








Key:

-  Survey Area
-  Location of Waterbody
-  Waterbody Subject to eDNA Survey in 2019
-  Waterbody Subject to Detailed Great Crested Newt Presence / Absence Survey in 2019
-  Waterbody Subject to eDNA survey in 2021
-  Waterbody Scoped Out of Further Great Crested Newt Survey Work
-  250m Buffer

WB1-4 were all subject to Habitat Suitability Index (HSI) assessment work in 2019

**NO GREAT CRESTED  
NEWT RECORDED**

**aspect** ecology

Aspect Ecology Limited - West Court - Hardwick Business Park  
Noral Way - Banbury - Oxfordshire - OX16 2AF  
01295 279721 - info@aspect-ecology.com - www.aspect-ecology.com

Drayton Water, Chichester PROJECT

Great Crested Newt Survey Results TITLE

5625/EC05 DRAWING NO.

- REV.

November 2021 DATE

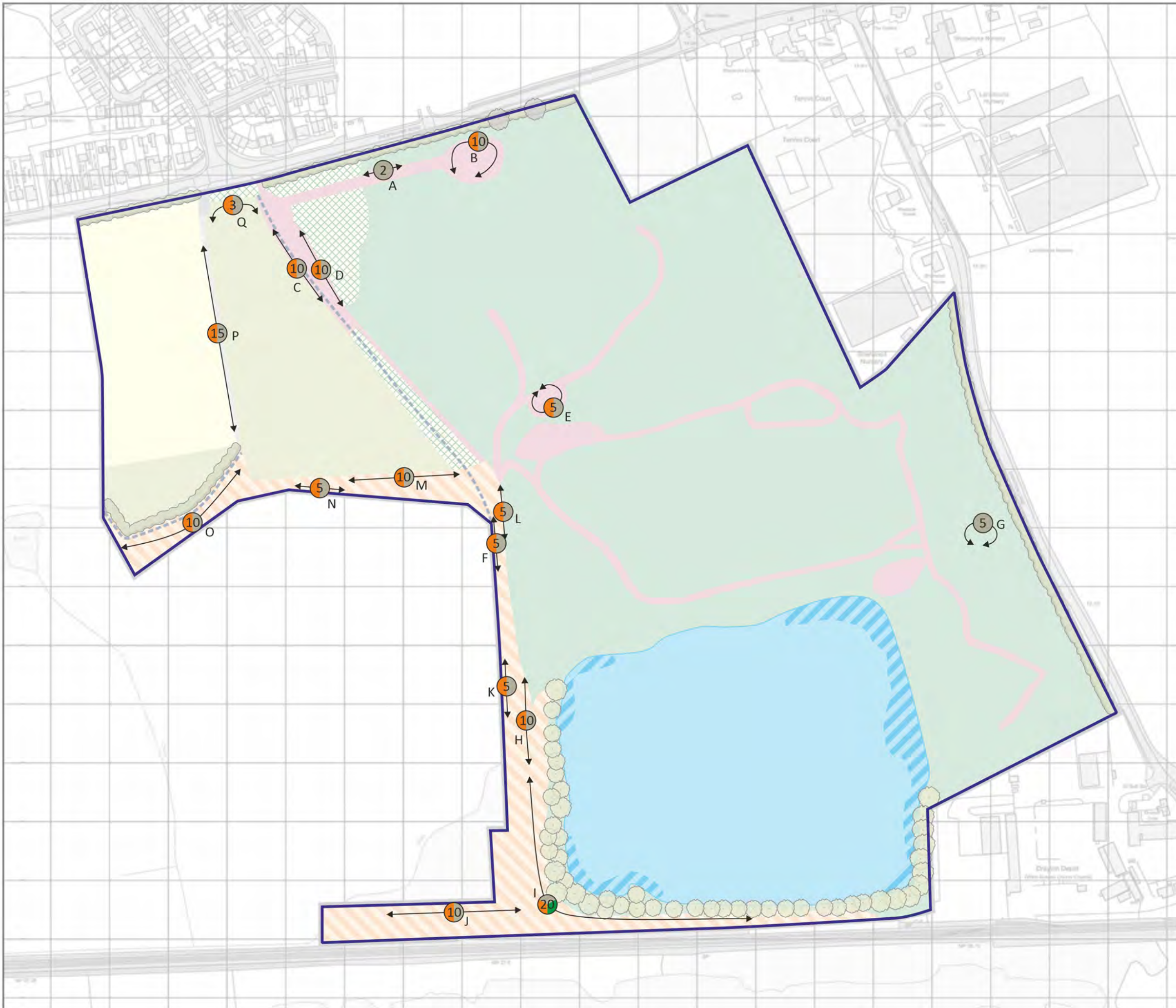







## **Plan 5625/ECO6:**

Reptile Survey Results

---





- Key:
-  Survey Area
  -  Location and Number of Refugia
  -  Common Lizard Present
  -  Slow-worm Present
  -  Grass Snake Present



Aspect Ecology Limited - West Court - Hardwick Business Park  
 Noral Way - Banbury - Oxfordshire - OX16 2AF  
 01295 279721 - info@aspect-ecology.com - www.aspect-ecology.com

Drayton Water, Chichester PROJECT

Reptile Survey Results TITLE

5625/ECO6 DRAWING NO.

A REV.

November 2021 DATE

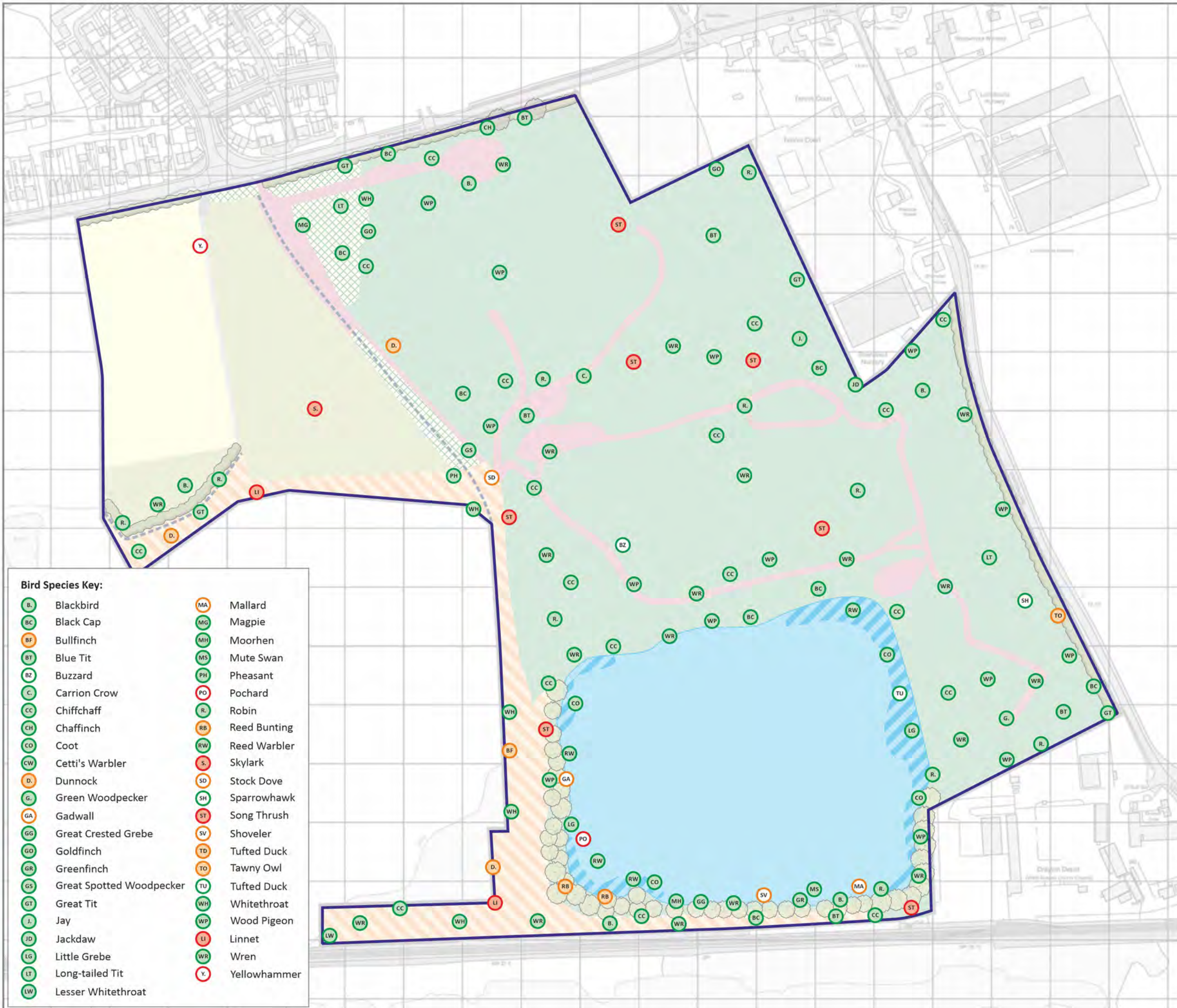


## **Plan 5625/ECO7:**

Breeding Bird Survey Results

---





**Bird Species Key:**

B	Blackbird	MA	Mallard
BC	Black Cap	MG	Magpie
BF	Bullfinch	MH	Moorhen
BT	Blue Tit	MS	Mute Swan
BZ	Buzzard	PH	Pheasant
C	Carrion Crow	PO	Pochard
CC	Chiffchaff	R	Robin
CH	Chaffinch	RB	Reed Bunting
CO	Coot	RW	Reed Warbler
CW	Cetti's Warbler	S	Skylark
D	Dunnock	SD	Stock Dove
G	Green Woodpecker	SH	Sparrowhawk
GA	Gadwall	ST	Song Thrush
GG	Great Crested Grebe	SV	Shoveler
GO	Goldfinch	TD	Tufted Duck
GR	Greenfinch	TO	Tawny Owl
GS	Great Spotted Woodpecker	TU	Tufted Duck
GT	Great Tit	WH	Whitethroat
J	Jay	WP	Wood Pigeon
JD	Jackdaw	LI	Linnet
LG	Little Grebe	WR	Wren
LT	Long-tailed Tit	Y	Yellowhammer
LW	Lesser Whitethroat		

**KEY:**

[Blue outline]	Survey Area
[Red circle with Y]	Breeding / Probable Breeding (BOCC Red List)
[Red circle with Y]	Possible Breeding (BOCC Red List)
[Orange circle with D]	Breeding / Probable Breeding (BOCC Amber List Species)
[Orange circle with D]	Possible Breeding (BOCC Amber List Species)
[Green circle with B]	Breeding / Probable Breeding (BOCC Green List - Not Threatened)
[Green circle with B]	Possible Breeding (BOCC Green List - Not Threatened)

**aspect ecology**

Aspect Ecology Limited - West Court - Hardwick Business Park  
 Noral Way - Banbury - Oxfordshire - OX16 2AF  
 01295 276066 - info@aspect-ecology.com - www.aspect-ecology.com

Drayton Water, Chichester	PROJECT
Breeding Bird Survey Results	TITLE
5625/ECO7	DRAWING NO.
A	REV.
November 2021	DATE



## **Appendix 5625/1:**

Assessment Methodology

---



## Evaluation Methodology

1. The evaluation of ecological features and resources is based on professional judgement whilst also drawing on the latest available industry guidance and research. The approach taken in this report is based on that described by the Chartered Institute of Ecology and Environmental Management (CIEEM) 'Guidelines for Ecological Impact Assessment in the UK and Ireland' (2018)<sup>1</sup>.

### Importance of Ecological Features

2. Ecological features within the site/study area have been evaluated in terms of whether they qualify as 'important ecological features'. In this regard, CIEEM guidance states that *"it is not necessary to carry out detailed assessment of features that are sufficiently widespread, unthreatened and resilient to project impacts and will remain viable and sustainable"*.
3. Various characteristics contribute to the importance of ecological features, including:

- Naturalness;
- Animal or plant species, sub-species or varieties that are rare or uncommon, either internationally, nationally or more locally, including those that may be seasonally transient;
- Ecosystems and their component parts, which provide the habitats required by important species, populations and/or assemblages;
- Endemic species or locally distinct sub-populations of a species;
- Habitat diversity;
- Habitat connectivity and/or synergistic associations;
- Habitats and species in decline;
- Rich assemblages of plants and animals;
- Large populations of species or concentrations of species considered uncommon or threatened in a wider context;
- Plant communities (and their associated animals) that are considered to be typical of valued natural/semi-natural vegetation types, including examples of naturally species-poor communities; and
- Species on the edge of their range, particularly where their distribution is changing as a result of global trends and climate change.

4. As an objective starting point for identifying important ecological features, European, national and local governments have identified sites, habitats and species which form a key focus for biodiversity conservation in the UK, supported by policy and legislation. These are summarised by CIEEM guidance as follows:

### *Designated Sites*

- Statutory sites designated or classified under international conventions or European legislation, for example World Heritage Sites, Biosphere Reserves, Wetlands of International Importance (Ramsar sites), Special Areas of Conservation (SAC), Special Protection Areas (SPA);

---

<sup>1</sup> CIEEM (2018) 'Guidelines for Ecological Impact Assessment in the UK and Ireland: Terrestrial, Freshwater, Coastal and Marine', Chartered Institute of Ecology and Environmental Management, Winchester

- Statutory sites designated under national legislation, for example Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Local Nature Reserves (LNR);
- Locally designated wildlife sites, e.g. Local Wildlife Sites (LWS).

#### *Biodiversity Lists*

- Habitats and species of principal importance for the conservation of biodiversity in England and Wales (largely drawn from UK BAP priority habitats and priority species), often referred to simply as Priority Habitats / Species;
- Local BAP priority species and habitats.

#### *Red Listed, Rare, Legally Protected Species*

- Species of conservation concern, Red Data Book (RDB) species;
- Birds of Conservation Concern;
- Nationally rare and nationally scarce species;
- Legally protected species.

5. In addition to this list, other features may be considered to be of importance on the basis of local rarity, where they enable effective conservation of other important features, or play a key functional role in the landscape.

#### Assigning Level of Importance

6. The importance of an ecological feature should then be considered within a defined geographical context. Based on CIEEM guidance, the following frame of reference is used:
  - International (European);
  - National;
  - Regional;
  - County;
  - District;
  - Local (e.g. Parish or Neighbourhood);
  - Site (not of importance beyond the immediate context of the site).
7. Features of 'local' importance are those considered to be below a district level of importance, but are considered to appreciably enrich the nature conservation resource or are of elevated importance beyond the context of the site.
8. Where features are identified as 'important' based on the list of key sites, habitats and species set out above, but are very limited in extent or quality (in terms of habitat resource or species population) and do not appreciably contribute to the biodiversity interest beyond the context of the site, they are considered to be of 'site' importance.
9. In terms of assigning the level of importance, the following considerations are relevant:



### *Designated Sites*

10. For designated sites, importance should reflect the geographical context of the designation (e.g. SAC/SPA/Ramsar sites are designated at the international level whereas SSSIs are designated at the national level). Consideration should be given to multiple designations as appropriate (where an area is subject to differing levels of nature conservation designations).

### *Habitats*

11. In certain cases, the value of a habitat can be measured against known selection criteria, e.g. SAC selection criteria, 'Guidelines for the selection of biological SSSIs' and the Hedgerows Regulations 1997. However, for the majority of commonly encountered sites, the most relevant habitat evaluation will be at a more localised level and based on relevant factors such as antiquity, size, species-diversity, potential, naturalness, rarity, fragility and typicalness (Ratcliffe, 1977). The ability to restore or re-create the habitat is also an important consideration, for example in the case of ancient woodland.
12. Whether habitats are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Habitats of Principal Importance' or 'Priority Habitats', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular habitat under a BAP does not in itself imply any specific level of importance.
13. Habitat inventories (such as habitat mapping on the MAGIC database) or information relating to the status of particular habitats within a district, county or region can also assist in determining the appropriate scale at which a habitat is of importance.

### *Species*

14. Deciding the importance of species populations should make use of existing criteria where available. For example, there are established criteria for defining nationally and internationally important populations of waterfowl. The scale within which importance is determined could also relate to a particular population, e.g. the breeding population of common toads within a suite of ponds or an otter population within a catchment.
15. When determining the importance of a species population, contextual information about distribution and abundance is fundamental, including trends based on historical records. For example, a species could be considered particularly important if it is rare and its population is in decline. With respect to rarity, this can apply across the geographic frame of reference and particular regard is given to populations where the UK holds a large or significant proportion of the international population of a species.
16. Whether species are listed as priorities for conservation at a national level in accordance with Sections 41 and 42 of the Natural Environment and Rural Communities Act (NERC) 2006, so called 'Species of Principal Importance' or 'Priority Species', or within regional or local Biodiversity Action Plans (BAPs) is also relevant, albeit the listing of a particular species under a BAP does not in itself imply any specific level of importance.
17. Species populations should also be considered in terms of the potential zone of influence of the proposals, i.e. if the entire species population within the site and surrounding area were to be affected by the proposed development, would this be of significance at a local, district, county or wider scale? This should also consider the foraging and territory ranges of individual species (e.g. bats roosting some distance from site may forage within site whereas other species such as invertebrates may be more sedentary).

## **Appendix 5625/2:**

Legislation Summary

---



## LEGISLATION SUMMARY

1. In England and Wales primary legislation is made by the UK Parliament, and in Scotland by the Scottish Parliament, in the form of Acts. The main piece of legislation relating to nature conservation in the UK is the Wildlife and Countryside Act 1981 (as amended).
2. Acts of Parliament confer powers on Ministers to make more detailed orders, rules or regulations by means of secondary legislation in the form of statutory instruments. Statutory instruments are used to provide the necessary detail that would be too complex to include in an Act itself<sup>1</sup>. The provisions of an Act of Parliament can also be enforced, amended or updated by secondary legislation.
3. In summary, the key pieces of legislation relating to nature conservation in the UK are:
  - Wildlife and Countryside Act 1981 (as amended)
  - Protection of Badgers Act 1992
  - Hedgerows Regulations 1997
  - Countryside and Rights of Way (CROW) Act for England and Wales 2000
  - Natural Environment and Rural Communities Act 2006
  - Conservation of Habitats and Species Regulations 2017
4. A brief summary of the relevant legislation is provided below. The original Acts and instruments should be referred to for the full and most up to date text of the legislation.
5. **Wildlife and Countryside Act 1981 (as amended)**. The WCA Act provides for the notification and confirmation of Sites of Special Scientific Interest (SSSIs) identified for their flora, fauna, geological or physiographical features. The Act contains strict measures for the protection and management of SSSIs.
6. The Act also refers to the treatment of UK wildlife including protected species listed under Schedules 1 (birds), 5 (mammals, herpetofauna, fish, invertebrates) and 8 (plants).
7. Under Section 1(1) of the Act, all wild birds are protected such that it is an offence to intentionally:
  - Kill, injure or take any wild bird;
  - Take, damage or destroy the nest of any wild bird whilst in use\* or being built;
  - Take or destroy an egg of any wild bird.

\* The nests of birds that re-use their nests as listed under Schedule ZA1, e.g. Golden Eagle, are protected against taking, damage or destruction irrespective of whether they are in use or not.
8. Offences in respect of Schedule 1 birds are subject to special, i.e. higher, penalties. Schedule 1 birds also receive greater protection such that it is an offence to intentionally or recklessly:
  - Disturb any wild bird included in Schedule 1 while it is building a nest or while it is in, on or near a nest containing eggs or young;
  - Disturb dependent young of such a bird.

---

<sup>1</sup> <http://www.parliament.uk/business/bills-and-legislation/secondary-legislation/statutory-instruments/>

9. Under Section 9(1) of the Act, it is an offence to:
  - Intentionally kill, injure or take any wild animal included in Schedule 5.
10. In addition, under Section 9(4) it is an offence to intentionally or recklessly:
  - Obstruct access to, any structure or place which any wild animal included in Schedule 5 uses for shelter or protection; or
  - Disturb any wild animal included in Schedule 5 while occupying a structure or place which it uses for that purpose.
11. Under Section 13(1) it is an offence:
  - To intentionally pick, uproot or destroy any wild plant listed in Schedule 8; or
  - Unless the authorised person, to intentionally uproot any wild plant not included in Schedule 8.
12. The Act also contains measures (S.14) for preventing the establishment of non-native species that may be detrimental to native wildlife, prohibiting the introduction into the wild of animals (releases or allows to escape) and plants (plants or causes to grow) listed under Schedule 9.
13. **Protection of Badgers Act 1992.** The Act aims to protect the species from persecution, rather than being a response to an unfavourable conservation status, as the species is in fact common over most of Britain. It should be noted that the legislation is not intended to prevent properly authorised development. Under the Act it is an offence to:
  - Wilfully kill, injure, take, possess or cruelly ill-treat\* a Badger, or attempt to do so;
  - To intentionally or recklessly interfere with a sett# (this includes disturbing Badgers whilst they are occupying a sett, as well as damaging or destroying a sett or obstructing access to it).

\* the intentional elimination of sufficient foraging area to support a known social group of Badgers may, in certain circumstances, be construed as an offence

# A sett is defined as “any structure or place which displays signs indicating current use by a Badger”. Natural England advice (June 2009) is that a sett is protected so long as such signs remain present, which in practice could potentially be for some time after the last actual occupation by Badger. Interference with a sett includes blocking tunnels or damaging the sett in any way
14. Licences can be obtained from the Statutory Nature Conservation Organisation (SNCO) for development activities that would otherwise be unlawful under the legislation, provided there is suitable justification. The SNCO for England is Natural England.
15. **Hedgerows Regulations 1997.** ‘Important’ hedgerows (as defined by the Regulations) are protected from removal (up-rooting or otherwise destroying). Various criteria specified in the Regulations are employed to identify ‘important’ hedgerows for wildlife, landscape or historical reasons.
16. **Countryside and Rights of Way (CRoW) Act for England and Wales 2000.** The CRoW Act provides increased measures for the management and protection of SSSIs and strengthens wildlife enforcement legislation. Schedule 12 of the Act amends the species provisions of the WCA 1981, strengthening the legal protection for threatened species. The Act also introduced a duty on Government to have regard to the conservation of biodiversity and maintain lists of species and habitats for which conservation steps should be taken or promoted, in accordance with the Convention on Biological Diversity.



17. **Natural Environment and Rural Communities Act 2006.** Section 41 of the NERC Act requires the Secretary of State to publish a list of habitats and species that are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as local planning authorities, in implementing their duty under Section 40 of the Act, to have regard to the conservation of biodiversity in England, when exercising their normal functions. 56 habitats and 943 species of principal importance are included on the S41 list. These are all the habitats and species in England that were identified as requiring action in the UK Biodiversity Action Plan (BAP).
18. **Conservation of Habitats and Species Regulations 2017 (as amended).** The Regulations enact the European Union's Habitats Directive (92/43/EEC) in the UK. The Habitats Directive was designed to contribute to the maintenance of biodiversity within member states through the conservation of sites, known in the UK as Special Areas of Conservation (SACs), containing habitats and species selected as being of EC importance (as listed in Annexes I and II of the Habitats Directive respectively). Member states are required to take measures to maintain or restore these natural and semi-natural habitats and wild species at a favourable conservation status.
19. The Regulations also require the compilation and maintenance of a register of European sites, to include SACs and Special Protection Areas (SPAs)<sup>2</sup> classified under Council Directive 79/409/EEC on the Conservation of Wild Birds (the Birds Directive). These sites constitute the Natura 2000 network. The Regulations impose restrictions on planning decisions likely to significantly affect SPAs or SACs.
20. The Regulations also provide protection to European Protected Species of animals that largely overlaps with the WCA 1981, albeit the provisions are generally stricter. Under Regulation 43 it is an offence, *inter alia*, to:
  - Deliberately capture, injure or kill any wild animal of a European Protected Species;
  - Deliberately disturb any wild animals of any such species, including in particular any disturbance likely to impair their ability to survive, to breed or reproduce, to rear or nurture their young, to hibernate or migrate, or which is likely to affect significantly their local distribution or abundance;
  - Deliberately take or destroy the eggs of such an animal;
  - Damage or destroy a breeding site or resting place of such an animal.
21. Similar protection is afforded to European Protected Species of plants, as detailed under Regulation 47.
22. The Regulations do provide a licensing system that permits otherwise illegal activities in relation to European Protected Species, subject to certain tests being fulfilled.

---

<sup>2</sup> Special Protection Areas (SPAs) are protected sites classified in accordance with Article 4 of the EC Directive on the Conservation of Wild Birds (79/409/EEC) (aka the Birds Directive), which came into force in April 1979. SPAs are classified for rare and vulnerable birds (as listed on Annex I of the Directive), and for regularly occurring migratory species.

## **Appendix 5625/3:**

Manual Walked Bat Activity Survey Results

---

Appendix 5625/3: Total bat registrations per survey session recorded throughout the manual walked activity surveys. See Plan 5625/ECO4a for transect route.

Species	28/05/2020 (dusk)		09/06/2020 (dusk)		14/07/2020 (dusk)		10/08/2020 (dusk)		11/08/2020 (dawn)		16/09/2020 (dusk)	
	Number of Passes	Percent of Total Passes Recorded	Number of Passes	Percent of Total Passes Recorded	Number of Passes	Percent of Total Passes Recorded	Number of Passes	Percent of Total Passes Recorded	Number of Passes	Percent of Total Passes Recorded	Number of Passes	Percent of Total Passes Recorded
Common Pipistrelle	52	23.74	61	38.85	4	2.74	23	14.29	0	0.00	19	17.43
Soprano Pipistrelle	142	64.84	55	35.03	128	87.67	73	45.34	27	58.70	48	44.04
Pipistrellus sp.	9	4.11	10	6.37	4	2.74	21	13.04	6	13.04	10	9.17
Nathusius' Pipistrelle	0	0.00	6	3.82	0	0.00	6	3.73	0	0.00	2	1.83
Noctule	11	5.02	15	9.55	0	0.00	27	16.77	8	17.39	7	6.42
Unidentified Big Bat	0	0.00	0	0.00	2	1.37	1	0.62	0	0.00	0	0.00
Serotine	0	0.00	0	0.00	1	0.68	0	0.00	0	0.00	0	0.00
Myotis sp.	4	1.83	10	6.37	7	4.79	10	6.21	3	6.52	20	18.35
Plecotus sp.	0	0.00	0	0.00	0	0.00	0	0.00	2	4.35	3	2.75
Barbastelle	1	0.46	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
Total	219		157		146		161		46		109	



## **Appendix 5625/4:**

Automated Bat Activity Survey Results

---





## **Appendix 5625/5:**

Illustrative Masterplan

---





-  Pre-Application Site Boundary
-  Proposed Strategic Site Allocation AL3



ecology • landscape planning • arboriculture

aspect

Aspect Ecology Ltd  
West Court  
Hardwick Business Park  
Noral Way  
Banbury  
Oxfordshire OX16 2AF

T: 01295 279721  
E: [info@aspect-ecology.com](mailto:info@aspect-ecology.com)  
W: [www.aspect-ecology.com](http://www.aspect-ecology.com)



## APPENDIX 5

---



# Drayton Water, Chichester – Draft Allocation A8 Transport Delivery Report

Client: Obsidian Strategic AC Limited, DC Heaver and Eurequity Ltd

i-Transport Ref: TW/EP/AI/ITB14506-006d

Date: 14 March 2023

# Drayton Water, Chichester – Draft Allocation A8 Transport Delivery Report

Client: Obsidian Strategic AC Limited, DC Heaver and Eurequity Ltd

i-Transport Ref: TW/EP/AI/ITB14506-006d

Date: 14 March 2023

**i-Transport LLP**

The Square  
Basing View

Basingstoke  
Hampshire  
RG21 4EB

Tel: 01256 637940

[www.i-transport.co.uk](http://www.i-transport.co.uk)

**COPYRIGHT**

The contents of this document must not be copied or reproduced in whole or in part without the written consent of i-Transport LLP



## Quality Management

Report No.	Comments	Date	Author	Authorised
ITB14506-006	First Draft	18/11/21	AI/TW	TW
ITB14506-006a	Client Issue	19/11/21	AI/TW	TW
ITB14506-006b	Final	07/12/21	AI/TW	TW
ITB14506-006c	Updated Draft A8	03/03/23	EP	TW
ITB14506-006d	Final – Updated	14/03/23	AI/EP	TW

File Ref: T:\Projects\14000 Series\14506\ITB Land South of Shopwhyke Rd, Chichester\Admin\Report and Tech Notes\006 - Pre App Note\ITB14506-006d Pre-Application Transport Note - updated.docx

## Contents

<b>SECTION 1</b>	<b>Introduction</b>	<b>2</b>
<b>SECTION 2</b>	<b>Policy and Strategy Context</b>	<b>5</b>
<b>SECTION 3</b>	<b>Site Context and Accessibility</b>	<b>11</b>
<b>SECTION 4</b>	<b>Development Opportunity and Access Strategy</b>	<b>18</b>
<b>SECTION 5</b>	<b>Traffic Considerations</b>	<b>24</b>
<b>SECTION 6</b>	<b>Summary and Conclusions</b>	<b>29</b>

## Figures

<b>FIGURE 2</b>	<b>Accessibility Plan</b>
<b>FIGURE 3</b>	<b>Existing Footway Provision from Shopwhyke Road to City Centre</b>

## Drawings

<b>ITB14506-GA-002</b>	<b>Eastern Site Access Option</b>
<b>ITB14506-GA-006</b>	<b>Western Site Access Option</b>
<b>ITB14506-GA-007</b>	<b>Pedesrian / Cycle Improvement on Shopwhyke Road</b>

## Appendices

<b>Appendix A</b>	<b>CDC / WSCC Pre-application Meeting Note</b>
<b>Appendix B</b>	<b>Trip Rate Analysis Note</b>

## SECTION 1 Introduction

1.1.1 Obsidian Strategic AC Limited, DC Heaver and Eurequity Ltd ("the Applicant") is promoting Drayton Water (hereafter 'the Site') for a residential led, mixed use development. The site forms a proposed Strategic Site Allocation in the Chichester District Local Plan 2021-2039 Proposed Submission under draft Policy A8: Land East of Chichester.

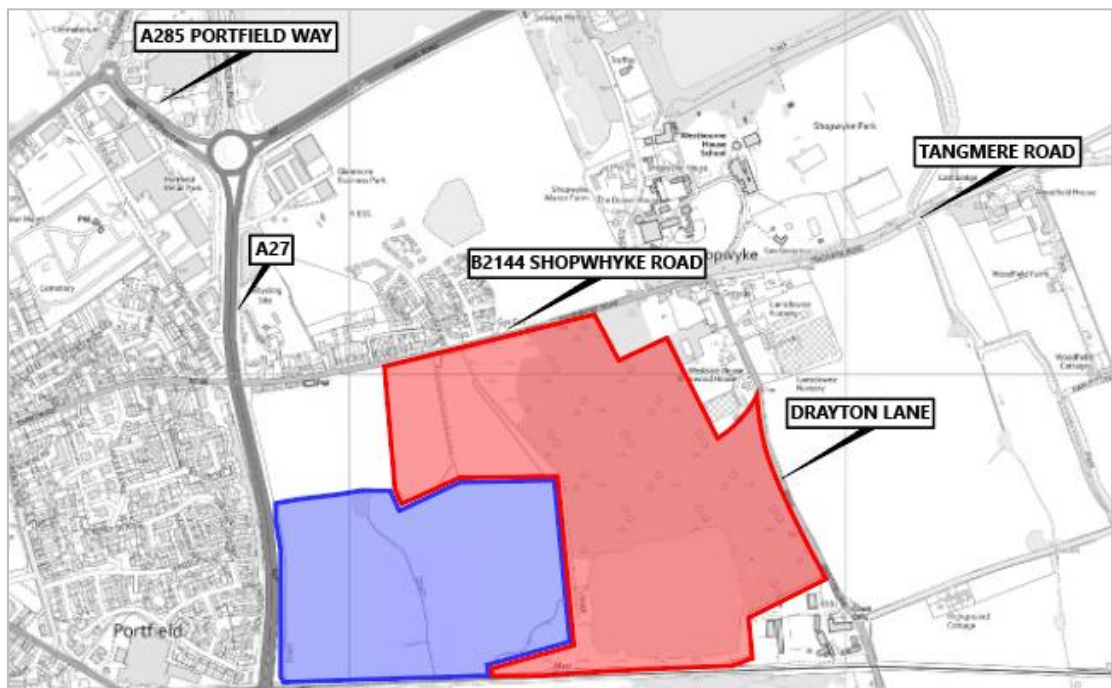
1.1.2 i-Transport LLP has been appointed to provide highways and transport advice.

### 1.2 Site Location

1.2.1 The Drayton Water Site is approximately 37ha in area and is located some 2km east of Chichester city centre. It is bordered by B2144 Shopwhyke Road to the north and Drayton Lane to the east. To the west, the site abuts the A27 corridor and to the south is the railway line.

1.2.2 **Image 1.1** identifies the extent of land forming the proposed Strategic Site Allocation A8, identifying that part of the Site under the control of the Applicants (in Red), which forms the north and eastern part of Proposed Allocation A8. The south western part of Proposed Allocation A8 Site is shown in blue and is owned by SUEZ. The Applicants and SUEZ are working collaboratively to ensure comprehensive development of Drayton Water.

**Image 1.1 Site Location**



1.2.3 The development site forms a natural extension to Chichester City which is the largest service centre in the district, and is a sub-regional centre, offering high-order services to the wider area.

1.2.4 To the north of the site is the Shopwhyke Strategic Development Location which forms an existing allocation in the adopted Local Plan, and which is being developed presently to deliver a new community of 585 dwellings and associated facilities. The Site is substantially complete.

### 1.3 Policy Context

1.3.1 The emerging Chichester Local Plan Proposed Submission Policy A8 identifies development of the A8 Allocation Site for:

***“Approximately 39 hectares of land at Land East of Chichester is allocated for a phased residential-led development comprising:***

- ***Development to include 680 dwellings, including ten suitable serviced plots to provide self/custom build housing;***
- ***Specialist accommodation for older persons, to include a component of care or support, of a form which is appropriate for the site;***
- ***A neighbourhood centre incorporating local shops, a community centre, flexible space for employment/ small-scale leisure uses and a one-form (expandable to two-form) entry primary school with provision for early years/ childcare and special educational needs and disability;***
- ***Provision of on-site public open space and play area;***
- ***Nine gypsy and traveller pitches, if there remains an outstanding need for pitches at the time of the determination of the planning application.”***

### 1.4 Purpose and Structure

1.4.1 Chichester District Council (CDC) has published its preferred approach Local Plan 2021-2039: Proposed Submission, which identifies the Council’s preferred strategy for development of the district over the next 20 years. The proposed allocation site, hereafter referred to as the Site forms a key part of that emerging strategy.

1.4.2 This Transport Delivery Report is provided to outline the emerging transport strategy for the Site, to present work carried out to date to appraise the likely transport impacts of the scheme, and to form the basis of further engagement with West Sussex County Council (WSCC), National Highways (NH) and CDC in the context of promotion of the site through the Local Plan process.

1.4.3 This Report builds on the earlier engagement with the Councils and NH (**Appendix A**).

1.4.4 In line with the critical transport tests of the National Planning Policy Framework (NPPF) and the emerging Local Plan Policy requirements, this Transport Delivery Report considers:

- i How safe and suitable access can be delivered to serve the site for all people;
- ii The opportunities for travel available to the site, in order to deliver a sustainable community, and promote sustainable travel options in the local area and to Chichester;
- iii How the design of streets and other transport elements of the scheme will meet current national guidance; and
- iv A review of likely transport impacts from the Site, as well as the broad scope and scale of assessment that will be required of transport impacts, consistent with the CDC Evidence Base for the Local Plan. This demonstrates that there will not be a severe residual cumulative impact, or an unacceptable highway safety impact.

1.4.5 This Transport Delivery Report is provided in the following format:

- Section 2 – Transport Planning Policy and Strategy Context
- Section 3 – Site Context and Accessibility
- Section 4 – Development Opportunity and Access Strategy
- Section 5 – Traffic Impact Considerations
- Section 6- Summary and Conclusions



## SECTION 2 Policy and Strategy Context

2.1.1 This section provides a high-level overview of key policy and strategy requirements and provides an update on current work to consider the transport strategy for the A27 corridor.

### 2.2 Emerging Local Plan

2.2.1 As set out in Section 1, the emerging Chichester Local Plan 2021-2039 Policy A8 identifies the site for development to provide 680 dwellings, specialist accommodation for older persons, a neighbourhood centre and primary school, on-site public open space, and potentially gypsy and traveller pitches if required at the time of a planning application.

2.2.2 In relation to transport matters, the emerging policy identifies some site-specific requirements:

***1. To be masterplanned and designed to provide for a high-quality form of development in accordance with the National Design Guide and any design code or guidance adopted or approved which is relevant to the site.***

***2. Ensure that the new development is designed and laid out in order to form a sustainable extension to Chichester, that is well integrated with neighbouring areas, providing good access routes to the city centre, key facilities and sustainable forms of transport;***

***7. Ensure that green infrastructure provision is well related to the overall layout and character of the development and how it relates to its surroundings. This will include creating linkages throughout the site to the wider countryside, Tangmere and development at Shopwhyke Lakes;***

***11. Provide safe and suitable access points for all users, including a vehicular access from Shopwhyke Road, and provide or fund mitigation for potential off-site traffic impacts through a package of measures in conformity with Policy T1 (Transport Infrastructure) and T2 (Transport and Development), which will include promoting sustainable transport options;***

***12. Provide for improved sustainable travel modes and new improved cycle and pedestrian routes, including linkages with Chichester;***

***16. Provide for infrastructure and community facilities in accordance with the most recent Infrastructure Delivery Plan.***

#### Chichester Local Plan Sustainability Appraisal January 2023

2.2.3 The Submission Draft Local Plan is supported by a Sustainability Appraisal which considers the development credentials of the proposed allocation site (**Table 2.1**). With regards to transport, the Sustainability Appraisal notes:

***“Land East of Chichester (680 homes) – is located between main road / bus corridors, but is overall relatively well connected to Chichester city centre and railway station, plus there will be the potential to support a degree of trip internalisation, with the proposal to deliver a local centre within the scheme.” (Para 9.6.5)***

2.2.4 In transport terms, this confirms that the site is suitable for development with opportunities to take up sustainable transport modes and provide opportunities for internalisation of trips.

## 2.3 A27 Strategy Development

2.3.1 A crucial influence on the Local Plan is transport (and road) capacity, most critically on the A27 Trunk Road which routes around the south of Chichester. CDC has (with WSCC and in consultation with National Highways) been preparing its evidence base including strategic transport modelling to consider the impact of its proposed spatial strategy.

2.3.2 A former major scheme to provide a significant improvement to the A27 was put on hold in 2017 due to a lack of consensus between NH, CDC and WSCC about the preferred option. Improvement of the A27 is included as a potential scheme in the latest National Highways Road Investment Strategy (RIS3) but no funding is at this time secured.

2.3.3 Stantec, on behalf of CDC, has updated the Chichester Area Transport Model (CATM) and prepared a Chichester Transport Study Local Plan Review Transport Assessment, which forms part of the primary evidence base for the Local Plan (published January 2023). The modelling that supports this assessment has been developed alongside WSCC and NH.

2.3.4 The Local Plan Review TA assumes a development of 600 dwellings in the Land East of Chichester allocation site but also concludes, by way of its Sensitivity Test, that the impacts of a higher level of development on the A8 Site and across the district would not materially alter the findings.

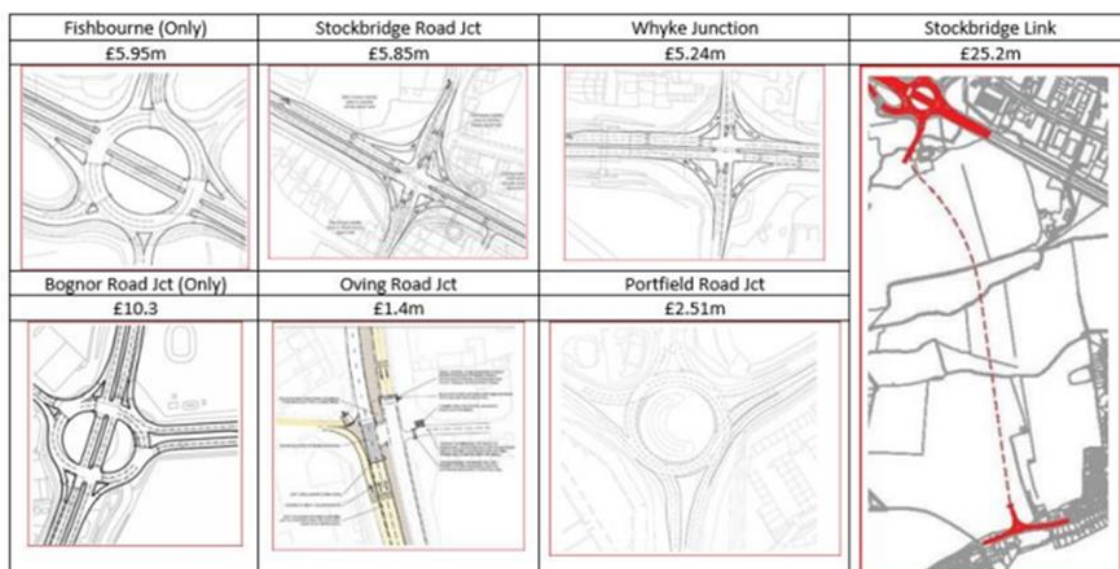
2.3.5 The TA identifies the following conclusions, considering conditions in 2039 with Local Plan development but without mitigation:

- All modelled A27 junctions are shown to be over capacity in the peak hours prior to adding Local Plan development traffic – these are primarily pre-existing issues;
- Evidence of traffic rat running on the local road network was identified in both the AM and PM peaks which was identified to result of capacity constraints on the A27;
- Portfield Roundabout and the Oving Road Junction are identified for improvement, with schemes having been delivered or being under delivery.

2.3.6 The TA identifies that significant mitigation is required to support the growth proposed in the Local Plan and address pre-existing capacity issues. The proposed mitigation is summarised in **Image 2.1** below and includes:

- Schemes to promote sustainable travel including bus, cycling, and walking;
- Local improvement schemes to critical junctions; and
- Mitigation schemes at six A27 junctions, plus the delivery of the Stockbridge Link Road (Fishbourne Roundabout to A286 Birdham Road, south-west of Stockbridge).

**Image 2.1: A27 Mitigation Summary**



Source: Local Plan preferred Scenario Transport Assessment Figure 7-3, Stantec.

2.3.7 The results of the traffic modelling work concludes that in 2039 with mitigation:

- The model shows large decreases on modelled traffic flows in northern Chichester and increases on flows on the A27 throughout its length in both peak hours. The identified rat-running without mitigation is primarily addressed.
- There is general improvement in the capacity / operation of A27 junctions following the mitigation measures, when compared with a no Local Plan scenario.
- Delays to traffic are generally reduced by the on-line mitigation schemes, albeit not fully in the AM Peak hours at Portfield and Oving junctions. Bognor Roundabout shows a significant improvement in operation, queueing, and delay in both the AM and PM peak.
- Further enhancements to the mitigation schemes may need to be made to better address traffic flow increases at Portfield and Oving junctions.

- 2.3.8 The Study concludes that the impacts of development promoted in the local plan can be suitably mitigated by the proposed mitigation package. The Local Plan seeks to secure funding from the planned Local Plan development to A27 improvement through a tariff contribution approach.
- 2.3.9 The findings of the transport study are picked up in emerging Chichester Local Plan 2021-2039 Proposed Submission policy T1 which states:

***All parties, including applicants, are expected to support these objectives by:***

***[...]***

***7. Delivering a coordinated package of infrastructure improvements to junctions on the A27 Chichester Bypass along with other small-scale junction improvements within the city and elsewhere, as identified through the monitor and manage process. These will increase road capacity, reduce traffic congestion, improve safety and air quality, and improve access to Chichester city from surrounding areas.***

***Opportunities to secure funding to implement this package of improvements (in relation to criterion 7) will be maximised by working proactively with government agencies including National Highways and Homes England, other public sector organisations and private investors. Developer contributions from new development will also be sought from all new housing development that is not yet subject to planning permission, in accordance with the per dwelling contribution as set out in paragraphs 8.20 to 8.21.***

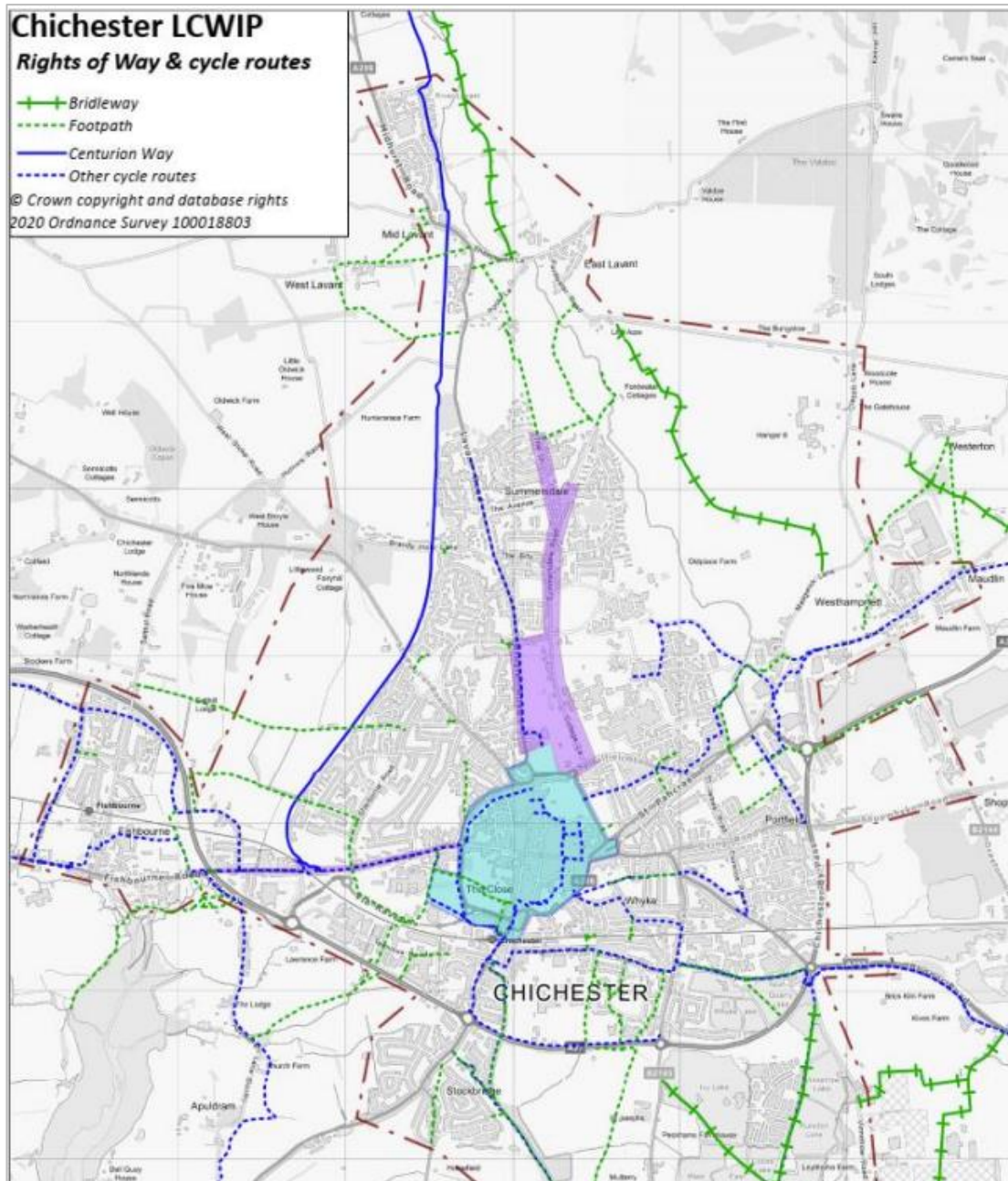
- 2.3.10 The A27 schemes to be provided within the Local Plan period are Fishbourne Road roundabout and Terminus Link Road; and Bognor Road Roundabout and Vinnetrow Road Link.
- 2.3.11 A 'monitor and manage' approach to transport mitigation will be established, led by CDC / WSCC which will monitor traffic conditions, appraise the need for further mitigation and seek to achieve the remaining funding for the package of A27 improvements.

#### **Chichester City Local Cycling and Walking Infrastructure Plan (LCWIP) (January 2021)**

- 2.3.12 CDC's LCWIP was published in January 2021, setting out proposals for the delivery of improvements to the walking and cycling network within the district.
- 2.3.13 **Image 2.2** demonstrates these connections and the wider network of cycling infrastructure improvements proposed to deliver the LCWIP.



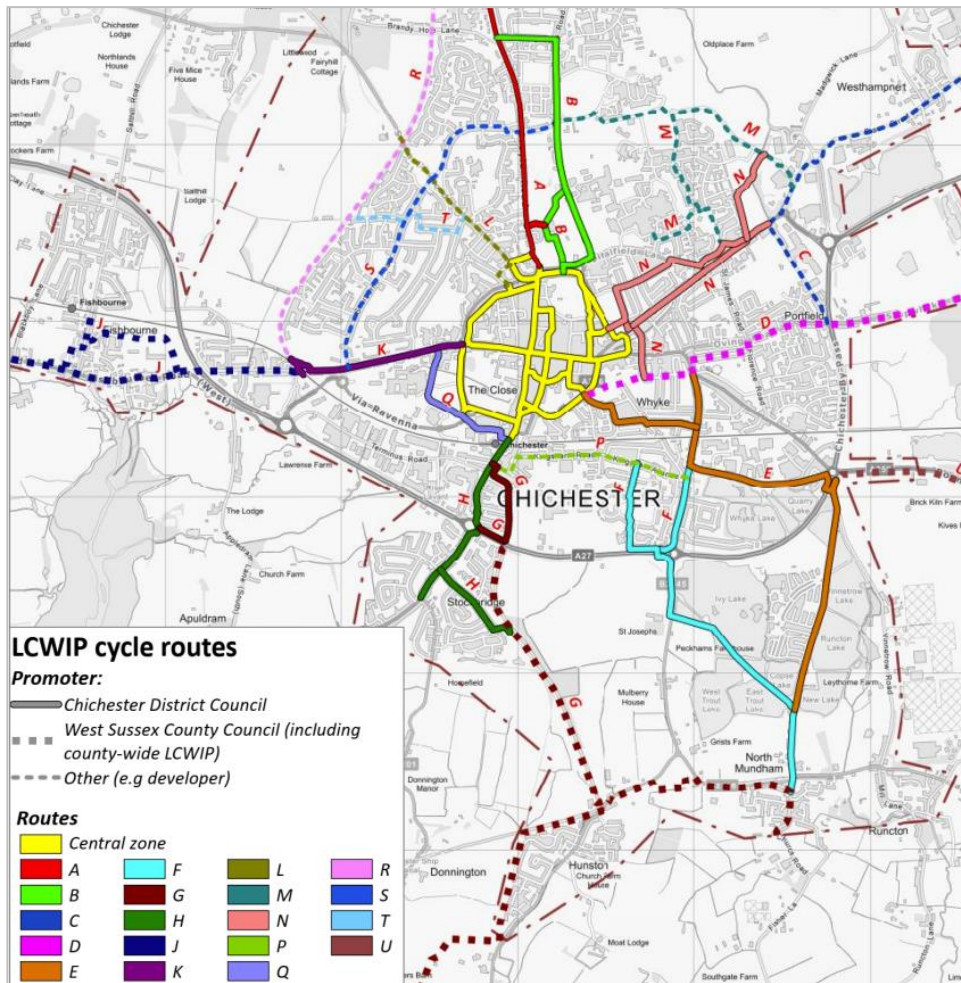
Image 2.2: Extract of Chichester LCWIP Map



Source – Chichester LCWIP - [Chichester LCWIP \(modern.gov.co.uk\)](http://Chichester LCWIP (modern.gov.co.uk))

2.3.14 The LCWIP identifies various routes for improvement in the area, including Route D which connects the Drayton Water A8 Allocation Site to Chichester City Centre. These are shown in **Image 2.3** and are under consideration for delivery by both CDC and WSCC.

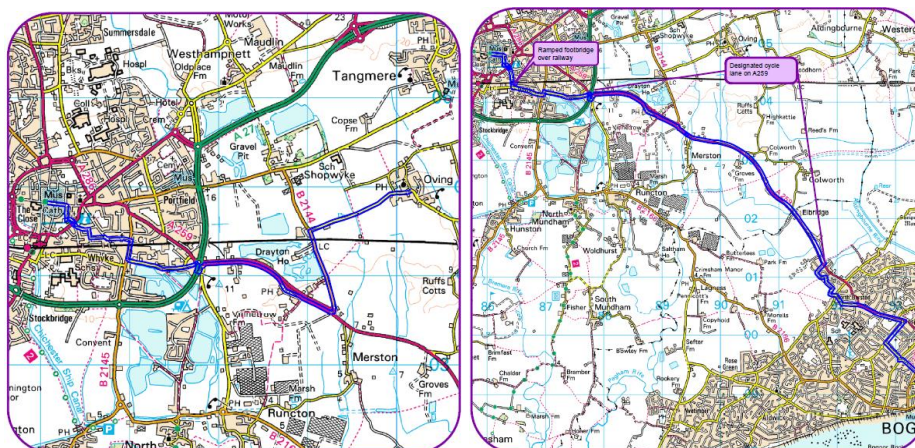
Image 2.3 – LCWIP – Proposed Routes / Network



Source – Chichester LCWIP - [Chichester LCWIP \(modern.gov.co.uk\)](http://Chichester LCWIP (modern.gov.co.uk))

2.3.15 For access further afield, two advisory cycle routes are proposed connecting to Oving and Bognor Regis (Image 2.4), and which could provide alternative connections to the City Centre.

Image 2.4: Proposed Cycle Routes to Oving and Bognor Regis



Source – Chichester LCWIP - [Chichester LCWIP \(modern.gov.co.uk\)](http://Chichester LCWIP (modern.gov.co.uk))



## SECTION 3 Site Context and Accessibility

3.1.1 The site is located east of the A27 corridor, some 2km east of the City Centre. The site benefits from its proximity to a range of facilities and is well connected to the local area and its communities by a range of travel modes making it a sustainable location for growth.

3.1.2 Furthermore, the scheme is proposed as a mixed use scheme, which will deliver a range of education, retail and community uses on the land, reducing the need to travel externally.

### 3.2 Walking and Cycling Opportunities

3.2.1 A street-lit footway runs on the northern side of Oving Road and Shopwhyke Road adjacent to the site, connecting west to the A27 junction with Oving Road where controlled crossing facilities are provided for pedestrians and cyclists across the northern arm of the junction. The footway continues west along the B2144 into the City providing a continuous, off-road walking route between the site and the City Centre (**Figure 3**).

3.2.2 As part of the Shopwhyke Lakes development, various strategic pedestrian and cycle improvements are already committed, shown in **Image 3.1** and including:

- New Footbridge over the A27 Chichester Bypass south of Portfield Roundabout to provide access towards the city and its commercial centres;
- New Footbridge over the A27 Arundel Road east of Portfield Roundabout to provide access to the South Downs; and
- Improvement to the A27 / Oving Road junction to improve bus movement and cycle infrastructure (already delivered).

3.2.3 The recent closure of Oving Road to general traffic and upgrading of the A27 / Oving Road crossing to enable cycle use (by Shopwhyke Lakes), will ensure this connection between the A8 Site and the A27 network provides suitable conditions for pedestrians and cyclists.

3.2.4 There are a number of designated cycle routes in the area, which provide connections towards key facilities. The majority of these routes commence to the west of the A27 By-pass and provide routes north to the Hospital and University, and west towards the City Centre and rail station.

3.2.5 The proposals will seek to facilitate and connect into the opportunities created by the LCWIP improvement schemes (see Section 2).

### 3.3 Public Transport Opportunities

3.3.1 There are three sets of bus stops located within close proximity to the site. The closest stop is located on Oving Road adjacent to the northern site boundary. Further stops are located on Shopwhyke Road and Drayton Lane. Each are served by Service 85/85a connecting to the city.

**Table 3.1: Bus Services**

Service	Destination	Frequency		
		Mon- Fri	Sat	Sun
85/85a	Arundel - Barnham - Chichester	4 services per day	-	-

Source: Compass Travel (accessed November 2022)

3.3.2 In combination with the consented development sites at Shopwhyke Lakes and Oving Road, the mass of new bus demand that will result from growth to the east of the city will inevitably alter existing bus patterns and markets and make routing of additional and increased bus services in the area more attractive and viable. WSCC is intending to introduce a 55x service to the area to enhance bus provision in the short term, improving bus connectivity and accessibility.

3.3.3 Means to encouraging enhanced services and bus use will be developed as the scheme progresses and in association with WSCC and CDC and are outlined below.

#### Rail Travel

3.3.4 National Rail services are available from Chichester Railway station located circa 3.5km to the west of the site. The railway station has 180 cycle storage spaces and 202 car parking spaces available, is accessible by bus services from the site and within a comfortable cycle distance.

**Table 3.2** outlines the available services from this station, operated predominantly by Southern and provide services to Portsmouth, Southampton, Brighton and London Victoria.

**Table 3.2: Rail Service Frequency**

Destination	Service Frequency		Journey Time
	Morning Peak	Evening Peak	
Littlehampton	2	1	19 minutes
Portsmouth Harbour	1	2	28 minutes
Southampton Central	3	2	56 minutes
Brighton	2	2	58 minutes
London Victoria	2	2	92 minutes

Source: National Rail (accessed 26<sup>th</sup> November 2022)

### 3.4 Highway Network

- 3.4.1 The local highway network is focused around the A27 (Chichester By-pass) and B2144 (Oving Road). To the west of the site, Oving Road forms a four-arm traffic signal-controlled junction with Chichester By-pass, with the closure of Oving Road to general traffic to/from the A27 recently implemented.
- 3.4.2 When travelling east, Oving Road becomes Shopwhyke Road and connects to the surrounding villages of Oving, Tangmere and Barnham. It connects southwards to Drayton Lane which provides access towards Bognor Regis via the A259.
- 3.4.3 As part of the Strategic Road Network, the A27 provides a primary east-west link along the south-coast of England and provides onward connections to the A3 (M) and M27 to the west and A23 to the east. The A27 forms a junction with the A259 (Bognor Road) to the south of the site, which provides a further east-west link along the South Coast.

### 3.5 Committed Development / LP Allocations

- 3.5.1 There are three main committed developments close to the site:
- **Shopwhyke Lakes** (O/11/05283/OUT) – This formed part of the existing local plan and comprises a new community of 500 dwellings, along with complimentary facilities. The scheme is under construction by CALA Homes and others and is substantially occupied. A further consent for an additional 85 dwellings (O/15/03720/OUT) was approved in November 2016 which increases the total number of dwellings to 585 for the site;
  - **Land at the corner of Oving Road and A27** (20/02471/FUL) – 143 dwellings – the scheme is under construction by Redrow Homes and is mostly completed.
  - **UMA House** (19/02030/FUL) – Development for 88 dwellings under development by Bellway Homes.
- 3.5.2 As part of the Shopwhyke Lakes development, a package of highway improvements was agreed with WSCC, CDC and NH. These are summarised in **Table 3.3** and illustrated in **Image 3.1**.
- 3.5.3 These improvements are all implemented, other than the footbridge, which is understood to be expected to be delivered shortly.

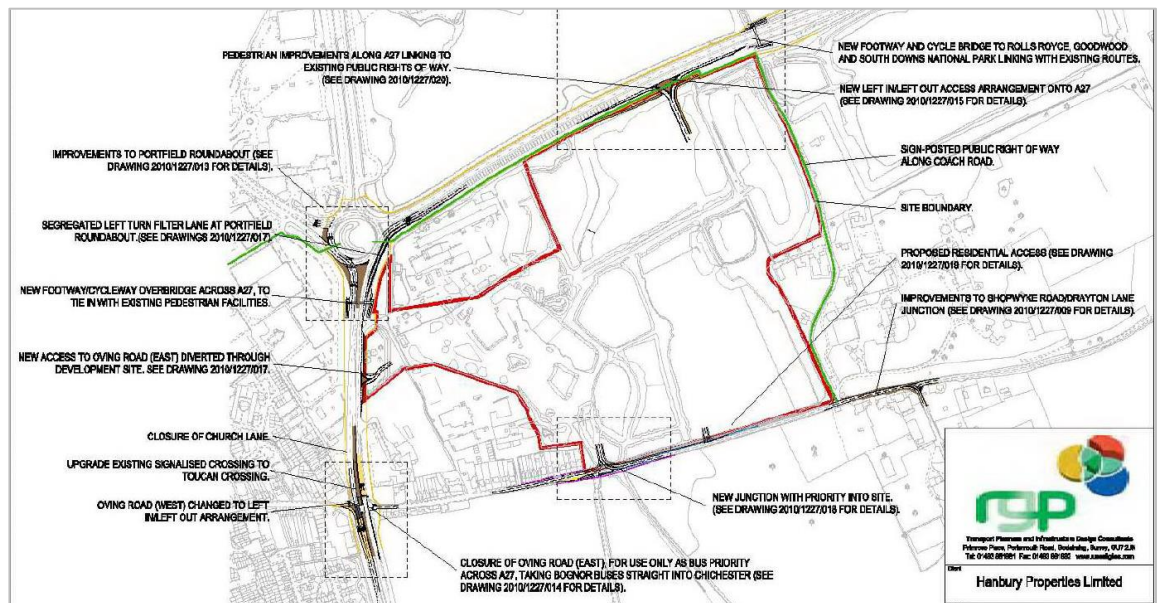


**Table 3.3 Shopwhyke Lakes S106 Highway Works**

Works	Trigger
New Access to Shopwhyke Road – Phase 1 – Simple Priority Junction	Start of Development
Toucan Crossing to A27 / Oving Road	Prior to Occupation
New Footbridge at A27 Chichester Bypass	124 Dwellings
A27 / Oving Road Improvement – Phase 1 – Left Turn Only	297 Dwellings
A27 / Oving Road Improvement – Phase 2 – Left Turn Only	399 Dwellings
New Access to Shopwhyke Road – Phase 2 – Realigned Priorities	
A27 Portfield Roundabout Improvements	400 Dwellings
A27 / Arundel Road Footbridge	475 Dwellings
New Left-in / Left-out access to A27 Arundel Road	Phased with Development
New Left-in / Left-out access to A27 Chichester Bypass	

Sources: Shopwhyke Lakes planning consent conditions and Design and Access Statement

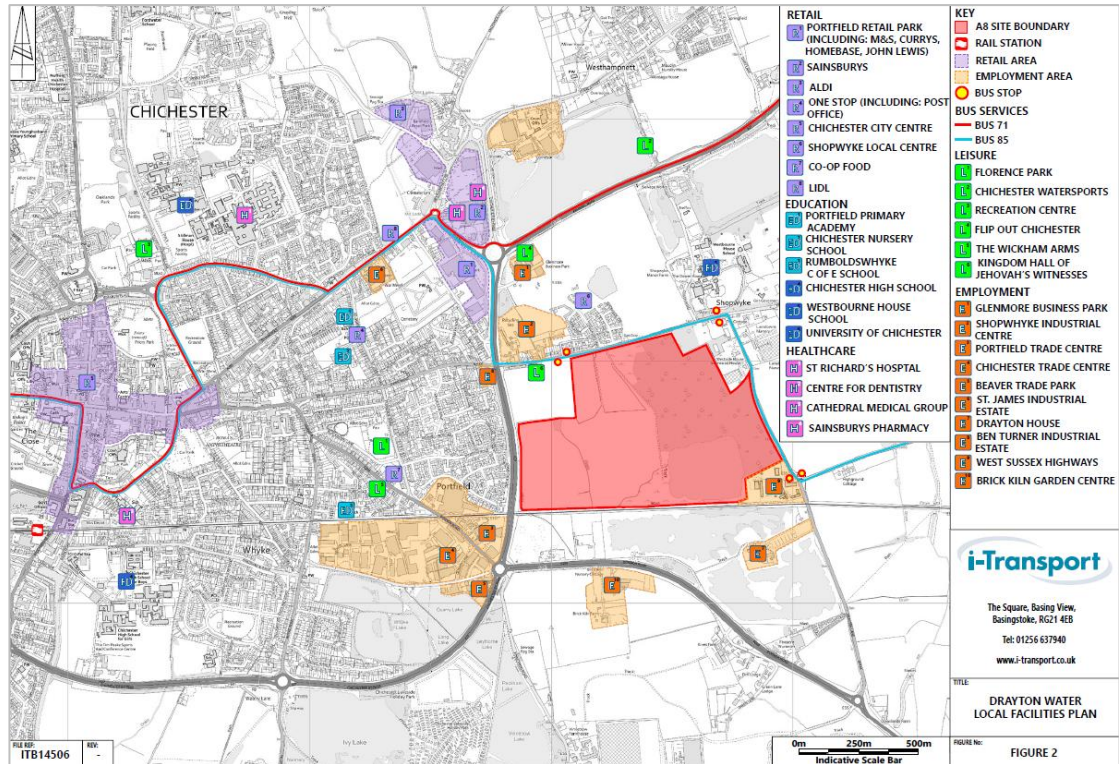
**Image 3.1: Shopwhyke Lakes Transport Strategy**



### 3.6 Local Facilities and Key Destinations

3.6.1 A review of the local area has been carried out to consider the location of relevant services and facilities that would support the needs of the development. This includes key local services including education, employment, retail and health facilities in the surrounding area. The accessibility map is shown on **Figure 2 (Image 3.2)**.

Image 3.2 - Local Facilities and Accessibility Plan



Source: i-Transport – Figure 2

3.6.2 The site is shown to be well located to a large range of key services and facilities, including:

- i Chichester City Centre, providing wide ranging employment, retail and leisure facilities;
- ii Employment opportunities, including Shopwhyke Industrial Centre, Portfield and Chichester Trade Centre and a number of other commercial units;
- iii Education Facilities, including Portfield Primary and Chichester High School; and
- iv Community facilities that are being delivered as part of the Shopwhyke Lakes site.

3.6.3 This assessment takes no account of the facilities that will be provided on the site and described in Section 1 which will include primary education, neighbourhood centre and community uses, as well as a residential care home. The delivery of a mixed-use scheme means that many everyday travel needs can be fulfilled within the Site, reducing the need to travel further afield. This will limit the transport impacts of the proposed A8 Allocation Site.

3.6.4 **Table 3.4** provides a further assessment which considers the travel opportunities available to reach each facility by walking, cycling and existing public transport, noting that there are significant opportunities to improve bus connectivity and further enhance accessibility.

**Table 3.4: Accessibility Table**

Type	Facility	Approximate Distance	Walk Time (minutes)	Cycle Time (minutes)	Bus Connection
Employment	Shopwhyke Industrial Centre	500m	6	2	-
	West Sussex Highways Depot	200m	2	1	-
	Glenmore Business Park	1,100m	13	4	-
	Drayton House	1,200m	14	5	-
	St. James Industrial Estate	1,500m	18	6	✓
	Beaver Trade Park	1,600m	19	6	-
	Portfield Trade Centre	1,700m	20	6	-
	Chichester Trade Centre	1,700m	20	6	-
	Chichester City Centre	2,300m	29	9	✓
Education	Westbourne House School (Ind)	500m	6	2	-
	Portfield Primary Academy	1,500m	18	6	✓
	Chichester Nursery School	1,500m	18	6	✓
	Rumboldswyke C of E School	2,100m	25	8	-
	University of Chichester	3,000m	36	11	✓
	Chichester High School	3,300m	39	12	✓
Retail	Shopwhyke Lakes Local Centre	500m	6	2	-
	Portfield Retail Park	1,200m	14	5	✓
	One Stop (inc. Post office)	1,400m	17	5	✓
	Lidl	1,600m	19	6	✓
	Sainsburys	1,700m	20	6	✓
	Co-op Food	1,800m	21	7	-
	Aldi	2,000m	24	8	-
	Chichester City Centre	2,300m	29	9	✓
Leisure	Kingdom Hall	550m	7	2	-
	Flip Out Chichester	1,300m	15	5	-
	Florence Park	1,400m	17	5	-
	The Wickham Arms	1,800m	21	7	-
	Recreation Centre	2,600m	31	10	✓
	Chichester Water Sports	2,800m	33	11	-
Healthcare	Sainsburys Pharmacy	1,700m	20	6	✓
	Centre for Dentistry	1,700m	20	6	✓
	St Richard's Hospital	2,400m	29	9	✓
	Cathedral Medical Group	2,700m	32	10	✓

Source: i-Transport Consultant Estimates

### 3.7 Sustainable Transport Strategy

3.7.1 To ensure opportunities for sustainable travel are taken up, a Sustainable Transport Strategy will be prepared and delivered, based on the following principles (**Table 3.5**).

**Table 3.5: Sustainable Transport Strategy Principles**

Principle	Potential Measure
Reducing the Need to Travel	Deliver Community facilities on the Site
	Deliver Primary Education on the Site
	Provide high-quality broadband connections to homes
	Provide home working space
Promoting Walking	Deliver a network of footways and footpaths on the site
	Provide multiple points of pedestrian access to Shopwhyke Road
	Improvement to Oving Road between site and A27 and to the City
	Deliver a Wayfinding strategy to key facilities
Promoting Cycling	Provide cycle routes on the site and to improve connections east-west
	Improvement to Oving Road between site and A27
	Provide cycle parking facilities for each dwelling
	Investigate an e-bike hire scheme on the site
	Investigate discounted cycle equipment offers
Promoting Public Transport	Provide connections to and improvement of bus stops on Shopwhyke Road
	Consider improvements to bus infrastructure
	Liaise with WSCC and Operators to consider route extensions (i.e. 55x)
	Investigate discounts / incentives for bus travel
Promoting Smarter Choices	Investigate extension of car club to the site
	Delivery of a Travel Plan to promote sustainable travel choices

### 3.8 Summary

3.8.1 Overall, the site offers the opportunity to deliver a sustainable extension to Chichester, building on the locational benefits of the site, close to a range of local facilities and being well connected to a choice of travel modes, and offering a mixture of uses on the site to reduce travel demand.

3.8.2 A Sustainable Transport Strategy would be delivered to ensure opportunities for sustainable travel are taken up. This will comprise a range of infrastructure based improvements building on the aspirations of the LCWIP and including delivery of improved facilities, enhanced bus service provision and measures designed to engender behaviour change and influence travel behaviour.



## SECTION 4 Development Opportunity and Access Strategy

### 4.1 Development Opportunity

- 4.1.1 The site offers the opportunity to deliver a sustainable extension to Chichester.
- 4.1.2 The Site is able to deliver at least 680 dwellings alongside care, community and education uses as part of a comprehensive re-development and in line with proposed Allocation A8.
- 4.1.3 A Concept Masterplan, which is subject to further development / refinement, has been prepared to show how the draft allocation could be brought forward (**Image 4.1**).

**Image 4.1: Concept Masterplan**



### 4.2 Site Access Strategy

- 4.2.1 To deliver access to the site, consideration has been given to access opportunities to the east, north and west. To the south of the site is the mainline railway which prevents access.

4.2.2 The Site has frontage to the west to the A27 Chichester Bypass. In view of the strategic role of this road, and the proximity of the A27 / Oving Cross-roads junction, National Highways has confirmed that they would not support delivery of a new access to the A27 for the Site.

4.2.3 To the east of the Site is Drayton Lane but the eastern side of the A8 Allocation Site is promoted to provide a Strategic Wildlife Corridor. Providing engineered road crossings across a Wildlife Corridor would be inconsistent with its purposes and has been discounted.

4.2.4 For this reason, access is proposed to Shopwhyke Road, consistent with the access strategy for the committed developments at Shopwhyke Lakes and Oving Park. The strategy comprises:

- Delivery of two points of vehicular access to Shopwhyke Road, one to align and improve the western Shopwhyke Lakes junction and the other towards the eastern boundary of the Site. Together these would acceptably serve the draft Strategic Site Allocation A8.
- The western access is proposed as a 3-arm roundabout with Oving Road realigned to meet the southern arm at a simple priority junction some 30m south of the roundabout.
- The eastern access is proposed as simple priority junction, consistent with existing junctions along Shopwhyke Road serving Shopwhyke Lakes and Oving Park.
- Pedestrian and cycle access to be provided on key desire lines towards:
  - Shopwhyke Lakes to the north, to integrate the local community.
  - Oving Road, to facilitate access towards the City Centre and Railway Station.
  - To the consented development at Oving Park.

#### **Vehicular Access**

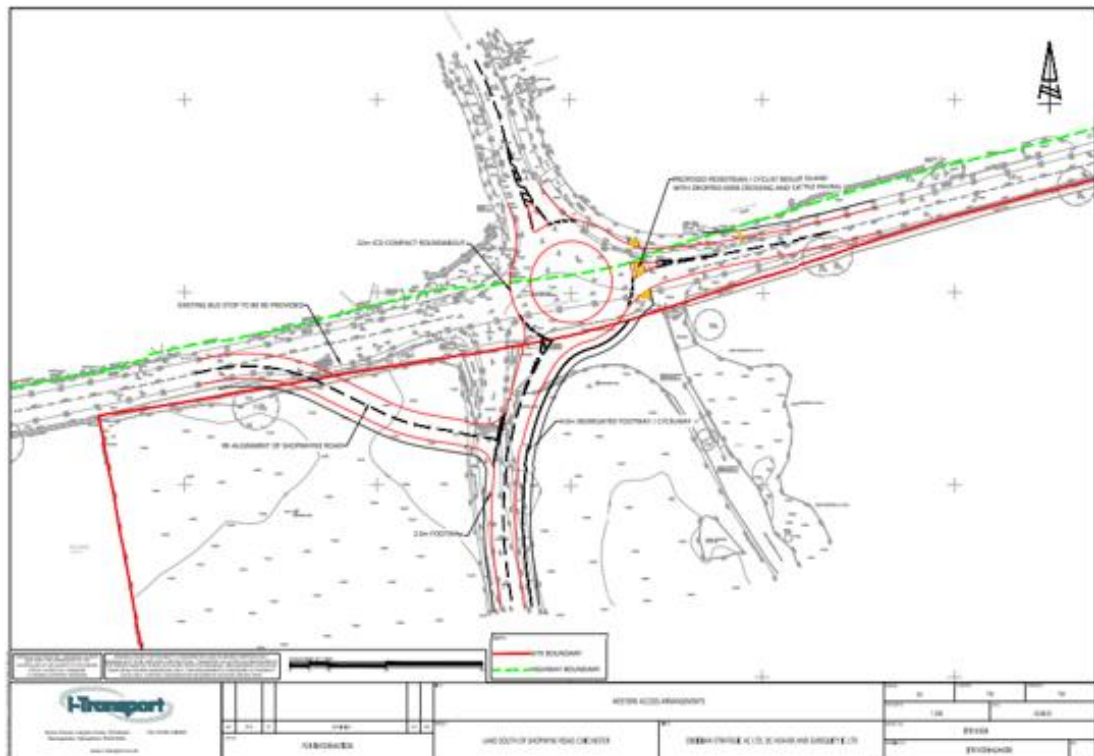
4.2.5 To demonstrate that access can be achieved, initial access designs have been prepared which will be developed and agreed with WSCC as the proposals develop. These proposals take on board previous feedback from WSCC obtained through the pre-application process.

#### **Western Access**

4.2.6 The western site access is proposed as a 32m ICD 3-arm compact roundabout, as shown on **Drawing ITB14506-GA-006** shown as **Image 4.2**. An earlier option to deliver a lower key access option (a priority junction) was agreed in principle with WSCC and remains deliverable, but it is considered that taking account of the nature of the site and local network, and the opportunity that this location provides to deliver a critical gateway, that a roundabout is more appropriate.



**Image 4.2: Proposed Western Site Access**



Source: Drawing ITB14506-GA-006

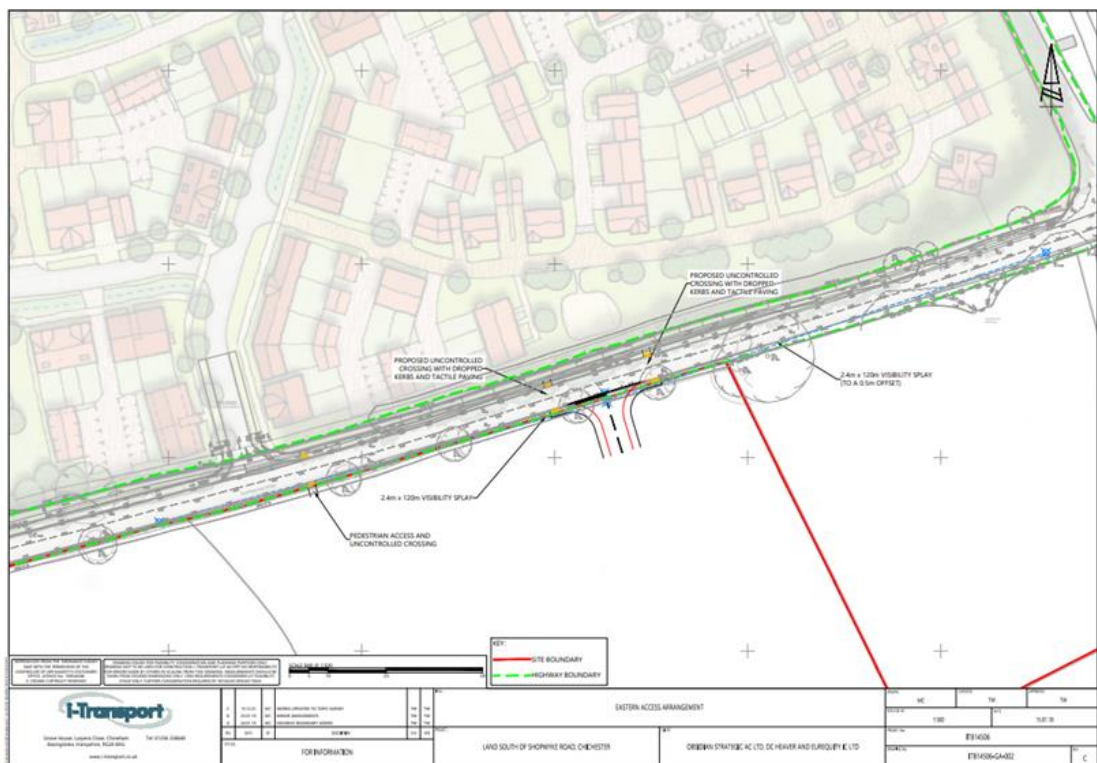
- 4.2.7 The proposed roundabout has been designed in line with geometric standards in Design Manual for Roads and Bridges (DMRB) CD116 – ‘Geometric Design of Roundabouts’. The southern arm of the roundabout would be aligned to tie in with the existing access track to the site so far as possible, with Shopwhyke Road (west) realigned to meet this southern arm at a simple priority junction some 30m south of the roundabout. Existing bus stops located on the Shopwhyke Road west arm would be relocated on-line and improved. The proposed design accounts for the significantly reduced flows on Oving Road following the alterations to the Oving Road junction.
- 4.2.8 Development of the design will be required to provide service road access to existing properties on the northern side of Oving Road which is deliverable in line with Site constraints.

**Eastern Access**

- 4.2.9 The eastern access is proposed as a simple priority junction. The junction has been located towards the eastern site boundary to provide sufficient separation to the constructed access to Shopwhyke Lakes and achieves adequate visibility in line with the prevailing speed limit (40mph), as well as delivering footway connections to the network to the north.

- 4.2.10 Following pre-application advice, westwards relocation of the junction will be considered to bring it within the 30mph speed limit, subject to consideration of the need to ensure separation from the Shopwhyke Lakes eastern access, the impact on frontage hedgerow, and the landscape strategy. The exact position of this junction is therefore being considered through the masterplanning process and will be the subject of a future phase planning application.
- 4.2.11 An illustrative access design is provided as **Drawing ITB14506-GA-002**, shown at **Image 4.3** which is wholly deliverable in line with land constraints and design standards.

**Image 4.3: Eastern Access Option**



**Site Access Capacity Assessments**

- 4.2.12 Initial capacity assessments have been undertaken using TRL software Junctions 10 to assess the future operation of the proposed eastern and western access junctions.
- 4.2.13 The assessments have been undertaken for a future year of 2039 with traffic demand data drawn from the Chichester Area Transport Model (CATM) provided by WSCC and updated from 2035 to the current Local Plan year of 2039 using TEMPRO growth factors. The assessment takes account of committed development traffic, namely the Shopwhyke Lakes site and Oving Park, as well as highway network changes already committed. These initial assessments will be fully updated in due course using appropriate baseline data agreed with WSCC.

4.2.14 At this stage, an assessment of the traffic impacts of the proposed allocation site is calculated in Section 5 of this report and has been used to assess the operation of the proposed site access junctions. The Assessments consider a development of 680 dwellings, but the modelling demonstrates capacity within the access schemes for further development beyond this.

4.2.15 **Tables 4.1** and **4.2** present the results.

**Table 4.1: Western Site Access – 3-arm roundabout**

Arm	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
<b>2039 + A8 Proposed Allocation Site Development</b>						
Northern Arm	0.4	4.11	0.27	1.1	6.36	0.53
Eastern Arm	0.6	4.45	0.36	0.4	4.17	0.31
Southern Arm	0.2	4.80	0.16	0.1	4.21	0.08

**Table 4.2: Eastern Site Access – Priority Junction**

Arm	AM Peak (0800-0900)			PM Peak (1700-1800)		
	Queue	Delay (s)	RFC	Queue	Delay (s)	RFC
<b>2039 + A8 Proposed Allocation Site Development</b>						
Site Access	0.4	11.20	0.31	0.2	11.23	0.18
Shopwhyke Road	0.2	5.29	0.11	0.7	4.57	0.22

Source: Junctions 10

4.2.16 Both of the proposed access junctions are demonstrated to operate efficiently and within capacity, without any notable queuing or delay. On that basis, it is demonstrated that safe, suitable, and satisfactory access can be delivered to the proposed Strategic Site Allocation A8.

### Pedestrian / Cycle Connectivity

4.2.17 The proposal will bring forward a pedestrian and cycle connection from the site to Shopwhyke Road via the proposed site access roundabout and north-western corner of the site.

4.2.18 A 4m width footway/cycleway is shown running along the northern boundary of the site to assist delivery of the LCWIP improvement for Route D, designed in line with guidance in LTN 01/20 to deliver either shared or segregated provision, shown in concept form on **ITB14506-GA-007**.

4.2.19 Uncontrolled dropped kerb crossing points are proposed at the roundabout and a north-south uncontrolled crossing with central refuge island is incorporated on the Shopwhyke Road east arm, with a signalised crossing of Shopwhyke Road provided centrally to the site.

4.2.20 Future phases of the emerging masterplan will include pedestrian and cycle access provided on key desire lines towards:

- Shopwhyke Lakes to the north, to integrate the local community.
- Oving Road to the north, to facilitate access towards the City Centre and Railway Station.
- To the consented development at Oving Park.

### 4.3 Summary

4.3.1 A Site Access Strategy has been developed which comprises:

- Primary all-mode access to the Site from Shopwhyke Road in two locations, through both a roundabout junction and a simple priority junction. Both accesses are shown to be deliverable in design terms, operate efficiently, and would connect to the existing non-motorised facilities on Shopwhyke Road;
- A dedicated pedestrian / cycle access to Oving Road in the north-west of the site, to provide ease of access towards the City Centre; and
- Potential for non-motorised connections to Oving Park will be considered through masterplanning to connect to wider pedestrian and cycle routes in the area.

4.3.2 The strategy will deliver safe and suitable access for all modes of travel. The access strategy is shown to be **deliverable and achievable**, and will ensure a well-planned, integrated sustainable extension to Chichester.

---

## SECTION 5 Traffic Considerations

5.1.1 The emerging Local Plan Submission Draft Policy A8 and its evidence base identifies the Site for a residential led mixed-use development of at least 680 dwellings alongside a primary school, care use and neighbourhood centre.

### 5.2 Local Plan Traffic Assessments

5.2.1 As set out in Section 2, CDC has (with WSCC and NH) been preparing its evidence base including strategic transport modelling to consider the impact of its proposed spatial strategy. Stantec, on behalf of CDC has updated the Chichester Area Transport Model (CATM) and prepared a Chichester Transport Study Local Plan Review Transport Assessment, which forms part of the evidence base for the Local Plan (published January 2023).

5.2.2 The findings of the transport study are picked up in emerging Chichester Local Plan 2021-2039 Proposed Submission policy T1 which requires developer contributions to be sought from all new housing development to A27 improvements on a contribution per dwelling basis.

5.2.3 Overall, it is concluded that the proposed local plan allocations, of which the site is one, are capable of being accommodated on the highway network local to the Site, subject to the delivery of identified mitigation measures. The traffic impacts of the Site on the A27 corridor are therefore assessed by the CATM model and will be appropriately mitigated through the CDC monitor and manage approach presented in the draft Local Plan.

### 5.3 Local Network Traffic Assessments

5.3.1 To determine the potential traffic generation of the proposed development, trip rates have been obtained from the TRICS database. A Trip Rate Analysis note was previously provided to NH, CDC and WSCC for agreement and is provided in **Appendix B**.

5.3.2 Taking account of the expected composition of the Site, a 'Mixed Housing >300 Dwellings' trip rate is considered appropriate taking account of:

- Scale of the development (at least 680 dwellings);
- Site location – i.e. connected to the most sustainable settlement in the District;
- Mix of development expected (houses and flatted development will be needed to achieve the necessary densities) as well as affordable provision;

5.3.3 The Scheme will deliver various complimentary uses on the site – the site will deliver a primary school and neighbourhood centre, which could include retail, workspace and community uses, allowing for an internalisation of a proportion of trips. The allowances to be made for containment / internalisation will be discussed with NH / WSCC in due course.

5.3.4 As set out above, the mix and scale of uses is subject to the ongoing masterplanning process. However, at this early stage, the following has been assumed for the non-residential uses:

- A trip rate has been obtained for a care home in an edge of town setting. Trips have been calculated based on a 100-bed care home – this is subject to discussions with CDC and masterplanning. The trip rate is included at **Appendix B**.
- The primary school is assumed to be a one form of entry primary school (210 pupils), expandable to two forms of entry (420 pupils). At this stage, a first principles approach has been used to calculate the potential trip generation of a one form of entry primary school – this assessment will be reviewed and developed in discussion with WSCC:
  - Based on the thresholds for the likely number of pupils arising from a residential development set out in West Sussex’s Planning Obligations Explaining Contributions Calculations document’, it is assumed that the number of primary school children generated per dwelling is 0.25. Therefore, the assessment assumes that 170 of the 210 pupils (81%) will come from the A8 Site.
  - Given the proximity of these pupils to the school, it is assumed that only the small number of trips associated with 40 pupils plus 30 staff that will be generated externally to the site will occur on the external highway network as a result of the school. For a robust assessment it is assumed that all of these external trips will arrive by car and only staff trips would occur in the PM peak hour, which is robust in view of the likely catchment in adjoining developments.
  - This assessment will be developed through the TA process, with indicative figures for staff and pupil travel given in **Table 5.1** below.
- A neighbourhood centre, for example local retail and community facilities which could be provided within the development are ancillary to the proposed residential uses and are therefore only likely to attract residents living within the site on a day-to-day basis. The provision of a convenience store or other retail uses on site will also reduce the need for future residents to travel off-site for everyday shopping needs and therefore will have a beneficial impact in reducing the external traffic generation of the site.



5.3.5 The trip rates and traffic projections for the Site are summarised in **Table 5.1**.

**Table 5.1: Residential Trip Rates and Development Trips**

Time	AM Peak			PM Peak		
	In	Out	Total	In	Out	Total
Residential Trip Rate	0.075	0.275	0.350	0.256	0.127	0.383
Care Home Trip Rate	0.064	0.064	0.128	0.037	0.048	0.085
1FE Primary School	First principles assessment					
Neighbourhood Centre	Will not generate significant external trips. No assessment of internalisation effects undertaken at this stage.					
Development Trips						
680 dwellings	52	188	240	174	86	260
100-bed care home	6	6	12	4	5	9
1FE Primary School	70	40	110	0	30	30
Neighbourhood Centre	-	-	-	-	-	-
<b>Total</b>	<b>128</b>	<b>234</b>	<b>362</b>	<b>178</b>	<b>121</b>	<b>299</b>

Source: TRICS

5.3.6 The assessment shows that the A8 Site would generate some 300-360 two-way vehicle movements in peak hours. This is a robust assessment particularly in relation to education trips.

5.3.7 It is noted that the neighbourhood/community uses are expected to primarily serve the immediate development area and result in limited external traffic demand. The assessment of these uses will be refined through the masterplanning and transport assessment process.

5.3.8 In the same manner, the residential trip rates used for this assessment take no account of trip internalisation, i.e. traffic movements that would be addressed by destinations on the site (i.e. the primary school and local centre). This would be agreed with WSCC / NH at a later stage.

## 5.4 Traffic Distribution and Assignment

5.4.1 As part of the Shopwhyke Lakes development, new accesses are provided to the A27 corridor, and the A27 / Oving Road has been amended to close Oving Road to general traffic (bus access is maintained). These committed changes impact traffic distribution.

5.4.2 To take account of the future network, and to consider likely impacts of the development options, the agreed traffic assignment for the Shopwhyke Lakes development has been used. This approach will be refined and confirmed as part of a future planning application.

## 5.5 Summary Traffic Impacts

5.5.1 The impact of the proposed A8 allocation on key junctions on the local network has been considered. This compares the likely development generated traffic flows at key junctions on both the A27 corridor and the local network, with future 2039 baseline traffic flows, derived from the Chichester Area Transport Model. The results are presented in **Table 5.2**.

**Table 5.2: Development Traffic Impact – A8 Allocation**

Junction	Morning Peak			Evening Peak		
	2039 Base	Dev Flows	Impact	2039 Base	Dev Flows	Impact
<b>A27 Junctions</b>						
A27 / Shopwhyke Lakes Access	4214	108	3%	4665	89	2%
Portfield Roundabout	5138	96	2%	5251	83	2%
Oving Road Junction	4452	112	3%	3960	75	2%
Bognor Road Roundabout	6229	83	1%	5887	54	1%
<b>Local Junctions</b>						
Drayton Lane / Tangmere Road	1282	167	13%	1594	131	8%
Drayton Lane / A259 Bognor Road	3270	72	2%	3287	59	2%

5.5.2 **Table 5.2** shows that development of the Site would result in traffic increases on the A27 corridor junctions of 1-3%, and in real terms resulting in generally less than two additional vehicles each minute. This level of traffic increase is limited and is likely to be imperceptible to existing traffic conditions. Whilst the impacts on more local junctions (i.e. Drayton Lane - 2-13%) are more significant in percentage terms, this is considered against lower baseline traffic flows.

### Impacts on Highway Links

5.5.3 Beyond the A27 and key local junctions, an assessment has also been carried out to consider the likely increases in traffic on the local road network. This compares the 2039 Future Year two-way traffic flows on the local network with the projected traffic increase that would arise from development of the Site. The assessment is presented in **Table 5.3**.

5.5.4 The impact of the development of the Site is shown to be generally small-modest, with traffic increases on the A27 corridor of generally less than ~2%. More pronounced impacts are focussed on Shopwhyke Road and at the access to Shopwhyke Lakes as would be expected due to their relationship with the Site, but this is considered against low baseline traffic flows and means an additional 3-4 vehicles each minute in real terms on average.

**Table 5.3 – Traffic Impacts on Local Road Network**

Junction	Morning Peak			Evening Peak		
	2039 Base	Dev Flows	Impact	2039 Base	Dev Flows	Impact
B2144 Shopwhyke Road	682	264	39%	1066	214	20%
B2144 Oving Road west of A27	404	18	4%	512	15	3%
B2144 Drayton Lane	1097	72	7%	1274	59	5%
A259 Bognor Road	2532	0	0%	2169	0	0%
A259 Chichester Road	3192	0	0%	2862	0	0%
Tangmere Road	767	95	12%	848	71	8%
Shopwhyke Lakes Access Road	519	276	53%	743	232	31%
A27 Arundel Road east of Shopwhyke Lakes	4057	61	2%	4462	65	1%
A27 Chichester Bypass north of Oving Road	4413	101	2%	3945	69	2%
A285 Portfield Way	1698	48	3%	1532	36	2%

## 5.6 Traffic Impact Summary

5.6.1 The Site offers real opportunities to deliver sustainable development, promoting active travel opportunities, and to reduce travel demands through providing a mixture of uses on the Site. Sustainable travel modes should and will be prioritised and the scheme is designed to minimise vehicle trips leaving the site as far as practical.

5.6.2 Nevertheless, development of the proposed Strategic Site Allocation A8 will inevitably generate a level of traffic on the wider highway network.

5.6.3 Initial (and conservative) appraisal of the impacts of the site for 680 dwellings plus care and community uses, demonstrates that traffic impacts on the A27 corridor will amount to some 1-3%. Whilst the capacity constraints of the corridor are noted, this level of traffic change is unlikely to materially impact the operation of the corridor and these impacts can be dealt with by way of financial contribution in line with emerging local policy.

5.6.4 Going forward, engagement with WSCC, NH and CDC will be continued in order to:

- Inform and detail the scope of Transport Assessment required for the Site.
- Confirm the assessment parameters.
- Define the approach to mitigation that may be necessary.

## SECTION 6 Summary and Conclusions

6.1.1 Drayton Water is identified as a proposed residential-led mixed use sustainable extension to Chichester in the emerging Chichester Local Plan. The Site is capable of delivering at least 680 dwellings, plus care and neighbourhood/community uses including a primary school.

6.1.2 This Transport Delivery Report has considered the deliverability of the site in the context of the emerging Local Plan policy, and against the key policy tests laid out in the NPPF, which require sites to demonstrate:

- Safe and suitable access can be achieved;
- Opportunities for sustainable travel have or can be taken up;
- The design of streets, parking areas, other transport elements and the content of associated standards will reflect current national guidance, including the National Design Guide and the National Model Design Code;
- That cost effective solutions can be delivered to address the significant impacts of development, such that the proposal would not result in a severe residual cumulative impact, or unacceptable safety impact.

### 6.2 Site Access

6.2.1 A sustainable modes access strategy will ensure a connected and sustainable development and enhance opportunities for sustainable travel and will ensure strong integration of the Site.

6.2.2 Vehicular access to the site can be achieved to Shopwhyke Road, where two accesses are proposed. Access is shown to be deliverable in operational and design terms and is consistent with other accesses agreed on this corridor associated with committed development schemes.

### 6.3 Transport Sustainability

6.3.1 Drayton Water represents an opportunity to deliver a sustainable extension to the City, and one which can seek to reduce the need to travel, particularly by car by delivering a mixed use scheme.

6.3.2 The site is well located adjacent to the existing built-up area of Chichester and is closely located to a range of facilities. The Site is well connected to sustainable movement networks, and to public transport, which make alternative travel options to the private car realistic and attractive.



6.3.3 To ensure opportunities for sustainable travel are taken up, a Sustainable Transport Strategy is proposed which will deliver a series of measures to promote travel choices, ranging from infrastructure enhancements, bus enhancements and measures to promote behavioural change.

## 6.4 Traffic Impacts

6.4.1 It is acknowledged that the A27 corridor is a traffic sensitive route that suffers congestion.

6.4.2 A high-level assessment of traffic impacts has been carried out to consider the likely impact of development of the Site. This confirms that whilst inevitably the allocation would generate traffic to the sensitive A27 corridor, these impacts are proportionately small (1-3%).

6.4.3 CDC, NH and WSCC have recently published their Transport Assessment for this corridor alongside a transport strategy to support Local Plan development. This assessment concludes that subject to securing the identified mitigation, the impact of the draft Local Plan sites would be acceptable. Emerging policy requires developer contributions to A27 improvements to be secured from all new housing development on a tariff contribution basis.

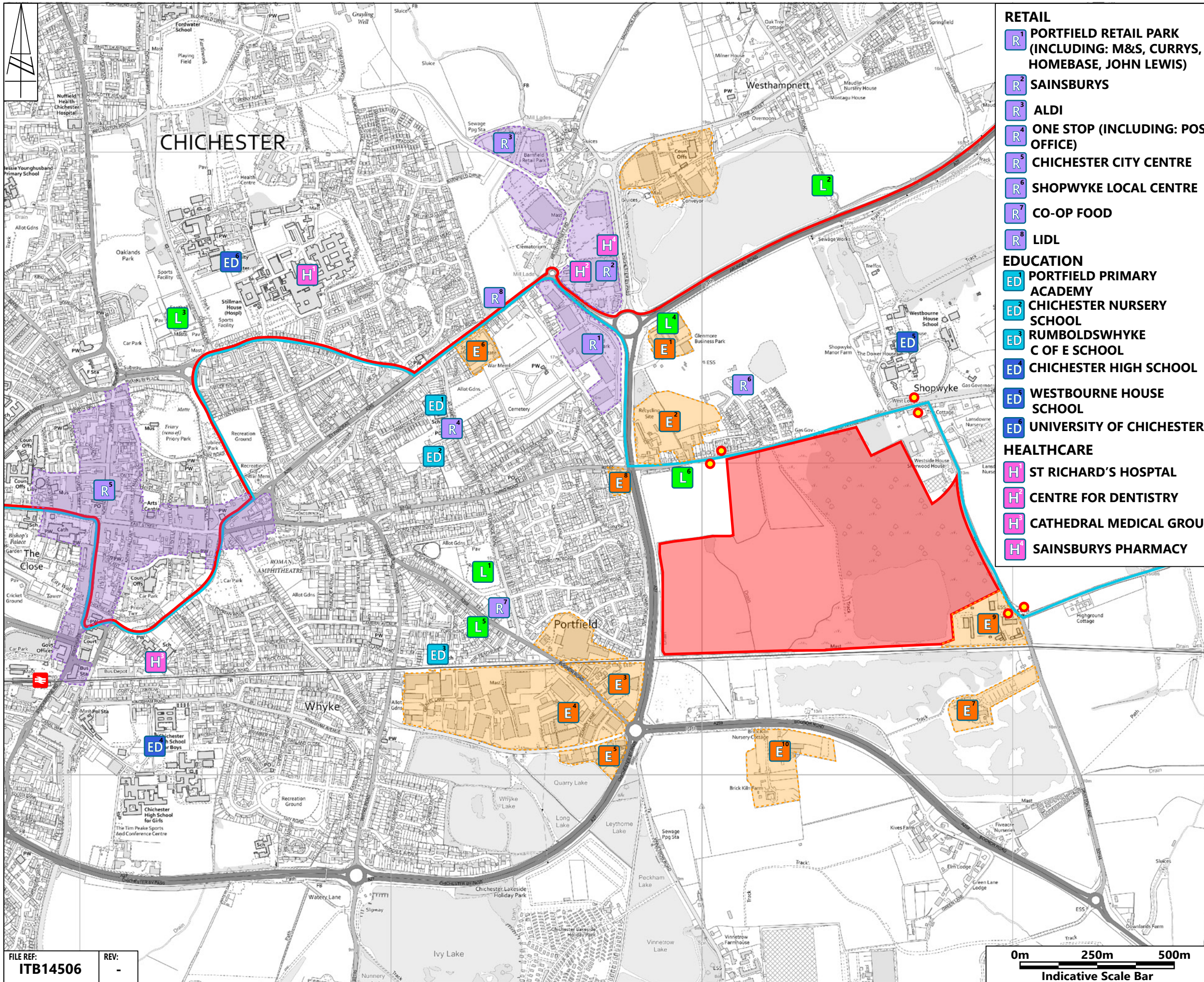
6.4.4 Impacts on the local network surrounding the site are more pronounced, but baseline traffic flows are lesser and there are opportunities for any such impacts to be addressed, for example through the provision of active travel connections and a Travel Plan, alongside local junction improvements if identified as necessary through the transport assessment process.

6.4.5 The Site offers the opportunity to deliver necessary housing growth in a sustainable location, well connected to existing facilities and transport choices, and supported by critical everyday facilities provided on the site itself. This will reduce the impact of growth by promoting sustainable travel means and suppressing vehicular trips. Travel demand can be further reduced through the Travel Plan and by providing strong sustainable connections. It is considered that by providing complimentary uses on the site, combined with the Sustainable Transport Strategy outlined, that reduced travel demand to that forecast by the Council can be achieved.

6.4.6 Overall, whilst a financial contribution to improvements to the A27 corridor will be required, alongside more detailed assessment of local junctions when the scheme is more advanced and a package of mitigation measures (focussed on sustainable travel), there are no critical transport barriers to the development of the Site which is shown to be deliverable and appropriate.

## FIGURES





- RETAIL**
- R<sup>1</sup>** PORTFIELD RETAIL PARK (INCLUDING: M&S, CURRYS, HOMEBASE, JOHN LEWIS)
  - R<sup>2</sup>** SAINSBURYS
  - R<sup>3</sup>** ALDI
  - R<sup>4</sup>** ONE STOP (INCLUDING: POST OFFICE)
  - R<sup>5</sup>** CHICHESTER CITY CENTRE
  - R<sup>6</sup>** SHOPWYKE LOCAL CENTRE
  - R<sup>7</sup>** CO-OP FOOD
  - R<sup>8</sup>** LIDL
- EDUCATION**
- ED<sup>1</sup>** PORTFIELD PRIMARY ACADEMY
  - ED<sup>2</sup>** CHICHESTER NURSERY SCHOOL
  - ED<sup>3</sup>** RUMBOLDSWHYKE C OF E SCHOOL
  - ED<sup>4</sup>** CHICHESTER HIGH SCHOOL
  - ED<sup>5</sup>** WESTBOURNE HOUSE SCHOOL
  - ED<sup>6</sup>** UNIVERSITY OF CHICHESTER
- HEALTHCARE**
- H<sup>1</sup>** ST RICHARD'S HOSPITAL
  - H<sup>2</sup>** CENTRE FOR DENTISTRY
  - H<sup>3</sup>** CATHEDRAL MEDICAL GROUP
  - H<sup>4</sup>** SAINSBURYS PHARMACY

- KEY**
- A8 SITE BOUNDARY
  - RAIL STATION
  - RETAIL AREA
  - EMPLOYMENT AREA
  - BUS STOP
- BUS SERVICES**
- BUS 71
  - BUS 85
- LEISURE**
- L<sup>1</sup>** FLORENCE PARK
  - L<sup>2</sup>** CHICHESTER WATERSPORTS
  - L<sup>3</sup>** RECREATION CENTRE
  - L<sup>4</sup>** FLIP OUT CHICHESTER
  - L<sup>5</sup>** THE WICKHAM ARMS
  - L<sup>6</sup>** KINGDOM HALL OF JEHOVAH'S WITNESSES
- EMPLOYMENT**
- E<sup>1</sup>** GLENMORE BUSINESS PARK
  - E<sup>2</sup>** SHOPWHYKE INDUSTRIAL CENTRE
  - E<sup>3</sup>** PORTFIELD TRADE CENTRE
  - E<sup>4</sup>** CHICHESTER TRADE CENTRE
  - E<sup>5</sup>** BEAVER TRADE PARK
  - E<sup>6</sup>** ST. JAMES INDUSTRIAL ESTATE
  - E<sup>7</sup>** DRAYTON HOUSE
  - E<sup>8</sup>** BEN TURNER INDUSTRIAL ESTATE
  - E<sup>9</sup>** WEST SUSSEX HIGHWAYS
  - E<sup>10</sup>** BRICK KILN GARDEN CENTRE



The Square, Basing View,  
Basingstoke, RG21 4EB

Tel: 01256 637940

[www.i-transport.co.uk](http://www.i-transport.co.uk)

TITLE:

**DRAYTON WATER LOCAL FACILITIES PLAN**

FILE REF:  
**ITB14506**

REV:  
-

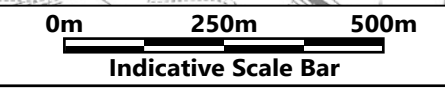


FIGURE No:  
**FIGURE 2**

Reproduced from ordnance survey by the permission of the controller of her majestys stationery office. Crown copyright. All rights reserved. Licence number 100022432



# CHICHESTER



**KEY**

- A8 SITE BOUNDARY
- TOWN CENTRE
- PEDESTRIAN DESIRE LINE

**i-Transport**

The Square, Basing View,  
Basingstoke, RG21 4EB

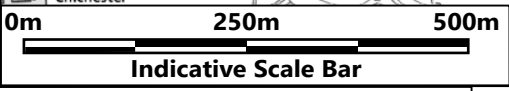
Tel: 01256 637940

[www.i-transport.co.uk](http://www.i-transport.co.uk)

TITLE:

**DRAYTON WATER  
EXISTING PEDESTRIAN/CYCLE  
PROVISION INTO CITY CENTRE**

FIGURE No: **FIGURE 3**



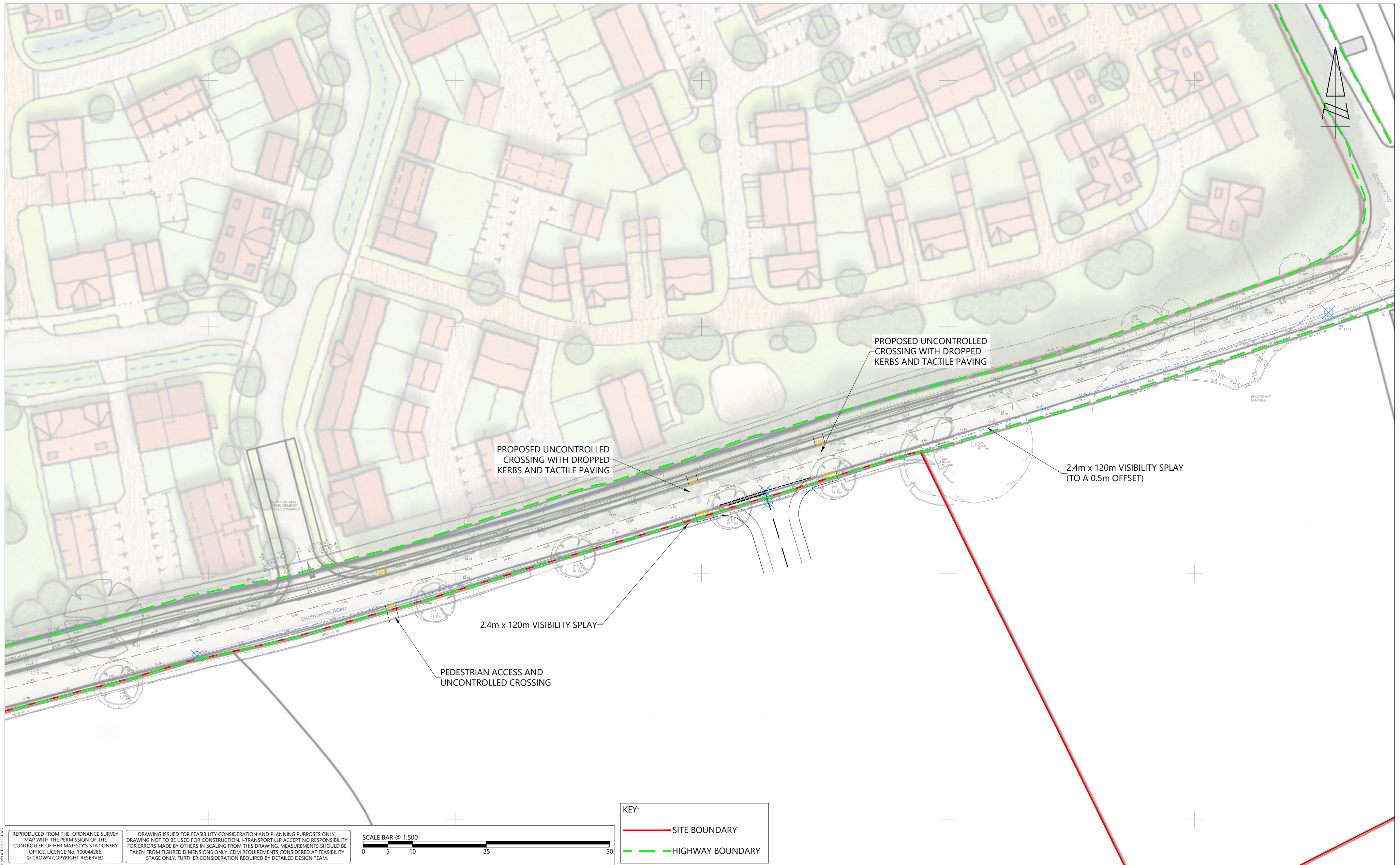
FILE REF: **ITB14506**

REV: -



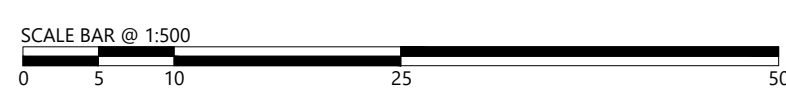
# DRAWINGS





REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE. LICENCE No. 100044286 © CROWN COPYRIGHT RESERVED.

DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.



KEY:

<span style="color: red;">—</span>	SITE BOUNDARY
<span style="color: green;">- - -</span>	HIGHWAY BOUNDARY



Grove House, Lutyens Close, Chineham Basingstoke, Hampshire, RG24 8AG  
Tel: 01256 338640  
www.i-transport.co.uk

REV	DATE	BY	DESCRIPTION	CHK	APD
C	13.12.21	MC	WORKS UPDATED TO TOPO SURVEY	TW	TW
B	25.01.19	MC	MINOR AMENDMENTS	TW	TW
A	24.01.19	MC	HIGHWAY BOUNDARY ADDED	TW	TW

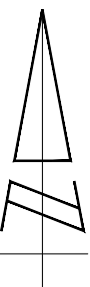
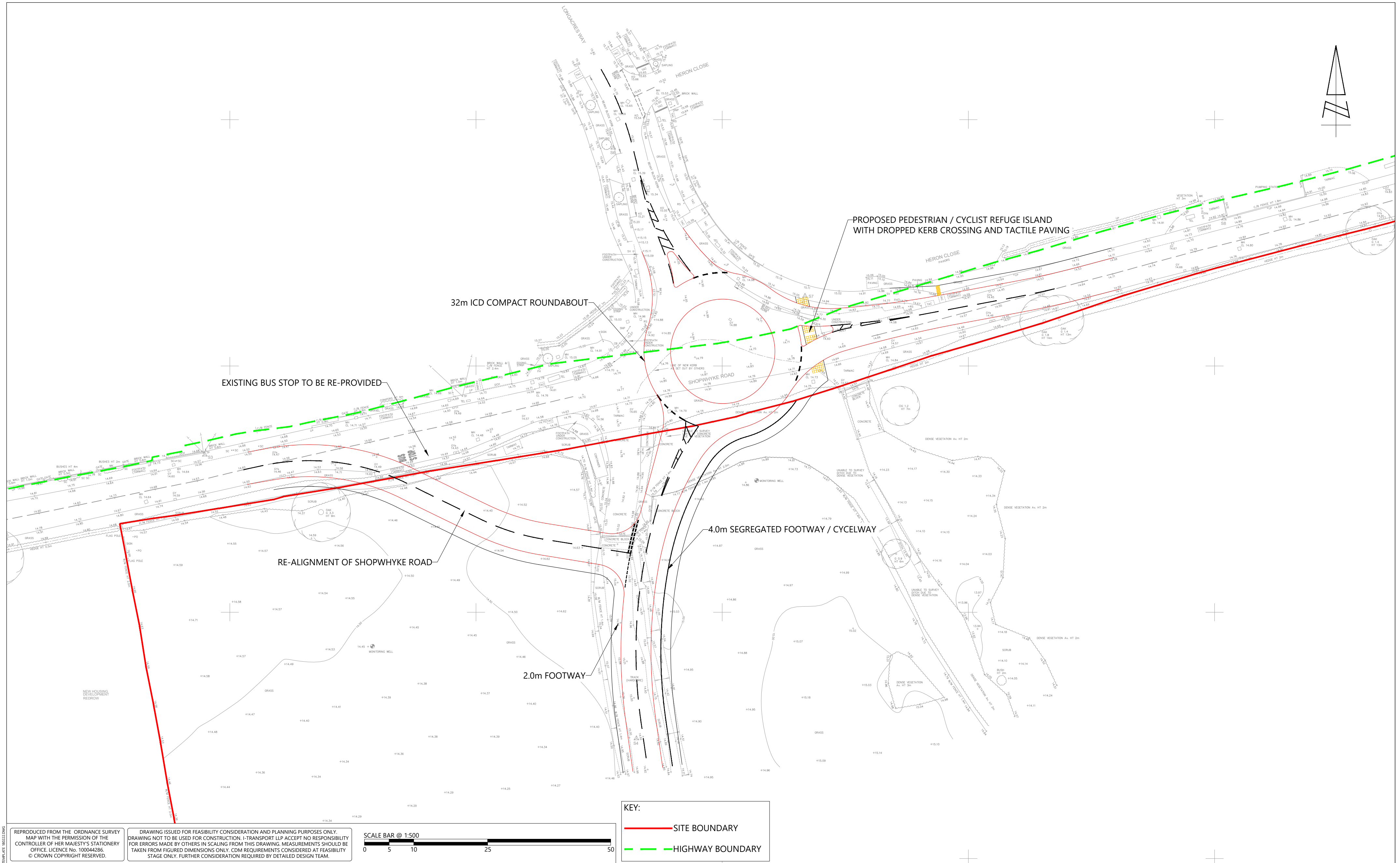
STATUS: FOR INFORMATION

TITLE: EASTERN ACCESS ARRANGEMENT  
PROJECT: LAND SOUTH OF SHOPWYKE ROAD, CHICHESTER

CLIENT: OBSIDIAN STRATEGIC AC LTD, DC HEAVER AND EUREQUITY IC LTD

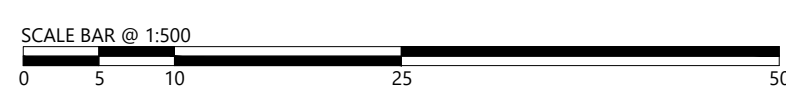
DRAWN: MC	CHECKED: TW	APPROVED: TW
SCALE @ A2: 1:500	DATE: 15.01.18	
PROJECT No: ITB14506		
DRAWING No: ITB14506-GA-002		REV: C





REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE. LICENCE No. 100044286 © CROWN COPYRIGHT RESERVED.

DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. COM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.



KEY:	
<span style="color: red;">—</span>	SITE BOUNDARY
<span style="color: green;">—</span>	HIGHWAY BOUNDARY



Grove House, Lutyns Close, Chineham  
Basingstoke, Hampshire, RG24 8AG  
Tel: 01256 338640  
www.i-transport.co.uk

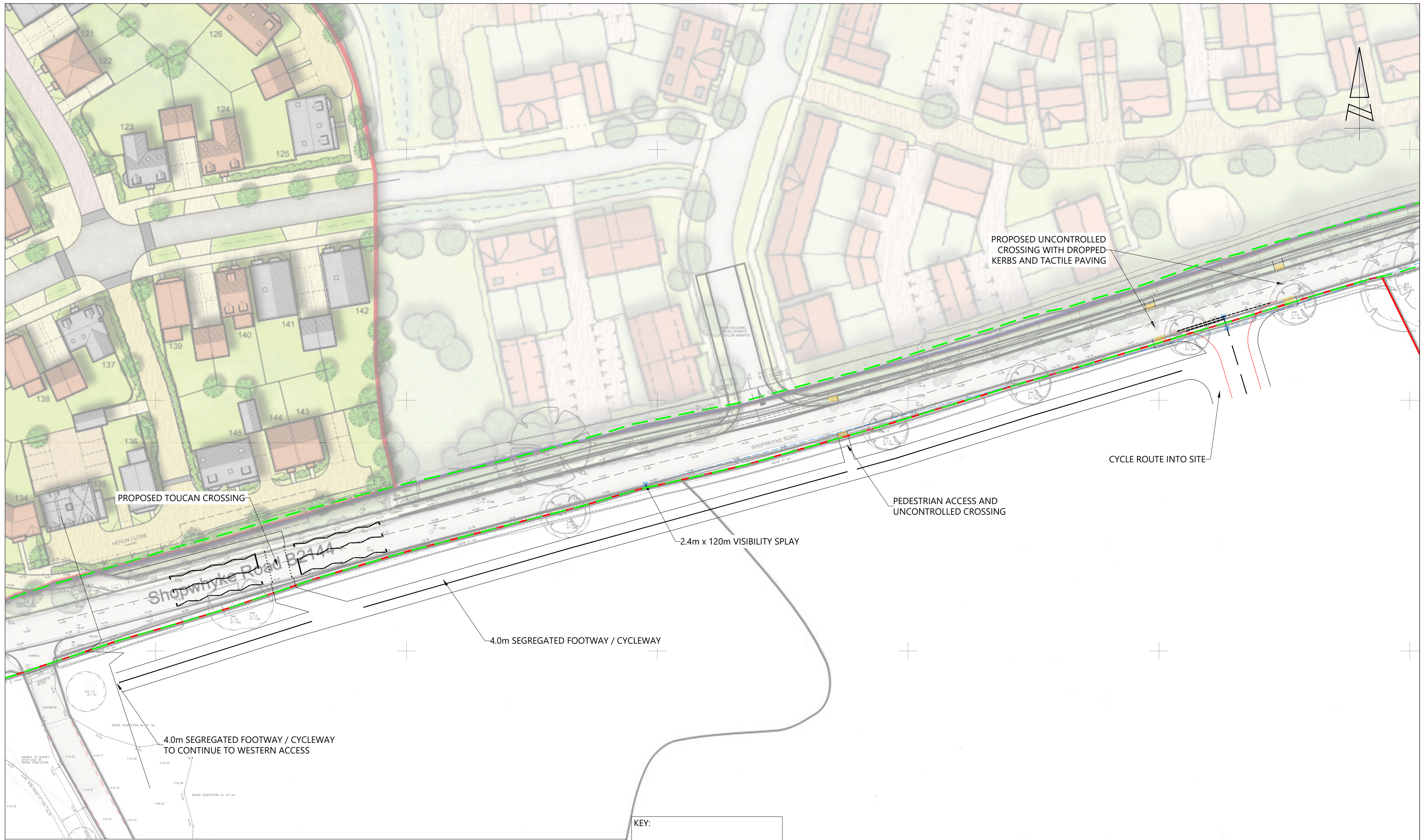
REV	DATE	BY	DESCRIPTION	CHK	APD
STATUS: FOR INFORMATION					

TITLE:	WESTERN ACCESS ARRANGEMENTS
PROJECT:	LAND SOUTH OF SHOPWHYKE ROAD, CHICHESTER
CLIENT:	OBSDIAN STRATEGIC AC LTD, DC HEAVER AND EUREQUITY IC LTD

DRAWN:	SH	CHECKED:	TW	APPROVED:	TW
SCALE @ A2:	1:500	DATE:	24.08.22		
PROJECT No:	ITB14506				
DRAWING No:	ITB14506-GA-006				REV:

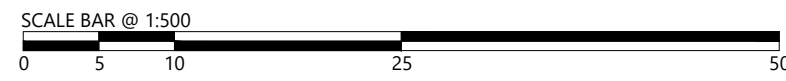
T:\Technical\14506\14506.dwg





REPRODUCED FROM THE ORDNANCE SURVEY MAP WITH THE PERMISSION OF THE CONTROLLER OF HER MAJESTY'S STATIONERY OFFICE. LICENCE No. 100044286 © CROWN COPYRIGHT RESERVED.

DRAWING ISSUED FOR FEASIBILITY CONSIDERATION AND PLANNING PURPOSES ONLY. DRAWING NOT TO BE USED FOR CONSTRUCTION. I-TRANSPORT LLP ACCEPT NO RESPONSIBILITY FOR ERRORS MADE BY OTHERS IN SCALING FROM THIS DRAWING. MEASUREMENTS SHOULD BE TAKEN FROM FIGURED DIMENSIONS ONLY. CDM REQUIREMENTS CONSIDERED AT FEASIBILITY STAGE ONLY. FURTHER CONSIDERATION REQUIRED BY DETAILED DESIGN TEAM.



KEY:

- SITE BOUNDARY
- - - HIGHWAY BOUNDARY



Grove House, Lutyens Close, Chineham  
Basingstoke, Hampshire, RG24 8AG  
Tel: 01256 338640  
www.i-transport.co.uk

REV	DATE	BY	DESCRIPTION	CHK	APD

STATUS: FOR INFORMATION

TITLE:	EASTERN ACCESS ARRANGEMENT
PROJECT:	LAND SOUTH OF SHOPWHYKE ROAD, CHICHESTER
CLIENT:	OBSDIAN STRATEGIC AC LTD, DC HEAVER AND EUREQUITY IC LTD

DRAWN:	SH	CHECKED:	TW	APPROVED:	TW
SCALE @ A2:	1:500	DATE:	24.08.22		
PROJECT No:	ITB14506				
DRAWING No:	ITB14506-GA-007				REV:



## **APPENDIX A.** Pre-Application Notes



## Notes of Meeting

Project No: ITB14506  
Project Title: Land at Drayton, Chichester  
Date: 12 April 2022  
Venue: MS Teams

### Attendees

Guy Parfect — WSCC (GP)  
Ian Gledhill — WSCC (JC)  
Olamide Olayinka — CDC (KD)  
Tim Wall — i-Transport (TW)  
Adam Imeson — i-Transport (AI)

Item	Actions
<p><b>1.0 Introduction</b></p> <p>1.1 TW explained the project with reference to the location and mixed use nature of the development in line with the emerging Chichester Local Plan 2035 Policy AL3. Obsidian, SUEZ and the landowners are looking to bring the site forward in line with AL3.</p> <p>1.2 A Pre-application submission has been made to CDC and is under consideration. This identifies the Obsidian land for the first phase of development for around 550 dwellings, with the wider land (SUEZ) being promoted but likely to follow as a second phase.</p> <p>1.3 TW set out the agenda for the meeting which is based around a review of the ITB14506-006 Pre-Application Transport Note. Broad Agenda to:</p> <ul style="list-style-type: none"> <li>• Introduce Ian Gledhill to the scheme (who will be taking on the DC role for WSCC)</li> <li>• Discuss the proposed access strategy and sustainable transport provisions and obtain an update from WSCC on current thinking.</li> <li>• Receive an update on the CDC Local Plan Traffic Appraisal work and consider how the application can be approached in that context.</li> </ul> <p>1.4 A formal response will follow on the note from WSCC in the next 2 weeks.</p>	<p>IG</p>
<p><b>2.0 Access</b></p> <p>2.1 TW confirmed the current access strategy with access to Shopwhyke Road.</p> <p>2.2 Shopwhyke Road has recently been improved to its final arrangement now that the Shopwhyke Lakes accesses to the A27 are open, and the Oving Road junction is undergoing improvement works. There is no need for an interim access arrangement.</p> <p>2.3 Two locations for vehicular access to the scheme from Shopwhyke Lakes are proposed as demonstrated in the Note. These would both form simple priority junctions and modelling has been carried out to demonstrate these would be suitable.</p>	

Item	Actions
2.4 IG confirmed that the proposed vehicular access strategy was acceptable in principle. Any detailed comments would be provided shortly.	IG
2.5 TW confirmed the active travel access strategy, with pedestrian and cycle access to Shopwhyke Road, as well as potential connections to Drayton Lane (to link with PROW) and to the Redrow Scheme.	
<p>2.6 The active travel access strategy was agreed in principle noting:</p> <ul style="list-style-type: none"> <li>• Consideration needs to be given to the location and form of a crossing on Shopwhyke Road to connect to Shopwhyke Lakes. IG / GP considered this may need to take the form of a Toucan Crossing. TW / AI to consider further and define the location.</li> <li>• Access to Drayton Lane could improve access to Oving Road and offer a route through the site but would rely on the WSCC LCWIP strategy for improved access between Chichester and Tangmere and BEW.</li> <li>• Consideration should be given to a cycle connection along the northern frontage of the site as part of the wider cycle network improvements.</li> </ul>	TW / AI  TW / AI  TW / AI
<b>3.0 Accessibility</b>	
3.1 TW presented the current Sustainable transport strategy. IG / OO to consider and provide any comments on elements that should be included. The potential for car clubs on the site is well supported and should be integrated to the scheme.	IG / OO TW
3.2 IG agreed that the A27 / Oving Road Toucan Crossing is sufficient to connect the site to the Town Centre. Consideration should also be given to routes to Westhampnett Road (from Oving Road) and through Shopwhyke Lanes to the Portfield Retail Park. This will not comprise further crossings of the A27 but may include route improvements.	TW / AI
<p>3.3 OO / IG to provide further detail on current thinking on:</p> <ul style="list-style-type: none"> <li>• Cycle Network between Chichester and Tangmere</li> <li>• Cycle Network between Chichester and BEW</li> <li>• Pedestrian and Cycle Network between Chichester and Tangmere</li> <li>• Current thinking on the bus service improvements in the area, including those required from Shopwhyke Lakes and the regional C55 service improvements to link Bognor and Chichester.</li> </ul>	IG / OO
3.4 The Application will need to consider in detail the ability to connect to local facilities, including the quality of the routes to facilities.	TW / AI
3.5 IG confirmed that it was unlikely that the site would need to deliver physical improvements in the wider area but instead would be expected to feed into (and fund through contributions) improvements to emerging strategies on the Walking and Cycling Network and Public Transport Strategies.	
<b>4.0 Local Plan Traffic Modelling Update</b>	

Item	Actions
<p>4.1 GP provided an update on progress on the LP Modelling:</p> <ul style="list-style-type: none"> <li>• Local Plan assessments ongoing by CDC to consider a deliverable level of development that can be supported by infrastructure that is capable of funding.</li> <li>• This removes the Stockbridge Link Road (for funding / delivery reasons), assumes the Portfield and Oving Improvements (complete / underway) and will focus improvements on the following junctions: <ul style="list-style-type: none"> <li>▪ Bognor Road</li> <li>▪ Fishbourne Road</li> </ul> </li> <li>• Further improvements to the A27 likely in the fullness of time, particularly at Whyke and Stockbridge Road junctions, and some interim improvements may be needed. Impacts at these junctions may lead to the need for other improvements on local roads with traffic diverting / assigning away from the A27 corridor.</li> <li>• CDC not willing to speculate on potential public funding in the assessments.</li> <li>• WSCC has seen various initial presentations of results, but the study results / modelling has not been passed for review. This is expected in the coming weeks.</li> <li>• The assessments assume a single spatial strategy, with 600 dwellings on AL3. No higher or lower tests are currently being done, or revised spatial distributions.</li> </ul> <p>4.2 GP confirmed that the capacity of the site for development (in transport terms) wouldn't be confirmed by this work as only a single spatial strategy being tested.</p> <p>4.3 The connected work on A27 Feasibility has not been commissioned. This will be needed to confirm the funding and deliverability of the improvements that will be identified.</p> <p>4.4 GP confirmed National Highways has been engaged through the work and fed into the scheme prioritisation being tested but they are unlikely to have seen the model results yet.</p> <p>4.5 All agreed to review and discuss the implications of the LP assessments when available.</p>	<p>All</p>
<p><b>5.0 Approach to Traffic Assessment</b></p> <p>5.1 IG confirmed the likely approach to considering the application will be:</p> <ul style="list-style-type: none"> <li>• Use of the CDC Local Plan Modelling for strategic impacts</li> <li>• Local modelling for junctions away from the A27</li> </ul> <p>5.2 No value was seen in reproducing assessments that are already being covered by the Local Plan assessments.</p> <p>5.3 The scope of local junction / network assessments would need to be confirmed in a TA Scoping Note, but expected to comprise:</p> <ul style="list-style-type: none"> <li>• Shopwhyke Road</li> <li>• Drayton Lane</li> <li>• A259 Bognor Road</li> </ul>	

Item	Actions
<ul style="list-style-type: none"> <li>• Westhampnett Road</li> <li>• Oving Road</li> <li>• Tangmere Road</li> </ul>	
<p>5.4 GP confirmed that the Bognor Road is being considered for improvement as part of the Major Roads programme, expected to focus on bs priority rather than traffic capacity. GP to supply any details available.</p>	GP
<p>5.5 IG recommended that in relation to traffic distribution, consideration is given to:</p> <ul style="list-style-type: none"> <li>• The Tangmere SDL distribution, which includes the link road (RPS)</li> <li>• The CATM distribution (through select link analysis)</li> </ul>	TW / AI
<p>5.6 A full TA Scoping Note will be prepared in due course to establish the scope and methodology of the Transport Assessment required.</p>	TW / AI
<p><b>6.0 Other Matters</b></p>	
<p>6.1 IG confirmed the pre-application response will be provided in 2 weeks.</p>	IG

**Author**

Tim Wall

**WEST SUSSEX COUNTY COUNCIL  
PRE APPLICATION CONSULTATION**

<b>TO:</b>	Organisation: i-transport FAO: Tim Wall
<b>FROM:</b>	WSCC - Highways Authority
<b>DATE:</b>	14 April 2022
<b>LOCATION:</b>	Land south of Shopwhyke Road, Shopwhyke Road, Chichester, PO20 2GD
<b>SUBJECT:</b>	Internal Reference: PRE-110-19 Mixed use development of between 600-1000 dwellings, promoted as part of CDC's Local Plan - East of Chichester AL3.
<b>DATE OF SITE VISIT:</b>	n/a
<b>RECOMMENDATION:</b>	Advice
<b>S106 CONTRIBUTION TOTAL:</b>	n/a

Comments are made in respects of,

- Pre Application Transport Report, reference TW/AI/ITB14506-006E, dated 7<sup>th</sup> December 2021.

Where possible comments are made against the numbered points within the Transport Report.

3.2.7 – WSCC are progressing feasibility work on potential cycle routes along Oving Road and Westhampnett Road; Oving Road in particular would have a particular benefit for the proposed development at AL3. Further feasibility work is also being progressed on a Barnham to Chichester cycle route. Various route options have been considered for this, including routes south of the A27 as well as along Tangmere Road/Shopwhyke Road. Subject to determination of the final route, this may still offer a benefit to the development.

Again, relating to 3.2.7, the routes shown in images 3.3 are advisory cycle routes published on the Chichester District Council website. These aren't proposed formal routes although the majority of the Bognor to Chichester route is an existing signed route.

3.3.2 – The WSCC Bus Service Improvement Plan outlines proposals for a new Chichester to Littlehampton service (referred to as the 55X). Clarity has been sought from the WSCC Passenger Transport team in terms of the expected development of this service and the likely routing. It is acknowledged however that the development east of Chichester and Tangmere is such that there would be logic



to reviewing bus services. Any discussions will of course require the involvement of the relevant bus operators as well as WSCC.

3.5.2, table 3.3 – Although irrelevant for many of the triggers (given the works have been or are being constructed), some were varied through planning applications 18/2326/FUL and 18/02329/OUT.

3.6.3 – It's agreed that some of the proposed services (primary school, neighbourhood centre, community uses) may reduce the need to travel off-site. Currently though, there are limited details as to what might be provided in the neighbourhood centre and community uses. The potential trip reducing benefits of these uses could not currently be quantified. This uncertainty should be reflected within the trip rates used (comments on which are made in 5.2.1).

3.7.1, table 3.5 – There are no in principle issues with the measures listed and the majority are self-explanatory and can be further refined in due course. It would perhaps be useful to understand what the reference to 'Improvement to Oving Road between site and A27' within the promoting Walking and Cycling sections is referring to though. The Sustainable Access Strategy could also refer to potential contributions towards new and improved bus services (i.e. the 55X) if this is determined to be relevant.

4.2.5 – There are no in principle issues with a simple priority junction although this could be moved further westwards so it's more within the 30mph speed limit rather than in the 40mph. This could then allow for some form of gateway treatment into what will be predominantly residential area. The access will in due course need to be the subject of a Stage One Road Safety Audit.

4.2.6 – It should be noted that the interim arrangement has been removed and the permanent Shopwhyke Road/Longacres Way junction is now in place.

In principle, there are no issues with a simple priority junction to serve the development but this will in due course need to be the subject of a Stage One Road Safety Audit. As an observation, the development junction is somewhat close to the Shopwhyke Road/Longacres Way junction. It's acknowledged that the Shopwhyke Road arm will be lightly trafficked even with the development, so in practice the siting should not pose an issue. An alternate option would be to re-site the access further west and potentially remove the bus lay-by, the need for which is perhaps questionable.

4.2.12 – Based on the information presented, it would seem that the junctions would operate within capacity. The junctions would need to be the subject of a Stage One Road Safety Audit.

4.3.1, image 4.4 – With respect to the movement framework plan, there are no facilities for pedestrians or cyclists on Drayton Lane at present. If accesses are proposed, additional and appropriate infrastructure will be required to support

these. There would be merit to further discussion in terms of the nature of the crossing points on Shopwhyke Road, particularly if there is the expectation that the uses within the proposed site could also be used by those residing at the Shopwhyke Lakes development. A controlled crossing facility may be appropriate.

5.2.1 – There has been previous discussions regarding residential trip rates for the site. It is accepted that there is merit in applying a trip rate for mixed housing. It is noted that two trip rates for mixed housing are provided in appendix B; one for all sites and one for sites of 300 or more units. Given that housing mix is unknown (and without wishing to resort to applying a potentially unrepresentative private house only trip rate) and there is a degree of uncertainty in terms of the scale of the uses proposed (and therefore their potential to reduce off-site trips), there would seem merit in using the higher mixed private/affordable housing trip rate.

5.2.4. – The hotel and care home are unlikely to serve the immediate development area. Separate trip rates should be provided for these. With the primary school, it's accepted that this will more than likely cater for the proposed and permitted development in the immediate vicinity, but it may draw pupils from a wider area. The need for the school and its likely catchment should be determined through discussion with the WSCC School Place Planning team. The outcome of these discussions should then inform the related trip rate sections of any future transport assessment.

5.2.5. – The potential internalisation of trips is acknowledged. WSCC would have no issue in a more detailed assessment of trip rates, including breaking these down by purpose. This approach would require further information as already stated, there is currently limited information in terms of the neighbourhood centre and community uses, as such there's limited ability to account for internalised trips associated with these currently. Aspects relating to the school also need to be clarified.

5.3.2 – The use of distribution/assignment taken from the Shopwhyke Lakes development TA is accepted. However it should be noted that this won't account for the Link Road associated with the Tangmere SDL. Further refinement of the distribution and assignment may consequently be needed.

5.4.5 – The potential impacts on the local highway network are noted although the use of percentages may not provide a true reflection of actual development impact. Given the points raised above, there will need to be refinement to the modelling through further scoping discussions.

I trust you appreciate that any advice given by council officers for pre-application enquiries does not constitute a formal response or decision of the council with regard to the granting of planning permission in the future. Any views or opinions expressed are given in good faith, and to the best of ability, without prejudice to the formal consideration of any application, which will be the subject of public consultation and ultimately decided by the Local Planning Authority.

**Ian Gledhill**  
**Planning Services**

## Notes of Meeting

Project No: ITB14506  
Project Title: Land at Drayton, Chichester  
Date: 13 November 2019  
Venue: WSCC Offices, Chichester

### Attendees

Philip Scott — Obsidian Strategic AC Limited (PS)  
Emma Smyth — SUEZ (ES)  
Guy Parfect — WSCC (GP)  
Jayne Colbert — WSCC (JC)  
Karen Dower — CDC (KD)  
Tim Wall — i-Transport (TW)  
Adam Imeson — i-Transport (AI)

Item	Actions
<p><b>1.0 Introduction</b></p> <p>1.1 TW explained the project with reference to the location and mixed use nature of the development in line with the emerging Chichester Local Plan 2035 Policy AL3. Obsidian, SUEZ and the landowners are looking to bring the site forward in line with AL3.</p> <p>1.2 TW set out the agenda for the meeting and tabled copies of ITB14506-002 Local Plan Scoping Note. Broad Agenda to:</p> <ul style="list-style-type: none"> <li>• Provide understanding of the site and opportunity</li> <li>• To present current thinking on access strategy and development proposal</li> <li>• To understand the work that the Council/s are doing on their LP and Evidence base and to understand how the site is being considered / opportunities to feed into it.</li> </ul>	
<p><b>2.0 Access</b></p> <p>2.1 TW confirmed the current access strategy with access to Shopwhyke Road and tabled drawings ITB14506-GA-001B and GA-02B showing the current western and eastern access arrangements respectively, as well as the interim access design for the western access.</p> <p>2.2 TW identified that there are aspirations to consider a 'left-in-left-out' priority junction onto the A27 along the western boundary of the site, a similar arrangement to the Shopwhyke Lakes committed development to the north. GP suggested discussions with HE regarding the matter and thought it unlikely they would consider this positively.</p> <p>2.3 TW noted that such an option would need further assessment, including through the modelling work. GP confirmed the current model considers access to Shopwhyke Road and not the A27 corridor.</p>	i-T

Item	Actions
<p>2.4 TW stated that pedestrian/cycle access is proposed to Oving Road in the north west of the site to provide a continuous link west towards the city centre and to connect to Shopwhyke Lakes. Further non-motorised access to Drayton Lane to also be considered. This was broadly agreed.</p>	
<p><b>3.0 Accessibility</b></p>	
<p>3.1 TW tabled current Accessibility Plans produced by i-Transport. Amendments to be made to the plan to reflect recent changes made to schools and other facilities in the site vicinity.</p>	i-T
<p>3.2 TW highlighted the existing pedestrian and cycle routes in the vicinity of the site with the potential for further connections to Drayton Lane at the south east corner of the site. This would allow access to the existing bus stops. JC recommended designated pedestrian provision to serve existing bus stops. Consideration was given to the opportunity to create a cycle route through the site. JC to consider the benefits and advise.</p>	i-T JC
<p>3.3 JC suggested wayfinding infrastructure through the site and wider Shopwhyke Lakes. Options to avoid the Drayton Lane/Tangmere Road junction to the north east to be considered, to be shown in the final masterplan.</p>	i-T
<p>3.4 JC stated that WSCC are in contact with local bus provider, Compass Travel, to establish the potential for future bus services to route through the wider site. Stagecoach also considering longer term route to Bognor / Tangmere Road. JC to provide latest information from Stephen Shaw. Consideration should be given to connecting into the Shopwhyke Lakes strategy. Bus infrastructure (including RTI) to be integrated.</p>	JC i-T
<p>3.5 JC noted that connections between the site and the town centre will be important to demonstrate. This should form the basis for further work / reps. The Chichester Walking and Cycling plan should be considered (release early 2020) and inform the proposals. JC to provide any early information.</p>	i-T JC
<p><b>4.0 Traffic Modelling Methodology</b></p>	
<p>4.1 GP stated that Peter Brett Associates (PBA) have been tasked to carry out further assessment of the LP scenarios and to develop evidence base. Work to consider:</p> <ul style="list-style-type: none"> <li>• Traffic Assessment – This will consider various spatial strategy options and will test and consider the mitigation package. In particular: <ul style="list-style-type: none"> <li>▪ The work is assessing two spatial options, both for 5,625 dwellings. One allows for 600 dwellings at AL3 and the other 1000 dwellings.</li> </ul> <p>Other changes relate to areas away from Chichester at Fishbourne, Bognor and Whyke and to update development assumptions from adjoining authority areas, including Arun and Havant.</p> <ul style="list-style-type: none"> <li>▪ Mitigation approaches – the assessment is considering the need for the Stockbridge Link Road and other junction mitigation requirements, including to determine what is needed for the A27 corridor. Further work likely to develop the A27 solutions to address LP impacts.</li> </ul> </li> </ul>	



Item	Actions
<ul style="list-style-type: none"> <li>Engineering Feasibility of A27 improvements – this would provide greater certainty on delivery and costings and would feed into viability work and is to assess ecological, hydrological and utilities constraints. This responds to HC concerns.</li> </ul>	
<p>4.2 The work is due to be completed in early 2020 to input to the next LP consultation. HE is engaged in the work.</p>	
<p>4.3 TW requested sight of the PBA brief. KD / GP suggested contacting Toby Ayling at CDC. i-Transport to liaise with PBA and HE to understand fully the scope of work required and the current position on transport related matters.</p>	i-T
<p>4.4 TW queried the trip rates used by WSCC to inform the CDC Local Plan Evidence Base (<i>report ref: CATM_43682_CTS</i>), stating that a mixed use development would generate internal trips that would not impact the wider highway network in the same way as a residential site. TW concerned there is an overestimate of trip rates in the model for AL3 which should be addressed to prevent an overestimate of impacts / overprovision of mitigation / infrastructure. Further consideration to be given by GP and TW.</p>	i-T / GP
<p>4.5 TW requested access to / engagement with PBA on the model and ongoing work. TW to liaise with CDC – Toby Ayling.</p>	i-T
<p>4.6 It was agreed that the strategic traffic impacts of the development are best considered through the PBA assessment, and this will consider the impacts of the range of development scenarios on the A27 corridor, including to develop any necessary mitigation. It was agreed no work on this should be carried out by the promoters. TW expressed the need to engage / input to the work.</p>	i-T
<p>4.7 Away from the strategic matters on the A27 corridor. GP / JC confirmed that the promoters should address impacts accessibility strategy, as well as traffic matters more local to the site, including at:</p> <ul style="list-style-type: none"> <li>Shopwhyke Road corridor;</li> <li>Shopwhyke Road / Drayton Lane;</li> <li>Drayton Lane level crossing; and</li> <li>Drayton Lane / A259 roundabout.</li> </ul> <p>4.7.1 KD confirmed that when the PBA work is complete, CDC will be able to advance its viability testing. This is considering an amendment to the A27 contribution tariff currently used, in addition to the future CIL. Options between £0-£20k per dwelling being considered for the viability assessment, to be derived from the PBA work.</p>	i-T
<p><b>5.0 Other Matters</b></p>	
<p>5.1 KD confirmed the current LP Programme as</p> <ul style="list-style-type: none"> <li>Evidence Base updated – Early 2020</li> <li>Reg 19 – Spring 2020</li> </ul>	

**Author**

Adam Imeson / Tim Wall

## Tim Wall

---

**From:** Bowie, David <David.Bowie@highwaysengland.co.uk>  
**Sent:** 28 October 2019 12:28  
**To:** Tim Wall  
**Cc:** Harwood, Paul; Planning SE; Franklin, Richard; Cleaver, Elizabeth; Bown, Kevin; WALKDEN, NIGEL  
**Subject:** RE: East of Chichester

Good afternoon Tim,

I think it would be useful for Highways England to attend but unfortunately we are a little thin on resource that week.

You be aware that we have already agreed in principle further highway mitigations to the A27 Chichester Bypass resulting from the emerging Local Plan. This may be simply a case of the development paying the relevant contribution at the appropriate point towards those further Local Plan mitigations. However, I do not believe that Chichester have revised their SPD to reflect the new improvement works so it could be a case that we will have to deal this this site as we would any other normal application of this size.

If we are unable to attend then we can always schedule a meeting later at Bridge House Guildford.

Kind regards

David

**David Bowie**

**Area 4 Spatial Planning Manager (Acting)**

**Tel:** +44 (0) 7900 056130

Highways England | Bridge House | 1 Walnut Tree Close | Guildford | Surrey | GU1 4LZ

**Web:** <http://www.highwaysengland.co.uk>

---

**From:** Tim Wall [mailto:tim.wall@i-transport.co.uk]  
**Sent:** 28 October 2019 12:15  
**To:** Bowie, David <David.Bowie@highwaysengland.co.uk>  
**Cc:** Harwood, Paul <Paul.Harwood@highwaysengland.co.uk>; Planning SE <planningse@highwaysengland.co.uk>  
**Subject:** FW: East of Chichester

Hi David – I trust you are well?

i-Transport is instructed on the draft allocation site at East of Chichester which is a draft allocation in the emerging Chichester plan for 600-1000 dwellings and complimentary uses (AL3 – East of Chichester).

We are meeting with WSCC to discuss transport matters and any input required to the next stages of the plan process, and in view of the interaction of the site and the A27 corridor, were hoping you or a colleague would be able to join us?

Are you available for a meeting on the 8<sup>th</sup> November, 13:30 in Chichester?

I will circulate some information in advance.

Kind regards  
Tim



**Tim Wall**

Associate Partner  
for i-Transport LLP

**T:** 01256 338640  
**E:** tim.wall@i-transport.co.uk

**M:** 07508 413269  
**W:** www.i-transport.co.uk

**Basingstoke Office:** Grove House, Lutyens Close,  
Chineham Court, Basingstoke, RG24 8AG

---

i-Transport is the trading name of i-Transport LLP, which is a limited liability partnership registered in England under number OC311185. Registered Office: 3rd Floor, One London Square, Cross Lanes, Guildford, Surrey, GU1 1UN. A list of members is available upon request.

We use the word "partner" to refer to a member of i-Transport LLP or an employee or consultant with equivalent standing and qualifications.

Please note that the information in this e-mail is confidential and unless you are (or authorised to receive it for) the intended recipient, you must not disclose, copy, circulate or in any way use the information it contains. If you have received this e-mail in error please inform us and immediately delete all copies from your system. Whilst it is believed that this e-mail and any attachments are free of any virus or other defect, it is your responsibility to ensure that your computer or IT system are not affected and we accept no responsibility for any loss or damage arising.

*This email may contain information which is confidential and is intended only for use of the recipient/s named above. If you are not an intended recipient, you are hereby notified that any copying, distribution, disclosure, reliance upon or other use of the contents of this email is strictly prohibited. If you have received this email in error, please notify the sender and destroy it.*

**Highways England Company Limited | General enquiries: 0300 123 5000 | National Traffic Operations Centre, 3 Ridgeway, Quinton Business Park, Birmingham B32 1AF | <https://www.gov.uk/government/organisations/highways-england> | [info@highwaysengland.co.uk](mailto:info@highwaysengland.co.uk)**

**Registered in England and Wales no 9346363 | Registered Office: Bridge House, 1 Walnut Tree Close, Guildford, Surrey GU1 4LZ**

Consider the environment. Please don't print this e-mail unless you really need to.

## **APPENDIX B.** Trip Rate Analysis Note



## Land East of Chichester

### Local Plan CATM Assessment

Client: DC Heaver, Eurequity IC Ltd, SUEZ Recycling and Recovery UK, and Obsidian Strategic AC Ltd

i-Transport Ref: TW/ITB14506-004a

Date: 03 August 2020



Land East of Chichester

Local Plan CATM Assessment

Client: DC Heaver, Eurequity IC Ltd, SUEZ  
Recycling and Recovery UK, and Obsidian  
Strategic AC Ltd

i-Transport Ref: TW/ITB14506-004a

Date: 03 August 2020

**i-Transport LLP**

Grove House  
Lutyens Close  
Chineham Court  
Basingstoke  
Hampshire  
RG24 8AG

Tel: 01256 338640

Fax: 01256 338644

[www.i-transport.co.uk](http://www.i-transport.co.uk)

**COPYRIGHT**

The contents of this document must not be copied or reproduced in whole or in part without the written consent of i-Transport LLP

## Quality Management

Report No.	Comments	Date	Author	Authorised
ITB14506-004	Client Draft	01/06/2020	AI/SG/TW	TW
ITB14506-004a	Issue	03/08/2020	AI/SG/TW	TW

File Ref: T:\Projects\14000 Series\14506\ITB Land at Drayton\Admin\Report and Tech Notes\004\ITB14506-004a Trip Rate Analysis.docx

## Contents

<b>SECTION 1</b>	<b>Introduction</b>	<b>1</b>
<b>SECTION 2</b>	<b>Strategic Transport Study</b>	<b>2</b>
<b>SECTION 3</b>	<b>Forecasting Approach</b>	<b>7</b>
<b>SECTION 4</b>	<b>Summary and Conclusions</b>	<b>11</b>

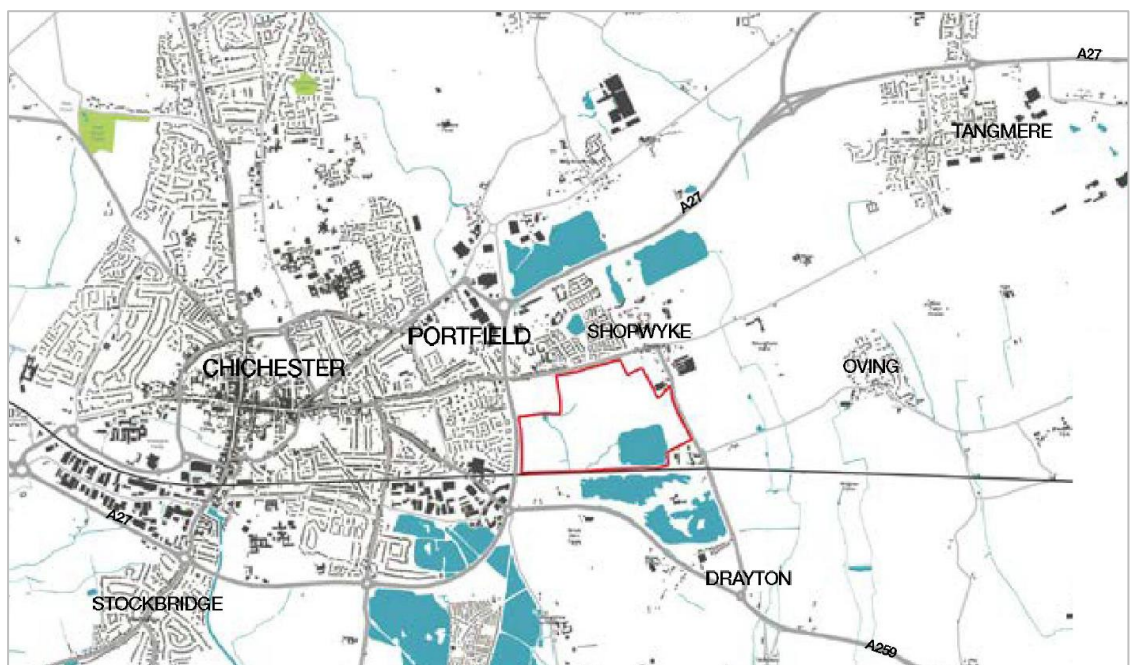
## Appendices

<b>APPENDIX A.</b>	<b>TRICS – Private Housing</b>
<b>APPENDIX B.</b>	<b>TRICS – Mixed Private Housing</b>
<b>APPENDIX C.</b>	<b>TRICS – Mixed Private / Affordable</b>
<b>APPENDIX D.</b>	<b>Oving Road Survey Data – Vectos TA Extracts</b>

## SECTION 1 Introduction

- 1.1 DC Heaver, Eurequity IC Ltd, SUEZ Recycling and Recovery UK, and Obsidian Strategic AC Ltd (hereafter collectively 'the client') are promoting Land East of Chichester ('the site') for mixed-use development. i-Transport LLP has been appointed to provide advice in relation to highways and transport matters.
- 1.2 The site is located some 2km east of Chichester city centre, shown on **Image 1.1**. It is bordered by the B2144 Shopwhyke Road to the north and Drayton Lane to the east. To the west, the site fronts the A27 corridor and to the south the site is bordered by the railway line.

**Image 1.1: Site Location Plan**



Source: AL3 Land East of Chichester Vision Statement and Delivery Strategy

- 1.3 The site forms a draft development allocation in the emerging Chichester District Local Plan Review under draft Policy AL3: Land East of Chichester. Policy AL3 identifies the site for:
- “A minimum of 600 dwellings, a neighbourhood centre /community hub (incorporating early years, primary school, local shops, a community centre and flexible space for employment / small-scale leisure) along with open space and green infrastructure.”***
- 1.4 The earlier Local Plan consultation identified that the site has the potential for this to increase to around 1,000 dwellings, subject to infrastructure constraints.
- 1.5 It is currently envisaged that the site can deliver around 1,000 dwellings along with complimentary uses such as a primary school, local neighbourhood / community facilities and open space.



---

## SECTION 2 Strategic Transport Study

2.1.1 Chichester District Council (CDC) has commissioned Stantec to prepare an assessment of the traffic impacts of its emerging Local Plan Review. West Sussex County Council (WSCC) as local highway authority is fully engaged in the work as is Highways England (HE) in respect of the Strategic Road Network (i.e. the A27 corridor).

2.1.2 i-Transport LLP has been asked to input to the assessment in respect of the Land East of Chichester Site which is one of the larger allocation sites being considered. It is important to maintain synergies between the approaches of the Council and promoter, and to ensure that the assessment work presents the most appropriate assessment case for the Local Plan Review. There are significant congestion issues on the A27 corridor in Chichester. It is therefore important that traffic assessments are realistic, based on the best knowledge we currently have at site and regional level, are sufficiently robust to allow sound planning and infrastructure decisions to be made, but are not overly pessimistic so to prevent 'good growth' and increase the infrastructure burden, much of which will fall to the public purse.

### 2.2 Strategic Transport Study Scope

2.2.1 The Stantec work is to prepare a Strategic Transport Study which utilises and updates the earlier Chichester Area Traffic Model (CATM) (a SATURN model) which supported the adopted Chichester Local Plan (adopted 2015). The CATM has been revalidated to a 2014 base year.

2.2.2 In October 2018, to inform the CDC Local Plan Review, PBA (now Stantec) produced a Transport Study of Strategic Development Options and Sustainable Transport Measures. This provided an initial appraisal of impacts of the Local Plan Review strategy.

2.2.3 The scope of the current CDC commission is broadly to:

- a Update the CATM Reference Case (for committed development and traffic growth);
- b Model various spatial development options, as to be determined by CDC;
- c Determine an appropriate mitigation package to accommodate the Local Plan Review proposed strategy. This includes appraising the removal of the Stockbridge Link Road and reviewing / updating A27 mitigation strategy; and.
- d Advising on the phasing of infrastructure needs.

2.2.4 This work was due to be completed in early 2020 but due to various factors (i.e. local elections, COVID-19) the programme has been extended, with work to be complete by late 2020.

## 2.3 2035 Reference Case Parameters

2.3.1 The Local Plan Forecasting work will consider a series of spatial option scenarios, all compared back to the 2035 Reference Case. The Reference Case presents network conditions which are projected to occur without any Local Plan Review development or infrastructure changes.

2.3.2 The 2035 Reference Case is under review as part of the current work, and it is understood that some alterations have been made already by CDC / WSCC and work is ongoing.

### Committed Development

2.3.3 The CATM includes committed development within Chichester District, but also in neighbouring authority areas, i.e. Arun and Havant. The 2018 Transport Study and CATM update included a total of 6,737 dwellings of committed development, of which 4,545 was development within Chichester District including large sites (2015 LP allocations) at Westhampnett / NE Chichester SDL, Shopwhyke Lakes, Tangmere SDL and West of Chichester SDL.

2.3.4 It is understood that further changes have been made to reflect the latest position on Committed Development as part of the latest review, particularly in adjoining authority areas.

2.3.5 The 2018 CATM update work utilised specific trip rates for the identified Committed Developments from their respective TA's (where available and generic trip rates where not), with traffic distribution and assignment determined by the SATURN model. Through liaison with Stantec, it is apparent that the latest 2020 update to the 2035 Reference Case has departed from this approach, and rather than utilising specific trip rates for each key Committed Development as agreed for each site at the planning stage, a generic TRICS trip rate is instead being used.

2.3.6 It is not clear why this approach has been taken when site specific trip rates for the larger sites have been agreed with each authority following extensive and detailed scrutiny, and taking account of the specific development mix, locational characteristics and expected travel patterns.

2.3.7 As explained below, the generic TRICS based trip rate now being applied is not appropriate to use for larger strategic sites which often provide a mix of uses (leading to trip containment), a large mix of housing (including flatted accommodation which exhibits lower trip rates) and a mixed tenure (with substantial affordable housing provision). The proposed TRICS rate is based on Private Housing only, so takes no account of these key influences on travel behaviour.

2.3.8 This approach risks overestimating the traffic demands that will be generated by the significant committed development loaded into the Reference Case, undermining the mitigation packages that were agreed as part of the adopted LP and respective planning applications, and unnecessarily inflating the infrastructure burden that the LP Review must face.

2.3.9 **Table 2.1** sets out trip rates agreed with CDC / WSCC during planning applications for the larger Chichester commitments and compares these to the trip rate now proposed (Emerging LP Rate).

**Table 2.1 – Traffic Generation Trip Rates agreed for Chichester Local Plan Commitments**

Site	Dwellings	Morning Peak Hour			Evening Peak Hour		
		In	Out	Total	In	Out	Total
Tangmere SDL	500	0.09	0.36	0.45	0.28	0.16	0.44
West Chichester SDL	750	0.07	0.26	0.34	0.24	0.11	0.35
Shopwyke Lakes SDL	585	0.07	0.26	0.33	0.24	0.11	0.35
Westhampnett SDL	500	0.07	0.26	0.33	0.24	0.11	0.35
Oving Road	100	0.09	0.23	0.33	0.25	0.14	0.39
<i>Average Trip Rate</i>	<i>2,435</i>	<i>0.08</i>	<i>0.27</i>	<i>0.36</i>	<i>0.25</i>	<i>0.13</i>	<i>0.38</i>
<i>Emerging LP Rate</i>		<i>0.11</i>	<i>0.38</i>	<i>0.49</i>	<i>0.38</i>	<i>0.18</i>	<i>0.56</i>
<i>Difference</i>		<i>+0.03</i>	<i>+0.11</i>	<i>+0.13</i>	<i>+0.13</i>	<i>+0.05</i>	<i>+0.18</i>

2.3.10 When comparing the average trip rate used for large committed sites with that proposed under the updated CATM, the rate to be now be applied is substantially higher, by some 35-50%.

2.3.11 Research carried out by TRICS in 2019 ('*TRICS Guidance Note on Changes in Travel Behaviour*' - August 2019) demonstrates that trip rates are reducing over time and not increasing, consistent with the National Travel Survey findings, and so this is in contrast to the approach being applied.

2.3.12 To put this into context, calculating the number of vehicle trips generated by the key Chichester LP 2015 sites using the TA trip rates agreed for those schemes, and comparing it to the revised CATM approach of applying a generic trip rate demonstrates the significant issues this creates.

**Table 2.2 – Traffic Generation of Chichester Local Plan Commitments**

Site	Dwellings	Morning Peak Hour			Evening Peak Hour		
		In	Out	Total	In	Out	Total
Tangmere SDL	500	45	180	225	140	80	220
West Chichester SDL	750	53	195	255	180	83	263
Shopwyke Lakes SDL	585	41	152	193	140	64	205
Westhampnett SDL	500	35	130	165	120	55	175
Oving Road	100	9	23	33	25	14	39
Total	2,435	182	680	871	605	296	901
Average Trip Rate		195	657	877	609	317	925
<i>Emerging LP Rate</i>		268	925	1,193	925	438	1,364
<i>Difference</i>		<b>+85</b>	<b>+245</b>	<b>+322</b>	<b>+320</b>	<b>+142</b>	<b>+462</b>

2.3.13 During the morning peak hour, the revised approach introduces some 320 additional trips (35% increase) and in the evening peak the revised approach introduces a 50% increase in traffic flows (~450 car movements) above the approach agreed with the authorities at the time of the applications. In equivalent terms, this would equate to traffic from an additional 1,000 dwellings being loaded onto the network. When the network in question (i.e. the A27 corridor) is already congested, this has the potential to significantly overestimate development impacts.

2.3.14 In simple terms, the assessments that supported the adopted Chichester Local Plan and were used to derive infrastructure requirements were based on vehicle trip rates some 30-50% lower than is currently proposed. We know that trip rates are falling not increasing. The approach proposed will overestimate traffic demands from committed development sites.

#### **Traffic Growth Forecasts**

2.3.15 The CATM update in 2018 used the TEMPro database v.7.2 to derive traffic forecasts for the 2035 Reference Case from the NTEM. The TEMPro derived trip rates in the 2018 CATM Update were adjusted to remove the double counting of traffic between the land use assumptions in TEMPro and the housing numbers to be assessed in the modelling (as unbuilt Committed Development and LP Review options).

2.3.16 Since this time, TEMPro has been updated and superseded (now version 7.2b released in October 2019). Clarification is needed to understand whether TEMPro forecasts for the 2035 Reference Case have been updated to reflect the latest traffic growth forecasts.

#### **Impact of COVID-19**

2.3.17 Irrespective of the above approach, which would conventionally be a sensible and logical approach, the current COVID-19 situation fundamentally calls into question whether the TEMPro 7.2b forecast of traffic growth will be representative of future conditions.

2.3.18 It is highly likely that the economic impacts of COVID-19 will be significant and long-lasting, many expecting these to be significantly worse than the 2007 recession, and many expect social changes to fundamentally alter movement for the foreseeable future (less peak commuting, more working from home, reduced visitation retail, reduced business travel, increased active mode movement for short trips). This is likely to lead to reduced traffic growth forecasts.

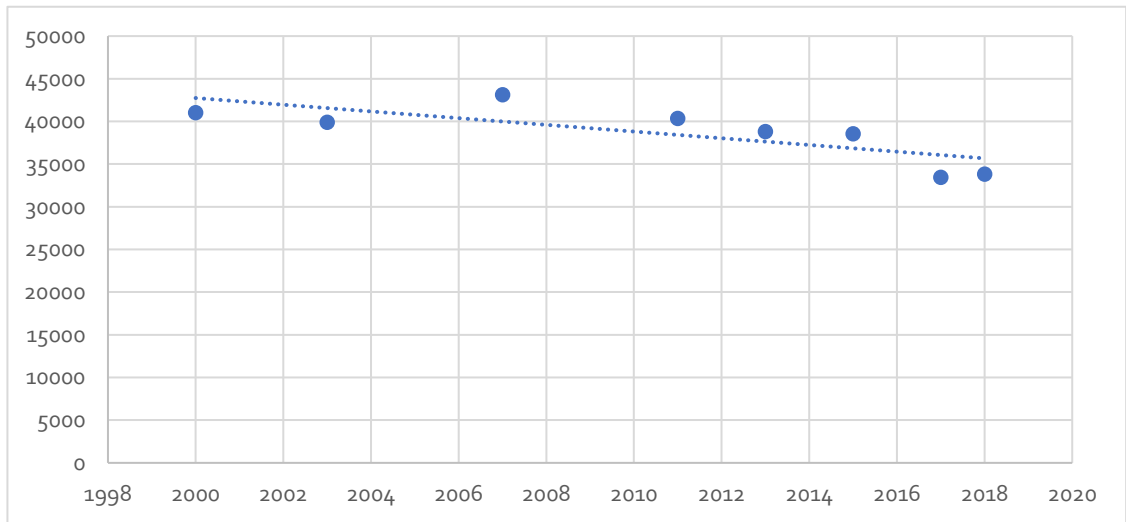
#### **Recent Traffic Trends on the A27 Corridor**

2.3.19 Furthermore, for the A27 Corridor, it should be understood whether applying traffic growth to the 2014 re-based CATM is in any event appropriate, looking at recent conditions.



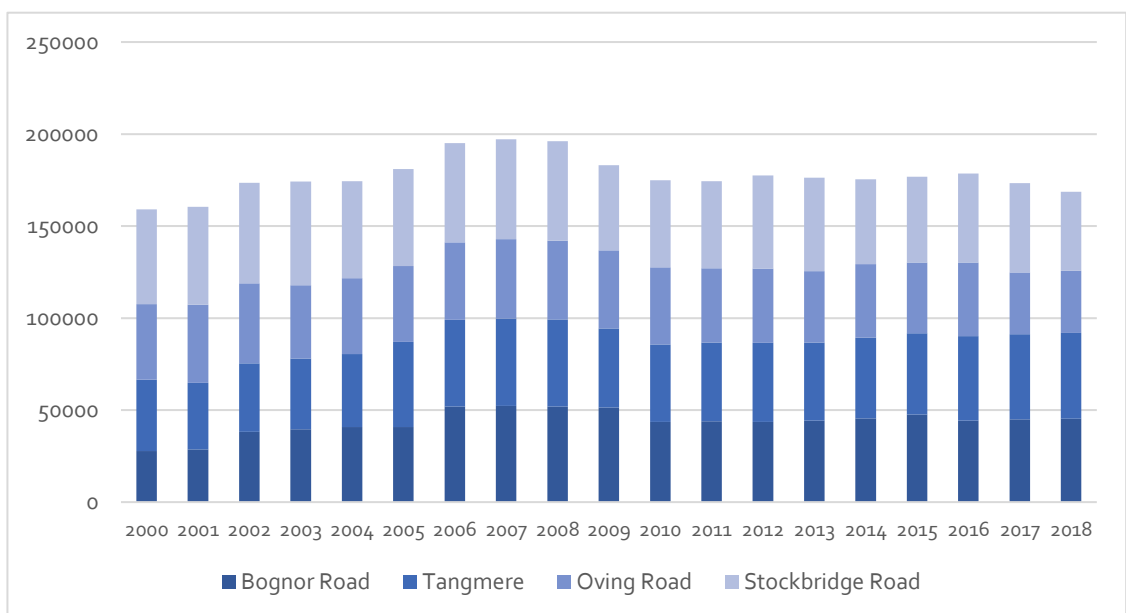
2.3.20 A review of the Annual Count Point Data for the A27 at the Oving Road Junction (CP36297) demonstrates that there has been an overall reduction in vehicular traffic on the A27 corridor since 2000, and that between 2013 and 2018 there was a 13% decrease in traffic at Oving Road.

**Image 2.1 - A27 Traffic Changes Year on Year (Oving Road) – AADT (Two Way)**



2.3.21 Considered across the wider A27 corridor through Chichester, the patterns are similar, and whilst some count points have increased (Tangmere), the others have decreased from 2014 levels. Overall, there is a small decrease in combined AADT flow on the corridor since 2014 (-3.9%) and traffic levels are significantly lower than 2007 (pre-recession) levels (**Image 2.2**).

**Image 2.2 – A27 Traffic Flows – Combined AADT of Chichester Countpoints**



2.3.22 Accepting the above is not peak hour traffic, we recommend consideration is given to the appropriateness of the current approach to TEMPro forecasting in light of the situation faced.

## SECTION 3 Forecasting Approach

- 3.1 It is understood that the forecast Local Plan scenarios to be appraised under the current work are yet to be agreed and issued by CDC so this part of the work is on hold at present.
- 3.2 However, the current methodology proposed would be for generic TRICS trip rates to be applied to all of the proposed allocation sites. There are two trip rates identified, one for 'Edge of Town Centre' sites, and a second rate to be applied to all other growth, based on a 'Suburban' location. The edge of town centre rate is naturally lower but it is only intended to be applied to the one site, the Chichester City Centre (southern Gateway) scheme (for ~350 dwellings).
- 3.3 As outlined in Section 2, we maintain significant concerns about the adequacy of the trip rate approach proposed for the majority of the larger allocations, and its ability to properly reflect and projected traffic demand for large mixed sites where complimentary uses are proposed. The proposed 'Suburban' trip rate is presented in Appendix C of the 2018 assessment. **Table 3.1** presents the TRICS Criteria utilised along with our commentary on the parameters, accepting that the TRICS database is not an exact science and some discretion on parameters is needed.

**Table 3.1 - TRICS Parameters – Suburban Areas**

TRICS Parameter	CDC Approach	i-Transport Comment
Land Use	03/A – Residential / Houses Privately Owned	This considers only Private Housing (Affordable Housing <25% and >75% houses).  Affordable housing, and private / affordable flatted accommodation exhibit lower trip rate characteristics than this appraisal will consider.
Parameter Range	7-363 Dwellings (Actual)	This does not reflect larger mixed use sites which have a range and diversity of mix and tenure. No larger sites are included.
Date Range	01/01/10 – 27/11/17	This excludes the latest sites added to TRICS by ~24 months.
Days	Tuesdays, Weds, Thursdays	Reasonable.
Location	Suburban Area / Residential Zone	To apply a blanket Trip rate to all non-city centre sites does not properly reflect locational characteristics that will exist.
Population	1 mile – 1-50,000 / 5 miles – 1-500,000	Reasonable, but population within 5 miles is closer to 150,000
Sites Selected	14 Ave Dwellings - 56	This represents a relatively limited data set, but more concerning is that the average development size is only 56 dwellings. Trip characteristics for a 56 dwelling scheme will be fundamentally different from a 1,000 dwelling scheme.

3.4 To consider updated and alternative approaches to trip rate analysis, and initial assessment of the TRICS database has been prepared. This considers weekday only surveys for all for locations in England (excluding greater London) and excludes Town Centre and Edge of Town Centre sites:

- Houses Privately Owned
- Houses Privately Owned – Larger sites >300 Dwellings
- Mixed Private Housing (Houses and Flats)
- Mixed Private Housing (Houses and Flats) – No TC / Edge TC >300 Dwellings
- Mixed Private / Affordable Housing – No TC / Edge TC
- Mixed Private / Affordable Housing – No TC / Edge TC >300 Dwellings
- As part of the North West Chichester SDL TA, to confirm the proposed trip rates, a survey of the established residential areas at Oving Road was undertaken.

**Table 3.2 – Revised / Alternative Trip Rate Analysis**

Site	Morning Peak Hour			Evening Peak Hour		
	In	Out	Total	In	Out	Total
Private Houses - All	0.126	0.359	0.485	0.332	0.149	0.481
Private Houses >300	0.110	0.358	0.468	0.338	0.148	0.486
Mixed Private Housing - All	0.088	0.284	0.372	0.263	0.127	0.390
Mixed Private Housing > 300	0.075	0.275	0.350	0.256	0.127	0.383
Mixed P/A Housing >All	0.120	0.352	0.472	0.318	0.159	0.477
Mixed P/A Housing >300	0.116	0.327	0.443	0.274	0.140	0.414
Oving Road Survey Site	0.099	0.234	0.333	0.253	0.140	0.394
Emerging LP Trip Rate	0.109	0.378	0.487	0.379	0.183	0.562

**Image 3.1 – Trip Rate Comparison – Combined Peak Hours**



- 3.5 It is clear that the trip rate proposed to be applied in the latest assessment is higher than derived from any of the alternative assessments, including an assessment of only Private Housing, particularly during the PM Peak (some 17% higher).
- 3.6 For a development at Land East of Chichester of say 1,000 dwellings, applying an inappropriate trip rate can have substantial consequences. The current LP approach would project 1,050 combined peak hour trips. Using a 'Mixed Housing' trip rate (so making greater allowance for flatted development as would be needed to achieve necessary densities) this would reduce the expected traffic production to around 750 trips (-29%), or 850 (-20%) with 'Mixed Private / Affordable Housing'. These are substantial differences and demonstrate the consequences of applying an inappropriate rate. To overestimate travel demands onto a congested network will increase unreasonably the expected impacts and consequential infrastructure requirements.
- 3.7 A review of the parameters that feeds this assessment demonstrates that the emerging LP Trip Rate is not well suited to inform vehicle trip rates for larger sites. A review of larger site trip rates across the three residential land use sub-categories demonstrates a closer synergy to the Land East of Chichester Site, and whilst survey site numbers are of course lower, these still provide a more appropriate means to assess the site.

**Table 3.3 – TRICS Trip Rate Assessment Parameters (selected)**

Trip Rate	Range	No. Surveys	Average Dwellings
Private Houses - All	7 - 1,817	77	133
Private Houses >500	363 - 1817	6	814
Mixed Private Housing - All	15 - 618	14	131
Mixed Private Housing > 300	371 - 618	2	495
Mixed P/A Housing >All	9 - 762	68	142
Mixed P/A Housing >300	300 - 762	7	423
Emerging LP Trip Rate	7 - 363	14	56

- 3.8 In our view applying the proposed LP Trip rate to the Land East of Chichester site is inappropriate and will overestimate vehicular travel demands. Taking account of the proposed scale of the development (~1,000 dwellings), its location on the edge of the most sustainable settlement in the District, the mix of development expected (houses and flatted development as well as complimentary uses) and the tenure, that a more appropriate trip rate should be applied to the site. We consider that this should reflect the Mixed Private Housing category for larger sites (i.e greater than 300 dwellings). This trip rate is broadly consistent with that obtained from survey of the existing residential area of Oving Road (**Appendix D**) which provides local validation.



- 3.9 The development will be delivered alongside a comprehensive and forward looking Sustainable Transport Strategy (in line with emerging Policy S14) which will seek to promote non-car based travel from the outset and support the application of a more realistic trip rate assessment. We would recommend sustainability factors are applied to the trip rate.
- 3.10 We would also recommend a similar approach is adopted to the other larger proposed allocations in the plan, namely:
- i Land West of Chichester – Residual from LP Allocation ~850 dwellings
  - ii Westhampnett / North East Chichester – Extension from LP allocation – 200 Dwellings
- 3.11 A discussion on the trip rate to be applied is sought with DCD, WSCC and HE.

---

## SECTION 4 Summary and Conclusions

- 4.1 Our Clients are promoting development on Land East of Chichester. The site is identified as a preferred allocation site in the preferred options Chichester Local Plan 2035 Review consultation and has capacity to deliver in the order of 1,000 dwellings plus a school and associated uses. This would be developed as a sustainable extension to the city.
- 4.2 As part of its development of the Local Plan Review, CDC has commissioned further technical work to consider the transport impacts and infrastructure requirements of the plan. The current work has focussed on updating the 2035 Reference Case, and Forecasting is yet to commence.
- 4.3 In respect of the 2035 Reference Case, we consider that this should be further updated to present more realistic assessment of conditions, namely:
- **Trip Rates for Committed Development** – The latest work proposes application of a different and much higher trip rate than was agreed as part of individual bespoke assessments of the consented sites. This creates a risk of overestimating travel demands, exacerbating baseline impacts beyond likely levels and increasing infrastructure needs for the baseline. We consider that the trip rates agreed for these strategic sites through the planning process should be applied; and
  - **Traffic Growth Rates** – We consider that the traffic growth rate should be further updated to take account of the latest TEMPro dataset (if not already done), to take account of recent A27 traffic trends, and that further consideration should be given to the likely long term impacts that COVID-19 will have for traffic movement at peak times.
- 4.4 In relation to the Land East of Chichester Site, the proposed approach to Forecasting will estimate travel demands based on a basic / generic TRICS derived trip rate. We have significant concerns with this approach in the context of strategic development sites that will deliver a broad mix of development type and tenure and will be accompanied by associated facilities. The approach presented is highly likely to significantly overestimate travel demands of the site.
- 4.5 Having reviewed a number of alternative approaches, we consider that applying an alternative trip rate analysis that better reflects the mix, scale and tenure of the site would be more appropriate and provide a sounder basis to assess development impacts and infrastructure requirements. We proposed that the TRICS Mixed Private Housing rate should instead be applied, filtered to larger schemes. This is consistent with local data collected at Oving Road.
- 4.6 We welcome a discussion with CDC, Stantec, WSCC and HE on this matter.

## **APPENDIX A.** TRICS – Private Housing

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : A - HOUSES PRIVATELY OWNED  
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	3 days
	EX ESSEX	1 days
	HC HAMPSHIRE	3 days
	HF HERTFORDSHIRE	1 days
	IW ISLE OF WIGHT	1 days
	KC KENT	6 days
	SC SURREY	2 days
	WS WEST SUSSEX	7 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	3 days
	SM SOMERSET	3 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
	NF NORFOLK	9 days
	SF SUFFOLK	4 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	LE LEICESTERSHIRE	1 days
	LN LINCOLNSHIRE	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	2 days
	ST STAFFORDSHIRE	2 days
	WK WARWICKSHIRE	2 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
	NY NORTH YORKSHIRE	5 days
	SY SOUTH YORKSHIRE	1 days
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	CH CHESHIRE	4 days
	GM GREATER MANCHESTER	1 days
	LC LANCASHIRE	1 days
	MS MERSEYSIDE	1 days
09	NORTH	
	DH DURHAM	3 days
	TW TYNE & WEAR	2 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*



## Primary Filtering 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: No of Dwellings  
Actual Range: 7 to 1817 (units: )  
Range Selected by User: 6 to 4334 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 19/11/19

*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	17 days
Tuesday	16 days
Wednesday	17 days
Thursday	16 days
Friday	11 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count	76 days
Directional ATC Count	1 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)	24
Edge of Town	38
Neighbourhood Centre (PPS6 Local Centre)	14
Free Standing (PPS6 Out 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	63
Village	10
Out of Town	2
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.*

## Secondary Filtering selection:

Use Class:

C3 77 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@.*

Secondary Filtering selection (Cont.):

Population within 1 mile:

1,000 or Less	2 days
1,001 to 5,000	13 days
5,001 to 10,000	18 days
10,001 to 15,000	20 days
15,001 to 20,000	9 days
20,001 to 25,000	7 days
25,001 to 50,000	7 days
50,001 to 100,000	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	7 days
25,001 to 50,000	8 days
50,001 to 75,000	12 days
75,001 to 100,000	16 days
100,001 to 125,000	2 days
125,001 to 250,000	22 days
250,001 to 500,000	9 days
500,001 or More	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	23 days
1.1 to 1.5	50 days
1.6 to 2.0	4 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:

Yes	20 days
No	57 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.*

PTAL Rating:

No PTAL Present	76 days
2 Poor	1 days

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	CA-03-A-05 EASTFIELD ROAD PETERBOROUGH	DETACHED HOUSES	CAMBRI D G E S H I R E
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 <i>Survey date: MONDAY 17/10/16</i>		<i>Survey Type: MANUAL</i>
2	CA-03-A-06 CRAFT'S WAY NEAR CAMBRIDGE BAR HILL	MIXED HOUSES	CAMBRI D G E S H I R E
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 207 <i>Survey date: FRIDAY 22/06/18</i>		<i>Survey Type: MANUAL</i>
3	CH-03-A-08 WHITCHURCH ROAD CHESTER BOUGHTON HEATH	DETACHED	C H E S H I R E
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 11 <i>Survey date: TUESDAY 22/05/12</i>		<i>Survey Type: MANUAL</i>
4	CH-03-A-09 GREYSTOKE ROAD MACCLESFIELD HURDSFIELD	TERRACED HOUSES	C H E S H I R E
	Edge of Town Residential Zone Total No of Dwellings: 24 <i>Survey date: MONDAY 24/11/14</i>		<i>Survey Type: MANUAL</i>
5	CH-03-A-10 MEADOW DRIVE NORTHWICH BARNTON	SEMI -DETACHED & TERRACED	C H E S H I R E
	Edge of Town Residential Zone Total No of Dwellings: 40 <i>Survey date: TUESDAY 04/06/19</i>		<i>Survey Type: MANUAL</i>
6	CH-03-A-11 LONDON ROAD NORTHWICH LEFTWICH	TOWN HOUSES	C H E S H I R E
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 24 <i>Survey date: THURSDAY 06/06/19</i>		<i>Survey Type: MANUAL</i>
7	DC-03-A-08 HURSTDENE ROAD BOURNEMOUTH CASTLE LANE WEST	BUNGALOWS	D O R S E T
	Edge of Town Residential Zone Total No of Dwellings: 28 <i>Survey date: MONDAY 24/03/14</i>		<i>Survey Type: MANUAL</i>
8	DH-03-A-01 GREENFIELDS ROAD BISHOP AUCKLAND	SEMI DETACHED	D U R H A M
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 50 <i>Survey date: TUESDAY 28/03/17</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	DH-03-A-02	MIXED HOUSES	DURHAM
	LEAZES LANE		
	BISHOP AUCKLAND		
	ST HELEN AUCKLAND		
	Neighbourhood Centre (PPS6 Local Centre)		
	Residential Zone		
	Total No of Dwellings:	125	
	Survey date: MONDAY	27/03/17	Survey Type: MANUAL
10	DH-03-A-03	SEMI-DETACHED & TERRACED	DURHAM
	PILGRIMS WAY		
	DURHAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	57	
	Survey date: FRIDAY	19/10/18	Survey Type: MANUAL
11	DS-03-A-02	MIXED HOUSES	DERBYSHIRE
	RADBOURNE LANE		
	DERBY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	371	
	Survey date: TUESDAY	10/07/18	Survey Type: MANUAL
12	DV-03-A-01	TERRACED HOUSES	DEVON
	BRONSHILL ROAD		
	TORQUAY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	37	
	Survey date: WEDNESDAY	30/09/15	Survey Type: MANUAL
13	DV-03-A-02	HOUSES & BUNGALOWS	DEVON
	MILLHEAD ROAD		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	116	
	Survey date: FRIDAY	25/09/15	Survey Type: MANUAL
14	DV-03-A-03	TERRACED & SEMI DETACHED	DEVON
	LOWER BRAND LANE		
	HONITON		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	70	
	Survey date: MONDAY	28/09/15	Survey Type: MANUAL
15	ES-03-A-03	MIXED HOUSES & FLATS	EAST SUSSEX
	SHEPHAM LANE		
	POLEGATE		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	212	
	Survey date: MONDAY	11/07/16	Survey Type: MANUAL
16	ES-03-A-04	MIXED HOUSES & FLATS	EAST SUSSEX
	NEW LYDD ROAD		
	CAMBER		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	134	
	Survey date: FRIDAY	15/07/16	Survey Type: MANUAL



LIST OF SITES relevant to selection parameters (Cont.)

17	ES-03-A-05 RATTLE ROAD NEAR EASTBOURNE STONE CROSS Edge of Town Residential Zone Total No of Dwellings: 99 <i>Survey date: WEDNESDAY 05/06/19</i>	MIXED HOUSES & FLATS	EAST SUSSEX	<i>Survey Type: MANUAL</i>
18	EX-03-A-02 MANOR ROAD CHIGWELL GRANGE HILL Edge of Town Residential Zone Total No of Dwellings: 97 <i>Survey date: MONDAY 27/11/17</i>	DETACHED & SEMI-DETACHED	ESSEX	<i>Survey Type: MANUAL</i>
19	GM-03-A-11 RUSHFORD STREET MANCHESTER LEVENSHULME Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: 37 <i>Survey date: MONDAY 26/09/16</i>	TERRACED & SEMI-DETACHED	GREATER MANCHESTER	<i>Survey Type: MANUAL</i>
20	HC-03-A-21 PRIESTLEY ROAD BASINGSTOKE HOUNDMILLS Edge of Town Residential Zone Total No of Dwellings: 39 <i>Survey date: TUESDAY 13/11/18</i>	TERRACED & SEMI-DETACHED	HAMPSHIRE	<i>Survey Type: MANUAL</i>
21	HC-03-A-22 BOW LAKE GARDENS NEAR EASTLEIGH BISHOPSTOKE Edge of Town Residential Zone Total No of Dwellings: 40 <i>Survey date: WEDNESDAY 31/10/18</i>	MIXED HOUSES	HAMPSHIRE	<i>Survey Type: MANUAL</i>
22	HC-03-A-23 CANADA WAY LIPHOOK  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 <i>Survey date: TUESDAY 19/11/19</i>	HOUSES & FLATS	HAMPSHIRE	<i>Survey Type: MANUAL</i>
23	HF-03-A-03 HARE STREET ROAD BUNTINGFORD  Edge of Town Residential Zone Total No of Dwellings: 160 <i>Survey date: MONDAY 08/07/19</i>	MIXED HOUSES	HERTFORDSHIRE	<i>Survey Type: MANUAL</i>
24	IW-03-A-01 MEDHAM FARM LANE NEAR COWES MEDHAM Free Standing (PPS6 Out of Town) Out of Town Total No of Dwellings: 72 <i>Survey date: TUESDAY 25/06/19</i>	DETACHED HOUSES	ISLE OF WIGHT	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

25	KC-03-A-03	MIXED HOUSES & FLATS	KENT
	HYTHE ROAD		
	ASHFORD		
	WILLESBOROUGH		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	51	
	Survey date: THURSDAY	14/07/16	Survey Type: MANUAL
26	KC-03-A-04	SEMI-DETACHED & TERRACED	KENT
	KILN BARN ROAD		
	AYLESFORD		
	DITTON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	110	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
27	KC-03-A-05	DETACHED & SEMI-DETACHED	KENT
	ROCHESTER ROAD		
	NEAR CHATHAM		
	BURHAM		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	8	
	Survey date: FRIDAY	22/09/17	Survey Type: MANUAL
28	KC-03-A-06	MIXED HOUSES & FLATS	KENT
	MARGATE ROAD		
	HERNE BAY		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	363	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
29	KC-03-A-07	MIXED HOUSES	KENT
	RECVLVER ROAD		
	HERNE BAY		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	288	
	Survey date: WEDNESDAY	27/09/17	Survey Type: MANUAL
30	KC-03-A-08	MIXED HOUSES	KENT
	MAIDSTONE ROAD		
	CHARING		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	159	
	Survey date: TUESDAY	22/05/18	Survey Type: MANUAL
31	LC-03-A-31	DETACHED HOUSES	LANCASHIRE
	GREENSIDE		
	PRESTON		
	COTTAM		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	32	
	Survey date: FRIDAY	17/11/17	Survey Type: MANUAL
32	LE-03-A-02	DETACHED & OTHERS	LEICESTERSHIRE
	MELBOURNE ROAD		
	IBSTOCK		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	85	
	Survey date: THURSDAY	28/06/18	Survey Type: MANUAL
33	LN-03-A-03	SEMI DETACHED	LINCOLNSHIRE
	ROOKERY LANE		
	LINCOLN		
	BOULTHAM		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	22	
	Survey date: TUESDAY	18/09/12	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

34	MS-03-A-03 BEMPTON ROAD LIVERPOOL OTTERSPOOL Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 15 <i>Survey date: FRIDAY 21/06/13</i>	DETACHED	MERSEYSIDE	<i>Survey Type: MANUAL</i>
35	NE-03-A-02 HANOVER WALK SCUNTHORPE  Edge of Town No Sub Category Total No of Dwellings: 432 <i>Survey date: MONDAY 12/05/14</i>	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE	<i>Survey Type: MANUAL</i>
36	NF-03-A-01 YARMOUTH ROAD CAISTER-ON-SEA  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 27 <i>Survey date: TUESDAY 16/10/12</i>	SEMI DET. & BUNGALOWS	NORFOLK	<i>Survey Type: MANUAL</i>
37	NF-03-A-02 DEREHAM ROAD NORWICH  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 98 <i>Survey date: MONDAY 22/10/12</i>	HOUSES & FLATS	NORFOLK	<i>Survey Type: MANUAL</i>
38	NF-03-A-03 HALING WAY THETFORD  Edge of Town Residential Zone Total No of Dwellings: 10 <i>Survey date: WEDNESDAY 16/09/15</i>	DETACHED HOUSES	NORFOLK	<i>Survey Type: MANUAL</i>
39	NF-03-A-04 NORTH WALSHAM ROAD NORTH WALSHAM  Edge of Town Residential Zone Total No of Dwellings: 70 <i>Survey date: WEDNESDAY 18/09/19</i>	MIXED HOUSES	NORFOLK	<i>Survey Type: MANUAL</i>
40	NF-03-A-05 HEATH DRIVE HOLT  Edge of Town Residential Zone Total No of Dwellings: 40 <i>Survey date: THURSDAY 19/09/19</i>	MIXED HOUSES	NORFOLK	<i>Survey Type: MANUAL</i>
41	NF-03-A-06 BEAUFORT WAY GREAT YARMOUTH BRADWELL Edge of Town Residential Zone Total No of Dwellings: 275 <i>Survey date: MONDAY 23/09/19</i>	MIXED HOUSES	NORFOLK	<i>Survey Type: MANUAL</i>
42	NF-03-A-07 SILFIELD ROAD WYMONDHAM  Edge of Town Out of Town Total No of Dwellings: 297 <i>Survey date: FRIDAY 20/09/19</i>	MIXED HOUSES & FLATS	NORFOLK	<i>Survey Type: DIRECTIONAL ATC COUNT</i>

LIST OF SITES relevant to selection parameters (Cont.)

43	NF-03-A-08	MIXED HOUSES & FLATS	NORFOLK
	SIR ALFRED MUNNINGS RD NEAR NORWICH COSTESSEY Neighbourhood Centre (PPS6 Local Centre) Village		
	Total No of Dwellings:	1817	
	Survey date:	THURSDAY 19/09/19	Survey Type: MANUAL
44	NF-03-A-09	MIXED HOUSES & FLATS	NORFOLK
	ROUND HOUSE WAY NORWICH CRINGLEFORD Edge of Town Residential Zone		
	Total No of Dwellings:	984	
	Survey date:	TUESDAY 24/09/19	Survey Type: MANUAL
45	NY-03-A-08	TERRACED HOUSES	NORTH YORKSHIRE
	NICHOLAS STREET YORK  Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	21	
	Survey date:	MONDAY 16/09/13	Survey Type: MANUAL
46	NY-03-A-09	MIXED HOUSING	NORTH YORKSHIRE
	GRAMMAR SCHOOL LANE NORTHALLERTON  Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	52	
	Survey date:	MONDAY 16/09/13	Survey Type: MANUAL
47	NY-03-A-10	HOUSES AND FLATS	NORTH YORKSHIRE
	BOROUGHBRIDGE ROAD RIPON  Edge of Town No Sub Category		
	Total No of Dwellings:	71	
	Survey date:	TUESDAY 17/09/13	Survey Type: MANUAL
48	NY-03-A-11	PRIVATE HOUSING	NORTH YORKSHIRE
	HORSEFAIR BOROUGHBRIDGE  Edge of Town Residential Zone		
	Total No of Dwellings:	23	
	Survey date:	WEDNESDAY 18/09/13	Survey Type: MANUAL
49	NY-03-A-13	TERRACED HOUSES	NORTH YORKSHIRE
	CATTERICK ROAD CATTERICK GARRISON OLD HOSPITAL COMPOUND Suburban Area (PPS6 Out of Centre) Residential Zone		
	Total No of Dwellings:	10	
	Survey date:	WEDNESDAY 10/05/17	Survey Type: MANUAL
50	SC-03-A-04	DETACHED & TERRACED	SURREY
	HIGH ROAD BYFLEET  Edge of Town Residential Zone		
	Total No of Dwellings:	71	
	Survey date:	THURSDAY 23/01/14	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

51	SC-03-A-05 REIGATE ROAD HORLEY	MIXED HOUSES	SURREY
	Edge of Town Residential Zone Total No of Dwellings:	207	
	<i>Survey date: MONDAY</i>	<i>01/04/19</i>	<i>Survey Type: MANUAL</i>
52	SF-03-A-04 NORMANSTON DRIVE LOWESTOFT	DETACHED & BUNGALOWS	SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	7	
	<i>Survey date: TUESDAY</i>	<i>23/10/12</i>	<i>Survey Type: MANUAL</i>
53	SF-03-A-05 VALE LANE BURY ST EDMUNDS	DETACHED HOUSES	SUFFOLK
	Edge of Town Residential Zone Total No of Dwellings:	18	
	<i>Survey date: WEDNESDAY</i>	<i>09/09/15</i>	<i>Survey Type: MANUAL</i>
54	SF-03-A-06 BURY ROAD KENTFORD	DETACHED & SEMI -DETACHED	SUFFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings:	38	
	<i>Survey date: FRIDAY</i>	<i>22/09/17</i>	<i>Survey Type: MANUAL</i>
55	SF-03-A-07 FOXHALL ROAD IPSWICH	MIXED HOUSES	SUFFOLK
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	73	
	<i>Survey date: THURSDAY</i>	<i>09/05/19</i>	<i>Survey Type: MANUAL</i>
56	SH-03-A-05 SANDCROFT TELFORD SUTTON HILL	SEMI -DETACHED/TERRACED	SHROPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	54	
	<i>Survey date: THURSDAY</i>	<i>24/10/13</i>	<i>Survey Type: MANUAL</i>
57	SH-03-A-06 ELLESMERE ROAD SHREWSBURY	BUNGALOWS	SHROPSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	16	
	<i>Survey date: THURSDAY</i>	<i>22/05/14</i>	<i>Survey Type: MANUAL</i>
58	SM-03-A-01 WEMBDON ROAD BRIDGWATER NORTHFIELD	DETACHED & SEMI	SOMERSET
	Edge of Town Residential Zone Total No of Dwellings:	33	
	<i>Survey date: THURSDAY</i>	<i>24/09/15</i>	<i>Survey Type: MANUAL</i>



LIST OF SITES relevant to selection parameters (Cont.)

59	SM-03-A-02	MIXED HOUSES	SOMERSET
	HYDE LANE NEAR TAUNTON CREECH SAINT MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 42 <i>Survey date: TUESDAY 25/09/18</i>		
	<i>Survey Type: MANUAL</i>		
60	SM-03-A-03	MIXED HOUSES	SOMERSET
	HYDE LANE NEAR TAUNTON CREECH ST MICHAEL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 41 <i>Survey date: TUESDAY 25/09/18</i>		
	<i>Survey Type: MANUAL</i>		
61	ST-03-A-07	DETACHED & SEMI-DETACHED	STAFFORDSHIRE
	BEACONSIDE STAFFORD MARSTON GATE Edge of Town Residential Zone Total No of Dwellings: 248 <i>Survey date: WEDNESDAY 22/11/17</i>		
	<i>Survey Type: MANUAL</i>		
62	ST-03-A-08	DETACHED HOUSES	STAFFORDSHIRE
	SILKMORE CRESCENT STAFFORD MEADOWCROFT PARK Edge of Town Residential Zone Total No of Dwellings: 26 <i>Survey date: WEDNESDAY 22/11/17</i>		
	<i>Survey Type: MANUAL</i>		
63	SY-03-A-01	SEMI DETACHED HOUSES	SOUTH YORKSHIRE
	A19 BENTLEY ROAD DONCASTER BENTLEY RISE Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 54 <i>Survey date: WEDNESDAY 18/09/13</i>		
	<i>Survey Type: MANUAL</i>		
64	TW-03-A-02	SEMI-DETACHED	TYNE & WEAR
	WEST PARK ROAD GATESHEAD  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 16 <i>Survey date: MONDAY 07/10/13</i>		
	<i>Survey Type: MANUAL</i>		
65	TW-03-A-03	MIXED HOUSES	TYNE & WEAR
	STATION ROAD NEAR NEWCASTLE BACKWORTH Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 33 <i>Survey date: FRIDAY 13/11/15</i>		
	<i>Survey Type: MANUAL</i>		
66	WK-03-A-02	BUNGALOWS	WARWICKSHIRE
	NARBERTH WAY COVENTRY POTTERS GREEN Edge of Town Residential Zone Total No of Dwellings: 17 <i>Survey date: THURSDAY 17/10/13</i>		
	<i>Survey Type: MANUAL</i>		
67	WK-03-A-03	DETACHED HOUSES	WARWICKSHIRE
	BRESE AVENUE WARWICK GUYS CLIFFE Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 23 <i>Survey date: WEDNESDAY 25/09/19</i>		
	<i>Survey Type: MANUAL</i>		

LIST OF SITES relevant to selection parameters (Cont.)

68	WL-03-A-02 HEADLANDS GROVE SWINDON	SEMI DETACHED		WILTSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 27 <i>Survey date: THURSDAY 22/09/16</i>			
69	WM-03-A-04 OSBORNE ROAD COVENTRY EARLSDON	TERRACED HOUSES		WEST MIDLANDS
	Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: 39 <i>Survey date: MONDAY 21/11/16</i>			
70	WS-03-A-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 151 <i>Survey date: THURSDAY 11/12/14</i>			
71	WS-03-A-05 UPPER SHOREHAM ROAD SHOREHAM BY SEA	TERRACED & FLATS		WEST SUSSEX
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 48 <i>Survey date: WEDNESDAY 18/04/12</i>			
72	WS-03-A-07 EMMS LANE NEAR HORSHAM BROOKS GREEN	BUNGALOWS		WEST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 57 <i>Survey date: THURSDAY 19/10/17</i>			
73	WS-03-A-08 ROUNDSTONE LANE ANGMERING	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 180 <i>Survey date: THURSDAY 19/04/18</i>			
74	WS-03-A-09 LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON	MIXED HOUSES & FLATS		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 197 <i>Survey date: THURSDAY 05/07/18</i>			
75	WS-03-A-10 TODDINGTON LANE LITTLEHAMPTON WICK	MIXED HOUSES		WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 79 <i>Survey date: WEDNESDAY 07/11/18</i>			

LIST OF SITES relevant to selection parameters (Cont.)

76	WS-03-A-11 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	MIXED HOUSES      918 <i>02/04/19</i>	WEST SUSSEX       <i>Survey Type: MANUAL</i>
77	WY-03-A-01 SPRING VALLEY CRESCENT LEEDS BRAMLEY Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	MIXED HOUSING      46 <i>21/09/16</i>	WEST YORKSHIRE       <i>Survey Type: MANUAL</i>

*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 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED  
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	77	133	0.070	77	133	0.304	77	133	0.374
08:00 - 09:00	77	133	0.126	77	133	0.359	77	133	0.485
09:00 - 10:00	77	133	0.137	77	133	0.166	77	133	0.303
10:00 - 11:00	77	133	0.116	77	133	0.140	77	133	0.256
11:00 - 12:00	77	133	0.121	77	133	0.129	77	133	0.250
12:00 - 13:00	77	133	0.142	77	133	0.139	77	133	0.281
13:00 - 14:00	77	133	0.146	77	133	0.138	77	133	0.284
14:00 - 15:00	77	133	0.154	77	133	0.165	77	133	0.319
15:00 - 16:00	77	133	0.229	77	133	0.163	77	133	0.392
16:00 - 17:00	77	133	0.260	77	133	0.153	77	133	0.413
17:00 - 18:00	77	133	0.332	77	133	0.149	77	133	0.481
18:00 - 19:00	77	133	0.287	77	133	0.156	77	133	0.443
19:00 - 20:00	1	97	0.062	1	97	0.052	1	97	0.114
20:00 - 21:00	1	97	0.031	1	97	0.021	1	97	0.052
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			2.213			2.234			4.447

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

## Parameter summary

Trip rate parameter range selected: 7 - 1817 (units: )  
Survey date range: 01/01/12 - 19/11/19  
Number of weekdays (Monday-Friday): 81  
Number of Saturdays: 0  
Number of Sundays: 0  
Surveys automatically removed from selection: 5  
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-236601-200501-0515

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
Category : A - HOUSES PRIVATELY OWNED  
VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	KC KENT	1 days
	WS WEST SUSSEX	1 days
04	EAST ANGLIA	
	NF NORFOLK	2 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

Primary Filtering 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: No of Dwellings  
Actual Range: 363 to 1817 (units: )  
Range Selected by User: 300 to 4334 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 24/09/19

*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	1 days
Tuesday	3 days
Wednesday	1 days
Thursday	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)	1
Edge of Town	4
Neighbourhood Centre (PPS6 Local Centre)	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	4
Village	1
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.*



Secondary Filtering selection:

Use Class:

C3 6 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:

1,001 to 5,000 2 days  
 10,001 to 15,000 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:

50,001 to 75,000 2 days  
 75,001 to 100,000 1 days  
 125,001 to 250,000 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 3 days  
 1.1 to 1.5 3 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:

Yes 3 days  
 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.*

PTAL Rating:

No PTAL Present 6 days

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	DS-03-A-02 RADBOURNE LANE DERBY	MIXED HOUSES	DERBYSHIRE
	Edge of Town Residential Zone Total No of Dwellings:	371	
	<i>Survey date: TUESDAY</i>	<i>10/07/18</i>	<i>Survey Type: MANUAL</i>
2	KC-03-A-06 MARGATE ROAD HERNE BAY	MIXED HOUSES & FLATS	KENT
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings:	363	
	<i>Survey date: WEDNESDAY</i>	<i>27/09/17</i>	<i>Survey Type: MANUAL</i>
3	NE-03-A-02 HANOVER WALK SCUNTHORPE	SEMI DETACHED & DETACHED	NORTH EAST LINCOLNSHIRE
	Edge of Town No Sub Category Total No of Dwellings:	432	
	<i>Survey date: MONDAY</i>	<i>12/05/14</i>	<i>Survey Type: MANUAL</i>
4	NF-03-A-08 SIR ALFRED MUNNINGS RD NEAR NORWICH COSTESSEY	MIXED HOUSES & FLATS	NORFOLK
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings:	1817	
	<i>Survey date: THURSDAY</i>	<i>19/09/19</i>	<i>Survey Type: MANUAL</i>
5	NF-03-A-09 ROUND HOUSE WAY NORWICH CRINGLEFORD	MIXED HOUSES & FLATS	NORFOLK
	Edge of Town Residential Zone Total No of Dwellings:	984	
	<i>Survey date: TUESDAY</i>	<i>24/09/19</i>	<i>Survey Type: MANUAL</i>
6	WS-03-A-11 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH	MIXED HOUSES	WEST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings:	918	
	<i>Survey date: TUESDAY</i>	<i>02/04/19</i>	<i>Survey Type: MANUAL</i>

*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 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED  
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	814	0.054	6	814	0.318	6	814	0.372
08:00 - 09:00	6	814	0.110	6	814	0.358	6	814	0.468
09:00 - 10:00	6	814	0.123	6	814	0.148	6	814	0.271
10:00 - 11:00	6	814	0.098	6	814	0.118	6	814	0.216
11:00 - 12:00	6	814	0.101	6	814	0.096	6	814	0.197
12:00 - 13:00	6	814	0.121	6	814	0.123	6	814	0.244
13:00 - 14:00	6	814	0.124	6	814	0.114	6	814	0.238
14:00 - 15:00	6	814	0.141	6	814	0.136	6	814	0.277
15:00 - 16:00	6	814	0.194	6	814	0.152	6	814	0.346
16:00 - 17:00	6	814	0.242	6	814	0.138	6	814	0.380
17:00 - 18:00	6	814	0.338	6	814	0.148	6	814	0.486
18:00 - 19:00	6	814	0.313	6	814	0.153	6	814	0.466
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			1.959			2.002			3.961

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

## Parameter summary

Trip rate parameter range selected:	363 - 1817 (units: )
Survey date range:	01/01/12 - 24/09/19
Number of weekdays (Monday-Friday):	6
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	1
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.

## **APPENDIX B.** TRICS – Mixed Private Housing

Calculation Reference: AUDIT-236601-200501-0530

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : K - MIXED PRIV HOUS (FLATS AND HOUSES)  
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	WS WEST SUSSEX	1 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

Primary Filtering 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: No of Dwellings  
 Actual Range: 371 to 618 (units: )  
 Range Selected by User: 300 to 788 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 23/07/18

*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	1 days
Thursday	1 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count	2 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	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:

Industrial Zone	1
Residential Zone	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.*

Secondary Filtering selection:

Use Class:

C3	2 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®.*



Secondary Filtering selection (Cont.):

Population within 1 mile:

10,001 to 15,000 2 days

*This data displays the number of selected surveys within stated 1-mile radii of population.*

Population within 5 miles:

75,001 to 100,000 1 days  
125,001 to 250,000 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 1 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:

Yes 1 days  
No 1 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.*

PTAL Rating:

No PTAL Present 2 days

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	DS-03-K-01 PRIDE PARKWAY DERBY WILMORTON Edge of Town Industrial Zone Total No of Dwellings: <i>Survey date: MONDAY</i>	MIXED HOUSES & FLATS      618 <i>23/07/18</i>	DERBYSHIRE         <i>Survey Type: MANUAL</i>
2	WS-03-K-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	MIXED HOUSES & FLATS      371 <i>28/06/18</i>	WEST SUSSEX         <i>Survey Type: MANUAL</i>

*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 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

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	2	495	0.048	2	495	0.235	2	495	0.283
08:00 - 09:00	2	495	0.075	2	495	0.275	2	495	0.350
09:00 - 10:00	2	495	0.091	2	495	0.155	2	495	0.246
10:00 - 11:00	2	495	0.091	2	495	0.093	2	495	0.184
11:00 - 12:00	2	495	0.083	2	495	0.089	2	495	0.172
12:00 - 13:00	2	495	0.093	2	495	0.095	2	495	0.188
13:00 - 14:00	2	495	0.105	2	495	0.116	2	495	0.221
14:00 - 15:00	2	495	0.115	2	495	0.102	2	495	0.217
15:00 - 16:00	2	495	0.147	2	495	0.124	2	495	0.271
16:00 - 17:00	2	495	0.182	2	495	0.086	2	495	0.268
17:00 - 18:00	2	495	0.241	2	495	0.110	2	495	0.351
18:00 - 19:00	2	495	0.256	2	495	0.127	2	495	0.383
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			1.527			1.607			3.134

*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.*

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

Parameter summary

Trip rate parameter range selected: 371 - 618 (units: )  
 Survey date range: 01/01/12 - 23/07/18  
 Number of weekdays (Monday-Friday): 2  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 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-236601-200501-0544

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : K - MIXED PRIV HOUS (FLATS AND HOUSES)  
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HC HAMPSHIRE	1 days
	WS WEST SUSSEX	2 days
03	SOUTH WEST	
	CW CORNWALL	1 days
	DV DEVON	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	2 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	NT NOTTINGHAMSHIRE	1 days
06	WEST MIDLANDS	
	ST STAFFORDSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NE NORTH EAST LINCOLNSHIRE	1 days
09	NORTH	
	CB CUMBRIA	2 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

Primary Filtering 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: No of Dwellings  
 Actual Range: 15 to 618 (units: )  
 Range Selected by User: 15 to 788 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 23/05/19

*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	4 days
Tuesday	2 days
Wednesday	1 days
Thursday	6 days
Friday	1 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count	14 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)	6
Edge of Town	7
Neighbourhood Centre (PPS6 Local Centre)	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:

*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.*

Secondary Filtering selection:

Use Class:

C3 14 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:

1,001 to 5,000	2 days
5,001 to 10,000	5 days
10,001 to 15,000	2 days
15,001 to 20,000	1 days
20,001 to 25,000	2 days
25,001 to 50,000	2 days

*This data displays the number of selected surveys within stated 1-mile radii of population.*

Population within 5 miles:

5,000 or Less	1 days
25,001 to 50,000	5 days
50,001 to 75,000	1 days
75,001 to 100,000	2 days
125,001 to 250,000	3 days
250,001 to 500,000	2 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	6 days
1.1 to 1.5	7 days
1.6 to 2.0	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:

Yes	3 days
No	11 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.*

PTAL Rating:

No PTAL Present	14 days
-----------------	---------

*This data displays the number of selected surveys with PTAL Ratings.*



LIST OF SITES relevant to selection parameters

1	CA-03-K-01 WEASANHAM LANE WISBECH FENLAND Edge of Town Residential Zone Total No of Dwellings: 100 <i>Survey date: MONDAY 07/09/15</i>	MIXED HOUSES & FLATS	CAMBRI DGESHI RE	<i>Survey Type: MANUAL</i>
2	CA-03-K-04 FORDHAM ROAD SOHAM  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 65 <i>Survey date: WEDNESDAY 11/07/18</i>	MIXED HOUSES & FLATS	CAMBRI DGESHI RE	<i>Survey Type: MANUAL</i>
3	CB-03-K-01 BRIDGE LANE CARLISLE  Edge of Town Industrial Zone Total No of Dwellings: 66 <i>Survey date: THURSDAY 12/06/14</i>	FLATS & TERRACED	CUMBRI A	<i>Survey Type: MANUAL</i>
4	CB-03-K-02 NATLAND ROAD KENDAL  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 15 <i>Survey date: TUESDAY 21/06/16</i>	SEMI -DETACHED & FLATS	CUMBRI A	<i>Survey Type: MANUAL</i>
5	CW-03-K-01 TRELLOWEN DRIVE PENRYN  Edge of Town Residential Zone Total No of Dwellings: 89 <i>Survey date: THURSDAY 28/03/19</i>	MIXED HOUSES & FLATS	CORNWALL	<i>Survey Type: MANUAL</i>
6	DS-03-K-01 PRIDE PARKWAY DERBY WILMORTON Edge of Town Industrial Zone Total No of Dwellings: 618 <i>Survey date: MONDAY 23/07/18</i>	MIXED HOUSES & FLATS	DERBYSHIRE	<i>Survey Type: MANUAL</i>
7	DV-03-K-01 ROYAL WAY STARCROSS  Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 15 <i>Survey date: MONDAY 17/07/17</i>	MIXED HOUSES & FLATS	DEVON	<i>Survey Type: MANUAL</i>
8	ES-03-K-01 LEWES ROAD UCKFIELD RIDGEWOOD Edge of Town Residential Zone Total No of Dwellings: 64 <i>Survey date: THURSDAY 14/07/16</i>	MIXED HOUSES & FLATS	EAST SUSSEX	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	HC-03-K-06 ROMSEY ROAD SOUTHAMPTON MAYBUSH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 91 <i>Survey date: THURSDAY 02/10/14</i>	HOUSES & FLATS	HAMPSHIRE	<i>Survey Type: MANUAL</i>
10	NE-03-K-01 LADYSMITH ROAD CLEETHORPES  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 67 <i>Survey date: TUESDAY 06/05/14</i>	BLOCK OF FLATS	NORTH EAST LINCOLNSHIRE	<i>Survey Type: MANUAL</i>
11	NT-03-K-02 CASTLE BRIDGE ROAD NOTTINGHAM  Suburban Area (PPS6 Out of Centre) No Sub Category Total No of Dwellings: 132 <i>Survey date: MONDAY 07/11/16</i>	MIXED HOUSES	NOTTINGHAMSHIRE	<i>Survey Type: MANUAL</i>
12	ST-03-K-03 CLAREMONT ROAD WOLVERHAMPTON  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 28 <i>Survey date: FRIDAY 09/05/14</i>	MIXED HOUSING & FLATS	STAFFORDSHIRE	<i>Survey Type: MANUAL</i>
13	WS-03-K-03 LITTLEHAMPTON ROAD WORTHING WEST DURRINGTON Edge of Town Residential Zone Total No of Dwellings: 111 <i>Survey date: THURSDAY 12/05/16</i>	MIXED HOUSES & FLATS	WEST SUSSEX	<i>Survey Type: MANUAL</i>
14	WS-03-K-04 HILLS FARM LANE HORSHAM BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: 371 <i>Survey date: THURSDAY 28/06/18</i>	MIXED HOUSES & FLATS	WEST SUSSEX	<i>Survey Type: MANUAL</i>

*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 03 - RESIDENTIAL/K - MIXED PRIV HOUS (FLATS AND HOUSES)

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	14	131	0.058	14	131	0.238	14	131	0.296
08:00 - 09:00	14	131	0.088	14	131	0.284	14	131	0.372
09:00 - 10:00	14	131	0.101	14	131	0.138	14	131	0.239
10:00 - 11:00	14	131	0.105	14	131	0.127	14	131	0.232
11:00 - 12:00	14	131	0.103	14	131	0.102	14	131	0.205
12:00 - 13:00	14	131	0.123	14	131	0.113	14	131	0.236
13:00 - 14:00	14	131	0.122	14	131	0.121	14	131	0.243
14:00 - 15:00	14	131	0.114	14	131	0.129	14	131	0.243
15:00 - 16:00	14	131	0.174	14	131	0.132	14	131	0.306
16:00 - 17:00	14	131	0.189	14	131	0.113	14	131	0.302
17:00 - 18:00	14	131	0.263	14	131	0.127	14	131	0.390
18:00 - 19:00	14	131	0.238	14	131	0.134	14	131	0.372
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			1.678			1.758			3.436

*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.*

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected: 15 - 618 (units: )  
Survey date range: 01/01/12 - 23/05/19  
Number of weekdays (Monday-Friday): 14  
Number of Saturdays: 0  
Number of Sundays: 0  
Surveys automatically removed from selection: 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.*

## **APPENDIX C.** TRICS – Mixed Private / Affordable

Calculation Reference: AUDIT-236601-200501-0518

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : M - MIXED PRIVATE/AFFORDABLE HOUSING  
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	11 days
	HC HAMPSHIRE	6 days
	KC KENT	2 days
	OX OXFORDSHIRE	1 days
	SC SURREY	4 days
	WS WEST SUSSEX	12 days
03	SOUTH WEST	
	DC DORSET	1 days
	DV DEVON	1 days
	SM SOMERSET	1 days
	WL WILTSHIRE	1 days
04	EAST ANGLIA	
	CA CAMBRIDGESHIRE	1 days
	NF NORFOLK	14 days
05	EAST MIDLANDS	
	DS DERBYSHIRE	1 days
	LE LEICESTERSHIRE	1 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	3 days
	WM WEST MIDLANDS	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	WY WEST YORKSHIRE	1 days
08	NORTH WEST	
	GM GREATER MANCHESTER	1 days
	MS MERSEYSIDE	2 days
09	NORTH	
	CB CUMBRIA	1 days
	TW TYNE & WEAR	2 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

Primary Filtering 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: No of Dwellings  
 Actual Range: 9 to 762 (units: )  
 Range Selected by User: 9 to 1874 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 14/11/19

*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	5 days
Tuesday	11 days
Wednesday	14 days
Thursday	21 days
Friday	17 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count	60 days
Directional ATC Count	8 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.*



*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:

Industrial Zone	1
Residential Zone	48
Village	14
Out of Town	2
No Sub Category	3

*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.*

Secondary Filtering selection:

Use Class:

C3	68 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:

1,000 or Less	2 days
1,001 to 5,000	20 days
5,001 to 10,000	15 days
10,001 to 15,000	11 days
15,001 to 20,000	3 days
20,001 to 25,000	5 days
25,001 to 50,000	12 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	7 days
25,001 to 50,000	12 days
50,001 to 75,000	11 days
75,001 to 100,000	9 days
100,001 to 125,000	4 days
125,001 to 250,000	18 days
250,001 to 500,000	5 days
500,001 or More	2 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	11 days
1.1 to 1.5	50 days
1.6 to 2.0	7 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:

Yes	48 days
No	20 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.*

PTAL Rating:

No PTAL Present	68 days
-----------------	---------

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	CA-03-M-01 BANNOLD ROAD WATERBEACH	MIXED HOUSES & FLATS	CAMBRI DGESHI RE
	Edge of Town Residential Zone Total No of Dwellings: 52 <i>Survey date: WEDNESDAY 20/06/18</i>		<i>Survey Type: MANUAL</i>
2	CB-03-M-04 STANHOPE ROAD CARLISLE	SEMI-DETACHED & TERRACED	CUMBRIA
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 20 <i>Survey date: FRIDAY 24/06/16</i>		<i>Survey Type: MANUAL</i>
3	DC-03-M-02 KINGS ROAD DORCHESTER FORDINGTON	TERRACED & BUNGALOWS	DORSET
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 37 <i>Survey date: FRIDAY 16/09/16</i>		<i>Survey Type: MANUAL</i>
4	DS-03-M-01 COCKAYNE STREET DERBY BOULTON	TERRACED/SEMI DETACHED	DERBYSHIRE
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 32 <i>Survey date: TUESDAY 21/10/14</i>		<i>Survey Type: MANUAL</i>
5	DV-03-M-02 SAINT PETER' QUAY TOTNES	MIXED HOUSES & FLATS	DEVON
	Edge of Town Residential Zone Total No of Dwellings: 90 <i>Survey date: FRIDAY 29/03/19</i>		<i>Survey Type: MANUAL</i>
6	ES-03-M-05 A26 CROWBOROUGH RD NEAR UCKFIELD FIVE ASH DOWN VILLAGE	HOUSES & FLATS	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 138 <i>Survey date: MONDAY 30/06/14</i>		<i>Survey Type: MANUAL</i>
7	ES-03-M-07 SOUTH COAST ROAD PEACEHAVEN	MIXED HOUSING	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 188 <i>Survey date: THURSDAY 12/11/15</i>		<i>Survey Type: MANUAL</i>
8	ES-03-M-09 STATION ROAD NORTHIAM	DETACHED/SEMI-DETACHED	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 16 <i>Survey date: WEDNESDAY 17/05/17</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

9	ES-03-M-10 DITTONS ROAD POLEGATE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 108 <i>Survey date: MONDAY 11/07/16</i>		<i>Survey Type: MANUAL</i>
10	ES-03-M-11 HEMPSTEAD LANE HAILSHAM UPPER HORSEBRIDGE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 354 <i>Survey date: WEDNESDAY 13/07/16</i>		<i>Survey Type: MANUAL</i>
11	ES-03-M-12 PARK ROAD HAILSHAM	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 93 <i>Survey date: THURSDAY 21/06/18</i>		<i>Survey Type: MANUAL</i>
12	ES-03-M-13 NORTH COMMON ROAD WIVELSFIELD GREEN	MIXED HOUSES	EAST SUSSEX
	Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 66 <i>Survey date: FRIDAY 22/06/18</i>		<i>Survey Type: MANUAL</i>
13	ES-03-M-14 KINGS DRIVE EASTBOURNE UPPERTON	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 119 <i>Survey date: THURSDAY 15/11/18</i>		<i>Survey Type: MANUAL</i>
14	ES-03-M-15 FIELD END MARESFIELD	MIXED HOUSES	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 80 <i>Survey date: WEDNESDAY 13/03/19</i>		<i>Survey Type: MANUAL</i>
15	ES-03-M-16 BARNHORN ROAD BEXHILL LITTLE COMMON	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 119 <i>Survey date: WEDNESDAY 10/07/19</i>		<i>Survey Type: MANUAL</i>
16	ES-03-M-17 NEW ROAD HAILSHAM AMBERSTONE	MIXED HOUSES & FLATS	EAST SUSSEX
	Edge of Town Residential Zone Total No of Dwellings: 91 <i>Survey date: THURSDAY 07/11/19</i>		<i>Survey Type: MANUAL</i>
17	GM-03-M-01 PARK ROAD ROCHDALE	TERRACED & FLATS	GREATER MANCHESTER
	Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 9 <i>Survey date: TUESDAY 25/11/14</i>		<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

18	HC-03-M-05 WIMPSON LANE SOUTHAMPTON MAYBUSH Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 62 <i>Survey date: FRIDAY 03/10/14</i>	HOUSES & FLATS	HAMPSHIRE	<i>Survey Type: MANUAL</i>
19	HC-03-M-06 HUNTS POND ROAD NEAR FAREHAM TITCHFIELD Edge of Town Residential Zone Total No of Dwellings: 328 <i>Survey date: WEDNESDAY 04/11/15</i>	HOUSES & FLATS	HAMPSHIRE	<i>Survey Type: MANUAL</i>
20	HC-03-M-09 ROMSEY ROAD WINCHESTER STANMORE Edge of Town Residential Zone Total No of Dwellings: 157 <i>Survey date: THURSDAY 07/06/18</i>	MIXED HOUSES & FLATS	HAMPSHIRE	<i>Survey Type: MANUAL</i>
21	HC-03-M-10 RAWLINGS LANE ALTON  Edge of Town Residential Zone Total No of Dwellings: 176 <i>Survey date: TUESDAY 05/03/19</i>	MIXED HOUSES & FLATS	HAMPSHIRE	<i>Survey Type: MANUAL</i>
22	HC-03-M-11 ALDERMASTON ROAD BASINGSTOKE  Edge of Town No Sub Category Total No of Dwellings: 238 <i>Survey date: THURSDAY 07/03/19</i>	MIXED HOUSES & FLATS	HAMPSHIRE	<i>Survey Type: MANUAL</i>
23	HC-03-M-12 BARNFIELD WAY NEAR SOUTHAMPTON HEDGE END Edge of Town Out of Town Total No of Dwellings: 181 <i>Survey date: WEDNESDAY 23/10/19</i>	MIXED HOUSES & FLATS	HAMPSHIRE	<i>Survey Type: MANUAL</i>
24	KC-03-M-02 HERMITAGE LANE MAIDSTONE BARMING Edge of Town No Sub Category Total No of Dwellings: 119 <i>Survey date: TUESDAY 05/06/18</i>	MIXED HOUSES AND FLATS	KENT	<i>Survey Type: MANUAL</i>
25	KC-03-M-03 BUNYARD WAY MAIDSTONE ALLINGTON Edge of Town Residential Zone Total No of Dwellings: 140 <i>Survey date: TUESDAY 22/05/18</i>	MIXED HOUSES & FLATS	KENT	<i>Survey Type: MANUAL</i>
26	LE-03-M-01 RYDER ROAD LEICESTER BRAUNSTONE FRITH Edge of Town Residential Zone Total No of Dwellings: 16 <i>Survey date: THURSDAY 27/09/12</i>	SEMI DETACHED	LEICESTERSHIRE	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

27	MS-03-M-02	TERRACED	MERSEYSIDE
	LOVEL ROAD LIVERPOOL SPEKE Edge of Town Residential Zone Total No of Dwellings: 27 <i>Survey date: FRIDAY 21/06/13</i>		<i>Survey Type: MANUAL</i>
28	MS-03-M-03	SEMI DETACHED/TERRACED	MERSEYSIDE
	LOVEL ROAD LIVERPOOL SPEKE Edge of Town Residential Zone Total No of Dwellings: 24 <i>Survey date: FRIDAY 21/06/13</i>		<i>Survey Type: MANUAL</i>
29	NF-03-M-01	MIXED HOUSES & FLATS	NORFOLK
	LONG LANE NEAR NORWICH MULBARTON Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 173 <i>Survey date: FRIDAY 20/09/19</i>		<i>Survey Type: MANUAL</i>
30	NF-03-M-02	MIXED HOUSES	NORFOLK
	CAWSTON ROAD AYLSHAM  Edge of Town Out of Town Total No of Dwellings: 250 <i>Survey date: TUESDAY 17/09/19</i>		<i>Survey Type: MANUAL</i>
31	NF-03-M-04	MIXED HOUSES & FLATS	NORFOLK
	HUNSTANTON ROAD HUNSTANTON  Edge of Town Residential Zone Total No of Dwellings: 70 <i>Survey date: THURSDAY 19/09/19</i>		<i>Survey Type: MANUAL</i>
32	NF-03-M-05	MIXED HOUSES	NORFOLK
	CAISTOR LANE PORINGLAND FRAMINGHAM EARL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 150 <i>Survey date: MONDAY 16/09/19</i>		<i>Survey Type: MANUAL</i>
33	NF-03-M-06	MIXED HOUSES	NORFOLK
	STALHAM ROAD HOVETON  Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 120 <i>Survey date: FRIDAY 20/09/19</i>		<i>Survey Type: DIRECTIONAL ATC COUNT</i>
34	NF-03-M-07	MIXED HOUSES	NORFOLK
	MENDHAM LANE HARLESTON  Edge of Town Residential Zone Total No of Dwellings: 120 <i>Survey date: FRIDAY 20/09/19</i>		<i>Survey Type: DIRECTIONAL ATC COUNT</i>
35	NF-03-M-08	MIXED HOUSES & FLATS	NORFOLK
	DEREHAM ROAD NORWICH  Edge of Town No Sub Category Total No of Dwellings: 248 <i>Survey date: THURSDAY 19/09/19</i>		<i>Survey Type: DIRECTIONAL ATC COUNT</i>



LIST OF SITES relevant to selection parameters (Cont.)

36	NF-03-M-09	MIXED HOUSES	NORFOLK
	MILL LANE NEAR NORWICH HORSFORD Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 125 <i>Survey date: THURSDAY 19/09/19</i>		
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>		
37	NF-03-M-10	MIXED HOUSES & FLATS	NORFOLK
	BURGH ROAD AYLSHAM  Edge of Town Residential Zone Total No of Dwellings: 300 <i>Survey date: FRIDAY 27/09/19</i>		
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>		
38	NF-03-M-11	MIXED HOUSES	NORFOLK
	PIGOT LANE NEAR NORWICH FRAMINGHAM EARL Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 100 <i>Survey date: FRIDAY 20/09/19</i>		
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>		
39	NF-03-M-12	MIXED HOUSES	NORFOLK
	BRANDON ROAD SWAFFHAM  Edge of Town Residential Zone Total No of Dwellings: 181 <i>Survey date: THURSDAY 19/09/19</i>		
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>		
40	NF-03-M-13	MIXED HOUSES	NORFOLK
	MACMILLAN WAY NEAR NORWICH LITTLE PLUMSTEAD Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 75 <i>Survey date: FRIDAY 20/09/19</i>		
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>		
41	NF-03-M-14	MIXED HOUSES & FLATS	NORFOLK
	NORWICH COMMON WYMONDHAM  Edge of Town Residential Zone Total No of Dwellings: 321 <i>Survey date: THURSDAY 19/09/19</i>		
	<i>Survey Type: MANUAL</i>		
42	NF-03-M-15	MIXED HOUSES & FLATS	NORFOLK
	ATLANTIC AVENUE NORWICH SPROWSTON Edge of Town Residential Zone Total No of Dwellings: 762 <i>Survey date: TUESDAY 24/09/19</i>		
	<i>Survey Type: MANUAL</i>		
43	OX-03-M-01	MIXED HOUSES	OXFORDSHIRE
	WENMAN ROAD THAME  Edge of Town Industrial Zone Total No of Dwellings: 100 <i>Survey date: THURSDAY 28/06/18</i>		
	<i>Survey Type: MANUAL</i>		

LIST OF SITES relevant to selection parameters (Cont.)

44	SC-03-M-05	HOUSES & FLATS	SURREY
	HOLYWELL WAY		
	STAINES		
	STANWELL		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	52	
	Survey date: MONDAY	19/11/12	Survey Type: MANUAL
45	SC-03-M-06	HOUSES & FLATS	SURREY
	ST ANNE'S DRIVE		
	REDHILL		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	500	
	Survey date: WEDNESDAY	11/12/13	Survey Type: MANUAL
46	SC-03-M-07	HOUSES/FLATS	SURREY
	EPSOM ROAD		
	GUILDFORD		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	199	
	Survey date: THURSDAY	24/10/13	Survey Type: MANUAL
47	SC-03-M-08	MIXED HOUSES & FLATS	SURREY
	CHOBHAM LANE		
	LONGCROSS		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	107	
	Survey date: TUESDAY	12/11/19	Survey Type: MANUAL
48	SM-03-M-01	DETACHED & TERRACED HOUSES	SOMERSET
	MILTON HILL		
	TAUNTON		
	MONKTON HEATHFIELD		
	Neighbourhood Centre (PPS6 Local Centre)		
	Village		
	Total No of Dwellings:	135	
	Survey date: WEDNESDAY	26/09/18	Survey Type: MANUAL
49	TW-03-M-01	DETACHED & BUNGALOWS	TYNE & WEAR
	WESTLANDS		
	NEWCASTLE		
	CHAPEL HOUSE		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	27	
	Survey date: FRIDAY	13/11/15	Survey Type: MANUAL
50	TW-03-M-02	MIXED HOUSES & FLATS	TYNE & WEAR
	BENTON ROAD		
	NEWCASTLE UPON TYNE		
	Suburban Area (PPS6 Out of Centre)		
	Residential Zone		
	Total No of Dwellings:	108	
	Survey date: FRIDAY	19/10/18	Survey Type: MANUAL
51	WK-03-M-01	MIXED HOUSES & FLATS	WARWICKSHIRE
	BIRMINGHAM ROAD		
	STRATFORD UPON AVON		
	Edge of Town		
	Residential Zone		
	Total No of Dwellings:	395	
	Survey date: FRIDAY	29/06/18	Survey Type: MANUAL

LIST OF SITES relevant to selection parameters (Cont.)

52	WK-03-M-02 BISHOPTON LANE STRATFORD UPON AVON BISHOPTON Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: FRIDAY</i>	MIXED HOUSES      130 <i>29/06/18</i>	WARWICKSHIRE	<i>Survey Type: MANUAL</i>
53	WK-03-M-03 STOCKTON ROAD LONG ITCHINGTON  Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	MIXED HOUSES     124 <i>27/06/18</i>	WARWICKSHIRE	<i>Survey Type: MANUAL</i>
54	WL-03-M-03 WARNEFORD CRESCENT NEAR SALISBURY LONGHEDGE Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: <i>Survey date: TUESDAY</i>	MIXED HOUSES & FLATS     260 <i>09/10/18</i>	WILTSHIRE	<i>Survey Type: MANUAL</i>
55	WM-03-M-01 MEADOWSWEET AVENUE BIRMINGHAM KINGS NORTON Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: MONDAY</i>	SEMI DETACHED     56 <i>09/11/15</i>	WEST MIDLANDS	<i>Survey Type: MANUAL</i>
56	WS-03-M-04 SUMMERSDALE ROAD CHICHESTER  Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	HOUSES & FLATS     214 <i>08/05/14</i>	WEST SUSSEX	<i>Survey Type: MANUAL</i>
57	WS-03-M-05 ELLIS ROAD WEST HORSHAM S BROADBRIDGE HEATH Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: THURSDAY</i>	MIXED HOUSING     92 <i>23/10/14</i>	WEST SUSSEX	<i>Survey Type: MANUAL</i>
58	WS-03-M-06 SOUTHFIELDS CLOSE CHICHESTER  Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: TUESDAY</i>	SEMI DETACHED/DETACHED     67 <i>27/01/15</i>	WEST SUSSEX	<i>Survey Type: MANUAL</i>
59	WS-03-M-07 ROSE GREEN ROAD BOGNOR REGIS ALDWICK Edge of Town Residential Zone Total No of Dwellings: <i>Survey date: WEDNESDAY</i>	HOUSES & FLATS     90 <i>05/03/14</i>	WEST SUSSEX	<i>Survey Type: MANUAL</i>

LIST OF SITES relevant to selection parameters (Cont.)

60	WS-03-M-12	HOUSES & FLATS UPPER SHOREHAM ROAD SHOREHAM BY SEA	WEST SUSSEX
		Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 192 <i>Survey date: WEDNESDAY 27/04/16</i>	<i>Survey Type: MANUAL</i>
61	WS-03-M-13	TERRACED & FLATS IRENE AVENUE WORTHING LANCING	WEST SUSSEX
		Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 23 <i>Survey date: TUESDAY 21/06/16</i>	<i>Survey Type: MANUAL</i>
62	WS-03-M-16	MIXED FLATS & HOUSES BROYLE ROAD CHICHESTER	WEST SUSSEX
		Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 252 <i>Survey date: WEDNESDAY 21/03/18</i>	<i>Survey Type: MANUAL</i>
63	WS-03-M-17	MIXED HOUSES & FLATS STANE STREET CHICHESTER WESTHAMPNETT	WEST SUSSEX
		Neighbourhood Centre (PPS6 Local Centre) Village Total No of Dwellings: 99 <i>Survey date: WEDNESDAY 03/10/18</i>	<i>Survey Type: MANUAL</i>
64	WS-03-M-18	MIXED HOUSES & FLATS WESTLOATS LANE BOGNOR REGIS NORTH BERSTED	WEST SUSSEX
		Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 86 <i>Survey date: THURSDAY 17/10/19</i>	<i>Survey Type: MANUAL</i>
65	WS-03-M-19	MIXED HOUSES & FLATS ADLINGTON GARDENS BOGNOR REGIS	WEST SUSSEX
		Suburban Area (PPS6 Out of Centre) Residential Zone Total No of Dwellings: 32 <i>Survey date: THURSDAY 17/10/19</i>	<i>Survey Type: MANUAL</i>
66	WS-03-M-20	MIXED HOUSES & FLATS OLD GUILDFORD ROAD HORSHAM BROADBRIDGE HEATH	WEST SUSSEX
		Neighbourhood Centre (PPS6 Local Centre) Residential Zone Total No of Dwellings: 121 <i>Survey date: THURSDAY 24/10/19</i>	<i>Survey Type: MANUAL</i>
67	WS-03-M-21	MIXED HOUSES CLAPPERS LANE BRACKLESHAM BAY	WEST SUSSEX
		Edge of Town Residential Zone Total No of Dwellings: 57 <i>Survey date: THURSDAY 14/11/19</i>	<i>Survey Type: MANUAL</i>
68	WY-03-M-01	SEMI DETACHED & FLATS HOLMEFIELD VIEW BRADFORD	WEST YORKSHIRE
		Edge of Town Residential Zone Total No of Dwellings: 31 <i>Survey date: THURSDAY 14/03/19</i>	<i>Survey Type: MANUAL</i>

*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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING  
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	68	142	0.086	68	142	0.286	68	142	0.372
08:00 - 09:00	68	142	0.120	68	142	0.352	68	142	0.472
09:00 - 10:00	68	142	0.130	68	142	0.167	68	142	0.297
10:00 - 11:00	68	142	0.119	68	142	0.136	68	142	0.255
11:00 - 12:00	68	142	0.131	68	142	0.138	68	142	0.269
12:00 - 13:00	68	142	0.141	68	142	0.133	68	142	0.274
13:00 - 14:00	68	142	0.139	68	142	0.140	68	142	0.279
14:00 - 15:00	68	142	0.134	68	142	0.165	68	142	0.299
15:00 - 16:00	68	142	0.239	68	142	0.165	68	142	0.404
16:00 - 17:00	68	142	0.250	68	142	0.153	68	142	0.403
17:00 - 18:00	68	142	0.318	68	142	0.159	68	142	0.477
18:00 - 19:00	68	142	0.282	68	142	0.157	68	142	0.439
19:00 - 20:00	1	119	0.126	1	119	0.008	1	119	0.134
20:00 - 21:00	1	119	0.101	1	119	0.017	1	119	0.118
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			2.316			2.176			4.492

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

## Parameter summary

Trip rate parameter range selected: 9 - 762 (units: )  
Survey date range: 01/01/12 - 14/11/19  
Number of weekdays (Monday-Friday): 100  
Number of Saturdays: 0  
Number of Sundays: 0  
Surveys automatically removed from selection: 13  
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-236601-200501-0531

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 03 - RESIDENTIAL  
 Category : M - MIXED PRIVATE/AFFORDABLE HOUSING  
 VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	ES EAST SUSSEX	1 days
	HC HAMPSHIRE	1 days
	SC SURREY	1 days
04	EAST ANGLIA	
	NF NORFOLK	3 days
06	WEST MIDLANDS	
	WK WARWICKSHIRE	1 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

Primary Filtering 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: No of Dwellings  
 Actual Range: 300 to 762 (units: )  
 Range Selected by User: 300 to 1874 (units: )

Parking Spaces Range: All Surveys Included

Parking Spaces per Dwelling Range: All Surveys Included

Bedrooms per Dwelling Range: All Surveys Included

Percentage of dwellings privately owned: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/12 to 29/09/19

*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
Wednesday	3 days
Thursday	1 days
Friday	2 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count	6 days
Directional ATC Count	1 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	7
--------------	---

*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	7
------------------	---

*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.*



Secondary Filtering selection:

Use Class:

C3 7 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:

1,001 to 5,000	1 days
5,001 to 10,000	3 days
10,001 to 15,000	2 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
25,001 to 50,000	1 days
50,001 to 75,000	2 days
125,001 to 250,000	3 days

*This data displays the number of selected surveys within stated 5-mile radii of population.*

Car ownership within 5 miles:

1.1 to 1.5	6 days
1.6 to 2.0	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:

Yes	5 days
No	2 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.*

PTAL Rating:

No PTAL Present	7 days
-----------------	--------

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	ES-03-M-11	MIXED HOUSES & FLATS	EAST SUSSEX
	HEMPSTEAD LANE HAILSHAM UPPER HORSEBRIDGE Edge of Town Residential Zone Total No of Dwellings: 354 <i>Survey date: WEDNESDAY 13/07/16</i>		
	<i>Survey Type: MANUAL</i>		
2	HC-03-M-06	HOUSES & FLATS	HAMPSHIRE
	HUNTS POND ROAD NEAR FAREHAM TITCHFIELD Edge of Town Residential Zone Total No of Dwellings: 328 <i>Survey date: WEDNESDAY 04/11/15</i>		
	<i>Survey Type: MANUAL</i>		
3	NF-03-M-10	MIXED HOUSES & FLATS	NORFOLK
	BURGH ROAD AYLSHAM  Edge of Town Residential Zone Total No of Dwellings: 300 <i>Survey date: FRIDAY 27/09/19</i>		
	<i>Survey Type: DIRECTIONAL ATC COUNT</i>		
4	NF-03-M-14	MIXED HOUSES & FLATS	NORFOLK
	NORWICH COMMON WYMONDHAM  Edge of Town Residential Zone Total No of Dwellings: 321 <i>Survey date: THURSDAY 19/09/19</i>		
	<i>Survey Type: MANUAL</i>		
5	NF-03-M-15	MIXED HOUSES & FLATS	NORFOLK
	ATLANTIC AVENUE NORWICH SPROWSTON Edge of Town Residential Zone Total No of Dwellings: 762 <i>Survey date: TUESDAY 24/09/19</i>		
	<i>Survey Type: MANUAL</i>		
6	SC-03-M-06	HOUSES & FLATS	SURREY
	ST ANNE'S DRIVE REDHILL  Edge of Town Residential Zone Total No of Dwellings: 500 <i>Survey date: WEDNESDAY 11/12/13</i>		
	<i>Survey Type: MANUAL</i>		
7	WK-03-M-01	MIXED HOUSES & FLATS	WARWICKSHIRE
	BIRMINGHAM ROAD STRATFORD UPON AVON  Edge of Town Residential Zone Total No of Dwellings: 395 <i>Survey date: FRIDAY 29/06/18</i>		
	<i>Survey Type: MANUAL</i>		

*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 03 - RESIDENTIAL/M - MIXED PRIVATE/AFFORDABLE HOUSING  
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	7	423	0.071	7	423	0.245	7	423	0.316
08:00 - 09:00	7	423	0.116	7	423	0.327	7	423	0.443
09:00 - 10:00	7	423	0.116	7	423	0.139	7	423	0.255
10:00 - 11:00	7	423	0.100	7	423	0.117	7	423	0.217
11:00 - 12:00	7	423	0.109	7	423	0.121	7	423	0.230
12:00 - 13:00	7	423	0.119	7	423	0.116	7	423	0.235
13:00 - 14:00	7	423	0.108	7	423	0.113	7	423	0.221
14:00 - 15:00	7	423	0.119	7	423	0.150	7	423	0.269
15:00 - 16:00	7	423	0.225	7	423	0.141	7	423	0.366
16:00 - 17:00	7	423	0.239	7	423	0.140	7	423	0.379
17:00 - 18:00	7	423	0.274	7	423	0.140	7	423	0.414
18:00 - 19:00	7	423	0.243	7	423	0.134	7	423	0.377
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
<b>Total Rates:</b>			1.839			1.883			3.722

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

## Parameter summary

Trip rate parameter range selected: 300 - 762 (units: )  
 Survey date range: 01/01/12 - 29/09/19  
 Number of weekdays (Monday-Friday): 11  
 Number of Saturdays: 0  
 Number of Sundays: 0  
 Surveys automatically removed from selection: 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.

**APPENDIX D.** Oving Road Survey Data – Vectos TA  
Extracts

## 6 TRIP GENERATION AND DISTRIBUTION

- 6.1 This section of the Transport Assessment describes how the trip generation and distribution of the proposed development has been calculated.

### Residential Vehicular Trip Rates - Background

- 6.2 As part of the strategic site allocation process, vehicular trip rates for each strategic site were agreed with West Sussex County Council (WSCC) and with the Highways Agency (HA). These agreed trip rates were used to undertake a transport study of strategic development options for the city and the impact of several sustainable transport measures. The report was commissioned by a collaborative working partnership between Chichester District Council, WSCC, the HA and several housing developers. This ensured a consistent approach between all of the potential housing sites under consideration.
- 6.3 Subsequently, it was suggested by the Parklands Residents Association that the agreed vehicular trip rates do not represent vehicle traffic in residential areas in Chichester. The residents requested that further evidence be provided to underpin the trip rate assumptions in the form of surveys at a representative housing development in Chichester.
- 6.4 It was agreed with WSCC that the housing area bounded by Oving Road to the north, the A27 to the east, Bognor Road to the south and Florence Road to the west would provide representative trip rates for Chichester as a whole and should be used to underpin the trip rate assumptions. It should be noted that the area does not contain local shops, employment or a local school and this would need to be considered when comparing trip rates for a new development that is likely to include internalisation of trips. The area is shown in **Figure 6.1**.

**Figure 6.1: Residential Trip Survey Area**



Surveyed Trip Rates

- 6.5 The survey data is presented at **Appendix T** for information.
- 6.6 A summary of the associated vehicular trip rates (based on 847 units within the area) is shown in **Table 6.1**.

**Table 6.1: Surveyed Trip Rates**

	Weekday AM Peak			Weekday PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
<b>Vehicle Trips</b>	98	232	330	251	139	390
<b>Trip Rate</b>	0.116	0.274	0.390	0.296	0.164	0.460



- 6.7 As previously described, the area does not contain local shops, employment or a local school and this needs to be considered when comparing trip rates for a new development that is likely to include internalisation of trips.
- 6.8 Based on our previous experience it is reasonable to apply a 10% reduction factor to account for internalisation for a mixed use site that will include a primary school, local shops and employment. The site benefits from being extremely close to Bishop Luffa secondary school, which will also reduce the number of vehicle trips to/from the site. It should be noted that Vectos has previously agreed up to a 17% reduction to account for internalisation at sites with a comparable mix of uses. Therefore a 10% reduction is robust.
- 6.9 A summary of the trip rates including the 10% reduction factor is shown in **Table 6.2**.

**Table 6.2: Surveyed Trip Rates including 10% Internalisation Reduction**

	Weekday AM Peak			Weekday PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
<b>Trip Rates</b>	0.104	0.247	0.351	0.266	0.148	0.414

- 6.10 In addition, the development on the Land West of Chichester will include a residential Travel Plan that aims to reduce single occupancy car trips by the promotion of sustainable travel measures. The surveyed site does not have a Travel Plan. Therefore it is reasonable to apply a further 5% reduction to account for the sustainable measures that will be promoted through the Travel Plan.
- 6.11 A summary of the trip rates including the 5% reduction factor is shown in **Table 6.3**.

**Table 6.3: Surveyed Trip Rates including 10% Internalisation and 5% Travel Plan Reduction**

	Weekday AM Peak			Weekday PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
<b>Trip Rates</b>	0.099	0.234	0.333	0.253	0.140	0.394

Comparison with Agreed Trip Rates

- 6.12 A comparison of the surveyed (including the internalisation and travel plan reductions) and agreed trip rates is provided in **Table 6.4**.

**Table 6.4 - Trip Rate Comparison**

	Weekday AM Peak			Weekday PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
<b>Agreed Trip Rates</b>	0.072	0.264	0.336	0.244	0.113	0.357
<b>Surveyed Trip Rates</b>	0.099	0.234	0.333	0.253	0.140	0.394
<b>Difference</b>	0.027	-0.030	-0.003	0.009	0.027	0.037

- 6.13 The comparison shows that the surveyed trip rates (including the internalisation and travel plan reductions) are marginally lower in the AM peak hour and marginally higher in the PM peak hour.
- 6.14 The associated vehicular trips for a development of 1,600 units is summarised in **Table 6.5**.

**Table 6.5 - Vehicle Trip Comparison**

	Weekday AM Peak			Weekday PM Peak		
	Arr	Dep	Total	Arr	Dep	Total
<b>Agreed Vehicles</b>	115	422	538	390	181	571
<b>Surveyed Vehicles</b>	158	375	533	405	225	630
<b>Difference</b>	43	-47	-5	15	44	59

- 6.15 The comparison shows that the use of the surveyed trips would result in 5 fewer trips two-way in the AM peak hour and 59 more trips two-way in the PM peak.
- 6.16 This demonstrates that the agreed trip rates are representative for Chichester and are acceptable for use in the assessment.
- 6.17 Notwithstanding the above, a sensitivity test has been included within **Section 8** of this report using the surveyed residential trips for the weekday PM peak hour, as shown in **Table 6.5**.

### **Trip Generation – Phase 1**

- 6.18 For Phase 1 of the development the trip generation has been based on the trip rates shown in **Table 6.6** below. These are the agreed trip rates from Table 6.4, without the application of a 10% reduction factor to account for internalisation. The reduction factor has not been applied for the Phase 1 scenario as the majority of the proposed employment use will not be delivered until Phase 2.





# Sky High

Count On Us

Client : Vectos

Project : L0806KS Chichester

Date : Thursday 03 July 2014





# Sky High

## Count On Us

Client: Vectos  
 Project: L0806KS Chichester  
 Site: Charles Avenue  
 Date: Thursday 03 July 2014

### Charles Avenue

	Northbound							Total	Southbound							Total
	Car	Lgv	Ogv1	Ogv2	Psv	Mc	Pc		Car	Lgv	Ogv1	Ogv2	Psv	Mc	Pc	
07:00	11	1	1	0	0	0	3	16	4	0	0	0	0	0	0	4
07:15	14	3	0	0	0	0	1	18	6	2	0	0	1	0	0	9
07:30	21	2	1	0	0	1	1	26	7	0	0	0	0	0	1	8
07:45	20	2	1	0	0	0	0	23	1	1	1	0	0	0	0	3
H/T total	66	8	3	0	0	1	5	83	18	3	1	0	1	0	1	24
08:00	22	1	2	0	0	0	1	26	8	0	0	0	0	0	0	8
08:15	21	1	0	0	0	0	2	24	16	2	1	0	0	0	1	20
08:30	27	1	1	0	0	1	3	33	6	0	0	0	1	0	0	7
08:45	20	1	0	0	0	0	3	24	11	0	0	0	0	0	2	13
H/T total	90	4	3	0	0	1	9	107	41	2	1	0	1	0	3	48
09:00	13	4	0	0	0	0	0	17	12	2	0	0	0	0	1	15
09:15	9	2	0	0	0	1	3	15	11	3	0	0	0	0	1	15
09:30	9	3	0	0	0	0	2	14	9	2	0	0	0	0	1	12
09:45	13	0	0	0	0	1	1	15	6	3	1	0	0	0	2	12
H/T total	44	9	0	0	0	2	6	61	38	10	1	0	0	0	5	54
10:00	10	0	0	0	0	1	3	14	11	1	2	0	1	0	2	17
10:15	11	1	0	0	0	0	1	13	9	1	0	0	0	1	1	12
10:30	15	3	0	0	0	0	1	19	13	3	0	0	0	0	1	17
10:45	13	2	2	0	0	0	0	17	4	2	1	0	0	0	0	7
H/T total	49	6	2	0	0	1	5	63	37	7	3	0	1	1	4	53
11:00	11	2	0	0	0	1	1	15	8	0	0	0	1	0	1	10
11:15	9	1	0	0	0	0	1	11	14	1	0	0	0	0	0	15
11:30	11	0	1	0	0	0	1	13	9	3	1	0	0	1	2	16
11:45	9	0	1	0	0	0	2	12	12	0	1	0	0	1	0	14
H/T total	40	3	2	0	0	1	5	51	43	4	2	0	1	2	3	55
12:00	13	1	0	0	0	1	0	15	9	0	0	0	0	1	1	11
12:15	15	2	0	0	0	1	0	18	14	2	0	0	1	0	2	19
12:30	10	4	0	0	0	0	0	14	10	1	0	0	0	1	2	14
12:45	4	0	0	0	0	0	0	4	9	3	0	0	0	2	1	15
H/T total	42	7	0	0	0	2	0	51	42	6	0	0	1	4	6	59
13:00	7	1	0	0	0	0	0	8	9	3	0	0	0	0	1	13
13:15	8	2	0	0	0	0	2	12	11	1	0	0	0	0	1	13
13:30	12	1	2	0	0	0	1	16	9	1	1	0	1	0	1	13
13:45	11	2	0	0	0	1	0	14	14	1	0	0	0	0	1	16
H/T total	38	6	2	0	0	1	3	50	43	6	1	0	1	0	4	55
14:00	8	1	0	0	0	1	0	10	7	2	0	0	0	0	2	11
14:15	9	1	0	0	0	0	2	12	15	1	1	0	0	1	1	19
14:30	17	2	1	0	0	0	0	20	15	1	0	0	1	0	0	17
14:45	20	2	0	0	0	0	3	25	10	2	0	0	0	1	1	14
H/T total	54	6	1	0	0	1	5	67	47	6	1	0	1	2	4	61
15:00	10	0	0	0	0	1	1	12	10	2	0	0	0	0	1	13
15:15	8	3	0	0	0	0	1	12	13	0	1	0	0	0	2	16
15:30	14	2	2	0	0	1	1	20	14	2	0	0	0	0	1	17
15:45	19	2	0	0	0	0	1	22	19	1	0	0	0	0	2	22
H/T total	51	7	2	0	0	2	4	66	56	5	1	0	0	0	6	68
16:00	14	2	0	0	0	0	1	17	15	0	0	0	1	1	3	20
16:15	12	2	0	0	0	0	0	14	11	3	0	0	0	1	2	17
16:30	13	2	0	0	0	0	0	15	17	7	0	0	0	1	1	26
16:45	9	1	0	0	0	0	0	10	17	4	1	0	0	0	2	24
H/T total	48	7	0	0	0	0	1	56	60	14	1	0	1	3	8	87
17:00	9	3	0	0	0	1	2	15	19	3	0	0	1	0	1	24
17:15	10	1	0	0	0	0	2	13	22	6	0	0	0	1	5	34
17:30	20	2	0	0	0	1	0	23	20	3	0	0	0	0	0	23
17:45	17	2	0	0	0	0	2	21	30	1	0	0	0	1	1	33
H/T total	66	8	0	0	0	2	6	72	91	13	0	0	1	2	7	114
18:00	17	0	0	0	0	1	3	21	22	2	0	0	0	0	2	26
18:15	19	1	0	0	0	0	0	20	24	2	0	0	1	0	1	28
18:30	18	0	0	0	0	0	2	20	11	2	0	0	0	1	2	16
18:45	13	2	0	0	0	0	2	17	18	3	0	0	0	0	2	23
H/T total	67	3	0	0	0	1	7	78	75	9	0	0	1	1	7	93
Total	645	74	15	0	0	15	56	805	591	85	12	0	10	15	58	771



# Sky High

## Count On Us

Client: Vectos  
 Project: L0806KS Chichester  
 Site: Windsor Road  
 Date: Thursday 03 July 2014

### Windsor Road

	Eastbound							Total	Westbound							Total
	Car	Lgv	Ogv1	Ogv2	Psv	Mc	Pc		Car	Lgv	Ogv1	Ogv2	Psv	Mc	Pc	
07:00	4	3	0	0	0	0	0	7	9	6	1	0	0	1	0	17
07:15	6	1	0	0	0	0	1	8	18	2	0	0	1	1	1	23
07:30	2	0	0	0	0	1	1	4	21	1	0	0	0	0	3	25
07:45	4	1	0	0	0	0	0	5	23	4	0	0	0	0	6	33
H/T total	16	5	0	0	0	1	2	24	71	13	1	0	1	2	10	98
08:00	9	3	0	0	0	0	0	12	19	1	0	0	0	0	5	25
08:15	17	0	0	0	0	1	0	18	28	3	0	0	0	0	1	32
08:30	5	1	0	0	0	0	0	6	36	0	0	0	1	1	7	45
08:45	13	1	0	0	0	0	0	14	14	1	0	0	0	0	8	23
H/T total	44	5	0	0	0	1	0	50	97	5	0	0	1	1	21	125
09:00	9	0	1	0	0	1	3	14	14	2	0	0	0	0	1	17
09:15	7	3	0	0	0	0	1	11	9	1	0	1	0	0	4	15
09:30	7	1	0	0	0	0	1	9	14	1	0	0	0	0	0	15
09:45	6	1	1	0	0	0	1	9	12	2	0	0	0	0	3	17
H/T total	29	5	2	0	0	1	6	43	49	6	0	1	0	0	8	64
10:00	9	0	1	0	0	1	0	11	12	1	3	0	1	0	2	19
10:15	13	2	0	0	0	0	0	15	16	1	1	0	0	0	0	18
10:30	10	4	0	0	0	0	1	15	9	0	0	0	0	1	2	12
10:45	16	0	0	0	0	0	0	16	7	2	0	0	0	0	1	10
H/T total	48	6	1	0	0	1	1	57	44	4	4	0	1	1	5	59
11:00	9	2	0	0	0	0	0	11	6	3	0	0	1	0	1	11
11:15	4	1	0	0	0	0	2	7	7	0	0	0	0	0	1	8
11:30	14	0	0	0	0	0	2	16	12	3	1	0	0	0	1	17
11:45	12	0	2	0	0	0	2	16	10	4	1	0	0	0	0	15
H/T total	39	3	2	0	0	0	6	50	35	10	2	0	1	0	3	51
12:00	12	1	0	0	0	0	0	13	11	1	0	0	0	0	0	12
12:15	9	3	0	0	0	0	0	12	15	1	0	0	1	0	0	17
12:30	9	1	0	0	0	0	1	11	11	1	0	0	0	0	1	13
12:45	10	1	0	1	0	0	0	12	5	1	0	1	0	1	2	10
H/T total	40	6	0	1	0	0	1	48	42	4	0	1	1	1	3	52
13:00	12	1	1	0	0	0	1	15	3	1	0	0	0	0	1	5
13:15	13	1	0	0	0	0	0	14	8	1	0	0	0	0	1	10
13:30	13	2	0	0	0	0	1	16	11	1	0	0	1	1	2	16
13:45	12	3	0	0	0	0	2	17	11	3	0	0	0	1	0	15
H/T total	50	7	1	0	0	0	4	62	33	6	0	0	1	2	4	46
14:00	6	1	0	0	0	0	0	7	10	3	0	0	0	0	1	14
14:15	15	3	0	0	0	0	2	20	9	1	1	0	0	0	0	11
14:30	14	2	0	0	0	0	0	16	12	2	0	0	1	1	0	16
14:45	9	4	0	1	0	1	1	16	16	2	0	0	0	0	1	19
H/T total	44	10	0	1	0	1	3	59	47	8	1	0	1	1	2	60
15:00	10	2	0	0	0	0	2	14	13	2	0	0	0	0	0	15
15:15	17	2	1	0	0	0	5	25	8	3	0	0	0	1	0	12
15:30	19	1	0	0	0	0	1	21	13	2	0	0	0	0	1	16
15:45	16	1	2	0	0	1	1	21	9	2	0	0	0	0	0	11
H/T total	62	6	3	0	0	1	9	81	43	9	0	0	0	1	1	54
16:00	9	3	1	0	0	0	2	15	16	1	0	0	1	0	1	19
16:15	24	1	0	0	0	0	4	29	9	1	0	0	0	0	2	12
16:30	25	4	1	0	0	0	1	31	6	2	1	0	0	0	0	9
16:45	20	4	1	0	0	0	1	26	12	0	1	0	0	0	2	15
H/T total	78	12	3	0	0	0	8	101	43	4	2	0	1	0	5	55
17:00	26	4	0	0	0	2	4	36	16	3	0	0	1	2	3	25
17:15	24	2	0	0	0	0	7	33	17	2	0	0	0	0	1	20
17:30	35	2	0	0	0	0	4	41	9	1	0	0	0	0	0	10
17:45	20	2	0	0	0	0	5	27	10	2	0	0	0	0	0	12
H/T total	105	10	0	0	0	2	20	137	52	8	0	0	1	2	4	67
18:00	28	1	0	0	0	0	2	31	25	3	0	0	0	0	2	30
18:15	18	3	0	0	0	0	1	22	19	2	0	0	0	0	1	22
18:30	15	3	0	0	0	1	1	20	16	1	0	0	1	0	1	19
18:45	15	1	0	0	0	1	0	17	18	3	0	0	0	0	0	21
H/T total	76	8	0	0	0	2	4	90	78	9	0	0	1	0	4	92
Total	631	83	12	2	0	10	64	802	634	86	10	2	10	11	70	823





Calculation Reference: AUDIT-236601-230227-0232

## TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 05 - HEALTH  
 Category : F - CARE HOME (ELDERLY RESIDENTIAL)  
 TOTAL VEHICLES

Selected regions and areas:

02	SOUTH EAST	
	SP SOUTHAMPTON	1 days
04	EAST ANGLIA	
	SF SUFFOLK	1 days
05	EAST MIDLANDS	
	NN NORTH NORTHAMPTONSHIRE	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE	
	NY NORTH YORKSHIRE	1 days
08	NORTH WEST	
	BP BLACKPOOL	1 days

*This section displays the number of survey days per TRICS® sub-region in the selected set*

## Primary Filtering 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: 17 to 60 (units: )  
 Range Selected by User: 17 to 180 (units: )

Parking Spaces Range: All Surveys Included

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/14 to 13/06/22

*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
Friday	1 days

*This data displays the number of selected surveys by day of the week.*

Selected survey types:

Manual count	5 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	5
--------------	---

*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
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.*

Inclusion of Servicing Vehicles Counts:

Servicing vehicles Included	2 days - Selected
Servicing vehicles Excluded	3 days - Selected

Secondary Filtering selection:

Use Class:

C2 5 days

*This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order (England) 2020 has been used for this purpose, which can be found within the Library module of TRICS@.*

Population within 500m Range:

All Surveys Included

Population within 1 mile:

5,001 to 10,000	1 days
10,001 to 15,000	1 days
15,001 to 20,000	1 days
25,001 to 50,000	2 days

*This data displays the number of selected surveys within stated 1-mile radii of population.*

Population within 5 miles:

25,001 to 50,000	1 days
75,001 to 100,000	1 days
125,001 to 250,000	2 days
250,001 to 500,000	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	1 days
1.1 to 1.5	4 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 5 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.*

PTAL Rating:

No PTAL Present 5 days

*This data displays the number of selected surveys with PTAL Ratings.*

LIST OF SITES relevant to selection parameters

1	BP-05-F-01 LYTHAM ROAD BLACKPOOL SQUIRES GATE Edge of Town Residential Zone Total Number of residents: <i>Survey date: TUESDAY</i>	NURSING HOME      31 27/09/16	BLACKPOOL       <i>Survey Type: MANUAL</i>
2	NN-05-F-01 MALHAM DRIVE KETTERING  Edge of Town No Sub Category Total Number of residents: <i>Survey date: MONDAY</i>	NURSING HOME      60 13/06/22	NORTH NORTHAMPTONSHIRE       <i>Survey Type: MANUAL</i>
3	NY-05-F-05 SEAGRIM CRESCENT RICHMOND  Edge of Town Residential Zone Total Number of residents: <i>Survey date: MONDAY</i>	NURSING HOME      37 04/03/19	NORTH YORKSHIRE       <i>Survey Type: MANUAL</i>
4	SF-05-F-01 COLCHESTER ROAD IPSWICH  Edge of Town Residential Zone Total Number of residents: <i>Survey date: FRIDAY</i>	CARE HOME      17 18/09/15	SUFFOLK       <i>Survey Type: MANUAL</i>
5	SP-05-F-01 BOTLEY ROAD SOUTHAMPTON  Edge of Town No Sub Category Total Number of residents: <i>Survey date: TUESDAY</i>	CARE HOME      42 24/11/15	SOUTHAMPTON       <i>Survey Type: MANUAL</i>

*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)

TOTAL 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	5	37	0.118	5	37	0.032	5	37	0.150
08:00 - 09:00	5	37	0.064	5	37	0.064	5	37	0.128
09:00 - 10:00	5	37	0.102	5	37	0.064	5	37	0.166
10:00 - 11:00	5	37	0.096	5	37	0.053	5	37	0.149
11:00 - 12:00	5	37	0.080	5	37	0.102	5	37	0.182
12:00 - 13:00	5	37	0.075	5	37	0.112	5	37	0.187
13:00 - 14:00	5	37	0.134	5	37	0.053	5	37	0.187
14:00 - 15:00	5	37	0.102	5	37	0.166	5	37	0.268
15:00 - 16:00	5	37	0.144	5	37	0.230	5	37	0.374
16:00 - 17:00	5	37	0.053	5	37	0.123	5	37	0.176
17:00 - 18:00	5	37	0.037	5	37	0.048	5	37	0.085
18:00 - 19:00	5	37	0.059	5	37	0.048	5	37	0.107
19:00 - 20:00	5	37	0.032	5	37	0.043	5	37	0.075
20:00 - 21:00	5	37	0.064	5	37	0.053	5	37	0.117
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			1.160			1.191			2.351

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.

The survey data, graphs and all associated supporting information, contained within the TRICS Database are published by TRICS Consortium Limited ("the Company") and the Company claims copyright and database rights in this published work. The Company authorises those who possess a current TRICS licence to access the TRICS Database and copy the data contained within the TRICS Database for the licence holders' use only. Any resulting copy must retain all copyrights and other proprietary notices, and any disclaimer contained thereon.

The Company accepts no responsibility for loss which may arise from reliance on data contained in the TRICS Database. [No warranty of any kind, express or implied, is made as to the data contained in the TRICS Database.]

#### Parameter summary

Trip rate parameter range selected:	17 - 60 (units: )
Survey date range:	01/01/14 - 13/06/22
Number of weekdays (Monday-Friday):	5
Number of Saturdays:	0
Number of Sundays:	0
Surveys automatically removed from selection:	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.





## APPENDIX 6

---



# Required Policy Amendments

---

Policy	Policy Wording	Our Comment
<p><b>A8: Land East of Chichester</b></p>	<p>Approximately 39 hectares of land at Land East of Chichester is allocated for a phased residential-led development comprising:</p> <ul style="list-style-type: none"> <li>• Development to include 680 dwellings, including ten suitable serviced plots to provide self/custom build housing;</li> <li>• Specialist accommodation for older persons, to include a component of care or support, of a form which is appropriate for the site;</li> <li>• A neighbourhood centre incorporating local shops, a community centre, flexible space for employment/ small-scale leisure uses and a one-form (expandable to two-form) entry primary school with provision for early years/ childcare and special educational needs and disability;</li> <li>• Provision of on-site public open space and play area;</li> <li>• Nine gypsy and traveller pitches, if there remains an outstanding need for pitches at the time of the determination of the planning application.</li> </ul> <p>Development of this site will need to accord with the following site-specific requirements:</p> <ol style="list-style-type: none"> <li>1. To be masterplanned and designed to provide for a high-quality form of development in accordance with the National Design Guide and any design code or guidance adopted or approved which is relevant to the site.</li> <li>2. Ensure that the new development is designed and laid out in order to form a sustainable extension to</li> </ol>	<p><b>Housing</b></p> <p>Amend first bullet point to, “<i>Development to include at least 680 dwellings...</i>”</p> <p>The final bullet point, related to meeting the need for gypsy and traveller pitches should cross-reference draft Policy H11 Meeting Gypsies, Travellers and Travelling Showpeoples’ Needs, which makes specific allowance for off-site provision where this is justified.</p> <p><b>Heritage assets</b></p> <p>The significance of nearby listed buildings are required to be conserved and enhanced by requirement 4. The requirement to enhance the assets’ historic significance goes beyond the policy requirement in the NPPF. Paragraph 190 states, “Plans should set out a positive strategy for the conservation and enjoyment of the historic environment...” There is no requirement to enhance significance and it is difficult to see how a development on site A8 could achieve this. Requirement 4 should be amended to remove the reference to enhancement.</p> <p><b>Landscaping and Ecology</b></p> <p>Regarding landscaping and requirement 6, as set out in the main report, the only requirement for the buffer to the SWC is that it is effective. It is unnecessary to use arbitrary terms “<i>substantial</i>” and “<i>significant</i>”. These should be removed.</p> <p>From an ecology perspective, we suggest amendments to site-specific requirement 8. The first sentence wording should be amended as follows:</p>

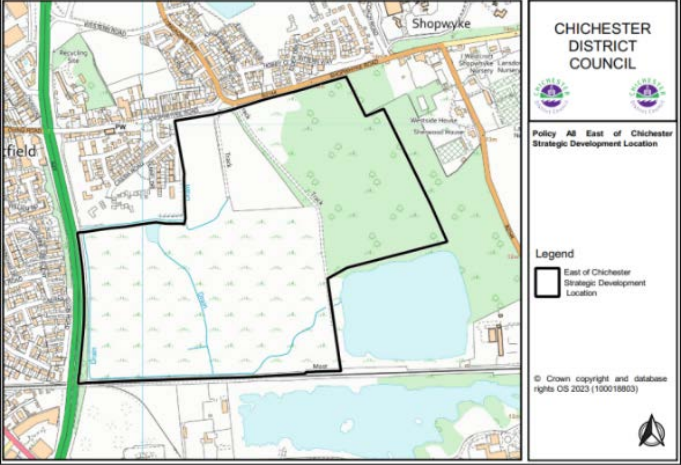
Policy	Policy Wording	Our Comment
	<p>Chichester, that is well integrated with neighbouring areas, providing good access routes to the city centre, key facilities and sustainable forms of transport;</p> <p>3. Ensure that key views, particularly of Chichester Cathedral spire, (and as identified via the masterplanning process, any relevant Landscape and Visual Impact Appraisal or the council's Landscape Capacity Study) are protected and that such views are considered as part of the design and layout of the proposed development in order to create attractive views and vistas, particularly from important public spaces;</p> <p>4. Conserve and enhance the historic significance of the listed Shopwyke Grange and the cluster of buildings associated with the grade II* listed Shopwhyke Hall which should be analysed at an early stage of the masterplan;</p> <p>5. Provision of on-site public open space, including allotments and play areas in accordance with Policy P15;</p> <p>6. Provide for appropriate hard and soft landscaping, including street trees, a substantial and effective buffer with significant planting to the strategic wildlife corridor on the eastern boundary of the site, and protect existing landscape features which are worthy of retention, in order to ensure the development is well integrated with its surroundings and successfully mitigates the impacts on the wider landscape character. The buffer to the corridor should ensure darkness and minimise disturbance in the wildlife corridor and ensure habitats and microclimates of</p>	<p><i>'Ensure that the design and layout <del>avoids</del> <u>minimises</u> harm to SAC designated species, section 41 priority species, other protected species and the existing habitat features within, and in the vicinity of the site, that support these species'</i></p> <p>Requirement 8 seeks to impose a restriction on proposed lighting as follows:</p> <p><i>' . . . Appropriate buffers, of sufficient width and landscaping design to reduce light levels down to a maximum of 0.2 lux in the horizontal plane and 0.4 lux in the vertical plane, will be required to the strategic wildlife corridor. . . '</i></p> <p>This is a relatively onerous restriction. Authorities in other areas with light-sensitive bats (e.g. Somerset) specify a restriction of 0.5 lux, which is more pragmatic.</p> <p>Requirement 10 is for sufficient mitigation to be in place <i>"to ensure no adverse effects on the integrity of Singleton and Cocking Tunnels SAC or any other European sites."</i> <i>"No adverse effects"</i> is not the threshold advocated by the NPPF (paragraph 179) which instead requires Local Plans to <i>"promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species..."</i> Paragraph 180 establishes the correct threshold, which is <i>"significant harm"</i>. Requirement 10 should be amended accordingly.</p> <p><b>Transport</b></p> <p>Site specific requirement 11 should be re-worded to conform with the requirements of the NPPF more closely, where mitigation can only be required where an impact is identified through transport assessment. Suggested alternative wording below:</p>

Policy	Policy Wording	Our Comment
	<p>the corridor continue to support a wide range of species and maintain connectivity;</p> <p>7. Ensure that green infrastructure provision is well related to the overall layout and character of the development and how it relates to its surroundings. This will include creating linkages throughout the site to the wider countryside, Tangmere and development at Shopwyke Lakes;</p> <p>8. Ensure that the design and layout avoids harm to SAC designated species, section 41 priority species, other protected species and the existing habitat features within, and in the vicinity of the site, that support these species. The design and layout should facilitate the achievement of biodiversity net gain and facilitates the creation of high levels of habitat connectivity within the site and to the adjacent strategic wildlife corridor and wider green infrastructure network. Appropriate buffers, of sufficient width and landscaping design to reduce light levels down to a maximum of 0.2 lux in the horizontal plane and 0.4 lux in the vertical plane, will be required to the strategic wildlife corridor, that includes the lake/water body, to reinforce its functionality and to include mitigation measures to minimise noise to reduce disturbance from the development. Buffers may contain appropriate unlit uses such as recreational use and SuDS provision</p> <p>9. Avoid and where relevant mitigate potential impacts on the Chichester Harbour SAC/SPA/Ramsar, including contributing to any strategic access management issues (including on-site mitigation where required as part of the</p>	<p><i>Provide safe and suitable access points for all users, including a vehicular access from Shopwhyke Road. Should significant impacts on the local highway network be identified through assessment, provide or fund mitigation for potential off-site traffic impacts through a package of measures in conformity with Policy T1 (Transport Infrastructure) and T2 (Transport and Development), which will include promoting sustainable transport options;</i></p> <p>Site specific requirement 16 is open-ended. Suggested alternative wording below:</p> <p><i>Where a significant impact is identified requiring mitigation, provide for infrastructure and community facilities in accordance with the most recent Infrastructure Delivery Plan;</i></p>

Policy	Policy Wording	Our Comment
	<p>Habitats Regulations Assessment), and potential for loss of functionally linked supporting habitat;</p> <p>10. Any development brought forward at this site will require a project level HRA to establish that adequate mitigation is in place in line with the submission of a planning application to ensure no adverse effects on the integrity of Singleton and Cocking Tunnels SAC or any other European sites.</p> <p>11. Provide safe and suitable access points for all users, including a vehicular access from Shopwhyke Road, and provide or fund mitigation for potential off-site traffic impacts through a package of measures in conformity with Policy T1 (Transport Infrastructure) and T2 (Transport and Development), which will include promoting sustainable transport options;</p> <p>12. Provide for improved sustainable travel modes and new improved cycle and pedestrian routes, including linkages with Chichester;</p> <p>13. Incorporate suitable noise mitigation measures into the design and layout to address impacts arising from the proximity of the site to the A27 and railway.</p> <p>14. A site-specific flood risk assessment should demonstrate that the development will be safe for its lifetime taking account of the vulnerability of its uses, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall. This should have regard to the measures identified in the Level 2 SFRA (2023). Flood mitigation measures and drainage features</p>	

Policy	Policy Wording	Our Comment
	<p>must be integrated into the development in a manner which facilitates the use of SuDs, the achievement of a high standard of design and layout, and supports biodiversity net gain;</p> <p>15. The development will need to be phased in such a manner as to ensure that sufficient wastewater disposal capacity is available to accommodate the requirements resulting from this development;</p> <p>16. Provide for infrastructure and community facilities in accordance with the most recent Infrastructure Delivery Plan;</p> <p>17. A satisfactory remediation strategy will need to be provided to address any pre-existing land (soil, gas and water) contamination on any existing or adjacent land in accordance with relevant guidance, see Land contamination risk management (LCRM) - GOV.UK;'</p> <p>18. Consider the implication of development on safeguarded minerals in line with the West Sussex Joint Minerals Local Plan (Policy M9) and Safeguarding Guidance, to assess whether the land contains economically viable minerals that would require extraction prior to development to avoid permanent sterilisation.</p> <p>19. Consider the implication of development on the safeguarded strategic waste allocation at the former Fuel Depot site, and other safeguarded waste management sites in the vicinity, to ensure development of the site does not prevent or prejudice the waste management uses, as</p>	



Policy	Policy Wording	Our Comment
	<p>required by Policies W2 and W10 of the West Sussex Waste Local Plan.</p> <p>Map 10.4 – Policy A8 East of Chichester</p> 	
<p><b>I1: Infrastructure Provision</b></p>	<p>The council will work with partner organisations to coordinate infrastructure provision to ensure that individual and cumulative development is supported by the timely provision of adequate infrastructure, facilities, and services. The Infrastructure Delivery Plan will be used to identify the timing and nature of infrastructure requirements to support the objectives and policies of the</p>	<p>A requirement to meet in-perpetuity costs of infrastructure and its maintenance is unlikely to meet policy tests. Suggest the following:</p> <p><i>To consider and meet as appropriate the <del>in-perpetuity</del> costs of infrastructure and arrangements for its future management and maintenance;</i></p>

Policy	Policy Wording	Our Comment
	<p>Plan as well as the main funding mechanisms and lead agencies responsible for their delivery.</p> <p>New development will be expected to provide for the on and off-site infrastructure, facilities and services required as a result of the development. Provision should be made in accordance with a phasing and implementation plan where necessary. All such requirements will be secured by way of condition or legal agreement.</p> <p>Development proposals will be permitted that:</p> <ol style="list-style-type: none"> <li>i. Make effective use of existing infrastructure, facilities, and services, including opportunities for co-location, sharing and multifunctional use of services and facilities;</li> <li>ii. Provide for the on and off-site infrastructure, facilities and services required as a result of the development;</li> <li>iii. Safeguard the requirements of infrastructure providers, including but not limited to: <ul style="list-style-type: none"> <li>o Renewable energy;</li> <li>o Gigabit-capable electronic communications networks;</li> <li>o Electricity power lines;</li> <li>o High pressure gas mains;</li> <li>o Educational facilities;</li> <li>o Health facilities;</li> <li>o Aquifer protection areas;</li> <li>o Highways and cycle lanes, and</li> <li>o Flood defences and SuDS infrastructure.</li> </ul> </li> </ol>	

Policy	Policy Wording	Our Comment
	<ul style="list-style-type: none"> <li>iv. Future-proof infrastructure provision to take account of the impacts of climate change such as flooding events from heavy rainfall, rivers and rising sea levels, increased drought, sustained and high wind speeds and extremes of temperature and water scarcity;</li> <li>v. To consider and meet as appropriate the in-perpetuity costs of infrastructure and arrangements for its future management and maintenance;</li> <li>vi. Agree a programme of delivery with the relevant infrastructure provider before development begins including coordination of financial and physical contributions;</li> <li>vii. Ensure new development benefits from gigabit-capable broadband infrastructure at the point of occupation;</li> <li>viii. Improve accessibility to necessary facilities and services by sustainable travel modes from the outset.</li> </ul>	
<p><b>T1: Transport Infrastructure</b></p>	<p>Integrated transport measures will be developed to mitigate the impact of planned development on the highways network, improve highway safety and air quality, promote more sustainable travel patterns and encourage increased use of sustainable modes of travel, such as public transport, cycling and walking.</p> <p>The council will work with National Highways, West Sussex County Council, other transport and service providers (including through the Traffic and Infrastructure</p>	<p>The following policy elements require further consideration. The timing of delivery of transport infrastructure on the A27 will be outside of the applicant's control. Emerging policy will require financial contributions (8.20/8.21) towards a wider package of A27 improvements which will discharge the applicant's obligation with regard delivery of transport infrastructure on the A27 and beyond this it would not be reasonable for the development to be held back due to the Council's failure to deliver.</p> <p>Reference in the policy to <i>"including applicants"</i> should be removed.</p>

Policy	Policy Wording	Our Comment
	<p>Management Group) and developers to provide a better integrated transport network and to improve accessibility to key services and facilities. All development is expected to demonstrate how it will support four key objectives to create an integrated transport network which will alleviate pressure on the road network, improve highway safety, encourage sustainable travel behaviours and help improve air quality, by:</p> <ul style="list-style-type: none"> <li>• Avoiding or reducing the need to travel by car;</li> <li>• Enabling access to sustainable means of travel, including public transport, walking and cycling;</li> <li>• Managing travel demand; and</li> <li>• Mitigating the impacts of travel by car.</li> </ul> <p>All parties, including applicants, are expected to support these objectives by:</p> <ol style="list-style-type: none"> <li>1. Ensuring that new development is well located and designed to avoid or minimise the need for travel, encourages the use of sustainable modes of travel as an alternative to the private car and provides or contributes towards new or improved transport infrastructure;</li> <li>2. Working with relevant providers to improve accessibility to key services and facilities and to ensure that new facilities are easily accessible by sustainable modes of travel;</li> </ol>	<p>In the alternative, point 4 should be separated out as a council-only policy, on the basis that it is not within the applicant’s control to deliver.</p> <p>Point 5 could be reworded as follows:</p> <p style="padding-left: 40px;"><i>5. Phasing the delivery of new transport infrastructure agreed through the Transport Assessment process to align with development phases with triggers identified based on the outcomes of monitoring travel demand. It may also be necessary to proactively phase development to take into account the monitoring and effectiveness of travel plans to encourage sustainable travel behaviour.</i></p> <p>Point 7 should remove reference to A27 improvements and be reworded to reflect potential for mitigation through active travel mode improvements. Suggested rewording as follows:</p> <p style="padding-left: 40px;"><i>7. Delivering a coordinated package of infrastructure improvements as identified through the monitor and manage process. These will increase opportunities for active travel mode use, reduce traffic congestion, improve safety and air quality, and improve access to Chichester city by all modes from surrounding areas.</i></p>

Policy	Policy Wording	Our Comment
	<ol style="list-style-type: none"> <li>3. Targeting investment to provide local travel options as an alternative to the car, focusing on the delivery of improved integrated bus and train services, and improved pedestrian and cycling networks, including the public rights of way network, based on the routes and projects identified in the Local Transport Plan, Local Cycling and Walking Infrastructure Plan (LCWIP) and the Infrastructure Delivery Plan;</li> <li>4. Planning to achieve the timely delivery of transport infrastructure on the A27 and elsewhere on the network, needed to support new housing, employment and other development identified in this plan;</li> <li>5. Phasing the delivery of new development to align with the provision of new transport infrastructure and the outcomes of monitoring travel demand. It may also be necessary to proactively phase development to take into account the monitoring and effectiveness of travel plans to encourage sustainable travel behaviour;</li> <li>6. Using demand management measures, such as travel plans, to manage travel demand and minimise the need for new or improved transport infrastructure as part of the monitor and manage process.</li> <li>7. Delivering a coordinated package of infrastructure improvements to junctions on the A27 Chichester Bypass along with other small-scale junction improvements within the city and elsewhere, as identified through the monitor and manage process. These will increase road capacity, reduce traffic congestion,</li> </ol>	

Policy	Policy Wording	Our Comment
	<p>improve safety and air quality, and improve access to Chichester city from surrounding areas.</p> <p>Opportunities to secure funding to implement this package of improvements (in relation to criterion 7) will be maximised by working proactively with government agencies including National Highways and Homes England, other public sector organisations and private investors. Developer contributions from new development will also be sought from all new housing development that is not yet subject to planning permission, in accordance with the per dwelling contribution as set out in paragraphs 8.20 to 8.21.</p> <p>The Community Infrastructure Levy may be used to contribute towards the cost of improvements to the local transport network. New development may also be required to deliver or contribute towards specific transport improvements directly related to the development.</p> <p>The following routes are safeguarded (as shown in the Transport Study 2023) to ensure that the A27 improvements can be delivered, unless it can be demonstrated that they are no longer required:</p> <ul style="list-style-type: none"> <li>• A259 Cathedral Way/ Terminus Road Link</li> </ul>	



Policy	Policy Wording	Our Comment
	<ul style="list-style-type: none"> <li>• A259 Bognor Road/ Vinnetrow Road Link</li> </ul>	
<p><b>NE4: Strategic Wildlife Corridors</b></p>	<p>Development will only be permitted where it would not lead to an adverse effect upon the ecological value, function, integrity and connectivity of the strategic wildlife corridors.</p> <p>Development proposals within strategic wildlife corridors will only be granted where it can be demonstrated that:</p> <ol style="list-style-type: none"> <li>1. There are no sequentially preferable sites available outside the wildlife corridor; and</li> <li>2. The development will not have an adverse impact on the integrity and function of the wildlife corridor and protects and enhances its features and habitats.</li> </ol> <p>Development proposals outside, but in close proximity to the strategic wildlife corridor will be acceptable where it can be demonstrated that:</p> <ol style="list-style-type: none"> <li>a. The development will not have an adverse impact on the integrity and function of the wildlife corridor; and</li> <li>b. The proposal will not undermine the connectivity and ecological value of the corridor.</li> </ol> <p>All proposals for new development (with the exception of householder applications) within or in close proximity to</p>	<p>The requirement for new development adjacent to SWCs to “take opportunities available in order to extend and enhance those corridors” introduces uncertainty and conflict with draft Policy A8 (see main report, section 4). The final paragraph to NE4 should be deleted.</p> <p>The requirement in criterion 2 for development to “not have an adverse effect” is similar to Requirement 10 of draft Policy A8: “<i>no adverse effects</i>” is not the threshold advocated by the NPPF (paragraph 179) which instead requires Local Plans to “<i>promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species...</i>” Paragraph 180 establishes the correct threshold, which is “<i>significant harm</i>”. Criterion 2 should be amended accordingly.</p>

Policy	Policy Wording	Our Comment
	wildlife corridors should take opportunities available in order to extend and enhance those corridors.	
<p><b>NE5: Biodiversity and Biodiversity Net Gain</b></p>	<p>All development shall ensure the conservation, protection, enhancement and restoration of biodiversity, avoiding any adverse impact on the condition and recovery of all types of nature conservation sites, habitats and species within their ecological networks including:</p> <ul style="list-style-type: none"> <li>A. Internationally designated sites (SPA, SAC, Ramsar)</li> <li>B. Irreplaceable habitats, including ancient woodland and ancient or veteran trees</li> <li>C. Nationally designated sites, such as Sites of Special Scientific Interest (SSSI), National Nature Reserves (NNR) and Marine Conservation Zones (MCZ)</li> <li>D. Riverine and Marine Habitats</li> <li>E. Priority Habitats and Species</li> <li>F. Biodiversity Opportunity Areas (BOA)/ Nature Recovery Networks (NRN)</li> <li>G. Locally designated sites, such as local wildlife sites and Local Nature Reserves</li> <li>H. Wildlife corridors and stepping-stones</li> </ul> <p>Opportunities to conserve, protect, enhance and recover biodiversity and contribute to wildlife and habitats connectivity will be undertaken, including the preservation, restoration and recreation of priority habitats, ecological</p>	<p>Point 1d refers to a worst-case scenario of developments providing BNG by purchasing credits for through the national biodiversity credit scheme. The policy wording should also allow for off-site BNG provision to be delivered on land outside of the LPA area that is controlled by applicants or other landowners, or for a solution to be delivered via a BNG broker.</p> <p>Similarly to draft Policies A8 and NE4, the requirement to avoid “any adverse impact” is more onerous than the NPPF threshold for refusal of planning permission which is “significant harm”. NE5 should be amended accordingly.</p> <p>We suggest that the criteria for permitting development proposals should be amended as follows:</p> <p><i>(1.c) Net gain should be provided on-site in the first instance, and then locally off-site (as close as possible to the development site, or if that is not possible, elsewhere within Chichester District or the South Coast Plain NCA) where it should contribute towards strategic networks such as green infrastructure, wildlife corridors or nature recovery networks.</i></p>

Policy	Policy Wording	Our Comment
	<p>networks and the protection and recovery of priority species populations.</p> <p>Development proposals will be permitted where it can be demonstrated that the following criteria have been met:</p> <ol style="list-style-type: none"> <li>1. Development proposals adhere to the NPPF mitigation hierarchy, and in addition, demonstrate that proposals provide a minimum of 10% net gain in biodiversity against a pre-development baseline[19]: <ol style="list-style-type: none"> <li>a. For major development of 10 or more dwellings or on sites of 0.5 hectares or more, the most recent national Biodiversity Metric will be used to calculate biodiversity net gain;</li> <li>b. For minor development of 1 – 9 dwellings or on sites of less than 0.5 hectares the Small Sites Metric (or future equivalent) will be applied;</li> <li>c. Net gain should be provided on-site in the first instance, and then locally off-site (as close as possible to the development site, or if that is not possible, elsewhere within Chichester District) where it should contribute towards strategic networks such as green infrastructure, wildlife corridors or nature recovery networks;</li> <li>d. Where appropriate, as a last resort, and with the agreement of the local planning authority that on or local off-site provision is not possible, applicants will be required to purchase credits for biodiversity gain through the national biodiversity credit scheme;</li> </ol> </li> </ol>	

Policy	Policy Wording	Our Comment
	<ul style="list-style-type: none"> <li>e. Development will provide for the long-term management of biodiversity features retained and enhanced within the site or for those features created off-site, for a minimum period of 30 years through planning obligations; and</li> <li>f. Designated sites and irreplaceable habitats are excluded from net gain metrics as they are irreplaceable. Proposals which may impact these sites will be required to satisfy the legislative tests as set out in Section 3 below.</li> </ul> <p>2. Development proposals should be accompanied by a biodiversity appraisal that assesses the level of existing ecological value of the site through adequate and proportionate information, and demonstrates that any adverse impacts are avoided or reduced in line with the mitigation hierarchy through an avoidance or mitigation plan:</p> <ul style="list-style-type: none"> <li>a. Where an adverse impact on biodiversity is unavoidable, and no other option is available, this will only be supported where it has been demonstrated that the impact has been minimised as far as possible and, as a last resort, appropriate compensation provided for any remaining adverse impacts;</li> <li>b. Opportunities to conserve, protect and enhance biodiversity and contribute to wildlife and habitats connectivity should be undertaken, including the preservation, restoration and recreation of priority habitats, ecological networks and the protection and recovery of priority species populations.</li> </ul>	

Policy	Policy Wording	Our Comment
	<p>3. Development proposals that will have an impact on international, national, locally designated and irreplaceable habitats will be required to meet the following requirements:</p> <ul style="list-style-type: none"> <li>a. Internationally Protected Sites (as shown on the policies map), including SPAs, SACs and Ramsar sites, or candidate and formally proposed versions of these designations: <ul style="list-style-type: none"> <li>i. Development proposals with the potential to impact on one or more international site(s) will be subject to a HRA to determine the potential for likely significant effects. Where likely significant effects may occur, development proposals will be subject to Appropriate Assessment.</li> </ul> </li> <li>b. Nationally Protected Sites (as shown on the policies map), including SSSIs, NNRs, MCZs: <ul style="list-style-type: none"> <li>i. Development proposals considered likely to have a significant effect on nationally protected sites will be required to assess the impact by means of an EIA;</li> <li>ii. Development proposals should avoid impacts on these nationally protected sites. Development proposals where any adverse effect on the site's notified special interest is likely and which cannot be either avoided or adequately mitigated will be refused, unless the benefits of the development at this site clearly outweigh</li> </ul> </li> </ul>	

Policy	Policy Wording	Our Comment
	<p>the likely impact to the notified features of the site and any broader impacts on the network of nationally protected sites.</p> <ul style="list-style-type: none"> <li>c. Irreplaceable habitats including ancient woodland (as shown on the policies map), and veteran trees: <ul style="list-style-type: none"> <li>i. Development proposals which result in the loss or deterioration of irreplaceable habitats, including ancient woodland and veteran trees, will be refused unless there are wholly exceptional reasons and a suitable compensation strategy exists.</li> </ul> </li>   <li>d. Locally protected sites, including local wildlife sites, and Local Nature Reserves (as shown on the policies map): <ul style="list-style-type: none"> <li>i. Development proposals considered likely to have a significant impact on local sites will be required to assess the impact by means of an Ecological Impact Assessment;</li> <li>ii. Development proposals that will result in any adverse effect on the integrity of any local site which cannot be either avoided or adequately mitigated, will be refused, unless exceptional circumstances outweighing the adverse impacts are clearly demonstrated.</li> </ul> </li>   <li>e. Outside of designated sites: <ul style="list-style-type: none"> <li>i. Development proposals should identify and incorporate opportunities to conserve, restore and recreate priority habitats and ecological networks. Development proposals should take opportunities to contribute and</li> </ul> </li> </ul>	



Policy	Policy Wording	Our Comment
	<p>deliver on the aims and objectives of the relevant biodiversity strategies where possible.</p>	
<p><b>NE8: Trees, Hedgerows and Woodlands</b></p>	<p>Development proposals will be granted where it can be demonstrated that all the following criteria have been met:</p> <ol style="list-style-type: none"> <li>1. Proposals conserve and, where appropriate, enhance existing valued and protected trees, hedgerows and woodlands;</li> <li>2. Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and trees; veteran trees; protected trees, groups of trees and woodland and hedgerows) should be refused unless there are wholly exceptional reasons and a suitable compensation strategy in accordance with relevant legislation, policy and guidelines;</li> <li>3. Loss or damage of woodland and hedgerows that are priority habitats and non-protected but valued trees, woodland, community orchards, and all hedgerows should be avoided, and if demonstrated as being unavoidable, appropriate mitigation measures provided;</li> <li>4. Proposals should maximise opportunities for planting of new trees, woodlands and hedgerows to contribute to biodiversity net gain, green infrastructure and nature recovery strategies and networks. In addition, proposals will be required to plant two trees for each one lost through development; provide new planting to thicken existing hedgerows, and fill in all gaps in all hedgerows;</li> </ol>	<p>Part 2 of Policy NE8 states:  <i>'Development resulting in the loss or deterioration of irreplaceable habitats (such as ancient woodland and trees; veteran trees; protected trees, groups of trees and woodland and hedgerows) should be refused unless there are wholly exceptional reasons. . .'</i></p> <p>The features highlighted above are <u>not</u> irreplaceable habitats – reference to these features should be removed from this sentence.</p>

Policy	Policy Wording	Our Comment
	<ol style="list-style-type: none"> <li>5. Proposals should have a minimum buffer zone of 15 metres from the boundary of ancient woodland or veteran trees to avoid root damage (known as the root protection area);</li> <li>6. All major development proposals will be required to provide street tree planting;</li> <li>7. Development proposals must demonstrate that appropriate protection measures are in place prior to any work on site and throughout the development process as part of a tree protection plan;</li> <li>8. Suitable opportunities for the restoration, enhancement or planting of trees, woodland, and hedgerows are identified and incorporated into a comprehensive landscaping plan; and</li> <li>9. Where appropriate, the council will seek minimum five-year maintenance and management plans to accompany the soft landscaping proposals.</li> <li>10. Trees proposed for landscaping and replacement planting should be selected from a diverse range and variety of native species to help provide long-term resilience to pests, diseases and climate change.</li> </ol> <p>The council will consider development proposals against the requirements and standards contained in legislation as well as current local and national guidance and practice.</p>	

Policy	Policy Wording	Our Comment
<p><b>NE15 Flood Risk and Water Management</b></p>	<p>Flood and erosion risk will be taken into account at all stages of the planning process to avoid inappropriate development in areas at current or future risk of flooding, from any source. Development will be directed to areas of lowest flood risk applying the sequential test and where relevant the exception test. The starting point for application of the sequential test will be the latest Chichester Strategic Flood Risk Assessment (SFRA) (which includes a sequential test methodology).</p> <p>Development should not increase the risk of flooding elsewhere, taking into account the cumulative effects of other development, and should seek to achieve a reduction in flood risk for existing communities on and off site.</p> <p>Where development is necessary in a location at risk of flooding, and has passed the sequential test, then the exception test must also be passed.</p> <p>Around the coast, including the harbours, new buildings should be set back at least 25 metres in line with Policy NE12 (Development Around the Coast).</p> <p>Elsewhere, new development should be set back at least 8m from fluvial watercourses and 16 m from tidal</p>	<p>Policy NE15 should be amended to make clear that the Sequential Test need not be applied to strategic allocations as the test will already have been carried out by the LPA via the SFRA.</p>

Policy	Policy Wording	Our Comment
	<p>watercourses to allow easy access for maintenance and repair.</p> <p>All development proposals must demonstrate that:</p> <ol style="list-style-type: none"> <li>1. New site drainage systems are designed to cope with events that exceed the normal design standard, such as by considering flood flow routing and using temporary storage areas;</li> <li>2. There is no increase in either the volume or rate of surface water run-off leaving the site. Where development is on a brownfield site, run off rates should be reduced to match those of greenfield sites wherever possible; and</li> <li>3. Development would not result in or exacerbate coastal squeeze of any European site or prevent managed realignment necessary to protect the European sites.</li> <li>4. For vulnerable development, finished floor levels should be no lower than: <ul style="list-style-type: none"> <li>o 300mm above average ground level of the site</li> <li>o 300mm above the adjacent road level to the building</li> <li>o 300mm above predicted significant fluvial/tidal flood level (Fluvial 1 in 100year / Tidal 1 in 200year plus latest climate change allowances) for the lifetime of the development.</li> </ul> </li> </ol> <p>Construction materials that have low permeability up to at least the same height as finished floor levels should be used. If it is not practical to raise floor levels to those specified above, consultation with the Environment Agency</p>	

Policy	Policy Wording	Our Comment
	<p>will be required to determine alternative approaches. This includes replacement dwellings.</p> <p>Sustainable Drainage Systems should be designed into the landscape of all major development, and all development that needs a site-specific flood risk assessment; in order to reduce surface water flow, to provide flood mitigation and improve water quality. Clear and funded management arrangements must be in place for the lifetime of the development. The use of SuDs on smaller sites is encouraged.</p> <p>Site-specific flood risk assessments will be required for all relevant proposals as set out in the NPPF and the Planning Practice Guidance and/or relevant guidance issued by the Environment Agency and LLFA. Development will only be allowed in flood risk affected areas where, in light of this assessment, and the sequential and exception tests as applicable, it is clear that:</p> <ol style="list-style-type: none"> <li>a. The proposal addresses the specific requirements of the site, including adaptation and mitigation measures to reduce flood risk, locating the most vulnerable uses in the area of the site with lowest flood risk, and where a residual flood risk remains, incorporates protection, resilience and resistance measures which are appropriate to the character and biodiversity of the area;</li> <li>b. The development will be safe, including access and egress, without increasing the flood risk elsewhere, and where possible, will reduce flood risk overall. A site-</li> </ol>	

Policy	Policy Wording	Our Comment
	<p>specific flood warning and evacuation plan will be required where residual flood risk remains;</p> <p>c. In the event of a flood the development could be quickly brought back into use without significant refurbishment;</p> <p>d. The development would not constrain the natural function of the flood plain, either by impeding flood flow or reducing storage capacity, and that consideration has been given to opportunities for natural flood management.</p> <p>e. Where strategic flood defence or adaptation measures are necessary within the site, these are designed as an intrinsic part of the scheme.</p> <p>All development proposals must take account of relevant Strategic Flood Risk Assessments, Surface and Foul Water Drainage SPD, relevant Surface Water Management Plans, South East River Basin Management Plan, Catchment Flood Management Plans, Shoreline Management Plans, The Marine Plan South, Coastal Defence Strategies, Flood Risk Management Plans and any other related flood defence plans and strategies as well as national guidance.</p>	
<p><b>Policy NE16</b> <b>Water</b> <b>Management and</b> <b>Water Quality</b></p>	<p><b>Water Supply</b></p> <p>Development proposals will be permitted that demonstrate:</p> <p>a. Sufficient water supplies can be provided prior to occupation to serve the development and;</p>	<p>Regarding “Water Quality and Wastewater”, it may not be possible in all cases to demonstrate no adverse impact on the quality of water bodies, surface water and groundwater. As such, suggest rewording to say development proposals will “minimise harm” rather than have “no adverse impact”.</p>



Policy	Policy Wording	Our Comment
	<p>b. Provision of a water supply is not considered detrimental to existing abstractions, river flows, water quality, fisheries, amenity or nature conservation.</p> <p><b>Water Efficiency</b></p> <p>All new residential proposals must demonstrate that a maximum water consumption of 110 litres per person per day including external water use will be achieved, and lower water use will be encouraged. A tighter target applies to development in the Sussex North Water Resource Zone as set out in policy NE17.</p> <p>a. Water efficiency of non-residential uses will be assessed using the BREEAM New Construction Standard and should achieve at least 3 credits.</p> <p>b. In addition to improving water efficiency, water neutrality will be required for all development in Southern Water's Supply Zone North in line with Policy NE17 and encouraged elsewhere in the plan area. This is likely to require offsetting of water use.</p> <p><b>Water Quality and Wastewater:</b></p> <p>Development proposals will be permitted that demonstrate:</p>	

Policy	Policy Wording	Our Comment
	<p>a. the development has no adverse impact on the quality of water bodies and groundwater, nor will it prevent future attainment of favourable conservation status, taking into account agreed mitigation measures where necessary;</p> <p>b. the development contributes positively to the water environment and its ecology and does not adversely affect surface and ground water quality;</p> <p>c. no surface water from new development will be discharged to the public foul or combined sewer system;</p> <p>d. development is phased to align with the delivery of new or improved wastewater infrastructure where this is required;</p> <p>e. the provision of water infrastructure is not considered detrimental to the water environment, including existing abstractions, river flows, water quality, fisheries, amenity and nature conservation;</p> <p>f. compliance with position statements that may be agreed with partners in relation to wastewater; and</p> <p>g. compliance with the Surface Water and Foul Drainage and Wastewater Management Supplementary Planning Document or future replacement.</p> <p><b>Residential development within the catchment of the Apuldram (Chichester) Wastewater Treatment Works</b></p> <p>Development in the catchment will be permitted that demonstrates:</p>	

Policy	Policy Wording	Our Comment
	<p>a. Through a drainage impact assessment, that the development complies with the principles set out in the latest Apuldram Position Statement.</p> <p>b. New development outside of the settlement boundaries of Chichester, Fishbourne and Stockbridge will not drain to the Apuldram WwTW.</p> <p>c. Major development (10+ dwellings) within the settlement boundaries of Chichester, Fishbourne and Stockbridge will result in no net increase in flows to the sewer network of the Apuldram WwTW.</p> <p>d. Minor development (1-9 dwellings) within the settlement boundaries of Chichester, Fishbourne and Stockbridge, may be able to connect but should seek to achieve no net increase in flows wherever possible.</p> <p><b>Residential development within the catchment of the Thornham Wastewater Treatment Works</b></p> <p>A drainage impact assessment should show that the development complies with the principles set out in the latest Thornham Position Statement.</p>	