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.009	6	132	0.010	6	132	0.019
08:00 - 09:00	6	132	0.010	6	132	0.034	6	132	0.044
09:00 - 10:00	6	132	0.006	6	132	0.009	6	132	0.015
10:00 - 11:00	6	132	0.001	6	132	0.010	6	132	0.011
11:00 - 12:00	6	132	0.008	6	132	0.001	6	132	0.009
12:00 - 13:00	6	132	0.004	6	132	0.009	6	132	0.013
13:00 - 14:00	6	132	0.008	6	132	0.006	6	132	0.014
14:00 - 15:00	6	132	0.004	6	132	0.004	6	132	0.008
15:00 - 16:00	6	132	0.025	6	132	0.008	6	132	0.033
16:00 - 17:00	6	132	0.020	6	132	0.006	6	132	0.026
17:00 - 18:00	6	132	0.011	6	132	0.019	6	132	0.030
18:00 - 19:00	6	132	0.013	6	132	0.001	6	132	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.119			0.117			0.236

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	101 - 186 (units:)
Survey date date range:	01/01/06 - 22/10/12
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL VEHICLE OCCUPANTS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.101	6	132	0.326	6	132	0.427
08:00 - 09:00	6	132	0.219	6	132	0.578	6	132	0.797
09:00 - 10:00	6	132	0.217	6	132	0.289	6	132	0.506
10:00 - 11:00	6	132	0.186	6	132	0.238	6	132	0.424
11:00 - 12:00	6	132	0.219	6	132	0.209	6	132	0.428
12:00 - 13:00	6	132	0.278	6	132	0.241	6	132	0.519
13:00 - 14:00	6	132	0.248	6	132	0.199	6	132	0.447
14:00 - 15:00	6	132	0.224	6	132	0.238	6	132	0.462
15:00 - 16:00	6	132	0.402	6	132	0.246	6	132	0.648
16:00 - 17:00	6	132	0.451	6	132	0.240	6	132	0.691
17:00 - 18:00	6	132	0.501	6	132	0.307	6	132	0.808
18:00 - 19:00	6	132	0.253	6	132	0.271	6	132	0.524
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			3.299			3.382			6.681

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 101 - 186 (units:)
Survey date date range: 01/01/06 - 22/10/12
Number of weekdays (Monday-Friday): 6
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PEDESTRIANS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.028	6	132	0.056	6	132	0.084
08:00 - 09:00	6	132	0.029	6	132	0.131	6	132	0.160
09:00 - 10:00	6	132	0.033	6	132	0.053	6	132	0.086
10:00 - 11:00	6	132	0.043	6	132	0.039	6	132	0.082
11:00 - 12:00	6	132	0.020	6	132	0.039	6	132	0.059
12:00 - 13:00	6	132	0.028	6	132	0.035	6	132	0.063
13:00 - 14:00	6	132	0.024	6	132	0.032	6	132	0.056
14:00 - 15:00	6	132	0.041	6	132	0.039	6	132	0.080
15:00 - 16:00	6	132	0.117	6	132	0.060	6	132	0.177
16:00 - 17:00	6	132	0.065	6	132	0.039	6	132	0.104
17:00 - 18:00	6	132	0.061	6	132	0.033	6	132	0.094
18:00 - 19:00	6	132	0.044	6	132	0.030	6	132	0.074
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.533			0.586			1.119

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 101 - 186 (units:)
Survey date date range: 01/01/06 - 22/10/12
Number of weekdays (Monday-Friday): 6
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL BUS/TRAM PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.000	6	132	0.001	6	132	0.001
08:00 - 09:00	6	132	0.001	6	132	0.009	6	132	0.010
09:00 - 10:00	6	132	0.000	6	132	0.008	6	132	0.008
10:00 - 11:00	6	132	0.005	6	132	0.005	6	132	0.010
11:00 - 12:00	6	132	0.004	6	132	0.008	6	132	0.012
12:00 - 13:00	6	132	0.004	6	132	0.003	6	132	0.007
13:00 - 14:00	6	132	0.004	6	132	0.004	6	132	0.008
14:00 - 15:00	6	132	0.004	6	132	0.004	6	132	0.008
15:00 - 16:00	6	132	0.004	6	132	0.003	6	132	0.007
16:00 - 17:00	6	132	0.003	6	132	0.000	6	132	0.003
17:00 - 18:00	6	132	0.011	6	132	0.001	6	132	0.012
18:00 - 19:00	6	132	0.010	6	132	0.000	6	132	0.010
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.050			0.046			0.096

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected:	101 - 186 (units:)
Survey date date range:	01/01/06 - 22/10/12
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys manually removed from selection:	2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TRAIN PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.000	6	132	0.003	6	132	0.003
08:00 - 09:00	6	132	0.000	6	132	0.003	6	132	0.003
09:00 - 10:00	6	132	0.000	6	132	0.003	6	132	0.003
10:00 - 11:00	6	132	0.000	6	132	0.001	6	132	0.001
11:00 - 12:00	6	132	0.000	6	132	0.000	6	132	0.000
12:00 - 13:00	6	132	0.000	6	132	0.000	6	132	0.000
13:00 - 14:00	6	132	0.000	6	132	0.000	6	132	0.000
14:00 - 15:00	6	132	0.000	6	132	0.000	6	132	0.000
15:00 - 16:00	6	132	0.001	6	132	0.004	6	132	0.005
16:00 - 17:00	6	132	0.000	6	132	0.000	6	132	0.000
17:00 - 18:00	6	132	0.004	6	132	0.000	6	132	0.004
18:00 - 19:00	6	132	0.004	6	132	0.000	6	132	0.004
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.009			0.014			0.023

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 101 - 186 (units:)
 Survey date date range: 01/01/06 - 22/10/12
 Number of weekdays (Monday-Friday): 6
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL COACH PASSENGERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.000	6	132	0.000	6	132	0.000
08:00 - 09:00	6	132	0.001	6	132	0.005	6	132	0.006
09:00 - 10:00	6	132	0.000	6	132	0.000	6	132	0.000
10:00 - 11:00	6	132	0.000	6	132	0.000	6	132	0.000
11:00 - 12:00	6	132	0.005	6	132	0.001	6	132	0.006
12:00 - 13:00	6	132	0.000	6	132	0.000	6	132	0.000
13:00 - 14:00	6	132	0.000	6	132	0.000	6	132	0.000
14:00 - 15:00	6	132	0.000	6	132	0.000	6	132	0.000
15:00 - 16:00	6	132	0.000	6	132	0.000	6	132	0.000
16:00 - 17:00	6	132	0.000	6	132	0.000	6	132	0.000
17:00 - 18:00	6	132	0.000	6	132	0.000	6	132	0.000
18:00 - 19:00	6	132	0.000	6	132	0.000	6	132	0.000
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.006			0.006			0.012

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP*FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 101 - 186 (units:)
Survey date date range: 01/01/06 - 22/10/12
Number of weekdays (Monday-Friday): 6
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL PUBLIC TRANSPORT USERS

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.000	6	132	0.004	6	132	0.004
08:00 - 09:00	6	132	0.003	6	132	0.016	6	132	0.019
09:00 - 10:00	6	132	0.000	6	132	0.010	6	132	0.010
10:00 - 11:00	6	132	0.005	6	132	0.006	6	132	0.011
11:00 - 12:00	6	132	0.009	6	132	0.009	6	132	0.018
12:00 - 13:00	6	132	0.004	6	132	0.003	6	132	0.007
13:00 - 14:00	6	132	0.004	6	132	0.004	6	132	0.008
14:00 - 15:00	6	132	0.004	6	132	0.004	6	132	0.008
15:00 - 16:00	6	132	0.005	6	132	0.006	6	132	0.011
16:00 - 17:00	6	132	0.003	6	132	0.000	6	132	0.003
17:00 - 18:00	6	132	0.015	6	132	0.001	6	132	0.016
18:00 - 19:00	6	132	0.014	6	132	0.000	6	132	0.014
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			0.066			0.063			0.129

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 101 - 186 (units:)
 Survey date date range: 01/01/06 - 22/10/12
 Number of weekdays (Monday-Friday): 6
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys manually removed from selection: 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

MULTI-MODAL TOTAL PEOPLE

Calculation factor: 1 DWELLS

BOLD print indicates peak (busiest) period

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	6	132	0.138	6	132	0.395	6	132	0.533
08:00 - 09:00	6	132	0.261	6	132	0.759	6	132	1.020
09:00 - 10:00	6	132	0.256	6	132	0.361	6	132	0.617
10:00 - 11:00	6	132	0.236	6	132	0.294	6	132	0.530
11:00 - 12:00	6	132	0.256	6	132	0.259	6	132	0.515
12:00 - 13:00	6	132	0.313	6	132	0.288	6	132	0.601
13:00 - 14:00	6	132	0.284	6	132	0.241	6	132	0.525
14:00 - 15:00	6	132	0.272	6	132	0.285	6	132	0.557
15:00 - 16:00	6	132	0.549	6	132	0.319	6	132	0.868
16:00 - 17:00	6	132	0.539	6	132	0.285	6	132	0.824
17:00 - 18:00	6	132	0.588	6	132	0.360	6	132	0.948
18:00 - 19:00	6	132	0.324	6	132	0.303	6	132	0.627
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			4.016			4.149			8.165

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: COUNT/TRP*FACT. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 101 - 186 (units:)
Survey date date range: 01/01/06 - 22/10/12
Number of weekdays (Monday-Friday): 6
Number of Saturdays: 0
Number of Sundays: 0
Surveys manually removed from selection: 2

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.



Appendix K

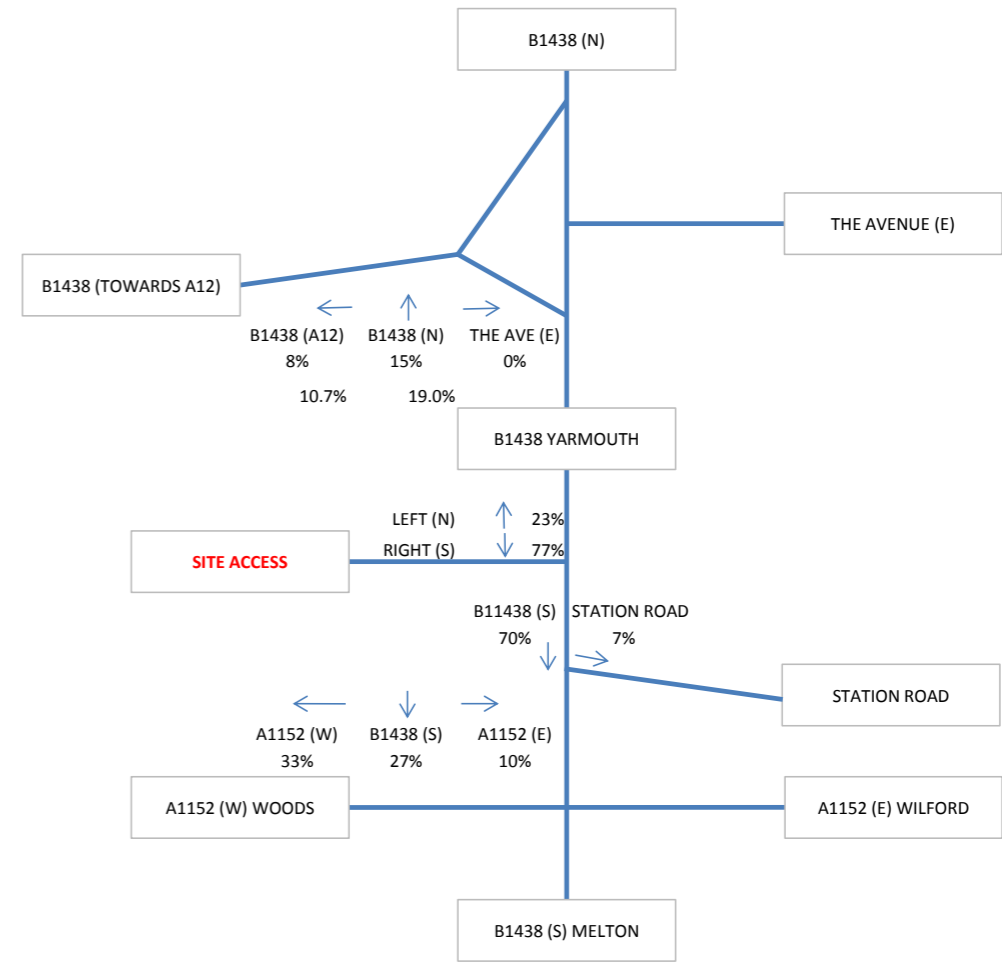
Traffic Distribution Calculations

WU03EW - Location of usual residence and place of work by method of travel to work (MSOA level)

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population All usual residents aged 16 and over in employment the week before the census
 units Persons
 date 2011
 method of travel to work Driving a car or van

place of work : 2011 super output area -	usual residence Suffolk Coastal 005	Percentage	Location Reference	Level 1: Site Access	Level 2: B1438/A1152 (south)	Level 2: Yarmouth Road/B1438 (north)
Suffolk Coastal 008	263	15.3%	WOODBIDGE	RIGHT / SOUTH	B1438 / SOUTH	
Suffolk Coastal 005	173	10.1%	MELTON	RIGHT / SOUTH	A1152 / EAST	
Suffolk Coastal 010	172	10.0%	MARTLESHAM	RIGHT / SOUTH	B1438 / SOUTH	
Suffolk Coastal 007	127	7.4%	RENDLESHAM	RIGHT / SOUTH	VIA STATION ROAD	
Ipswich 007	91	5.3%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Suffolk Coastal 002	89	5.2%	FRAMLINGHAM	LEFT / NORTH		B1438 NORTH
Ipswich 009	74	4.3%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Ipswich 010	73	4.3%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Suffolk Coastal 004	70	4.1%	LEISTON	LEFT / NORTH		B1438 NORTH
Ipswich 014	66	3.8%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Suffolk Coastal 006	54	3.1%	GRUNDISBURGH	RIGHT / SOUTH	WOODS LANE / WEST	
Suffolk Coastal 015	40	2.3%	FELIXSTOWE	RIGHT / SOUTH	WOODS LANE / WEST	
Ipswich 008	32	1.9%	BROKE HALL	LEFT / NORTH		B1438 / A12
Suffolk Coastal 009	29	1.7%	KESGRAVE	RIGHT / SOUTH	B1438 / SOUTH	
Suffolk Coastal 012	28	1.6%	TRIMLEY	RIGHT / SOUTH	WOODS LANE / WEST	
Suffolk Coastal 003	27	1.6%	SAXMUNDHAM	LEFT / NORTH		B1438 NORTH
Suffolk Coastal 011	25	1.5%	BIXLEY	LEFT / NORTH		B1438 NORTH
Mid Suffolk 011	23	1.3%	NEEDHAM MARKET	LEFT / NORTH		B1438 / A12
Mid Suffolk 012	21	1.2%	CLAYDON	LEFT / NORTH		B1438 / A12
Ipswich 003	18	1.0%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Ipswich 005	13	0.8%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Mid Suffolk 010	13	0.8%	STOWMARKET	LEFT / NORTH		B1438 / A12
Ipswich 006	12	0.7%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Ipswich 004	11	0.6%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Suffolk Coastal 014	11	0.6%	FELIXSTOWE	RIGHT / SOUTH	WOODS LANE / WEST	
Babergh 005	10	0.6%	WASHBROOK	RIGHT / SOUTH	WOODS LANE / WEST	
Ipswich 011	10	0.6%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Mid Suffolk 001	10	0.6%	EYE	LEFT / NORTH		B1438 / A12
Mid Suffolk 007	10	0.6%	DEBENHAM	LEFT / NORTH		B1438 / A12
Suffolk Coastal 001	10	0.6%	HALESWORTH	LEFT / NORTH		B1438 NORTH
Babergh 011	9	0.5%	HOLBROOK	LEFT / NORTH		B1438 / A12
Waveney 015	9	0.5%	HALESWORTH	LEFT / NORTH		B1438 NORTH
Ipswich 012	8	0.5%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Colchester 007	7	0.4%	COLCHESTER	RIGHT / SOUTH	WOODS LANE / WEST	
Waveney 013	7	0.4%	BUNGAY	LEFT / NORTH		B1438 NORTH
Babergh 004	6	0.3%	HADLEIGH	RIGHT / SOUTH	WOODS LANE / WEST	
Ipswich 001	6	0.3%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Mid Suffolk 003	6	0.3%	HARLESTON	LEFT / NORTH		B1438 NORTH
St Edmundsbury 006	6	0.3%	BURY ST EDMUNDS	LEFT / NORTH		B1438 / A12
Waveney 010	6	0.3%	BECCLES	LEFT / NORTH		B1438 / A12
Ipswich 016	5	0.3%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Colchester 002	4	0.2%	COLCHESTER	RIGHT / SOUTH	WOODS LANE / WEST	
Norwich 014	4	0.2%	NORWICH	LEFT / NORTH		B1438 NORTH
South Norfolk 006	4	0.2%	NORWICH	LEFT / NORTH		B1438 NORTH
Ipswich 002	4	0.2%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Ipswich 013	4	0.2%	IPSWICH	RIGHT / SOUTH	WOODS LANE / WEST	
Mid Suffolk 005	4	0.2%	STOWMARKET	LEFT / NORTH		B1438 / A12
Suffolk Coastal 013	4	0.2%	FELIXSTOWE	RIGHT / SOUTH	WOODS LANE / WEST	
Waveney 005	4	0.2%	LOWESTOFT	LEFT / NORTH		B1438 / A12
Waveney 014	4	0.2%	SOUTHWOLD	LEFT / NORTH		B1438 / A12



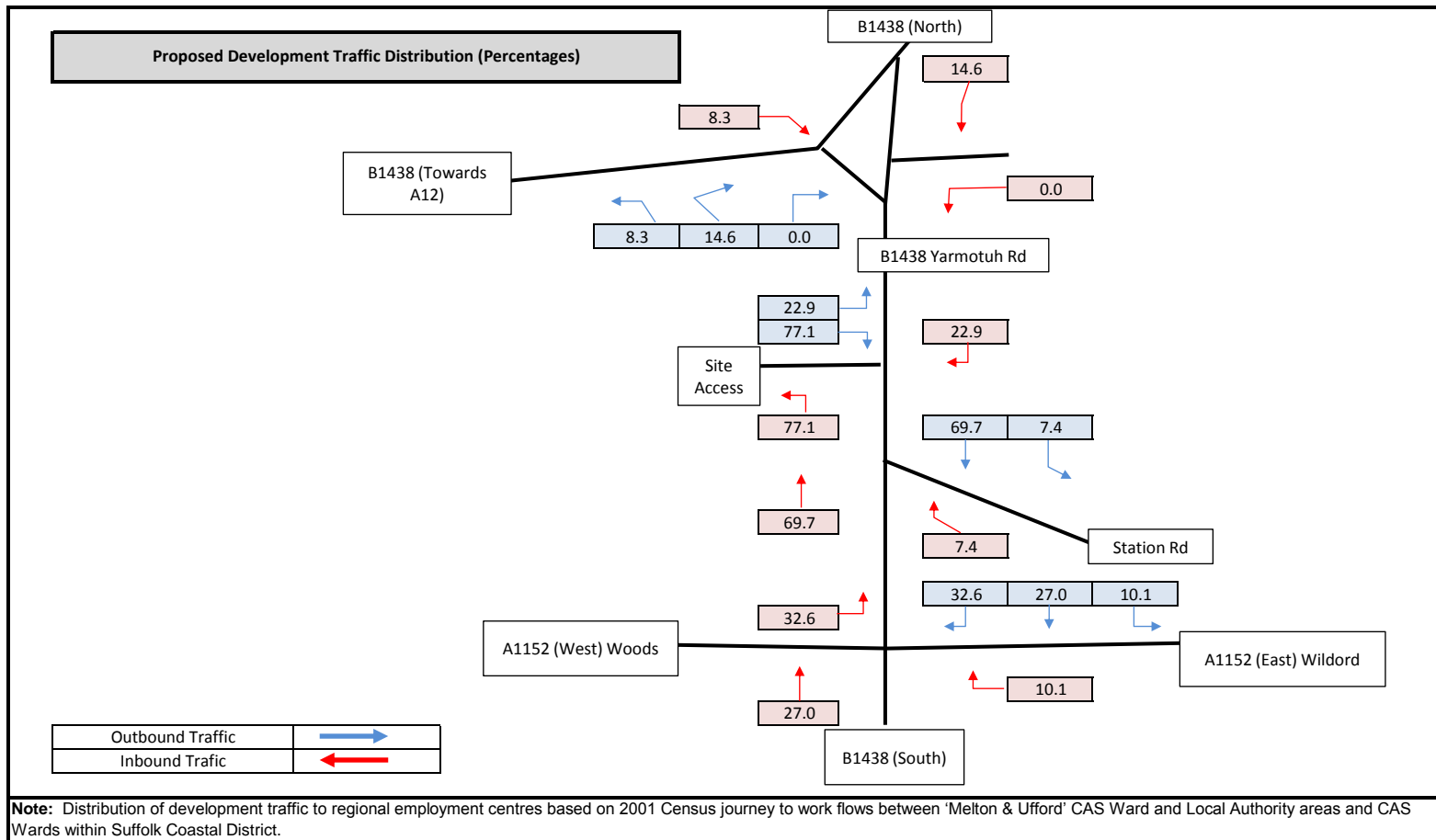


Appendix L

Development Traffic Flow Diagrams

Yarmouth Road, Melton - Development Traffic Distribution

Grand Totals:	Percentage (%)	Level 1 - Site access		Level 2 - B1438/A1152 junction (south) or Yarmouth Road/B1438 junction (north)
	8.3%	Left / North	22.9%	West / Left
14.6%	Left / North	East / North		
0.0%	Left / North	East		
7.4%	Right / South	77.1%	Mill (East / Left at junction with Station Road)	
10.1%	Right / South		East / Left	
27.0%	Right / South		South / Straight	
32.6%	Right / South		West / Right	
100.0%		100.0%		



**Proposed Development Traffic Distribution
(Vehicles) AM Peak**

O/D	A1	B1	C1	Tot
A1	0	0	0	0
B1	10	0	6	15
C1	0	3	0	3
Tot	10	3	6	18

O/D	A2	B2	C2	D2	Tot
A2	0	0	5	0	5
B2	0	0	0	0	0
C2	0	0	0	15	15
D2	0	0	3	0	3
Tot	0	0	8	15	23

**B1438
(North)**

A1/A2

0	5	0
---	---	---

The Avenue

B2

0
0
0

**B1438 (Towards
A12)**

B1/C2

6	10	0
---	----	---

**B1438
Yarmouth Rd**

Site

B3

52	15
----	----

C3

8	0
---	---

O/D	A3	B3	C3	Tot
A3	0	27	0	27
B3	52	0	15	67
C3	0	8	0	8
Tot	52	35	15	102

A3

27	0
----	---

**B1438 The
Street**

A

11
0
0

B

22	18	7
----	----	---

**A1152 (West)
Woods Ln**

**A1152 (East) Wilford
Bridge Road**

0	9	0
---	---	---

C

4
0
0

**B1438 (South)
Melton Rd**

O/D	A	B	C	D	Tot
A	0	11	0	0	11
B	22	0	7	18	47
C	0	4	0	0	4
D	0	9	0	0	9
Tot	22	24	7	18	71

**Proposed Development Traffic Distribution
(Vehicles) PM Peak**

O/D	A1	B1	C1	Tot
A1	0	0	0	0
B1	7	0	4	11
C1	0	5	0	5
Tot	7	5	4	16

O/D	A2	B2	C2	D2	Tot
A2	0	0	9	0	9
B2	0	0	0	0	0
C2	0	0	0	11	11
D2	0	0	5	0	5
Tot	0	0	14	11	25

**B1438
(North)**

A1/A2

0	9	0
---	---	---

The Avenue

B2

0
0
0

**B1438 (Towards
A12)**

C1/D2

0
0
5

B1/C2

4	7	0
---	---	---

**B1438
Yarmouth Rd**

Site

B3

38	11
----	----

C3

14	0
----	---

O/D	A3	B3	C3	Tot
A3	0	48	0	48
B3	38	0	11	49
C3	0	14	0	14
Tot	38	62	11	111

**B1438 The
Street**

A

20
0
0

B

16	13	5
----	----	---

**A1152 (West)
Woods Ln**

**A1152 (East) Wilford
Bridge Road**

D

0	17	0
---	----	---

C

6
0
0

O/D	A	B	C	D	Tot
A	0	20	0	0	20
B	16	0	5	13	34
C	0	6	0	0	6
D	0	17	0	0	17
Tot	16	43	5	13	77

**B1438 (South)
Melton Rd**



Appendix M

Base (2015) Traffic Flow Diagrams

Base 2015 Weekday (AM Peak) - PCUs

O/D	A1	B1	C1	Tot
A1	0	0	146	146
B1	116	0	50	166
C1	4	96	0	100
Tot	120	96	195	412

O/D	A2	B2	C2	D2	Tot
A2	0	4	61	0	65
B2	0	0	31	36	67
C2	0	8	0	166	174
D2	0	1	95	0	96
Tot	0	13	187	202	402

B1438 (North)

A1/A2

146	61	4
-----	----	---

The Avenue

B2

3
33
31

B1438 (Towards A12)

C1/D2

4
1
95

B1/C2

50	116	8
----	-----	---

B1438 Yarmouth Rd

Site

B3

0	0
---	---

C3

0	224
---	-----

O/D	A3	B3	C3	Tot
A3	0	0	209	209
B3	0	0	0	0
C3	224	0	0	224
Tot	224	0	209	433

B1438 The Street

A

147
392
125

B

106	134	12
-----	-----	----

A1152 (West) Woods Ln

A1152 (East) Wilford Bridge Road

57	87	130
----	----	-----

C

3
505
246

O/D	A	B	C	D	Tot
A	0	147	392	125	664
B	106	0	12	134	252
C	505	3	0	246	754
D	57	87	130	0	273
Tot	668	237	533	505	1943

B1438 (South) Melton Rd

D

Base 2015 Weekday (PM Peak) - PCUs

O/D	A1	B1	C1	Tot
A1	0	0	84	84
B1	192	0	36	229
C1	8	69	0	77
Tot	200	69	120	389

O/D	A2	B2	C2	D2	Tot
A2	0	3	69	0	72
B2	0	0	16	14	31
C2	0	35	0	229	264
D2	0	4	65	0	69
Tot	0	42	150	243	435

B1438 (North)

A1/A2

84	69	3
----	----	---

The Avenue

B2

1
13
16

B1438 (Towards A12)

B1/C2

36	192	35
----	-----	----

B1438 Yarmouth Rd

Site

B3

0	0
---	---

C3

0	180
---	-----

O/D	A3	B3	C3	Tot
A3	0	0	282	282
B3	0	0	0	0
C3	180	0	0	180
Tot	180	0	282	462

B1438 The Street

A

99
427
55

B

86	85	11
----	----	----

A1152 (West) Woods Ln

A1152 (East) Wilford Bridge Road

D

140	167	267
-----	-----	-----

C

12
494
137

O/D	A	B	C	D	Tot
A	0	99	427	55	581
B	86	0	11	85	182
C	494	12	0	137	643
D	140	167	267	0	574
Tot	720	278	704	278	1980

B1438 (South) Melton Rd



Appendix N

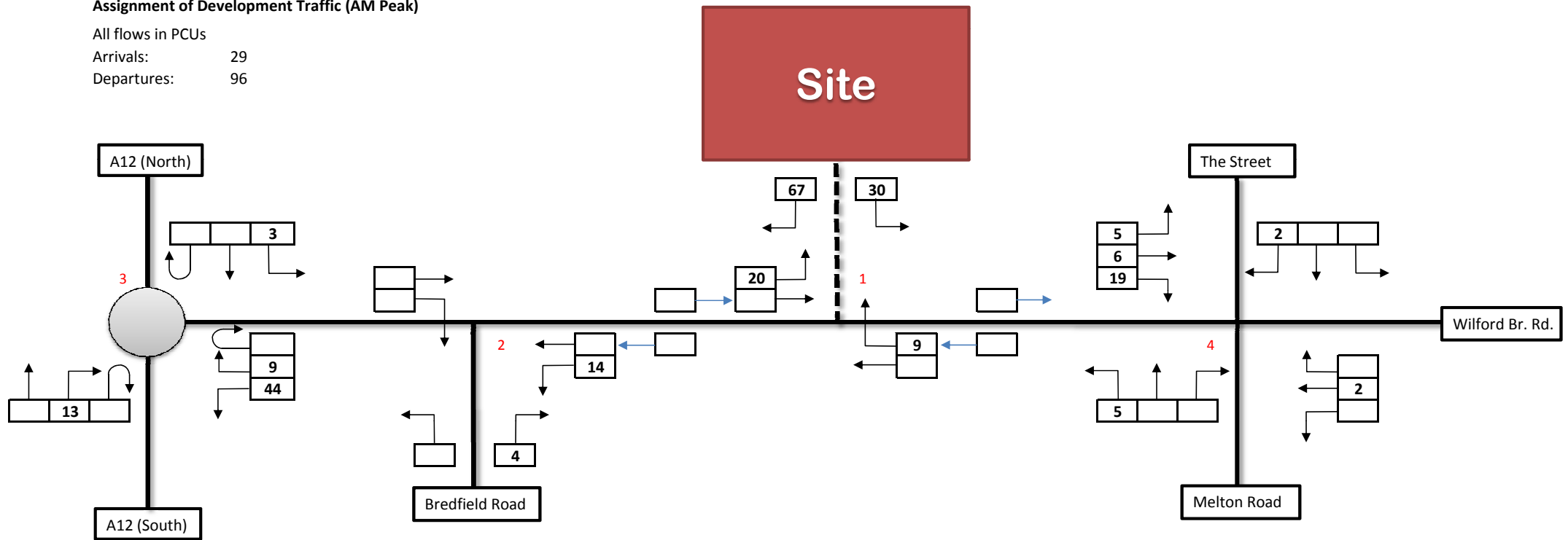
Committed Development (Woods Lane) Traffic Flow Diagrams

Assignment of Development Traffic (AM Peak)

All flows in PCUs

Arrivals: 29

Departures: 96

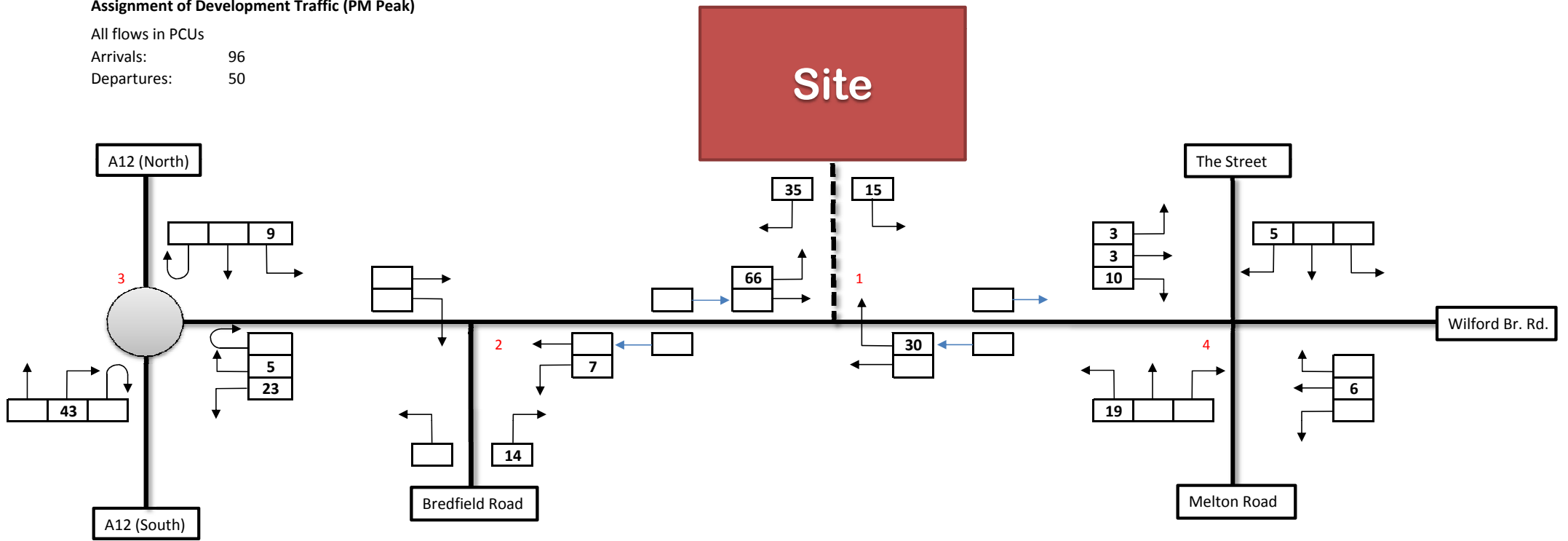


Assignment of Development Traffic (PM Peak)

All flows in PCUs

Arrivals: 96

Departures: 50





Appendix O

Total Forecast Base (2020) Traffic Flow Diagrams

Base 2020 + Committed Development AM Peak

O/D	A1	B1	C1	Tot
A1	0	0	157	157
B1	125	0	54	179
C1	4	104	0	108
Tot	130	104	211	445

O/D	A2	B2	C2	D2	Tot
A2	0	4	66	0	70
B2	0	0	34	39	73
C2	0	###	0	179	###
D2	0	1	103	0	104
Tot	0	###	202	218	###

B1438 (North)

A1/A2

157	66	4
-----	----	---

The Avenue

B2

3
36
34

B1438 (Towards A12)

C1/D2

4
1
103

B1/C2

54	125	###
----	-----	-----

B1438 Yarmouth Rd

Site

B3

0	0
0	0

C3

0	242
---	-----

O/D	A3	B3	C3	Tot
A3	0	0	226	226
B3	0	0	0	0
C3	242	0	0	242
Tot	242	0	226	468

B1438 The Street

A

159
423
135

B

114	145	13
-----	-----	----

A1152 (West) Woods Ln

A1152 (East) Wilford Bridge Road

D

61	94	140
----	----	-----

C

3
545
266

O/D	A	B	C	D	Tot
A	0	159	423	135	717
B	114	0	13	145	272
C	545	3	0	266	814
D	61	94	140	0	295
Tot	721	256	576	546	2098

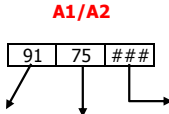
B1438 (South) Melton Rd

Base 2020 + Committed Development PM Peak

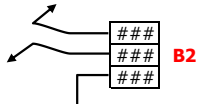
O/D	A1	B1	C1	Tot
A1	0	0	91	91
B1	###	0	###	###
C1	9	74	0	83
Tot	###	74	###	###

O/D	A2	B2	C2	D2	Tot
A2	0	###	75	0	###
B2	0	0	###	###	###
C2	0	###	0	###	###
D2	0	4	70	0	74
Tot	0	###	###	###	###

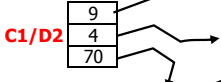
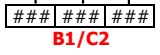
B1438 (North)



The Avenue

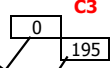
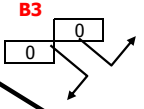


B1438 (Towards A12)



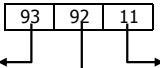
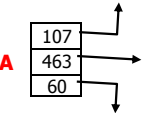
B1438 Yarmouth Rd

Site



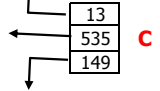
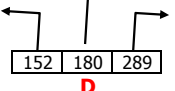
O/D	A3	B3	C3	Tot
A3	0	0	305	305
B3	0	0	0	0
C3	195	0	0	195
Tot	195	0	305	500

B1438 The Street



A1152 (West) Woods Ln

A1152 (East) Wilford Bridge Road



O/D	A	B	C	D	Tot
A	0	107	463	60	630
B	93	0	11	92	197
C	535	13	0	149	697
D	152	180	289	0	622
Tot	780	301	763	301	2146

B1438 (South) Melton Rd



Appendix P

Total Forecast Base (2020) + Development Traffic Flow Diagrams

Base 2020 plus Dev + Woods Lane Traffic (AM Peak) - PCUs

O/D	A1	B1	C1	Tot
A1	0	0	157	157
B1	136	0	60	196
C1	4	108	0	112
Tot	140	108	217	465

O/D	A2	B2	C2	D2	Tot
A2	0	4	72	0	76
B2	0	0	34	39	73
C2	0	9	0	196	205
D2	0	1	106	0	108
Tot	0	14	212	235	461

B1438 (North)

A1/A2

157	72	4
-----	----	---

B1438 (Towards A12)

C1/D2

4
1
106

The Avenue

B2

3
36
34

60	136	9
----	-----	---

B1/C2

B1438 Yarmouth Rd

Site

B3

52	15
----	----

C3

8	240
---	-----

O/D	A3	B3	C3	Tot
A3	0	27	225	252
B3	52	0	15	67
C3	240	8	0	248
Tot	292	35	240	567

B1438 The Street

A

175
429
154

B

138	163	19
-----	-----	----

C

7
547
266

A1152 (West) Woods Ln

A1152 (East) Wilford Bridge Road

66	103	140
----	-----	-----

D

O/D	A	B	C	D	Tot
A	0	175	429	154	758
B	138	0	19	163	321
C	547	7	0	266	820
D	66	103	140	0	310
Tot	752	285	588	583	2208

B1438 (South) Melton Rd

Base 2020 plus Dev + Woods Lane Traffic (PM Peak) - PCUs

O/D	A1	B1	C1	Tot
A1	0	0	91	91
B1	216	0	44	260
C1	9	80	0	89
Tot	225	80	135	439

O/D	A2	B2	C2	D2	Tot
A2	0	3	84	0	88
B2	0	0	18	15	33
C2	0	38	0	260	298
D2	0	4	76	0	80
Tot	0	46	178	275	499

B1438 (North)

A1/A2

91	84	3
----	----	---

B1438 (Towards A12)

C1/D2

9
4
76

The Avenue

B2

1
14
18

44	216	38
----	-----	----

B1/C2

B1438 Yarmouth Rd

Site

B3

11
38

C3

14	194
----	-----

O/D	A3	B3	C3	Tot
A3	0	48	303	351
B3	38	0	11	49
C3	194	14	0	208
Tot	232	62	315	608

A3

48
303

B1438 The Street

A

130
466
70

B

114	106	16
-----	-----	----

A1152 (West) Woods Ln

A1152 (East) Wilford Bridge Road

171	197	289
-----	-----	-----

D

19
541
149

C

O/D	A	B	C	D	Tot
A	0	130	466	70	666
B	114	0	16	106	236
C	541	19	0	149	709
D	171	197	289	0	657
Tot	826	347	771	324	2269

B1438 (South) Melton Rd

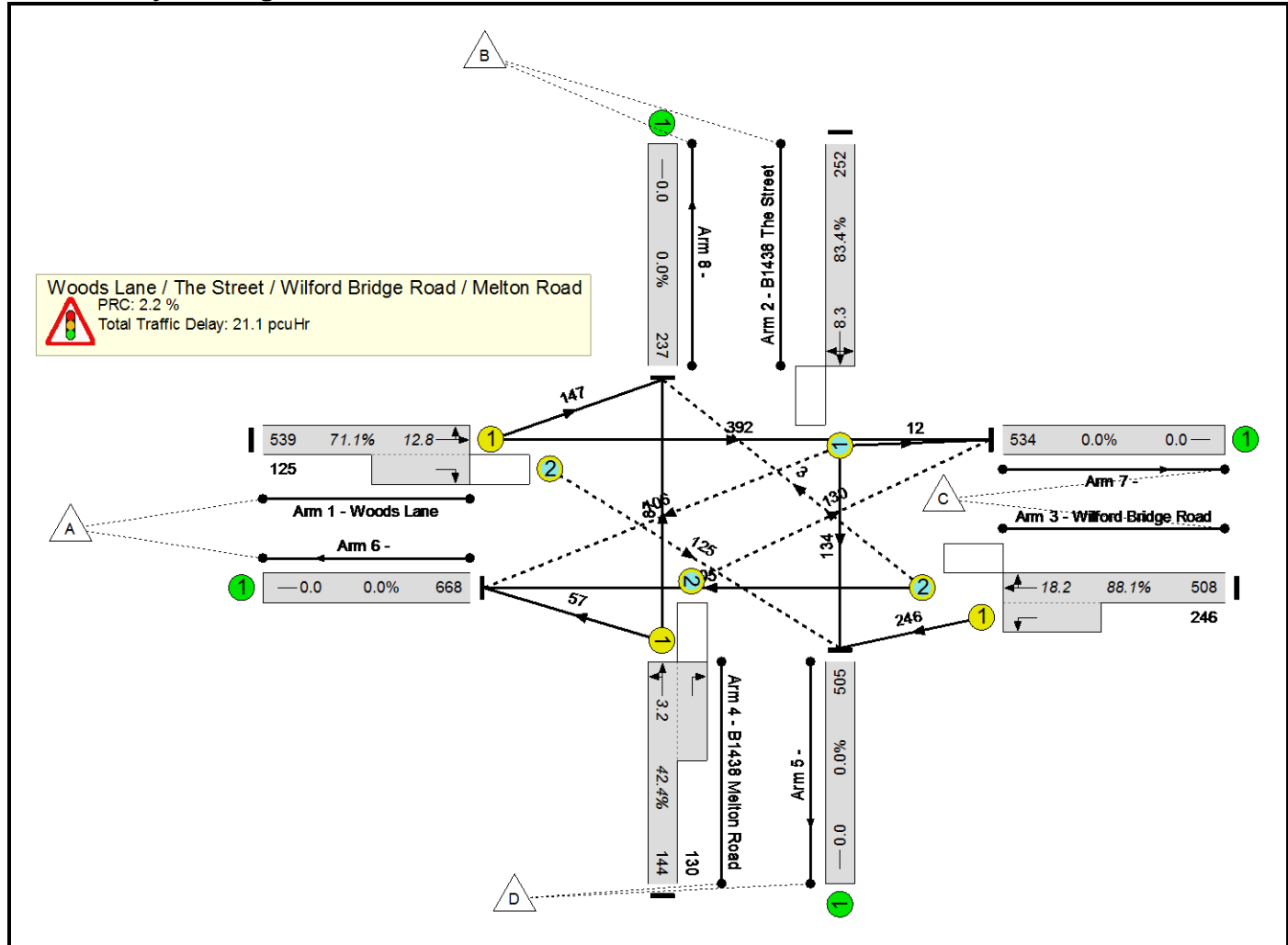


Appendix Q

Woods Lane / The Street / Wilford Bridge Road / Melton Road LinSig Output

Typical Results Summary

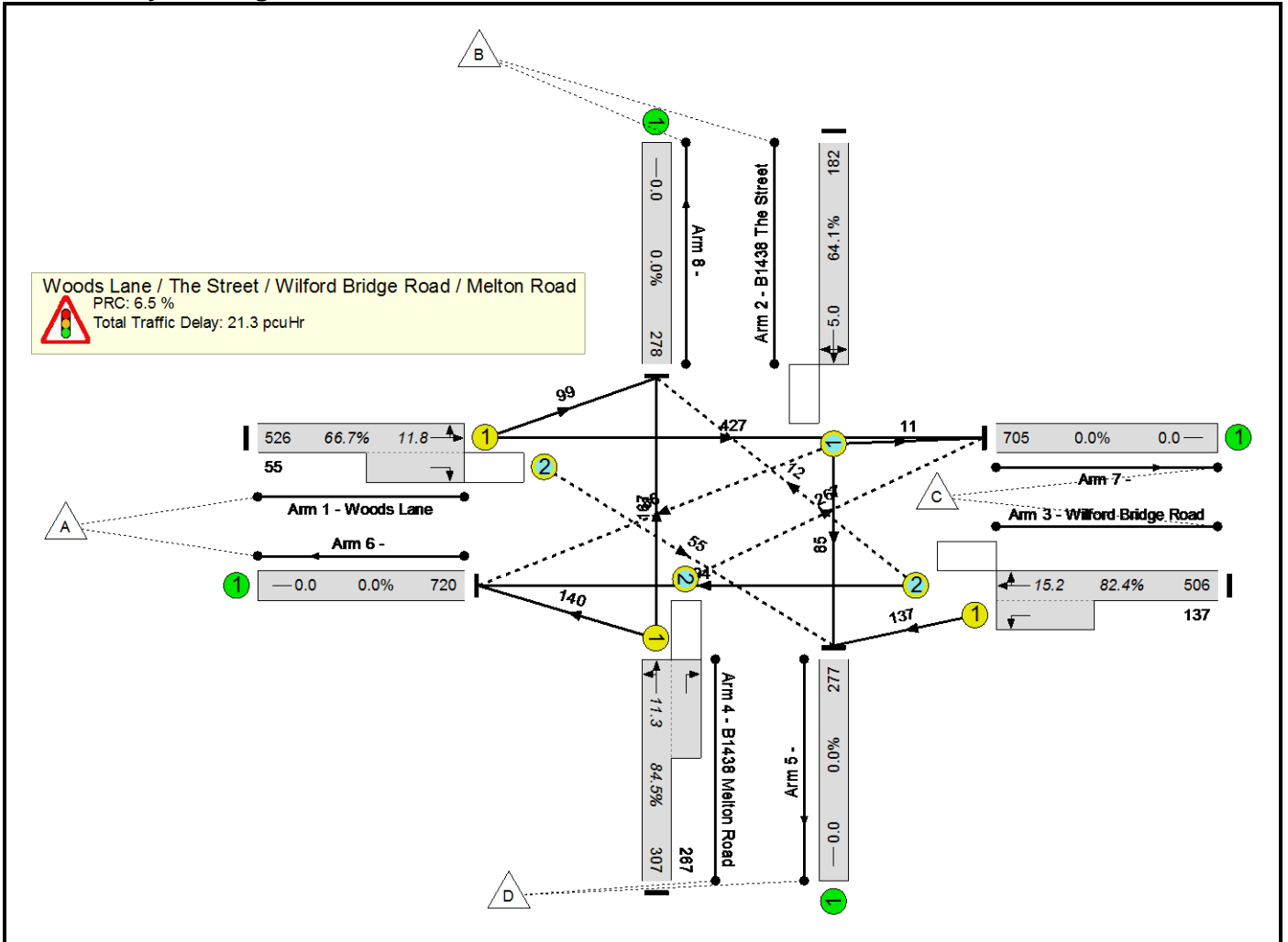
Scenario 5: '2015 Base - AM Peak' (FG5: '2015 Base - AM Peak', Plan 1: 'Single Cycle Peds')



Network Results

Item	Lane Description	Lane Type	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Wood Lane/Wilford Bridge Road Signal Junction	-	-	-	-	-	88.1%	21.1	-	-
Woods Lane / The Street / Wilford Bridge Road / Melton Road	-	-	-	-	-	88.1%	21.1	-	-
1/1+1/2	Woods Lane Right Ahead Left	U+O	664	1870:1888	933	71.1%	5.1	27.9	12.8
2/1	B1438 The Street Ahead Right Left	O	252	1845	302	83.4%	4.9	70.2	8.3
3/2+3/1	Wilford Bridge Road Left Ahead Right	O+U	754	2059:1725	856	88.1%	8.4	40.2	18.2
4/1+4/2	B1438 Melton Road Left Right Ahead	U+O	274	1811:1868	646	42.4%	2.7	35.2	3.2
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	2.2 2.2	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		21.15 21.15	Cycle Time (s): 90			

Scenario 6: '2015 Base - PM Peak' (FG6: '2015 Base - PM Peak', Plan 1: 'Single Cycle Peds')
Network Layout Diagram

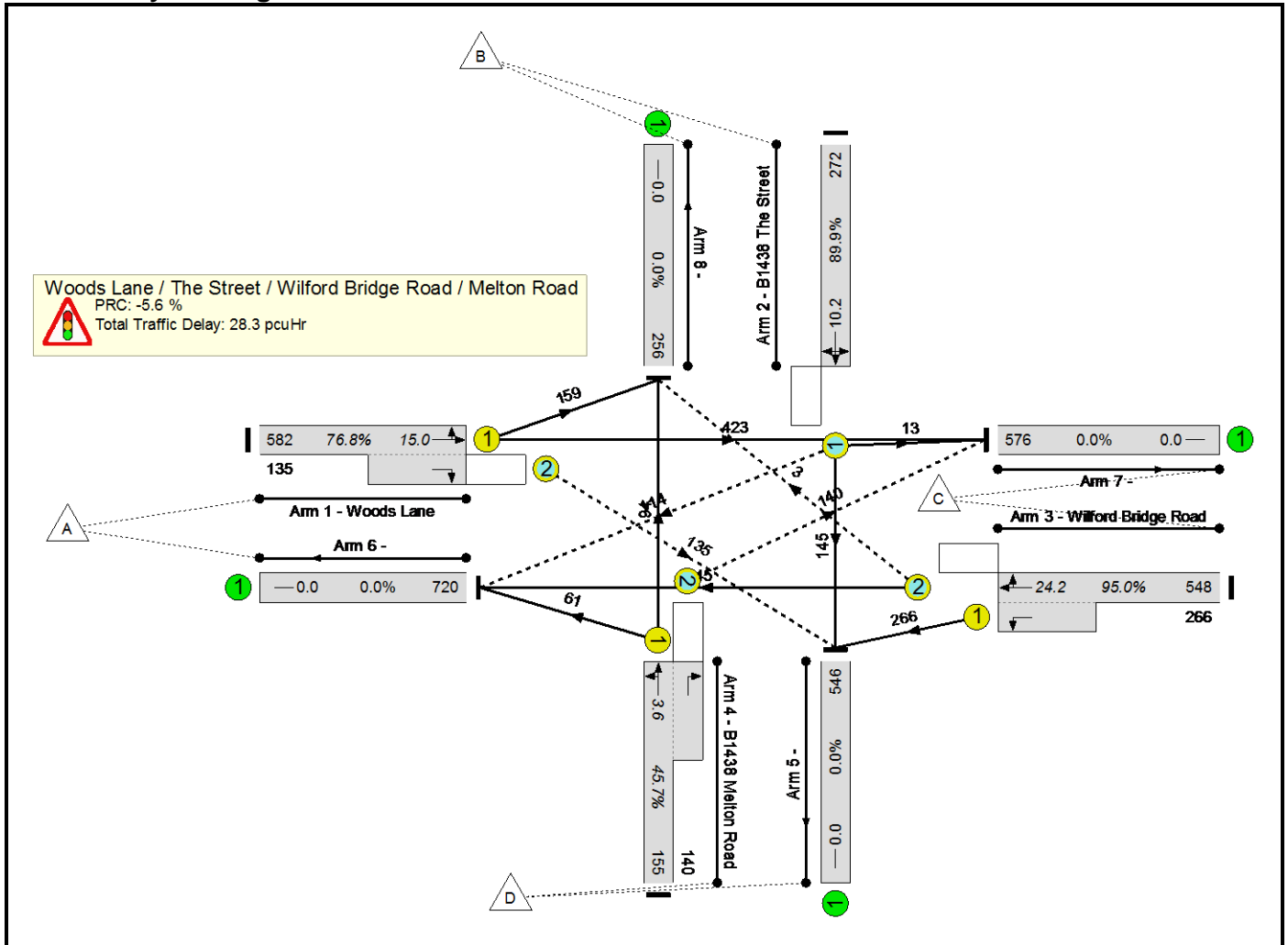


Network Results

Item	Lane Description	Lane Type	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Wood Lane/Wilford Bridge Road Signal Junction	-	-	-	-	-	84.5%	21.3	-	-
Woods Lane / The Street / Wilford Bridge Road / Melton Road	-	-	-	-	-	84.5%	21.3	-	-
1/1+1/2	Woods Lane Right Ahead Left	U+O	581	1886:1888	871	66.7%	4.2	26.2	11.8
2/1	B1438 The Street Ahead Right Left	O	182	1832	284	64.1%	2.8	55.7	5.0
3/2+3/1	Wilford Bridge Road Left Ahead Right	O+U	643	2054:1725	780	82.4%	6.7	37.4	15.2
4/1+4/2	B1438 Melton Road Left Right Ahead	U+O	574	1801:1868	679	84.5%	7.5	47.2	11.3
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	6.5 6.5	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		21.26 21.26	Cycle Time (s): 90			

Scenario 9: '2020 Base + Woods- AM Peak' (FG9: '2020 Base plus Woods Lane - AM Peak', Plan 1: 'Single Cycle Peds')

Network Layout Diagram

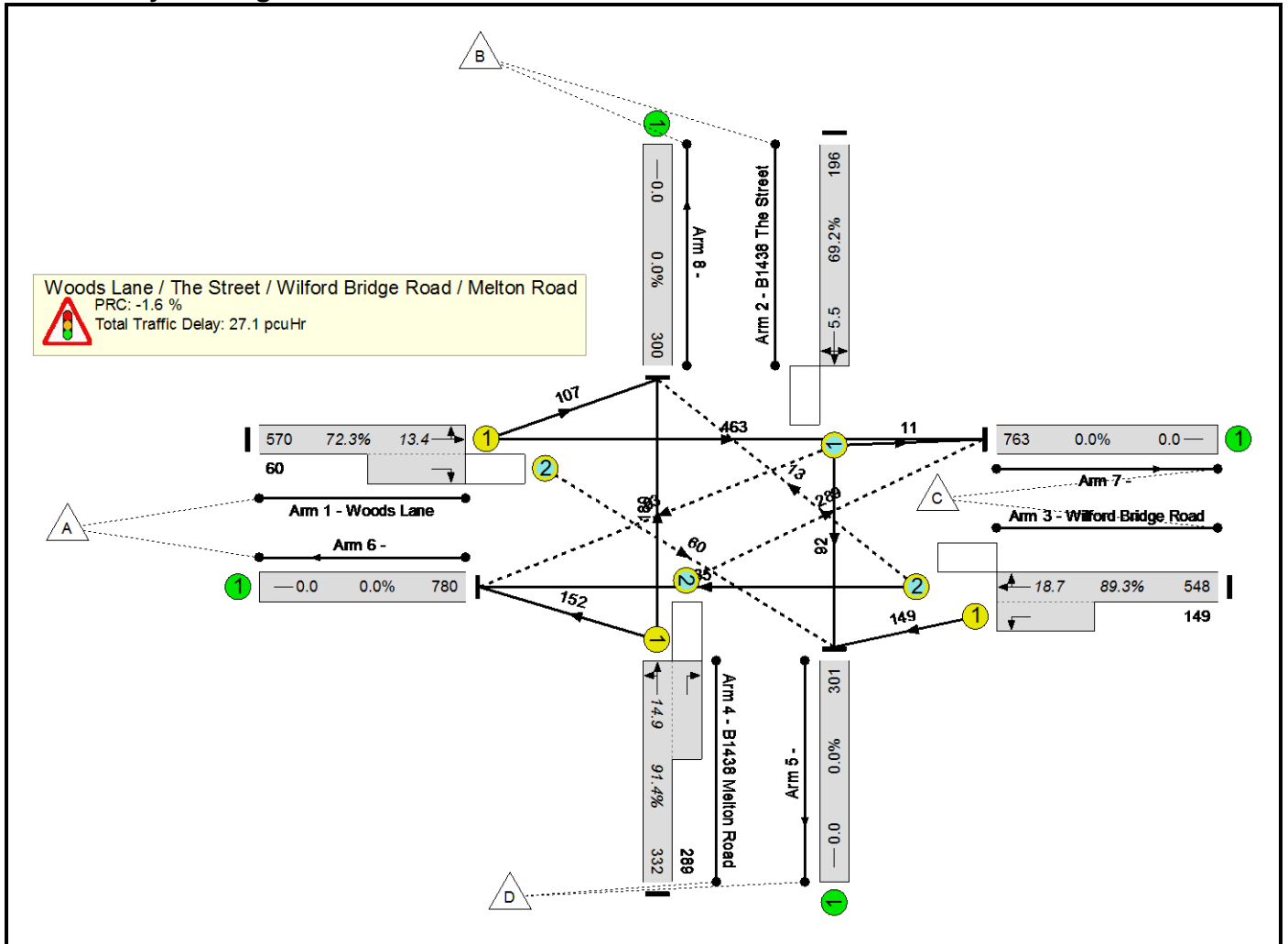


Network Results

Item	Lane Description	Lane Type	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Wood Lane/Wilford Bridge Road Signal Junction	-	-	-	-	-	95.0%	28.3	-	-
Woods Lane / The Street / Wilford Bridge Road / Melton Road	-	-	-	-	-	95.0%	28.3	-	-
1/1+1/2	Woods Lane Right Ahead Left	U+O	717	1869:1888	933	76.8%	6.1	30.5	15.0
2/1	B1438 The Street Ahead Right Left	O	272	1846	303	89.9%	6.5	85.5	10.2
3/2+3/1	Wilford Bridge Road Left Ahead Right	O+U	814	2059:1725	857	95.0%	12.8	56.6	24.2
4/1+4/2	B1438 Melton Road Left Right Ahead	U+O	295	1811:1868	646	45.7%	3.0	36.0	3.6
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	-5.6 -5.6	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		28.28 28.28	Cycle Time (s): 90			

Scenario 10: '2020 Base + Woods - PM Peak' (FG10: '2020 Base plus Woods Lane - PM Peak', Plan 1: 'Single Cycle Peds')

Network Layout Diagram

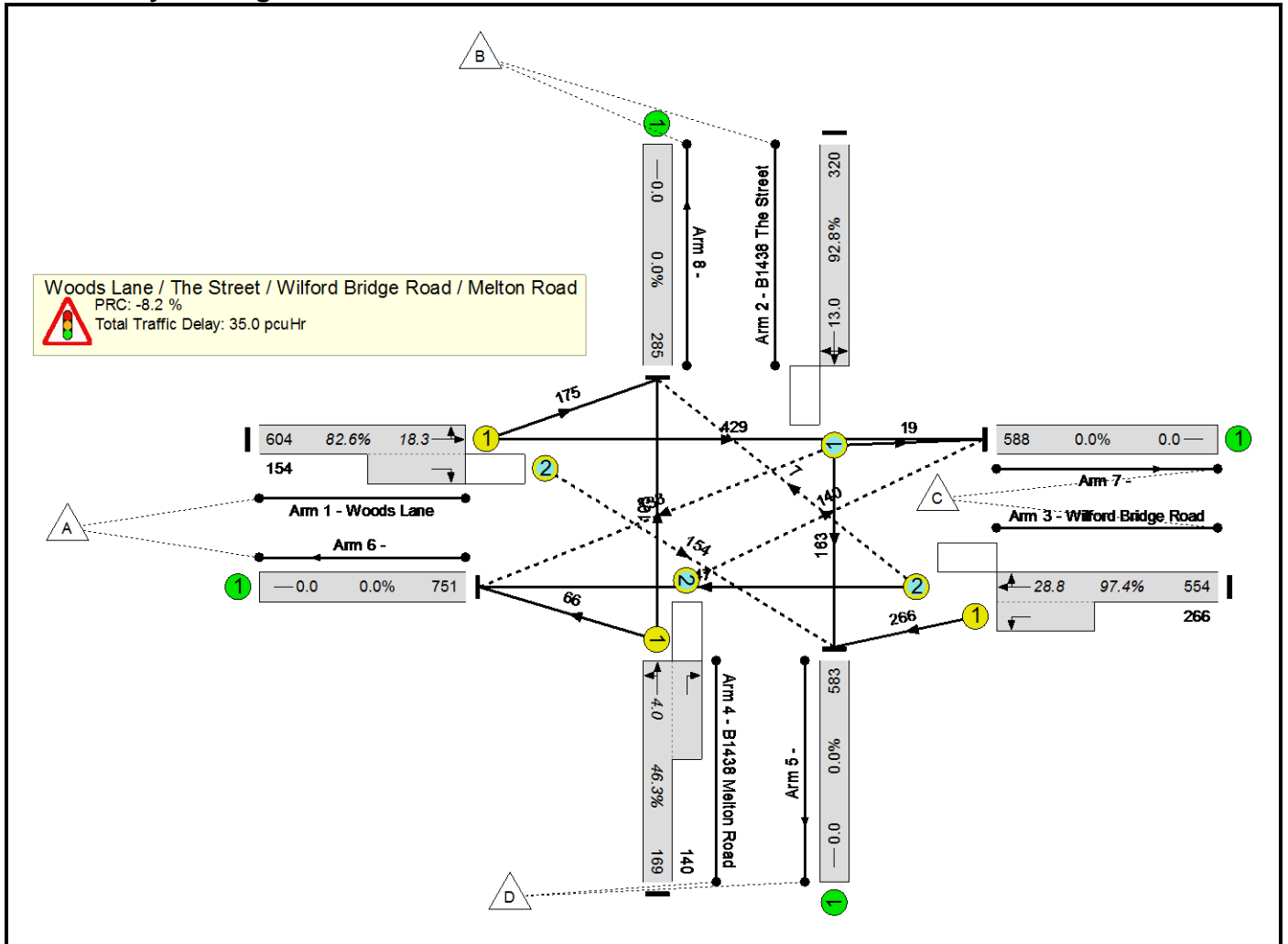


Network Results

Item	Lane Description	Lane Type	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Wood Lane/Wilford Bridge Road Signal Junction	-	-	-	-	-	91.4%	27.1	-	-
Woods Lane / The Street / Wilford Bridge Road / Melton Road	-	-	-	-	-	91.4%	27.1	-	-
1/1+1/2	Woods Lane Right Ahead Left	U+O	630	1887:1888	871	72.3%	5.0	28.4	13.4
2/1	B1438 The Street Ahead Right Left	O	196	1833	283	69.2%	3.2	59.5	5.5
3/2+3/1	Wilford Bridge Road Left Ahead Right	O+U	697	2054:1725	781	89.3%	8.8	45.5	18.7
4/1+4/2	B1438 Melton Road Left Right Ahead	U+O	621	1801:1868	679	91.4%	10.1	58.4	14.9
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	-1.6 -1.6	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		27.10 27.10	Cycle Time (s): 90			

Scenario 13: '2020 Base plus Dev plus Woods Lane Traffic - AM Peak' (FG13: '2020 Base plus Dev plus Woods Lane Traffic - AM Peak', Plan 1: 'Single Cycle Peds')

Network Layout Diagram

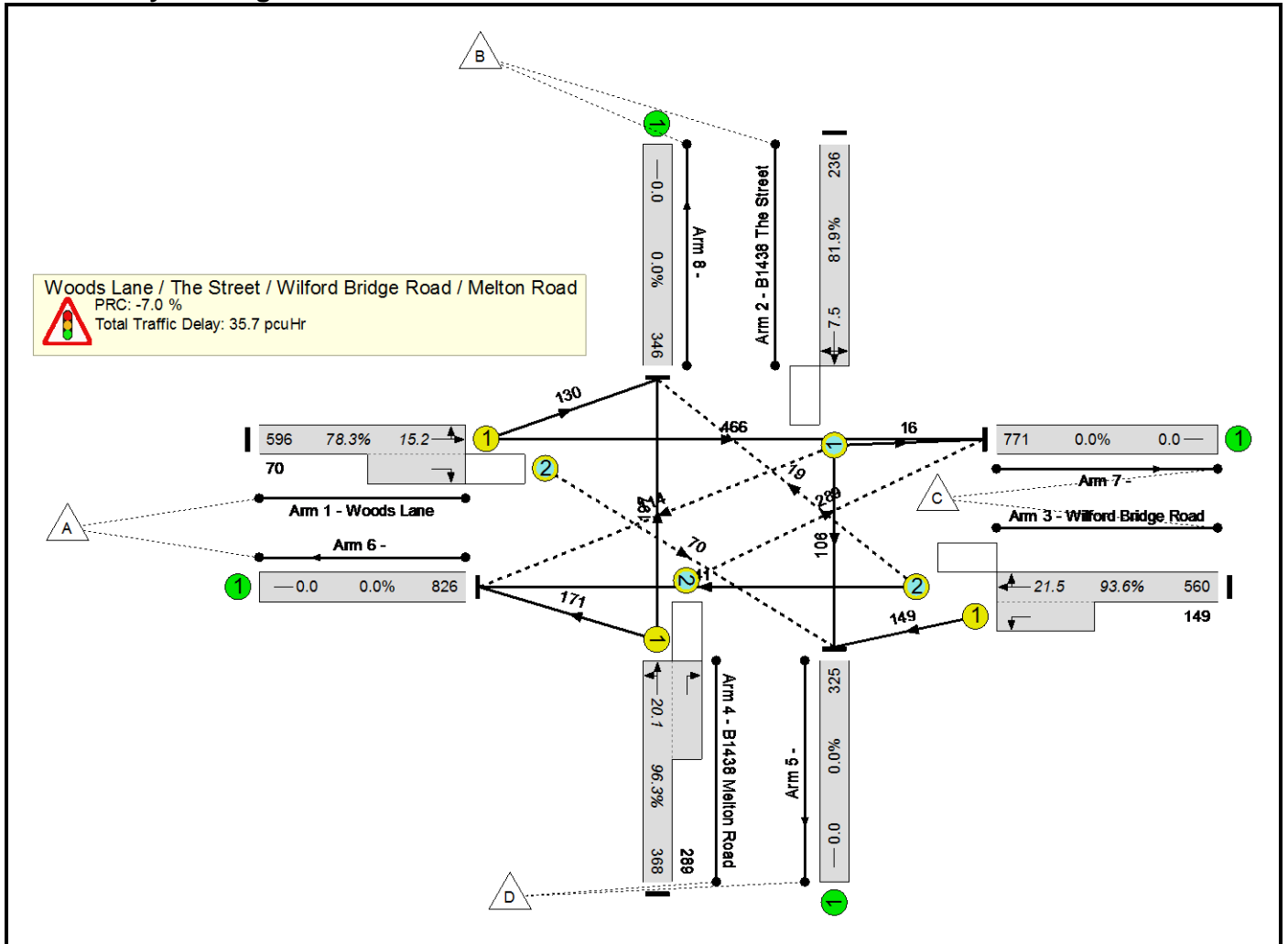


Network Results

Item	Lane Description	Lane Type	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Wood Lane/Wilford Bridge Road Signal Junction	-	-	-	-	-	97.4%	35.0	-	-
Woods Lane / The Street / Wilford Bridge Road / Melton Road	-	-	-	-	-	97.4%	35.0	-	-
1/1+1/2	Woods Lane Right Ahead Left	U+O	758	1866:1888	917	82.6%	7.7	36.5	18.3
2/1	B1438 The Street Ahead Right Left	O	320	1840	345	92.8%	8.1	91.6	13.0
3/2+3/1	Wilford Bridge Road Left Ahead Right	O+U	820	2057:1725	842	97.4%	16.0	70.4	28.8
4/1+4/2	B1438 Melton Road Left Right Ahead	U+O	309	1811:1868	668	46.3%	3.1	36.0	4.0
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	-8.2 -8.2	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		34.96 34.96	Cycle Time (s): 96			

Scenario 14: '2020 Base plus Dev plus Woods Lane Traffic - PM Peak' (FG14: '2020 Base plus Dev plus Woods Lane Traffic - PM Peak', Plan 1: 'Single Cycle Peds')

Network Layout Diagram



Network Results

Item	Lane Description	Lane Type	Demand Flow (pcu)	Sat Flow (pcu/Hr)	Capacity (pcu)	Deg Sat (%)	Total Delay (pcuHr)	Av. Delay Per PCU (s/pcu)	Mean Max Queue (pcu)
Network: Wood Lane/Wilford Bridge Road Signal Junction	-	-	-	-	-	96.3%	35.7	-	-
Woods Lane / The Street / Wilford Bridge Road / Melton Road	-	-	-	-	-	96.3%	35.7	-	-
1/1+1/2	Woods Lane Right Ahead Left	U+O	666	1880:1888	850	78.3%	6.0	32.2	15.2
2/1	B1438 The Street Ahead Right Left	O	236	1828	288	81.9%	4.7	72.4	7.5
3/2+3/1	Wilford Bridge Road Left Ahead Right	O+U	709	2052:1725	758	93.6%	11.2	57.0	21.5
4/1+4/2	B1438 Melton Road Left Right Ahead	U+O	657	1800:1868	682	96.3%	13.8	75.4	20.1
C1	PRC for Signalled Lanes (%): PRC Over All Lanes (%):	-7.0 -7.0	Total Delay for Signalled Lanes (pcuHr): Total Delay Over All Lanes(pcuHr):		35.70 35.70	Cycle Time (s): 90			



Appendix R

Yarmouth Road / B1438 / The Avenue PICADY Output

TRL LIMITED

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
RELEASE 5.0 (JUNE 2010)

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IN NO WAY RELIEVED OF HIS/HER RESPONSIBILITY FOR THE CORRECTNESS OF THE SOLUTION

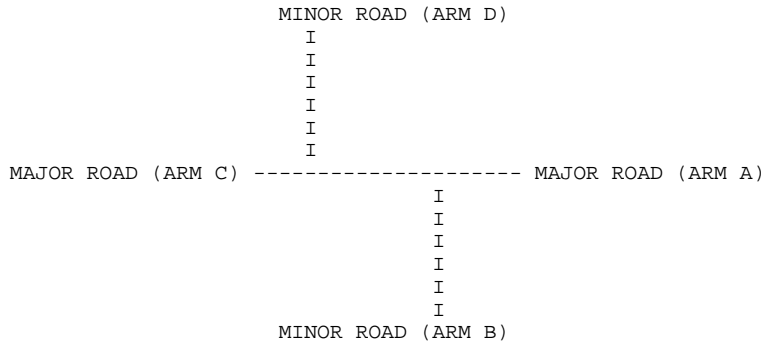
Run with file:-
"X:\Projects\2012\A080000\A087076 - Yarmouth Road Melton\30 Technical\31 Modelling\August 2015\
Yarmouth Rd - B1438 - The Avenue Junction.vpi"
(drive-on-the-left) at 15:23:40 on Monday, 14 September 2015

RUN INFORMATION

RUN TITLE : Yarmouth Rd - B1438 - The Avenue Junction
LOCATION : Melton, Woodbridge
DATE : 29/09/14
CLIENT : Christchurch Land & Estates Ltd
ENUMERATOR : robert.davies [1388DT]
JOB NUMBER : A087076
STATUS : Preliminary
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Yarmouth Road
ARM B IS B1438 (S)
ARM C IS B1438 (N)
ARM D IS The Avenue

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I	MINOR ROAD D	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	(W) 6.45 M.	I	(W) 6.45 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I	(WCR) 0.00 M.	I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 2.20 M.	I	(WA-D) 2.20 M.	I
I	- VISIBILITY	I	(VC-B) 111.00 M.	I	(VA-D) 100.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	NO (0)	I	YES (1)	I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 45.0 M.	I	(VD-A) 200.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 78.0 M.	I	(VD-C) 49.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) 4.78 M.	I	(WD-A) -	I
I	- LANE 2 WIDTH	I	(WB-A) 0.00 M.	I	(WD-C) -	I
I	WIDTH AT 0 M FROM JUNCTION	I	-	I	10.00 M.	I
I	WIDTH AT 5 M FROM JUNCTION	I	-	I	10.00 M.	I
I	WIDTH AT 10 M FROM JUNCTION	I	-	I	6.49 M.	I
I	WIDTH AT 15 M FROM JUNCTION	I	-	I	4.52 M.	I
I	WIDTH AT 20 M FROM JUNCTION	I	-	I	4.57 M.	I
I	- LENGTH OF FLARED SECTION	I	-	I	1 VEHS	I

SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-A

I	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM B-A	STREAM A-C	STREAM A-D	STREAM A-B	STREAM C-A	I
I	625.34	0.28	0.28	0.11	0.18	I

I	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM D-A	STREAM C-B	STREAM D-B	STREAM D-B	I
I	0.18	0.40	0.40	0.40	I

STREAM D-C

I	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM D-C	STREAM C-A	STREAM C-B	STREAM C-D	STREAM A-C	I
I	0.00	0.00	0.00	0.00	0.00	I

I	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM B-C	STREAM A-D	STREAM B-D	STREAM B-D	I
I	0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

STREAM CD-B

I	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM CD-B	STREAM A-B	STREAM A-C	STREAM A-D	STREAM A-C	I
I	631.87	0.24	0.24	0.28		I

STREAM AB-D

I	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM AB-D	STREAM C-D	STREAM C-A	STREAM C-B	STREAM C-B	I
I	631.87	0.24	0.24	0.00		I

STREAM B-CD

I	Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing	I
I	STREAM B-CD	STREAM A-C	STREAM A-D	STREAM A-B	STREAM A-B	I
I	792.98	0.30	0.30	0.12		I

STREAM D-AB

I Intercept For I STREAM D-AB	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing I
0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

I ARM	I FLOW SCALE (%)	I
I A	100	I
I B	100	I
I C	100	I
I D	100	I

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2015 Base AM Peak (07:45-08:45)

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I ARM	NUMBER OF MINUTES FROM START WHEN			RATE OF FLOW (VEH/MIN)		
	I FLOW STARTS I TO RISE	I TOP OF PEAK I IS REACHED	I FLOW STOPS I FALLING	I BEFORE I PEAK	I AT TOP I OF PEAK	I AFTER I PEAK
I ARM A	15.00	45.00	75.00	0.81	1.22	0.81
I ARM B	15.00	45.00	75.00	0.84	1.26	0.84
I ARM C	15.00	45.00	75.00	2.17	3.26	2.17
I ARM D	15.00	45.00	75.00	1.20	1.80	1.20

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2015 Base AM Peak (07:45-08:45)

I TIME	TURNING PROPORTIONS							
	TURNING COUNTS (PERCENTAGE OF H.V.S)							
I FROM/TO	I ARM A	I ARM B	I ARM C	I ARM D	I	I	I	I
I 07.30 - 09.00	I ARM A	0.000	0.062	0.938	0.000			
	I	0.0	4.0	61.0	0.0			
	I	(0.0)	(0.0)	(0.0)	(0.0)			
	I ARM B	0.000	0.000	0.463	0.537			
	I	0.0	0.0	31.0	36.0			
	I	(0.0)	(0.0)	(0.0)	(0.0)			
	I ARM C	0.000	0.046	0.000	0.954			
	I	0.0	8.0	0.0	166.0			
	I	(0.0)	(0.0)	(0.0)	(0.0)			
	I ARM D	0.000	0.010	0.990	0.000			
	I	0.0	1.0	95.0	0.0			
	I	(0.0)	(0.0)	(0.0)	(0.0)			

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Yarmouth Rd - B1438 - The Avenue Junction - 2015 Base AM Peak (07:45-08:45)
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-ACD	0.84	12.98	0.065		0.00	0.07	1.0		0.08
A-B	0.05								
A-C	0.77								
A-D	0.00								
AB-CD (	0.45)	10.01	0.045		0.00	0.04	0.7		0.10
AB-C (	1.15)								
D-AB	0.01	9.66	0.001		0.00	0.00	0.0		0.10
D-C	1.19	10.47	0.114		0.00	0.13	1.9		0.11
C-D	2.08								
C-A	0.00								
C-B	0.10								
CD-A (	0.00)								
CD-B (	0.11)	10.44	0.011		0.00	0.01	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-ACD	1.00	12.93	0.078		0.07	0.08	1.2		0.08
A-B	0.06								
A-C	0.91								
A-D	0.00								
AB-CD (	0.54)	9.91	0.054		0.04	0.05	0.8		0.11
AB-C (	1.38)								
D-AB	0.01	9.54	0.002		0.00	0.00	0.0		0.11
D-C	1.42	10.33	0.138		0.13	0.16	2.3		0.11
C-D	2.49								
C-A	0.00								
C-B	0.12								
CD-A (	0.00)								
CD-B (	0.13)	10.40	0.013		0.01	0.01	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-ACD	1.23	12.87	0.096		0.08	0.10	1.5		0.09
A-B	0.07								
A-C	1.12								
A-D	0.00								
AB-CD (	0.66)	9.76	0.068		0.05	0.07	1.0		0.11
AB-C (	1.69)								
D-AB	0.02	9.38	0.002		0.00	0.00	0.0		0.11
D-C	1.74	10.15	0.172		0.16	0.21	3.0		0.12
C-D	3.05								
C-A	0.00								
C-B	0.15								
CD-A (	0.00)								
CD-B (	0.17)	10.35	0.016		0.01	0.02	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-ACD	1.23	12.87	0.096		0.10	0.11	1.6		0.09
A-B	0.07								
A-C	1.12								
A-D	0.00								
AB-CD (	0.66)	9.76	0.068		0.07	0.07	1.0		0.11
AB-C (	1.69)								
D-AB	0.02	9.38	0.002		0.00	0.00	0.0		0.11
D-C	1.74	10.15	0.172		0.21	0.21	3.1		0.12
C-D	3.05								
C-A	0.00								
C-B	0.15								
CD-A (	0.00)								
CD-B (	0.17)	10.35	0.016		0.02	0.02	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-ACD	1.00	12.93	0.078		0.11	0.08	1.3		0.08
A-B	0.06								
A-C	0.91								
A-D	0.00								
AB-CD	(0.54)	9.91	0.055		0.07	0.05	0.8		0.11
AB-C	(1.38)								
D-AB	0.01	9.54	0.002		0.00	0.00	0.0		0.11
D-C	1.42	10.33	0.138		0.21	0.16	2.5		0.11
C-D	2.49								
C-A	0.00								
C-B	0.12								
CD-A	(0.00)								
CD-B	(0.13)	10.40	0.013		0.02	0.01	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-ACD	0.84	12.98	0.065		0.08	0.07	1.1		0.08
A-B	0.05								
A-C	0.77								
A-D	0.00								
AB-CD	(0.45)	10.01	0.045		0.05	0.05	0.7		0.10
AB-C	(1.15)								
D-AB	0.01	9.65	0.001		0.00	0.00	0.0		0.10
D-C	1.19	10.47	0.114		0.16	0.13	2.0		0.11
C-D	2.08								
C-A	0.00								
C-B	0.10								
CD-A	(0.00)								
CD-B	(0.11)	10.44	0.011		0.01	0.01	0.2		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUE FOR STREAM AB-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM D-C

TIME NO. OF
SEGMENT VEHICLES
ENDING IN QUEUE
07.45 0.1
08.00 0.2
08.15 0.2
08.30 0.2
08.45 0.2
09.00 0.1

QUEUE FOR STREAM CD-B

TIME NO. OF
SEGMENT VEHICLES
ENDING IN QUEUE
07.45 0.0
08.00 0.0
08.15 0.0
08.30 0.0
08.45 0.0
09.00 0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-ACD	92.2	61.5	7.7
A-B	5.5	3.7	
A-C	84.0	56.0	
A-D	0.0	0.0	
AB-CD	49.5	33.0	5.0
AB-C	126.6	84.4	
D-AB	1.4	0.9	0.1
D-C	130.8	87.2	14.7
C-D	228.5	152.3	
C-A	0.0	0.0	
C-B	11.0	7.3	
CD-A	0.0	0.0	
CD-B	12.4	8.3	1.2
ALL	553.3	368.9	28.8

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-A

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-D	STREAM A-B	STREAM C-A
625.34	0.28	0.28	0.11	0.18

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-A	STREAM C-B	STREAM D-B	
0.18	0.40	0.40	

STREAM D-C

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-C	STREAM C-A	STREAM C-B	STREAM C-D	STREAM A-C
0.00	0.00	0.00	0.00	0.00

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-D	STREAM B-D	
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

STREAM CD-B

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM CD-B	STREAM A-B	STREAM A-C	STREAM A-D	STREAM A-C
631.87	0.24	0.24	0.28	

STREAM AB-D

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM AB-D	STREAM C-D	STREAM C-A	STREAM C-B	
631.87	0.24	0.24	0.00	

STREAM B-CD

I Intercept For I STREAM B-CD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing I
792.98	0.30	0.30	0.12	I

STREAM D-AB

I Intercept For I STREAM D-AB	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing I
0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

I ARM	I FLOW SCALE (%)	I
I A	100	I
I B	100	I
I C	100	I
I D	100	I

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2015 Base PM Peak (16:45-17:45)

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I ARM	I NUMBER OF MINUTES FROM START WHEN I FLOW STARTS	I TOP OF PEAK I IS REACHED	I FLOW STOPS I FALLING	I RATE OF FLOW (VEH/MIN) I BEFORE PEAK	I AT TOP I OF PEAK	I AFTER I PEAK
I ARM A	15.00	45.00	75.00	0.90	1.35	0.90
I ARM B	15.00	45.00	75.00	0.38	0.56	0.38
I ARM C	15.00	45.00	75.00	3.30	4.95	3.30
I ARM D	15.00	45.00	75.00	0.86	1.29	0.86

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2015 Base PM Peak (16:45-17:45)

		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
I TIME	I FROM/TO	I ARM A	I ARM B	I ARM C	I ARM D
I 16.30 - 18.00	I	I	I	I	I
I	I ARM A	I 0.000	I 0.042	I 0.958	I 0.000
I	I	I 0.0	I 3.0	I 69.0	I 0.0
I	I	I (0.0)	I (0.0)	I (0.0)	I (0.0)
I	I	I	I	I	I
I	I ARM B	I 0.000	I 0.000	I 0.533	I 0.467
I	I	I 0.0	I 0.0	I 16.0	I 14.0
I	I	I (0.0)	I (0.0)	I (0.0)	I (0.0)
I	I	I	I	I	I
I	I ARM C	I 0.000	I 0.133	I 0.000	I 0.867
I	I	I 0.0	I 35.0	I 0.0	I 229.0
I	I	I (0.0)	I (0.0)	I (0.0)	I (0.0)
I	I	I	I	I	I
I	I ARM D	I 0.000	I 0.058	I 0.942	I 0.000
I	I	I 0.0	I 4.0	I 65.0	I 0.0
I	I	I (0.0)	I (0.0)	I (0.0)	I (0.0)
I	I	I	I	I	I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Yarmouth Rd - B1438 - The Avenue Junction - 2015 Base PM Peak (16:45-17:45)
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-ACD	0.38	12.95	0.029		0.00	0.03	0.4		0.08
A-B	0.04								
A-C	0.87								
A-D	0.00								
AB-CD (	0.17)	9.74	0.018		0.00	0.02	0.3		0.10
AB-C (	1.07)								
D-AB	0.05	9.69	0.005		0.00	0.01	0.1		0.10
D-C	0.82	10.33	0.079		0.00	0.09	1.2		0.10
C-D	2.87								
C-A	0.00								
C-B	0.44								
CD-A (	0.00)								
CD-B (	0.49)	10.42	0.047		0.00	0.05	0.7		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-ACD	0.45	12.90	0.035		0.03	0.04	0.5		0.08
A-B	0.04								
A-C	1.03								
A-D	0.00								
AB-CD (	0.21)	9.58	0.022		0.02	0.02	0.3		0.11
AB-C (	1.27)								
D-AB	0.06	9.58	0.006		0.01	0.01	0.1		0.11
D-C	0.97	10.19	0.096		0.09	0.10	1.5		0.11
C-D	3.43								
C-A	0.00								
C-B	0.52								
CD-A (	0.00)								
CD-B (	0.58)	10.38	0.056		0.05	0.06	0.9		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-ACD	0.55	12.83	0.043		0.04	0.04	0.7		0.08
A-B	0.06								
A-C	1.27								
A-D	0.00								
AB-CD (	0.26)	9.37	0.027		0.02	0.03	0.4		0.11
AB-C (	1.56)								
D-AB	0.07	9.41	0.008		0.01	0.01	0.1		0.11
D-C	1.19	9.98	0.119		0.10	0.13	2.0		0.11
C-D	4.20								
C-A	0.00								
C-B	0.64								
CD-A (	0.00)								
CD-B (	0.72)	10.32	0.069		0.06	0.07	1.1		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-ACD	0.55	12.83	0.043		0.04	0.04	0.7		0.08
A-B	0.06								
A-C	1.27								
A-D	0.00								
AB-CD (	0.26)	9.37	0.027		0.03	0.03	0.4		0.11
AB-C (	1.56)								
D-AB	0.07	9.41	0.008		0.01	0.01	0.1		0.11
D-C	1.19	9.98	0.119		0.13	0.14	2.0		0.11
C-D	4.20								
C-A	0.00								
C-B	0.64								
CD-A (	0.00)								
CD-B (	0.72)	10.32	0.069		0.07	0.07	1.1		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-ACD	0.45	12.90	0.035		0.04	0.04	0.6		0.08
A-B	0.04								
A-C	1.03								
A-D	0.00								
AB-CD (	0.21)	9.58	0.022		0.03	0.02	0.3		0.11
AB-C (	1.27)								
D-AB	0.06	9.58	0.006		0.01	0.01	0.1		0.11
D-C	0.97	10.19	0.096		0.14	0.11	1.6		0.11
C-D	3.43								
C-A	0.00								
C-B	0.52								
CD-A (	0.00)								
CD-B (	0.58)	10.38	0.056		0.07	0.06	0.9		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-ACD	0.38	12.95	0.029		0.04	0.03	0.5		0.08
A-B	0.04								
A-C	0.87								
A-D	0.00								
AB-CD (	0.18)	9.74	0.018		0.02	0.02	0.3		0.10
AB-C (	1.07)								
D-AB	0.05	9.69	0.005		0.01	0.01	0.1		0.10
D-C	0.82	10.33	0.079		0.11	0.09	1.3		0.11
C-D	2.87								
C-A	0.00								
C-B	0.44								
CD-A (	0.00)								
CD-B (	0.49)	10.42	0.047		0.06	0.05	0.8		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM AB-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM D-C

TIME NO. OF
SEGMENT VEHICLES
ENDING IN QUEUE
16.45 0.1
17.00 0.1
17.15 0.1
17.30 0.1
17.45 0.1
18.00 0.1

QUEUE FOR STREAM CD-B

TIME NO. OF
SEGMENT VEHICLES
ENDING IN QUEUE
16.45 0.0
17.00 0.1
17.15 0.1
17.30 0.1
17.45 0.1
18.00 0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-ACD	41.3	27.5	3.3
A-B	4.1	2.8	
A-C	95.0	63.3	
A-D	0.0	0.0	
AB-CD	19.3	12.8	2.0
AB-C	117.0	78.0	
D-AB	5.5	3.7	0.6
D-C	89.5	59.6	9.7
C-D	315.2	210.1	
C-A	0.0	0.0	
C-B	48.2	32.1	
CD-A	0.0	0.0	
CD-B	53.7	35.8	5.5
ALL	598.7	399.2	21.1

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-A

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-D	STREAM A-B	STREAM C-A
625.34	0.28	0.28	0.11	0.18

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-A	STREAM C-B	STREAM D-B	
0.18	0.40	0.40	

STREAM D-C

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-C	STREAM C-A	STREAM C-B	STREAM C-D	STREAM A-C
0.00	0.00	0.00	0.00	0.00

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-D	STREAM B-D	
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

STREAM CD-B

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM CD-B	STREAM A-B	STREAM A-C	STREAM A-D	STREAM C-A
631.87	0.24	0.24	0.28	

STREAM AB-D

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM AB-D	STREAM C-D	STREAM C-A	STREAM C-B	
631.87	0.24	0.24	0.00	

STREAM B-CD

I Intercept For I STREAM B-CD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing I
792.98	0.30	0.30	0.12	I

STREAM D-AB

I Intercept For I STREAM D-AB	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing I
0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

I ARM	I FLOW SCALE (%)	I
A	100	I
B	100	I
C	100	I
D	100	I

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base plus Dev AM Peak + Woods

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I ARM	I NUMBER OF MINUTES FROM START WHEN I FLOW STARTS	I TOP OF PEAK I IS REACHED	I FLOW STOPS I FALLING	I RATE OF FLOW (VEH/MIN) I BEFORE PEAK	I AT TOP I OF PEAK	I AFTER I PEAK
A	15.00	45.00	75.00	0.95	1.42	0.95
B	15.00	45.00	75.00	0.91	1.37	0.91
C	15.00	45.00	75.00	2.56	3.84	2.56
D	15.00	45.00	75.00	1.34	2.01	1.34

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base plus Dev AM Peak + Woods

		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
I TIME	I FROM/TO	I ARM A	I ARM B	I ARM C	I ARM D
07.30 - 09.00	A	0.000	0.053	0.947	0.000
		(0.0)	(0.0)	(0.0)	(0.0)
	B	0.000	0.000	0.466	0.534
		0.0	0.0	34.0	39.0
		(0.0)	(0.0)	(0.0)	(0.0)
	C	0.000	0.044	0.000	0.956
		0.0	9.0	0.0	196.0
		(0.0)	(0.0)	(0.0)	(0.0)
	D	0.000	0.009	0.991	0.000
		0.0	1.0	106.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base plus Dev AM Peak + Woods
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-ACD	0.92	12.94	0.071		0.00	0.08	1.1		0.08
A-B	0.05								
A-C	0.90								
A-D	0.00								
AB-CD (	0.49)	9.91	0.049		0.00	0.05	0.7		0.11
AB-C (	1.33)								
D-AB	0.01	9.58	0.001		0.00	0.00	0.0		0.10
D-C	1.33	10.37	0.128		0.00	0.15	2.1		0.11
C-D	2.46								
C-A	0.00								
C-B	0.11								
CD-A (	0.00)								
CD-B (	0.13)	10.41	0.012		0.00	0.01	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-ACD	1.09	12.88	0.085		0.08	0.09	1.4		0.08
A-B	0.06								
A-C	1.08								
A-D	0.00								
AB-CD (	0.58)	9.79	0.060		0.05	0.06	0.9		0.11
AB-C (	1.59)								
D-AB	0.01	9.44	0.002		0.00	0.00	0.0		0.11
D-C	1.59	10.22	0.155		0.15	0.18	2.7		0.12
C-D	2.94								
C-A	0.00								
C-B	0.13								
CD-A (	0.00)								
CD-B (	0.15)	10.36	0.014		0.01	0.01	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-ACD	1.34	12.81	0.105		0.09	0.12	1.7		0.09
A-B	0.07								
A-C	1.32								
A-D	0.00								
AB-CD (	0.71)	9.63	0.074		0.06	0.07	1.1		0.11
AB-C (	1.94)								
D-AB	0.02	9.25	0.002		0.00	0.00	0.0		0.11
D-C	1.95	10.00	0.194		0.18	0.24	3.5		0.12
C-D	3.60								
C-A	0.00								
C-B	0.17								
CD-A (	0.00)								
CD-B (	0.18)	10.30	0.018		0.01	0.02	0.3		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-ACD	1.34	12.81	0.105		0.12	0.12	1.7		0.09
A-B	0.07								
A-C	1.32								
A-D	0.00								
AB-CD (	0.72)	9.63	0.074		0.07	0.07	1.1		0.11
AB-C (	1.95)								
D-AB	0.02	9.25	0.002		0.00	0.00	0.0		0.11
D-C	1.95	10.00	0.194		0.24	0.24	3.6		0.12
C-D	3.60								
C-A	0.00								
C-B	0.17								
CD-A (	0.00)								
CD-B (	0.18)	10.30	0.018		0.02	0.02	0.3		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-ACD	1.09	12.88	0.085		0.12	0.09	1.4		0.08
A-B	0.06								
A-C	1.08								
A-D	0.00								
AB-CD	(0.59)	9.79	0.060		0.07	0.06	0.9		0.11
AB-C	(1.59)								
D-AB	0.01	9.44	0.002		0.00	0.00	0.0		0.11
D-C	1.59	10.22	0.155		0.24	0.19	2.9		0.12
C-D	2.94								
C-A	0.00								
C-B	0.13								
CD-A	(0.00)								
CD-B	(0.15)	10.36	0.014		0.02	0.01	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-ACD	0.92	12.94	0.071		0.09	0.08	1.2		0.08
A-B	0.05								
A-C	0.90								
A-D	0.00								
AB-CD	(0.49)	9.91	0.049		0.06	0.05	0.7		0.11
AB-C	(1.33)								
D-AB	0.01	9.57	0.001		0.00	0.00	0.0		0.10
D-C	1.33	10.37	0.128		0.19	0.15	2.3		0.11
C-D	2.46								
C-A	0.00								
C-B	0.11								
CD-A	(0.00)								
CD-B	(0.13)	10.41	0.012		0.01	0.01	0.2		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUE FOR STREAM AB-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM D-C

TIME NO. OF
SEGMENT VEHICLES
ENDING IN QUEUE
07.45 0.1
08.00 0.2
08.15 0.2
08.30 0.2
08.45 0.2
09.00 0.1

QUEUE FOR STREAM CD-B

TIME NO. OF
SEGMENT VEHICLES
ENDING IN QUEUE
07.45 0.0
08.00 0.0
08.15 0.0
08.30 0.0
08.45 0.0
09.00 0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-ACD	100.5	67.0	8.5
A-B	5.5	3.7	
A-C	99.1	66.1	
A-D	0.0	0.0	
AB-CD	53.6	35.8	5.5
AB-C	145.9	97.2	
D-AB	1.4	0.9	0.1
D-C	145.9	97.3	17.0
C-D	269.8	179.9	
C-A	0.0	0.0	
C-B	12.4	8.3	
CD-A	0.0	0.0	
CD-B	13.8	9.2	1.3
ALL	634.5	423.0	32.5

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-A

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-D	STREAM A-B	STREAM C-A
625.34	0.28	0.28	0.11	0.18

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-A	STREAM C-B	STREAM D-B	
0.18	0.40	0.40	

STREAM D-C

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-C	STREAM C-A	STREAM C-B	STREAM C-D	STREAM A-C
0.00	0.00	0.00	0.00	0.00

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-D	STREAM B-D	
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

STREAM CD-B

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM CD-B	STREAM A-B	STREAM A-C	STREAM A-D	STREAM C-A
631.87	0.24	0.24	0.28	

STREAM AB-D

Intercept	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM AB-D	STREAM C-D	STREAM C-A	STREAM C-B	
631.87	0.24	0.24	0.00	

STREAM B-CD

I Intercept For I STREAM B-CD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing I
792.98	0.30	0.30	0.12	I

STREAM D-AB

I Intercept For I STREAM D-AB	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing I
0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

I ARM I	FLOW SCALE (%) I
I A I	100 I
I B I	100 I
I C I	100 I
I D I	100 I

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base plus Dev PM Peak + Woods

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I ARM I	NUMBER OF MINUTES FROM START WHEN I FLOW STARTS I TO RISE I	NUMBER OF MINUTES FROM START WHEN I TOP OF PEAK I IS REACHED I	NUMBER OF MINUTES FROM START WHEN I FLOW STOPS I FALLING I	I RATE OF FLOW (VEH/MIN) I BEFORE I AT TOP I AFTER I PEAK I OF PEAK I PEAK I
I ARM A I	15.00 I	45.00 I	75.00 I	1.09 I 1.63 I 1.09 I
I ARM B I	15.00 I	45.00 I	75.00 I	0.41 I 0.62 I 0.41 I
I ARM C I	15.00 I	45.00 I	75.00 I	3.72 I 5.59 I 3.72 I
I ARM D I	15.00 I	45.00 I	75.00 I	1.00 I 1.50 I 1.00 I

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base plus Dev PM Peak + Woods

		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
I TIME	I FROM/TO I	I ARM A I	I ARM B I	I ARM C I	I ARM D I
I 16.30 - 18.00	I	I	I	I	I
I	I ARM A I	0.000 I	0.034 I	0.966 I	0.000 I
I	I	0.0 I	3.0 I	84.0 I	0.0 I
I	I	(0.0) I	(0.0) I	(0.0) I	(0.0) I
I	I	I	I	I	I
I	I ARM B I	0.000 I	0.000 I	0.545 I	0.455 I
I	I	0.0 I	0.0 I	18.0 I	15.0 I
I	I	(0.0) I	(0.0) I	(0.0) I	(0.0) I
I	I	I	I	I	I
I	I ARM C I	0.000 I	0.128 I	0.000 I	0.872 I
I	I	0.0 I	38.0 I	0.0 I	260.0 I
I	I	(0.0) I	(0.0) I	(0.0) I	(0.0) I
I	I	I	I	I	I
I	I ARM D I	0.000 I	0.050 I	0.950 I	0.000 I
I	I	0.0 I	4.0 I	76.0 I	0.0 I
I	I	(0.0) I	(0.0) I	(0.0) I	(0.0) I
I	I	I	I	I	I

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base plus Dev PM Peak + Woods
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-ACD	0.41	12.89	0.032		0.00	0.03	0.5		0.08
A-B	0.04								
A-C	1.05								
A-D	0.00								
AB-CD (	0.19)	9.63	0.019		0.00	0.02	0.3		0.11
AB-C (	1.28)								
D-AB	0.05	9.60	0.005		0.00	0.01	0.1		0.10
D-C	0.95	10.24	0.093		0.00	0.10	1.5		0.11
C-D	3.26								
C-A	0.00								
C-B	0.48								
CD-A (	0.00)								
CD-B (	0.53)	10.37	0.051		0.00	0.05	0.8		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-ACD	0.49	12.83	0.039		0.03	0.04	0.6		0.08
A-B	0.04								
A-C	1.26								
A-D	0.00								
AB-CD (	0.22)	9.46	0.024		0.02	0.02	0.4		0.11
AB-C (	1.53)								
D-AB	0.06	9.46	0.006		0.01	0.01	0.1		0.11
D-C	1.14	10.08	0.113		0.10	0.13	1.9		0.11
C-D	3.90								
C-A	0.00								
C-B	0.57								
CD-A (	0.00)								
CD-B (	0.63)	10.32	0.061		0.05	0.06	1.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-ACD	0.61	12.75	0.048		0.04	0.05	0.7		0.08
A-B	0.06								
A-C	1.54								
A-D	0.00								
AB-CD (	0.27)	9.22	0.030		0.02	0.03	0.4		0.11
AB-C (	1.87)								
D-AB	0.07	9.27	0.008		0.01	0.01	0.1		0.11
D-C	1.39	9.85	0.142		0.13	0.16	2.4		0.12
C-D	4.77								
C-A	0.00								
C-B	0.70								
CD-A (	0.00)								
CD-B (	0.77)	10.25	0.075		0.06	0.08	1.2		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-ACD	0.61	12.75	0.048		0.05	0.05	0.7		0.08
A-B	0.06								
A-C	1.54								
A-D	0.00								
AB-CD (	0.28)	9.22	0.030		0.03	0.03	0.4		0.11
AB-C (	1.87)								
D-AB	0.07	9.27	0.008		0.01	0.01	0.1		0.11
D-C	1.39	9.85	0.142		0.16	0.16	2.5		0.12
C-D	4.77								
C-A	0.00								
C-B	0.70								
CD-A (	0.00)								
CD-B (	0.77)	10.25	0.075		0.08	0.08	1.2		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-ACD	0.49	12.83	0.039		0.05	0.04	0.6		0.08
A-B	0.04								
A-C	1.26								
A-D	0.00								
AB-CD (	0.23)	9.46	0.024		0.03	0.02	0.4		0.11
AB-C (	1.53)								
D-AB	0.06	9.46	0.006		0.01	0.01	0.1		0.11
D-C	1.14	10.07	0.113		0.16	0.13	2.0		0.11
C-D	3.90								
C-A	0.00								
C-B	0.57								
CD-A (	0.00)								
CD-B (	0.63)	10.32	0.061		0.08	0.07	1.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-ACD	0.41	12.89	0.032		0.04	0.03	0.5		0.08
A-B	0.04								
A-C	1.05								
A-D	0.00								
AB-CD (	0.19)	9.63	0.020		0.02	0.02	0.3		0.11
AB-C (	1.28)								
D-AB	0.05	9.59	0.005		0.01	0.01	0.1		0.10
D-C	0.95	10.24	0.093		0.13	0.10	1.6		0.11
C-D	3.26								
C-A	0.00								
C-B	0.48								
CD-A (	0.00)								
CD-B (	0.53)	10.37	0.051		0.07	0.05	0.8		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM AB-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM D-C

TIME NO. OF
SEGMENT VEHICLES
ENDING IN QUEUE
16.45 0.1
17.00 0.1
17.15 0.2
17.30 0.2
17.45 0.1
18.00 0.1

QUEUE FOR STREAM CD-B

TIME NO. OF
SEGMENT VEHICLES
ENDING IN QUEUE
16.45 0.1
17.00 0.1
17.15 0.1
17.30 0.1
17.45 0.1
18.00 0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-ACD	45.4	30.3	3.7
A-B	4.1	2.8	
A-C	115.6	77.1	
A-D	0.0	0.0	
AB-CD	20.6	13.8	2.2
AB-C	140.4	93.6	
D-AB	5.5	3.7	0.6
D-C	104.6	69.7	11.8
C-D	357.9	238.6	
C-A	0.0	0.0	
C-B	52.3	34.9	
CD-A	0.0	0.0	
CD-B	57.8	38.5	5.9
ALL	685.5	457.0	24.1

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-A

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-D	STREAM A-B	STREAM C-A
625.34	0.28	0.28	0.11	0.18

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-A	STREAM C-B	STREAM D-B	
0.18	0.40	0.40	

STREAM D-C

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-C	STREAM C-A	STREAM C-B	STREAM C-D	STREAM A-C
0.00	0.00	0.00	0.00	0.00

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-D	STREAM B-D	
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

STREAM CD-B

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM CD-B	STREAM A-B	STREAM A-C	STREAM A-D	
631.87	0.24	0.24	0.28	

STREAM AB-D

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM AB-D	STREAM C-D	STREAM C-A	STREAM C-B	
631.87	0.24	0.24	0.00	

STREAM B-CD

I Intercept For I STREAM B-CD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing I
792.98	0.30	0.30	0.12	I

STREAM D-AB

I Intercept For I STREAM D-AB	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing I
0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

I ARM	I FLOW SCALE (%)	I
A	100	I
B	100	I
C	100	I
D	100	I

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base + Woods Lane AM

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I ARM	I NUMBER OF MINUTES FROM START WHEN I FLOW STARTS	I TOP OF PEAK I IS REACHED	I FLOW STOPS I FALLING	I RATE OF FLOW (VEH/MIN) I BEFORE PEAK	I AT TOP I OF PEAK	I AFTER I PEAK
A	15.00	45.00	75.00	0.88	1.31	0.88
B	15.00	45.00	75.00	0.91	1.37	0.91
C	15.00	45.00	75.00	2.35	3.52	2.35
D	15.00	45.00	75.00	1.30	1.95	1.30

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base + Woods Lane AM

		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
I TIME	I FROM/TO	I ARM A	I ARM B	I ARM C	I ARM D
07.30 - 09.00	A	0.000	0.057	0.943	0.000
		(0.0)	(0.0)	(0.0)	(0.0)
	B	0.000	0.000	0.466	0.534
		(0.0)	(0.0)	(0.0)	(0.0)
	C	0.000	0.048	0.000	0.952
		(0.0)	(0.0)	(0.0)	(0.0)
	D	0.000	0.010	0.990	0.000
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base + Woods Lane AM
AND FOR TIME PERIOD 1

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.30-07.45									
B-ACD	0.92	12.96	0.071		0.00	0.08	1.1		0.08
A-B	0.05								
A-C	0.83								
A-D	0.00								
AB-CD (	0.49)	9.97	0.049		0.00	0.05	0.7		0.11
AB-C (	1.25)								
D-AB	0.01	9.61	0.001		0.00	0.00	0.0		0.10
D-C	1.29	10.41	0.124		0.00	0.14	2.0		0.11
C-D	2.25								
C-A	0.00								
C-B	0.11								
CD-A (	0.00)								
CD-B (	0.13)	10.42	0.012		0.00	0.01	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
07.45-08.00									
B-ACD	1.09	12.91	0.085		0.08	0.09	1.4		0.08
A-B	0.06								
A-C	0.99								
A-D	0.00								
AB-CD (	0.58)	9.86	0.059		0.05	0.06	0.9		0.11
AB-C (	1.50)								
D-AB	0.01	9.48	0.002		0.00	0.00	0.0		0.11
D-C	1.54	10.26	0.150		0.14	0.18	2.6		0.11
C-D	2.68								
C-A	0.00								
C-B	0.13								
CD-A (	0.00)								
CD-B (	0.15)	10.38	0.014		0.01	0.01	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.00-08.15									
B-ACD	1.34	12.84	0.104		0.09	0.12	1.7		0.09
A-B	0.07								
A-C	1.21								
A-D	0.00								
AB-CD (	0.71)	9.70	0.074		0.06	0.07	1.1		0.11
AB-C (	1.83)								
D-AB	0.02	9.30	0.002		0.00	0.00	0.0		0.11
D-C	1.89	10.06	0.188		0.18	0.23	3.4		0.12
C-D	3.28								
C-A	0.00								
C-B	0.17								
CD-A (	0.00)								
CD-B (	0.18)	10.33	0.018		0.01	0.02	0.3		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.15-08.30									
B-ACD	1.34	12.84	0.104		0.12	0.12	1.7		0.09
A-B	0.07								
A-C	1.21								
A-D	0.00								
AB-CD (	0.72)	9.70	0.074		0.07	0.07	1.1		0.11
AB-C (	1.84)								
D-AB	0.02	9.30	0.002		0.00	0.00	0.0		0.11
D-C	1.89	10.06	0.188		0.23	0.23	3.4		0.12
C-D	3.28								
C-A	0.00								
C-B	0.17								
CD-A (	0.00)								
CD-B (	0.18)	10.33	0.018		0.02	0.02	0.3		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-ACD	1.09	12.91	0.085		0.12	0.09	1.4		0.08
A-B	0.06								
A-C	0.99								
A-D	0.00								
AB-CD	(0.59)	9.86	0.059		0.07	0.06	0.9		0.11
AB-C	(1.50)								
D-AB	0.01	9.48	0.002		0.00	0.00	0.0		0.11
D-C	1.54	10.26	0.150		0.23	0.18	2.7		0.11
C-D	2.68								
C-A	0.00								
C-B	0.13								
CD-A	(0.00)								
CD-B	(0.15)	10.38	0.014		0.02	0.01	0.2		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-ACD	0.92	12.96	0.071		0.09	0.08	1.2		0.08
A-B	0.05								
A-C	0.83								
A-D	0.00								
AB-CD	(0.49)	9.97	0.049		0.06	0.05	0.7		0.11
AB-C	(1.26)								
D-AB	0.01	9.60	0.001		0.00	0.00	0.0		0.10
D-C	1.29	10.41	0.124		0.18	0.14	2.2		0.11
C-D	2.25								
C-A	0.00								
C-B	0.11								
CD-A	(0.00)								
CD-B	(0.13)	10.42	0.012		0.01	0.01	0.2		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUE FOR STREAM AB-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM D-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.2
08.15	0.2
08.30	0.2
08.45	0.2
09.00	0.1

QUEUE FOR STREAM CD-B

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

STREAM	TOTAL DEMAND	* QUEUEING * * DELAY *	* INCLUSIVE QUEUEING * * DELAY *
(VEH)	(VEH/H)	(MIN)	(MIN/VEH)
B-ACD	100.5	67.0	8.5
A-B	5.5	3.7	
A-C	90.8	60.6	
A-D	0.0	0.0	
AB-CD	53.6	35.8	5.5
AB-C	137.6	91.7	
D-AB	1.4	0.9	0.1
D-C	141.8	94.5	16.4
C-D	246.4	164.3	
C-A	0.0	0.0	
C-B	12.4	8.3	
CD-A	0.0	0.0	
CD-B	13.8	9.2	1.3
ALL	598.7	399.2	31.8

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

STREAM B-A

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-A	STREAM A-C	STREAM A-D	STREAM A-B	STREAM C-A
625.34	0.28	0.28	0.11	0.18

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-A	STREAM C-B	STREAM D-B	
0.18	0.40	0.40	

STREAM D-C

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM D-C	STREAM C-A	STREAM C-B	STREAM C-D	STREAM A-C
0.00	0.00	0.00	0.00	0.00

Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM B-C	STREAM A-D	STREAM B-D	
0.00	0.00	0.00	

* Due to the presence of a flare, data is not available

STREAM CD-B

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM CD-B	STREAM A-B	STREAM A-C	STREAM A-D	STREAM A-C
631.87	0.24	0.24	0.28	

STREAM AB-D

Intercept For	Slope For Opposing	Slope For Opposing	Slope For Opposing	Slope For Opposing
STREAM AB-D	STREAM C-D	STREAM C-A	STREAM C-B	
631.87	0.24	0.24	0.00	

STREAM B-CD

I Intercept For I STREAM B-CD	Slope For Opposing STREAM A-C	Slope For Opposing STREAM A-D	Slope For Opposing STREAM A-B	Slope For Opposing I
792.98	0.30	0.30	0.12	I

STREAM D-AB

I Intercept For I STREAM D-AB	Slope For Opposing STREAM C-A	Slope For Opposing STREAM C-B	Slope For Opposing STREAM C-D	Slope For Opposing I
0.00	0.00	0.00	0.00	I

* Due to the presence of a flare, data is not available

TRAFFIC DEMAND DATA

I ARM	I FLOW SCALE (%)	I
A	100	I
B	100	I
C	100	I
D	100	I

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base + Woods Lane PM

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

LENGTH OF TIME PERIOD - 90 MIN.
LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I ARM	I NUMBER OF MINUTES FROM START WHEN I FLOW STARTS	I TOP OF PEAK I IS REACHED	I FLOW STOPS I FALLING	I RATE OF FLOW (VEH/MIN) I BEFORE I AT TOP I AFTER I PEAK I OF PEAK I PEAK
A	15.00	45.00	75.00	0.98 1.46 0.98
B	15.00	45.00	75.00	0.41 0.62 0.41
C	15.00	45.00	75.00	3.58 5.36 3.58
D	15.00	45.00	75.00	0.93 1.39 0.93

Demand set: Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base + Woods Lane PM

		TURNING PROPORTIONS			
		TURNING COUNTS			
		(PERCENTAGE OF H.V.S)			
I TIME	I FROM/TO	I ARM A	I ARM B	I ARM C	I ARM D
16.30 - 18.00	A	0.000	0.038	0.962	0.000
		(0.0)	(0.0)	(0.0)	(0.0)
	B	0.000	0.000	0.545	0.455
		0.0	0.0	18.0	15.0
		(0.0)	(0.0)	(0.0)	(0.0)
	C	0.000	0.133	0.000	0.867
		0.0	38.0	0.0	248.0
		(0.0)	(0.0)	(0.0)	(0.0)
	D	0.000	0.054	0.946	0.000
		0.0	4.0	70.0	0.0
		(0.0)	(0.0)	(0.0)	(0.0)

TURNING PROPORTIONS ARE CALCULATED FROM TURNING COUNT DATA

QUEUE AND DELAY INFORMATION FOR EACH 15 MIN TIME SEGMENT

FOR DEMAND SET Yarmouth Rd - B1438 - The Avenue Junction - 2020 Base + Woods Lane PM
AND FOR TIME PERIOD 2

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.30-16.45									
B-ACD	0.41	12.93	0.032		0.00	0.03	0.5		0.08
A-B	0.04								
A-C	0.94								
A-D	0.00								
AB-CD (	0.19)	9.67	0.019		0.00	0.02	0.3		0.11
AB-C (	1.17)								
D-AB	0.05	9.64	0.005		0.00	0.01	0.1		0.10
D-C	0.88	10.27	0.085		0.00	0.09	1.3		0.11
C-D	3.11								
C-A	0.00								
C-B	0.48								
CD-A (	0.00)								
CD-B (	0.53)	10.40	0.051		0.00	0.05	0.8		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
16.45-17.00									
B-ACD	0.49	12.87	0.038		0.03	0.04	0.6		0.08
A-B	0.04								
A-C	1.12								
A-D	0.00								
AB-CD (	0.22)	9.50	0.024		0.02	0.02	0.4		0.11
AB-C (	1.39)								
D-AB	0.06	9.51	0.006		0.01	0.01	0.1		0.11
D-C	1.05	10.12	0.104		0.09	0.11	1.7		0.11
C-D	3.72								
C-A	0.00								
C-B	0.57								
CD-A (	0.00)								
CD-B (	0.63)	10.35	0.061		0.05	0.06	0.9		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.00-17.15									
B-ACD	0.61	12.80	0.047		0.04	0.05	0.7		0.08
A-B	0.06								
A-C	1.38								
A-D	0.00								
AB-CD (	0.27)	9.27	0.030		0.02	0.03	0.4		0.11
AB-C (	1.71)								
D-AB	0.07	9.33	0.008		0.01	0.01	0.1		0.11
D-C	1.28	9.90	0.130		0.11	0.15	2.2		0.12
C-D	4.55								
C-A	0.00								
C-B	0.70								
CD-A (	0.00)								
CD-B (	0.77)	10.29	0.075		0.06	0.08	1.2		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.15-17.30									
B-ACD	0.61	12.80	0.047		0.05	0.05	0.7		0.08
A-B	0.06								
A-C	1.38								
A-D	0.00								
AB-CD (	0.28)	9.27	0.030		0.03	0.03	0.4		0.11
AB-C (	1.71)								
D-AB	0.07	9.33	0.008		0.01	0.01	0.1		0.11
D-C	1.28	9.90	0.130		0.15	0.15	2.2		0.12
C-D	4.55								
C-A	0.00								
C-B	0.70								
CD-A (	0.00)								
CD-B (	0.77)	10.29	0.075		0.08	0.08	1.2		0.11

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-ACD	0.49	12.87	0.038		0.05	0.04	0.6		0.08
A-B	0.04								
A-C	1.12								
A-D	0.00								
AB-CD	(0.23)	9.50	0.024		0.03	0.02	0.4		0.11
AB-C	(1.39)								
D-AB	0.06	9.51	0.006		0.01	0.01	0.1		0.11
D-C	1.05	10.12	0.104		0.15	0.12	1.8		0.11
C-D	3.72								
C-A	0.00								
C-B	0.57								
CD-A	(0.00)								
CD-B	(0.63)	10.35	0.061		0.08	0.07	1.0		0.10

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-ACD	0.41	12.93	0.032		0.04	0.03	0.5		0.08
A-B	0.04								
A-C	0.94								
A-D	0.00								
AB-CD	(0.19)	9.67	0.019		0.02	0.02	0.3		0.11
AB-C	(1.17)								
D-AB	0.05	9.64	0.005		0.01	0.01	0.1		0.10
D-C	0.88	10.27	0.085		0.12	0.09	1.4		0.11
C-D	3.11								
C-A	0.00								
C-B	0.48								
CD-A	(0.00)								
CD-B	(0.53)	10.40	0.051		0.07	0.05	0.8		0.10

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-ACD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM AB-CD

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM D-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM D-C

TIME	NO. OF
SEGMENT	VEHICLES
ENDING	IN QUEUE
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1

QUEUE FOR STREAM CD-B

TIME	NO. OF
SEGMENT	VEHICLES
ENDING	IN QUEUE
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I						
I	I	I	I	I	* DELAY *	I	* DELAY *	I						
I	I	I	I	I	I	I	I	I						
I	I	(VEH)	(VEH/H)	I	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)						
I	B-ACD	I	45.4	I	30.3	I	3.7	I	0.08	I	3.7	I	0.08	I
I	A-B	I	4.1	I	2.8	I		I		I		I		I
I	A-C	I	103.2	I	68.8	I		I		I		I		I
I	A-D	I	0.0	I	0.0	I		I		I		I		I
I	AB-CD	I	(20.6)	I	(13.8)	I	2.2	I	0.11	I	2.2	I	0.11	I
I	AB-C	I	(128.0)	I	(85.3)	I		I		I		I		I
I	D-AB	I	5.5	I	3.7	I	0.6	I	0.11	I	0.6	I	0.11	I
I	D-C	I	96.3	I	64.2	I	10.7	I	0.11	I	10.7	I	0.11	I
I	C-D	I	341.4	I	227.6	I		I		I		I		I
I	C-A	I	0.0	I	0.0	I		I		I		I		I
I	C-B	I	52.3	I	34.9	I		I		I		I		I
I	CD-A	I	(0.0)	I	(0.0)	I		I		I		I		I
I	CD-B	I	(57.8)	I	(38.5)	I	5.9	I	0.10	I	5.9	I	0.10	I
I	ALL	I	648.3	I	432.2	I	23.0	I	0.04	I	23.0	I	0.04	I

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

===== end of file =====



Appendix S

Site Access / Yarmouth Road PICADY Output

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CAPACITIES, QUEUES, AND DELAYS AT 3 OR 4-ARM MAJOR/MINOR PRIORITY JUNCTIONS

PICADY 5.1 ANALYSIS PROGRAM
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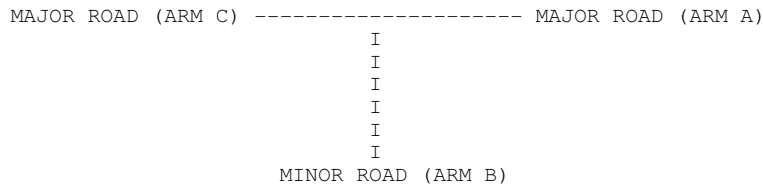
"X:\Projects\2012\A080000\A087076 - Yarmouth Road Melton\30 Technical\31 Modelling\August 2015\
Proposed Site Access.vpi"
(drive-on-the-left) at 15:25:24 on Monday, 14 September 2015

RUN INFORMATION

RUN TITLE : Proposed Site Access
LOCATION : Yarmouth Road, Melton
DATE : 26/09/14
CLIENT : Christchurch Land & Estates Ltd
ENUMERATOR : cesar.calvo [1314DT]
JOB NUMBER : A087076
STATUS : Preliminary
DESCRIPTION :

MAJOR/MINOR JUNCTION CAPACITY AND DELAY

INPUT DATA



ARM A IS Yarmouth Rd (S)
ARM B IS Site Access
ARM C IS Yarmouth Rd (N)

STREAM LABELLING CONVENTION

STREAM A-B CONTAINS TRAFFIC GOING FROM ARM A TO ARM B
STREAM B-AC CONTAINS TRAFFIC GOING FROM ARM B TO ARM A AND TO ARM C
ETC.

 GEOMETRIC DATA

I	DATA ITEM	I	MINOR ROAD B	I
I	TOTAL MAJOR ROAD CARRIAGEWAY WIDTH	I	(W) 6.00 M.	I
I	CENTRAL RESERVE WIDTH	I	(WCR) 0.00 M.	I
I		I		I
I	MAJOR ROAD RIGHT TURN - WIDTH	I	(WC-B) 3.50 M.	I
I	- VISIBILITY	I	(VC-B) 135.00 M.	I
I	- BLOCKS TRAFFIC (SPACES)	I	YES (8)	I
I		I		I
I	MINOR ROAD - VISIBILITY TO LEFT	I	(VB-C) 38.0 M.	I
I	- VISIBILITY TO RIGHT	I	(VB-A) 32.0 M.	I
I	- LANE 1 WIDTH	I	(WB-C) -	I
I	- LANE 2 WIDTH	I	(WB-A) -	I
I	WIDTH AT 0 M FROM JUNCTION	I	10.00 M.	I
I	WIDTH AT 5 M FROM JUNCTION	I	8.20 M.	I
I	WIDTH AT 10 M FROM JUNCTION	I	4.80 M.	I
I	WIDTH AT 15 M FROM JUNCTION	I	3.70 M.	I
I	WIDTH AT 20 M FROM JUNCTION	I	3.70 M.	I
I	- LENGTH OF FLARED SECTION	I	1 VEHS	I

 .SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-C	STREAM	A-C	STREAM	A-B	I
I	0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing	I
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A	STREAM	C-B	I
I	0.00		0.00		0.00		0.00		0.00	I

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	I
I	STREAM C-B	STREAM	A-C	STREAM	A-B	I
I	744.41		0.29		0.29	I

(NB These values do not allow for any site specific corrections)

 TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE (%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: Proposed Site Access - AM Peak (07:45-08:45)

TIME PERIOD BEGINS 07.30 AND ENDS 09.00

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I
I		I	FLOW STARTS	I	BEFORE	I
I		I	TOP OF PEAK	I	AT TOP	I
I		I	IS REACHED	I	OF PEAK	I
I		I	FALLING	I	PEAK	I
I		I		I		I
I		I	TO RISE	I		I
I	ARM A	I	15.00	I	3.15	I
I	ARM B	I	15.00	I	0.84	I
I	ARM C	I	15.00	I	3.10	I

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.30-08.45									
B-C	0.22	9.69	0.023		0.03	0.02	0.4		0.11
B-A	0.78	7.90	0.099		0.14	0.11	1.7		0.14
C-AB	0.12	11.32	0.011		0.01	0.01	0.2		0.09
A-B	0.40								
A-C	3.37								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
08.45-09.00									
B-C	0.19	9.88	0.019		0.02	0.02	0.3		0.10
B-A	0.65	8.16	0.080		0.11	0.09	1.3		0.13
C-AB	0.10	11.49	0.009		0.01	0.01	0.1		0.09
A-B	0.34								
A-C	2.82								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.1
08.00	0.1
08.15	0.1
08.30	0.1
08.45	0.1
09.00	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
07.45	0.0
08.00	0.0
08.15	0.0
08.30	0.0
08.45	0.0
09.00	0.0

QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I		
I	I	I	I	I	* DELAY *	I	* DELAY *	I		
I	I	(VEH)	(VEH/H)	(MIN)	(MIN/VEH)	(MIN)	(MIN/VEH)	I		
I	B-C	I	20.6	I	13.8	I	2.2	I	0.11	I
I	B-A	I	71.6	I	47.7	I	10.1	I	0.14	I
I	C-AB	I	11.0	I	7.3	I	1.0	I	0.09	I
I	A-B	I	37.2	I	24.8	I		I		I
I	A-C	I	309.7	I	206.5	I		I		I
I	ALL	I	780.4	I	520.3	I	13.3	I	0.02	I

* DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

.SLOPES AND INTERCEPT

(NB:Streams may be combined, in which case capacity will be adjusted)

I	Intercept For	Slope For	Opposing	Slope For	Opposing
I	STREAM B-C	STREAM	A-C	STREAM	A-B
I					
I	0.00		0.00		0.00

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing	Slope For	Opposing
I	STREAM B-A	STREAM	A-C	STREAM	A-B	STREAM	C-A
I							
I	0.00		0.00		0.00		0.00

* Due to the presence of a flare, data is not available

I	Intercept For	Slope For	Opposing	Slope For	Opposing
I	STREAM C-B	STREAM	A-C	STREAM	A-B
I					
I	744.41		0.29		0.29

(NB These values do not allow for any site specific corrections)

TRAFFIC DEMAND DATA

I	ARM	I	FLOW SCALE (%)	I
I	A	I	100	I
I	B	I	100	I
I	C	I	100	I

Demand set: Proposed Site Access - PM Peak (16:45-17:45)

TIME PERIOD BEGINS 16.30 AND ENDS 18.00

LENGTH OF TIME PERIOD - 90 MIN.
 LENGTH OF TIME SEGMENT - 15 MIN.

DEMAND FLOW PROFILES ARE SYNTHESISED FROM TURNING COUNT DATA

I	ARM	I	NUMBER OF MINUTES FROM START WHEN	I	RATE OF FLOW (VEH/MIN)	I								
I	I	I	FLOW STARTS	I	BEFORE	I								
I	I	I	TOP OF PEAK	I	AT TOP	I								
I	I	I	IS REACHED	I	OF PEAK	I								
I	I	I	FLOW STOPS	I	AFTER	I								
I	I	I	FALLING	I	PEAK	I								
I	I	I	I	I	I	I								
I	ARM A	I	15.00	I	45.00	I	75.00	I	4.39	I	6.58	I	4.39	I
I	ARM B	I	15.00	I	45.00	I	75.00	I	0.61	I	0.92	I	0.61	I
I	ARM C	I	15.00	I	45.00	I	75.00	I	2.60	I	3.90	I	2.60	I

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.30-17.45									
B-C	0.16	9.43	0.017		0.02	0.02	0.3		0.11
B-A	0.57	7.64	0.074		0.11	0.08	1.3		0.14
C-AB	0.21	10.89	0.019		0.02	0.02	0.3		0.09
A-B	0.72								
A-C	4.54								

TIME	DEMAND (VEH/MIN)	CAPACITY (VEH/MIN)	DEMAND/ CAPACITY (RFC)	PEDESTRIAN FLOW (PEDS/MIN)	START QUEUE (VEHS)	END QUEUE (VEHS)	DELAY (VEH.MIN/ TIME SEGMENT)	GEOMETRIC DELAY (VEH.MIN/ TIME SEGMENT)	AVERAGE DELAY PER ARRIVING VEHICLE (MIN)
17.45-18.00									
B-C	0.14	9.67	0.014		0.02	0.01	0.2		0.10
B-A	0.48	7.94	0.060		0.08	0.06	1.0		0.13
C-AB	0.18	11.14	0.016		0.02	0.02	0.2		0.09
A-B	0.60								
A-C	3.80								

WARNING NO MARGINAL ANALYSIS OF CAPACITIES AS MAJOR ROAD BLOCKING MAY OCCUR

QUEUE FOR STREAM B-C

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

QUEUE FOR STREAM B-A

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.1
17.00	0.1
17.15	0.1
17.30	0.1
17.45	0.1
18.00	0.1

QUEUE FOR STREAM C-AB

TIME SEGMENT ENDING	NO. OF VEHICLES IN QUEUE
16.45	0.0
17.00	0.0
17.15	0.0
17.30	0.0
17.45	0.0
18.00	0.0

 QUEUEING DELAY INFORMATION OVER WHOLE PERIOD

I	STREAM	I	TOTAL DEMAND	I	* QUEUEING *	I	* INCLUSIVE QUEUEING *	I		I
I		I		I	* DELAY *	I	* DELAY *	I		I
I		I	(VEH)	I	(MIN)	I	(MIN)	I	(MIN/VEH)	I
I		I	(VEH/H)	I	(MIN/VEH)	I	(MIN/VEH)	I		I
I	B-C	I	15.1	I	10.1	I	1.6	I	0.11	I
I	B-A	I	52.3	I	34.9	I	7.5	I	0.14	I
I	C-AB	I	19.3	I	12.8	I	1.8	I	0.09	I
I	A-B	I	66.1	I	44.0	I		I		I
I	A-C	I	417.1	I	278.0	I		I		I
I	ALL	I	836.9	I	557.9	I	10.9	I	0.01	I

 * DELAY IS THAT OCCURRING ONLY WITHIN THE TIME PERIOD
 * INCLUSIVE DELAY INCLUDES DELAY SUFFERED BY VEHICLES
 WHICH ARE STILL QUEUEING AFTER THE END OF THE TIME PERIOD
 * THESE WILL ONLY BE SIGNIFICANTLY DIFFERENT IF THERE IS
 A LARGE QUEUE REMAINING AT THE END OF THE TIME PERIOD.

*****END OF RUN*****

===== end of file =====

**Habitat Regulations Assessment for
proposed development on
land off Yarmouth Road,
Woodbridge, Suffolk**



Cotswold Wildlife Surveys

January 2015

CONTENTS

	Page
SUMMARY	3
1. INTRODUCTION.....	5
1.1 Background	5
1.2 Site Description and Project Proposal	6
2. CITATION FEATURES AND CONSERVATION OBJECTIVES	9
2.1 Deben Estuary SPA	9
2.1.1 SPA Qualifying Features and Site Conservation Objectives.....	9
2.1.2 Ramsar Site Qualifying Features and Site Conservation Objectives.....	10
2.1.3 Existing Impacts to the Deben Estuary SPA and Ramsar Site	10
2.1.4 Conservation objectives.....	11
3. POTENTIAL IMPACTS	13
3.1 Predicting the increased number of visitors to the SPA.....	13
3.2 Disturbance to birds	15
3.3 Recreational use of the Deben Estuary	17
3.4 Effects of an increase in recreational disturbance on Avocets	18
3.5 Effects of an increase in recreational disturbance on Brent Geese	21
3.6 Impacts of increased recreation on Narrow-mouthed Whorl Snail.....	23
3.7 Effects of increased air pollution on the SPA	23
4. CONCLUSIONS AND RECOMMENDATIONS	25
5. REFERENCES.....	26

Cotswold Wildlife Surveys Ltd (CWS) has prepared this report in accordance with the instructions of Richard Brown Planning, on behalf of Christchurch Land and Estates Ltd ("the Client"), by email dated 16th June 2014 and under the terms of appointment for CWS. This report is confidential and non-assignable by the Client and CWS shall not be responsible for any use of the report or its contents for any purpose other than that for which it was prepared and provided. Should the Client require to pass copies of the report to other parties for information, the whole of the report should be so copied, but no professional liability or warranty shall be extended to other parties by CWS in this connection without the explicit written agreement thereto by CWS. The report may be assigned by the Client by way of absolute legal assignment to a purchaser of all or part of the site to which the report refers ("The Site") without the consent of CWS being required and such assignment shall be effective upon written notice thereof being given to CWS. No further assignment shall be permitted. In the event of the Client entering into a legal joint venture to develop The Site, the report can be regarded as having been issued by CWS jointly in favour of the Client and the joint venture partner, and in respect of the report CWS would owe the joint venture partner the same duty of care that we owed to the Client when we were instructed to prepare the report subject to all the matters contained or referred to in the report.

SUMMARY

On Land off Yarmouth Road in Melton, Woodbridge, Suffolk, a Habitats Regulations Assessment (HRA) has been carried out to assess the potential impacts of a proposed residential development on the Deben Estuary Special Protection Area for Birds (SPA). The closest edge of the SPA lies approximately 1.0 km to the south of the application site.

The Habitats Directive protects habitats and non-avian species of European importance and applies to Special Areas of Conservation (SACs) and the European Directive (79/409/EEC) on the Conservation of Wild Birds (Birds Directive), protects bird species of European importance and applies to Special Protection Areas (SPAs).

These are known as the network of Natura 2000 Sites or "European Sites". The UK Government Guidance on HRA from the Department of Communities and Local Government (DCLG), August 2006 states that areas designated as globally important wetlands under the Ramsar Convention (1971) should also be given the same level of protection as SAC and SPA designations in the HRA process.

In producing this report, the necessary information has been provided to enable the competent authority, Suffolk Coastal District Council, and the Appeal Inspector, to determine whether an Appropriate Assessment should be completed in respect of the proposed development of the Land off Yarmouth Road.

In concluding its determinations, it is anticipated that the Council will consult with Natural England.

The HRA has been made following relevant guidance from the UK Government, including:

- A test in respect of the likely impacts upon a Natura 2000 site of a project or plan, either alone or in combination with other projects or plans, and consideration of whether these impacts are likely to be significant;
- An assessment of the impacts of a plan or project against the conservation objectives of a European Site, in order to identify whether there are likely to be any adverse effects on site integrity and site features;
- When significant negative effects are identified, an assessment of alternative solutions to avoid any potential damaging effects to the integrity of the Natura 2000 site; and
- Where adverse impacts remain, an assessment of compensatory measures if it is deemed that the project or plan should proceed.

The HRA has considered a range of potential impacts, and in each case has determined that there is unlikely to be any effect, or that an impact will not be material. In no circumstances will any of the impacts have a significant effect on the integrity of the SPA.

Given this conclusion, Suffolk Coastal District Council should proceed on the basis that there will be no requirement for a separate Appropriate Assessment of the proposed development.

1. INTRODUCTION

1.1 Background

The UK is bound by the terms of the EC Habitats Directive (and EC Birds Directive and the Ramsar Convention).

The aim of the Habitats Directive is to conserve natural habitats and wild species across Europe by establishing a network of sites known as Natura 2000 sites (for the purpose of this report, and as defined under the 2010 Habitats Regulations, these are referred to as European site(s)).

Under Article 6(3) of the Habitats Directive, an Appropriate Assessment is required where a plan or project is likely to have a significant effect upon a European site, either individually or in combination with other projects.

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to Appropriate Assessment of its implications for the site in view of the site’s conservation objectives” Article 6(3).

This Article has been interpreted as meaning that any project is to be subject to an Appropriate Assessment if it cannot be proven, beyond reasonable scientific doubt, that there is no significant effect on that site (a precautionary approach), either alone or in combination with other plans or projects.

Further to this, Article 6(4) states that where an Appropriate Assessment has been carried out and results in a negative assessment, (in other words, any proposed avoidance or mitigation measures anticipated are unable to reduce the potential impact so it is no longer significant), or if uncertainty remains over the significant effect, consent will only be granted if there are no alternative solutions, and there are imperative reasons of over-riding public interest (IROPI), for the development and compensatory measures have been secured.

If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted Article 6(4).

A Habitats Regulations Assessment (HRA) is a recognised step by step process which helps determine likely significant effect and (where appropriate) assess adverse impacts on the integrity of a European site. The HRA also examines alternative solutions, and provides justification for IROPI.

European guidance describes a four stage process to HRA which is summarised in Table 1 below.

Stage 1	Screening	The process to identify the likely impacts of a project upon a European site, either alone or in combination with other plans and projects, and consider whether the impacts are likely to be significant.
Stage 2	Appropriate assessment	The consideration of the impacts on the integrity of the European site, either alone or in combination with other plans and projects, with regard to the site's structure and function and its conservation objectives. Where there are adverse impacts, an assessment of mitigation options is carried out to determine adverse effect on the integrity of the site. If these mitigation options cannot avoid adverse effects then development consent can only be given if stages 3 and 4 are followed.
Stage 3	Assessment of alternative solutions	Examining alternative ways of achieving the objectives of the project to establish whether there are solutions that would avoid or have a lesser effect on European sites.
Stage 4	IROPI	This is the assessment where no alternative solution exists and where adverse impacts remain. The process to assess whether the development is necessary for IROPI and, if so, the potential compensatory measures needed to maintain the overall coherence of the site or integrity of the European site network.

Table 1: Four stage process to the HRA

1.2 Site Description and Project Proposal

The site bordered Yarmouth Road to the east and St Audry's Road to the west. St Audry's Golf Course bordered the site to the north.

The Ordnance Survey Grid Reference is TM 28510 51321, centred on the middle of the site.

The land comprised a large triangular shaped field which was under continuous cultivation and intensively managed.

A small block of woodland stood in the southeastern corner of the field where the site bordered Yarmouth Road. The woodland comprised a number of mature trees that included Pedunculate Oak *Quercus robur*, Ash *Fraxinus excelsior*, Sycamore *Acer pseudoplatanus*, Sweet Chestnut *Castanea sativa*, Common Beech *Fagus sylvatica*, Hawthorn *Crataegus monogyna*, Wild Cherry *Prunus avium* and Elder *Sambucus nigra*.

This woodland edge was lined with dense Bramble *Rubus fruticosus* scrub and tall ruderal vegetation, which included Common Nettle *Urtica dioica*, Creeping Thistle *Cirsium arvense* and Common Cleavers *Galium aparine*.

Narrow strips of scattered Bramble scrub and tall ruderal vegetation consisting of Common Nettle, Creeping Thistle, Common Cleavers, Hogweed *Heracleum sphondylium* and Alexander's *Smyrniololium olusatrum* ran along the southern and western margins of the field.

A wider strip (8-10 metres) of poor semi-improved grassland bordered Yarmouth Road at the northeastern corner of the field.

The grassland was dominated by tall grass species which included meadow-grasses *Poa* Spp., False Oat-grass *Arrhenatherum elatius*, Common Couch *Elymus repens* and Perennial Ryegrass *Lolium perenne*.

Amongst the sward were a small number of forbs including Cow Parsley *Anthriscus sylvestris*, White Clover *Trifolium repens*, Red Clover *T. pratense*, Sainfoin *Onobrychis viciifolia*, Red Campion *Silene dioica*, Common Mallow *Malva sylvestris*, Evening Primrose *Oenothera biennis* and Curled Dock *Rumex crispus*.

The hedgerows with trees which bordered the site perimeter comprised predominantly of Hawthorn and Blackthorn *Prunus spinosa* with some Elder and Bramble. The trees within the hedges were generally mature and included Ash, Pedunculate Oak, Sycamore, Sweet Chestnut and Common Beech.

A residential development is proposed for the site, as shown in the Indicative Masterplan below (Plan 1).



Plan 1 Indicative Masterplan

2. CITATION FEATURES AND CONSERVATION OBJECTIVES

2.1 Deben Estuary SPA

The Deben Estuary is located on the coast of Suffolk in East Anglia. It extends southeast for over 12.0 km from the town of Woodbridge to the North Sea just north of Felixstowe. It is relatively narrow and sheltered and has limited amounts of freshwater input.

The mouth of the estuary is the narrowest point and this is protected by the presence of shifting sandbanks, whilst intertidal areas are constrained by sea walls.

There are extensive areas of saltmarsh and intertidal mud-flats, these occupying most of the site and representing the most complete range of saltmarsh community types in Suffolk. There are also a range of swamp communities that fringe the estuary and occasionally form larger stands. In general, these are dominated by Common Reed *Phragmites australis*.

A large number of birds occur within the estuary, including Avocet *Recurvirostra avocetta*, Redshank *Tringa tetanus*, Dark-bellied Brent Goose *Branta bernicula bernicula*, Shelduck *Tadorna tadorna* and Black-tailed Godwit *Limosa limosa*, with the numbers of Wigeon *Anas penelope*, Pintail *Anas acuta* and Grey Plover *Pluvialis squatarola* at significant levels in some years.

The estuary also supports many other species including high numbers of Dunlin *Calidris alpina*, Curlew *Numenius arquata* and Mute Swan *Cygnus olor*.

2.1.1 SPA Qualifying Features and Site Conservation Objectives

The Deben Estuary qualifies as an SPA by supporting 95 (5 year peak mean 1991/2 – 1995/6) of Avocet which represents 7.5% of the wintering population in Great Britain. This species is listed on Annex I of the Birds Directive.

The integrity of the site is dependent on the following conservation objective:

To maintain, in favourable condition, the habitats for the populations of Avocet, with particular reference to:

- (i) Intertidal mudflat communities; and
- (ii) Saltmarsh communities.

Disturbance and water quality are identified as key factors affecting the integrity of the SPA (Table 1).

Qualifying Feature	Key Environmental conditions to support site integrity
Nationally important site for the wintering population of Avocets	1) Lack of disturbance during winter months (October to March) 2) Quality of water within the estuary

Table 1 Deben Estuary SPA Site Analysis

2.1.2 Ramsar Site Qualifying Features and Site Conservation Objectives

The Deben Estuary is designated as a Ramsar site for its over-wintering population of Dark-bellied Brent Geese. The site supports 1953 individuals (5 year peak mean 1998/9 – 2002/3), representing an average of 1.9% of the UK wintering population.

In addition, it is also designated for its population of Narrow-mouth Whorl Snail *Vertigo angustior*. Martlesham Creek (in the west of the Deben Estuary) is one of only fourteen sites in the UK where this species occurs.

Disturbance, feeding habitats and hydrological conditions are identified as key factors affecting the integrity of the Ramsar site (Table 2).

Qualifying Feature	Key Environmental conditions to support site integrity
Internationally important site for wintering populations of Dark-bellied Brent Geese	1) Lack of disturbance during winter months (October to March) 2) Maintenance of feeding habitats
Supports a population of the nationally rare mollusc Narrow-mouth Whorl Snail	1) Maintenance of hydrological conditions 2) Maintenance of grazing pressure 3) Lack of physical disturbance

Table 2 Deben Estuary Ramsar Site Analysis

2.1.3 Existing Impacts to the Deben Estuary SPA and Ramsar Site

As the Deben Estuary is large it is divided into 'units' for monitoring and units may vary in interest feature(s) and management from other units on the site.

The outcome of monitoring is the judgement of a unit's condition into one of a number of categories, such as "favourable", "unfavourable recovering", "unfavourable no change", "unfavourable declining" or "destroyed". Favourable or unfavourable recovering conditions mean that its' habitats and species are being conserved.

If a unit is found to be in an unfavourable condition, this means there is a current lack of appropriate management, or that there are damaging impacts (which may be outside of the control of the owner) which need to be addressed.

Of the 22 units within the Deben Estuary, 16 are considered to be "unfavourable declining", primarily due to coastal squeeze (erosion of saltmarsh due to rising sea levels). In at least one case, this has led to the loss of a high tide roost site. It should be noted that Natural England does not measure human disturbance on birds for the purposes of condition assessment, and therefore would not necessarily identify or record harm to bird populations from human disturbance.

2.1.4 Conservation objectives

Under Regulation 33(2)(a) of The Conservation (Natural Habitats &c.) Regulations 2010, Natural England has a duty to advise other relevant authorities as to the conservation objectives for the European site. The conservation objectives for Deben Estuary European marine site interest features are provided below.

2.1.4.1 The conservation objective for the internationally important populations of the regularly occurring Annex 1 bird species

Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of the regularly occurring Annex 1 bird species, under the Birds Directive, in particular:

- Intertidal mudflat communities
- Saltmarsh communities

2.1.4.2 The conservation objective for the internationally important populations of the regularly occurring migratory bird species

Subject to natural change, maintain in favourable condition the habitats for the internationally important populations of regularly occurring migratory bird species, under the Birds Directive, in particular:

- Intertidal mudflat communities
- Saltmarsh communities

A map showing the boundary of the SPA and the location of the application site is shown overleaf (Fig. 2).

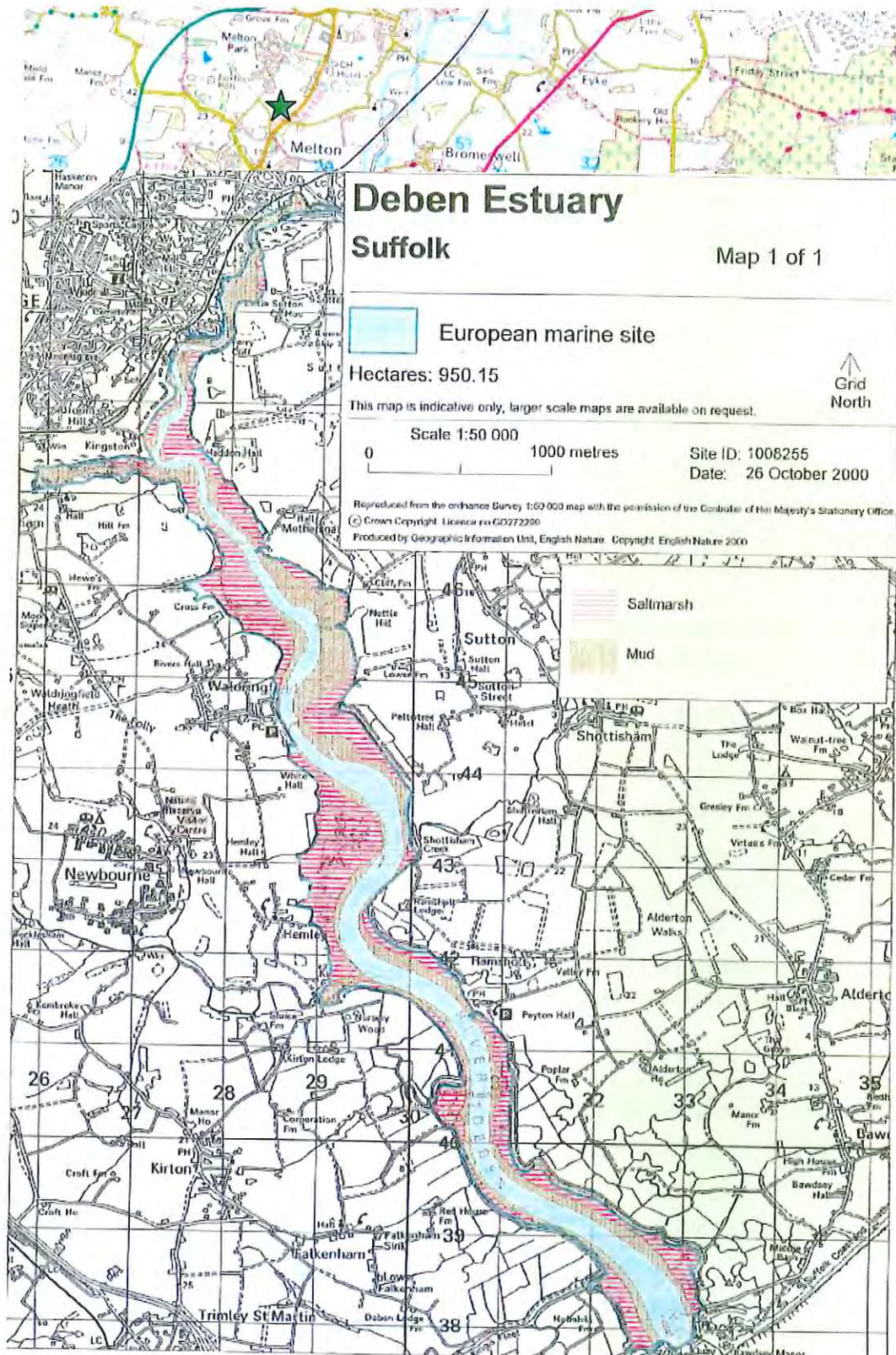


Fig. 2 Deben Estuary SPA boundary in relation to application site ★

3. POTENTIAL IMPACTS

3.1 Predicting the increased number of visitors to the SPA

Predicting the anticipated increases in the number of visitors to the SPA resulting from an increase in population is not straightforward. Indeed, the Suffolk Coastal District Council (SCDC) Core Strategy Appropriate Assessment (AA) uses two different visitor surveys and extrapolates from the results to consider how the proposed housing might translate into increased visitor numbers to European sites.

One study was carried out in 2004 by the East of England Tourist Board within the Suffolk Coasts and Heaths Area of Outstanding Natural Beauty (AONB). The SCDC Core Strategy AA calculated that the combined population increases would result in an increase in visitors to the AONB to be approximately 2.83%. It concluded that it would be reasonable to assume that the increase in visitors to European Sites within the AONB would be within the range of 2 to 5%.

The SCDC Core Strategy also considers a visitor study commissioned by the Suffolk Wildlife Trust and Forestry Commission in the South Sandlings (Cruikshanks *et al.*, 2011). This included the Deben Estuary SPA and Ramsar Site.

The key findings considered relevant to this HRA are:

- *53% of total visitors entered the study area at just three points; the forest opposite Sutton Heath Estate (housing associated with MoD Woodbridge including some open market housing), Sutton Heath car park, and Iken;*
- *Visitors were not spread out evenly across the study area; there were 'hotspots' of visitors at Sutton Heath and in Rendlesham Forest at Tangham visitor centre; there were also spots of activity concentrated at the Rendlesham Forest runway car park and by the B1084, and in the north of Tunstall Forest at Tunstall Heath and Blaxhall Common. Heaths were used disproportionately more by visitors compared to equivalent areas of forestry plantation;*
- *In the study area there were 16 formal car parks providing a total of 261 spaces, and 106 locations used for informal parking providing 256 parking spaces. The density of visitors within the sites was closely related to the location of car parks; the visitor hotspots were close to the bigger and formal car parks; other spots of activity were close to small and/or informal car parks;*
- *19% of visitors in summer and 6% of visitors in winter were tourists;*
- *63% of visitors had dogs with them; the proportion being slightly higher in the winter than in summer;*

- ❑ *Dog walking was undertaken by 52.8% of people interviewed; walking, exercise, family outings and cycling were undertaken by the majority of other visitors;*
- ❑ *80% of all visitors arrived by car, and 17% of all visitors walked across the road from the Sutton Heath Estate into the adjacent forest;*
- ❑ *Half of all visitors who arrived on foot lived within 420 m of the access point, and half of all visitors who arrive by car lived less than 8.0 km away. Over 75% of dog walkers lived within 10 km of the access point;*
- ❑ *The number of houses within 5.0 km of a site had a positive relationship with the number of visitors entering; the more houses there were, the more visitors there were;*
- ❑ *64% of visitors used the sites at least weekly, and over half of these visited daily;*
- ❑ *Over half the visitors also said that they would visit coastal and estuary sites in the area.*

Based on the findings of the Sandlings Visitor Survey, the SCDC Core Strategy AA calculated a potential increase in visitors of 8.8 %. Due to the number of assumptions needed to derive this figure, it cannot be considered precise. However, the SCDC Core Strategy AA concluded that it would be reasonable to predict that the increase in number of visitors to European Sites in the Sandlings area could be in the range of 6-12% as a result of the increase in population.

A third visitor survey has also been completed in 2011 in the Waldringfield area by the campaign group 'No Aadastral New Town', although the survey does not provide data on which a prediction in change in visitor numbers can be made.

However, the findings of the survey are broadly comparable with the results of the Sandlings Visitor Survey, except in the following cases:

- ❑ *The proportion of dog walkers was lower by the Deben;*
- ❑ *The proportion of visitors visiting the Deben in the winter was lower; and*
- ❑ *The distances travelled to the Deben were higher (although this was calculated differently as the mean rather than the median figure used in the Sandlings survey and is therefore not strictly comparable).*

A number of additional studies have been reviewed to inform the estimates of the distances people are likely to walk from their place of residence for amenity purposes and the distances they are likely to drive to visit a recreational area.

An extensive study on the distances people are likely to walk to natural areas was undertaken on the Dorset Heaths in 2005. These studies found that the average distance walked on heaths by walkers with or without dogs, was 2.2 km.

Of the people who walked to the site, 75% had walked less than 500 m to reach the heath, and 89% had walked less than 1.0 km.

The same study found that half the people who arrived at the site by car came from up to 3.7 km away and most who arrived by car had come from up to 8.0 km away. These figures are generally consistent with the findings of the South Sandlings Visitor Survey.

Natural England completed a national visitor survey in 2011. The findings highlighted the importance of accessible greenspace close to home, with 66% of visits taking place within 3.2 km miles from home and 82% within 8.0 km.

Another recent study by Liley *et al* in Dorset in 2008 found that for heathland sites, the strongest correlation between the number of visits to heaths made on foot (per household per year) and area of heathland in the vicinity was found using a distance band of 1.5 km, increasing to 1.5-5.0 km for those travelling by car.

3.2 Disturbance to birds

Disturbance can cause birds to spend energy flying away and to lose feeding time while re-locating to different feeding areas. If disturbance in one area causes more birds to congregate in another, less disturbed area, then the increased bird densities in the new area may intensify competition for food. If the high bird densities last long enough, prey may become depleted, further reducing birds' energy. Over time, this can impact on a bird's survival rate.

The implication of recreational disturbance to ducks, waders and other estuarine birds, has been the focus of a range of studies. These have revealed that:

- ❑ *In large populations of shorebirds, numerous minor disturbances may have a greater impact than fewer larger disturbances, e.g. bait diggers;*
- ❑ *Birds are affected more by people with dogs than by people alone, with birds flushing more readily, more frequently, at greater distances and for longer. Dogs resemble predators and may range quickly across a wide area if not on a lead;*
- ❑ *Different types of recreational activities cause different types of impacts. For example, a three year study of wetland birds at the Stour and Orwell SPA, found that bait digging caused disturbance of the largest proportion of birds in the study area. However walkers and dogs were the most regular source of disturbance, along with cyclists and joggers to a lesser extent. Walkers (with or without dogs) and yachts caused equal amounts of disturbance. Sailing vessels and power craft caused roughly equal amounts of disturbance. Gun shots caused the largest mean response but were infrequent;*

- *Some species are more prone to disturbance than others. For instance, of six wetland bird species studied at the Stour and Orwell SPA, Redshank were most easily disturbed, then Dunlin, Shelduck, Oystercatchers Haematopus ostralegus, Wigeon and finally Curlew. On average, about 40% of Redshank were displaced by a given disturbance event, compared with about 20% of Curlew. A study of birds at Mont Saint Michel bay in France also showed that Dunlins, Oystercatchers and Knots Calidris canutus reacted to recreational disturbance more than Curlew and Grey Plover;*
- *When feeding conditions are hardest (in winter, at the highest tides), disturbance is most likely to impact birds. A study of Oystercatchers in France showed that the birds could be disturbed up to 1.0–1.5 times per hour before their fitness was reduced in winters with good feeding conditions, but only up to 0.2–0.5 times per hour when feeding conditions were poor. A study of Oystercatchers in the Exe Estuary in Devon led to similar findings;*
- *Birds' sensitivity to disturbance could be related to the habitats of the species. Ravenscroft (2005) postulated that Redshank is more easily disturbed than Curlew because "Redshank are upper and mid-shore feeders whereas Curlew tend to feed at low tide along the tideline". The French researchers postulated that Curlew and Grey Plover are less affected by localised disturbance as they have a more varied diet and feed in smaller groups dispersed over the tidal flat and salt marsh;*
- *The most easily disturbed species are not necessarily those that will suffer the greatest impacts. In some cases, the most easily disturbed birds simply move to other feeding sites, whilst others may remain and suffer greater impacts on their population. Some of these principles may be used in planning management strategies to deal with disturbance associated with increases in the numbers enjoyed and undertaking recreational around the European site.*

The 2011 SCDC Core Strategy AA completed a survey of site managers of the European Sites considered by the AA to obtain their views on the impacts caused by visitors. The survey results were based on just five responses and therefore are not considered to be comprehensive. However, they do provide an additional insight into the existing baseline conditions.

The following findings are considered relevant to the land off Yarmouth Road HRA:

- *"All respondents highlighted disturbance to birds and other species as being the main impact of visitors. Dogs in particular were reported as the biggest source of disturbance, especially dogs off leads which were rarely under control. Visitors were also reported to destroy interpretation signs, cut fences, leave litter and leave gates open so that livestock escape. Visitors, or at least some of them, were believed to ignore signs requesting certain behaviours such as dog control or remaining on paths.*

On one estuarine site, disturbance to birds from boats was thought to be the biggest problem;

- ❑ *Three out of the four respondents who filled in the survey form reported that they thought that a 1% increase in visitors to their sites would cause harm to SPA features. The fourth respondent thought that a 10% increase would cause harm;*
- ❑ *All the site managers who filled in the survey form agreed that additional money could help to reduce or remove the impact of additional visitors, for example by moving or upgrading footpaths, providing additional wardening, moving or upgrading car parks, providing leaflets and signage, etc. Three of the respondents, unprompted by the design of the survey form, suggested that alternative recreation facilities should be provided close to new developments, with new Country Parks being mentioned twice;*
- ❑ *One site manager thought that the emphasis on recreation such as dog walking, was not appropriate for his site and that traditional coastal recreation such as wildfowling, fishing and clay pigeon shooting were normally not considered during studies of recreational harm to wildlife sites."*

3.3 Recreational use of the Deben Estuary

The exact numbers of people currently visiting the Deben Estuary is not known. However, an indication of the existing visitor pressure was established by Environ UK in 2012 for a large scale development at Adastral Park in Martlesham Heath. Here they considered the car parking facilities and footpaths in proximity to their application site.

Using this study as a baseline, the car parks in Woodbridge are the ones most likely to be used by visitors from the proposed new residential development off Yarmouth Road.

These car parks are separated from the SPA by a railway, although the Deben Estuary is still accessible via designated crossings. The presence of car parking at Woodbridge is considered unlikely to result in a significant effect to the SPA/Ramsar site, as this area is already densely populated and the key designated features of the estuary are not present in this location.

A private car park is also present at Martlesham Church, although it can also be used by the public. This is a relatively small site and has a capacity of up to 30 cars. It lies approximately 5.5 km by road from Yarmouth Road.

The use of footpaths along the Deben Estuary from these car parks is limited by the losses of various sections due to erosion and the presence of creeks which block progress. However, there is a route along the estuary from Martlesham to the north of Woodbridge.

3.4 Effects of an increase in recreational disturbance on Avocets

From study of British Trust for Ornithology (BTO) Wetland Bird Survey (WeBS) data and conversations with the local bird recorder for the area, Environ UK discovered that the main feeding areas for Avocets are in the south and east of the Deben Estuary, south of Martlesham Creek (Fig. 3 overleaf).

The closest feeding area lies approximately 4.5 km from the proposed development along the nearest footpath. The roost sites are also concentrated in the south of the estuary with the nearest located approximately 7.5 km from the proposed development along the nearest footpath.

The five year average core WeBS count for the 3.0 km section from Waldringfield to Martlesham is two individual Avocets, whereas the average low tide count in this area is one individual. The five year average core WeBS count for the 3.0 km section from Waldringfield to Kirton Creek is 15 and the average low tide count is 14.

Walkers: Avocets feed in shallow brackish water and mudflats and roost in loose colonies. The Avocets along the Deben Estuary feed out on the mudflats away from footpaths or areas where people and their dogs could access – the mudflats along this estuary are particularly difficult to navigate.

The nearest roosting area for this species is to the east of Hemley approximately 7.5 km from the land off Yarmouth Road and 3.5 km from the nearest car park in Waldringfield (9.0 km from Yarmouth Road along roads/footpaths). Although the distance, along with the poor state of the path, is likely to preclude the majority of walkers, it is evident that people are currently accessing the saltmarsh in this area.

It cannot therefore be concluded with any certainty that there would be no impact on the birds roosting here as a result of increased visitor pressure, and thus a 'precautionary principle' should be applied, whereby an adverse effect is likely.

Mountain biking: It is reported that mountain bikes are occasionally ridden along the estuary footpaths. This activity is likely to be similar in impact to dog walkers, although they are able to travel longer distances.

Mountain bikers would primarily stick to the paths as it would be difficult to venture off onto the sand. However, this impact on the birds cannot be ruled out with certainty particularly around Hemley, where Avocets roost, and therefore the 'precautionary principle' again applies.



Fig. 3 Locations of Avocet feeding and roosting areas (Environ UK, 2012)

Water sports: The activity that is likely to cause the most disturbance to Avocets is that caused by river traffic, especially small craft which move closer to the water's edge. There are two clubs in Woodbridge; Deben Sailing Club and Woodbridge Cruising Club. The former tends to operate along the estuary around Woodbridge, whilst boats from the latter explore the whole estuary and the sea beyond. In addition, there is Waldringfield Sailing Club, although this is currently near to maximum capacity with the vast majority of the moorings already occupied.

No significant increase in the number of boats associated with the sailing clubs is expected, whilst motor boats are actively discouraged from using the estuary and no increase is anticipated. Boats are not normally kept on the moorings during the winter due to the risk of damage from the weather and erosion.

Small craft such as kayaks are increasing along the Deben, and these boats can be easily carried by car. Car parking along the estuary is limited and it is unlikely that the car park belonging to Waldringfield Sailing Club for example, would be used due to barrier restrictions. Small craft are potentially highly disturbing to feeding and roosting Avocets, as they can venture near to the edge of the mudflats which are favoured by feeding birds, and are also able to gain access to otherwise inaccessible stretches of estuary where other activities are limited.

Although the majority of kayaking is undertaken in the summer, even a small increase in small craft could result in disruption to feeding patterns. A study by Triplet *et al.* in 2003, found that on days with frequent disturbance, Avocets in the Traicts du Croisic in France roost but then go to their feeding areas at night after the disturbances have finished.

Therefore, an increase in the number of small craft along the estuary could result in a limited effect on this species.

Effects of Bait-diggers on SPA/Ramsar: A three year study of wetland birds at the Stour and Orwell SPA found that bait digging caused disturbance of the largest proportion of birds in the study area. There is currently little bait digging within the Deben Estuary, since the mudflats in this area are difficult to access and therefore the increased population at Yarmouth Road is unlikely to result in an increase in this activity.

Wildfowling: Wildfowling along the Deben is overseen by the Anglian Wildfowling Association (AWA). Numbers of people shooting on the Deben and the number of birds shot are monitored by Natural England. The AWA conforms to a strict shooting management plan, and although it is possible that an increase in population would result in an increase in AWA members, it would not result in an increase in the number of birds being shot.

3.5 Effects of an increase in recreational disturbance on Brent Geese

From a review of the BTO WeBS data and conversations with the local bird recorder, Environ UK found that the Brent Geese within the Deben Estuary primarily feed and roost on the intertidal sub-features on the east side of the Deben from Waldringfield south towards Felixstowe (approximately 5.0 km from the Yarmouth Road development at the nearest point – Fig. 4).

They also graze the fields around the estuary, especially at high tide and also later in the winter when most of the intertidal food supplies have been eaten. This grazing is concentrated on the fields beside the lower reaches of the estuary, but they do periodically feed all the way up to Woodbridge, depending on which field is being managed most appropriately.

Walkers with and without dogs: From reviewing the spatial and temporal data on the distribution of the Brent Geese within the SPA and environs, it is extrapolated that the primary disturbance from an increase in walkers with and without dogs will be on the birds feeding on the saltmarshes and the nearby fields at high tide and late winter.

The distance between walkers and Brent Geese is a key factor in determining the degree of disturbance. Indeed, this species can take flight at distances of over 100 m, although observation of Brent Geese along the Exe Estuary found that flocks frequently feed on an adjacent golf course as near as 7.0 m from a main road used regularly by cars and pedestrians. Birds have also been found to habituate to frequent disturbance, although there is evidence to suggest that apparent habituation to more disruptive events is actually the result of reduced bird numbers.

Dogs are predators and therefore more likely to disturb Brent Geese when encountered, compared to walkers on their own. The data search suggests that geese graze the fields adjacent to the dog walking paths near Woodbridge less regularly than the fields further south, and therefore it is likely that flocks of Brent Geese may be periodically chased by dogs at high tide and late winter.

In conclusion, it is probable that the increase in dog walkers could periodically disturb the Brent Geese within the fields and saltmarsh at high tide and late winter. It is difficult to quantify the magnitude of this impact, as it is dependent on the availability of suitable fields nearby.

Although a significant impact on the integrity of the Ramsar is unlikely, the evidence of effects on this species is inconclusive and therefore the 'precautionary principle' applies and an adverse impact must be assumed.



Fig. 4 Locations of Brent Goose feeding and roosting areas (Environ UK, 2012)

Mountain Biking: This activity is likely to be similar in impact to dog walkers and although mountain bikes would be less abundant than dog walkers there is still expected to be a limited effect as a result of an increase in their numbers.

Water sports: At certain times of the year, Brent Geese feed on mud flats and on Eel Grass *Zostera* spp. which is present in the brackish water. The Deben contains less Eel Grass than other estuaries and therefore Brent Geese are less likely to feed on the water. Therefore no significant impacts on this species are anticipated as a result of a potential slight increase in small craft associated with an increase in local population at Yarmouth Road.

3.6 Impacts of increased recreation on Narrow-mouthed Whorl Snail

A small population of Narrow-mouthed Whorl Snail is present at Martlesham Creek, approximately 5.0 km from the proposed development site. This species is generally found in permanently wet grassland or amongst moss in damp hollows in sand dunes.

The effects of an increase in trampling on this species as a result of dog walkers can be extrapolated by considering other sites where trampling occurs. For example, at Whitford Burrows on the Gower Peninsular in South Wales, this species is locally abundant and occurs alongside grazing ponies. At the Blythe Estuary in Northumberland, where a large population is present, dog walkers are frequent.

It is therefore concluded that no effects are anticipated for this species as a result of an increase in visitor pressure.

3.7 Effects of increased air pollution on the SPA

An increase in the volume of traffic, especially where the flow becomes congested, can result in a localised increase in air pollution from vehicle emissions. Exhaust gases include nitrogen dioxide (NO₂) and particulate matter (PM10).

In addition there are similar gases produced by the treatment of waste water, and an increase in population, such as that associated with a new residential area, will inevitably lead to a rise in the amount of waste water requiring treating. However, emissions produced by treatment processes are generally negligible.

Once in the atmosphere, the gases react with rainwater to create a dilute acidic solution. In sufficient concentration, the acid can adversely affect sensitive plants, in particular fragile communities such as those associated with fen, mere and bog.

The proposed development off Yarmouth Road includes the provision of up to 138 houses. As such there is a potential to generate an increase in the volume of polluting gases over and above those already produced in Woodbridge, although this increase is negligible when compared to the density of the existing population.

It is not envisaged at this time that there will be any new waste water treatment plant on site, and if any additional capacity is required, it is more likely to be achieved through the existing sewer network.

Atmospheric gases will therefore largely be restricted to vehicle emissions. However, the strongest effects on plant communities are only observed in the first 50-100 m away from roads, and this is consistent with the nitrogen dioxide pollution profile, which decreases to background levels at a distance of 100-125 m (Bignal *et al*, 2008). Thus only those habitats within 125 m of a major road are considered to be at risk from increased air pollution at sufficient levels, to alter the composition of vulnerable plant communities.

Given that the application site lies on the northern edge of Woodbridge, and it is likely that the majority of vehicle movements will be into Woodbridge or across to the A12, it is considered that the potential impacts of increased air pollution will have no significant effect on the integrity of the Natura 2000 site habitat.

4. CONCLUSIONS AND RECOMMENDATIONS

This report details the results of a Habitat Regulations Assessment of potential impacts on the Deben Estuary Special Protection Area for birds.

A range of impacts have been identified, all associated with disturbance caused by an increase in recreational pressure resulting from an increase in population.

For Avocets (SPA qualifying feature) the impact arises from an increase in small craft on the river, whilst for the Dark-bellied Brent Geese (Ramsar qualifying feature) there are likely to be adverse effects caused by walkers (with or without dogs) and possibly by mountain biking.

Despite these impacts, it should be noted that the relatively small increase in population associated the proposed Yarmouth Road development is not considered to have a significant effect on the integrity of the protected site, as the Woodbridge area is already densely populated, whilst the main feeding and roosting areas for Avocets and Brent Geese lie to the south and east.

As such, Suffolk Coastal District Council should proceed on the basis that there will be no requirement for a separate Appropriate Assessment of the proposed development.

5. REFERENCES

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Land off Yarmouth Road, Woodbridge – Habitat Regulations Assessment

To: Christchurch Land and Estates Ltd

Report Number: 1644-CWS-03

Version: 01

Date: 15th January 2015

Appeal Decision

Inquiry opened on 21 March 2017

Site visits made on 27 and 29 March 2017

by Philip Major BA(Hons) DipTP MRTPI

an Inspector appointed by the Secretary of State for Communities and Local Government

Decision date: 12 April 2017

Appeal Ref: APP/J3530/W/16/3165730

Land off Duke's Park, Woodbridge, Suffolk IP12 4DQ.

- The appeal is made under section 78 of the Town and Country Planning Act 1990 against a refusal to grant outline planning permission.
 - The appeal is made by Gladman Developments Ltd against the decision of Suffolk Coastal District Council.
 - The application Ref: DC/16/3597/OUT, dated 26 August 2016, was refused by notice dated 20 December 2016.
 - The development proposed is up to 140 residential dwellings (including up to 33% affordable housing) a convenience store (use class A1, up to 400sqm gross/280sqm net) with associated car parking. Demolition of existing structures, introduction of structural planting and landscaping, informal public open space and children's play area, surface water flood mitigation and attenuation, vehicular access from Ipswich Road and emergency, pedestrian and cycle access from Top Street, and associated ancillary works.
-

Decision

1. The appeal is dismissed.

Preliminary Matters

2. The appeal is made in outline with all matters reserved except site access as shown on Hydrock drawing No 010 Revision A. The access proposals were amended during the course of the Council's consideration of the application. The application was also accompanied by a development framework plan and an illustrative masterplan which do not form part of the final proposals but give an indication of how it would be intended to develop the site.
 3. It is common ground that the appeal site lays within the setting of the Suffolk Coast and Heaths Area of Outstanding Natural Beauty (AONB). The site is also crossed by the route of interconnector(s) associated with offshore wind farms. These are constraints which are recognised in the proposals.
 4. Prior to the inquiry Statements of Common Ground (SoCG) were agreed between the Appellant and Suffolk Coastal District Council (the Council) and Suffolk County Council (SCC). These cover matters relating to planning generally, the 5 year housing requirement and supply, highways and transport, drainage, European and Ramsar designated sites, and archaeology. These statements also helpfully identify remaining areas of disagreement where relevant.
-

5. Shortly before the close of the inquiry I was provided with a planning obligation in the form of a Unilateral Undertaking pursuant to S106 of the 1990 Act. This sets out matters which the owners of the land would undertake, and contributions which would be made, in the event of planning permission being granted. I am content, in light of the Community Infrastructure Levy Regulations compliance statements provided by both the Council and SCC, that the obligation would meet the requirements of the Regulations. However, because I have decided that the appeal should be dismissed I do not need to consider this matter further.

Main Issues

6. There are 3 main areas of dispute in this appeal. These are:
 - (a) Whether the housing requirement contained within the Suffolk Coastal District Local Plan - Core Strategy and Development Management Policies (CS) is up to date, and whether the Council can demonstrate a 5 year supply of deliverable housing sites;
 - (b) The impact of the proposed development on the character and appearance of the area, bearing in mind the proximity of the Suffolk Coast and Heaths AONB;
 - (c) In light of the first 2 issues, whether the proposal is sustainable development and therefore whether the planning balance indicates that planning permission should be granted.

Planning Policy

7. It is agreed that the relevant parts of the development plan for the purposes of this appeal are formed of saved policies of the Suffolk Coastal Local Plan (saved LP) which dates from 1994 but was altered in 2001 and 2006, the CS (adopted July 2013) as set out above, and the Site Allocations and Area Specific Policies Document (SAP - adopted January 2017).
8. Within the saved LP it is agreed that Policies AP212 and AP214 are relevant.
9. The planning SoCG sets out what are agreed as relevant policies within the Core Strategy. These are SP1, SP1A, SP2, SP3, SP15, SP16, SP17, SP18, SP19, SP20, SP26, SP29, DM2 and DM32. Others were raised and discussed at the inquiry. It became clear at the inquiry that as a result of the evolving nature of the proposal and the contents of the submitted obligation, the Council does not argue that there is conflict with all of these policies, notably SP3 (provision of homes) SP16 (sport and recreation) SP17 (green space provision) SP18 (infrastructure provision) DM2 (provision of affordable housing) and DM32 (provision of sport and play facilities).
10. The Appellant agrees that the proposal is in conflict with CS Policies SP19, SP29 and DM3 because of the location of the site outside development limits and in an area of countryside. There is disagreement about the conflict or otherwise principally relating to CS Policies SP1 (principle of sustainable development) SP1A (presumption in favour of sustainable development) SP2 (housing numbers and distribution) SP11 (accessibility) SP15 (landscape and townscape) SP26 (strategy for Woodbridge) and saved LP Policies AP28, AP212 and AP214.

11. It is useful at this point, in light of the first main issue, to identify those development plan policies which are relevant to the supply of housing (as opposed to simply being relevant to the proposal in general). CS Policy SP2, which sets out the housing requirement, is clearly relevant. So too are Policies SP19 which sets out a settlement hierarchy whilst indicating that development will be restricted in the countryside, and SP26, which seeks to consolidate the town of Woodbridge. Policy SP29 is also restrictive of development in the countryside and is therefore of relevance.
12. Saved LP Policy AP212 specifically seeks to retain open spaces between settlements, including between Martlesham and Woodbridge. This is clearly relevant to the supply of housing in that locality. Policy AP214 encourages enhancement of the land of which the appeal site is part. The supporting text also indicates that more development in the policy area would not be appropriate and to that extent can be seen to be relevant.
13. There was debate at the inquiry in relation to the potential relevance of other policies. CS Policy SP15 relates to landscape and townscape, seeking to protect and enhance the valley of the River Fynn (amongst others) as well as the townscape of locations such as Woodbridge. The site is not identified as a particular location which is identified as being protected from development but nonetheless its location within the River Fynn valley is restrictive of development under the terms of this policy, which I consider has some potential relevance to the supply of housing. However the policy also cross refers to Policy AP28 of the saved LP. AP 28 seems to me to be specific to the areas identified on the proposals map (the site is not) or other sites making an important contribution in their undeveloped form to such matters as setting or character. The supporting text clearly indicates that the policy is focussed on land which is within a physical limits boundary (the site is not). Taken together it is my judgement that these 2 policies are not of material relevance to the supply of housing.
14. Martlesham Neighbourhood Plan (MNP) is in the process of being prepared. It is expected to deal with housing matters. Draft Policy MAR7 deals with local gaps between settlements where it is intended that development should maintain open character and not significantly reduce the gap. One of the gaps identified is between Martlesham village and Woodbridge, wherein the appeal site lies. However, the MNP has not yet been submitted to the Council. It is therefore at a relatively early stage of preparation and can be given limited weight in this appeal.

Reasons

Housing Requirement and Supply

15. The Core Strategy (CS) requirement is for there to be provision of 7900 homes in the period 2010 to 2027. However, it was established in the examination of the CS that 7900 did not represent the full objectively assessed need (OAN) at that time, which was some 11000 homes. But in order to progress the CS the Inspector took a pragmatic decision to find the CS sound with the housing requirement of 7900 subject to an early review. Policy SP2 of the CS sets out that the issues and options for the review would be published before the end of 2015 at the latest. That did not happen, and nor has it happened as yet. This has been the subject of consideration in other appeals which have variously come to different conclusions on the housing requirement for Suffolk Coastal.

Those decisions, of course, were based on the evidence then presented, and whilst material in this case, do not bind my consideration of this matter.

16. From the evidence given at the inquiry it is my understanding that the Council's requirement as it stands in the CS (7900) was updated from the figure submitted for examination (7590) which the CS Inspector required to be revisited. The updated requirement of 7900, though, still stemmed from the Regional Strategy requirement of 10200 homes in the period 2001 to 2021. It was described as the projected residual need requirements in Main Modification (MM3) of the CS. In parallel there was the fact that OAN was actually assessed, without constraints, at 11000 (using the East of England Forecasting Model). It is clear that the lower figure of 7900 was accepted as being acceptable in order for the CS to be found sound for 2 reasons. First, it avoided the need to withdraw the CS and start afresh with the accepted OAN of 11000 as the starting point, and secondly, there was the commitment to review of the CS starting no later than 2015.
17. At the inquiry I was presented with different requirement scenarios by the Appellant and Council. The Appellant has used 2 different forecasting models to predict the requirement for the period 2011 to 2031. The East of England model finds a requirement of 14500 dwellings (725 per annum) whilst the Local Plans Expert Group's proposed methodology finds a requirement of 15184 (759 pa). On the other hand the Council currently sticks to the requirement of 7900 (465 pa). Although pressed on the likely outcome of the current assessment being carried out on behalf of the Council no expected requirement figure (or potential range of outcomes) was offered. It was indicated, however, that a figure close to the current requirement was the likely outcome. But any resultant figure would in any event require testing at examination.
18. The bulk of evidence before me suggests that the OAN for the District is likely to be greater than 7900. The Council points to the most recent household projections suggesting a supply of dwellings starting at 365 dwellings per annum, well below the CS requirement of 465 pa. Applying a vacancy and second homes allowance brings the projection to 395 pa. But the household projection figure, as pointed out by the Appellant, is the starting point only, and might well reflect the impacts of constrained delivery in suppressing future projections. In addition there would be no inclusion of factors such as changing economic circumstances. I do not regard the household projections on their own as providing any likelihood of being a proxy for future need. Furthermore I have no firm evidence before me that the OAN is likely to have reduced from the 11000 calculated in 2010. The more compelling evidence is that the baseline (before application of constraints) OAN is likely to have risen.
19. At the present time I accept that the Council is pressing forward with the committed CS review and that an issues and options document is planned for mid 2017. However, I am cautious over the timing of the review for 2 reasons. First there is a necessity to consider the housing market area (HMA), which includes other authorities. Although a memorandum of understanding has now been completed it is not beyond possibility that one of the outcomes of this joint working would be to cause some delay. In addition the proposal to merge Suffolk Coastal and Waveney to form a single council has further potential for concurrent delay.

20. I can therefore summarise my findings on the housing requirement quite succinctly. First, the CS requirement must be regarded as being unreliable, both because of its derivation and the fact that the Council (in acknowledging that the true OAN was higher at that time) committed to a CS review during a timescale which has now been missed by some distance. Secondly the weight of evidence points clearly to the prospect that the OAN is likely to be beyond 11000 before any constraints are applied. I do not have accurate and tested figures with which to work, but it is my judgement that the OAN should at this time be held to be a minimum of 11000 dwellings over the period to 2031 (the CS review period) but may well be more.
21. Before considering the supply side of the equation I turn to the matter of what buffer would be appropriate in this case. The Appellant argues that 20% is appropriate, the Council 5%. What is not disputed is that the buffer should be applied using the Sedgfield method, and that any shortfall should be added to the first 5 years.
22. The delivery figures presented by the Appellant (Mr May's proof of evidence Table 3) show housing requirements being exceeded in 5 of the last 13 years. But 6 of the last 7 years exhibit failure to meet the requirement. Although the first part of that period coincided with the latter part of the financial crash, no significant improvement was seen until 2015/16. I do not share the Council's optimism that this is a sign of an upward trend and that things are improving. A single year's figure cannot logically be seen to be taken as such a sign. That being the case it is my judgement that the under delivery has been persistent and that a 20% buffer should be applied as required by the National Planning Policy Framework (NPPF).
23. The Appellant has provided a comparative table of how each of the various scenarios plays out in terms of housing requirement (Table 4 of Mr May's evidence). I will, for the sake of simplicity, adopt an OAN of 11000 for the purposes of this appeal. The Appellant's evidence indicates that this would result in an annual requirement of 647 dwellings. There is a shortfall on this figure of 1866 which, when added to the 2016 – 2021 requirement (the appropriate period for this appeal) gives a requirement of 5101. Adding the 20% buffer increases this to 6121, an annual requirement of 1224.
24. Supply over the next 5 years does not hold much dispute between the Council and Appellant. The Council assess supply as 3757, including 710 from allocations in the recently adopted SAP (not in dispute) and the Appellant at 3482. There are only 3 areas where there is material disagreement. The difference amounts to some 275 dwellings. I do think that there is merit in discounting windfall sites in year 3 to avoid double counting, and in my judgement the likely delivery at Adastral Park is somewhat optimistic on the Council's (and developer's) part. Hence I agree that a small reduction in supply should be factored in. For the purposes of this appeal I will treat supply as being around 3600 dwellings.
25. I doubt that anyone would claim that predicting housing requirement and supply is an exact science, but these figures are the most realistic I can adduce from the evidence before me. Applying the figures to the supply side of the argument is set out in Table 6 of Mr May's evidence. Even on the Council's supply of 3757, with a 20% buffer this would provide just 3.1 years supply on

- a requirement as set out above. In reality I think that a current supply of about 3 years is realistic based on the evidence given.
26. Other Inspectors have reached different conclusions, notably in the appeal relating to land at Top Street Martlesham (APP/J3530/W/16/3159464). I was not party to the evidence in that appeal, but I note that the Inspector applied a 5% buffer and concluded that there was a supply of about 4.5 years. It would appear that the evidence available there was significantly different and as a result I have reached a different conclusion for the reasons I have set out.
27. The Council cannot therefore provide a 5 year supply of deliverable housing sites. As such, paragraph 49 of the NPPF is engaged. Policies relevant to the supply of housing should not be considered up to date. At this point I can therefore indicate which policies I consider to be out of date. By reference to the policy section set out earlier these can be seen to be CS Policies SP2, SP19, SP26, SP29 and saved LP Policies AP212 and AP214. However, the fact that policies relevant to the supply of housing are out of date does not mean that those policies carry no weight. In this instance I have taken note of the fact that the recently adopted SAP shows that a supply of some 8670 houses has been identified in the period to 2027. This is almost 10% higher than the minimum figure set in the core strategy. Though falling short of what is likely to be the future OAN this indicates that there is likely to be an upward trend in supply in the future. Furthermore, the fact that the Council is now embarking on the CS review (albeit with the possibility of some further delay) is of positive weight. With this background, notwithstanding the shortfall in housing supply I can afford the policies a moderately significant degree of weight with the exception of SP2 which, because of its unrealistic retention of a low housing requirement, should not attract more than limited weight.
28. If policies for the supply of housing are out of date NPPF paragraph 14 indicates that planning permission should be granted unless any adverse impacts of doing so would significantly and demonstrably outweigh the benefits when assessed against the NPPF as a whole, or unless specific policies of the NPPF indicates that development should be restricted (by reference to footnote 9).
29. Before moving to other issues I therefore consider here whether Footnote 9 of the NPPF is engaged in this case. The footnote cites a number of policies, including those policies relating to land designated as an Area of Outstanding Natural Beauty. Within the text of the NPPF the relevant paragraphs are 115 and 116. The Council does not contend that paragraph 116 applies here (since that refers to development in designated areas). However it asserts that paragraph 115 is engaged in that development outside the boundary of the AONB can affect the objective of conserving the landscape and scenic beauty within that area. I do not agree with that position. The thrust of the NPPF seems to me to be related to the restriction of development within designated areas. If the intention had been to be restrictive in the setting of such areas the NPPF would surely have said so. The fact that setting is addressed in Planning Practice Guidance is not a position which can alter the intention of the stated policy in the NPPF. The position is summed up in a previous appeal¹ in which the Inspector, noting the general application of paragraph 115, found

¹ APP/G1630/A/13/2209001

that it did not amount to a 'specific policy' indicating that development should be restricted in terms of paragraph 14. I agree with that position.

30. I turn then to the second main issue.

Landscape and Visual Matters

31. The appeal site has no formal designation, but lies immediately between the AONB to the south and an area identified as a Special Landscape Area (SLA) to the west. It is principally comprised of a tract of rural land which has lately been used for agricultural purposes, but currently lies dormant. There are detractors nearby (such as the employment uses to the south and south west and farm sheds and a sewage treatment works) but these sit lower in the landscape and are not as prominent as the rising ground of the appeal site. Although the site has no significant attractiveness per se, it is in a sensitive gap between settlements and urban influences are low key. The result is that there is no current sense of there being any material connection between the built form of Woodbridge and Martlesham village respectively. The lack of current use gives the land a plain but unobjectionable appearance. In itself it may not exhibit the qualities associated with a valued landscape, but it is clear to me that development of the site has the potential to impact upon the AONB to the south as it lies within its setting. That is not a matter of dispute. There is also no dispute that the proposed development would create an impact on the character of the landscape and on its visual traits. But there is disagreement on the magnitude of those impacts despite broad agreement on the methodology used to assess them.
32. The site lies within the large national character area NCA 82 – Suffolk Coast and Heaths. More locally the 2011 Suffolk Landscape Character Assessment split the site between the Rolling Farmlands and Furze landscape character area (LCA) and the Urban LCA. Quite why the northern part of the site is identified as part of the Urban LCA is unexplained. It was suggested that this reflects the sharp change in levels across the site, and there does seem to be a partial correlation between the change in levels and the LCA boundary. However, I am not persuaded that there is a realistic difference on site. All of the land (with the exception of very minor elements) is open countryside. I consider that the LCA is anomalous in this locality and does not reflect the true position on the ground.
33. The visual envelope identified by the Appellant is not disputed, and it is within this envelope that landscape character and visual impacts can be considered to be of material importance. The majority of the visual envelope is within the AONB. The Fynn Valley landscape (which is largely within the SLA) lies to the west, beyond Top Street and the A12, but it is difficult to observe the appeal site from that area.
34. A significant area of dispute at the inquiry surrounded the likely impact of structural and other planting which it would be intended to introduce. The Appellant maintains that it would be possible to ensure rapid tree growth, up to something approaching maturity, over a 10 year period. I have my doubts and there are 2 reasons for this. First, the ground conditions are not disputed to be sandy soil in a dry location. That is unlikely to optimise growth even with good management. Secondly I place a good deal of weight on the Council's local knowledge here, and as pointed out, the roadside planting for the A12 improvements can hardly be said to have grown at a fast rate (given that I was

- given undisputed evidence that those improvements were carried out nearly 30 years ago).
35. Nonetheless I agree with the Appellant's assessment of landscape effects for the most part. However, I am not persuaded that the impact on the setting of the AONB would reduce from the major/moderate adverse level to the suggested negligible level at 10 years post completion. In this locality the site is seen in large part as rising ground on the valley side beyond the AONB, and here it provides an important link in the continuity of open land. I recognise that there are detractors in the landscape, but even so it is my judgement that the impact on the setting of the AONB would be moderate and adverse even after a number of years, especially as the development on the upper part of the site would have a greater impact on character because of its prominence.
36. There is no doubt that this area is but a small part of the National Character Area, and I do not take issue with the Appellant's assessment that 10 years post completion the impact would be negligible. In the intervening period it deserves a higher level of impact. But overall the effect on the NCA is not a serious issue. However, there would be greater effect on the Rolling Valley and Furze LCA. Here I again believe that the Appellant underestimates impact. The long term effect would be at least moderate and adverse in my judgement.
37. In addition the development of the site would draw the settlements of Martlesham village and Woodbridge closer together. The structural planting proposed (though this would be subject to later final approval) would be likely to mitigate the effect, but I still consider that there would be a clear perception for many years of the appeal site having changed character from open countryside to urban fringe. This would be at odds with the established character of the LCA. I find the suggestion that the proposal would enhance the locality over time to be unconvincing given that about half of the site would be developed. In my view the Appellant has overstated the impact of existing settlement influences on character. I acknowledge the presence of the low density and sylvan development at Dukes Park, and the employment uses close by, but these are minor influences on a large tract of land. The railway to the south certainly has an impact, but it is a lightly used route which limits its influence. The nearby roads are largely out of sight, and therefore any impact from them is predominantly limited to noise.
38. In relation to the visual impact of the proposal I consider that the effects would be more severe. Despite the small visual envelope there are a number of footpaths within the AONB which are well used, and from which the site is clearly seen. The Appellant's assessment underplays the visual prominence of the site from a number of viewpoints which I visited during my site inspections. The sensitivity of receptors using the footpaths is rightly recorded as high, and the impact on their perception of the setting of the AONB would, in my judgement, range from major adverse (when seen for example from the area close to Martlesham boatyard and south side of Martlesham Creek) to moderate and adverse from further afield to the east alongside Martlesham Creek. These viewing points are central to the experience of the AONB and notwithstanding that the sewage treatments works and development along Sandy Lane would be in view, the development proposed would be far more prominent, particularly on the high ground in the northern part of the site. Because I cannot accept the suggested rates of growth of mitigating planting my assessment inevitably increases longer term adverse impacts. The AONB

must be regarded as a valued landscape and the visual harm to its setting would be moderate to major and adverse.

39. The same point of coalescence of settlements as set out above also applies in relation to visual matters. This would be exacerbated by the fact that the road linking the two parts of the residential development would cross open land in a somewhat incongruous manner. In effect it seems to me that the proposal envisages 2 development clusters without adequately resolving the linkage between them. There would be a distinct perception of Woodbridge and Martlesham being drawn together and the open countryside setting of the AONB would be further significantly compromised at this point.
40. In summary on this issue it is my judgement that the proposed development would introduce long term harm to the character of the area of a moderate magnitude, with long term harm to visual qualities of moderate to major magnitude. This would be in conflict with Policies SP15, AP212 and AP214.

Other Matters

41. Before carrying out the planning balance there are a number of matters which I should address. These are matters raised principally by local residents.
42. The evidence before me is that the appeal site is one of the few in Suffolk which is assessed as grade 2 agricultural land, and therefore falling within the best and most versatile (BMV) category. Use of BMV land is addressed in the NPPF and does not preclude the use of such land though the use of poorer quality land is preferred. However, in view of the lack of a 5 year housing supply this is not a matter which would weigh against the proposal being permitted. It has been agreed that drainage of the site could be adequately provided and I see no reason to find that there would be any risk of flooding from the development. Space about the development would be generous and I am satisfied that the living conditions of neighbours on the edge of Woodbridge could be retained at a satisfactory standard.
43. Concern has been expressed that the access to the site would be on a difficult and heavily used stretch of Ipswich Road, and that some of the evidence presented is inaccurate. Extensive dialogue has taken place between the highway authority and the Appellant, and a SoCG confirms that the access would be acceptable as proposed, subject to matters secured by condition and obligation. Whilst I note the concerns expressed I have no substantive evidence that the proposed access would cause material difficulty. I am satisfied that it would not result in severe residual cumulative effects as described in the NPPF.
44. The site is close to areas protected by European habitat regulations and protections. However, the provision of on-site open space and the restriction of access from the southern boundary of the site have led to agreement that there would be no likely impact on those areas. This is set out in the relevant SoCG. The evidence before me gives me no reason to disagree and therefore this does not militate against the development.
45. No1 Top Street is a Grade II listed building and lies just to the west of the site. Neither the Council nor the Appellant alleges any harm to the building or its setting. I have a duty to consider this matter under S.66 of the Planning (Listed Buildings and Conservation Areas) Act 1990, which requires me to have

special regard to the desirability of preserving or enhancing a listed building or its setting. In this case I agree with the parties that there would be no harm because of the enclosed nature of the setting and distance from the site boundary.

Sustainability and the Planning Balance

46. With regard to the accessibility of the site there has been criticism of the location in relation to services. It is at the fringes of the desirable walking distance for a number of services when measured from the centre of the site. My own observations are that the walk into the centre of Woodbridge, or the station, would take a relatively fit person some 20 to 25 minutes at a steady pace. The provision of a Toucan crossing (as proposed) would aid access to the footpath on the north side of Ipswich Road. But beyond that point the footpath becomes discontinuous and requires further crossings at unaided locations. It is not, therefore, a straightforward walk without challenges. In addition it is not a route which is without hills. Taken in the round walking would not offer an appealing alternative to other means of transport. In relation to the facilities at Martlesham Heath the walking route would be less desirable still, with steeper gradients and narrow footpaths in places. Overall I do not consider the appeal site to be a location which is likely to benefit from significant pedestrian traffic to the nearest services beyond the site. Indeed I consider that the location and lack of appeal of pedestrian routes detracts from the proposal.
47. Cycling would be possible as an alternative, but again I do not regard the location as making this a particularly appealing option. The gradients facing cyclists (including those internal to the site) are not so severe as to be unmanageable for some people, but the roads on which cycling would take place are quite narrow in places and would require motor traffic drivers to be particularly alert and careful when passing cyclists. The shortest route to Tesco at Martlesham Heath is particularly notable in this respect even though it has cycle lane priority which requires drivers to give way. In light of the traffic flows I observed on many occasions (having driven the routes to access the inquiry venue daily) I am not persuaded that the location of the site, coupled with the configuration of local roads, demonstrates the potential for cycling to services to the degree suggested by the Appellant. This is not a matter which weighs in favour of the proposal.
48. I do, however, recognise that there is a frequent bus service in either direction from the vicinity of the site vehicular access, and close to the pedestrian access. This would offer a genuine alternative to the private car for access to services at Martlesham Heath, Woodbridge and destinations beyond. The proposed new and re-sited bus stops and shelters would make this a more attractive option, and this is a matter which is favourable to the scheme.
49. The overall scheme, of course, includes a convenience store close to the site access. I have no doubt that this would soak up some of the demand for general day to day shopping for residents of the site. But it would be unlikely to impact on preferred modes of transport generally since a store of the size proposed could not cater for all needs. Although not accepted by the Appellant in cross examination there is an understandable suspicion on behalf of the Council that provision of the store is a tacit acknowledgement of the difficulties of the site location for access to shops in particular.

50. In terms of wider access to services, and recognising the provision of the small store (though the Council also has concerns about its delivery) the location of the site can be described as being between service clusters. In my judgement, even with the encouragement and assistance provided by a travel plan, I am not persuaded that this location would be an attractive place from which to utilise travel modes other than the private car, with the exception of bus journeys. In this regard, in overall accessibility terms, the site location is not favourable to the scheme.
51. The benefits of the proposal are clearly set out in the evidence of the Appellant. By reference to the 3 dimensions of sustainability set out in the NPPF I agree that there is economic benefit. Though the figures provided in the Appellant's case are perhaps debatable it is certainly fair to say that there would be economic benefit in construction activity, employment, expenditure by residents, Council Tax and New Homes Bonus payments and elsewhere.
52. Benefits socially include the provision of both market and affordable housing. Affordable housing is planned in accordance with the relevant policy at 33% of the total, and this would be a significant boost to the shortfall in such provision. I agree that the community as a whole would be better off with this provision. The generous areas of open space (principally resulting from the easement for the wind farm connector) would provide social benefits in providing spacious surroundings for play and recreation. I do not accept, though, that there would be social benefit resulting from the accessibility of the site, and that any opportunity for the reduction in reliance on private vehicles is limited, for the reasons set out above. Social benefit is therefore not as clear cut as suggested.
53. Although it seems inevitable that the provision of housing in the future would require the use of greenfield sites I disagree that this scheme would offer environmental enhancement. In regard to the environmental dimension of sustainability I find that there would be harm to the character and visual qualities of the area and to the setting of the AONB. Because AONBs carry the highest level of protection this is a significant disbenefit to the scheme notwithstanding my belief that footnote 9 of the NPPF should not apply here. The perceived step towards the coalescence of Woodbridge and Martlesham village would exacerbate this harm by introducing an urbanising influence which would be readily observed from within the AONB. I give significant weight to this matter. The fact that residents of the development would be likely to rely principally on the use of private motor vehicles would also be likely to be environmentally damaging.
54. Taking the dimensions of sustainable development as a whole, and in light of the policies in the NPPF, I do not consider that the proposal can be accepted as being sustainable development. Therefore the enhanced weight in the planning balance afforded by NPPF paragraph 14 does not apply in this case.
55. To summarise the planning balance I conclude that:
- The Council cannot demonstrate a 5 year supply of deliverable housing land. This is an important material consideration which renders policies relevant to the supply of housing out of date;
 - Most of those policies, however, continue to attract moderately significant weight because of the upward trend in supply demonstrated

by the SAP and fact the CS review is now beginning, with a new OAN shortly to be identified as part of the CS review;

- The proposed development includes benefits in economic terms.
- There are benefits in the supply of housing and affordable housing, and open space, but these social benefits are at least partially offset by the location of the site in a relatively inaccessible position;
- There would be environmental harm to a significant degree;
- The proposal does not, as a result, fall within the definition of sustainable development and the enhanced weight of NPPF paragraph 14 cannot apply.

56. The conflict with the development plan is acknowledged by the Appellant in respect of Policies SP19, SP29 and DM3, to which moderately significant weight still applies for the reasons set out earlier. In addition I have found conflict with Policies SP15, AP212 and AP214. The location of the site leads to conflict with Policy SP11, whilst the failure to adhere to the principles of sustainable development brings conflict with Policies SP1, SP1A and SP26. The Martlesham Neighbourhood Plan is at a relatively early stage and attracts limited weight, hence any conflict with Policy MAR7 of that document cannot materially influence this decision. Policy SP2 now carries limited weight and any conflict with its requirements does not militate against the development. Although the proposal does not run counter to other policies as set out earlier in this decision, it is my judgement that the development would be in conflict with the development plan as a whole. The serious harm to the character and appearance of the area, and to the setting of the AONB, would in my judgement significantly and demonstrably outweigh the benefits of the proposal. Therefore this appeal must fail.

57. For the reasons given above I conclude that the appeal should be dismissed.

Philip Major

INSPECTOR

APPEARANCES

FOR THE LOCAL PLANNING AUTHORITY:

Mr Jonathan Clay	Counsel
He called:	
Mr N Newton BA(Hons) MSc	Arboriculture and Landscape Manager, Suffolk Coastal District Council
Mrs H Hanslip BSc(Hons) MRTPI	Principal Planning Officer, Policy and Delivery, Suffolk Coastal District Council
Mr P Perkin BA MRTPI	Principal Planning Officer, Suffolk Coastal District Council

FOR THE APPELLANT:

Mr Martin Carter	Counsel
He called:	
Mr P Rech	Director, FPCR Environmental and Design
Mr C May BA(Hons) MRTPI	Executive Director, Pegasus Planning Group
Mr P Dutton BA MCD MRTPI	Senior Planner, Gladman Developments Ltd

INTERESTED PERSONS:

Mr M Morley	Resident of Dukes Park
Mr M Richardson	Resident of Dukes Park
Mr L Brome	Martlesham Parish Council
Cllr C Blundell	District Councillor, Martlesham Ward
Cllr J Kelso	District Councillor, Martlesham Ward

FOR THE CONDITIONS AND OBLIGATIONS DISCUSSION:

Mr C Ward	Suffolk County Council
Mr L Mitchell	Suffolk County Council
Mr L Barber	Suffolk County Council
Mr N McManus	Suffolk County Council

DOCUMENTS SUBMITTED AT THE INQUIRY

From the Local Planning Authority

- 1 Letter of notification of the inquiry
- 2 Opening submissions of Mr Clay
- 3 Adopted Site Allocations and Area Specific Policies DPD
- 4 Appeal decision APP/J3530/W/16/3159464 – land at Top Street, Martlesham
- 5 Appeal decision APP/J3530/W/16/3160953 – land at Woodbridge Road, Bredfield
- 6 Box 5.1 from the Guidelines for Landscape and Visual Impact Assessment 3rd edition

- 7 Extract from the Suffolk Coast and Heaths AONB Management Plan
- 8 High Court Judgement – *Forest of Dean District Council and SoS for Communities and Local Government and Gladman Developments Ltd – October 2016*
- 9 High Court Judgement – *Stroud District Council and SoS for Communities and Local Government and Gladman Developments Ltd – February 2015*
- 10 Court of Appeal Judgement – *Gladman Developments Ltd and Daventry District Council and SoS for Communities and Local Government – November 2016*
- 11 High Court Judgement – *Cheshire East Borough Council and SoS for Communities and Local Government and Harlequin(Wistaston) Ltd- February 2016*
- 12 Extract of sight lines into the appeal site prepared by Mr Newton
- 13 Extract of Planning Practice Guidance on Landscape
- 14 Enforcement Notice relating to land at Bridge farm, Top Street, Martlesham, dated 22 March 2017
- 15 Email exchanges between Mrs Hanslip and Mr May during January 2017
- 16 Scoping response information relating to Adastral Park
- 17 Martlesham Neighbourhood Plan – Household Survey sheet
- 18 High Court Judgement – *Thorpe-Smith and SoS for Communities and Local Government and North Devon District Council – February 2017*
- 19 Email confirming proposed affordable housing mix
- 20 Community Infrastructure Levy compliance statement
- 21 Closing submissions of Mr Clay

From the Appellant

- 22 Opening statement of Mr Carter
- 23 Extract of landscape character area maps
- 24 Photographs of tree growth in various locations
- 25 Extract from Planning Practice Guidance on housing supply
- 26 Extract of the development plan proposals map relating to saved policies in Melton and Woodbridge
- 27 High Court Judgement – *West Berkshire District Council and SoS for Communities and Local Government and HDD Burghfield Common Ltd – February 2016*
- 28 High Court Judgement – *Watermead Parish Council and Aylesbury Vale District Council and Crematoria Management Ltd – March 2016*
- 29 Court of Appeal Judgement - *Watermead Parish Council and Aylesbury Vale District Council and Crematoria Management Ltd – March 2017*
- 30 Draft planning conditions
- 31 Written authority for manuscript alterations to the submitted Unilateral Undertaking
- 32 Unilateral Undertaking submitted pursuant to S106 of the 1990 Act
- 33 Closing Submissions of Mr Carter

From Other Parties

- 34 Speaking notes, documents and photographs from Mr Morley
- 35 Documents, plans and photographs from Mr Richardson
- 36 Speaking notes from Cllr Blundell
- 37 Speaking Notes from Cllr Kelso
- 38 Speaking notes (as amended) from Mr Richardson

CO/3447/2016

Neutral Citation Number: [2017] EWHC 420 (Admin)
IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION
THE ADMINISTRATIVE COURT

Royal Courts of Justice
Strand
London WC2A 2LL

Friday, 27 January 2017

B e f o r e:

MR JUSTICE DOVE

Between:

THE QUEEN ON THE APPLICATION OF SWAN QUAY LLP

Claimant

v

SWALE BOROUGH COUNCIL

Defendant

Computer-Aided Transcript of the Stenograph Notes of
WordWave International Limited
Trading as DTI
8th Floor, 165 Fleet Street, London EC4A 2DY
Tel No: 020 7404 1400 Fax No: 020 7404 1424
(Official Shorthand Writers to the Court)

Ms Mary Cook and Mr Robert Williams (instructed by Shakespeare Martineau LLP)
appeared on behalf of the **Claimant**

Ms Megan Thomas (instructed by Sharpe Pritchard LLP) appeared on behalf of the
Defendant

Hearing date: 12 January 2017

JUDGMENT

MR JUSTICE DOVE:

Introduction

1. This is a claim for judicial review of the defendant's decision to hold a referendum in respect of the Faversham Creek Neighbourhood Plan ("FCNP") on 21 June 2016. Holgate J granted permission solely on one ground. As this ground was clarified at the hearing, it amounts to the alleged failure of the examiner to provide adequate reasons for his recommendation (adopted by the defendant) that the FCNP should be modified in relation to its proposals for Swan Quay, and thus it is contended that the court could not be satisfied that neither the examiner nor the defendant had acted within the powers given to them to modify a neighbourhood plan which has been submitted.

The facts

2. In the early Middle Ages, Faversham was part of the Cinque Ports Confederation as a limb of Dover. Its significance as a port was built upon the development of Faversham Creek. Faversham Creek is described as a tidal inlet of the Swale waterway, penetrating some 6 kilometres inland on a winding course across the marshes of the North Kent coast. Its fortunes steadily declined as a port, in particular in the 20th century, and by 2000 commercial boat traffic had completely ceased.
3. The creek area forms part of the conservation area and is identified within a draft Character Assessment for the Conservation Area as "Creekside". In particular, that part of the Conservation Area containing the Swan Quay site, which is owned by the claimant and the subject of these proceedings, is described in the following terms:

"4.33. A large joinery works occupies the southern end of Belvedere Road, where a rather pleasing array of traditional-looking industrial buildings fronts onto the creek (although most of the structures are relatively modern). Exceptionally, Faversham Chandlery is a brightly-painted weatherboarded building dating from the early C19. Despite having no direct connection with the water this site has established a rather convincing aesthetic relationship with the creek, the buildings being expressed for the most part in a local vernacular of treated weatherboarding and slated roofs. Alongside to the north is the impressive C19, five storeys high, yellow brick-built Belvedere Mill now being converted to flats and a restaurant. With its characteristic projecting hoist bays the structure is a crucial and prominent part of the historical record of the creek's industrial past. On the opposite side of Belvedere Road are other vacant buildings and land, whilst to the north are brewery premises where barrels and pallets are stored both in the open and under cover."

4. The Swale Borough Local Plan 2008 established a specific planning policy context for the development of Faversham Creekside within its policy AAP2, which provided, together with its explanation, as follows:

"5.12. Faversham creek winds inland crossing the marshes into the heart of the town. Once a thriving place of industry and water-trade, recent

years have seen a change in the character of the creekside with new waterside housing. Despite this, as a central component to the historic development of Faversham, the creek remains an important ingredient in its unique character as well as a place of employment, leisure, and tourism opportunity. It is an irreplaceable historic asset of great significance.

[...]

5.14. House builders and homeowners have found the creekside's industrial sites an attractive prospect, but these change the character of the area and place pressures - both financial and environmental - on the remaining businesses and vacant sites to follow suit. Such changes to the character of the creekside lead to the loss of diversity of activity and a severance in the old links between the water and waterside uses. The Council considers that levels of new housing have reached the point where further proposals will damage the area and it will now resist them as both contrary to the strategy for the Local Plan and the policy for this AAP. Additionally, the Council considers that frontage development not involving active use or management of the creek itself, or that which prevents use of the creek by vessels, should not be permitted.

[...]

5.16. For existing and former employment sites, a rigorous application of Policy B1 will mean retaining the availability of employment land and buildings along the creekside. For existing employment uses, within the context of the strategy for the town and Policy AAP2, the Council will look to support proposals to expand and diversify businesses that will enable them to maintain a presence within the town. However, given the proximity of recent housing development, there are employment uses that would now be entirely inappropriate, as they would in any other residential area, and the suitability of their retention will need to be carefully considered. However, where sites may be considered unsuitable for their current or former use, it will normally be the case that an alternative, more suitable, commercial use will be sought by the Council, rather than the site being accepted for housing development. In exceptional cases, where mixed uses, or wholly non commercial developments, are considered appropriate under Policy B1 and Policy AAP2 for those sites with a frontage to the water, the provision of links to the water, whether by moorings, mooring points, rubbing strips, or through commercial activity, will be sought, alongside the restoration of the quayside frontage.

[...]

5.19. [...] To address the regeneration of the creek basin as described, and the future of the various sites referred to above, Policy B17 promotes use

of the wider area of the creek basin for the mooring, maintenance and use of historic craft for employment/tourism purposes. These would be focused around land and buildings at Ordnance Wharf, the Purifier building, and the BMM Weston car park (where open space and environmental enhancement should be additionally considered around a retained car park), but could extend onto other wharfage. Housing development would prejudice these proposals and will not be permitted.

- Conduit Street and Quay Lane: maintaining the strongly industrial character of the area and creekside on both sides of these roads.
- Belvedere Road: retaining remaining employment sites and seeking a greater diversity of uses and activity in what is largely now a residential area.

[...]

Policy AAP2

Faversham Creekside

An Area Action Plan is designated for Faversham Creekside, as shown on the Proposals Map. Within this area the Borough Council will seek to ensure that it continues to function as a place of special interest and activity with strong associations with the water, and will specifically encourage the regeneration of the creek basin for commercial and tourism purposes, including use of the basin and its wharfage for historic craft. Planning permission will not be granted for proposals that would result in the loss of land or buildings suitable for employment uses or, on appropriate sites, would not involve active use or management of the creek itself. All development proposals will:

1. maintain or enhance a mix of uses and activity that respect the maritime, industrial and residential character, as appropriate to the varied parts of the AAP area;
2. maintain or enhance an environment appropriate to enable traditional waterside activities to flourish, including, where appropriate, financially contributing toward improving and maintaining the navigability of the creek channel and its infrastructure, including providing wharfage and moorings;
3. preserve or enhance the area's special archaeological, architectural and historic character, including its open spaces; and
4. avoid any significant adverse environmental impacts and where possible enhance the biodiversity interest of neighbouring internationally designated sites for nature conservation. The Borough Council will expect development to:

- a. preserve or enhance landmark and other important buildings, waterside structures and details;
 - b. preserve and create access to the waterside, including wharfage and moorings, and where appropriate provide for a creekside walk;
 - c. by use of its grain, scale, form and theme of materials, be creekside in character;
 - d. retain existing greenspace and, where appropriate provide new areas; and
 - e. retain or enhance existing townscapes, including those in the views of higher ground."
5. On 15 January 2013, Faversham Town Council ("FTC") applied to have Faversham Creek designated as a neighbourhood area. The neighbourhood area, and thus the area ultimately covered by the FCNP, is, for present purposes, essentially the same as the area covered by AAP2. The neighbourhood area's designation was confirmed by the defendant on 20 February 2014. FTC published a pre-submission draft of the FCNP for consultation and thereafter consultation occurred in May and June 2014. The pre-submission draft included specific proposals for a number of identified sites within the neighbourhood area. In particular, Site 5 was identified as Swan Quay.
 6. In the consultation responses, concern was expressed by a number of respondents in relation to the extent of housing proposed in the neighbourhood plan and its impact on heritage value, especially where housing might manifest itself on the waterfront. FTC responded to these representations by stating that further creekside housing was not being promoted and any housing was solely as an element of an overall mixed-use development.
 7. In November 2014, a submission version of the FCNP was submitted by FTC to the defendant, accompanied by a basic conditions statement and a consultation statement. The submission version contained the following proposals for Site 5 Swan Quay:

"SITE 05

SWAN QUAY

Site Context

This site was formerly used by Frank and Whittome joinery company and comprises four buildings. The blue two storey building set at right angles to the Creek is listed grade II and was last used as an office. Attached to the rear of this is a vacant shed dating from the turn of the 19th and 20th Centuries, which has been re-clad in weatherboarding to the south and west sides. This is currently vacant but as an attached building would require listed building consent to remove.

There is an open shed with a metal trussed roof with a long elevation to Conduit Street with attached modern offices built in the 1990s. The fourth building is a modern building built for the joinery company (c. 1990) constructed in brick and weatherboard, now used by a sail maker. The site has access for both vehicles and pedestrians off Belvedere Road.

Suggested Redevelopments, Designs and Land Uses

On the side of the site adjacent to Town Quay, a range of buildings running at right angles to the creek, up to three and a half storeys, could replace the existing structures. This would create a wider gap between the new and existing buildings to allow more open views of the water down Quay Lane.

- Land uses could include offices/workshops (Class B1) and a gallery (Class D1) and some limited car parking. New buildings should be constructed in yellow stock brickwork and slate roof with metal framed windows
- The upper floors could be in residential use. A second shorter building, also using traditional materials and three and a half storeys in height, could be set parallel to this, with a ground floor workshop with the upper floors residential.
- A single storey extension to the retained workshop at the corner of the site adjacent to Belvedere Quay constructed in suitable materials (e.g. brick and weatherboard) could provide a retail, restaurant or workshop use. The retained workshop could be used by the sailmaker.
- Additional three storey buildings using traditional materials to the rear of the blue buildings could be used for ground floor parking with residential above. This could provide approximately 15-20 residential units.

[...]

Swan Quay Site Specific Policies

SWQ1: Use classes: the site shall be used for a mix of retail (A1), restaurant (A3), office and workshops (Class B1) and a gallery (Class D1), with residential (C3) on some upper floors.

SWQ2: Public walkways shall be created through the site from Belvedere Road and along the Creek frontage to connect with the existing walkways to sites on either side with regard to the Faversham Creek Streetscape Strategy.

SWQ3: Moorings shall be provided to the Creek frontage suitable for all sizes of craft up to and including Thames Barges or similar. Swan Quay

Site Specific Projects Improvements to the junction of Quay Lane and Conduit Street as indicated in the Faversham Creek Streetscape Strategy, including negotiation with the landowners to improve boundary treatments as necessary."

8. During the course of the consultation, English Heritage (as they then were) raised concerns as to the potential impact of the FCNP's proposals on the historic environment. English Heritage were concerned that, without modification, the plan may not meet the basic conditions, which I shall set out below.
9. On 18 December 2014, English Heritage wrote to the defendant setting out their concerns in relation to the FCNP as it was then proposed as follows, in so far as is relevant to this claim:

"In summary, the areas where we have concern about the plan's policies are:

- The lack of assessment of significance of sites, buildings and activities that contribute positively to the Faversham Conservation Area's significance and promotion of their protection and enhancement as part of a designated heritage asset;
- The absence or low level of analysis of the positive components of the area's character, including variation between character areas within the Neighbourhood Plan Area and the definition of an appropriate response to this within the policies relating to the allocated sites;
- Consideration of the potential for presence of as yet unidentified assets of archaeological interest within the plan area and promotion of the need to develop understanding of their significance and their conservation in a manner appropriate to their significance within policies relating to the allocated sites;
- The potential impact of the policy approach of providing public access to the creekside on the industrial working character of the creek as a distinct area of the Faversham Conservation Area and on Faversham's maritime traditions;
- The impact of the policy approach of providing a mix of uses including residential use on creekside land on the character of the Faversham Conservation Area and Faversham's maritime traditions;
- The lack of a positive strategy for the conservation and enjoyment of the non-designated heritage assets identified within the evidence base study;

[...]

Whilst the draft conservation area appraisal prepared by the Council in 2004 provided a detailed consideration of the character areas that form the

conservation area, this assessment does not appear to have been transferred to the neighbourhood plan. [...] The contribution of the historic character which might be distinguished from the character of more recent development of the creekside, appears to be particularly lacking in this analysis. Indeed, without a proper assessment of the potential impacts of development of the opportunity sites on the significance of the conservation area, including potential loss of the special historic or architectural interest of the area or impacts on its character and appearance, the policies cannot be shown to represent a positive strategy for the conservation and enjoyment of the historic environment.

Furthermore, the special interest and character of the conservation area may not reside solely in its buildings and spaces, but may also result from the activities that traditionally were and, in some cases, continue to be conducted within these. The loss of key employment sites that contribute to the viability of the area for a range of waterside industries, notably boat building, that contributes to the working character of the waterway and creekside, would represent a loss of the significance of the conservation area as an historic focus for such activities and ultimately, a reason for the town's existence. The need to protect this character was referred to in the recent planning appeal decision relating to the Black Shed at Standard Quay (Appeal Decisions APP/V2255/A/13/2202894, APP/V2255/E/13/2202924). As un-neighbourly industries these may not be suitable for continuance within mixed-use development. As such, the potential impact of any such allocation on the viability of the creek for these activities should form a part of the analysis that underpins the plan in order for it to comply with both the national and local planning policies.

[...]

Site 5 Swan Quay: We have serious reservations about the appropriateness of the development proposed, including: its potential impact on the character and appearance of the conservation area; the impacts to archaeological remains that may be of national significance; and the impacts on listed buildings, including impacts to their settings and potential curtilage listed structures. Without more detailed evidence being presented on the significance of these heritage assets and the contribution of the site to them, as well as assessment of the potential impacts of the proposed land use, including the 'suitable development' identified, there is a serious risk that the policy sets a presumption in favour of a development that would not conform with local or national planning policy.

Consideration of the appropriateness of the allocation policy should include assessment of: the impact of the proposed development on the architectural character of the creekside as a distinct character area within

the conservation area; the impact on the spatial character of the creek, including the grain of development, open spaces and relationship of buildings to spaces; the impact on the listed buildings both within the site and in its immediate vicinity, including assessment of potential curtilage listed buildings and the settings of buildings both within the site and in its vicinity; and, the impact of the key views looking along the creek. Moreover the early 20th century open sided shed described is likely to be considered both a curtilage listed building associated with the listed 'blue building', as well as contributing positively to the significance of the conservation area by representing the historic and architectural interest of the creekside as a distinct character area within the conservation area as a whole. As such, its demolition would be regarded as substantial harm to the conservation area and would not normally be expected to receive permission.

Whilst the plan may provide guidance that sets parameters within which development should be proposed, the supporting text reads as a description of a specific development that would be considered to impose a detailed form and style of development that is unsubstantiated as a requirement (see paragraph 60 of the NPPF, which sets out limitations on how specific planning policies should be on the style or form of development that can be required). The plan should not prejudice the decision-making process by describing a particular development proposal."

10. During the hearing of this claim, I was provided with summaries of the representations made by other objectors. They expressed concern about the inclusion of new residential development within the proposals for the Swan Quay site and also about the impact of the proposal described and its proposed uses on the historic environment.
11. Following discussion between the defendant, FTC and English Heritage, a statement of common ground was agreed containing what were called "minor modifications" of the plan. Amendments were proposed to the text explaining the historic context of the site and a change to the development proposals and the policy was proposed as follows:

"SITE 4 AND 5 SWAN QUAY/FRANK AND WHITTOME

At page 47 amended text to read: [Page 47 is the text from the submission draft of the FCNP which I have quoted above]

This site was formerly used by the Frank and Whittome Joinery Company and comprises four buildings:

The first is a blue two storey building set at right angles to the Creek is listed grade II and is an early 19th century industrial building last used as an office. Attached to the rear of this is a second building, a shed dating from the turn of the 19th and 20th Centuries, which has been re-clad in weatherboarding to the south and west sides. This is currently vacant but

as an attached building would require listed building consent for any alterations that would affect its contribution to the listed building's historic or architectural interest.

The third building is an open shed with a metal-trussed roof with a long elevation to Conduit Street with attached modern offices built in the 1990s. As an industrial building illustrating the working history of this part of the Conservation Area, the form, shape and scale of the open sided shed makes a positive contribution to the character of the Conservation Area.

The fourth building is a modern building built for the joinery company (c. 1990) constructed in brick and weatherboard, now occupied by a sail maker. The low level of the building, its sensitive choice of materials (preserving an industrial aesthetic) and its position set back from the Creek's edge creating a wharf space, means this building has integrated well with the Conservation Area and retained a distinct working edge to the Creek with views over it to the surrounding historic buildings.

The site provides a long section of timber wharf fronting the creek with an open space of quay behind, both of which make a positive contribution to the character and appearance of this part of the Conservation Area as part of the historic working Creekside. A slip way within the site provides one of the few points of access for boat launching in this side of the creek. The site has access for both vehicles and pedestrians off Belvedere Road.

At page 47 paragraph two text to be added as follows:

The site lies adjacent to the medieval Town Quay and close to the Grade II* listed 15th century warehouse that is now referred to as TS Hazard. The site is likely to have formed a part of the abbey wharfs from the medieval period and is known to have included a dock in the late 18th Century. The potential for a waterlogged environment and the likelihood of successive phases of wharf development, as well as development of buildings and structures for associated uses throughout the site's history creates a high potential for remains of archaeological interest and, potentially, those of national importance.

At page 47 text to be amended as follows:

The scale of new development will be given particular consideration when considering its sensitivity to the character and appearance of the Conservation Area and the significance of other heritage assets. Whilst three storeys is considered to be an expected maximum height, it is likely that variation across the site, including lower buildings in some areas, will be required to protect the setting of listed buildings and to provide a suitable architectural character. The upper floors could be in residential use.

At page 48 after policy SWQ1 amended text to read:

SWQ1. The site is considered suitable for a mix of uses that can include retail (A1), restaurant (A3), office and workshops (Class B1) and a gallery (Class D1) with residential (C3) on some upper floors. New development requiring change of use should not result in a reduction in the footprint of employment uses within the site or an overall loss of the site's contribution to industrial and maritime character of the Conservation Area."

12. Two additional policies at Swan Quay were also agreed in the statement of common ground to be necessary. One of those policies dealt with existing buildings and features which made a positive contribution to the character of the conservation area. This arose from the agreement between the parties that, as set out above in the amended text describing the site, there was a third building and also the timber wharf frontage to the creek which made a positive contribution to the conservation area. The second additional policy which was proposed and agreed related to archaeological potential.
13. In response to the publication of the statement of common ground, the claimant provided a full and detailed response to the issues which were raised and the observations which had been made within it. An examiner was appointed in order to examine the submitted draft of the FCNP. He issued several notes, providing directions and guidance in relation to the conduct of the examination. In particular, he directed on 14 September 2015 that the examination should include a hearing in relation to certain key issues, one of which was Swan Quay.
14. Evidence has been provided within this claim as to what happened at the hearing between 5 and 7 October 2015. Within the evidence from both sides, accounts of the hearings are provided. In particular, notes of the hearing sessions have been provided by Mrs Taylor, a planning consultant who was retained by the claimant to represent them at the hearing. It appears from the notes which were produced by Mrs Taylor that there was debate in the session on Swan Quay about whether the third building did in fact make a positive contribution to the conservation area. Further, it appears that there was discussion, and the examiner explored "at length", the merits of three-and-a-half storey buildings and their relationship to existing listed buildings.
15. The claimant provided the examiner during the course of the hearing with floor plans and elevations of an illustrative proposal for the development of the site. It is clear that there were wide-ranging discussions during the course of the hearing about Swan Quay. At a later stage, the hearing turned to consider other proposals at sites known as Standard Quay and Standard House. During the course of that discussion, Mrs Taylor noted the following:

"There was then discussion re the wider issue of maritime uses including Swan Quay and Ordnance Wharf.

RE commented that the Plan should not prevent such uses - any requirements to be demand-led.

Harold Goodwin, speaking for Faversham Society:

Commented that the town had turned its back on the Creek for 30 or 40 years - marketed as a market town.

Maritime connection is very important.

History relating to gunpowder and bricks.

Industrial grittiness important - lost with gentrification and now significant loss of maritime heritage."

16. On 4 April 2016 the defendant received the examiner's report. In light of the statutory definition of the basic conditions (which is set out below), the examiner proceeded to identify what were the relevant strategic policies of the Swale Borough Local Plan, and, in doing so, was guided by the provisions of the National Planning Practice Guidance. No criticism is made of his identification of policy AAP2 and policy B1 from the Swale Borough Local Plan as the relevant strategic policies for the consideration of the basic conditions. Policy AAP2 has been set out in detail above. Policy B1 provides as follows:

"B1. Supporting and Retaining Existing Employment Land and Businesses

1. Land and buildings currently in employment use will be retained for that use unless it is:

- a) inappropriately located for any employment use, and having an unacceptable environmental impact in an area; or
- b) demonstrated by expert advice that the site is no longer suitable for any employment use; or
- c) demonstrated by market testing that there is insufficient demand to justify its retention for any employment use; or
- d) allocated in the Plan for other purposes.

In cases involving a change of use or redevelopment for residential purposes, the Council will additionally require proposals to: (a) demonstrate, by reference to 1a) to c) above, that a mixed use approach to the site, involving a viable level of replacement or alternative employment provision, is not appropriate; and (b) that there is no conflict with Policy SH1.

2. Proposals for the expansion of existing businesses on-site, or onto adjoining land, will be permitted provided the expansion proposal would not result in a loss in the supply of small sites or units which are specifically intended for start-up businesses. Where expansion would

result in the development of greenfield land mitigation measures will be required to minimise any adverse impacts on biodiversity and landscape."

17. In relation to Site 5 Swan Quay, the examiner formed the following conclusions in his report:

"59. Site 05 is in a particularly sensitive location. As the plan on page 46 shows, it is to the north of a critical cluster of heritage assets (TS Hazard with undesignated heritage assets) and existing local landmarks, next to the Creek and at a location that is clearly visible from the publicly accessible Brents Swing Bridge and the proposed (in my opinion rightly) Designated Local Green Space at Front Bents. Two listed buildings, TS Hazard (built in the 15th century as a town warehouse and grade II*) and the Faversham Creek Hotel (18th-century, grade II) are very close to it and within the site the early 19th-century Chandlery building is listed grade II. It contains a maritime use (sail-making) in a modern building that is in an appropriate style for its location and that contributes to jobs in a town that has a shortfall of jobs. I am not persuaded that the possibility that somewhere might be found for this in new development is a likelihood or a risk worth taking. As such, the loss of this employment use would conflict with SBLP policies B1 and AAP2 and would be of sufficient importance to prevent the NDP being in general conformity with the development plan.

60. In considering this site, I have had regard to national policies and advice contained in guidance issued by the Secretary of State. This includes:

- The Framework's 10th core principle, *'conserve heritage assets in a manner appropriate to their significance, so that they can be enjoyed for their contribution to the quality of life of this and future generations'*;
- The special position of designated heritage asset's in the Framework's paragraph 65; and
- The Framework's specific advice on Conserving and Enhancing the Historic Environment;

61. I also note

- The fact that the LBA in general and the general duties under its ss 66 and 72 underpin government and local policy in respect of listed buildings and their settings and of conservation areas;
- The references in the SBLP to Faversham's *'outstanding range and quality of historic buildings'* and its *'rich architectural and historical heritage reflecting its naval and maritime history, its Roman and medieval legacy and its industrial heritage and archaeology'*;

- The protection for existing buildings provided in SBLP's policy AAP2's '*preserve or enhance landmark and other important buildings, waterside structures and details*'; and

- The fact that EH had serious reservations about the appropriateness of the development proposed.

62. The proposals, which I recognise are illustrative, that Ms Taylor showed me for redevelopment of this site, did not impress me. Rather they illustrated the risk of gentrification of a part of the Creek that maintains something of its old character. I do not consider that residential development of this site would occur without gentrification. I recognise that, for some people, more open views of the creek down Quay Lane would be attractive, but this factor does not begin to outweigh my concerns about the historic damage of the proposals.

63. I consider that the first two paragraphs on page 47's column 1 are inadequate for this particularly sensitive site. The suggested 'minor modification' gives a better and adequate description, which corresponds with my opinion following my site visits. Accordingly I recommend modification to replace the existing text."

18. The examiner's modification incorporated the description of the site and its contribution to the historic environment from the first five paragraphs of the statement of common ground which I have set out in full above and do not repeat. Thus, the examiner accepted that that which had been agreed in those first five paragraphs as a description of the site and its historic context were appropriate for inclusion by way of modification of the plan.

19. Having set out that modification, his report then continues in the following terms:

"64. Having regard to national policies and advice contained in guidance issued by the Secretary of State, I would not consider it appropriate to make the Plan if the proposals in the draft NDP in respect of Swan Quay remained. Without modification, basic conditions (a) and (e) would not be met. I would also have given considerable weight in the balance exercise basic condition (d) requires to the negative contribution to the achievement of sustainable development that these proposals would entail. However since I am recommending modification to meet basic condition (a) and (e), I need not consider the latter point more fully.

65. In addition to my rejection in principle of the approach to site 05, I do not consider that three and three and a half storey (or higher) buildings would be appropriate in this location. This is not based on public opposition, which is not a matter for the examination stage of the draft NDP, but on my assessment of the impact of such buildings. I agree with the criticisms of such tall buildings by Mr Harrison, whose architectural and conservation expertise I note with respect. I am of course aware that

there are taller buildings in other part of the Creek, but I do not consider that these set a precedent in this sensitive location.

Recommendation 21

On page 47 delete the bottom half of column 1 from and including the heading '*Suggested Redevelopments, Designs and Land Uses*' and the whole of column 2 replace with:

'The current nature of the site, including its role as part of the setting of nearby listed buildings should be preserved and enhanced.

- Land uses could include offices/workshops (Class B1), maritime general industrial (B2 limited by condition) and a gallery (Class D1) and some limited car parking, but not dwelling houses (Class C3). It may be possible to permit new building consistent with the site's current character. If so, they should be constructed in yellow stock brickwork and slate roof with metal framed windows.

- In the event of any substantial development on the site a Creekside walkway must be provided along the frontage of the site in front of all the buildings.

- Moorings to be provided along the frontage suitable for a range of sizes of craft.

- Any redevelopment will need to provide a connection to the nearest point of adequate capacity in the sewerage network, as advised by Southern Water. There should be an adequate gap between the wastewater pumping station and development to allow odour dispersion and help prevent an unacceptable impact from vibration. Development proposals must ensure future access to the existing sewerage infrastructure for maintenance and upsizing purposes.

- Close to this site is the junction of Quay Lane and Conduit Street. The Faversham Creek Streetscape Strategy sets out a project to form a sitting-out area for the Faversham Creek Hotel and formation of a square with better quality paving, measures to encourage slower traffic including a shared surface and measures to improve the boundary treatments of adjoining sites.

The neighbourhood plan places responsibility firmly upon any applicant to demonstrate the appropriateness and suitability of their proposed design through the formal planning application process. This demonstration must be made with regard to the range of policies in this neighbourhood plan, not just the site-specific ones. It must also comply with the Planning (Listed Buildings and Conservation Areas) Act 1990 sections 66 and 72.'

66. For the above reasons I also recommend modification of policies SWQ1 and SWQ2.

Recommendations 22

Replace policies SWQ1 and SWQ2 with:

'SWQ1: Use classes: the site shall be used for a mix of office and workshops (Class B1) retail, maritime general industrial (Class B2 limited by condition), and may be used for a gallery (Class D1). It shall not be used for dwelling houses (Class C3).

SWQ2 Public walkways shall be created along the Creek frontage and to the extent that is consistent with the site's character through the site from Belvedere Road."

20. The examiner also accepted that it was necessary to include the two additional policies from the statement of common ground in relation to buildings and features making a positive contribution to the conservation area and archaeology. It will be noted that the examiner's modifications to the suggested redevelopment in effect replaced in toto that which was proposed for the redevelopment of the site in the submission draft of the FCNP. In addition his modifications to policy SWQ2, excluded the possibility of residential uses at Swan Quay. This aspect of the modifications is the focus of the claimant's attack on the examiner and the defendant's conclusions and proposed modifications.
21. On 25 May 2016, the defendant resolved to accept the examiner's modifications, as he had concluded that without the modifications he proposed the basic conditions would not be met. The defendant also resolved to progress the FCNP to a referendum. The decision statement in relation to those resolutions was published on 21 June 2016 and is the subject of this challenge.

The law

22. A central feature of the planning system is the development plan. By section 38(3) of the Planning and Compulsory Purchase Act 2004, which defines the development plan outside London, the neighbourhood development plans which have been made in relation to a local planning authority's area are included within the development plan. The neighbourhood development plan as an element of the development plan is itself defined in section 38A of the 2004 Act:

"38A Meaning of 'neighbourhood development plan'

(1) Any qualifying body is entitled to initiate a process for the purpose of requiring a local planning authority in England to make a neighbourhood development plan.

(2) A 'neighbourhood development plan' is a plan which sets out policies (however expressed) in relation to the development and use of land in the

whole or any part of a particular neighbourhood area specified in the plan.

(3) Schedule 4B to the principal Act, which makes provision about the process for the making of neighbourhood development orders, including—

- (a) provision for independent examination of orders proposed by qualifying bodies, and
- (b) provision for the holding of referendums on orders proposed by those bodies

is to apply in relation to neighbourhood development plans (subject to the modifications set out in section 38C(5) of this Act).

(4) A local planning authority to whom a proposal for the making of a neighbourhood development plan has been made—

- (a) must make a neighbourhood development plan to which the proposal relates if in each applicable referendum under that Schedule (as so applied) more than half of those voting have voted in favour of the plan, and
- (b) if paragraph (a) applies, must make the plan as soon as reasonably practicable after the referendum is held and, in any event, by such date as may be prescribed.

[...]

(12) [...] 'qualifying body' means a parish council, or an organisation or body designated as a neighbourhood forum, authorised for the purposes of a neighbourhood development plan to act in relation to a neighbourhood area as a result of section 61F of the principal Act, as applied by section 38C of this Act."

23. As a consequence of these provisions, schedule 4B of the Town and Country Planning Act 1990 applies directly to the preparation of neighbourhood plans, although the language of schedule 4B is expressed in terms of neighbourhood development orders. Paragraph 7 of schedule 4B of the 1990 Act requires the submission by the local planning authority of the neighbourhood plan to independent examination if the requirements of paragraph 6(2) of schedule 4B (which are essentially formal and procedural) have been met. Paragraph 8 of schedule 4B provides the framework for the independent examination and requires (adjusted for the effect of section 38C(5) of the 2004 Act) as follows:

"8(1) The examiner must consider the following—

- (a) whether the draft neighbourhood development order meets the basic conditions (see sub-paragraph (2))

(b) whether the draft order complies with the provision made by or under sections 38A and 38B

[...]

(d) whether the area for any referendum should extend beyond the neighbourhood area to which the draft order relates, and

(e) such other matters as may be prescribed.

(2) A draft order meets the basic conditions if—

(a) having regard to national policies and advice contained in guidance issued by the Secretary of State, it is appropriate to make the order,

[...]

(d) the making of the order contributes to the achievement of sustainable development,

(e) the making of the order is in general conformity with the strategic policies contained in the development plan for the area of the authority (or any part of that area),

(f) the making of the order does not breach, and is otherwise compatible with, EU obligations, and

(g) prescribed conditions are met in relation to the order and prescribed matters have been complied with in connection with the proposal for the order.

[...]

(6) The examiner is not to consider any matter that does not fall within sub-paragraph (1) (apart from considering whether the draft order is compatible with the Convention rights)."

24. Further provisions, so far as relevant to this case, are contained within paragraph 10 of schedule B in the following terms:

"10(1) The examiner must make a report on the draft order containing recommendations in accordance with this paragraph (and no other recommendations).

(2) The report must recommend either—

(a) that the draft order is submitted to a referendum, or

(b) that modifications specified in the report are made to the draft

order and that the draft order as modified is submitted to a referendum, or

(c) that the proposal for the order is refused.

(3) The only modifications that may be recommended are—

(a) modifications that the examiner considers need to be made to secure that the draft order meets the basic conditions mentioned in paragraph 8(2),

[...]

e) modifications for the purpose of correcting errors.

(4) The report may not recommend that an order (with or without modifications) is submitted to a referendum if the examiner considers that the order does not—

(a) meet the basic conditions mentioned in paragraph 8(2), or

(b) comply with the provision made by or under sections 61E(2), 61J and 61L.

[...]

(6) The report must—

(a) give reasons for each of its recommendations, and

(b) contain a summary of its main findings."

25. Upon receipt of the examiner's report, the local planning authority must consider it and, in relation to that, paragraph 12 of schedule 4B provides as follows:

"12(1) This paragraph applies if an examiner has made a report under paragraph 10.

(2) The local planning authority must—

(a) consider each of the recommendations made by the report (and the reasons for them), and

(b) decide what action to take in response to each recommendation.

[...]

(4) If the authority are satisfied—

(a) that the draft order meets the basic conditions mentioned in

paragraph 8(2), is compatible with the Convention rights and complies with the provision made by or under sections 61E(2), 61J and 61L, or

- (b) that the draft order would meet those conditions, be compatible with those rights and comply with that provision if modifications were made to the draft order (whether or not recommended by the examiner)

a referendum in accordance with paragraph 14, and (if applicable) an additional referendum in accordance with paragraph 15, must be held on the making by the authority of a neighbourhood development order."

26. Section 61N of the 1990 Act provides that a challenge to a decision maker under paragraph 12 of schedule 4B shall be brought by way of judicial review.
27. There has been limited consideration by the courts of the statutory framework relating to neighbourhood plans. In R (on the application of Larkfleet Homes Ltd) v Rutland County Council [2015] EWCA Civ 597, the Court of Appeal identified the bespoke and separate nature of the neighbourhood planning statutory regime, distinct from the regime for local development documents which are prepared by the local planning authority. As that case established, neighbourhood plans are capable of containing site allocation policies, as indeed the present FCNP did. In BDW Trading Ltd (t/a Barratt Homes) & Anor v Cheshire West & Chester Borough Council [2014] EWHC 1470, Supperstone J had to deal with a judicial review challenge which, amongst other grounds, included a contention that there was a breach of the duty upon the local planning authority to ensure that the neighbourhood development plan met the basic conditions. Amongst other matters, the claimant submitted that the basic condition contained within paragraph 8(2)(a) (ie whether it was appropriate to make the order having regard to national policies and advice contained in guidance published by the Secretary of State) did not admit of a lighter touch than the requirement of soundness contained within section 20 of the 2004 Act in relation to a local plan. Supperstone J concluded in the following terms in relation to that submission:

"In my view the criticisms made by the Claimants under Ground 2 of the challenge fail to appreciate the limited role of the Examiner which was to assess whether the Basic Conditions had been met. Condition (a) required Mr McGurk to have regard to national policies and then consider whether it was appropriate that the Plan should proceed. Condition (d) required that 'the making of the order contributes to the achievement of sustainable development'. The Examiner considered both conditions and was entitled, in my view, on the evidence, to conclude that 'Policy 1 has regard to national policy and contributes to the achievement of sustainable development' (see para 33 above).

Further, I accept Mr Sauvain's submission that the only statutory requirement imposed by Condition (e) is that the Neighbourhood Plan as a whole should be in general conformity with the adopted Development

Plan as a whole. Whether or not there was any tension between one policy in the Neighbourhood Plan and one element of the eventual emerging Local Plan was not a matter for the Examiner to determine. The parties are agreed that there is no current strategic housing policy in an adopted plan that sets out the overall housing requirement or method of distribution of housing across the local authority area, but the Council does not accept that there are no strategic housing or other policies in the current adopted Local Plan."

28. In paragraph 83 of the judgment, Supperstone J went on to reject the submission that the requirements of the basic conditions equated to a similar test to that demanded by section 20 of the 2004 Act in respect of a local plan, namely that it is sound, a requirement which is further elaborated in paragraph 182 of the National Planning Policy Framework.
29. I entirely agree with Supperstone J that the basic conditions cannot be equated with soundness as understood from paragraph 182 of the Framework. I would, however, with respect, differ from the suggestion that "the only statutory requirement imposed by Condition (e) is that the Neighbourhood Plan as a whole should be in general conformity with the adopted development plan as a whole". That observation does not reflect the clear statutory language of paragraph 8(2)(e). First, this basic condition relates to the strategic policies of the development plan, not the development plan as a whole. Those strategic policies which are identified will have to be considered as a whole in addressing the question of whether or not the neighbourhood plan is in general conformity with them. This underlines the point made by Supperstone J in paragraph 82 that tension or conflict between one policy of the neighbourhood plan and one policy of the local plan is not the matter at stake. Where there are no strategic policies in a local plan, then paragraph 8(2)(e) is not engaged, as Lewis J concluded in R (on the application of Gladman Developments Ltd) v Aylesbury Vale District Council [2014] EWHC 4323, and the absence of strategic policies does not preclude as a matter of law a neighbourhood plan being produced.
30. The question which is posed under paragraph 8(2)(e) is one which is entirely a matter of planning judgment. The phrase "general conformity" was considered in Persimmon Homes (Thames Valley) Ltd v Stevenage Borough Council [2005] EWCA Civ 1365, in which Laws LJ observed at paragraphs 28 and 29 as follows:

"28. [...] I agree with the judge (at [53]) that to read 'general conformity' as simply meaning that the proposals of the local plan should be 'in character' with the structure plan would be to accept too broad a construction. On the other hand, there are the features to which I have earlier referred – the long lead-times involved, the fact that the exigencies of planning policy may present a changing picture, and the statutory words themselves. In construing the general conformity requirement the court should in my judgment favour a balanced approach by which these different factors may be accommodated. I consider that on its true construction the requirement may allow considerable room for manoeuvre within the local plan in the measures taken to reflect structure plan policy,

so as to meet the various and changing contingencies that can arise. In particular (for it is relevant here) measures may properly be introduced into a local plan to reflect the fact, where it arises, that some aspect of the structure plan is itself to be subject to review. This flexibility is not unlimited. Thus measures of this kind may not pre-judge the outcome of such a review. They must respect the structure plan policies as they are, while allowing for the possibility that they may be changed. I doubt whether it is possible to derive any more focussed conclusion on the construction of the general conformity requirement. [...]

29. [...] But if the right interpretation of 'general conformity' is, as in agreement with the judge I would hold, a balanced one, it will as I have said allow what may be a considerable degree of movement within the local plan to meet the various and changing contingencies that can arise. In that case the question whether the local plan is in general conformity with the structure plan is likely to admit of more than one reasonable answer, all of them consistent with the proper construction of the statute and of the relevant documents. In those circumstances the answer at length arrived at will be a matter of planning judgment and not of legal reasoning."

31. In his judgment, Lloyd LJ added the following observations:

"71. The use of the phrase 'general conformity' leaves some scope for flexibility and even, as noted above, for some conflict. The context is that of the structure plan authority setting a general policy, which could no doubt be regarded as a strategy, for its area, leaving it to the local plan authorities within the area to implement those policies and that strategy by detailed policies. It cannot be open to a local plan authority to subvert the general policies, or to resolve that it will not give effect to a general policy within its area. It is open to such an authority to exercise some flexibility as to how the general policy is implemented, though the degree of flexibility may depend on the nature of the general policy. [...]

[...]

86. As I said at paragraph 68 above, it is not sensible to attempt to define the statutory phrase 'in general conformity with' a structure plan, and I do not propose to try. However, it seems to me that, at least, in order to be in general conformity with a structure plan, the local plan must give effect to the main policies set out in the structure plan, and must do so in a way which does not contradict or subvert their achievement. There is room for flexibility, subject to the terms in which the general policies are stated. There may be scope for variations of detail as regards timing, for example. But the local plan must not put obstacles in the way of the fulfilment of the strategic policies in the structure plan such that they will not, or may well not, be achieved as provided for in the structure plan. Otherwise the purpose of the structure plan, and the basis of the

relationship between one structure plan and a series of local plans would be altogether undermined, with the purpose behind an overall strategic policy being implemented differently and in conflicting ways in different parts of the area governed by the structure plan, and in some of those parts possibly not implemented at all."

32. These observations demonstrate that in exercising the planning judgment in relation to general conformity there is sufficient elasticity in the evaluation to accommodate some conflict with strategic policies as well as the prospect of strategic policies being reviewed. But that elasticity has limits, and the extent of the limit will be part and parcel of the planning judgment.
33. The basic condition at paragraph 8(2)(e) does not refer to the neighbourhood plan (or neighbourhood order, for that matter) "as a whole". Clearly evaluating the overarching policies and proposals of a neighbourhood plan will be a necessary exercise, but where, as here, a neighbourhood plan contains site-specific proposals, then it will be proper, if not essential, for the examiner additionally to consider those proposals individually against the basic conditions. I should add that it is clear that the basic condition in paragraph 8(2)(a), namely that having regard to material policies and advice in guidance from the Secretary of State it is "appropriate" to make the order, is again a question of planning judgment for the examiner to reach, applying that clear and straightforward statutory language.
34. As identified by paragraph 10(3) of schedule 4B, there is a clear limitation on the modifications which can be proposed by the examiner. In this instance only modifications which are needed to secure that the basic conditions would be met can be sanctioned in accordance with the legislation.
35. Paragraph 10(6) of schedule 4B requires the examiner to give reasons for each of the report's recommendations, along with a summary of the report's main findings. The seminal decision in relation to the giving of reasons in planning appeals is South Bucks District Council v Porter (No. 2) [2004] 1 WLR 1953. In R (on the application of Crownhall Estates Ltd) v Chichester District Council [2016] EWHC 73, Holgate J expressed the concern that, given the more limited ambit of the task of an examiner compared to a decision maker in a planning appeal, some modification may be necessary to the principles in South Bucks. Those concerns are understandable. But, for the reasons which I will set out below, this case and my judgment on the reasons in this case do not turn on any such distinction. For the avoidance of doubt and for the purposes of this case, I have deployed the South Bucks principles as the yardstick for considering the examiner's reasons.

The grounds

36. The claimant contends that the examiner's reasons, in particular in paragraphs 59, 62 and 64 to 65, are inadequate. It is submitted that he has failed to properly explain intelligibly why the redevelopment proposals endorsed by the submission draft should be abandoned, and in particular why residential development can no longer be part and parcel of any residential redevelopment proposal. It is complained that his use of the

term "gentrification", which is not a land use planning term, is incapable of amounting to a land use planning basis for establishing conflict with policy AAP2. It is submitted that it is not capable of being a basis to reject residential redevelopment of the site.

37. Further, in so far as the examiner was concerned about tall buildings, his proposed modifications did not address building height. It is submitted that it was not legitimate to base any of his concerns on the claimant's illustrative scheme which did not represent a firm proposal or a planning application and was but one design response to the submission draft proposals of the FCNP for Swan Quay. Further, the examiner endorsed both the loss of employment use and the promotion of residential development on other of the FCNP sites, and it is complained that he failed to explain why that was appropriate on those sites but not on Swan Quay, or why the inappropriate and harmful effects he identified at Swan Quay would not also and equally be manifest on those sites.

Conclusions

38. It is important to appreciate, as Ms Thomas pointed out in her submissions on behalf of the defendant, that the inspector's reasoning incorporated his adoption of the description of the site and its context taken from the statement of common ground. The incorporation of that description as part of the modifications recommended by his report is also part and parcel of the reasons which he gave for the conclusions he reached.
39. It is clear, in my judgment, from the examiner's reasons that a number of specific factors underpin his approach. As he noted in paragraph 59 of the report, the Swan Quay site is "in a particularly sensitive location". The balance of that paragraph sets out the heritage assets which made the location particularly sensitive in terms of the historic environment. In paragraph 63, he explains that the submission draft's site description is inadequate and that the description from the statement of common ground is a better one and corresponds with his view of the site following his site visits. In adopting that description, the examiner also adopts the conclusions in relation to the positive contribution which the third building and the section of timber wall fronting the creek, with the open quay behind, make to the character and appearance of the conservation area. This is, of course, necessarily a very different context for proposals for the site from the submission draft, which contemplated more widespread demolition, and also represents a very different appreciation of the historic value and sensitivity of Swan Quay.
40. All of those matters are, in my judgment, fully, clearly and adequately reasoned and explained in the contents of the report. As the examiner explained in paragraphs 59 and 63 of his report, those conclusions are grounded in the historic assets in and around the site and his site visits, alongside the other material which he rehearses as part and parcel of the report. The site description which he endorsed emphasised within its terms "the working history of this part of the conservation area" and "the character and appearance of this part of the conservation area as part of the historic working Creekside". The "industrial aesthetic" of a modern building housing a sail maker "integrated well with the conservation area and retained a distinct working edge to the

Creek". In paragraphs 59 to 61, the examiner set out a range of policies from the Framework, and also included the strategic policies B1 and AAP2 which stressed the importance of retaining employment uses and, further identified the importance of the preservation of the historic character of the AAP2 area and its associations with industrial uses and the port use which historically had taken place within that area.

41. These reasons, in my judgment, fully explain the examiner's findings. His conclusion in paragraph 59 about the potential loss of employment from Swan Quay as a conflict with policies B1 and AAP2, which did not comply with the general conformity requirement, were a clearly explained planning judgment about which no legitimate complaint could be made. He was entitled to have regard to the claimant's proposals which had been placed before him as part and parcel of the examination. He recognised that they, and the residential use which they brought, were inconsistent with and harmful to the historic industrial character of that part of the creek and the site with which he was concerned.
42. Whilst I entirely accept that "gentrification" is not a land use planning technical term, in my view it did not need to be; it is a word which describes the erosion of the legacy of industrial use, and the surroundings of the historic assets associated with that use, by the introduction of a new and historically unprecedented residential use and associated activities. That new and historically unprecedented inconsistent use would bring with it, as the proposals showed, a different aesthetic and different design requirements which would harm the historic character. The findings as to the historic character and value of Swan Quay, the harm to that character caused by residential use and taller buildings, and the weight to be afforded to these matters were all questions of planning judgment, as was the issue of whether the extent of the harm arising meant that the basic conditions at paragraphs 8(2)(a) and 8(2)(e) could not be met by the FCNP without modification. The reasons for both the failure to meet basic conditions at paragraphs 8(2)(a) and 8(2)(e) and the need for modifications are clearly explained, in my judgment, by the examiner. True it is that the examiner could have said more. But that is not the test; his conclusions are clear from the reasons given.
43. The claimant is correct that the examiner did not explain in detail why his concerns in relation to the residential use at Swan Quay did not arise on other sites in the FCNP where residential uses and loss of employment were proposed. However, in my view, he did not need to. The reasons which he gave clearly set out that at Swan Quay he was addressing a site which was "particularly sensitive". It was a site which, by virtue of the reasons he gave and the site description which he adopted in the modification, was clearly different, with its own particular qualities, from those other sites within the FCNP. There was, in those circumstances, no need for any form of compare-and-contrast exercise with the other sites in the FCNP. The examiner's evaluation of the Swan Quay site and of the FCNP and his modifications addressed the particular sensitivity of the site which he was considering, the demands which that raised in the context of the historic environment and the constraints which had to be respected as to what uses could properly be accepted as consistent with the particularly sensitive historic environment that he concluded was present.

44. It follows that, for all of these reasons, I am satisfied that the examiner's reasons were legally adequate and fit for purpose, and make clear the basis upon which he made the modifications, which, in my judgment, he plainly had power to make.
45. For all of these reasons, this claim must be dismissed.

IN THE HIGH COURT OF JUSTICE
QUEEN'S BENCH DIVISION
ADMINISTRATIVE COURT

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 13/10/2016

Before:

THE HON. MRS JUSTICE PATTERSON DBE

Between:

THE QUEEN (on the application of	
(1) STONEGATE HOMES LIMITED	
(2) LITTLEWORTH PROPERTIES LIMITED)	<u>Claimants</u>
- and -	
HORSHAM DISTRICT COUNCIL	<u>Defendant</u>
- and -	
HENFIELD PARISH COUNCIL	<u>Interested Party</u>

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Official Shorthand Writers to the Court)

Mark Lowe QC and Robert Williams (instructed by **Russell-Cooke**) for the **Claimants**
David Lintott (instructed by **Sharpe Pritchard**) for the **Defendant**

Hearing date: 4 October 2016

Approved Judgment

Mrs Justice Patterson:

Introduction

1. This is a claim under section 61N of the Town and Country Planning Act 1990 (as amended) (the 1990 Act) which seeks to challenge the decision of the defendant on 27 April 2016 to make the Henfield Neighbourhood Plan (HNP). That decision was made following a referendum held on 12 April 2016 when the HNP was passed with a vote of 94.3% of the voters.
2. The claimants are developers who have been promoting a site known as Sandgate Nursery, on the western side of Henfield, as a site for the development of 72 dwellings. A planning application was refused by the defendant on 25 November 2014. That refusal was appealed by the claimants. The decision remains with the Secretary of State for determination.
3. The claim is brought on three grounds:
 - i) That the defendant had failed to lawfully assess reasonable alternatives to the spatial strategy as established by the HNP and, in particular, the alternative of permitting development on the western edge of Henfield;
 - ii) That the defendant had failed to consider any alternatives to the Built-Up Area Boundary (BUAB) as established in the HNP and had failed to act rationally in the selection of the BUAB;
 - iii) That the defendant and/or the examining inspector failed to give any or adequate reasons as to why the HNP met EU obligations.
4. The defendant submits:
 - i) That the challenge is limited in scope by section 38A(4) and section 38A(6) of the 2004 Act to a consideration of whether the making of the neighbourhood development order would breach or would otherwise be incompatible with any EU obligation or any of the Convention rights;
 - ii) Even if the scope of challenge is not so limited the option of developing land to the west of Henfield and that of including the “Barratt site” within the BUAB of Henfield had been adequately dealt with by the examiner and the defendant in a proportionate way and the reasons that had been advanced were adequate.
5. An acknowledgement of service and summary grounds of resistance were filed by the interested party, Henfield Parish Council, on 3 June 2016, which submit:
 - i) That it lawfully assessed development sites put forward during the call for sites including those on the western edge of Henfield;
 - ii) It did consider alternatives to the BUAB and it acted rationally in the selection of the BUAB.

Apart from submission of those grounds the Parish Council has played no active role in the proceedings before me.

6. On 27 June 2016 Gilbart J ordered a “rolled-up hearing”.

Legal framework

Development plans

7. The development plan has a particular significance in the operation of the planning system in England. Section 38(6) of the Planning and Compulsory Purchase Act 2004 (the 2004 Act) provides:

“(6) If regard is to be had to the development plan for the purpose of any determination to be made under the planning Acts the determination must be made in accordance with the plan unless material considerations indicate otherwise.”

Neighbourhood development plans

8. Amendments to the 2004 Act were made by the Localism Act 2011. Those amendments provide for a process whereby parish councils or bodies designated as neighbourhood forums can initiate the making of a neighbourhood development plan. The provisions provide for an independent examination of a neighbourhood development plan. The examiner may recommend that the plan, with or without modification, is submitted to a referendum. If more than half of those voting at a referendum vote in favour of the plan, the local planning authority must make the neighbourhood development plan.

9. The material provisions of section 38A of the 2004 Act provide:

“(1) Any qualifying body is entitled to initiate a process for the purpose of requiring a local planning authority in England to make a neighbourhood development plan.

(2) A ‘neighbourhood development plan’ is a plan which sets out policies (however expressed) in relation to the development and use of land in the whole or any part of a particular neighbourhood area specified in the plan.

(3) Schedule 4B to the principal Act, which makes provision about the process for the making of neighbourhood development orders, including—

(a) provision for independent examination of orders proposed by qualifying bodies, and

(b) provision for the holding of referendums on orders proposed by those bodies,

is to apply in relation to neighbourhood development plans (subject to the modifications set out in section 38C(5) of this Act).

(4) A local planning authority to whom a proposal for the making of a neighbourhood development plan has been made—

(a) must make a neighbourhood development plan to which the proposal relates if in each applicable referendum under that Schedule (as so applied) more than half of those voting have voted in favour of the plan, and

(b) if paragraph (a) applies, must make the plan as soon as reasonably practicable after the referendum is held.”

10. A qualified body is a parish council or an organisation or body designated as a neighbourhood forum authorised to act for a neighbourhood area for the purposes of a neighbourhood development plan: see section 38A(12) of the 2004 Act. Section 38B(1) of the 2004 Act prescribes that neighbourhood development plans must specify the period for which they are to have effect, may not include provision about excluded developments as defined and may not relate to more than one neighbourhood area.

11. Schedule 4B to the 1990 Act, with modifications, is applied to the process of preparing and making a neighbourhood plan: see sections 38A(5) and 38C(5) to the 2004 Act. Paragraph 7 of Schedule 4B requires the local authority to submit a draft neighbourhood plan for independent examination. Paragraph 8, as modified by section 38C(5)(d) of the 2004 Act, provides, so far as material:

“8(1) The examiner must consider the following—

(a) whether the draft neighbourhood development order meets the basic conditions (see sub-paragraph (2)),

(b) whether the draft order complies with the provision made by or under sections 61E(2), 61J and 61L,

...

(2) A draft order meets the basic conditions if—

(a) having regard to national policies and advice contained in guidance issued by the Secretary of State, it is appropriate to make the order,

...

(d) the making of the order contributes to the achievement of sustainable development,

(e) the making of the order is in general conformity with the strategic policies contained in the development plan for the area of the authority (or any part of that area),

(f) the making of the order does not breach, and is otherwise compatible with, EU obligations, and

(g) prescribed conditions are met in relation to the order and prescribed matters have been complied with in connection with the proposal for the order.”

12. The reference in paragraph 8(2)(e) to the development plan excludes the neighbourhood development plan (see paragraph 17 of Schedule 4B to the 1990 Act). The basic condition in paragraph 8(2)(e) therefore means, “in general conformity with the strategic policies contained in the development plan (documents) for the area (or any part of that area).”
13. Paragraph 9 sets out the general rule that the examination of the issues by the examiner is to take the form of the consideration of written representations.
14. Paragraph 10 sets out what the examiner must do after the independent examination. That reads, where relevant:

“10(1) The examiner must make a report on the draft order containing recommendations in accordance with this paragraph (and no other recommendations).

(2) The report must recommend either—

(a) that the draft order is submitted to a referendum, or

(b) that modifications specified in the report are made to the draft order and that the draft order as modified is submitted to a referendum, or

(c) that the proposal for the order is refused.

(3) The only modifications that may be recommended are—

(a) modifications that the examiner considers need to be made to secure that the draft order meets the basic conditions mentioned in paragraph 8(2),

(b) modifications that the examiner considers need to be made to secure that the draft order is compatible with the Convention rights,

(c) modifications that the examiner considers need to be made to secure that the draft order complies with the provision made by or under sections 61E(2), 61J and 61L,

(d) modifications specifying a period under section 61L(2)(b) or (5), and

(e) modifications for the purpose of correcting errors.

...

(5) If the report recommends that an order (with or without modifications) is submitted to a referendum, the report must also make—

(a) a recommendation as to whether the area for the referendum should extend beyond the neighbourhood area to which the order relates, and

(b) if a recommendation is made for an extended area, a recommendation as to what the extended area should be.

(6) The report must—

(a) give reasons for each of its recommendations, and

(b) contain a summary of its main findings.

(7) The examiner must send a copy of the report to the qualifying body and the local planning authority.

(8) The local planning authority must then arrange for the publication of the report in such manner as may be prescribed.”

15. Paragraph 12 applies to the duty on the local planning authority after receipt of the independent examiner’s report. That reads:

“12(1) This paragraph applies if an examiner has made a report under paragraph 10.

(2) The local planning authority must—

(a) consider each of the recommendations made by the report (and the reasons for them), and

(b) decide what action to take in response to each recommendation.

(3) The authority must also consider such other matters as may be prescribed.

(4) If the authority are satisfied—

(a) that the draft order meets the basic conditions mentioned in paragraph 8(2), is compatible with the Convention rights

and complies with the provision made by or under sections 61E(2), 61J and 61L, or

(b) that the draft order would meet those conditions, be compatible with those rights and comply with that provision if modifications were made to the draft order (whether or not recommended by the examiner),

a referendum in accordance with paragraph 14, and (if applicable) an additional referendum in accordance with paragraph 15, must be held on the making by the authority of a neighbourhood development order.

(5) The order on which the referendum is (or referendums are) to be held is the draft order subject to such modifications (if any) as the authority consider appropriate.

(6) The only modifications that the authority may make are—

(a) modifications that the authority consider need to be made to secure that the draft order meets the basic conditions mentioned in paragraph 8(2),

(b) modifications that the authority consider need to be made to secure that the draft order is compatible with the Convention rights,

(c) modifications that the authority consider need to be made to secure that the draft order complies with the provision made by or under sections 61E(2), 61J and 61L,

(d) modifications specifying a period under section 61L(2)(b) or (5), and

(e) modifications for the purpose of correcting errors.

(7) The area in which the referendum is (or referendums are) to take place must, as a minimum, be the neighbourhood area to which the proposed order relates.

(8) If the authority consider it appropriate to do so, they may extend the area in which the referendum is (or referendums are) to take place to include other areas (whether or not those areas fall wholly or partly outside the authority's area).

(9) If the authority decide to extend the area in which the referendum is (or referendums are) to take place, they must publish a map of that area.

(10) In any case where the authority are not satisfied as mentioned in sub-paragraph (4), they must refuse the proposal.

(11) The authority must publish in such manner as may be prescribed—

- (a) the decisions they make under this paragraph,
- (b) their reasons for making those decisions, and
- (c) such other matters relating to those decisions as may be prescribed.

(12) The authority must send a copy of the matters required to be published to—

- (a) the qualifying body, and
- (b) such other persons as may be prescribed.”

16. Under the Neighbourhood Planning (General) Regulation 2012, regulation 19 provides for the decision on a plan proposal. That reads:

“19. As soon as possible after deciding to make a neighbourhood development plan under section 38A(4) of the 2004 Act or refusing to make a plan under section 38A(6) of the 2004 Act, a local planning authority must—

(a) publish on their website and in such other manner as they consider is likely to bring the decision to the attention of people who live, work or carry on business in the neighbourhood area—

(i) a statement setting out the decision and their reasons for making that decision (“the decision statement”);

(ii) details of where and when the decision statement may be inspected; and

(b) send a copy of the decision statement to—

(i) the qualifying body; and

(ii) any person who asked to be notified of the decision.”

17. Section 61E of the 1990 Act reads:

“(4) A local planning authority to whom a proposal for the making of a neighbourhood development order has been made—

(a) must make a neighbourhood development order to which the proposal relates if in each applicable referendum under

that Schedule more than half of those voting have voted in favour of the order, and

(b) if paragraph (a) applies, must make the order as soon as reasonably practicable after the referendum is held.”

18. That is subject to subsection 8 which reads:

“(8) The authority are not to be subject to the duty under subsection (4)(a) if they consider that the making of the order would breach, or would otherwise be incompatible with, any EU obligation or any of the Convention rights (within the meaning of the Human Rights Act 1998).”

19. Section 61N provides, where relevant:

“(1) A court may entertain proceedings for questioning a decision to act under section 61E(4) or (8) only if—

(a) the proceedings are brought by a claim for judicial review, and

(b) the claim form is filed before the end of the period of 6 weeks beginning with the day on which the decision is published.”

The remainder of section 61N deals with challenges to the independent examiner’s report and the holding of a referendum. Those provisions are not relevant here.

Environmental assessment

20. Directive 2001/42/EC provides for the environmental assessment of certain plans and programmes. Article 1 sets out its objective. That reads:

“The objective of this Directive is to provide for a high level of protection of the environment and to contribute to the integration of environmental considerations into the preparation and adoption of plans and programmes with a view to promoting sustainable development, by ensuring that, in accordance with this Directive, an environmental assessment is carried out of certain plans and programmes which are likely to have significant effects on the environment.”

21. Article 2 provides that plans and programmes include those prepared at a local level for adoption.

22. Article 3 deals with the scope of the environmental assessment.

23. Article 5 provides for the preparation of an environmental report in which the likely significant effects on the environment of implementing the plan or programme and reasonable alternatives, taking into account the objectives and the geographical scope

of the plan or programme are identified, described and evaluated. The information to be given is set out in Annex I to the Directive. It includes at:

“(h) an outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.”

24. Article 8 provides that the report shall be taken into account during the preparation of the plan or programme and before its adoption or submission to the legislative procedure.
25. Article 9 provides for what information is to be given on the decision and includes at Article 9(1)(b): “...the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with.”

Policy guidance

26. Planning practice guidance on neighbourhood planning provides that:

“Proportionate, robust evidence should support the choices made and the approach taken. The evidence should be drawn upon to explain succinctly the intention and rationale of the policies in the draft neighbourhood plan or the proposals in an order.”

27. On strategic environmental assessments the advice is that:

“The strategic environmental assessment should identify, describe and evaluate the likely significant effects on environmental factors using the evidence base ... reasonable alternatives must be considered and assessed in the same level of detail as the preferred approach intended to be taken forward in the neighbourhood plan (the preferred approach). Reasonable alternatives are the different realistic options considered while developing the policies in the draft plan ... the strategic environmental assessment should outline the reasons the alternatives were selected, the reasons the rejected options were not taken forward and the reasons for selecting the preferred approach in light of the alternatives ... the development and appraisal of proposals in the neighbourhood plan should be an iterative process with the proposals being revised to take account of the appraisal findings. This should inform the selection refinement and publication of the preferred approach for consultation.”

28. In a practical guide to the Strategic Environmental Assessment Directive (SEA) published by the Office of the Deputy Prime Minister (ODPM) there is advice at B3 on predicting the effects of the plan or programme including alternatives. Paragraph 5.B.9 says that authorities should predict effects by identifying the changes to the

environmental baseline which are predicted to arise from the plan or programme, including alternatives, which can be compared with each other and with no “plan or programme” and/or “business as usual” scenarios, where these exist, and against the SEA objectives. It continues at paragraph 5.B.10 that predictions do not have to be expressed in quantitative terms. Qualitative predictions can be equally valid and appropriate but qualitative does not mean “guessed” (see 5.B.11). Section B4 on evaluating the effect of the draft plan or programme including alternatives advises that evaluation involves forming a judgment on whether or not a predicted effect will be environmentally significant.

29. EU policy advice is contained in ‘Implementation of Directive 2001/42 on the assessment of certain plans and programmes on the environment’. Under the heading ‘Alternatives’ it reads, where relevant:

“On alternatives it indicates that the obligation to identify, describe and evaluate reasonable alternatives must be read in the context of the objective of the Directive which is to ensure that the effects of implementing plans and programmes are taken into account during their preparation and before their adoption.” (see 5(11)).

It continues:

“...it is essential that the authority or parliament responsible for the adoption of the plan or programme as well as the authorities and the public consulted are presented with an accurate picture of what reasonable alternatives there are and why they are not considered to be the best option. The information referred to in Annex I should thus be provided for the alternatives chosen.” (see 5.12)

30. The National Planning Policy Framework (NPPF) sets out the Government’s planning policies for England. Its policies are a material consideration. Paragraph 14 explains that at the heart of the NPPF is a presumption in favour of sustainable development which should be seen as a golden thread running through both plan-making and individual decision-taking. Paragraphs 183 to 185 deal specifically with neighbourhood development plans. They provide:

“183. Neighbourhood planning gives communities direct power to develop a shared vision for their neighbourhood and deliver the sustainable development they need. Parishes and neighbourhood forums can use neighbourhood planning to:

- set planning policies through neighbourhood plans to determine decisions on planning applications; and
- grant planning permission through Neighbourhood Development Orders and Community Right to Build Orders for specific development which complies with the order.

184. Neighbourhood planning provides a powerful set of tools for local people to ensure that they get the right types of development for their community. The ambition of the neighbourhood should be aligned with the strategic needs and priorities of the wider local area. Neighbourhood plans must be in general conformity with the strategic policies of the Local Plan. To facilitate this, local planning authorities should set out clearly their strategic policies for the area and ensure that an up-to-date Local Plan is in place as quickly as possible. Neighbourhood plans should reflect these policies and neighbourhoods should plan positively to support them. Neighbourhood plans and orders should not promote less development than set out in the Local Plan or undermine its strategic policies.

185. Outside these strategic elements, neighbourhood plans will be able to shape and direct sustainable development in their area. Once a neighbourhood plan has demonstrated its general conformity with the strategic policies of the Local Plan and is brought into force, the policies it contains take precedence over existing non-strategic policies in the Local Plan for that neighbourhood, where they are in conflict. Local planning authorities should avoid duplicating planning processes for non-strategic policies where a neighbourhood plan is in preparation.”

Factual background

31. Henfield is a settlement recognised as appropriate to accommodate further housing development. It was classified as a category 1 settlement in the settlement hierarchy established in the Horsham Core Strategy (2007). A category 1 settlement means that it has a good range of services and facilities as well as some access to public transport and is capable of sustaining some expansion. There is some variation in public transport services within the category 1 settlements. Several regular bus services connect Henfield with Horsham and the coastal conurbation.
32. The whole of Henfield Parish was designated a neighbourhood area for the purpose of preparing the HNP. The designation was approved by the defendant on 4 February 2014 and by the South Downs National Park on 13 December 2013.
33. The process up to submission of the HNP included a state of parish report which summarised the evidence provided by focus groups and others on which the HNP is based.
34. In July 2014 a Land and Site Assessment Schedule was prepared by the housing and development focus group. That included, at site 6, land at Sandgate Nursery in which the claimants have an interest. The site was noted to have an area of 3.76 hectares and had been identified in the 2014 Strategic Housing Land Availability Assessment (SHLAA) as developable with 30 units. Site 7 was land north of West End Lane which had a site area of 7.34 hectares which had been identified in the 2014 SHLAA as not developable. The site was on the west of Henfield, in a similar location to site

6 which was on the other side of West End Lane. At the time an application for 160 residential units had been refused and was the subject of a planning appeal by Barratt Homes. That appeal was allowed on 2 June 2014. I shall return to that later. Site 24, on the east of Henfield, known as land at east of Manor Close, had a site area of 4.12 hectares and again, had been subject to appeal where development of 102 units had been allowed.

35. The Pre-Submission Plan was dated September 2014. The Submission Plan was produced in March 2015. An independent examination was held. The examiner reported on 10 July 2015 and recommended that a referendum be held. That was scheduled for 22 September 2015 but was cancelled due to concerns raised by the community due to the reclassification of a site from housing use to mixed use. A further independent examination was held in February 2016 into a revised HNP. The examiner reported on 25 February 2016.
36. The HNP 2015 to 2035 was published on 25 February 2016. The relevant policies are:

“Policy 1: A Spatial Plan for the Parish.

The Neighbourhood Plan defines the Built Up Area Boundary of Henfield and Small Dole, as shown on pages 22 and 23. Development proposals located inside these boundaries will be supported, provided they accord with the other provisions of the Neighbourhood Plan and the Horsham development plan.

Development proposals outside of these boundaries will be required to conform to development plan policies in respect of development in the countryside. Proposals will be resisted if they adversely affect the setting of the South Downs National Park or if they result in the loss of Grade 1/2/3a agricultural land. Only proposals for minor development of an appropriate scale will be supported on land west of the Downs Link, or on the southern escarpment of Henfield village.”

Policy 1 draws a clear distinction between sites within the BUAB where development proposals will be supported and development proposals outside the boundary which will be required to conform to development plan policies in respect to developments in the countryside.

37. The supporting paragraphs make clear that the policy establishes the key spatial priority for the HNP. Paragraph 4.13 reads:

“The key criteria for determining the right spatial strategy of the plan focused on sites within the Henfield boundary first, then identifying only sites that immediately adjoin the eastern boundary of the village, which is considerably closer to the majority of village services located on and around High Street. All other sites in the Horsham Strategic Housing Land Availability Assessment (SHLAA) and/or that responded to the Parish Council’s call for sites have been excluded from further assessment if they did not meet these criteria (see the separate Site Assessments Report in the evidence base).”

38. Paragraph 4.16 refers to the fact that to accommodate some of the proposals the policy modifies the BUAB of Henfield.
39. Paragraph 4.18 refers to the Sustainability Appraisal/Strategic Environmental Assessment (SA/SEA) report and its assessment that the policy had positive and neutral likely effects in achieving sustainable development in the parish.
40. Paragraph 4.19 reads:

“One alternative was to confine development within the existing settlement boundaries and allocate no new sites on the edge of the village, which resulted in too few new homes being allocated, though scoring well on a range of environmental measures. Another was to confine allocations to all the edges of the village and to allow for greater development at Small Dole but not to allocate land inside the boundary at Henfield. In this option, the scale of negative impact on environmental measures outweighed the benefits of delivering housing and, in any event, would very likely put at risk the chance of securing a majority vote at referendum. The remaining alternative was to favour sites on the western boundary of the village that consolidate the recent consent at West End Lane. This too scored badly overall as any further significant development in that area, which lies furthest from the village centre, would place unsustainable pressure on the local road system.”
41. Policy 2 provides housing site allocations. Those are predominantly on the east of Henfield and include land to the east of Manor Close where the development was allowed on appeal. They do not include the Barratt site, north of West End Lane or the Sandgate Nursery site.
42. The rest of the policies are not relevant for current purposes.
43. The SA/SEA provides an assessment of the options which were considered to policy 1. The site selection strategy is recorded as sites within the BUAB followed by sites on the eastern edge of Henfield as these are closer to the services and facilities in the village centre (see paragraph 7.9). Alternative option A confined development within the existing settlement boundaries and was dismissed as it resulted in too few new homes being allocated. Alternative option B confined allocations to all the edges of the village and allowed for greater development at Small Dole. That was dismissed due to the scale of negative impact on environmental measures. Alternative option C favoured sites on the western boundary of the village that consolidated the recent consent at West End Lane. That, too, scored badly overall as any further significant development in that area, which lies furthest from the village centre, would place unsustainable pressure on the local road system and infrastructure: see paragraph 7.11.
44. The wording in the final SEA on option C is identical to that contained in the Sustainability Appraisal in December 2014, that published in March 2015 and that published in August 2015.

45. In a note produced of a planning workshop on 7 July 2014 into the HNP on housing and development it was noted that the recent planning appeals/consents in Henfield had had an impact on local public opinion and, significantly:

“Sites in Henfield closer to the village services on its eastern edge would have less of an impact in terms of traffic movements generated by new residents (but marginal in terms of commuting, shopping, leisure trips).”

Submissions

46. To a great extent the claimants’ grounds of challenge overlap. For ease I have retained their original numbering but as will become apparent much of the reasoning applies to all and the rest of this judgment should be read with that in mind.

Ground 1(a): Assessment of alternatives to the spatial strategy within the HNP

47. The claimants contend that there were three basic errors, namely:
- i) That there was an unlawful departure from/failure to grapple with previous findings on a materially similar issue;
 - ii) That there was a lack of any evidential foundation for the conclusions that were drawn;
 - iii) There was a premature fixing of the spatial strategy.
48. The claimants rely upon the principle that where an issue has previously been the subject of a finding of fact or judgment by an expert independent tribunal in a related context the decision-maker must take into account and give appropriate respect to the conclusions of that tribunal. The weight to be given to the conclusions of the other tribunal and the ease with which the decision-maker can depart from previous conclusions of the tribunal depends upon the context. However, in all cases it is incumbent on the decision-maker to grapple with the conclusions of the tribunal and, if departing from them, to give reasons for so doing.
49. In support of that proposition the claimants rely upon the well known cases of **R v Warwickshire County Council ex parte Powergen Plc** (1998) 75 P&CR 89, **R (Bradley) v Work and Pensions Secretary** [2008] EWCA Civ 36, **R (Mayor of London) v Enfield London Borough Council** [2008] EWCA Civ 202 and **R (Bachelor Enterprises Limited) v North Dorset District Council** [2003] EWHC 3006 (Admin) and **R (Evans) v Attorney General** [2015] UKSC 21.
50. From those cases the claimants make the following five submissions:
- i) Both the local planning authority and the parish council were dealing, in the HNP, with the same proposition made by the parish council in the Barratt appeal. The only distinction was of size of development.
 - ii) The proposition was the same as that which was put to the inspector on the sustainability of the Barratt site and rejected by him after he had heard evidence.

- iii) The Barratt appeal inspector had heard evidence over several days.
 - iv) Neither the defendant nor the parish council began to grapple with the significance of the Barratt decision or to consider whether that appeal decision constituted a change of circumstances that might have warranted a different decision on spatial strategy in the HNP.
 - v) The decision made in the HNP was of an absolute nature, namely, that development on the west would “lead to unsustainable pressure on the local road network”.
51. The second strand of cases on which the claimants rely are those which highlight the principle of consistency in decision-making. The claimants rely on **North Wiltshire District Council v Secretary of State for the Environment** (1992) 65 P&CR 137 and **R (Fox Strategic Land & Property Limited) v Secretary of State for Communities and Local Government** [2012] EWCA Civ 1198. The claimants submit that although the decisions relate to individual planning applications there is no logical reason why the principle of consistency should not apply equally to the context of plan-making.
52. The defendant contends that a plan-making exercise is different to what was being considered in the cases of **Powergen, Evans, Bachelor** and **North Wiltshire**. The plan-making authority and independent inspector were looking at comparative sustainability. What was before them was an evaluative judgment as to where development should go within the neighbourhood. A court can only intervene if the decisions made were irrational.
53. The timing of the challenge is important to the overall context. The independent examiner’s report has not been challenged by the claimants at any stage. The February 2016 decision on the part of the defendant accepted the recommendation and modifications of the examiner that the HNP met the basic conditions in paragraph 8(2) of Schedule 4B of the 1990 Act which included a determination as to the compatibility with EU obligations. After the referendum on 12 April 2016 with 94.3% of the votes cast agreeing that the HNP be used in the determination of planning applications the defendant was under a duty to make the plan subject only to section 38A(6) which provides that local planning authorities are not subject to the duty if they consider that the making of the plan would breach or otherwise be incompatible with any EU obligation. Unless the claimants can establish that the defendant could not lawfully consider that the plan was incompatible with any EU obligation the claim must fail.

Discussion and conclusions

54. Alternative option C which related to sites on the western boundary of Henfield was dismissed in the SA/SEA report and in the HNP because “any further significant development in that area which lies furthest from the village centre would place unsustainable pressure on the local road system.” There was, therefore, a live issue as to whether development on the western side would place unsustainable pressure on the local road system. As a matter of fact the western area lay further from the village centre but that was not the rationale for rejecting the area in the SA/SEA or in the HNP.

55. The Barratt application on land north of West End Lane was made on 29 April 2014. The appeal into the refusal of planning permission by the defendant was heard over four days at the end of March and the beginning of April 2014. A decision letter was issued on 2 June 2014. One of the reasons for refusal was a highways reason. That was withdrawn by the council at appeal as a result of an agreement between Barratt and the Highways Authority on highway works and contributions. The issue of transportation though remained live at the appeal as the parish council and other interested parties maintained their objections. As a result, one of the main issues in the appeal recorded by the appeal inspector was what effect the development would have on the safety and free-flow of traffic in Henfield and on sustainable travel objectives. The inspector allowed the appeal.
56. In dealing with transportation objections he concluded that most Henfield facilities were within reasonable and level walking distance of the appeal site and the roads were also suitable for cycling. Improvements to the footways would make walking easier and safer and a more attractive option. He noted that much attention at the appeal before him focused on the junction of Church Street and High Street. The appeal development would generate additional movements so that there was some potential for additional congestion at peak hours but the transport assessment did not support the high traffic estimates claimed by some objectors which were typically based on car ownership and parking provision rather than car use. Not all cars would be used every day or at the same time of day. Moreover, should excessive queuing occur then alternative routes were available which had wider and higher capacity junctions with the main road. Some drivers were likely to divert to those routes if congestion increased. Those features would themselves serve to keep traffic speeds to safe levels. He rejected the suggestion that the diversion routes were not suitable to carry extra traffic. Accordingly, there was before him a lack of evidence to demonstrate that the Church Street junction would become unsafe or that the congestion or other effects of extra traffic would be severe in terms of the NPPF. He clearly dismissed the arguments of the parish council and individual objectors on highways and sustainability grounds. Neither the district council nor the county highway authority objected to the development on highway grounds (paragraphs 55 and 56 of the decision letter). He concluded that the Barratt development would be a sustainable development and the presumption in favour of such development should be applied.
57. The Sandgate Nursery site was the subject of an application for planning permission in March 2014 for 72 dwellings. Officers recommended approval. Members rejected that recommendation and refused planning permission on 25 November 2015 including highways grounds. As set out that refusal has been the subject of an appeal.
58. During the course of the appeal a highways statement of common ground was agreed between the appellants and West Sussex County Council, the relevant highways authority. That included agreement that the Sandgate Nursery site was accessible by foot to many of Henfield's facilities and services located about 1.2 kilometres east of the site within a maximum "acceptable" walking distance for pedestrians without mobility impairment of 2 kilometres. The parties agreed that the proposal should not be refused on traffic or transport grounds with the consequence that the highways reason for refusal was withdrawn.

59. The claimants contend that the primary basis for rejecting alternative option C in the HNP was unsustainable pressure on the local road system which was clearly inconsistent with the inspector's decision in the Barratt appeal. No reference in the plan making process was made to the Barratt appeal decision letter nor to the position of the highways authority in that appeal or in the Sandgate appeals where the highway authority withdrew the highways reason for refusal. The outcome of the Barratt appeal was clearly known both to the parish council and to the defendant. It had been brought to the attention of the independent examiner who was obliged to deal with it.

60. In her first report dated 10 July 2015 the independent examiner in dealing with matters under the heading 'European Convention on Human Rights and European Union Obligations' expressed "satisfaction that the neighbourhood plan did not breach nor is it in anyway incompatible with the ECHR". She continued "I am satisfied that a fair and transparent process has been undertaken in the seeking of and the selection of development sites within the neighbourhood plan area. There is a clear rationale to the allocations where presumption is in favour of development within the allocated settlement boundaries close to facilities both to the benefit of future occupants and to continue sustaining those facilities." She continued that it had been determined that an SA/SEA would be required as policies may have significant environmental effects, in particular site allocations. She said:

"The SA/SEA demonstrates its policies will have no significant social, economic or environmental effects. I am satisfied that the proposals have been significantly assessed and raise no negative impact in either summary (as per Table 3: Summary Assessment of Objectives) nor in the detail of the assessment."

61. In her second report dated 25 February 2016 under the heading 'Subsequent changes to policy context since an examination July 2015' the examining inspector said:

"There had been no subsequent alterations to the European Convention on Human Rights under European Union obligations to impact upon this NDP ... I am satisfied that the neighbourhood plan does not breach nor is in anyway incompatible with the ECHR. ...the SA/SEA demonstrates the revised NDPs policies will have no significant social, economic or environmental effect ... I am therefore satisfied that the neighbourhood plan is compatible with EU obligations and, as modified, will meet the basic conditions in this respect."

62. Section 5 of her report dealt with representations received. In that she said:

"Concern is raised about failing to assess housing needs for local and wider community and providing a sufficient allocation of land for housing and unfair exclusion of land on the western side of the village, no objective assessment to support the evidence of 137 unit allocation is correct in terms of numbers, need to provide an opportunity to revisit the other candidate sites to make up the shortfalls. Most of these points were raised on the previous plan. ...the rationale for not supporting development on the western boundary is clearly

stated in NDP para 4.19. The rationale for supporting or otherwise is clearly stated in the site allocation paper and there is no reason to reopen these issues with no conflicts arising with meeting the basic conditions.”

63. The issue then is whether the inspector was under an obligation to grapple with the implications of the finding of the Barratt appeal inspector on the parish council’s assessment of reasonable alternatives and the subsequent development of highways issues in the Sandgate Nursery appeal. Her failure to do so is contended to be in breach of the legal principles established in the **Powergen** and **North Wiltshire** line of cases.
64. I have no hesitation in rejecting the application of the **North Wiltshire** line of cases to the circumstances before the independent examiner and the defendant, namely, that the decision made in the HNP needed to be consistent with the decision on the individual planning decision on the Barratt appeal. **North Wiltshire** was dealing with an entirely different context to a plan-making exercise in which comparative judgments have to be made within the plan boundary. That exercise is distinct from determining, on an individual basis, whether a planning application is acceptable on a particular site. An individual case is entirely distinguishable from reaching a decision on the spatial dispersal of prospective development in a broader geographical area. That is the case also in **Fox Strategic Land & Property** which, again, was dealing with two planning appeals after the refusal of planning permission. There, the issue was whether the decisions of the Secretary of State were inconsistent with the established spatial vision for the area. In the current context the issue was the establishment of the spatial vision for the HNP and how it is to be realised through objectives in the NDP. It is, in my judgment, a materially different exercise. That does not mean, however, that the Barratt decision may not be a material consideration for the plan making process but there was no obligation on the part of the plan making authority to follow it.
65. Again, none of the **Powergen** line of cases are dealing with plan-making decisions and the comparative exercise which is part of that process. In **Evans** Lord Neuberger reviewed the cases of **Powergen** and **Bradley** amongst others and continued at paragraph 66 and 67:

“66. Such comparisons with other cases can, however, only be of limited assistance: what is of more importance is to seek to identify the relevant principles. In **Bradley** at para 70, Sir John Chadwick did just that and suggested that there were five applicable propositions. At least for present purposes, I would reformulate and encapsulate those propositions in the following two sentences. In order to decide the extent to which a decision-maker is bound by a conclusion reached by an adjudicative tribunal in a related context, regard must be had to the circumstances in which, and the statutory scheme within which, (i) the adjudicative tribunal reached its conclusion, and (ii) the decision-maker is carrying out his function. In

particular, the court will have regard to the nature of the conclusion, the status of the tribunal and the decision-maker, the procedure by which the tribunal and decision-maker each reach their respective conclusions (eg, at the extremes, (i) adversarial, in public, with oral argument and testimony and cross-examination, or (ii) investigatory, in private and purely on the documents, with no submissions), and the role of the tribunal and the decision-maker within the statutory scheme.

67. Although Sir John expressed his propositions so as to apply to “findings of fact”, it seems to me that they must apply just as much to opinions or balancing exercises. The issue is much the same on an appeal or review, namely whether the tribunal was entitled to find a particular fact or to make a particular assessment. Anyway, it is clear from Powergen that an assessment as to whether an access onto a highway would be safe fell within the scope of his propositions. Indeed, the ombudsman’s decision in Bradley itself seems to me to have involved issues as to which she had to make assessments or judgements, such as whether the department concerned should have done more and whether some failures amounted to maladministration – see at para 27 of Sir John’s judgment.”

66. That makes it clear that a decision-maker can have regard to a balancing exercise carried out by another in a related context but the extent to which he is bound by it requires a consideration of the circumstances and the statutory scheme within which the decision-maker is reaching its conclusion and carrying out its function. Given the different nature of the exercises which an inspector on an appeal under section 78 is concerned and those with which an independent examiner or a plan-making authority is concerned it would be difficult to conclude that the latter were bound by the decision of an inspector on an individual site such as that at West End Lane. But that is not to say that the Barratt decision and the current state of knowledge on the highways network should have been disregarded in the plan making system. The Barratt decision letter was issued on 2 June 2014. The parish council were clearly aware of it, as Mr Osgood, who has filed a witness statement in the current proceedings, attended the Barratt inquiry as a local resident and as a member of the Henfield Parish Council, as also did a Mr P Hill. They were aware also of the comments at the planning workshop on the 7 July 2014.
67. The basis for the claim in the HNP that sites on the western boundary consolidating the recent consent at West End Lane would place unsustainable pressure on the local road system is thus, in my judgment, entirely obscure. Mr Osgood, in his witness statement of 29 July 2016, refers to the planning workshop on 7 July whose purpose was to determine the preferred spatial plan for the parish and, specifically, the approach to be taken to distributing new houses to be allocated by the plan. He says, in paragraph 8 of his witness statement:

“It was open to the parish council and the examiner to determine where development should go and to rule out development to the west on the basis that the community felt ‘it would place unsustainable pressure on the local road system and infrastructure’ based upon the following:

1. The western side of the village is further from the High Street as a matter of facts;
2. Although some facilities are to the west of the High Street, these are all on the eastern side of the village bar one;
3. Those travelling from the west would therefore be less likely to travel on foot and more likely to come by car; and
4. Travel by car from the western side of the village is more likely to cause pressure because of pinch points in the road system.

This was discussed at length at the planning workshop in 7 July 2014 and at the site visits thereafter and the essence of this reasoning appeared in many residents’ representations.”

68. His following paragraph refers to the statement of common ground submitted at the West End Lane inquiry where agreement was reached that, in highways terms, the roads and junctions local to the site were adequate in terms of safety and capacity to cope with site traffic during the construction period but he goes on to say that local residents were still of the opinion that the increase in traffic would have an adverse effect on highways safety. That was revealed in various consultation responses.
69. The difficulty with the basis upon which Mr Osgood says that the decision was reached that sites on the west would place unsustainable pressure on the local road system and infrastructure is that, firstly, the record of the planning workshop of 7 July says nothing of the sort. Its full terms are set out above. Sites to the east are said to have less of an impact in terms of traffic movement but the difference between east and west was marginal in terms of commuting, shopping and leisure trips. That does not amount to an evidence base for concluding unsustainable pressure on the local road system and infrastructure. Secondly, the other points that Mr Osgood makes in paragraph 8 of his witness statement, as set out above, and that he attributes to other consultation responses do not provide a basis for the conclusion in the HNP either. They are unsupported by any technical or expert evidence which, in so far as it exists, goes the other way. Mr Osgood’s views are based on opinion and an opinion that had been rejected in the Barratt appeal. As the claimants submit, the reason given for the rejection of sites on the western boundary was because they would place unsustainable pressure on the local road system. That conclusion and the evidence base for it, was therefore, fundamental to the choice of strategy for the HNP.
70. The question then is whether such evidence as there was, based upon local opinion and, as Mr Osgood says, “what the community felt”, was sufficient to meet the

standard required under the SEA Directive? As **Ashdown Forest Economic Development Llp v Secretary of State for Communities and Local Government & Others** [2015] EWCA Civ 681 confirmed, "...the identification of reasonable alternatives is a matter of evaluative assessment for the local planning authority, subject to review by the court on normal public law principles [42]."

71. Article 5(2) of Directive 2001/42/EC says:

"2. The environmental report prepared pursuant to paragraph 1 shall include the information that may reasonably be required taking into account current knowledge and methods of assessment, the contents and level of detail in the plan or programme, its stage in the decision-making process and the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment."

72. Guidance on the implementation of the Directive by the EU advises that:

"The essential thing is that likely significant effects of the plan or programme when the alternatives are identified, described and evaluated in a comparable way. ...it is essential that the authority ... responsible for the plan as well as the authorities and public consulted are presented with an accurate picture of what reasonable alternatives there are and why they are not considered the best option."

73. Here, anyone reading the HNP would be of the view that significant development on the western side of Henfield would lead to unsustainable pressure on the local road system. Beyond assertion by local residents who had made the same point at the West End Lane appeal when it had been rejected, there was no evidence to support the view expressed for the rejection of option C in the HNP. Although the Office of the Deputy Prime Minister's Practical Guide to Strategic Environmental Assessment Directive advises that predictions do not have to be expressed in quantitative terms as quantification is not always practicable and qualitative predictions can be equally valid and appropriate it goes on to say in paragraph 5.B.11:

"However, qualitative does not mean 'guessed'. Predictions need to be supported by evidence, such as references to any research, discussions or consultation which helped those carrying out the SEA to reach their conclusions."

74. The problem here is that the absolute nature of the rejection of option C is unsupported by anything other than guesswork. At the very least, having received the Barratt decision letter the plan-making authority, the parish council could have contacted the highways authority to obtain their views on the capacity of the broader local highways network in the western part of Henfield. There is no evidence that that was done. There is no evidence that anything was done when the highways objections to residential development on the Sandgate Nursery site was withdrawn either. Until it is, the outcome of significant development on the western side of Henfield on the local road network is unknown. What is known is that the permitted

site and the appealed site together do not provide any insuperable highways objections. Without further highways evidence though, the reason for rejecting option C as set out in paragraph 4.19 of the HNP is flawed, based as it is upon an inadequate, if that, evidence base. The requirement, under the Directive, that the alternatives are to be assessed in a comparable manner and on an accurate basis was simply not met.

75. The Sandgate Nursery appeal in which the highways reason for refusal was withdrawn would not have been available to the independent examiner in 2015 but it would have been known to the defendant when it received the second report from the independent examiner in February 2016. That combination of factors, namely, the West End Lane appeal decision letter and the highways stance at Sandgate Nursery mean that questions ought to or should have been raised on the part of the defendant on the adequacy of the SEA process for the determination of the spatial strategy in the HNP.
76. Further, the position on Sandgate Nursery was made known to the independent examiner in 2016 through further representations made by the claimants as part of the revised plan process. Given that, and her knowledge of the outcome of the Barratt appeal, her conclusion on compliance of the HNP with EU obligations was wrong. It was insufficient on her part to say that the matter had been raised before and refer back to paragraph 4.19 of the HNP. That paragraph, in so far as it deals with the rejection of Option C, I have found was based on what appears to be an erroneous conclusion and certainly had not been reached based upon an accurate appraisal of alternative C. The obligation under the SEA Directive is to ensure that the consideration of reasonable alternatives is based upon an accurate picture of what reasonable alternatives are. That was not done here. Not only was the conclusion wrong but, in the circumstances, it was irrational, given the absence of an evidence base. Her flawed report then tainted the decision on the part of the defendant.
77. But the defendant knew the position and had the relevant information. It is under an independent duty to set out its decision under regulation 19 of the Neighbourhood Planning (General) Regulations 2012 as to why it made the plan. It was clearly unable to make a lawful decision given, as I have found, that the plan breached and was incompatible with EU obligations.
78. It follows that, in my judgment, the assessment of reasonable alternatives within the SEA process was flawed and that the making of the HNP was incompatible with EU obligations. The decision on the part of the defendant to make the plan was thus irrational.
79. This ground succeeds.

Ground 1(b): Lack of any evidential foundation for conclusions

80. I have largely dealt with this under ground 1(a). I deal with it more shortly as I do also ground 1(c).
81. It is of note that in the representations made on behalf of the claimants on 16 November 2015 on the HNP it was said in terms that there was no objective assessment to support the contention in the draft neighbourhood plan that locations on the western edge of the village were unsustainable in highways terms. In that

representation, not only is there reference to the Barratt inspector's findings but there is also reference to the fact that in the then current ongoing appeal in relation to Sandgate Nursery the council had now withdrawn its highways grounds for refusal.

82. On 24 March 2016 the solicitors acting for the claimants wrote a pre-action protocol letter to the defendant. In that letter the solicitors repeated the contention that there was no objective assessment to support the contention that there was unsustainable pressure on the local road system, that the reason advanced was contrary to the inspector's report on the Barratt appeal and that the defendant had withdrawn its highways reason for refusal in relation to Sandgate Nursery.
83. Both the parish council and the independent examiner had before them in February 2016 a clear dispute as to the adequacy of the reason advanced in the draft HNP at 4.19 for rejection of Option C which they failed to address. But the defendant failed to apply its mind to its own independent duty as to whether the plan complied with EU obligations. At no stage did it seek further evidence or recognise any concern. Its Regulation 19 statement dated 31 May 2016 simply states that the HNP complies with the legal requirements and basic conditions without further explanation or identifying the evidence upon which it relies for such a statement.
84. It follows that this ground succeeds also.

Ground 1(c): Premature fixing of the spatial strategy

85. The claimants contend that, in the circumstances, there was a predetermined view on development to the western edge of Henfield.
86. Reference in the HNP to the sequential test, the claimants contend, is reference to screening out those sites on the western edge of Henfield. That stance remained the position of the parish council and the defendant notwithstanding the Barratt decision in June 2014. The SA in December 2014 and the SA/SEAs published in March, August and October 2015 and February 2016 were after spatial strategy appears to have been decided upon. What the parish council was doing, therefore, was not pursuing an iterative process which informed choices being made in the plan.
87. The defendant submits that, although there is no requirement that a plan and environmental report proceed in parallel, the first iteration of the SA was produced in December 2014 and was published at the same time as the draft plan. That reflected the consultations and evidence from 7 July 2014 workshop. That eventually became the SA/SEA and was considered by the independent examiner. The plan was not adopted until April 2016 following the positive recommendation of the independent examiner.

Discussion and conclusions

88. This part of ground 1 is interrelated with the other two which I have already dealt with. It is right that the SA/SEA process needs to be iterative so that it can inform the development plan as it evolves. The problem here is that in relation to sites on the western part of Henfield the SA/SEA document did not change to reflect what I have found to be changed circumstances. Even when first published in December 2014 it

did not accurately reflect the contents of the workshop on 7 July or deal with the issues raised as a result of the Barratt appeal.

89. The defendant has submitted that the use of planning workshops was a sensible approach. It was only after that in July 2014 that the first version of the SA/SEA was produced.
90. I agree that planning workshops can be a sensible approach and can perform a valuable contribution to the development plan process; they are part of the way in which the public can participate in the local plan-making process. However, that does not mean to say that they should be run according to an entirely local agenda. They feed into a process which needs to comply with EU obligations. Although the workshop did provide a forum for indicating that the difference between sites on the west and east was marginal for shopping, commuting and leisure it did not provide a basis for supporting a contention that sites on the west would lead to unsustainable pressure on the local road network. None of that was incorporated into the SA/SEA. As I have found, the process was flawed because it did not present an accurate picture of the alternatives so that they could be considered on a comparable basis. The real problem here was that the parish council failed to grapple with the changing highways information in relation to sites on the west of Henfield.
91. It follows this ground also succeeds.

Ground 2: Was the BUAB of Henfield unfairly fixed?

92. The claimants submit that the BUAB is integral to the spatial strategy of the HNP. By policy 1 development proposals located inside the BUAB will be supported where they accord with other provisions of the development plan. In contrast, outside the BUAB the policy is more restrictive so that minor development only is permitted outside the BUAB.
93. The claimants submit that there is no assessment of the environmental impact of the proposed BUAB or any reasonable alternatives. There was no explanation for the delineation of BUAB or why it should be preferred to any alternatives.
94. In particular, no consideration was given to the inclusion of land to the north of West End Lane (the Barratt site) which had extant permission for 160 residential dwellings and which abutted the western edge of the BUAB but the inclusion of land on the eastern side of Henfield, namely land east of Manor Close which had also been granted permission on appeal. It was irrational to exclude the Barratt site on the west but to include land east of Manor Close on the east. That led to the HNP proceeding on a false basis.
95. The defendant submits that the claimants are relying upon the same approach as they did in relation to ground 1.
96. The key is that the policy guides where development is to go. As planning permission had been granted for the Barratt site there was no need to include it. It was not irrational to do so.

97. Even if there was an error of law, the defendant submits it would not be material given that the rationale for the spatial strategy at 4.13 of the HNP is to identify sites that immediately join the eastern boundary of the village because they are considerably closer to the majority of village services located on or around High Street. Accordingly, the key consideration for where development should go in the HNP is the sustainability of its location in relation to the majority of services.

Discussion and conclusions

98. Paragraph 4.13 of the HNP sets out the rationale for the choice of the BUAB, namely, proximity to services for sites on the eastern edge of Henfield.
99. It follows that whether sites were granted planning permission on an appeal is not determinative as to where the BUAB should be drawn. The decisions on appeal may contribute as to where the line should be drawn but, in themselves, would not be conclusive.
100. The real problem is that there does not appear to have been any assessment of the environmental impact of the BUAB which appears inextricably linked, understandably, with the chosen spatial strategy. There is no explanation in the SA/SEA as to why the proposed delineation is preferred to any alternatives. The line was amended to take into account the consent granted for land to the east of Manor Close but no explanation is given for not extending it to the west to include the Barratt site. The issue was raised by the claimants in their representations on the draft HNP in November 2015 but, apparently, ignored by the independent examiner, the defendant and the interested party in the plan making process. It follows that approach, too, was in breach of EU obligations.

Ground 3: Reasons

101. The claimants acknowledge that since the judicial review has been issued the defendant has issued a regulation 19 decision statement. That, however, it is still contended, is inadequate as it fails to provide adequate reasons.
102. The claimants accept that there is a duty on local planning authorities to make a neighbourhood development plan following a positive result in the referendum. The only circumstances in which the duty is disapplied are by virtue of section 38A(6), "...if they consider that the making of the plan would breach, or would otherwise be incompatible with, any EU obligation or any of the Convention rights."
103. The claimants submit that the regulation 19 decision notice should address the referendum result and whether the making of the plan would breach or otherwise be incompatible with any EU obligation or Convention rights. It is submitted that the duty is heightened in circumstances where the decision maker is aware of concerns that the making of the plan would not be compatible with EU obligations.
104. In this case the decision statement makes no reference to compliance with EU obligations. Nor is the defendant able to cure the defect by reliance on the council's report on its decision statement.

105. The defendant submits that it is important to bear in mind the context in which this challenge is brought. The independent examiner's report has not been the subject of legal challenge. The defendant upheld its approach and there has been no change in circumstances since those decisions. In that context it was acceptable for the defendant to deal with matters as it did.
106. The defendant accepts that the independent examiner did not go into detail in her recommendations but she had flagged-up the rationale to the strategy which favoured development on the eastern side of Henfield in her first report. In February 2016 she said that she was satisfied that the HNP was compatible with EU obligations and, as modified, would meet the basic conditions in that respect as there had been no subsequent alterations to the ECHR and EU obligations to impact upon the HNP.

Discussion and conclusions

107. It follows from the flaws identified in ground 1, in particular, that both the independent examiner and the defendant were proceeding on a false basis. At no stage did the independent examiner give the slightest hint as to why rejection of option C caused unsustainable pressure on the local road system. Likewise, the defendant failed to address that issue. Both the independent examiner's report and the defendant's decision statement fail to explain why they reached the conclusions that they did on compliance with EU obligations with appropriate rigour or particularity or how they concluded that their assessment of reasonable alternatives was compliant with the SEA Directive and Regulations.
108. The absence of reasons, even bearing in mind the context, which is a point fairly made by the defendant, means that this ground, too, must succeed.
109. Although the claimants did not challenge the independent examiner's report or the defendant's dealing with it they are still entitled to challenge, under section 61N, the consequences of the referendum which lead to the making of the HNP on the statutory grounds contained within that section.
110. As the flaws identified in the plan-making system in grounds 1 and 2 were that the HNP was in breach of the SEA Directive and Regulations, for reasons that I have already set out, the reasons given by the defendant in its decision statement were bound to be and were inadequate. They came nowhere close to dealing with the principal controversial issues of why the HNP complied with EU obligations.
111. This ground succeeds also.
112. This claim is allowed.

IN THE COURT OF APPEAL (CIVIL DIVISION)
ON APPEAL FROM THE ADMINISTRATIVE COURT
PLANNING COURT
MR JUSTICE FOSKETT
[2015] EWHC 2311 (Admin)

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: 10 February 2017

Before:

Lord Justice Lewison
and
Lord Justice Lindblom

Between:

R. (on the application of DLA Delivery Ltd.) **Appellant**

- and -

Lewes District Council **Respondent**

- and -

Newick Parish Council **Interested Party**

Mr Christopher Young and Mr James Corbet Burcher (instructed by **Irwin Mitchell LLP**)
for the **Appellant**
Ms Clare Parry (instructed by **Sharpe Pritchard**) for the **Respondent**
The interested party did not appear and was not represented

Hearing dates: 15 and 16 November 2016

Judgment Approved by the court
for handing down
(subject to editorial corrections)

Lord Justice Lindblom:

Introduction

1. This appeal concerns the process by which a neighbourhood development plan was prepared for the parish of Newick in East Sussex – the Newick Neighbourhood Plan (“the NNP”).
2. In a claim for judicial review the appellant, DLA Delivery Ltd., challenged the decision of the respondent, Lewes District Council, to allow the NNP to proceed to a referendum under paragraph 12 of Schedule 4B to the Town and Country Planning Act 1990, prior to its statutory “making” – effectively its adoption – under section 38A(4) of the Planning and Compulsory Purchase Act 2004. The NNP had been prepared by the interested party, Newick Parish Council. The claim was dismissed by Foskett J. on 31 July 2015. He granted permission to appeal on a single ground. On 5 April 2016 I granted permission on the other four.

The issues in the appeal

3. As now refined, the grounds of appeal raise five issues. First, did the district council misunderstand and misapply the requirement in paragraph 8(2)(e) of Schedule 4B that a neighbourhood development plan be in “general conformity with the strategic policies contained in the development plan for the area of the [local planning] authority (or any part of that area)” (ground 1)? Secondly, did it fail to discharge the requirements of article 6(3) of Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (“the Habitats Directive”) and regulation 102 of the Conservation of Habitats and Species Regulations 2010 (“the Habitats regulations”) (ground 2)? Thirdly, did it fail to have regard to relevant national policy and guidance for the delivery of new housing, in the National Planning Policy Framework (“NPPF”) and the Planning Practice Guidance (“PPG”) (ground 3)? Fourthly, did it proceed in breach of regulations 5(6) and 9 of the Environmental Assessment of Plans and Programmes Regulations 2004 (“the SEA regulations”) (ground 4)? And fifthly, did it fail to comply with the requirement in paragraph 7(6) of Schedule 4B that the examiner of a neighbourhood development plan should be “independent”, and was the NNP process thus infected by apparent bias (ground 5)?

The statutory scheme for the preparation of neighbourhood development plans

4. Neighbourhood planning was an important part of the coalition Government’s “localism” agenda. The provisions for the preparation of a “neighbourhood development plan” – in sections 38A, 38B and 38C of the 2004 Act and Schedule 4B to the 1990 Act – were introduced by the Localism Act 2011 (see the first instance judgment in *Crane v Secretary of State for Communities and Local Government* [2015] EWHC 425 (Admin), at paragraphs 1 and 6). Section 38(A)(2) of the 2004 Act defines a neighbourhood development plan as “a plan which sets out policies (however expressed) in relation to the development and use of land in the whole or any part of a particular neighbourhood area specified in the plan”. Once made, a neighbourhood development plan becomes part of the

development plan (section 38(3)(c) of the 2004 Act), in accordance with which planning applications must be determined unless material considerations indicate otherwise (section 38(6)).

5. Where a neighbourhood development plan is to be prepared, a “qualifying body” must make an application for the designation of an area as a “neighbourhood area” (Part 2 of the Neighbourhood Planning (General) Regulations 2012 (“the 2012 regulations”). The local planning authority must assist in this process (paragraph 3 of Schedule 4B to the 1990 Act). The neighbourhood development plan, once prepared, must be consulted upon under regulation 14 of the 2012 regulations, submitted to the local planning authority under regulation 15, and publicized by the local planning authority under regulation 16. If the local planning authority considers that the requirements of paragraph 6 of Schedule 4B have been complied with, it must submit the “draft neighbourhood development order” for examination under paragraph 7. The examiner’s remit is relatively limited (see the judgment of Holgate J. in *Woodcock Holdings Ltd. v Secretary of State for Communities and Local Government* [2015] EWHC 1173 (Admin), at paragraphs 61, 62, 132 and 133, and the judgment of Supperstone J. in *BDW Trading Ltd. v Cheshire West and Chester Borough Council* [2014] EWHC 1470 (Admin), at paragraphs 83 and 84). He must consider whether the draft order meets the “basic conditions” – which do not include the question of whether the neighbourhood development plan is “sound” (paragraph 8(1) and (2) of Schedule 4B). He must prepare a report, recommending either that the draft order, with or without modifications, is submitted to a referendum or that the proposal for the order is refused (paragraph 10). He may only recommend that the order is submitted to a referendum if it complies with the “basic conditions” (paragraph 10(4)). If the local planning authority is satisfied that the neighbourhood development plan “meets the basic conditions”, is “compatible with the Convention rights”, and complies with any provision under section 61E(2), 61J and 61L of the 1990 Act, a referendum on the making of the neighbourhood development order must be held (paragraph 12(4) of Schedule 4B). If more than half of those voting have voted in favour of it, the local planning authority must “make” the neighbourhood development plan unless to do so would breach “any EU obligation or any of the Convention rights” (section 38A(4) and (6) of the 2004 Act).

The NNP process

6. The parish of Newick is described in the NNP (in section 1, “Newick Past and Present”) in this way:

“[It] is a largely rural area of just under eight square kilometres (three square miles) in the North of Lewes District. It lies on the Greenwich Meridian and in the Low Weald of East Sussex. At its centre is the Village of Newick, this being the only settlement of any size in the Parish. The nearest towns are Haywards Heath, seven miles to the west, Uckfield, five miles to the east, Burgess Hill, eight miles to the southwest and Lewes ..., eight miles to the south.”

The population of the village is about 2,500. It is about 7 kilometres from the Ashdown Forest Special Protection Area (“the SPA”) and the Ashdown Forest Special Area of Conservation (“the SAC”), one of the largest continuous blocks of lowland heath in the south-east of England, which provides habitat for two species of ground-nesting birds – the European Nightjar and the Dartford Warbler, both of them European Protected Species.

7. In 2003 the district council adopted the Lewes District Local Plan, whose plan period ran from 1991 to 2011. Some of the policies of that local plan, including Policy RES1, which provided for 4,600 new dwellings in the plan period, were in due course saved and remained effective until the district council and the South Downs National Park Authority adopted the Lewes District Local Plan Part 1: Joint Core Strategy, for a plan period running from 2010 to 2030. The core strategy provides for a minimum of 100 net additional dwellings in Newick, on sites to be identified in the Lewes District Local Plan Part 2: Site Allocations and Development Management Policies Development Plan Document or in neighbourhood development plans. It was published in draft in November 2011. The examination hearings began in January 2015. In his report, published in March 2016, the inspector concluded that it was sound. It was adopted by the district council in May 2016 and by the National Park Authority on 23 June 2016. Its adoption has been challenged by Wealden District Council in proceedings now before the Planning Court. That claim was heard on 8 February 2017, and judgment was reserved.
8. The preparation of the NNP began in 2013. The work was undertaken by a steering group formed by the parish council, with assistance from officers of the district council. In his report, published on 3 December 2014, the examiner, Mr Nigel McGurk, B.Sc. (Hons.), M.C.D., M.B.A., M.R.T.P.I., said that the preparation of the NNP had been a “major, sustained community effort”. He concluded that, subject to a number of modifications, the NNP “is in general conformity with the strategic policies of the development plan for the area”, and that it “meets the basic conditions” (p.25 of his report), and he recommended that it should proceed to a referendum (p.26). The NNP identified four sites for housing – under Policy HO2, Policy HO3, Policy HO4 and Policy HO5. It was put to a referendum on 26 February 2015. There were 846 votes in favour and 102 against, on a turnout of 49%. It was duly made by the district council on 22 July 2015.
9. DLA had promoted a site at Mitchelswood Farm in Newick for allocation in the NNP, without success. But planning permission for a development of up to 50 dwellings on that site was granted by the Secretary of State for Communities and Local Government on appeal on 23 November 2016. The site is outside the 7 kilometre “zone of influence” for the SPA and the SAC. The sites allocated in the NNP are all within that “zone of influence”.

Ground 1 – paragraph 8(2)(e) of Schedule 4B

10. Paragraph 8(2) of Schedule 4B provides:

“(2) A draft order meets the basic conditions if –

- (a) having regard to national policies and advice contained in guidance issued by the Secretary of State, it is appropriate to make the order,
...
- (d) the making of the order contributes to the achievement of sustainable development,
- (e) the making of the order is in general conformity with the strategic policies contained in the development plan for the area of the authority (or any part of that area),

- (f) the making of the order does not breach, and is otherwise compatible with EU obligations, and
... .”

Under section 38(3)(b) of the 2004 Act, the “development plan” comprises “the development plan documents (taken as a whole) which have been adopted or approved in relation to [the] area”. However, paragraph 17(a) of Schedule 4B states that reference to the “development plan” in this schedule “does not include so much of a development plan as consists of a neighbourhood development plan under section 38A of [the 2004 Act]”. There is no relevant statutory definition of “strategic policies”, or of the concept of “general conformity”.

11. Paragraph 183 of the NPPF says that “[neighbourhood] planning gives communities direct power to develop a shared vision for their neighbourhood and deliver the sustainable development they need”. It adds that “[parishes] and neighbourhood forums can use neighbourhood planning to ... set planning policies through neighbourhood plans to determine decisions on planning applications ...”. Paragraphs 184 and 185 state:

“184. Neighbourhood planning provides a powerful set of tools for local people to ensure that they get the right types of development for their community. The ambition of the neighbourhood should be aligned with the strategic needs and priorities of the wider local area. Neighbourhood plans must be in general conformity with the strategic policies of the Local Plan. To facilitate this, local planning authorities should set out clearly their strategic policies for the area and ensure that an up-to-date Local Plan is in place as quickly as possible. Neighbourhood plans should reflect these policies and neighbourhoods should plan positively to support them. Neighbourhood plans and orders should not promote less development than set out in the Local Plan or undermine its strategic policies.

185. Outside these strategic elements, neighbourhood plans will be able to shape and direct sustainable development in their area. Once a neighbourhood plan has demonstrated its general conformity with the strategic policies of the Local Plan and is brought into force, the policies it contains takes precedence over existing non-strategic policies in the Local Plan for that neighbourhood, where they are in conflict. Local planning authorities should avoid duplicating planning processes for non-strategic policies where a neighbourhood plan is in preparation.”

Paragraph 198 says that “[where] a planning application conflicts with a neighbourhood plan that has been brought into force, planning permission should not normally be granted”. In *Woodcock Holdings*, Holgate J. (in paragraph 24 of his judgment) endorsed the submission of counsel for the Secretary of State that the policy in paragraph 198 does not give “enhanced status to neighbourhood plans as compared with other statutory development plans”.

12. The PPG, as published by the Government in March 2014 and current at the time when the NNP was made, stated in paragraph ID:41-009-20140306, under the heading “Can a Neighbourhood Plan come forward before an up-to-date Local Plan is in place?”:

“Neighbourhood plans, when brought into force, become part of the development plan for the neighbourhood area. They can be developed before or at the same time as the local planning authority is producing its Local Plan.

A draft neighbourhood plan or Order must be in general conformity with the strategic policies of the development plan in force if it is to meet the basic condition. A draft Neighbourhood Plan or Order is not tested against the policies in an emerging Local Plan although the reasoning and evidence informing the Local Plan process may be relevant to the consideration of the basic conditions against which a neighbourhood plan is tested.

Where a neighbourhood plan is brought forward before an up-to-date Local Plan is in place the qualifying body and the local planning authority should discuss and aim to agree the relationship between policies in:

- the emerging neighbourhood plan
- the emerging Local Plan
- the adopted development plan

with appropriate regard to national policy and guidance.

...

The local planning authority should work with the qualifying body to produce complementary neighbourhood and Local Plans. It is important to minimise any conflicts between policies in the neighbourhood plan and those in the emerging Local Plan. This is because section 38(5) of [the 2004 Act] requires that the conflict must be resolved by the decision maker favouring the policy which is contained in the last document to become part of the development plan.”

When that guidance was revised in February 2016 a passage was added which said that “... allocating reserve sites [in neighbourhood plans] to ensure that emerging evidence of housing need is addressed ... can help minimise potential conflicts and ensure that policies in the neighbourhood plan are not overridden by a new Local Plan”.

13. Foskett J. summarized DLA’s argument on this ground of the claim in this way (in paragraph 115 of his judgment):

“ ... (i) although [the NNP] is required to be in general conformity with the strategic policies of the Local Plan ..., this was not possible in this case because the adopted Local Plan (which was adopted in 2003 and addressed development needs for the period 1991 to 2011) does not contain any relevant strategic content as regards the contemporary housing needs for the area; (ii) all of the available evidence demonstrates that [the NNP] was never intended to be in conformity with the adopted Local Plan, but to be in conformity with the emerging Local Plan ((Part 1): Core Strategy); (iii) the housing requirement in the Local Plan has not yet been decided and the emerging Local Plan is still in the process of examination yet [the NNP] (and, it is said, the examiner in particular) relies upon the content of the emerging Local Plan for its strategic content, especially in terms of the delivery of [“Suitable Alternative Natural Greenspace” (“SANG”)]; (iv) there is no policy requiring a review of [the NNP] which will henceforth be the local development

plan for Newick until 2030. It is argued that [the NNP] cannot be in conformity with the emerging Local Plan because the latter is not yet adopted.”

14. In preparing the 2003 local plan the district council had planned for a requirement of 4,600 new dwellings between 1991 and 2011 – in accordance with the East Sussex and Brighton & Hove Structure Plan. As the judge said, therefore, the 2003 local plan “[did] not address current housing needs or the needs for the period from 2015 to 2030” (paragraph 116). He referred to the emerging core strategy, the core strategy inspector’s “Interim Findings” in February 2015, and the evidence of Mr Edward Sheath, the district council’s Head of Strategic Policy, in his first witness statement, dated 3 June 2015, confirming that the settlement target for Newick of approximately 100 dwellings in Spatial Policy 2 “will not be proposed to be increased through the modifications to the Core Strategy, subject to Council approval” (paragraphs 117 to 119 of the judgment).
15. Before the judge, Mr Christopher Young, for DLA, contended that this was mere speculation. At that stage the core strategy process had not yet run its course, its final housing requirement might still change, and the figure of “approximately 100” dwellings for Newick might then become meaningless. There was no relevant local plan with which the NNP could be in “general conformity”. The adopted local plan was out of date, and the new core strategy still emerging. The NNP had been drafted to conform with the core strategy (paragraphs 120 and 121 of the judgment). In his report the examiner had said that the Foreword to the NNP “contains an error ... – it is not a requirement for neighbourhood plans to conform with emerging District-wide plans” (p.12). He said this of the section on “Housing” (p.17):

“The introduction, or supporting text, to this section is simply wrong. It states that the Neighbourhood Plan has to accord with the allocation of housing in the emerging Local Plan. This fails to reflect national legislation.”

He recommended the deletion of the offending text.

16. The “essential issue” here, said the judge, was “whether in law it is permissible for [a neighbourhood development plan] to be “made” before the appropriate Local Plan has been adopted” (paragraph 129 of the judgment). He referred to Lewis J.’s judgment in *R. (on the application of Gladman Developments Ltd.) v Aylesbury Vale District Council and another* [2014] EWHC 4323 (Admin), and Holgate J.’s in *Woodcock Holdings*. In both of those cases the court had accepted that the absence of strategic policies for housing in an up-to-date local plan did not preclude the making of a neighbourhood development plan. Though not bound by those decisions, Foskett J. saw no reason to think that the essential reasoning in them was wrong (paragraphs 130 to 138).
17. Mr Young submitted to us that the “basic condition” in paragraph 8(2)(e) demonstrates Parliament’s intention that a neighbourhood development plan should not undermine the strategy in an up-to-date local plan, including its policies for the provision of new housing in the local planning authority’s area. That, said Mr Young, is the true purpose of paragraph 8(2)(e). Government policy in paragraph 184 of the NPPF is consistent with it. The requirement in paragraph 8(2)(e) did not prevent the NNP being made before the core strategy had been adopted, so long as it was, at the time of its making, in “general conformity” with the “strategic policies” of the 2003 local plan which had been saved and therefore remained policies of the development plan. Neither at the time of the examiner’s

report – December 2014 – nor when the NNP was made – July 2015 – was the emerging core strategy part of the development plan. There were, in fact, no “strategic policies” for housing in the development plan with which the NNP could properly be said to be in “general conformity”. In this respect the NNP was, said Mr Young, “premature”.

18. Policy RES1 of the 2003 local plan was a saved policy. It related to the period from 1991 to 2011. It said nothing about the provision of housing after 2011, and, as Mr Young put it in reply, “plainly had no relevance post-March 2011”. The NNP’s figure of 100 dwellings to be provided in Newick in the period from 2015 to 2030 did not derive from the 2003 local plan. It derived from the emerging core strategy, whose period runs from 2010 to 2030. This is clear from the examination draft of the NNP published in August 2014, which stated in its Foreword that “[as] required by the regulations, [the NNP] conforms with [the district council’s] proposed Joint Core Strategy, due for adoption in 2014/15, which sets out the strategic planning policy of the district’s Local Plan until 2030 ...”, and in section 4.2, “HOUSING”, that “[to] comply with government legislation, [the NNP] has to accord with the allocation of new housing for Newick proposed in [the district council’s] emerging Local Plan”, which “requires that construction of a further 100 new homes by 2030 be planned for in the Parish of Newick”. It is also clear from the Newick Neighbourhood Plan: Basic Conditions Statement, also published in August 2014, which stated (on p.7) that “[the NNP] is written to be in general conformity with both the strategic and core policies of the Core Strategy, which is at an advanced stage, as well as the saved policies of the Local Plan”. In his report the examiner made it clear that an attempt to achieve “general conformity” with the emerging core strategy was inappropriate (see paragraph 15 above). The original reference to “general conformity” with the emerging core strategy had been removed in the draft of the NNP that went to the referendum, but that erroneous intention, Mr Young submitted, is still apparent in section 4.2, which states:

“To reflect the emerging housing target of [the core strategy], this plan seeks to allocate sites for the construction of 100 new homes by 2030,”

So, submitted Mr Young, the NNP failed the “basic condition” in paragraph 8(2)(e). It could not be in “general conformity” both with the housing policies of the 2003 local plan and with the housing policies of the emerging core strategy. Section 38(5) of the 2004 Act does not overcome DLA’s concern here, which is that the NNP was found to meet the requirement of “general conformity” in a vacuum, before the core strategy was adopted, and had been relied upon by the district council in refusing planning permission for the Mitchelswood Farm proposal.

19. I do not accept that argument. As Ms Clare Parry, for the district council, pointed out, submissions similar to Mr Young’s have several times been rejected at first instance. In *Gladman Developments v Aylesbury Vale District Council* the saved policies of the adopted local plan did not include any policies relating to the identification of the housing needs for the district, or any strategic housing policies. The local planning authority had prepared a draft local plan that identified a housing requirement for the district as a whole and for the settlement, Winslow, for which a neighbourhood development plan was being prepared. But the local plan inspector recommended that the local plan should not be adopted. There was therefore no adopted development plan document containing strategic policies for housing development. Lewis J. said (in paragraph 58 of his judgment):

“In my judgment, a neighbourhood development plan may include policies dealing with the use and development of land for housing, including policies dealing with the location of a proposed number of new dwellings, even where there is at present no development plan document setting out strategic policies for housing. The examiner was therefore entitled in the present case to conclude that the Neighbourhood Plan satisfied basic condition 8(2)(e) of Schedule 4B to the 1990 Act as it was in conformity with such strategic policies as were contained in development plan documents notwithstanding the fact that the local planning authority had not yet adopted a development plan document containing strategic policies for housing. . . .”

and (in paragraph 59):

“[As] a matter of statutory language, there is nothing in the provisions of either Schedule 4B to the 1990 Act or the provisions of the 2004 Act governing neighbourhood development plans to support the contention that a neighbourhood development plan cannot include policies dealing with the use and development of land for housing in the absence of a development plan document setting out strategic policies on housing issues. . . . [The condition in paragraph 8(2)(e)] is dealing with a situation where there are in existence strategic policies and they are contained in a development plan document and there is a conflict between those policies and the policies contained in a neighbourhood development plan. The condition is not dealing with a situation where there are no strategic policies dealing with particular issues contained in a development plan document. The condition is not worded in terms that a neighbourhood development plan cannot include policies dealing with particular issues unless and until a development plan document is brought into existence containing strategic policies on such issues.”

To the same effect, though not on precisely parallel facts, is the reasoning of Supperstone J. in *BDW Trading* (in paragraph 82 of his judgment), Holgate J. in *Woodcock Holdings* (in paragraph 131 of his judgment), and since Foskett J.’s judgment was handed down, Holgate J. in *R. (on the application of Crownhall Estates Ltd.) v Chichester District Council* [2016] EWHC 73 (Admin) (in paragraphs 27 to 29 and 60 to 64 of his judgment).

20. In my view Foskett J.’s conclusions on this issue (in paragraphs 135 to 139 of his judgment) are consistent with those first instance decisions, and correct.
21. Mr Young submitted that Lewis J. was wrong in *Gladman Developments v Aylesbury Vale District Council* to construe paragraph 8(2)(e) as permitting “general conformity” with “something which does not exist”. But I think the reasoning in the passages I have quoted from Lewis J.’s judgment is perfectly good. It is also consistent with his analysis in *Gladman Developments Ltd. v Wokingham Borough Council* [2014] EWHC 2320 (Admin). There the local planning authority had made allocations in a development plan document to meet a core strategy’s housing requirement which derived from a regional plan. It was argued that the plan could not in those circumstances be “sound”, because it was not based on the full “objectively assessed needs” for housing in the authority’s area, as government policy in paragraph 47 of the NPPF now requires. Lewis J. rejected that argument (in paragraphs 60 to 69 of his judgment). Similar submissions also failed in *Oxted Residential Ltd. v Tandridge District Council*, both before Dove J. at first instance ([2015] EWHC 793 (Admin)), and before this court in the subsequent appeal ([2016] EWCA Civ 414: see, in

particular, paragraphs 29 to 38 of my judgment, with which Jackson and Patten L.JJ. agreed). I recognize, of course, that those two cases were not concerned with a neighbourhood development plan's relationship to a local plan whose period had expired, but with the relationship between a development plan document and a core strategy said to be out of date because it did not conform with government policy in the NPPF.

22. I do not see how Mr Young's argument can be reconciled with the relevant statutory context. The provisions of Part 2 of the 2004 Act envisage a "local development scheme" comprising "development plan documents", which will together form the statutory development plan for the local planning authority's area (section 17(3) of the 2004 Act). A neighbourhood development plan, once made, will be a constituent part of the development plan (section 38A(2) of the 2004 Act). As one would expect, the statutory scheme seeks to ensure an appropriate degree of consistency between a neighbourhood development plan and the strategy of the extant, statutorily adopted development plan. That is the essential purpose of the "basic condition" in paragraph 8(2)(e). Section 13 of the 1990 Act requires local planning authorities to keep their development plan documents under review. If a neighbourhood development plan has been made and the local planning authority later produces a development plan document containing new "strategic policies", that development plan document will, under section 38(5) of the 2004 Act, prevail over any inconsistent policies in the neighbourhood development plan. And if a policy in a neighbourhood development plan is not, or ceases to be, up-to-date, this will be a material consideration in a development control decision, and may justify departing from that policy.
23. Nor, in my view, does the language of paragraph 8(2)(e) bear the interpretation urged upon us by Mr Young. The true sense of the expression "in general conformity with the strategic policies contained in the development plan" is simply that if there are relevant "strategic policies" contained in the adopted development plan for the local planning authority's area, or part of that area, the neighbourhood development plan must not be otherwise than in "general conformity" with those "strategic policies". The degree of conformity required is "general" conformity with "strategic" policies. Whether there is or is not sufficient conformity to satisfy that requirement will be a matter of fact and planning judgment (see the judgment of Laws L.J. in *Persimmon Homes and others v Stevenage Borough Council* [2006] 1 W.L.R. 334, at pp.344D-345D and pp.347F-348F).
24. The short answer to Mr Young's argument is, I think, to be found within the argument itself. Housing allocations made in a neighbourhood development plan for a plan period which does not coincide or even overlap with the period of an adopted local plan cannot logically be said to lack "general conformity" in this respect with the strategic housing policies of that local plan for that local plan period. In those circumstances the two plans will have been planning for the provision of housing in wholly different periods. In this case – as in *Gladman Developments v Aylesbury Vale District Council* (see paragraphs 27 and 31 of the judgment), but in contrast, for example, to the situation in *Crane* (see paragraph 7 of the judgment in that case) – the period for which the 2003 local plan had planned had elapsed before the preparation of the NNP was begun, and some four years before it was made. As Mr Young himself submitted in reply, the NNP does not align itself with the housing requirement in the 2003 local plan, and the NNP could not possibly do that because its period runs from 2015 to 2030, whereas the period of the 2003 local plan ran from 1991 to 2011.

25. Paragraph 8(2)(e) does not require the making of a neighbourhood development plan to await the adoption of any other development plan document. It does not prevent a neighbourhood development plan from addressing housing needs unless or until there is an adopted development plan document in place setting a housing requirement for a period coinciding, wholly or partly, with the period of the neighbourhood development plan. A neighbourhood development plan may include, for example, policies allocating land for particular purposes, including housing development, even when there are no “strategic policies” in the statutorily adopted development plan to which such policies in the neighbourhood development plan can sensibly relate. This may be either because there are no relevant “strategic policies” at all or because the relevant strategy itself is now effectively redundant, its period having expired. The neighbourhood development plan may also conform with the strategy of an emerging local plan. It may, for example, anticipate the strategy for housing development in that emerging plan and still not lack “general conformity” with the “strategic policies” of the existing development plan.
26. This understanding of paragraph 8(2)(e) is consistent with national policy and guidance in the NPPF and the PPG. As Foskett J. recognized (in paragraph 129 of his judgment), such policy and guidance is not an aid to statutory interpretation. However, the policies in paragraphs 184 and 185 of the NPPF reflect the statutory requirement, in paragraph 8(2)(e), for a neighbourhood development plan to be in “general conformity” with the “strategic policies” of the development plan, and the references to the “Local Plan” in those policies of the NPPF are clearly to a statutorily adopted local plan, not an emerging plan. Both NPPF policy and the guidance in the PPG are designed to prevent the mischief of a neighbourhood development plan frustrating the strategy of an up-to-date local plan. But the encouragement in paragraph 184 for local planning authorities to “set out clearly their strategic policies for the area and ensure that an up-to-date Local Plan is in place as quickly as possible” does not imply that only when an up-to-date local plan has already been adopted will it be possible for a neighbourhood development plan to be taken through its own statutory process. The guidance in the PPG explicitly accepts that a neighbourhood development plan can be prepared “before or at the same time” as a local plan, and explains how a local planning authority should proceed if the neighbourhood development plan is brought forward first. Such guidance would have been unnecessary and inappropriate if the statutory scheme required the preparation of the neighbourhood development plan to be held back until an up-to-date local plan is in place.
27. Finally, I see no force in the submission that a statement made in the House of Commons by the then Planning Minister, Mr Greg Clark M.P. at the committee stage of the passage through Parliament of the Localism Bill ought to be admitted in these proceedings to assist in the construction of paragraph 8(2)(e). The Minister said that “one test of the soundness of a neighbourhood plan – ... a requirement for it even to go to a referendum – is that it has to be consistent with the local plan, which itself has to be consistent with national policy” (*Hansard*, HC, Public Bill Committee, 1 March 2011, col. 700). I cannot see how that statement of the Minister could conceivably be admissible under the principles identified by the House of Lords in *Pepper (Inspector of Taxes) v Hart* [1993] A.C. 593 (see the speech of Lord Browne-Wilkinson at p.634F to p.635B). The legislative provision with which we are concerned is neither ambiguous nor obscure, and the statement on which DLA seeks to rely cannot be said to be clear on any contentious question of construction.
28. I would therefore reject this ground of appeal.

Ground 2 – article 6(3) of the Habitats Directive and regulation 102 of the Habitats regulations

29. Article 6(2) of the Habitats Directive requires Member States to “take appropriate steps to avoid, in the special areas of conservation, the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated ...”. Article 6(3) provides that “[any] plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives”, and that “[in] the light of the conclusions of the assessment ... and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public”. Regulation 102(1) of the Habitats regulations provides that where a “land use plan” is “(a) ... likely to have a significant effect on a European site ... (either alone or in combination with other plans or projects)”, and “(b) is not directly connected with or necessary to the management of the site”, the plan-making authority “must, before the plan is given effect, make an appropriate assessment of the implications for the site in view of that site’s conservation objectives ...”. Regulation 102(4) provides that “[in] the light of the conclusion of the assessment, and subject to regulation 103 (considerations of overriding public interest), the plan-making authority ... must give effect to the land use plan only after having ascertained that it will not adversely affect the integrity of the European site”.
30. The relevant principles in European and domestic case law are well established and familiar. Article 6(3) of the Habitats Directive must be applied consistently with the “precautionary principle” (see the judgment of Lord Carnwath in *R. (on the application of Champion) v North Norfolk District Council* [2015] UKSC 52, at paragraph 12). The need for an “appropriate assessment” is triggered by a risk that the plan or project in question will have a significant effect on a European site. Such a risk will exist if, on the basis of objective information, the possibility of a significant effect cannot be excluded (see the judgment of the Grand Chamber of the European Court of Justice in Case C-127/02 *Landelijke Vereniging tot Behoud van de Waddenzee v Staatssecretaris van Landbouw, Natuurbeheer en Visserij* [2005] 2 C.M.L.R. 31, at paragraph 44, and the Opinion of Advocate General Sharpston in Case C-258/11 *Sweetman v An Bord Peanala* [2013] 3 C.M.L.R. 16, at paragraphs 47 to 50). It is for a third party who asserts that there is a risk which cannot be excluded on the basis of objective information to produce credible evidence to the court that the risk is a real one, and not merely hypothetical (see the judgment of Sullivan L.J. in *Boggis v Natural England* [2009] EWCA Civ 1061, at paragraph 37). Where the need for an “appropriate assessment” is not obvious, the competent authority must decide whether it is necessary (see the judgment of Lord Carnwath in *Champion*, at paragraph 35). The views of Natural England may – though not must – be given considerable weight in this exercise (see, for example, the judgment of Beatson J., as he then was, in *Shadwell Estates Ltd. v Breckland District Council* [2013] EWHC 12 (Admin), at paragraph 72).
31. A decision-maker considering whether a significant effect can be ruled out may take into account mitigation (see the judgment of Sullivan J., as he then was, in *R. (on the application of Hart District Council) v Secretary of State for Communities and Local Government* [2008] EWHC 1204 (Admin), at paragraphs 54 to 76). Where mitigation

measures are relied upon, the question will be whether there was “sufficient information at that stage” to enable the decision-maker to be satisfied “as to the achievability of the mitigation ...” (see the judgment of Richards L.J., with which Underhill and Briggs L.J.J. agreed, in *No Adastral New Town Ltd. v Suffolk Coastal District Council* [2015] EWCA Civ 88, at paragraph 72). In some circumstances, for example, the provision of SANGs may be relied upon as mitigation even though their exact location and ultimate deliverability remain for the time being uncertain (see Richards L.J.’s judgment in *No Adastral New Town*, at paragraphs 31, 34, 39 and 70 to 74, and the judgment of Sales L.J., with which Richards and Kitchin L.J.J. agreed, in *Smyth v Secretary of State for Communities and Local Government* [2016] Env. L.R. 7, at paragraphs 77 and 87 to 102).

32. As Foskett J. acknowledged (in paragraph 39 of his judgment), if any of the sites allocated for housing in the NNP were to be developed – except perhaps for the site allocated under Policy HO5 – appropriate SANG would have to be found. The site allocated under Policy HO2, at Cricketfields, was the subject of a resolution by the district council in May 2015 to grant planning permission for 31 houses, subject to a condition preventing implementation until a SANG had been provided. As the judge explained (in paragraph 40), it was “agreed that 8 hectares of SANG is required per 1,000 additional population”, and “each SANG must be a minimum size which needs to be large enough to accommodate a minimum of a 2.3-2.5 km circular walk (without doubling back) and ideally with a choice of routes extending up to 5km in length”. The “purpose is to attract dog walkers”. For developments near Ashdown Forest, “the [SANGs] must relate well to the location of the new housing, either on the edge of the new housing proposal or in close proximity to it, because its primary purpose is to be sufficiently attractive to divert people (especially dog walkers) from the housing development away from the forest to the new SANG”.
33. In the Habitat Regulations Assessment Report (Stages 1-3) for the emerging core strategy, published in January 2013 (“the HRA”), the district council said that “using the precautionary principle, it was necessary to continue the [“appropriate assessment”] process for the two sites” (paragraph 4.5). The “appropriate assessment”, in section 6 of the HRA, acknowledged that “mitigation of new residential development within 7km of the Ashdown Forest was required as there was no evidence to suggest that there would not be significant negative effect alone and in combination, on the protected site by increasing recreational disturbance”, and “[given] that the Proposed Submission Core Strategy includes a figure of 100 residential units to be provided in Newick (Spatial Policy 2), it meant that the effect needed to be mitigated or alternative solutions found” (paragraph 6.1). Section 7 described the intended approach to the provision of SANGs for residential development within 7 kilometres of Ashdown Forest. It envisaged that “work on identifying suitable SANG provision is progressed by [the district council] so that a site or sites can be allocated in a Development Management Policies Development Plan Document or a Neighbourhood Development Plan” (paragraph 7.17). The approach to the provision of SANGs was refined in an addendum report produced in March 2014, which amended paragraph 7.17 of the HRA to include this:

“SANG(s) will be provided at an appropriate scale, design and location in accordance with advice from Natural England. The delivery of a SANG or SANGs is in order to successfully offset the impact of residential development in the 7km zone around the Ashdown Forest. Therefore, until such a time that appropriate SANG provision is delivered or site specific mitigation is provided that is agreed to

be suitable by the District Council and Natural England, development resulting in a net increase of one or more dwellings within the 7km zone will be resisted.”

34. As Foskett J. explained (in paragraphs 66 to 97 of his judgment), the district council found that the NNP did not require “appropriate assessment”. In February 2014 it produced the Habitat Regulations Screening Report for the NNP, which had been prepared in July 2013. In section 1, “Introduction”, the Habitats Regulations Screening Report explained that it “presents the finding of the screening stage of the [Habitats Regulations Assessment] process, examining whether or not the emerging Newick Neighbourhood Development Plan ... is likely to have a likely significant effect [sic] on any protected sites” (paragraph 1.4), and that “[this] screening assessment should be read alongside the Habitat Regulations Assessment of the Lewes District Core Strategy: Proposed Submission Version” (paragraph 1.5). In section 2, “Process”, it acknowledged that “[other] plans and strategies that could have an impact on protected sites “in combination” with the plan under production, also have to be taken into account during the screening stage” (paragraph 2.8). It also recognized that “[importantly,] the HRA process is underpinned by the precautionary principle, especially in the assessment of potential impacts and their resolution”, and that “[therefore] if it is not possible to rule out a risk of harm, based on the evidence available, to a protected site, it is assumed a risk may exist”, and this “would mean that such a site could not be ‘screened out’ at the initial stage of the process” (paragraph 2.9).
35. Section 4 of the Habitat Regulations Screening Report, “Screening the Protected Site”, referred to “the HRA on the Lewes District Core Strategy”, which had “assumed that 100 homes would be built in Newick by 2030” (paragraph 4.2). It had noted that “... it has been determined, in consultation with Natural England, that the Core Strategy would not have a significant negative effect on the Ashdown Forest SAC/SPA in terms of nitrogen deposition either alone or in combination with other plans”, and therefore that “mitigation or avoidance measures are not required” (paragraph 4.3). It had also “found that development within 7km of the Ashdown [Forest] (within which most of Newick Parish lies) was likely to have a significant negative effect on the Ashdown Forest SAC/SPA in terms of recreational disturbance, unless mitigated against”, but that, “as a result [of the mitigation measures], the Core Strategy complies with the Habitats Regulations and does not require further assessment” (paragraph 4.4). It had been “assumed that [the NNP] will plan for the same amount of housing (100 homes) as tested in the HRA on the Core Strategy” (paragraph 4.5). Under the heading “The Screening Assessment”, the Habitat Regulations Screening Report said this (in paragraph 4.6):

“As can be seen in Table 1 below, a screening assessment has been undertaken. From the findings of the screening assessment, it has been determined that [the NNP] would not cause a likely significant effect to the Ashdown Forest SAC/SPA, either alone or in combination with other plans. As such, we have screened out the site from further stages of the HRA process.”

Table 1, “Screening Assessment of Ashdown Forest SAC/SPA”, under the heading “LIKELY SIGNIFICANT EFFECTS TO SITE (INCLUDING POTENTIAL ‘IN-COMBINATION’ IMPACTS)?”, referred to the conclusions in the HRA that there would be no significant effect on the European site – either from nitrogen deposition caused by traffic generated by the new development, or, with the necessary mitigation for development within 7 kilometres of the European site, from recreational disturbance. It stated:

“The HRA for the Lewes District Core Strategy considered whether nitrogen deposition on the site, caused by traffic, would be significant. It found that it would not. As [the] will plan for the same amount of development as the Core Strategy, it is assumed that it would also not have a significant effect.

The HRA for the Lewes District Core Strategy considered whether recreational disturbance caused by residents from new development would have a significant effect on the site. It found that development within 7km of the Forest would need to be mitigated against. The Core Strategy introduces the necessary mitigation and therefore the HRA found that development would not have a significant effect on the site. As [the NNP] will plan for the same amount of development as the Core Strategy, it is assumed that it would also not have a significant effect.”

36. That conclusion was consistent with the view expressed by Natural England in an e-mail to the district council dated 17 May 2013, in which they stated that “[as] the amount of development proposed in [the NNP] is in accordance with the Lewes DC Local Plan [sic], Natural England agrees with your conclusion of the HRA screening of no likely significant effect”.

37. The examination draft of the NNP referred (on p.8) to the SPA and the SAC, to the “protected zone ... encompassing all land within 7km of [the] boundary [of Ashdown Forest]”, and stated:

“... Much of Newick lies within that zone and it has been agreed that [SANGs] must be developed before any new housing is permitted within the zone. It is understood that [the district council] is working towards provision of such [SANGs]. ...”

38. In its letter to the district council dated 13 October 2014, in response to consultation on the NNP, DLA complained that no relevant and available SANGs had yet been identified, that providing them would be difficult and likely to extend “over many years”, that there was no certainty about their provision – or even on the formula for the calculation of payments for the “Suitable Access and Management and Monitoring Strategy” (“SAMMS”), and that this was an obstacle to the delivery of the sites allocated for housing in the NNP. In their consultation response, undated but seemingly submitted to the district council in September or early October 2014, Natural England said that “[although] reference to [SANGs] is made in the final paragraph of page 8 of [the NNP], it is not clear that development within the [7 kilometre] zone of influence will need to contribute to delivering this and other measures such as on-site visitor management ...”.

39. In his report the examiner said this (on p.18):

“I note above that [the NNP] recognises the need to provide [SANGs]. As a consequence of the location of the Neighbourhood Area in relation to the Ashdown Forest SPA, relevant development proposals must provide mitigation measures to be delivered prior to occupation and in perpetuity. Any such measures should include the provision of [SANGs].

It is not the role of a neighbourhood plan to set policy requirements for matters that need to be considered on a more strategic basis. [The NNP] does not, in itself, seek to allocate SANGS but it does highlight the need for them. I consider that, in the interests of clarity, it would be appropriate to set this out within Policy HO1.

- Policy HO1, add “HO1.7 Due to the Neighbourhood Area’s location, relevant development proposals must provide mitigation measures to be delivered prior to occupation of the development and in perpetuity. Measures should include the provision of [SANGs].”

I note that there is no substantive evidence to demonstrate that it would not be possible to meet the proposed requirements resulting from the above. I also note in this specific regard that [the district council] is working towards the provision of [SANGs] and that this is recognised within [the NNP].”

Policy HO1.7 was duly added to the NNP. It stated:

“HO1.7 Due to the Neighbourhood Area’s location, relevant development proposals must provide mitigation measures to be delivered prior to occupation of the development and in perpetuity. These measures should include the provision of [SANGs], or similar as agreed by [the district council] and Natural England, as well as contributions to a monitoring and management strategy at Ashdown Forest.”

40. On 21 September 2016 – after the hearing before the judge – the district council’s Planning Applications Committee resolved to grant planning permission for the provision of a SANG on a site of 11.8 hectares to the south of Jackies Lane in Newick, owned by a developer, Thakeham Homes Ltd.. The officer’s report to the committee, recommending that planning permission be granted, stated (in paragraph 6.14):

“Natural England, [the district council’s] expert advisers in this instance, has been consulted in relation to the submitted scheme. They have confirmed that they consider that the proposals fulfil the criteria for SANG. Furthermore they have confirmed that the size of the SANG being 11.8 hectares, is sufficient in size to meet the full policy criteria of 8ha per 1000 population i.e. it will mitigate against the effect of up to 1,375 people or approximately 572 new dwellings.”

and (in paragraph 6.43):

“Long term financing of the maintenance and management of the SANG is likely to be secured through Section 106 contributions sought from future housing developments coming forward in the 7km zone. As set out above the sites already allocated in [the NNP] will provide at least 100 additional dwellings. Discounting the site that already has planning permission (Cricketfield) this leave a minimum of 67 units. Whilst details of the expected management costs are still awaited from the applicants it is not expected that these are likely to be high and are therefore unlikely to result in unreasonable or unviable costs for future housing proposals coming forward in the 7km zone of influence.”

On 16 November 2016, as we were told after the hearing of the appeal, the district council granted planning permission for the SANGs at Jackies Lane, subject to a section 106

agreement committing the developer to transfer it to the parish council, the district council or a management company for its upkeep.

41. Before the judge, and again before us, Mr Young argued that the making of the NNP was vitiated by the lack of evidence to demonstrate that the requisite SANGs would actually be provided, and the allocations dependent on them brought forward. He submitted that there was here a breach of article 6(3) of the Habitats Directive and regulation 102 of the Habitats regulations. He relied on Richards L.J.'s observation in his judgment in *No Adastral New Town* (at paragraph 72) that a local planning authority in a situation of this kind must have "sufficient information ... to be duly satisfied that the proposed mitigation could be achieved in practice". In this case, he submitted, the necessary degree of certainty was absent. The examiner should have seen this, but failed to do so.
42. Mr Young also argued that the district council had omitted to consider the possibility of the NNP having significant effects on the European site in combination with other plans. That submission is not right. The Habitat Regulations Screening Report expressly concluded, in paragraph 4.6, that the NNP "would not cause a likely significant effect to the Ashdown Forest SAC/SPA, either alone or in combination with other plans", and the analysis in Table 1 included "POTENTIAL 'IN-COMBINATION' IMPACTS". The HRA had also considered (in paragraph 6.1) the potential effects on the European site "alone and in combination ..." (see paragraphs 33 to 35 above).
43. The judge rejected Mr Young's argument on the deliverability of SANGs. In his view the examiner's conclusions were sound. DLA's letter of 13 October 2014 had, in fact, provided no "substantive evidence" to support the conclusion that SANGs could not be delivered. The examiner was "perfectly entitled to express the view that he did based upon the assertion of [the district council] that work was continuing to identify SANG(s) for the purposes of ensuring that the contemplated housing development could proceed" (paragraphs 87 and 88 of the judgment). Ms Parry had submitted, as she did to us, that both the district council and the examiner had been properly satisfied that the required SANGs and payments for SAMMS would come forward. The judge saw support for that submission in the judgment of Sales L.J. in *Smyth*. Sales L.J. had referred (in paragraph 29 of his judgment) to the present "uncertainty about how and when both the substantial residential developments contemplated by the draft LDFs and the setting up of the SANGs will take place", acknowledging that the land for SANGs might have to be acquired by means of compulsory purchase orders, and that the funding for its acquisition had still to be found. But as he had gone on to say (in paragraph 77), the inspector had been "lawfully entitled to take into account the proposed preventive safeguarding measures in respect of the SPA and SAC under the first limb of art.6(3), for the purposes of giving a screening opinion to the effect that no "appropriate assessment" would be required under the second limb ... , in the course of his consideration whether to grant planning permission". In Foskett J.'s view that analysis "offers support for the proposition that plans for the provision of SANG in the future (even those with uncertainties attached) may be sufficient to comply with the [Habitats] Directive and the [Habitats regulations]" (paragraphs 89 to 92 of his judgment).
44. Foskett J. accepted that the court could find a local planning authority's conclusion on this question "unsustainable on the usual public law grounds", but rightly acknowledged that "the threshold for sustaining such a challenge is high even where the principle being applied is the strict precautionary principle ..." (paragraph 93). The issue for the court, he

said, was “not ... whether SANG will be deliverable as required, but whether [the district council] was entitled to rely upon its belief that it will be delivered within the plan period and whether the examiner was justified in accepting that as a sufficient basis for [the NNP] to meet the “basic conditions”...”. In the light of Richards L.J.’s judgment in *No Adastral New Town*, and Sales L.J.’s in *Smyth*, “the resolution of the issue must inevitably be fact and context specific”. Here, the court could place reliance on the district council’s confidence in “the deliverability of SANG” (paragraph 94). And “if the anticipated SANG does not materialise in a way that permits the necessary housing development, [the district council] will see itself as obliged to consider alternative sites” (paragraph 95).

45. Mr Young submitted that in *No Adastral New Town* and *Smyth* there had been considerably more detail before the decision-maker than was before the examiner and the district council in this case. In both of those cases an area or site had been identified for SANG (see paragraph 39 of Richards L.J.’s judgment in *No Adastral New Town*, and paragraph 28 of Sales L.J.’s in *Smyth*). That degree of certainty was missing in this case. The requisite “precautionary” approach cannot be discerned either in the assessment in the district council’s Habitat Regulations Screening Report or in the examiner’s relevant conclusions. The examiner seems to have imposed an evidential burden on objectors to the NNP to demonstrate that SANGs would not or could not be provided, and to have assumed the required SANGs would emerge without any evidence on which to base that assumption – whereas he should have assumed they would not emerge unless there was sufficient evidence that they would.
46. I cannot fully accept that argument, for these reasons.
47. First, as the judge found, both the district council and the examiner clearly understood that SANGs would in due course have to be identified and brought forward in a reasonable time to enable the allocated sites to be developed for housing within the period of the NNP (see paragraphs 32 to 44 above). This is not a case of a failure by a local planning authority or an inspector to recognize the need for mitigation of a particular kind to be in place before planned development may proceed, or to address the deliverability of that mitigation and thus the deliverability of the development itself. These questions were faced in the course of the preparation of the NNP, and in the light of DLA’s objection (see, in particular, paragraphs 32 to 39 above). In the end, however, they were matters of planning judgment for the examiner and the district council.
48. Secondly, I do not accept that, in the context of the strict “precautionary” approach consistently emphasized in European and domestic authority, the relevant planning judgments formed by the district council and the examiner were, on their face, irrational or otherwise unlawful. Those judgments, it should be remembered, fell to be made in a plan-making process, not in the making of a decision on an application for planning permission. In considering whether “appropriate assessment” for the NNP was necessary under article 6(3) of the Habitats Directive and regulation 102 of the Habitats regulations, the district council and the examiner clearly understood that mitigation in the form of suitable SANGs would be required to be in place before development on the allocated sites could go ahead, or at least before the new dwellings could be occupied. It was on this understanding that the examiner had to exercise his planning judgment. In principle, in my view, it was open to him to conclude, as a matter of planning judgment, that the requisite SANGs would be provided, and that, throughout the period of the NNP, the SPA and the SAC would therefore be safeguarded against any significant effects (see paragraphs 43 and 44 above).

49. Thirdly, I do not accept that, in substance, the planning judgment on which the examiner's conclusion rested was in any way inconsistent with the "precautionary" approach, or otherwise legally flawed. As he said, although the NNP acknowledged the need for SANGs, it was not allocating land for their provision. It was therefore unnecessary to resolve in this plan-making process which particular site or sites would be suitable for SANGs. The efficacy of SANGs as mitigation seems not to have been in dispute. At any rate, the district council and the examiner were evidently in no doubt about that, and it is not argued that they ought to have been (see paragraphs 32 to 37 above). At this stage it was perhaps inevitable, and anyway not surprising, that the location of the SANGs and the timing of their provision should still be uncertain. Such uncertainty might well have been an obstacle to a grant of planning permission for a proposed development of housing. But it was not an obstacle to allocations for housing development in Newick being made in the NNP. The examiner noted that, as the NNP stated, the district council was "working towards the provision of SANGs". In the circumstances I think he was entitled to take into account the absence of "substantive evidence to demonstrate that it would not be possible to meet the proposed requirements ..." (see paragraphs 39, 43 and 44 above). The absence of such evidence was a relevant factor here, to which he could reasonably give weight, and did. In doing so, he was not, in my view, intending to reverse an evidential burden, or to depart from the "precautionary" approach. He was, in effect, asking himself the critical question to which Richards L.J. referred in his judgment in *No Adastral New Town* (at paragraph 72): whether, on all the material before him, he was satisfied that the proposed mitigation "could be achieved in practice". On a fair reading of his conclusions, the answer he gave to that question was plainly "Yes".
50. However, I do accept that the examiner did not explicitly address the lack of positive evidence to demonstrate that the necessary SANGs would in fact be brought forward in a timely way to ensure that the allocations in the NNP were delivered. And I also accept that he should have done that. In this respect his report, in my view, falls short of the standard of reasons the law requires of an examiner in a neighbourhood development plan process, limited as his role may be (see paragraph 5 above). He was, of course, making a predictive planning judgment, looking at a plan period for the NNP which was to run until 2030, some 15 years in the future. Even so, I think he needed to do more than merely express the conclusion that there was "no substantive evidence" to demonstrate the impossibility of SANGs being provided in the right place at the right time in the course of the plan period – accurate though this statement was as a matter of fact. Nor was it a sufficient explanation for his planning judgment here simply to observe – true as this was too – that the district council was "working towards the provision of [SANGs] and ... this is recognised within [the NNP]". I think he needed to go further than that, and to articulate more fully than he did why he was able to conclude that SANGs would be provided, even though, for the moment, particular sites for them had not been identified. This he did not do. The criticism that has some sting, in my view, is that his conclusions, terse as they are, might be taken to suggest that he was placing more trust than he should in the belief of the parish council and the district council that the SANGs would indeed come forward. In short, he needed to say why he was able to share their confidence without hard evidence to support it at this stage.
51. I think that analysis sits perfectly well with the relevant reasoning in the decisions of this court in *No Adastral New Town* and *Smyth*. I have in mind here, in particular, the observations of Richards L.J. in paragraph 74 of his judgment in *No Adastral New Town*, where he endorsed the conclusion of Patterson J. at first instance that the inspector in that

case had been “quite justified in coming to a decision that the mitigation was sufficiently certain for Development Plan purposes” (my emphasis), and went on to say that the policy in question contained “a sensible precautionary measure in a [core strategy] that sets the framework for development until 2027, and ... serves to underline the obligation to have continuing regard to the avoidance of harm to the SPA at all subsequent stages of the planning process”. Such an approach, said Richards L.J., “is in accordance with Article 6 of the Habitats Directive, not in breach of it”. I agree with those observations, and they seem pertinent in this case too.

52. As I have said, however, I do see some force in DLA’s argument on this issue. If I am right about that, the question would then be whether the limited success of Mr Young’s submissions here should prove fatal to the NNP. I do not think it should. The relevant principles on which the court will act in exercising its discretion to withhold relief are settled and familiar (see the decisions of the Supreme Court in *Walton v Scottish Ministers* [2012] UKSC 44, in particular the judgment of Lord Carnwath at paragraphs 102 to 140, and *Champion*, in particular Lord Carnwath’s judgment at paragraphs 54 to 66). In this case I am in no doubt that the application of those principles should lead to relief being withheld. The rights conferred by the European legislation have, in practice, been enjoyed. And no substantial prejudice, either to DLA or to any other participant in the NNP process, has been demonstrated. As I have said, the examiner’s basic conclusion on SANGs cannot be stigmatized as irrational. Fuller reasons, if given now, might amplify that conclusion. But it seems to me unreal to imagine that they might change it. That is enough, in my view, to sustain this court’s conclusion that it would be inappropriate to grant any relief here. But in any event there is already objective evidence to support what the examiner said. As was rightly brought to our attention after the hearing, the district council has now, on 16 November 2016, granted planning permission for a SANG on a site of 11.8 hectares at Jackies Lane, subject to a section 106 agreement committing the developer to transfer the land (see paragraph 40 above). As Mr Young has quite properly pointed out, the section 106 agreement does not secure funding for the maintenance of the SANG. Nevertheless, the fact that planning permission has now been granted for a SANG only strengthens my conclusion that it would not be right for us, in the exercise of our discretion, to grant any remedy for the defect, such as it is, in the examiner’s report.

Ground 3 – deliverability

53. DLA’s argument on this ground is the corollary of its argument on the previous issue, and in my view the same essential conclusions apply to it.

54. It is submitted that the examiner and the district council failed to have regard to government policy and guidance for the delivery of new housing. The first of the “basic conditions”, in paragraph 8(2)(a) of Schedule 4B, required the examiner to test the NNP against “national policies and advice contained in guidance issued by the Secretary of State”. He therefore had to consider whether the NNP gave effect to one of the fundamental themes in the NPPF, amplified in the PPG: that the planning system should “boost significantly the supply of housing” (paragraph 47 of the NPPF). Mr Young submitted that the examiner failed to grapple with this question, and, in particular, to consider whether the NNP complied with the guidance on the deliverability of sites and on the need to take into account constraints on delivery – for example, in paragraphs 3-022-20140306, 3-030-20140306, and 3-032-20140306 of the PPG. The obvious constraint on delivery here, said

Mr Young, was the lack of SANGs for the allocations within the 7 kilometre “zone of influence” for the European site.

55. Foskett J. saw no force in this argument. As it seemed to him, “the deliverability of housing was addressed in the context of the deliverability of SANG: the two go hand-in-hand”, and he was, he said, “unable to see any flaw in the process by which [the NNP] was formulated or in the approach of the examiner when he gave his approval to that approach” (paragraph 96 of his judgment). He also rejected – as “nothing more than a repetition of matters already dealt with” – grounds contending that the exercise of site selection had been irrational because the 7 kilometre “zone of influence” was not used as a criterion for the choice of sites, and that the allocation of “undeliverable” sites offended government policy in the NPPF (paragraphs 113 and 114).
56. In my view the judge was clearly right to reject that argument. The main complaint here is that the delivery of the allocated sites might be impeded by the lack of suitable SANGs, and that the examiner failed to confront this possible problem. As I have said, I think that, in substance, this complaint is mistaken (see paragraphs 32 to 52 above). And the argument on this ground adds nothing to the criticism of the examiner’s reasons for concluding that the necessary SANGs would be brought forward.
57. More generally, I also agree with the judge that the deliverability of the sites allocated for housing development in the NNP was not neglected in the course of its preparation. The Newick Neighbourhood Plan: Basic Conditions Statement said (in section 3, “MEETING THE CONDITIONS”) that “deliverability has been a key consideration when producing the plan”. The Newick Neighbourhood Plan Consultation Statement, produced in August 2014, confirmed that “meetings were arranged with the relevant landowners and developers to check that their land would be available when required ...”. And the examiner, for his part, was plainly conscious of the need for the allocations to be deliverable, in accordance with the NPPF. He referred to the NPPF throughout his report, including the several comments he made about “delivery”. For example, when considering the sites allocated for housing, he recommended the removal of a provision for the phasing of development on the allocated sites, concluding that “such an approach fails to have regard to [the NPPF], which is clear in its requirement for sustainable development to go ahead, without delay (Ministerial foreword)” (p.18); that “... setting specific time slots, as [the NNP] seeks to do, would severely limit its ability to be flexible”, and that “[the NPPF] requires affordable housing policies to be sufficiently flexible to take account of changing market conditions over time (para 50)”; that, subject to his recommended modifications, “... Policies HO2 to HO5 provide for the delivery of a wide choice of high quality homes, having regard to [the NPPF]”; that the “specific allocations for housing... [provide] for a high degree of certainty with regards the delivery of 100 houses”, that “[nowhere] does [the NNP] seek to place a cap, or a maximum limit on the number of dwellings to be built in the Neighbourhood Area during the plan period”, and that “[this] approach has regard to [the NPPF’s] presumption in favour of sustainable development” (p.19).

Ground 4 – regulations 5 and 9 of the SEA regulations

58. Regulation 5(1) and (2)(b) of the SEA regulations, implementing article 3 of Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment (“the SEA Directive”), imposes on the “responsible authority”, subject to

paragraphs (5) and (6) and regulation 7, a requirement to carry out an environmental assessment (“SEA”) for a “plan or programme” which “sets the framework for future development consent of projects listed in Annex I or II to [Directive 2011/92/EU (“the EIA Directive”)]”. The NNP came within that description (see the judgment of Richards L.J., with which Moore-Bick and Sharp L.J.J. agreed, in *R. (on the application of Larkfleet Homes Ltd.) v Rutland County Council* [2015] EWCA Civ 597, at paragraph 24). Regulation 5(6), however, provides that an SEA “need not be carried out ... (a) for a plan ... of the description set out in paragraph (2) or (3) which determines the use of a small area at local level ... unless it has been determined under regulation 9(1) that the plan ... is likely to have significant environmental effects”.

59. Regulation 9(1) provides that “[the] responsible authority shall determine whether or not a plan ... of a description referred to in ... (b) paragraph (6)(a) [of regulation 5] ... is likely to have significant environmental effects”. Regulation 9(2) provides that “[before] making a determination under paragraph (1) the responsible body shall ... (a) take into account the criteria specified in Schedule 1 ...”, and “(b) consult the consultation bodies”. Regulation 9(3) provides that “[where] the responsible authority determines that the plan ... is unlikely to have significant environmental effects (and, accordingly, does not require [an SEA]), it shall prepare a statement of its reasons for the determination”. Regulation 15(1)(e) of the 2012 regulations requires, for a neighbourhood development plan, the provision of “(i) an environmental report prepared in accordance with paragraphs (2) and (3) of regulation 12 of [the SEA regulations]” or “(ii) where it has been determined under regulation 9(1) of [the SEA regulations] that the plan proposal is unlikely to have significant environmental effects (and, accordingly, does not require an environmental assessment), a statement of reasons for the determination”.
60. No SEA was undertaken for the NNP. Mr Young submitted that an SEA was unlawfully “screened out” by the district council.
61. This argument requires us to consider the Sustainability Appraisal Scoping Report Post-Consultation Issue, prepared by the steering group and dated 9 November 2013, and the previous version of the scoping report, dated 8 May 2013, on which consultation took place between 9 May and 20 June 2013.
62. In section 1, “Introduction”, of the May 2013 scoping report (p.2), paragraph 1.2 stated that “[as] required by both European and National Law, consideration is given in this report to the requirements of [the SEA Directive]”. In section 2, “Background” (p.3), paragraph 2.5 said:

“For their Joint Core Strategy, [the district council] and the South Downs National Park Authority carried out a full sustainability appraisal on the contents of their plan. That sustainability appraisal incorporated the requirements of [the SEA Directive].”

Paragraph 2.6 stated:

“As reported in Appendix 1, we have considered whether or not there is a need for our sustainability appraisal also to incorporate the requirements of [the SEA Directive]. We have concluded that [the NNP] would not have any significant environmental effect that has not been considered already in [the district council’s]

sustainability appraisal. As a result, we propose that our sustainability appraisal be simple and appropriate for a local-level plan.”

Consultees were then asked whether they “[agreed] with the findings of the analysis presented in Appendix 1”, and whether they “[believed] that a simple sustainability appraisal is appropriate for [the NNP]”. In section 3, “Parish Portrait” (pp.4 to14), sub-section 3.4, “Environmental”, described the relevant environmental constraints and designations, including “European Protected Sites” (paragraph 3.4.2), “Sites of Special Scientific Interest” (paragraph 3.4.3), “Conservation Areas” (paragraph 3.4.5), “Listed Buildings” (paragraph 3.4.6), “Flooding” (paragraph 3.4.7), “Tree Preservation Orders” (paragraph 3.4.9) and “Ancient Woodland” (paragraph 3.4.10). Paragraph 3.4.2 said that “Newick has no European Protected Sites within it, but ... is close to Ashdown Forest”, referred to the SPA and the SAC and the “protected zone ..., encompassing all land within 7 km. of [the] boundary [of Ashdown Forest]”, and continued:

“... Much of Newick lies within that zone and it has been agreed that [SANGs] must be developed before any new housing is permitted in the zone. It is understood that [the district council] is working towards provision of such [SANGs] and will recoup their cost by charging the developers of all new housing.”.

Section 4, “Sustainability Issues” (pp.15 and 16), identified the “main sustainability issues” – environmental, social and economic. Section 5, “Sustainability Appraisal” (pp.17 to 20), described the “Sustainability Framework” for the NNP, by reference to 12 “sustainability objectives” and their “corresponding indicators”. In section 6, “Next Steps” (p.21), paragraph 6.2 explained that the “sustainability framework ... will be used to appraise development and policy options for [the NNP], identifying options that would deliver sustainable outcomes”, and paragraph 6.3 that the “final sustainability report will accompany the proposed Neighbourhood Development Plan that will be submitted to [the district council]” and “...will be the document that demonstrates, as required by the Neighbourhood Planning Regulations, that the making of the plan contributes to the achievement of sustainable development”.

63. In Appendix 1 (pp.22 and 23), paragraphs A1 and A2 stated:

“A1. The SEA regulations transpose [the SEA Directive] into law. It requires that those making plans that could impact on the environment to consider whether they are likely to have a significant effect or not.

A.2. In order to assess the likely significance of the plan on the environment, the purpose of the plan has been appraised against the criteria detailed in [the SEA regulations] and [the SEA Directive]. This is seen in the table below.”

64. The table under those two paragraphs set out, in columns headed “Criteria”, “Notes” and “Likely Significant Effect?”, an analysis corresponding to the criteria in Schedule 1 to the SEA regulations – “Criteria for determining the likely significance of effects on the environment”. The first part of the table is headed “The characteristics of plans and programmes ...”. For criterion 1(a) – whether a plan or programme sets the framework for other projects or activities – the “Notes” stated that, as “Neighbourhood Development Plans are the lowest-level statutory planning documents in the UK”, the NNP “does not set a framework for other projects or plans”, but then said that the NNP “will be used for guiding

development in the Parish until 2030”. For criterion 1(b) – “the degree to which the plan or programme influences other plans or programmes – they said that “Neighbourhood Development Plans are influenced by other plans, such as [the core strategy] and national planning policy”, and that the NNP is “at the bottom of the hierarchy and is not intended to influence other plans and programmes”. For criterion 1(c) – “the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development” – they said that the NNP “... will help promote sustainable development and will consider the environment”. For criterion 1(d) – “environmental problems relevant to the plan or programme” – they said that “[the] state of the environment will be considered by those making the plan and, where appropriate, they will introduce policy to help overcome any problems”, and that “[the] sustainability appraisal and Habitats Regulations Assessment for [the core strategy], which [the NNP] supplements, identified issues relating to the Ashdown Forest and has addressed them in [the core strategy]”. And for criterion 1(e) – “the relevance of the plan or programme for the implementation of Community legislation on the environment (for example, plans and programmes linked to waste management or water protection)” – they simply stated “Not applicable for [the NNP]”. For each of the criteria, the answer given to the question “Likely Significant Effect” was “No”.

65. The second part of the table is under the heading “Characteristics of the effects and of the area likely to be affected ...”. For criterion 2(a) – “the probability, duration, frequency and reversibility of the effects” of the NNP, the “Notes” stated that the NNP “will guide development in the parish until 2030, with the aim of having a positive impact on the parish and by promoting sustainable development”. For criteria 2(b) and 2(c) – respectively, “the cumulative nature” and “the trans-boundary nature” of the effects – they said that “[the] sustainability appraisal of [the core strategy] considered the impact of development in the Parish alongside development in other settlements and parishes”, and that “[the] Habitats Regulations Assessment also considered the effects of development in neighbouring districts on protected sites”. For criterion 2(d) – “the risks to human health or the environment (for example, due to accidents)” – they stated “[it] is not thought that anything in [the NNP] will increase risks to human health”. For criterion 2(e) – “the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected)” – they stated that “[the NNP], unlike most plans, is to be written for a very small area and population”. For criterion 2(f) – “the value and vulnerability of the area likely to be affected due to – (i) special natural characteristics or cultural heritage; (ii) exceeded environmental quality standards or limit values; or (iii) intensive land-use” – they stated that “[in] collecting information for [the NNP], information has been gained on the characteristics of the area – including information on land use, listed buildings, TPOs and SSSIs”, and “[this] information gathering will inform the contents of [the NNP]”. For criterion 2(g) – “the effects on areas or landscapes which have a recognised national, European Community or international protection status” – they stated that “[the] Habitats Regulations Assessment for [the core strategy] considered the impact of development on [the SPA and SAC]”; and that “[the core strategy] has put in place policies which mitigate against the effects on the Forest of development in the Parish”, and “[thus the NNP] will not have a significant negative effect on the Forest”. Again, for each of the criteria, the answer to the question “Likely Significant Effect?” was “No”.

66. Under the table, paragraph A3 stated:

“A3. The above analysis was undertaken by [the district council] on behalf of [the parish council]. In the light of the analysis, it is not thought that [the NNP] would have a significant environmental effect.”

67. In an e-mail dated 18 June 2013, responding to consultation on the May 2013 scoping report, Natural England answered the question in paragraph 2.6 in this way:

“... Provided your analysis fits within the context and assumptions of the district’s SA/SEA of the local plan [sic], your appraisal is appropriate.”

68. The November 2013 scoping report was in largely the same terms as that of May 2013. It noted, in paragraph 1.4, that Natural England, the Environment Agency and English Heritage had been included in the consultation on the May 2013 scoping report. Paragraph 2.6 repeated the conclusion stated in paragraph 2.6 of the May 2013 scoping report, that the NNP “would not have any significant environmental effect that has not been considered already in [the district council’s] sustainability appraisal”, and added that none of the statutory consultees had objected to the sustainability appraisal being “simple and appropriate for a local-level plan”. Appendix 1 was in the same form as in the May 2013 scoping report.

69. Mr Young submitted that the requirements for “screening” in the SEA regulations were not properly discharged in the scoping reports. Reliance on the sustainability appraisal for the still emerging core strategy, and on the HRA, was misplaced. The core strategy had yet to be tested at its examination. Even when adopted, it was not going to secure the necessary mitigation for the effects of development in Newick within the 7 kilometre “zone of influence” for the European site. And in any event, said Mr Young, the “screening” decision embodied in the scoping reports was incomplete, opaque and, in certain respects, plainly wrong. The notion that the NNP was not setting the framework for the determination of applications for planning permission showed a basic misunderstanding of the legislative regime for SEA. The analysis in Appendix 1 to the scoping reports fell short of the minimum required of a “screening” decision under the SEA regulations. Potential “risks” to the environment were ignored. Had an SEA been undertaken for the NNP, it would have been necessary to consider reasonable alternatives to the allocated sites, including locations outside the 7 kilometre zone.

70. Ms Parry defended the “screening” decision for the NNP as adequate and lawful. It was, she submitted, entirely appropriate for the district council and the parish council to rely on the sustainability appraisal undertaken in the core strategy process, and the HRA. None of the statutory consultees, including Natural England, had disagreed with the conclusion that an SEA was not required for the NNP. Appendix 1 to the scoping reports should not be read in an unduly legalistic way (see, for example, the judgment of Wyn Williams J. in *Aston v Secretary of State for Communities and Local Government* [2013] EWHC 1936 (Admin), at paragraph 23). The criteria in Schedule 1 to the SEA regulations had all been dealt with. Any apparent shortcomings in the “Notes” for criteria 1(a) and 2(d) in Table 1 in the scoping reports were of no real significance. The NNP’s role and its place in the development plan hierarchy had not been misunderstood. The “Notes” for criteria 1(d), 2(b), (c), (f) and (g) covered any possible effects on the environment, including any effects on the European site.

71. Foskett J. rejected Mr Young’s argument on this ground (in paragraphs 103 to 107 of his judgment). In his view the scoping reports made it sufficiently clear why the conclusion had been reached, in the light of the sustainability appraisal for the core strategy and the HRA, that an SEA was not required for the NNP (paragraphs 104 to 106). He referred to paragraph 3.4.2 of the scoping reports, which acknowledged that much of the parish of Newick lies within the 7 kilometre “protected zone” for the European site; that the district council was committed to SANGs being in place before planning permission was granted for any new housing in the protected zone; and that it was working to secure the provision of SANGs (paragraph 105). He also rejected Mr Young’s submission that it was *Wednesbury* unreasonable to discount likely significant effects on the environment because the housing sites allocated in the NNP were all in the protected zone and the mitigation was still uncertain (paragraph 107).
72. The court must avoid an overly stringent approach to a “screening” decision under regulations 5 and 9 of the SEA regulations. The exercise of what is essentially a planning judgment on the likelihood of significant effects on the environment may be attacked only on public law grounds (see, for example, the first instance judgments in *Shadwell Estates Ltd.*, at paragraph 73; *Aston*, at paragraph 29; and *Grand Union Investments Ltd. v Dacorum Borough Council* [2014] EWHC 1894 (Admin), at paragraph 90). Of course, the “screening” analysis will sometimes be so perfunctory or superficial as to be legally flawed. And there will be cases where the court has no choice but to find a “screening” decision unlawful – for example, because the local planning authority has failed to demonstrate a true grasp of the issues involved, or to make plain why it has found there would be no likely significant effects on the environment (see, for example, the decision of this court in *R. (on the application of Friends of Basildon Golf Course) v Basildon District Council* [2010] EWCA Civ 1432, in particular the judgment of Pill L.J., with which Carnwath and Rimer L.JJ. agreed, at paragraph 62). But the court must remember that, as Richards L.J. put it in his judgment in *Larkfleet Homes* (at paragraph 41), “documents of this kind are to be read as a whole and with a degree of benevolence” (see also, for example, the judgment of Moore-Bick L.J. in *R. (on the application of Bateman) v South Cambridgeshire District Council* [2011] EWCA Civ 157, at paragraph 20).
73. In this case it cannot be said that there was no SEA “screening” decision, or that the “screening” decision was not made at an appropriate stage of the NNP process, or that it was made without the benefit of the input of the bodies whose views needed to be sought through consultation, including Natural England (see paragraphs 60 to 68 above). Nor can it be said that the authors of the scoping reports failed to address the crucial question at the “screening” stage: whether the NNP was “likely to have significant environmental effects” (regulations 5(6) and 9(1) of the SEA regulations). The answer to that question, clearly stated in paragraph A3 of Appendix 1 to the scoping reports in the light of the tabulated analysis of the criteria in Schedule 1 to the SEA regulations, and evidently without dissent from any of the “consultation bodies”, was that “it is not thought that [the NNP] would have a significant environmental effect” (see paragraphs 62 to 66 and 68 above). In the table in Appendix 1 each of the 12 criteria in Schedule 1 was addressed, albeit briefly (see paragraphs 64 and 65 above). And the “screening” decision itself was, in the circumstances, well within the bounds of reasonable planning judgment (see paragraphs 71 and 72 above). To this extent, therefore, I conclude that the requirements of regulations 5 and 9 of the SEA regulations were discharged.

74. But there are undoubtedly errors in Appendix 1 to the scoping reports. To state, in dealing with criterion 1(a), that the NNP “does not set a framework for other projects or plans” was obviously incorrect. However, this apparent misconception was contradicted straight away by the acknowledgment in the same sentence that the NNP “will be used for guiding development in the Parish until 2030”, and also by the similar comment made in dealing with criterion 2(a). And the “Notes” for criterion 1(b) are accurate in recognizing the position of the NNP at the bottom of the development plan hierarchy, and that the NNP is “not intended to influence other plans and programmes”. The “Notes” for criterion 1(e) might suggest that the authors of the scoping reports thought “Community legislation on the environment ...”, including the Habitats Directive, was irrelevant to the NNP process, but the “Notes” for criterion 2(g) specifically address the possible impact of “development in the Parish” on the SPA and the SAC and conclude that “[the NNP] will not have a significant negative effect on the Forest”. The “Notes” for criterion 2(d) omit a response to the question as to “risks to ... the environment”, but the “Notes” for criteria 1(d), 2(b), (c), (f) and (g) refer to the possibility of effects on the environment, both generally (the “Notes” on criteria 1(d), 2(b) and (c)), and, specifically, on the European site (the “Notes” on criteria 1(d), 2(b), (c) and (g)) and on “land use, listed buildings, TPOs and SSSIs” (the “Notes” on criterion 2(f)). The conclusion for each of these criteria, in the column headed “Likely Significant Effect?”, was that the NNP was not likely to have significant environmental effects (see paragraphs 64, 65 and 68 above).
75. The errors in Appendix 1 are certainly unfortunate. But in my view they are not enough to invalidate the conclusion, as a matter of planning judgment, that the NNP was not “likely to have significant environmental effects”. Read fairly in the light of the whole content of the scoping reports, Appendix 1 does not, in my view, betray a failure to understand and deal with the issues involved in the exercise required in regulations 5(6) and 9 of the SEA regulations (cf. the judgment of Pill L.J. in *Friends of Basildon Golf Course*, at paragraph 62). That, however, is not all. The summary analysis in Appendix 1 leans heavily on work undertaken in the core strategy process. I do not accept that this in itself is a defect in the “screening” decision (see the judgment of Richards L.J. in *Larkfleet Homes*, at paragraphs 24 to 41). The more powerful point, I think, is that although Appendix 1 expresses the conclusion that the NNP will not have significant environmental effects, and does so quite clearly, the scoping reports contain very little by way of an explicit consideration of the possible effects of the development planned for Newick in the NNP, relying instead on the analysis in the sustainability appraisal for the core strategy and the HRA. In this respect it may be said that the “reasons for the determination” are less than adequate. These flaws in the scoping reports are not, in my view, such as to constitute a breach of regulation 5 of the SEA regulations or of either regulation 9(1) or regulation 9(2). But I am prepared to accept that they amount to a breach of regulation 9(3), and also of the corresponding requirement in regulation 15(1)(e)(ii) of the 2012 regulations, and that to overlook this breach would be to strain the court’s benevolence too far (cf. Richards L.J.’s judgment in *Larkfleet Homes*, at paragraphs 29 to 41).
76. Once again, however, this leaves the question of whether, in the exercise of the court’s discretion, it would be appropriate to withhold relief. And once again, in my view, it would. I have already referred to the relevant principles in *Walton* and *Champion* in dealing with discretion on ground 2 (see paragraph 52 above). In the particular circumstances of this case, given the nature of the breach that I have identified – a breach only of the requirement for reasons in regulation 9(3) of the SEA regulations and regulation 15(1)(e)(ii) of the 2012 regulations, I cannot see any real prejudice to DLA, or any other party, in withholding a

remedy. By contrast, however, I can see considerable prejudice both to good administration and to the interests of the community in Newick – in terms of needless delay and uncertainty – if a remedy were granted. And in any event it is, in my view, inconceivable that the outcome of the SEA “screening” exercise for the NNP might now be any different if the “reasons for the determination” given in the scoping reports were amended and amplified. The “screening” decision itself was perfectly clear, not opposed by the “consultation bodies”, and, as I have said, well within the bounds of reasonable planning judgment (see paragraph 73 above). The focus of Mr Young’s argument here, as on ground 2, was on the possible effects of the development planned in the NNP on the SPA and the SAC, in view of DLA’s doubts over the delivery of SANGs as mitigation. No other point has been taken on the substance of the SEA “screening” exercise. In the light of the HRA and the Habitats Regulations Screening Report produced for the NNP in February 2014, I have already concluded that Mr Young’s argument asserting errors of law under the Habitats Directive and Habitats regulations is not sufficiently well founded to justify our granting relief (see paragraphs 46 to 52 above). That conclusion is also relevant here. It reinforces my view that, if the only errors of law in the process of preparing and making the NNP are those which I have identified under this issue and the issue arising under ground 2, we should exercise our discretion against granting relief.

Ground 5 – apparent bias

77. Paragraph 7(4) of Schedule 4B to the 1990 Act provides that “[the] authority may appoint a person to carry out the examination but only if the qualifying body consents to the appointment”. Paragraph 7(6) states:

- “(6) The person appointed must be someone who, in the opinion of the person making the appointment –
- (a) is independent of the qualifying body and the authority,
 - (b) does not have an interest in any land that may be affected by the draft order, and
 - (c) has appropriate qualifications and experience.”

78. Mr Young submitted that the appointment of Mr McGurk as examiner was tainted by the appearance of bias, and that this was fatal to the NNP process. He did not suggest that Mr McGurk had any interest in relevant land, or seek to cast doubt on his professional competence and integrity. DLA’s grievance here was that the arrangements by which local planning authorities and parish councils “actively select the examiners they want” are incompatible with the requirement that the examiner should be truly “independent”, and that they give rise to apparent bias. In this case the selection was made through the Neighbourhood Planning Independent Examiner Referral Service – which is operated by the R.I.C.S., with the support of the Department for Communities and Local Government. In selecting Mr McGurk as examiner, the district council was selecting an examiner whose “track record”, publicly available on the internet at the time, was that he had examined a large number of neighbourhood development plans and had found all of them to comply with the “basic conditions”.

79. Even without the aid of the helpful written submissions of Mr Richard Moules on behalf of the Secretary of State, dated 19 October 2016 – which were not before Foskett J. – I would conclude, as did the judge (in paragraphs 140 to 150 of his judgment), that Mr Young’s

argument must be rejected. A local planning authority is empowered under primary legislation to select an examiner in a neighbourhood development plan process. That legislation has not been challenged in these proceedings. The statutory provisions are not inherently defective. And the arrangements for the selection of the examiner which were used in this case do not undermine the requirement that an examiner must be “independent”. Nor do they generate bias or the appearance of bias. The performance by an examiner of the duties under Schedule 4B is subject to the court’s supervision in proceedings for judicial review, and the court may quash a neighbourhood development plan if he or she has failed to discharge those duties lawfully. Foskett J. was “unable to see how a fair-minded observer, applying his or her mind to the issue with that factor in play, would see the fact that the choice of examiner is left to the [local planning authority] (in consultation with the Parish Council) as producing an unfair or non-independent result” (paragraph 148 of his judgment). I entirely agree. The judge saw no relevance – and nothing remarkable – in the fact that a particular examiner has previously found all, or nearly all, of the neighbourhood development plans he has examined compliant with the “basic conditions” (paragraph 149). Again, I agree. As the judge concluded, there was no breach of the statutory requirement, in paragraph 7(6)(a), that an examiner be “independent”, and no apparent bias.

Conclusion

80. For the reasons I have given, I would dismiss this appeal.

Lewison L.J.

81. I agree.

IN THE COURT OF APPEAL (CIVIL DIVISION)
ON APPEAL FROM THE HIGH COURT OF JUSTICE
ADMINISTRATIVE COURT

Mr Justice Sales
[2014] EWHC 406 (Admin)

Royal Courts of Justice
Strand, London, WC2A 2LL

Date: Thursday 9th July 2015

Before :

LORD JUSTICE RICHARDS
LORD JUSTICE McFARLANE
and
LORD JUSTICE CHRISTOPHER CLARKE

Between :

Ashdown Forest Economic Development Llp
- and -

Appellant

(1) Wealden District Council
(2) South Downs National Park Authority

Respondents

(Transcript of the Handed Down Judgment of
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Official Shorthand Writers to the Court)

David Elvin QC and Charles Banner (instructed by **King Wood Malletsons LLP**) for the
Appellant

Douglas Edwards QC and David Graham (instructed by **Wealden and Rother Shared
Legal Service**) for the **Respondents**

Hearing date : 11 June 2015

Judgment
As Approved by the Court

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Lord Justice Richards :

1. This appeal concerns a single policy in the Wealden District (incorporating part of the South Downs National Park) Core Strategy Local Plan (“the Core Strategy”), adopted on 19 February 2013. The Core Strategy forms part of the statutory development plan for the administrative areas of Wealden District Council (“the Council”) and the South Downs National Park Authority. The Council had the main role in preparing it for adoption, and for convenience I will refer to the Council as the decision-maker.
2. The appellant is a corporate vehicle controlled by four landed estates whose property interests are affected by the Core Strategy. It brought a claim under section 113 of the Planning and Compulsory Purchase Act 2004 (“the 2004 Act”) seeking to quash the Core Strategy in whole or in part. The claim was dismissed by Sales J (as he then was) on all grounds. Permission to appeal was subsequently granted by Lewison LJ, limited to a single ground.
3. The ground on which permission was granted concerns a policy in the Core Strategy relating to the protection of Ashdown Forest, which is a special protection area (“SPA”) designated under Directive 2009/147/EC on the conservation of wild birds, and a special area of conservation (“SAC”) designated under Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora (“the Habitats Directive”). The policy is numbered WCS12 and includes the following material passage:

“WCS12 Biodiversity

...

In order to avoid the adverse effect on the integrity of the Ashdown Forest Special Protection Area and Special Area of Conservation it is the Council’s intention to reduce the recreational impact of visitors resulting from new housing development within 7 kilometres of Ashdown Forest by creating an exclusion zone of 400 metres for net increases in dwellings in the Delivery and Site Allocations Development Plan Document and requiring provision of Suitable Alternative Natural Green Space and contributions to on-site visitor management measures as part of policies required as a result of development at SD1, SD8, SD9 and SD10 in the Strategic Sites Development Plan Document. Mitigation measures within 7 kilometres of Ashdown Forest for windfall development, including provision of Suitable Alternative Natural Green Space and on-site visitor management measures will be contained within the Delivery and Sites Allocations Development Plan Document and will be associated with the implementation of the integrated green network strategy. In the meantime the Council will work with appropriate partners to identify Suitable Alternative Natural Green Space and on-site management measures at Ashdown Forest so that otherwise acceptable development is not prevented from coming forward by the absence of acceptable mitigation.”

4. The appellant challenges the policy in so far as it relates to new housing development within 7 km of Ashdown Forest, contending that it was adopted in breach of the Council's duty under Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment ("the SEA Directive"), as implemented by The Environmental Assessment of Plans and Programmes Regulations 2004 ("the SEA Regulations"), to assess reasonable alternatives to a 7 km zone. The 400 metre exclusion zone is not challenged.

The legal framework

The plan-making process

5. The position of a core strategy within the statutory development plan and the statutory process for its adoption are summarised at paragraphs 10-18 of the judgment of Sales J. It is unnecessary to repeat any of that here. I should, however, note that the Council was under a duty to carry out a sustainability appraisal ("SA") in respect of each successive draft of the Core Strategy and that the environmental assessments referred to below could lawfully be incorporated by reference within the SA.

The SEA Regulations

6. It is common ground that in preparing the Core Strategy the Council was required to carry out an environmental assessment in accordance with the SEA Regulations. Regulation 12 provides:

"Preparation of environmental report

12(1) Where an environmental assessment is required by any provision of Part 2 of these Regulations, the responsible authority shall prepare, or secure the preparation of, an environmental report in accordance with paragraphs (2) and (3) of this regulation.

(2) The report shall identify, describe and evaluate the likely significant effects on the environment of –

(a) implementing the plan or programme; and

(b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.

(3) The report shall include such of the information referred to in Schedule 2 to these Regulations as may reasonably be required"

The information referred to in Schedule 2 includes, in paragraph 8:

"An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information."

7. Regulation 13 provides that every draft plan or programme for which an environmental report has been prepared in accordance with regulation 12, and its accompanying environmental report, shall be made available for the purposes of consultation in accordance with provisions laid down by the regulation.
8. Regulation 16 provides that as soon as reasonably practicable after the adoption of a plan or programme, the responsible authority shall take steps which include the provision of information as to “how environmental considerations have been integrated into the plan or programme” and “the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with”.
9. The requirement to assess reasonable alternatives applies most obviously to matters such as the type of development proposed or the selection of areas for development, as in *City and District Council of St Albans v Secretary of State for Communities and Local Government* [2010] JPL 10; *Save Historic Newmarket Ltd and Others v Forest Heath District Council* [2011] JPL 123 21; *Heard v Broadland District Council* [2012] EWHC 344 (Admin), [2012] Env LR 23; and *R (Buckinghamshire County Council and Others) v Secretary of State for Transport* [2013] EWHC 481 (Admin). It can relate to the plan or programme as a whole or to specific policies within the plan or programme. We were not taken to any case comparable to the present, where the requirement to assess reasonable alternatives is said to apply to a policy directed specifically towards ensuring that the environment is not harmed by development provided for by the plan; but there appeared to be no dispute between the parties that the requirement is capable in principle of applying to such a policy (or, therefore, to the 7 km zone in policy WCS12).
10. In *Heard v Broadland District Council* (cited above), at paragraphs 66-71, Ouseley J held that where a preferred option – in that case, a preferred option for the location of development – emerges in the course of the plan-making process, the reasons for selecting it must be given. He held that the failure to give reasons for the selection of the preferred option was in reality a failure to give reasons why no other alternative sites were selected for assessment or comparable assessment at the relevant stage, and that this represented a breach of the SEA Directive on its express terms. He also held that although there is a case for the examination of the preferred option in greater detail, the aim of the Directive is more obviously met by, and it is best interpreted as requiring, an equal examination of the alternatives which it is reasonable to select for examination alongside whatever may be the preferred option.

The Habitats Regulations

11. Article 6(3) of the Habitats Directive requires *inter alia* that any plan or project likely to have a significant effect on a designated site must be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives. The relevant implementing regulations are The Conservation of Habitats and Species Regulations 2010 (“the Habitats Regulations”), which make provision in regulation 61 for the assessment of plans or projects generally, and in regulation 102 for the assessment of land use plans. Regulations 61 and 102 are in materially the same terms but I will quote the latter since it is the more obvious provision to apply to a core strategy:

“102. Assessment of implications for European sites and European offshore marine sites

(1) Where a land use plan –

(a) is likely to have a significant effect on a European site or a European offshore marine site (either alone or in combination with other plans or projects), and

(b) is not directly connected with or necessary to the management of the site,

the plan-making authority for that plan must, before the plan is given effect, make an appropriate assessment of the implications for the site in view of the site’s conservation objectives.

...

(4) In the light of the conclusions of the assessment, and subject to regulation 103 (considerations of overriding public interest), the plan-making authority ... must give effect to the land use plan only after having ascertained that it will not adversely affect the integrity of the European site or the European offshore marine site (as the case may be).”

12. This gives rise in practice to a two-stage process: (1) a screening stage, to determine whether there is a likelihood of significant effects on the relevant site(s) so as to require an appropriate assessment, and (2) unless ruled out at the screening stage, an appropriate assessment to determine in detail whether the plan will cause harm to the integrity of the relevant site(s). At the first stage, “likelihood” is equivalent to “possibility”. Advocate General Sharpston described the process as follows in her opinion in Case C-258/11, *Sweetman v An Bord Pleanala* [2013] 3 CMRL 16:

“47. It follows that the *possibility* of there being a significant effect on the site will generate the need for an appropriate assessment for the purposes of art. 6(3). The requirement at this stage that the plan or project be likely to have a significant effect is thus a trigger for the obligation to carry out an appropriate assessment. There is no need to *establish* such an effect; it is ... merely necessary to determine that there *may be* such an effect.

48. The requirement that the effect in question be ‘significant’ exists in order to lay down a *de minimis* threshold

49. The threshold at the first stage of art. 6(3) is thus a very low one. It operates merely as a trigger, in order to determine whether an appropriate assessment must be undertaken of the implications of the plan or project for the conservation objectives of the site. The purpose of that assessment is that

the plan or project in question should be considered thoroughly, on the basis of what the Court has termed ‘the best scientific knowledge in the field’

50. The test which that expert assessment must determine is whether the plan or project in question has ‘an adverse effect on the integrity of the site’, since that is the basis on which the competent authorities must reach their decision. The threshold at this (the second) stage is noticeably higher than that laid down at the first stage”

The evolution of policy WCS12

13. The version of the Core Strategy submitted to the Secretary of State in August 2011 for independent examination by an inspector (the submission draft) included the following text under the heading “Environment”:

“3.32 In accordance with advice from Natural England it will be necessary to reduce the recreational impact of visitors resulting from new housing development within 7 kilometres of Ashdown Forest by creating an exclusion zone of 400 metres for net increases in dwellings, requiring the provision of Suitable Alternative Natural Green Spaces (SANGS) in Uckfield and Crowborough and requiring contributions to on site management measures at Ashdown Forest”

14. That passage was not reflected in the specific policies of the draft and, in particular, did not feature in draft policy WCS12. The distinction between text and policy in a plan was considered in *R (Cherkley Campaign Limited) v Mole Valley District Council* [2014] EWCA 567, by reference to statutory provisions and policy guidance which, we were told, also governed the Core Strategy in the present case. I said at paragraph 16 of my judgment in the *Cherkley* case that the supporting text “is plainly relevant to the interpretation of a policy but is not itself a policy or part of a policy, it does not have the force of policy and it cannot trump the policy”. Whilst Mr Elvin QC, for the appellant, was at pains to stress the distinction between text and policy, I do not think that it has any real importance for the present case.
15. At an early stage, the Secretary of State’s inspector prepared a list of “matters, issues and questions”. We have it in the form of a draft issued on 3 November 2011. It included:

Matter 14: The Environment, Climate Change and Sustainable Construction (WCS12)

Main issue – Whether the Core Strategy makes appropriate provision for the protection of the natural environment and other environmental assets and for sustainable construction

- a) Has it been demonstrated that the Core Strategy would have no likely significant effects upon internationally important nature conservation sites?

b) Has the proposed 400m 'exclusion zone' around the Ashdown Forest Special Protection Area (SPA) been justified by the evidence base?

c) Has the proposed 7km zone around the Ashdown Forest SPA, within which contributions to Suitable Alternative Natural Green Spaces (SANGS) would be sought, been justified by the evidence base?

d) Is there adequate evidence that the scale of SANGS required can be identified and are deliverable? ...”

16. Mr Elvin suggested that the inspector was not asking about consideration of alternatives to the 7 km zone because at that stage it did not form part of the policy; and he contrasted other “matters”, such as the spatial strategies and the distribution and location of housing development, in respect of which the inspector did ask whether alternatives had been considered. I think that this is to attribute altogether too subtle a thought process to the inspector. The inspector referred to policy WCS12 in the heading to “Matter 14”, and he raised the issue whether the Core Strategy made appropriate provision for the protection of the environment. I think it probable that he did not ask about alternatives to the 7 km zone because at that stage he did not think of it, not because the zone was referred to in the text rather than in the policy.
17. There were detailed responses by the Council and others to the questions asked, making no reference to the consideration of alternatives to the 7 km zone.
18. At a hearing on 19 January 2012 the inspector asked, in relation to question c) under Matter 14, whether the Council should consider alternatives to the Thames Basin Heath approach on which, as explained below, the 7 km zone was based. The ensuing discussion centred on the validity of the Thames Basin Heath approach and did not take the question of alternatives any further.
19. In a letter to the Council dated 5 March 2012, the inspector referred to modifications to address the concerns he had with the Core Strategy. Some modifications had already been proposed by the Council but he considered further modifications to be necessary. In relation to the Ashdown Forest SPA he said this:

“22. The Habitats Regulations Assessment (HRA) has addressed the impacts of possible additional disturbance and urbanising effects from residential development on the SPA and indicates that it cannot be concluded that the CS would not lead to adverse effects on the ecological integrity of the SPA. Avoidance and mitigation measures are required including (i) a 400m zone around the SPA where residential development will not be permitted, (ii) a 7km zone where new residential development will be required to contribute to Suitable Alternative Natural Greenspaces (SANGs), and access strategy for the Forest and a programme of monitoring and research. The measures are regarded as critical infrastructure in the Infrastructure Delivery Plan (IDP). This approach is supported by NE [Natural England]. I am satisfied that it is justified by

the evidence base (including the 7km zone which is broader than those used elsewhere but justified by local factors).

23. The main impact of these measures would be on the towns of Crowborough and Uckfield and villages within the buffer zones. I have seen evidence that there is a reasonable expectation that suitable SANGs could be provided relating to the SDAs [Strategic Development Areas] in the towns. There is a large supply of open spaces within the District, many under the ownership or management of town or parish councils. NE is confident that SANGs can be delivered. However, for windfall planning applications and smaller sites where SANGS cannot be provided on site there is the possibility that otherwise acceptable development might be delayed while suitable SANGs are identified and brought forward.

24. The CS does not refer to these measures in a policy but includes text suggested in the HRA in supporting justification. The Council has proposed a modification to the plan that would include a policy reference to them being taken forward in subsequent DPDs [Development Plan Documents]. The Strategic Sites DPD is not expected to be adopted until March 2014 and the Delivery and Site Allocations DPD in March 2015. To avoid otherwise acceptable development being delayed it is important that, with appropriate partners, the Council identifies suitable SANGs and develops an on-site management strategy for the Forest as soon as possible in accordance with the conclusions of the HRA. While accepting the general thrust of the Council's approach I propose to add a further modification to the policy to reflect this."

20. The inspector's further modification was in substantially the form subsequently to be found in the adopted version of policy WCS12. It was duly included in a Proposed Modifications document issued for consultation in April 2012.
21. Whilst the responses to consultation included objections to the 7 km zone, they did not suggest that there had been any failure by the Council to consider reasonable alternatives to the 7 km zone. The nearest one gets is a response on behalf of one of the members of the appellant company which, *inter alia*, queried "whether in real terms enough assessment work has been done to explore other opportunities and mitigation measures to address this particular environmental issue". By this stage, of course, any point that Mr Elvin had on the distinction between policy and supporting text had fallen away, since the 7 km zone was now proposed within the policy.
22. The inspector's report on the examination into the Core Strategy, dated 30 October 2012, contained passages substantially similar to those quoted above from his letter of 5 March 2012 and concluded that with the recommended main modifications set out in an appendix to the report, including materially the same modification to policy WCS12 as previously considered, the Core Strategy was sound.

The Habitats Regulations Assessment

23. The basis for the inclusion of a 7 km zone can be seen from the Assessment of the Core Strategy under the Habitats Regulations (“the Habitats Regulations Assessment”) which accompanied the submission draft of the Core Strategy in August 2011.
24. Paragraph 4.1 of that document referred to a screening process carried out during spring 2009, the findings of which had been endorsed by Natural England. According to paragraph 4.2, the screening exercise revealed that several European sites were at risk from negative effects and that the Core Strategy therefore required further assessment to establish whether there would be adverse effects on ecological integrity. Likely significant effects identified at that stage were summarised in a table (Table 4.1) which included two entries for the Ashdown Forest SPA. The relevant entry related to “disturbance” caused by the “development of 9,600 dwellings, esp. those to the north”. The pathway, as it was described, was “recreational pressure leading to increasing visitor activity”, and the receptors were identified as the Dartford warbler and the nightjar. Paragraph 4.2 stated further:

“It is possible that the findings of the screening exercise could be superseded upon more detailed analysis during the Appropriate Assessment stage. Wherever changes to screening findings are made, the decision and clear justification is set out in the relevant section of the Appropriate Assessment presented in Chapters Five to Eight.”
25. Paragraph 4.3 explained that the purpose of the appropriate assessment stage was “to further analyse likely significant effects identified during the screening stage, as well as those effects which were uncertain or not well understood and taken forward for assessment in accordance with the precautionary principle”. The assessment “should seek to establish whether or not the plan’s effects, either alone or in combination with other plans or projects, will lead to adverse effects on site integrity”.
26. The key part of the document is chapter 6, headed “Disturbance: Ashdown Forest SPA”. The chapter first described the potential impact of increased visitor numbers on the ecological integrity of the site. In a lengthy section under the subheading “Other Considerations”, it referred to a field survey in 2008 which had examined visitor access patterns and had been the subject of further analysis to explore the relationship between visitor intensity and bird territories within the SPA. It then referred to “policy precedent” relating to the Thames Basin Heaths SPA, for which the relevant policy required that a minimum of 8 hectares of SANG should be provided for every 1,000 net increase in population as a result of new residential development within 5 km of the SPA, to offset the impact of increasing visitor pressure. It stated that the 5 km threshold “aims to ‘capture’ around three quarters of all visitors to the heaths, including 70% of drivers and all pedestrians”. Returning to Ashdown Forest, it described a model which could be used to predict the additional number of visitors to each access point, and therefore to the whole Forest, arising from the development of a specific number of dwellings in defined areas. It then explained in detail how the model was applied so as to reach a conclusion stated in these terms:

“At Ashdown Forest it is proposed that the threshold distance within which SANGs should be provided is set at **7km from the SPA boundary** (Figure 6.1). This is considered to be sufficient to capture a similar proportion of visitors to Ashdown Forest, as compared to the avoidance measures adopted in relation to the Thames Basin Heaths SPA.” (Emphasis in the original.)

27. Mr Elvin submitted, and I accept, that the process set out in that part of the chapter (and to be found more particularly in the detail I have omitted) was one of *extrapolation* so as to produce a result for the Ashdown Forest SPA – a 7 km zone – comparable to the 5 km zone adopted for the Thames Basin Heaths SPA. There was no consideration of a 5 km zone for the Ashdown Forest SPA as an *alternative* to a 7 km zone. Likewise, although the tables and figures looked at settlements located up to 15 km from the Ashdown Forest SPA, they did so only in the application of the model and as part of the process of extrapolation, not because a 15 km zone was under consideration as an alternative to a 7 km zone.
28. A little later, chapter 6 set out findings and recommendations:

“6.6 Appropriate Assessment Findings

Based on the information given above, **it cannot be concluded that the Core Strategy will not lead to adverse effects on the ecological integrity of Ashdown Forest SPA** if allowed to proceed unchecked. In accordance with the precautionary principle, avoidance and/or mitigation measures are required to remove or reduce the effects.

6.7 Recommendations

A series of avoidance and mitigation measures are recommended in **Table 6.3**, which aim to eliminate the risk of adverse effects at the Ashdown Forest SPA

6.8 Residual and In Combination Effects

It is considered that, subject to the measures outlined in **Table 6.3** being successfully adopted and implemented, effects connected with increasing recreational pressure can be satisfactorily avoided and reduced. Assuming this is the case, there are no further effects associated with the Core Strategy in relation to disturbance, and therefore the plan can **proceed to adoption without further tests under the Habitats Regulations** in this respect. As assessment of in combination effects is not required, because the effects of the Core Strategy are removed.” (Emphasis in the original.)

The recommendations in Table 6.3 included, in substance and so far as material, the provisions relating to a 7 km zone that were subsequently included in policy WCS12.

29. In a later chapter summarising recommendations and outcomes, it was stated at paragraph 9.2 that the report demonstrated that adverse effects associated with the Core Strategy in relation to, *inter alia*, disturbance from recreation at the Ashdown Forest SPA “can be overcome provided the avoidance and mitigation package presented in Table 9.1 [which included the 7 km zone] is successfully adopted and implemented”.
30. The conclusion reached in the Habitats Regulations accorded with the advice of Natural England. The notes of a meeting between Natural England, the Council and the Council’s environmental consultants on 8 June 2010 recorded that Natural England would object to a housing allocation within 400 metres of the Ashdown Forest SPA and that:
- “In addition, any net increase in dwelling numbers within 7 kilometres of the Ashdown Forest will require the provision of SANGs with the provision of 8 hectares of land per net increase of 1000 population”
31. Similarly, in a letter to the Council dated 15 April 2011 and commenting on the proposed submission draft of the Core Strategy, Natural England stated:
- “We support Sections 3.30 to 3.33 on the Environment and the broad mitigation measures that will be required in order to avoid likely significant effects on designated sites. We feel that the proposed avoidance and mitigation measures of SANGS and contributions for onsite access management will ensure that housing within 7 km will not have a likely significant impact on Ashdown Forest”

The judgment of Sales J

32. The Habitats Regulations Assessment was at the centre of the reasons given by Sales J for rejecting the appellant’s case that the Council, in breach of the requirement in regulation 12(2)(b) of the SEA Regulations, had failed to consider reasonable alternatives to the 7 km zone.
- “106. ... As the Commission guidance at para. 4.7 and the court in *Save Historic Newmarket Ltd* at [15] and in *Heard v Broadland DC* at [12] explain is permissible, the Habitats Regulations Assessment was issued with and incorporated by reference into the Sustainability Appraisal and hence into the environmental report required under the SEA Directive and the Environmental Assessment Regulations; and in the Sustainability Appraisal itself, WDC [Wealden District Council] made clear that it adopted the protection recommendations set out in the Habitats Regulations Assessment. Chapter 6 of the Habitats Regulations Assessment contained a detailed discussion of the issue of disturbance of wildlife at Ashdown Forest through increased recreational pressure associated with new residential development in its vicinity. The protective 7 km SANG zone was stated by

WDC's expert environmental consultants to be required to avoid harm to the Ashdown Forest protected site from increased residential development, and this was also the advice of Natural England.

107. The basis for this requirement was set out in the Habitats Regulations Assessment

108. Accordingly, in my view, the principled reasoning and evidence base which justified the selection of a protective zone set at 7 km were clearly set out in the relevant environmental report. Indeed, on a fair reading of the Habitats Regulations Assessment/environmental report I think one could say that three alternatives had been canvassed (a 5 km zone in accordance with the precedent at the Thames Basin Heaths; a 15 km zone; and a 7 km zone), and that clear reasons had been given for selecting the 7 km solution chosen to be included in the Core Strategy, namely that the Thames Basin Heaths protective zone was considered to provide a good model for controlling increased visitor numbers to the precautionary level considered appropriate by experts and that an extension of the protective zone around Ashdown Forest to 7 km was assessed to be necessary to provide the same level of protection. Read in this way, I think that the Habitats Regulations Assessment did in fact include a comparative assessment to the same level of detail of the preferred option (a 7 km zone) and two reasonable alternatives, a 5 km zone and a 15 km zone.

109. But even if one does not read the Habitats Regulations Assessment in that way, but rather just as a principled set of reasons for choosing a 7 km protective zone, in line with Mr Pereira's submissions, the reasons given explain clearly why that solution was chosen and, by clear implication, why other solutions were not chosen. Adjusting para. [70] of Ouseley J's judgment in *Heard v Broadland DC* for the circumstances of this case, the reasons given for selecting the 7 km protective zone as the relevant mitigation measure were in substance the reasons why no other alternatives were selected for assessment or comparable assessment. No other alternative would achieve the objectives which the 7 km zone would achieve. Again, the objectives of the SEA Directive to contribute to more transparent decision-making and to allow contributions to the development of a strategic plan by the public have been fulfilled in the circumstances of this case. WDC had explained the reasons for choosing a 7 km zone and members of the public were in a position to challenge those reasons and WDC's assessment during the examination of the proposed Core Strategy, should they wish to do so.

110. Mr Elvin sought to suggest that WDC should have commissioned further work to assess other possible options

which might have resulted in equivalent visitor densities in relation to bird population density as between Ashdown Forest and the Thames Basin or Dorset Heaths. I do not accept this suggestion. As the Habitats Regulations Assessment made clear, it was largely unknown exactly how and to what extent increased recreational visits might affect the protected bird populations, and any attempt to marry up visitor densities and bird densities in such a precise way would have been a spurious and potentially misleading exercise, which would not have met the points made by WDC's expert environmental advisers and Natural England. Neither of them suggested that there was any alternative which might be suitable and which should be examined further. A decision-maker is entitled, indeed obliged, to give the views of statutory consultees such as Natural England great weight: see *Shadwell Estates Ltd v Breckland DC* [2013] EWHC 12 (Admin), at [72]. No-one else raised any sustained or developed argument in the course of the iterative process of development of the Core Strategy in favour of a different solution. WDC was entitled to proceed to adopt the solution proposed by both Natural England and its own expert advisers without seeking to cast around for other potential alternatives to examine. To have done so would have been a completely artificial exercise in the circumstances.

...

112. In these proceedings, the Claimant has adduced evidence from Karen Colebourn, an ecological consultant, giving her opinion about possible mitigation measures "which may be suitable at Ashdown Forest", including decreasing car park capacity or increasing the cost of parking, creation of special dog exercise areas, provision of information and education for dog owners and improvement of strategic walking routes. This is opinion evidence put forward not in the context of the iterative process resulting in adoption of the Core Strategy, but well after the event. No concrete, worked through proposals are set out and there is no evidence to suggest that such measures would actually work by themselves. I accept Mr Pereira's submission that it cannot sensibly be contended on the basis of Ms Colebourn's evidence that no reasonable planning authority would have failed to identify these as "reasonable alternatives" so as to be obliged to assess such ideas or their efficacy in the Sustainability Appraisal. I am fortified in this view by the fact that the Inspector did not consider that further assessment work was required in relation to this part of the Core Strategy."

The appellant's case

33. The appellant's essential case, as I have said, is that there was a failure to comply with the duty under regulation 12 of the SEA Regulations to assess reasonable alternatives to the 7 km zone.

34. Mr Elvin's main submission is that the judge was wrong to rely as he did on the Habitats Regulations Assessment as meeting the appellant's complaint on this issue. It was not the function of that assessment to consider alternatives, and the exercise undertaken did not in fact involve any consideration of alternatives. The focus of the exercise was the elimination of risk: the 7 km zone was recommended as one of the avoidance and mitigation measures "which aim to eliminate the risk of adverse effects at the Ashdown Forest SPA" (paragraph 6.7). For that purpose it was sufficient to conclude that the 7 km zone, in conjunction with other measures that are not in issue, would eliminate the risk of adverse effects. The question whether it was necessary to go that far to eliminate the risk, or whether the risk could be eliminated by other means, was not posed. There was simply no discussion of alternatives.
35. Mr Elvin submitted that the judge was wrong to find that the reasons why alternatives were not chosen were implicit in the reasons given for choosing a 7 km zone: given the nature of the exercise (the ruling out of risk), the choice of a 7 km zone did not mean that there were no alternatives. In any event, he submitted that reasons have to be *explicit*, not implicit, in order to meet the requirements of the SEA Regulations.
36. As to alternatives that might have been considered, Mr Elvin referred to two types of possibility. One involved variants on the approach based on the Thames Basin Heaths precedent, producing a different radius from the 7 km adopted. The other avoided a zonal approach and involved alternative means of mitigating the additional recreational pressure arising from new development. He submitted that the fact that such alternatives were not raised at the time by the appellant or other objectors was immaterial, since the duty was on the Council to consider reasonable alternatives and to consult on them.

The Council's case

37. Mr Edwards QC submitted that under regulation 12 of the SEA Regulations a local planning authority, as the primary decision-maker, has a *discretion* to identify what, if any, reasonable alternatives there are. This is a matter of judgment, informed by the objectives of the plan (see regulation 12(2)(b)). Reasonable alternatives can be considered at different levels: alternatives to the plan as a whole, or to specific elements or policies within it. How far to drill down into the plan for the purpose of identifying alternatives is itself a matter of judgment. In respect of its decision with regard to reasonable alternatives, an authority "has a wide power of evaluative assessment, with the court exercising a limited review function" (per Sales J in the judgment under appeal, at paragraph 91; see also, most recently, *R (Friends of the Earth) v Welsh Ministers* [2015] EWHC 776 (Admin), per Hickinbottom J at paragraphs 85-89). Any decision as to whether there are reasonable alternatives and what those alternatives are is subject to challenge on normal public law principles. Only where the authority judges there to be reasonable alternatives is it necessary for it to carry out an evaluation of their likely significant effects on the environment, in accordance with regulation 12(2) and paragraph 8 of Schedule 2. Where the authority reasonably concludes that there are no reasonable alternatives, no such evaluation is needed.
38. Mr Edwards pointed to the clear advice of Natural England that a 7 km zone would be "required", which in his submission provided important context for the Council's approach. He also pointed out that there was no suggestion in any of the responses to

consultation that the Council should take a different approach towards protection of the Ashdown Forest SPA: no tangible alternative approach was put forward.

39. Mr Edwards took us through the detail of the relevant part of the Habitats Regulation Assessment. In his submission, it was “pretty obvious” that the Council, having started from a 5 km zone, recognised that this would not provide sufficient protection and rejected it; and it was plain that the Council also considered a 15 km zone, which can be seen on the plans albeit not mentioned in the text. Thus it was “pretty obvious” that in using the Thames Basin Heaths approach and setting the zonal figure at 7 km for the Ashdown Forest SPA, the Council was of the view that anything less than 7 km would not achieve the necessary protection and anything more would be unnecessary. The reasons for selecting the preferred option may themselves tell you why alternatives are considered to be unrealistic.
40. In Mr Edwards’s submission, it was not unreasonable for the Council not to consider either of the two types of possible alternatives suggested by Mr Elvin. It was not unreasonable to adopt the specific approach based on the Thames Basin Heaths SPA precedent, having regard *inter alia* to the advice given by Natural England and by the Council’s own consultants and to the fact that the consultation on this approach did not produce any suggestion of a different approach. As to on-site mitigation, the adopted policy referred to on-site visitor management measures in combination with the provision of SANGs, and it was not unreasonable in the circumstances to consider such measures as complementary rather than as an alternative to a zonal approach. Mr Edwards also advanced a point that the power to control access to, and to manage, Ashdown Forest lies with the Conservators and not with the Council; but he accepted that this would take him nowhere if the Conservators agreed to the course of action proposed and he sensibly did not pursue the point.
41. Mr Edwards also relied on the inspector’s final report, with its finding that the relevant procedural requirements were met and its endorsement of the soundness of the Core Strategy.

Discussion

42. I accept Mr Edwards’s submission that the identification of reasonable alternatives is a matter of evaluative assessment for the local planning authority, subject to review by the court on normal public law principles, including *Wednesbury* unreasonableness. In order to make a lawful assessment, however, the authority does at least have to apply its mind to the question. A fundamental difficulty faced by the Council in the present case, and not satisfactorily addressed in Mr Edwards’s submissions, is that there is in my view no evidence that the Council gave *any* consideration to the question of reasonable alternatives to the 7 km zone. If the Council had formed a judgment that it was not appropriate to “drill down” into the plan as far as the specific details of policy WCS12 for the purpose of identifying alternatives, or that there were no reasonable alternatives to the 7 km zone, then it would be in a relatively strong position to resist the appellant’s claim. But in the absence of any consideration of those matters, it is in a very weak position to do so.
43. The witness statements of Ms Marina Briginshaw, the Council’s Planning Policy Manager, describe in some detail the process leading to the adoption of the Core Strategy and engage with a variety of specific points raised in the evidence of the

appellant, but they do not suggest at any point that the Council did consider the question of reasonable alternatives to the 7 km zone.

44. The Council's case that the question of reasonable alternatives was considered depends on inferences to be drawn from the Habitats Regulations Assessment. As to that, however, it seems to me that the points made by Mr Elvin are well founded.
45. First, it was not the function of the Habitats Regulations Assessment to consider alternatives. What mattered for the purposes of that assessment was that the Core Strategy should not lead to any adverse effects on the integrity of the Ashdown Forest SPA. The avoidance and/or mitigation measures recommended in it were put forward in accordance with the precautionary principle with the aim of *eliminating the risk* of adverse effects. They were considered to meet that aim. It does not follow that there were no alternative means of ensuring the necessary protection of the SPA.
46. Sales J took the view, at paragraph 108 of his judgment, that on a fair reading of the Habitats Regulations Assessment three alternatives had been canvassed: a 5 km zone in accordance with the Thames Basin Heaths precedent, a 7 km zone, and a 15 km zone. With respect, and as already indicated at paragraph 27 above, I do not accept that the report can be read in that way. The report did not consider the 5 km as an alternative to a 7 km zone but simply as the starting point for a process of extrapolation leading to the 7 km zone. Nor was there any suggestion of a 15 km zone as an alternative: a 15 km radius was simply used in the course of the process of extrapolation leading to the 7 km zone.
47. Sales J's alternative analysis, at paragraph 109 of his judgment, is that if the report is to be read just as a principled set of reasons for choosing a 7 km zone, "the reasons given explain clearly why that solution was chosen and, by clear implication, why other solutions were not chosen". Again, I respectfully differ from the judge's view. It comes back to the same point about the purpose of the Habitats Regulations Assessment and the nature of the exercise undertaken in it. It was sufficient that the measures recommended in it, including the 7 km zone, would eliminate the risk of adverse effects on the Ashdown Forest SPA. The reasons why the 7 km zone would serve that purpose did not amount by necessary implication to reasons why there were no alternative means of ensuring the necessary protection of the SPA. The report did not state or suggest that nothing short of a 7 km zone would suffice or that no other measures were possible. The report simply explained why a 7 km zone was considered to meet the aim of eliminating the risk.
48. I should add for completeness that I do not accept that anything turns on the advice of Natural England that any net increase in dwelling numbers within a 7 km zone would "require" the provision of SANGs. In my view, this cannot be read as advice that the 7 km zone was the only option available, nor is there any evidence that the Council treated it as such. Nor do I accept that anything turns on the inspector's endorsement of the soundness of the Core Strategy.
49. In those circumstances it is unnecessary to examine Mr Elvin's submission that reasons have to be explicit in order to meet the requirements of the SEA Regulations. The primary reason why Lewison LJ granted permission to appeal was that the appellant's case on this point had a real prospect of success. Anything we said on it

would, however, be *obiter* and in my view the point is better left for consideration when a decision on it is needed.

50. At paragraph 110 of his judgment, Sales J pointed to the fact that neither Natural England nor the Council's environmental consultants suggested that there was any alternative that might be suitable and should be examined further, nor did anyone raise sustained or developed argument in favour of a different solution in the course of the iterative process of development of the Core Strategy. I find this a particularly troubling feature of the appellant's case, only marginally lessened by the fact that the inspector did at one point ask whether the Council should consider alternatives to the Thames Basin Heath approach (see paragraph 18 above). But it seems to me that Mr Elvin is correct in his submission that it was the duty of the Council to consider the question of reasonable alternatives. If the Council had considered the question, it might have concluded, in the absence of any suggestions to the contrary, that there were no reasonable alternatives, and have given reasons in support of that conclusion. The fact that nobody suggested alternatives cannot, however, validate the Council's failure to consider the question at all.
51. My conclusion, arrived at with a degree of reluctance, is that policy WCS12, in so far as it relates to the 7 km zone, was adopted in breach of the duty under regulation 12 of the SEA Regulations relating to the assessment of reasonable alternatives. That makes it necessary to consider the question of relief.

Relief

52. In terms of general approach to the question of relief, Mr Elvin accepted that the court retains its traditional discretion in the matter, provided that the substance of a claimant's EU rights is met. He referred to *Walton v Scottish Ministers* [2012] UKSC 44, [2013] PTSR 51, in which Lord Carnwath considered the EU authorities, in particular Case C-201/02, *R (Wells) v Secretary of State for Transport, Local Government and the Regions* [2005] All ER (EC) 323 and Case C-41/11, *Inter-Environnement Wallonie ASBL v Region Wallonne* [2012] 2 CMLR 623, and concluded:

“138. It would be a mistake in my view to read these cases as requiring automatic ‘nullification’ or quashing of any schemes or orders adopted under the 1984 Act where there has been some shortfall in the SEA procedure at an earlier stage, regardless of whether it has caused prejudice to anyone in practice, and regardless of the consequences for wider public interests. As *Wells* ... makes clear, the basic requirement of European law is that the remedies should be ‘effective’ and ‘not less favourable’ than those governing similar domestic situations. Effectiveness means no more than that the exercise of the rights granted by the Directive should not be rendered ‘impossible in practice or excessively difficult’. Proportionality is also an important principle of European law.

139. Where the court is satisfied that the applicant has been able in practice to enjoy the rights conferred by the European legislation, and where a procedural challenge would fail under

domestic law because the breach caused no substantial prejudice, I see nothing in principle or authority to require the courts to adopt a different approach merely because the procedural requirement arises from a European rather than a domestic source.”

53. Mr Elvin submitted that the non-compliance with the requirements of EU law, as implemented in the SEA Regulations, was in this case one of substance. He pointed in this connection to the late stage at which the 7 km zone became part of policy WCS12, as distinct from the text of the Core Strategy, and the late opportunity for consultation on it in that form; a point to which I attach little weight, since there was in reality an opportunity to raise concerns about it in response to consultation on the draft Core Strategy even when the 7 km zone featured only in the text, not in the policy.
54. More important is Mr Elvin’s submission that it cannot be said that a quashing order and a requirement to reconsider the issue of reasonable alternatives would make no difference. That submission brings in reference to some material that I have not covered so far or have touched on only incidentally. First, the first witness statement of Ms Karen Colebourn, an ecological consultant instructed by the appellant, sets out various measures which in her opinion may be suitable at Ashdown Forest and expresses the view that “there were no ‘knock-out’ reasons why any or all of these measures could properly have been discounted without assessment on the basis that they were not reasonable alternatives to a 7 km SANGS zone”; and her second witness statement contains an extended critique of the Council’s failure to assess alternatives. Sales J refers to that evidence at paragraph 112 of his judgment. I agree with Sales J that the evidence does not assist the appellant’s case that the Council was in breach of duty. In the context of relief, however, it does indicate that the possibility of reasonable alternatives cannot be dismissed out of hand.
55. Secondly, there is evidence that the effect of policy WCS12 has been to prevent new residential development within the 7 km zone because of the unavailability of SANGS and notwithstanding the willingness of developers to make a financial contribution towards the provision of SANGS. The delay caused by the absence of SANGS provision is a matter of real concern.
56. Thirdly, Natural England’s own stance has changed, at least partly in reaction to this concern. This appears from correspondence with the Council on which Ms Colebourn relies in her second witness statement. In a letter of 15 April 2013, Natural England stated:

“We are aware that the current approach is a matter of concern, and that the SANGS requirement in particular is seen by developers as an obstacle to housing delivery. Our expectation is that a combination of different measures would be most effective in protecting the forest from the effects of an increase in recreational disturbance but we are mindful that reliance on SANGS for this does present a risk of delay in putting in place a scheme which would stream line the granting of planning permission for housing. In order to avoid such a delay, our advice is that a strategic scheme of avoidance and mitigation

measures can be put in place, in a phased approach, so that at no point is it necessary to refuse planning permission on strategic (non case specific) grounds relating to recreational disturbance on the SPA and SAC.

Our understanding is that in the next two to three years, approximately about 800 houses are likely to come forward in your two authority areas and figures have been provided to indicate that this will increase visitor numbers on the forest by about 1.7%

In order to ensure that we are aware of the options to safeguard the SPA and SAC which will be least burdensome to developers, we have explored with the Conservators of Ashdown Forest their views on access management and monitoring. They have indicated to us that in principle they would be willing to take on additional resources, as part of a broader programme of measures, to increase the level of monitoring and wardening on the forest. Our advice is that this could be made sufficient to address at least the potential increase in visitor numbers on the scale indicated above

Early implementation of a scheme for increased monitoring and wardening would not only have benefit itself in enabling development to proceed, but with the monitoring built in, it should also provide information to inform the balance of measures put in place over the longer term. This would help to ensure their effectiveness in safeguarding the SPA and SAC, at lowest cost to development.”

57. In a letter of 21 June 2013, Natural England made clear that its suggestion for bringing forward what it described as “Strategic Access, Management and Monitoring (SAMM)” as an interim solution to release some limited development was not intended to unpick the measures in the Core Strategy regarding SAMMs and SANGs but that “the two schemes are intended to be complementary and we consider that no part of policy WCS12 prevents them from being introduced in a phased way”.
58. All of this suggests that there is scope for consideration of possible alternatives to the 7 km zone, whether in terms of an interim approach to enable development within the 7 km zone to proceed pending the availability of the SANG required by the existing policy, or in terms of an approach departing altogether from a 7 km zone. It tells strongly in favour of the grant of the relief sought by the appellant. Moreover, to quash the relevant part of policy WCS12 would not leave a serious lacuna in protection pending adoption of a replacement policy. Development would still be subject to the screening/assessment requirements of regulation 61 of the Habitats Regulations; and if the avoidance of adverse effects on the Ashdown Forest SPA could only be achieved by the provision of SANG, a requirement to that effect could be imposed on a site-specific basis. It seems to me that that is a more appropriate approach than to rely on a point made by Mr Edwards, that if policy WCS12 is retained in its existing form, it will remain open to an applicant for planning permission to adduce evidence to persuade the authority that the proposed

development is certain not to harm the Ashdown Forest even without the provision of SANG.

59. I have considered the various other points in Mr Edwards's skeleton argument upon which he relied in support of the submission that there should be no quashing order. I think it unnecessary to list them. In my view none of them has any significant weight.
60. In conclusion, I am satisfied that we should grant the quashing order sought by the appellant, limited to the part of policy WCS12 relating to the 7 km zone. The precise form of order can be left for agreement between counsel or can be the subject of written submissions in the event of disagreement.

Lord Justice McFarlane :

61. I agree.

Lord Justice Christopher Clarke :

62. I also agree.

2004 No. 1633

ENVIRONMENTAL PROTECTION

The Environmental Assessment of Plans and Programmes Regulations 2004

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<i>Made</i>	<i>28th June 2004</i>
<i>Laid before Parliament</i>	<i>29th June 2004</i>
<i>Coming into force</i>	<i>20th July 2004</i>

The Secretary of State, being a designated¹ Minister for the purposes of section 2(2) of the European Communities Act 1972 in relation to matters relating to the assessment of the effects of certain plans and programmes on the environment, in exercise of the powers conferred by that section 2, and of all other powers enabling him in that behalf, hereby makes the following Regulations:

Notes

¹ S.I. 2004/706.

Extent

Preamble: United Kingdom

PART 1**INTRODUCTORY PROVISIONS**

 Law In Force

1. Citation and commencement


These Regulations may be cited as the Environmental Assessment of Plans and Programmes Regulations 2004 and shall come into force on 20th July 2004.

Commencement

Pt 1 reg. 1: July 20, 2004

Extent

Pt 1 reg. 1: United Kingdom

 Law In Force
2.— Interpretation

(1) In these Regulations—

“consultation body” has the meaning given by regulation 4;

“England” includes the territorial waters of the United Kingdom that are not part of Northern Ireland, Scotland or Wales, and waters in any area for the time being designated under section 17(1) of the Continental Shelf Act 1964;

“the Environmental Assessment of Plans and Programmes Directive” means Directive 2001/42/EC of the European Parliament and of the Council on the assessment of the effects of certain plans and programmes on the environment;

“the Habitats Directive” means Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna, as last amended by Council Directive 97/62/EC¹;

“Northern Ireland” has the meaning given by section 98 of the Northern Ireland Act 1998²;

“plans and programmes” means plans and programmes, including those co-financed by the European Community, as well as any modifications to them, which—

(a) are subject to preparation or adoption by an authority at national, regional or local level; or

(b) are prepared by an authority for adoption, through a legislative procedure by Parliament or Government; and, in either case,

(c) are required by legislative, regulatory or administrative provisions; and

“responsible authority”, in relation to a plan or programme, means—

(a) the authority by which or on whose behalf it is prepared; and

(b) where, at any particular time, that authority ceases to be responsible, or solely responsible, for taking steps in relation to the plan or programme, the person who, at that time, is responsible (solely or jointly with the authority) for taking those steps;

“Scotland” has the meaning given by section 126 of the Scotland Act 1998³; and

“Wales” has the meaning given by section 155 of the Government of Wales Act 1998⁴.

(2) Other expressions used both in these Regulations and in the Environmental Assessment of Plans and Programmes Directive have the same meaning in these Regulations as they have in that Directive.

Notes

¹ O.J. No. L 206, 22.7.1992. The latest amending Directive is at O.J. No. L 305, 8.11.1997, p.42.

² See also the orders made under section 98.

³ See also the orders made under section 126.

⁴ See also the orders made under section 155.

Commencement

Pt 1 reg. 2(1)-(2): July 20, 2004

Extent

Pt 1 reg. 2(1)-(2): United Kingdom

Law In Force

3.— Application of Regulations

- (1) With the exception of regulations 14 and 15, these Regulations apply as follows.
- (2) These Regulations apply to a plan or programme relating—
- (a) solely to the whole or any part of England; or
 - (b) to England (whether as to the whole or part) and any other part of the United Kingdom.
- (3) These Regulations apply to a plan or programme relating (whether wholly or in part) to the Isles of Scilly as if the Isles were a county in England.
- (4) These Regulations do not apply to a plan or programme relating solely—
- (a) to the whole or any part of Northern Ireland;
 - (b) to the whole or any part of Scotland; or
 - (c) to the whole or any part of Wales.
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Commencement

Pt 1 reg. 3(1)-(4)(c): July 20, 2004

Extent

Pt 1 reg. 3(1)-(4)(c): United Kingdom

Law In Force

4.— Consultation bodies

- (1) Subject to paragraph (5), in relation to every plan or programme to which these Regulations apply, each of the following bodies shall be a consultation body—
- (a) the Countryside Agency;
 - (b) the Historic Buildings and Monuments Commission for England (English Heritage);
 - (c) English Nature; and
 - (d) the Environment Agency,
- but where paragraph (2), (3) or (4) applies, the functions of those bodies under these Regulations shall be exercisable only in relation to so much of the plan or programme as relates to England.
- (2) In relation to such part of a plan or programme to which these Regulations apply as relates to Northern Ireland, the Department of the Environment for Northern Ireland shall be a consultation body for the purposes of these Regulations.

(3) In relation to such part of a plan or programme to which these Regulations apply as relates to Scotland, each of the following shall be a consultation body for the purposes of these Regulations—

- (a) the Scottish Ministers;
- (b) the Scottish Environment Protection Agency; and
- (c) Scottish Natural Heritage.

(4) In relation to such part of a plan or programme to which these Regulations apply as relates to Wales, each of the following shall be a consultation body for the purposes of these Regulations—

- (a) the National Assembly for Wales; and
- (b) [the Natural Resources Body for Wales]¹.

(5) Where a body mentioned in paragraph (1) is at any time the responsible authority as regards a plan or programme, it shall not at that time exercise the functions under these Regulations of a consultation body in relation to that plan or programme; and references to the consultation bodies in the following provisions of these Regulations shall be construed accordingly.

Notes

- ¹ Words substituted by Natural Resources Body for Wales (Functions) Order 2013/755 Sch.4 para.189 (April 1, 2013: substitution has effect subject to transitional provisions and savings specified in SI 2013/755 art.10 and Sch.7)

Commencement

Pt 1 reg. 4(1)-(5): July 20, 2004

Extent

Pt 1 reg. 4(1)-(5): United Kingdom

PART 2

ENVIRONMENTAL ASSESSMENT FOR PLANS AND PROGRAMMES

 Law In Force

5.— Environmental assessment for plans and programmes: first formal preparatory act on or after 21st July 2004

(1) Subject to paragraphs (5) and (6) and regulation 7, where—

- (a) the first formal preparatory act of a plan or programme is on or after 21st July 2004; and
- (b) the plan or programme is of the description set out in either paragraph (2) or paragraph (3),

the responsible authority shall carry out, or secure the carrying out of, an environmental assessment, in accordance with Part 3 of these Regulations, during the preparation of that plan or programme and before its adoption or submission to the legislative procedure.

(2) The description is a plan or programme which—

- (a) is prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use, and
 - (b) sets the framework for future development consent of projects listed in Annex I or II to Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11/EC¹.
- (3) The description is a plan or programme which, in view of the likely effect on sites, has been determined to require an assessment pursuant to Article 6 or 7 of the Habitats Directive.
- (4) Subject to paragraph (5) and regulation 7, where—
- (a) the first formal preparatory act of a plan or programme, other than a plan or programme of the description set out in paragraph (2) or (3), is on or after 21st July 2004;
 - (b) the plan or programme sets the framework for future development consent of projects; and
 - (c) the plan or programme is the subject of a determination under regulation 9(1) or a direction under regulation 10(3) that it is likely to have significant environmental effects,
- the responsible authority shall carry out, or secure the carrying out of, an environmental assessment, in accordance with Part 3 of these Regulations, during the preparation of that plan or programme and before its adoption or submission to the legislative procedure.
- (5) Nothing in paragraph (1) or (4) requires the carrying out of an environmental assessment for—
- (a) a plan or programme the sole purpose of which is to serve national defence or civil emergency;
 - (b) a financial or budget plan or programme; or
 - (c) a plan or programme co-financed under—
 - (i) the 2000–2006 programming period for Council Regulation (EC) No. 1260/1999; or
 - (ii) the 2000–2006 or 2000–2007 programming period for Council Regulation (EC) No. 1257/1999.
- (6) An environmental assessment need not be carried out—
- (a) for a plan or programme of the description set out in paragraph (2) or (3) which determines the use of a small area at local level; or
 - (b) for a minor modification to a plan or programme of the description set out in either of those paragraphs,
- unless it has been determined under regulation 9(1) that the plan, programme or modification, as the case may be, is likely to have significant environmental effects, or it is the subject of a direction under regulation 10(3).

Notes


¹ O.J. No. L 175, 5.7.1985, p.40. The amending Directive is at O.J. L73, 14.3.1997, p.5.

Commencement

Pt 2 reg. 5(1)-(6)(b): July 20, 2004

Extent

Pt 2 reg. 5(1)-(6)(b): United Kingdom

 Law In Force

6.— Environmental assessment for plans and programmes: first formal preparatory act before 21st July 2004

(1) Subject to paragraph (2) and regulation 7, where—

(a) a plan or programme of which the first formal preparatory act is before 21st July 2004 has not been adopted or submitted to the legislative procedure for adoption before 22nd July 2006; and

(b) the plan or programme is such that, had the first act in its preparation occurred on 21st July 2004, the plan or programme would have required an environmental assessment by virtue of regulation 5(1); or

(c) the responsible authority is of the opinion that, if a determination under regulation 9(1) in respect of the plan or programme had been made on 21st July 2004, it would have determined that the plan or programme was likely to have significant environmental effects, the responsible authority shall carry out, or secure the carrying out of, an environmental assessment, in accordance with Part 3 of these Regulations, during the preparation of that plan or programme and before its adoption or submission to the legislative procedure.

(2) Nothing in paragraph (1) shall require the environmental assessment of a particular plan or programme if the responsible authority—

(a) decides that such assessment is not feasible; and


(b) informs the public of its decision.

Commencement

Pt 2 reg. 6(1)-(2)(b): July 20, 2004

Extent

Pt 2 reg. 6(1)-(2)(b): United Kingdom

 Law In Force

7. Environmental assessment for plans and programmes co-financed by the European Community

The environmental assessment required by any provision of this Part for a plan or programme co-financed by the European Community shall be carried out by the responsible authority in conformity with the specific provisions in relevant [EU]¹ legislation.

Notes

¹ Word substituted by Treaty of Lisbon (Changes in Terminology) Order 2011/1043 Pt 2 art.6(2)(b) (April 22, 2011)

Commencement

Pt 2 reg. 7: July 20, 2004

Extent

Pt 2 reg. 7: United Kingdom

Law In Force

8.— Restriction on adoption or submission of plans, programmes and modifications

(1) A plan, programme or modification in respect of which a determination under regulation 9(1) is required shall not be adopted or submitted to the legislative procedure for the purpose of its adoption—

- (a) where an environmental assessment is required in consequence of the determination or of a direction under regulation 10(3), before the requirements of paragraph (3) below have been met;
- (b) in any other case, before the determination has been made under regulation 9(1).

(2) A plan or programme for which an environmental assessment is required by any provision of this Part shall not be adopted or submitted to the legislative procedure for the purpose of its adoption before—

- (a) if it is a plan or programme co-financed by the European Community, the environmental assessment has been carried out as mentioned in regulation 7;
- (b) in any other case, the requirements of paragraph (3) below, and such requirements of Part 3 as apply in relation to the plan or programme, have been met.

(3) The requirements of this paragraph are that account shall be taken of—

- (a) the environmental report for the plan or programme;
- (b) opinions expressed in response to the invitation referred to in regulation 13(2)(d);
- (c) opinions expressed in response to action taken by the responsible authority in accordance with regulation 13(4); and
- (d) the outcome of any consultations under regulation 14(4).

Commencement

Pt 2 reg. 8(1)-(3)(d): July 20, 2004

Extent

Pt 2 reg. 8(1)-(3)(d): United Kingdom

Law In Force

9.— Determinations of the responsible authority

(1) The responsible authority shall determine whether or not a plan, programme or modification of a description referred to in—

- (a) paragraph (4)(a) and (b) of regulation 5;
- (b) paragraph (6)(a) of that regulation; or
- (c) paragraph (6)(b) of that regulation,

is likely to have significant environmental effects.

(2) Before making a determination under paragraph (1) the responsible authority shall—

- (a) take into account the criteria specified in Schedule 1 to these Regulations; and
- (b) consult the consultation bodies.

(3) Where the responsible authority determines that the plan, programme or modification is unlikely to have significant environmental effects (and, accordingly, does not require an environmental assessment), it shall prepare a statement of its reasons for the determination.

Commencement

Pt 2 reg. 9(1)-(3): July 20, 2004

Extent

Pt 2 reg. 9(1)-(3): United Kingdom

Law In Force

10.— Powers of the Secretary of State

- (1) The Secretary of State may at any time require the responsible authority to send him a copy of—
- (a) any determination under paragraph (1) of regulation 9 with respect to the plan, programme or modification;
 - (b) the plan, programme or modification to which the determination relates; and
 - (c) where paragraph (3) of that regulation applies, the statement prepared in accordance with that paragraph.
- (2) The responsible authority shall comply with a requirement under paragraph (1) within 7 days.
- (3) The Secretary of State may direct that a plan, programme or modification is likely to have significant environmental effects (whether or not a copy of it has been sent to him in response to a requirement under paragraph (1)).
- (4) Before giving a direction under paragraph (3) the Secretary of State shall—
- (a) take into account the criteria specified in Schedule 1 to these Regulations; and
 - (b) consult the consultation bodies.
- (5) The Secretary of State shall, as soon as reasonably practicable after the giving of the direction, send to the responsible authority and to each consultation body—
- (a) a copy of the direction; and
 - (b) a statement of his reasons for giving the direction.
- (6) In relation to a plan, programme or modification in respect of which a direction has been given—
- (a) any determination under regulation 9(1) with respect to the plan, programme or modification shall cease to have effect on the giving of the direction; and
 - (b) if no determination has been made under regulation 9(1) with respect to the plan, programme or modification, the responsible authority shall cease to be under any duty imposed by that regulation.

Commencement

Pt 2 reg. 10(1)-(6)(b): July 20, 2004

Extent

Pt 2 reg. 10(1)-(6)(b): United Kingdom

Law In Force

11.— Publicity for determinations and directions

(1) Within 28 days of making a determination under regulation 9(1), the responsible authority shall send to each consultation body—

- (a) a copy of the determination; and
- (b) where the responsible authority has determined that the plan or programme does not require an environmental assessment, a statement of its reasons for the determination.

(2) The responsible authority shall—

(a) keep a copy of the determination, and any accompanying statement of reasons, available at its principal office for inspection by the public at all reasonable times and free of charge; and

(b) within 28 days of the making of the determination, take such steps as it considers appropriate to bring to the attention of the public—

(i) the title of the plan, programme or modification to which the determination relates;

(ii) that the responsible authority has determined that the plan, programme or modification is or is not likely to have significant environmental effects (as the case may be) and, accordingly, that an environmental assessment is or is not required in respect of the plan, programme or modification; and

(iii) the address (which may include a website) at which a copy of the determination and any accompanying statement of reasons may be inspected or from which a copy may be obtained.

(3) Where the responsible authority receives a direction under regulation 10(3), it shall—

(a) keep a copy of the direction and of the Secretary of State's statement of his reasons for giving it available at its principal office for inspection by the public at all reasonable times and free of charge; and

(b) within 28 days of the receipt of such a direction, take such steps as it considers appropriate to bring to the attention of the public—

(i) the title of the plan, programme or modification to which the direction relates;

(ii) that the Secretary of State has directed that the plan, programme or modification is likely to have significant environmental effects and, accordingly, that an environmental assessment is required in respect of the plan, programme or modification; and

(iii) the address (which may include a website) at which a copy of the direction and of the Secretary of State's statement of his reasons for giving it may be inspected or from which a copy may be obtained.

(4) The responsible authority shall provide a copy of any document referred to in paragraph (2)(b)(iii) or (3)(b)(iii) free of charge.


Commencement

Pt 2 reg. 11(1)-(4): July 20, 2004

Extent

Pt 2 reg. 11(1)-(4): United Kingdom

PART 3**ENVIRONMENTAL REPORTS AND CONSULTATION PROCEDURES**

 Law In Force

12.— Preparation of environmental report

- (1) Where an environmental assessment is required by any provision of Part 2 of these Regulations, the responsible authority shall prepare, or secure the preparation of, an environmental report in accordance with paragraphs (2) and (3) of this regulation.
- (2) The report shall identify, describe and evaluate the likely significant effects on the environment of—
- (a) implementing the plan or programme; and
 - (b) reasonable alternatives taking into account the objectives and the geographical scope of the plan or programme.
- (3) The report shall include such of the information referred to in Schedule 2 to these Regulations as may reasonably be required, taking account of—
- (a) current knowledge and methods of assessment;
 - (b) the contents and level of detail in the plan or programme;
 - (c) the stage of the plan or programme in the decision-making process; and
 - (d) the extent to which certain matters are more appropriately assessed at different levels in that process in order to avoid duplication of the assessment.
- (4) Information referred to in Schedule 2 may be provided by reference to relevant information obtained at other levels of decision-making or through other [EU]¹ legislation.
- (5) When deciding on the scope and level of detail of the information that must be included in the report, the responsible authority shall consult the consultation bodies.
- (6) Where a consultation body wishes to respond to a consultation under paragraph (5), it shall do so within the period of 5 weeks beginning with the date on which it receives the responsible authority's invitation to engage in the consultation.

Notes

¹ Word substituted by Treaty of Lisbon (Changes in Terminology) Order 2011/1043 Pt 2 art.6(2)(b) (April 22, 2011)

Commencement

Pt 3 reg. 12(1)-(6): July 20, 2004

Extent

Pt 3 reg. 12(1)-(6): United Kingdom

Law In Force

13.— Consultation procedures

(1) Every draft plan or programme for which an environmental report has been prepared in accordance with regulation 12 and its accompanying environmental report (“the relevant documents”) shall be made available for the purposes of consultation in accordance with the following provisions of this regulation.

(2) As soon as reasonably practicable after the preparation of the relevant documents, the responsible authority shall—

- (a) send a copy of those documents to each consultation body;
- (b) take such steps as it considers appropriate to bring the preparation of the relevant documents to the attention of the persons who, in the authority's opinion, are affected or likely to be affected by, or have an interest in the decisions involved in the assessment and adoption of the plan or programme concerned, required under the Environmental Assessment of Plans and Programmes Directive (“the public consultees”);
- (c) inform the public consultees of the address (which may include a website) at which a copy of the relevant documents may be viewed, or from which a copy may be obtained; and
- (d) invite the consultation bodies and the public consultees to express their opinion on the relevant documents, specifying the address to which, and the period within which, opinions must be sent.

(3) The period referred to in paragraph (2)(d) must be of such length as will ensure that the consultation bodies and the public consultees are given an effective opportunity to express their opinion on the relevant documents.

(4) The responsible authority shall keep a copy of the relevant documents available at its principal office for inspection by the public at all reasonable times and free of charge.

(5) Nothing in paragraph (2)(c) shall require the responsible authority to provide copies free of charge; but where a charge is made, it shall be of a reasonable amount.

Commencement

Pt 3 reg. 13(1)-(5): July 20, 2004

Extent

Pt 3 reg. 13(1)-(5): United Kingdom

Law in Force

14.— Transboundary consultations

(1) Where a responsible authority, other than the Secretary of State, is of the opinion that a plan or programme for which it is the responsible authority is likely to have significant effects on the environment of another Member State, it shall, as soon as reasonably practicable after forming that opinion—

- (a) notify the Secretary of State of its opinion and of the reasons for it; and
- (b) supply the Secretary of State with a copy of the plan or programme concerned, and of the accompanying environmental report.

(2) Where the Secretary of State has been notified under paragraph (1)(a), the responsible authority shall, within such period as the Secretary of State may specify by notice in writing to the authority, provide the Secretary of State with such other information about the plan or programme or its accompanying environmental report as he may reasonably require.

(3) Where—

- (a) the Secretary of State, whether in consequence of a notice under paragraph (1)(a) or otherwise, considers that the implementation of a plan or programme in any part of the United Kingdom is likely to have significant effects on the environment of another Member State); or
- (b) a Member State that is likely to be significantly affected by the implementation of a plan or programme so requests,

the Secretary of State shall, before the adoption of the plan or programme or its submission to the legislative procedure for adoption, forward a copy of it and of its accompanying environmental report to the Member State concerned.

(4) Where the Secretary of State receives from a Member State an indication that it wishes to enter into consultations before the adoption, or submission to the legislative procedure for adoption, of a plan or programme forwarded to it in accordance with paragraph (3), the Secretary of State shall—

- (a) agree with the Member State—
 - (i) detailed arrangements to ensure that the authorities referred to in paragraph 3 of Article 6 of the Environmental Assessment of Plans and Programmes Directive and the public referred to in paragraph 4 of that Article in the Member State likely to be significantly affected are informed and given an opportunity to forward their opinion within a reasonable time; and
 - (ii) a reasonable time for the duration of the consultations;
- (b) enter into consultations with the Member State concerning—
 - (i) the likely transboundary environmental effects of implementing the plan or programme; and
 - (ii) the measures envisaged to reduce or eliminate such effects; and
- (c) where he is not the responsible authority, direct the responsible authority that it shall not adopt the plan or programme, or submit it to the legislative procedure for adoption, until the consultations with the Member State have been concluded.

(5) Where consultations take place pursuant to paragraph (4), the Secretary of State shall—


- (a) as soon as reasonably practicable after those consultations begin, notify the consultation bodies of that fact; and
- (b) notify the consultation bodies and, where he is not the responsible authority, the responsible authority, of the outcome of the consultations.

Commencement

Pt 3 reg. 14(1)-(5)(b): July 20, 2004

Extent

Pt 3 reg. 14(1)-(5)(b): United Kingdom

 Law In Force

15.— Plans and programmes of other Member States

(1) This regulation applies where the Secretary of State receives from a Member State (whether or not in response to a request made by the United Kingdom in that behalf under the Environmental Assessment of Plans and Programmes Directive) a copy of a draft plan or programme—

- (a) that is being prepared in relation to any part of that Member State; and
- (b) whose implementation is likely to have significant effects on the environment of any part of the United Kingdom.

(2) The Secretary of State shall indicate to the Member State whether, before the adoption of the plan or programme or its submission to the legislative procedure for adoption, the United Kingdom wishes to enter into consultations in respect of that plan or programme concerning—

- (a) the likely transboundary environmental effects of implementing the plan or programme; and
- (b) the measures envisaged to reduce or eliminate such effects.

(3) Where the Secretary of State so indicates, he shall agree with the Member State concerned—

- (a) detailed arrangements to ensure that the consultation bodies and the public in the United Kingdom or, as the case may be, the part of the United Kingdom that is likely to be significantly affected by the implementation of the plan or programme, are informed and given an opportunity to forward their opinion within a reasonable time; and
- (b) a reasonable time for the duration of the consultations.

(4) Where such consultations take place under this regulation, the Secretary of State shall—

- (a) inform the consultation bodies of the receipt of the draft plan or programme;
- (b) provide them with a copy of the draft plan or programme and the relevant environmental report provided under Article 7.1 of the Environmental Assessment of Plans and Programmes Directive or specify the address (which may include a website) at which those documents may be inspected;
- (c) take such steps as he considers appropriate to bring the receipt of the draft plan or programme to the attention of such persons as, in his opinion, are affected or likely to be affected by, or have an interest in the decisions involved in the assessment and adoption of the plan or programme concerned, required under the Environmental Assessment of Plans and Programmes Directive (“the transboundary consultees”);
- (d) inform the transboundary consultees of the address (which may include a website) at which a copy of the draft plan or programme and the relevant environmental report provided under Article 7.1 of the Environmental Assessment of Plans and Programmes Directive may be inspected, or from which a copy may be obtained; and

(e) invite the consultation bodies and the transboundary consultees to forward to him their opinions within such period as he may specify.

(5) The period specified under paragraph (4)(e) shall end not later than 28 days before the end of the period that the Secretary of State has agreed with the Member State concerned, pursuant to paragraph (3)(b), as reasonable for the duration of their consultations.

(6) Nothing in paragraph (4)(d) shall require the Secretary of State to provide copies free of charge; but where a charge is made, it shall be of a reasonable amount.


Commencement

Pt 3 reg. 15(1)-(6): July 20, 2004

Extent

Pt 3 reg. 15(1)-(6): United Kingdom

PART 4**POST-ADOPTION PROCEDURES**

 Law In Force

16.— Information as to adoption of plan or programme

(1) As soon as reasonably practicable after the adoption of a plan or programme for which an environmental assessment has been carried out under these Regulations, the responsible authority shall—

- (a) make a copy of the plan or programme and its accompanying environmental report available at its principal office for inspection by the public at all reasonable times and free of charge; and
- (b) take such steps as it considers appropriate to bring to the attention of the public—
 - (i) the title of the plan or programme;
 - (ii) the date on which it was adopted;
 - (iii) the address (which may include a website) at which a copy of it and of its accompanying environmental report, and of a statement containing the particulars specified in paragraph (4), may be viewed or from which a copy may be obtained;
 - (iv) the times at which inspection may be made; and
 - (v) that inspection may be made free of charge.

(2) As soon as reasonably practicable after the adoption of a plan or programme—

- (a) the responsible authority shall inform—
 - (i) the consultation bodies;
 - (ii) the persons who, in relation to the plan or programme, were public consultees for the purposes of regulation 13; and

- (iii) where the responsible authority is not the Secretary of State, the Secretary of State; and
- (b) the Secretary of State shall inform the Member State with which consultations in relation to the plan or programme have taken place under regulation 14(4), of the matters referred to in paragraph (3).

(3) The matters are—

- (a) that the plan or programme has been adopted;
- (b) the date on which it was adopted; and
- (c) the address (which may include a website) at which a copy of—
 - (i) the plan or programme, as adopted,
 - (ii) its accompanying environmental report, and
 - (iii) a statement containing the particulars specified in paragraph (4),may be viewed, or from which a copy may be obtained.

(4) The particulars referred to in paragraphs (1)(b)(iii) and (3)(c)(iii) are—

- (a) how environmental considerations have been integrated into the plan or programme;
- (b) how the environmental report has been taken into account;
- (c) how opinions expressed in response to—
 - (i) the invitation referred to in regulation 13(2)(d);
 - (ii) action taken by the responsible authority in accordance with regulation 13(4),have been taken into account;
- (d) how the results of any consultations entered into under regulation 14(4) have been taken into account;
- (e) the reasons for choosing the plan or programme as adopted, in the light of the other reasonable alternatives dealt with; and
- (f) the measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme.

Commencement

Pt 4 reg. 16(1)-(4)(f): July 20, 2004

Extent

Pt 4 reg. 16(1)-(4)(f): United Kingdom

 Law In Force

17.— Monitoring of implementation of plans and programmes

- (1) The responsible authority shall monitor the significant environmental effects of the implementation of each plan or programme with the purpose of identifying unforeseen adverse effects at an early stage and being able to undertake appropriate remedial action.
- (2) The responsible authority's monitoring arrangements may comprise or include arrangements established otherwise than for the express purpose of complying with paragraph (1).

Commencement

Pt 4 reg. 17(1)-(2): July 20, 2004

Extent

Pt 4 reg. 17(1)-(2): United Kingdom

Law In Force

Signed by authority of one of Her Majesty's Principal Secretaries of State

Keith Hill
Minister of State,
Office of the Deputy Prime Minister

28th June 2004

SCHEDULE 1**CRITERIA FOR DETERMINING THE LIKELY SIGNIFICANCE OF EFFECTS ON THE ENVIRONMENT****Regulations 9(2)(a) and 10(4)(a)**

Law In Force

1.

The characteristics of plans and programmes, having regard, in particular, to—

- (a) the degree to which the plan or programme sets a framework for projects and other activities, either with regard to the location, nature, size and operating conditions or by allocating resources;
- (b) the degree to which the plan or programme influences other plans and programmes including those in a hierarchy;
- (c) the relevance of the plan or programme for the integration of environmental considerations in particular with a view to promoting sustainable development;
- (d) environmental problems relevant to the plan or programme; and
- (e) the relevance of the plan or programme for the implementation of [EU]¹ legislation on the environment (for example, plans and programmes linked to waste management or water protection).

Notes

¹ Word substituted by Treaty of Lisbon (Changes in Terminology) Order 2011/1043 Pt 2 art.6(2)(b) (April 22, 2011)

Commencement

Sch. 1 para. 1(a)-(e): July 20, 2004

Extent

Sch. 1 para. 1(a)-(e): United Kingdom

Law In Force

2.

Characteristics of the effects and of the area likely to be affected, having regard, in particular, to—

- (a) the probability, duration, frequency and reversibility of the effects;
 - (b) the cumulative nature of the effects;
 - (c) the transboundary nature of the effects;
 - (d) the risks to human health or the environment (for example, due to accidents);
 - (e) the magnitude and spatial extent of the effects (geographical area and size of the population likely to be affected);
 - (f) the value and vulnerability of the area likely to be affected due to—
 - (i) special natural characteristics or cultural heritage;
 - (ii) exceeded environmental quality standards or limit values; or
 - (iii) intensive land-use; and
 - (g) the effects on areas or landscapes which have a recognised national, Community or international protection status.
-

Commencement

Sch. 1 para. 2(a)-(g): July 20, 2004

Extent

Sch. 1 para. 2(a)-(g): United Kingdom

SCHEDULE 2**INFORMATION FOR ENVIRONMENTAL REPORTS****Regulation 12(3)**

Law In Force

1.

An outline of the contents and main objectives of the plan or programme, and of its relationship with other relevant plans and programmes.

Commencement

Sch. 2 para. 1: July 20, 2004

Extent

Sch. 2 para. 1: United Kingdom

Law In Force

2.

The relevant aspects of the current state of the environment and the likely evolution thereof without implementation of the plan or programme.

Commencement

Sch. 2 para. 2: July 20, 2004

Extent

Sch. 2 para. 2: United Kingdom

Law In Force

3.

The environmental characteristics of areas likely to be significantly affected.

Commencement

Sch. 2 para. 3: July 20, 2004

Extent

Sch. 2 para. 3: United Kingdom

Law In Force

4.

Any existing environmental problems which are relevant to the plan or programme including, in particular, those relating to any areas of a particular environmental importance, such as areas designated pursuant to Council Directive 79/409/EEC on the conservation of wild birds and the Habitats Directive.

Commencement

Sch. 2 para. 4: July 20, 2004

Extent

Sch. 2 para. 4: United Kingdom

 Law In Force**5.**

The environmental protection objectives, established at international, Community or Member State level, which are relevant to the plan or programme and the way those objectives and any environmental considerations have been taken into account during its preparation.

Commencement

Sch. 2 para. 5: July 20, 2004

Extent

Sch. 2 para. 5: United Kingdom

 Law In Force**6.**

The likely significant effects on the environment, including short, medium and long-term effects, permanent and temporary effects, positive and negative effects, and secondary, cumulative and synergistic effects, on issues such as—

- (a) biodiversity;
- (b) population;
- (c) human health;
- (d) fauna;
- (e) flora;
- (f) soil;
- (g) water;
- (h) air;
- (i) climatic factors;
- (j) material assets;
- (k) cultural heritage, including architectural and archaeological heritage;
- (l) landscape; and
- (m) the inter-relationship between the issues referred to in sub-paragraphs (a) to (l).

Commencement

Sch. 2 para. 6(a)-(m): July 20, 2004

Extent

Sch. 2 para. 6(a)-(m): United Kingdom

Law In Force

7.

The measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan or programme.

Commencement

Sch. 2 para. 7: July 20, 2004

Extent

Sch. 2 para. 7: United Kingdom

Law In Force

8.

An outline of the reasons for selecting the alternatives dealt with, and a description of how the assessment was undertaken including any difficulties (such as technical deficiencies or lack of know-how) encountered in compiling the required information.

Commencement

Sch. 2 para. 8: July 20, 2004

Extent

Sch. 2 para. 8: United Kingdom

Law In Force

9.

A description of the measures envisaged concerning monitoring in accordance with regulation 17.

Commencement

Sch. 2 para. 9: July 20, 2004

Extent

Sch. 2 para. 9: United Kingdom

Law In Force

10.

A non-technical summary of the information provided under paragraphs 1 to 9.

Commencement

Sch. 2 para. 10: July 20, 2004

Extent

Sch. 2 para. 10: United Kingdom

EXPLANATORY NOTE

(This note is not part of the Regulations)

These Regulations implement Directive 2001/42/EC of the European Parliament and Council on the assessment of the effects of certain plans and programmes on the environment (“the Directive”), as regards plans and programmes relating solely to any part of England. For this purpose, England is treated as including any territorial waters of the United Kingdom that are not within Northern Ireland, Scotland or Wales, and waters in areas for the time being designated under the Continental Shelf Act 1964.

The Regulations also implement the Directive as regards plans and programmes relating to England and any other part of the United Kingdom. They do not apply to plans and programmes relating exclusively to Northern Ireland, Scotland or Wales, for which separate provision implementing the Directive is to be made.

The Directive and, accordingly, these Regulations, do not apply to plans and programmes whose sole purpose is to serve national defence or civil emergency, or to financial or budget plans and programmes. Nor do they apply to a plan or programme co-financed by the European Community under the 2000–2006 programming period for Council Regulation (EC) No. 1260/1999 or the

2000–2006 or 2000–2007 programming period for Council Regulation (EC) No. 1257/1999 (regulation 5(5); Article 3.8 and 3.9 of the Directive).

The Regulations apply to certain plans and programmes, including those co-financed by the European Community, and any modifications to them, which are required by legislative, regulatory or administrative provisions and are either–

- (a) subject to preparation or adoption by an authority at national, regional or local level; or
- (b) prepared by an authority for adoption, through a legislative procedure by Parliament or Government.

Subject to the exceptions mentioned below, where the first formal preparatory act in relation to a plan or programme to which the Regulations apply is on or after 21 July 2004, the plan or programme cannot be adopted, or submitted for adoption, unless it has been subjected to environmental assessment under the Regulations (regulations 5(1) and 7; Articles 4.1 and 13.3 of the Directive).

The requirement for environmental assessment applies, in particular, to any plan or programme prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use, which sets the framework for future development consent of projects listed in Annex I or II to Council Directive 85/337/EEC on the assessment of the effects of certain public and private projects on the environment, as amended by Council Directive 97/11/EC; and to any plan or programme which, in view of the likely effect on sites, has been determined to require an assessment pursuant to Article 6 or 7 of Council Directive 92/43/EEC on the conservation of natural habitats and of wild flora and fauna, as last amended by Council Directive 97/62/EC (regulation 5(1) to (3); Article 3.2 of the Directive).

There are exceptions for plans and programmes that determine the use of a small area at local level, and for minor modifications, if the authority responsible for preparing the plan or programme (referred to in the Regulations as the “responsible authority”) has determined under regulation 9(1) that the plan or programme is unlikely to have significant environmental effects (regulation 5(6); Article 3.3 of the Directive). The responsible authority's determination may, however, cease to have effect if the Secretary of State gives a direction under regulation 10(3).

The requirement for environmental assessment also applies to other plans and programmes which set the framework for future development consent of projects if they are the subject of a determination under regulation 9(1) that the plan or programme is likely to have significant environmental effects (regulation 5(4); Article 3.4 of the Directive). The responsible authority's determination may, however, cease to have effect if the Secretary of State gives a direction under regulation 10(3).

The requirement for environmental assessment under the Regulations may also apply where a plan or programme in relation to which the first formal preparatory act occurred before 21 July 2004 has not been adopted before 22 July 2006. If an environmental assessment would have been required if the first formal preparatory act had occurred on 21 July 2004, the plan or programme must be subjected to environmental assessment unless the responsible authority directs that that is not feasible and informs the public to that effect (regulation 6; Articles 4.1 and 13.3 of the Directive).

Regulation 7 makes provision for environmental assessment of plans and programmes co-financed by the European Community (other than those excepted by Article 3.9 of the Directive) to be carried

out in conformity with the specific provisions in relevant Community legislation (Article 11.3 of the Directive).

Regulation 8 prevents the adoption, or submission for adoption, of a plan or programme for which an environmental assessment is required under these Regulations, before the completion of that assessment. An environmental assessment is not complete until account has been taken of the environmental report for that plan or programme and the opinions expressed in the course of the consultations required by regulation 13, and the outcome of any transboundary consultations under regulation 14(4) (Article 8 of the Directive). Regulation 8 also prevents the adoption, or submission for adoption, of a plan or programme before the responsible authority has determined whether the plan or programme is likely to have significant environmental effects.

Regulation 9 deals with the making of determinations by the responsible authority as to whether a plan or programme is likely to have significant environmental effects. The criteria to be applied are set out in Schedule 1 to the Regulations (Article 3.5 of, and Annex II to, the Directive). Determinations cannot be made unless the responsible authority has consulted designated bodies ("the consultation bodies").

Regulation 4 deals with the designation of the consultation bodies (Article 6.3 of the Directive). In the case of every plan and programme to which the Regulations apply, the consultation bodies will consist of, or include, the Countryside Agency, English Heritage, English Nature and the Environment Agency. In respect of the part of a plan or programme to which the Regulations apply that relates to any part of Northern Ireland, the Department of the Environment for Northern Ireland will also be a consultation body. In respect of the part of a plan or programme to which the Regulations apply that relates to any part of Scotland, the Scottish Ministers, the Scottish Environment Protection Agency and Scottish Natural Heritage will also be consultation bodies. In respect of the part of a plan or programme to which the Regulations apply that relates to any part of Wales, the National Assembly for Wales and the Countryside Council for Wales will also be consultation bodies.

Regulation 10 enables the Secretary of State to require a responsible authority to provide him with relevant documents. It also enables him to direct that a particular plan or programme is likely to have significant environmental effects. In the latter case, any determination to the contrary made under regulation 9(1) by a responsible authority ceases to have effect. If a responsible authority has not made any determination under that provision, the Secretary of State's direction relieves it of the duty to do so.

Regulation 11 requires the publication of determinations under regulation 9 (Article 3.7 of the Directive) and directions under regulation 10.

Environmental assessment under the Regulations includes the preparation of an environmental report (regulation 12; Article 5 of the Directive). The matters to be included in the environmental report are specified in Schedule 2 to the Regulations (Article 5.1 of, and Annex I to, the Directive).

Regulation 13 specifies the consultation procedures that must be undertaken in relation to a draft plan or programme for which an environmental report has been prepared under these Regulations (Articles 5.4 and 6 of the Directive).

Regulation 14 deals with transboundary consultations and includes procedures for consultations in relation to those draft plans and programmes prepared in the United Kingdom that are likely to have significant effects on the environment in other Member States (Article 7 of the Directive).

Regulation 15 applies in relation to those draft plans and programmes prepared in another Member State that are likely to have significant effects on the environment in any part of the United Kingdom (Article 7 of the Directive). Where the Secretary of State receives a draft plan or programme from another Member State he must indicate to that Member State whether the United Kingdom wishes to enter into consultations in respect of that plan or programme concerning—

- (a) the likely transboundary environmental effects of implementing the plan or programme; and
- (b) the measures envisaged to reduce or eliminate such effects.

Regulation 16 in Part 4 deals with procedures after the adoption of a plan or programme that has been the subject of an environmental assessment under the Regulations. It requires the person who prepared the plan or programme to give notice of its adoption and to make it and other specified information available for inspection (Article 9 of the Directive).

Regulation 17 is relevant to the monitoring of the significant environmental effects of implementing plans and programmes (Article 10 of the Directive). It requires the person by whom the plan or programme was prepared to monitor with a view to identifying, at an early stage, unforeseen adverse effects, and being able to undertake appropriate remedial action.

A Regulatory Impact Assessment has been prepared in connection with these Regulations. A copy may be obtained from the Office of the Deputy Prime Minister, Zone D1, Eland House, Bressenden Place, London, SW1E 5DU (Tel: 0207 944 3894 or 5879) or accessed at www.odpm.gov.uk

Table of Contents

Environmental Assessment of Plans and Programmes Regulations 2004/1633.....	<u>1</u>
Preamble	<u>1</u>
Part 1 INTRODUCTORY PROVISIONS.....	<u>1</u>
☐ reg. 1 Citation and commencement.....	<u>1</u>
☐ reg. 2 Interpretation.....	<u>2</u>
☐ reg. 3 Application of Regulations.....	<u>3</u>
☐ reg. 4 Consultation bodies.....	<u>3</u>
Part 2 ENVIRONMENTAL ASSESSMENT FOR PLANS AND PROGRAMMES.....	<u>4</u>
☐ reg. 5 Environmental assessment for plans and programmes: first formal preparatory act on or after 21st July 2004.....	<u>4</u>
☐ reg. 6 Environmental assessment for plans and programmes: first formal preparatory act before 21st July 2004.....	<u>5</u>
☐ reg. 7 Environmental assessment for plans and programmes co-financed by the European Community.....	<u>6</u>
☐ reg. 8 Restriction on adoption or submission of plans, programmes and modifications.....	<u>6</u>
☐ reg. 9 Determinations of the responsible authority.....	<u>7</u>
☐ reg. 10 Powers of the Secretary of State.....	<u>8</u>
☐ reg. 11 Publicity for determinations and directions.....	<u>9</u>
Part 3 ENVIRONMENTAL REPORTS AND CONSULTATION PROCEDURES.....	<u>10</u>
☐ reg. 12 Preparation of environmental report.....	<u>10</u>
☐ reg. 13 Consultation procedures.....	<u>11</u>
☐ reg. 14 Transboundary consultations.....	<u>11</u>
☐ reg. 15 Plans and programmes of other Member States.....	<u>13</u>
Part 4 POST-ADOPTION PROCEDURES.....	<u>14</u>
☐ reg. 16 Information as to adoption of plan or programme.....	<u>14</u>
☐ reg. 17 Monitoring of implementation of plans and programmes.....	<u>15</u>
☐ Signatures	<u>16</u>
Schedule 1 CRITERIA FOR DETERMINING THE LIKELY SIGNIFICANCE OF EFFECTS ON THE ENVIRONMENT.....	<u>16</u>
☐ para. 1	<u>16</u>
☐ para. 2	<u>17</u>
Schedule 2 INFORMATION FOR ENVIRONMENTAL REPORTS.....	<u>17</u>
☐ para. 1	<u>17</u>
☐ para. 2	<u>18</u>
☐ para. 3	<u>18</u>
☐ para. 4	<u>18</u>
☐ para. 5	<u>19</u>
☐ para. 6	<u>19</u>

☐ para. 7	<u>20</u>
☐ para. 8	<u>20</u>
☐ para. 9	<u>20</u>
☐ para. 10	<u>21</u>
Explanatory Note	<u>21</u>
para. 1	<u>21</u>
Table of Contents.....	<u>25</u>