Appendix A  Scoping Report and Correspondence
Rowden Park, Chippenham
Draft Scoping Report for Transport Assessment

On behalf of Crest Nicholson and Redcliffe Homes
Document Control Sheet

Project Name: Rowden Park, Chippenham
Project Ref: 20399/042
Report Title: Draft Scoping Report
Doc Ref: 20399/042/SR01v4.0
Date: 7 August 2014

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by:</td>
<td>Sarah White</td>
<td>Graduate Engineer</td>
<td>SW</td>
</tr>
<tr>
<td>Reviewed by:</td>
<td>Dale Harvey</td>
<td>Senior Technician</td>
<td>DH</td>
</tr>
<tr>
<td>Approved by:</td>
<td>Sarah Matthews</td>
<td>LLP Director</td>
<td>SM</td>
</tr>
</tbody>
</table>

For and on behalf of Peter Brett Associates LLP

<table>
<thead>
<tr>
<th>Revision</th>
<th>Date</th>
<th>Description</th>
<th>Prepared</th>
<th>Reviewed</th>
<th>Approved</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>12/11/13</td>
<td>Updated based on comments from WCC &amp; M4 J17 Impacts included</td>
<td>SW</td>
<td>DH</td>
<td>SM</td>
</tr>
<tr>
<td>2</td>
<td>21/05/14</td>
<td>Updated based on policy and proposal changes</td>
<td>SW</td>
<td>DH</td>
<td>SM</td>
</tr>
<tr>
<td>3</td>
<td>30/06/14</td>
<td>Updated based on comments from WCC</td>
<td>SW</td>
<td>DH</td>
<td>SM</td>
</tr>
<tr>
<td>4</td>
<td>07/08/14</td>
<td>Updated based on comments from WCC regarding proposed mode shift</td>
<td>SW</td>
<td>DH</td>
<td>SM</td>
</tr>
</tbody>
</table>

Peter Brett Associates LLP disclaims any responsibility to the Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence within the terms of the Contract with the Client and generally in accordance with the appropriate ACE Agreement and taking account of the manpower, resources, investigations and testing devoted to it by agreement with the Client. This report is confidential to the Client and Peter Brett Associates LLP accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

© Peter Brett Associates LLP 2014
Contents

1 Introduction .................................................................................................................. 1
  1.1 Background ........................................................................................................... 1
  1.2 The Site .................................................................................................................. 1

2 Transport Policy Considerations .................................................................................. 3
  2.1 Relevant Policies .................................................................................................... 3

3 Baseline Conditions & Accessibility to Key Services .................................................... 4
  3.1 Walking and Cycling .............................................................................................. 4
  3.2 Public Transport ................................................................................................... 6
  3.3 Highway .................................................................................................................. 9

4 Development Proposals ............................................................................................... 14
  4.1 Proposals .............................................................................................................. 14
  4.2 Sustainable Access Improvements ......................................................................... 15
  4.3 Vehicle Access ...................................................................................................... 19
  4.4 Parking ................................................................................................................. 21

5 Trip Generation, Distribution, Mode Share & Assignment .......................................... 24
  5.1 Trip Generation ..................................................................................................... 24
  5.2 Trip Distribution ................................................................................................... 26
  5.3 Mode Share ......................................................................................................... 26
  5.4 Reduction in Car Driver Trips to and from Chippenham Town Centre .................... 27
  5.5 Assignment ......................................................................................................... 37
  5.6 Framework Travel Plan ......................................................................................... 38

6 Assessment ................................................................................................................... 39
  6.1 Highways Assessment ........................................................................................... 39
  6.2 Junction Assessment ............................................................................................. 39
  6.3 Impact at M4 Junction 17 ..................................................................................... 39

7 Transport Proposals ..................................................................................................... 40
  7.1 Summary .............................................................................................................. 40

Figures

Figure 1-1: Site Location Plan ......................................................................................... 2
Figure 3-1: Local Facilities Plan ...................................................................................... 5
Figure 3-2: Existing Public Rights of Way and Cycle Routes ........................................... 6
Figure 3-3: Existing Bus Routes Serving South West Chippenham ................................ 8
Figure 3-4: Observed Queues in AM Peak Hour from the Chippenham PARAMICS Model ........................................................................................................ 10
Figure 3-5: Observed Queues in PM Peak Hour from the Chippenham PARAMICS Model ........................................................................................................ 11
Figure 3-6: Study Area .................................................................................................. 12
Figure 4-1: Rowden Park WORKING DRAFT Masterplan ........................................... 14
Figure 4-2: Potential Green Infrastructure Links ......................................................... 15
Photographs 4-3: PRoW Connecting North and South Residential Areas Including Pudding Brook Footbridge
Figure 4-4: Potential North Bound Bus Lane Along A4 Rowden Hill ........................................ 17
Figure 4-5: Potential South Bound Bus Lane Along A4 Rowden Hill and North Bound Bus Lane on Patterdown Road ................................................................. 18
Figure 4-6: Possible Site Access Roundabout ................................................................................. 20
Figure 4-7: Proposed Vehicle Access ............................................................................................... 21
Figure 5-1: Proposed Residential Mode Share .................................................................................. 26
Figure 5-2: ‘Chippenham Cepen Park and Derriads’ and ‘Chippenham Cepen Park and Redlands’ Bus Service Provision ............................................................................ 28
Figure 5-3: Option 1 – Service X34 Diversion and Enhancement Rowden Park Potential Bus Service Provision ................................................................. 30
Figure 5-4: Option 2 – Service 55 Extension Rowden Park Potential Bus Service Provision .......... 31
Figure 5-5: Proposed Walk and Cycle Routes ..................................................................................... 34

Tables

| Table 3-1: Existing Bus Services ................................................................................................. 7 |
| Table 3-2: Rail Services from Chippenham Station .................................................................... 9 |
| Table 4-1: Proposed Residential Car Parking Provision ............................................................. 22 |
| Table 4-2: Other Use Car Parking Standards ............................................................................. 22 |
| Table 4-3: Residential Cycle Parking Standards .......................................................................... 22 |
| Table 4-4: Other Use Cycling Standards ....................................................................................... 23 |
| Table 5-1: Residential Vehicular Trip Generation Rates from the Chippenham PARAMICS Model .................................................................................. 24 |
| Table 5-2: Peak Hour Residential Vehicular Trip Generation Rates .......................................... 24 |
| Table 5-3: Peak Hour Primary School Vehicular Trips ................................................................. 25 |
| Table 5-4: Total Peak Hour Bus Trips .......................................................................................... 25 |
| Table 5-5: Total Peak Hour Vehicular Trips .................................................................................. 25 |
| Table 5-6: Proposed C3 Residential Person Trip Rates ............................................................... 26 |
| Table 5-7: Proportional Bus Journey Time Savings .................................................................... 32 |
| Table 5-8: Bus Journey Time Standard Deviations ...................................................................... 32 |
| Table 5-9: 7% Reduction in Residential Car Driver Trips ............................................................ 35 |
| Table 5-10: Total Peak Hour Vehicular Trips Proposed for Assessment ...................................... 36 |
| Table 5-11: Proposed Modelling Scenarios ............................................................................... 37 |
1 Introduction

1.1 Background

1.1.1 Peter Brett Associates has been commissioned by Crest Nicholson and Redcliffe Homes to prepare a Transport Assessment (TA) to support a planning application for a residential development south west Chippenham. This report sets out the proposed scope of the Transport Assessment, including assessment methodology and assumptions.

1.2 The Site

1.2.1 The site is situated approximately 1.6 kilometres to the south west of Chippenham town centre, and lies to the east of Patterdown Road. It is located within the County of Wiltshire.

1.2.2 The site is bordered by Chippenham to the north, the B4528 Patterdown Road to the west and the River Avon to the east as shown in Figure 1-1.
Figure 1-1: Site Location Plan
2 Transport Policy Considerations

2.1 Relevant Policies

2.1.1 The following policies will be reviewed in order to demonstrate and ensure that the development and masterplan are in compliance with the requirements and aspirations within them.

National Policies

- National Planning Policy Framework
- DfT – The Sustainable Road Network and the Delivery of Sustainable Development

Local Policies

- Wiltshire Local Transport Plan 2011-2026 (LTP3)
- Wiltshire LTP3 Car Parking Strategy
- Wiltshire LTP3 Cycling Strategy
- Wiltshire Core Strategy
- North Wiltshire Local Plan 2011 (Saved Policies)
- People, Places and Promises: Wiltshire Community Plan 2011-2026
3 Baseline Conditions & Accessibility to Key Services

3.1 Walking and Cycling

3.1.1 There are a number of existing footpaths and cycle routes within and around Chippenham.

3.1.2 Large proportions (nearly 13%) of trips to work from homes in Cepen Park, Chippenham (a new area of housing development similar to that proposed at Rowden Park) are made on foot. 15.5% are made on foot or cycle (2011 census data).

3.1.3 The built area sits within a 4 kilometre radius of the town centre and therefore there is great opportunity to walk and cycle to destinations within Chippenham. There is also a good network of Public Right of Ways and cycle routes further encouraging active travel.

3.1.4 The local facilities are shown on Figure 3-1.
3.1.5 The existing Public Rights of Way and cycle routes are shown in **Figure 3-2**.
3.2 **Public Transport**

**Bus Services**

3.2.1 The following regular bus routes currently operate on this corridor and on the nearby A4 Rowden Hill:
### Table 3-1: Existing Bus Services

<table>
<thead>
<tr>
<th>Service</th>
<th>Description</th>
<th>Headway</th>
<th>Mon-Sat Daytime</th>
<th>Evening &amp; Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>234</td>
<td>Chippenham &gt; Melksham &gt; Trowbridge &gt; Frome</td>
<td>60 mins</td>
<td>2 journeys evenings</td>
<td>No service Sun</td>
</tr>
<tr>
<td>X34</td>
<td>Chippenham &gt; Melksham &gt; Trowbridge &gt; Frome</td>
<td>30 mins Mon-Fri</td>
<td>No service Sat</td>
<td>No service</td>
</tr>
<tr>
<td>36</td>
<td>Chippenham &gt; Corsham &gt; Biddlestone &gt; Colerne &gt; Sherston</td>
<td>1 per day, Fri only</td>
<td>No service</td>
<td></td>
</tr>
<tr>
<td>44D</td>
<td>Chippenham Town Service to Barrow Green</td>
<td>30 mins</td>
<td>No service</td>
<td></td>
</tr>
<tr>
<td>75</td>
<td>Chippenham &gt; Burton &gt; Badminton &gt; Norton</td>
<td>1 per day, school days only</td>
<td>No service Sat</td>
<td>No service</td>
</tr>
</tbody>
</table>

3.2.2 Service X34 is operated by the Faresaver bus company, and service 234 is operated by First. The site is served by direct bus services to Chippenham town centre, Melksham, Trowbridge and Frome up to 3 times per hour during Monday to Saturday daytimes. Currently there are limited evening services on service 234 and no service on any route on Sundays.

3.2.3 The nearest stops to the site are located at Patterdown for service 234, and at the Rowden Arms for the X34.

3.2.4 Chippenham railway station is served by routes 234 and X34, by buses towards Chippenham in the morning and buses from Chippenham in the afternoon. This provides a direct link to the National Rail network and regular First Great Western services to Swindon, Reading, London Paddington, Bath Spa, Bristol Temple Meads and Westbury.
Chippenham is served by a range of bus services provided by a number of operators, with frequent links to destinations outside of the town such as Melksham, Calne, Malmesbury, Bath, Devizes and Swindon, as well as the suburbs of the town itself.

Despite this relatively good level of provision, bus use in the town is relatively low. Currently only 1.6% (2011 census data) of the town’s population that travel to work currently use the bus as their primary mode of transport. The low level of bus use can be explained by a number of factors:

- The River Avon acts as a physical barrier with all primary routes merging at the heart of the historical town centre. This restricts the ability for transport infrastructure improvements, and therefore the bus services do not benefit from any bus priority or dedicated lanes to provide buses with an advantage over private car travel;

- ‘Commuter’ services to work are generally relatively infrequent and significant improvements in frequency will be required if the bus is to be seen as a credible alternative to the car for these journeys;
Quality of service, particularly on tendered operations, is also an issue, and the image of bus travel needs to be improved if more people are to be attracted to use it; and

High bus fares mean that one-off or infrequent travel is relatively expensive.

**Rail**

3.2.7 The closest railway station to the site is Chippenham Station, located approximately two kilometres to the north east of the site.

3.2.8 Chippenham station lies on the Great Western Mainline, linking London (Paddington) to the southwest of England. Two services stop here: a long distance service linking Bristol Temple Meads with London Paddington, and a local service that connects Chippenham with surrounding stations such as Swindon and Trowbridge. Both services are currently operated by The First Group.

3.2.9 **Table 3-2** summarises the rail services from Chippenham station.

<table>
<thead>
<tr>
<th>Destination</th>
<th>Frequency (trains per hour)</th>
<th>Journey Time (minutes)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Peak</td>
<td>Off-Peak</td>
</tr>
<tr>
<td>Bath Spa</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Swindon</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Bristol Temple Meads</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Didcot Parkway</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Reading</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>London Paddington</td>
<td>3</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: National Rail website, August 2014

**3.3 Highway**

3.3.1 A review of the local road network and characteristics will be completed. This will be informed partly through Wiltshire Council’s Chippenham PARAMICS Model.

3.3.2 At present, the town experiences an over-reliance on private car use, with approximately 68% of trips to work (2011 Census data) from Chippenham made using the private car. This pattern of movement not only applies to regional trips for access to employment, but also local trips within Chippenham itself to access local employment, education facilities and day-to-day services.

3.3.3 The quantity of trips at peak times results in some traffic congestion on the A350 junction particularly to the north of Chippenham and within the town centre.

3.3.4 Traffic surveys undertaken to develop the Chippenham PARAMICS model show the observed queues. **Figure 3-4** and **Figure 3-5** have been extracted from the Local Model Validation Report for this model and show the observed queues in the AM and PM peak hours respectively.
Figure 3.4: Observed Queues in AM Peak Hour from the Chippenham PARAMICS Model
3.3.5 A study of the current travel patterns at Chippenham shows that a third of traffic on Chippenham’s roads arrives from within the town, i.e. internal trips, with another third travelling into the town in the morning and out of the town in the evening. Between 12% and 20% of traffic within Chippenham travels through the town in the peak periods. The high proportion of trips leaving and travelling through Chippenham causes detrimental effects on the operation of the northern section of the A350 passing Chippenham, i.e. A350 Cepen Way junction with Malmesbury Road, where congestion reaches significant levels during peak times.

**Study Area**

3.3.6 The proposed study area for the development will be informed by the Chippenham PARAMICS Model. The following junctions are expected to be included:

- A4 Rowden Hill / Patterdown Road mini roundabout
- Northern Access Priority Junction
- Central Northern Access Priority Junction
- Central Southern Access Priority Junction
- Primary Site Access Roundabout
- Queens Bridge signal junction
- A350 Showell Farm roundabout
- Lackham roundabout
- Bridge Centre Junction

3.3.7 The junctions within the study area can be seen in Figure 3-6.

Figure 3-6: Study Area
Traffic Surveys

3.3.8 It has been agreed with WCC that further surveys are not necessary to update the PARAMICS model.

Personal Injury Collisions

3.3.9 Personal injury collision records will be obtained for a period over the last 5 years for Patterdown Road between the A4 Bath Road and A350 Lackham Roundabout. This data will be analysed to understand whether or not there are any existing safety issues that may be adversely affected by the development proposals.
4 Development Proposals

4.1 Proposals

4.1.1 The development proposals include the provision of up to 1000 homes (including up to 60 Extra Care units), a 1 form entry (1FE) primary school and local community facilities (likely to consist of up to six small shops and an express foodstore). A current illustrative concept plan is shown in Figure 4-1.

Figure 4-1: Rowden Park WORKING DRAFT Masterplan
4.2 Sustainable Access Improvements

Walking & Cycling

4.2.1 The following will be considered:

- Foot/cycle connections linking to the town centre

These would encourage more sustainable means of travel to Chippenham town centre, therefore reducing vehicle trips and minimising any increase in traffic congestion. These links are illustrated in **Figure 4-2**.

**Figure 4-2: Potential Green Infrastructure Links**

- Cycle route to the north

A new cycle route to connect to the cycle route along the A4 and Hungerdown Lane connecting the development with the secondary schools and other destinations north of the railway line. This would encourage sustainable travel to school.

- Connections between Showell Farm and Rowden Park

If the Showell Farm employment site comes forward, new foot and cycle connections could be provided between the sites to encourage walking and cycling from both existing Chippenham and the site to the new employment area.

- Connection to the Hunters Moon Development foot/cycleway proposals under Queens Bridge
The Hunters Moon development is required to deliver a foot/cycle connection from their site to the east side of Queens Bridge. The proposed route will run along on the south side of the bridge. Therefore, a foot/cycle connection will be delivered from Rowden Park to the Queens Bridge signal junction with cycle facilities to assist crossing the B4634 Patterdown Road, thus providing a connection between the two developments.

- **PRoW connecting northern and southern residential areas**

  The PRoW linking the northern and southern residential areas (shown in Photographs 4-3) could be improved to increase integration within Rowden Park and provide good connection to the town centre on more lightly trafficked routes within the development rather than along Rowden Hill. This could include re-surfacing, appropriate lighting and the widening and upgrading of the footbridge over Pudding Brook.

  Photographs 4-3: PRoW Connecting North and South Residential Areas Including Pudding Brook Footbridge

- **Connections to the east**

  Links to the Pewsham area could be provided to deliver a direct connection to the secondary school on the eastern side of the River Avon, encouraging sustainable travel to school, as well improvement to integration and access to the riverside park. This route could connect to the existing Sustrans route to the east of the River Avon.

- **Connection to the south**

  A connection will be provided from Rowden Park to the PRoW leading to Lackham College.

  4.2.2 An informal audit of the pedestrian/cycle routes will be undertaken as part of the TA. This will identify proposed widths, materials and any constraints of routes. The existing footpaths through residential areas toward the town centre will be studied to determine if any improvements may be required.

**Public Transport**

**Bus Lanes**

4.2.3 There is potential to introduce bus lanes along the A4 Rowden Hill to and from the town centre as part of the development proposals. Two new sections of bus lane, shown in Figures 4-4 and 4-5, are proposed, subject to land searches and detailed investigation via WC’s Chippenham PARAMICS model as to the degree that the lanes would detriment the link capacity for existing non-bus traffic, as follows:
- A 75 metre stretch on the northbound approach of the A4/Patterdown Road junction to allow buses an unimpeded journey from the Coppice Close junction

- A new 450 metre stretch of bus lane between St Luke’s Drive and Rowden Hill to avoid observed queuing traffic on this section of the route. In the opposite direction, a new 150 metre bus lane is proposed between St Luke’s Drive and Rowden Road.

Figure 4.4: Potential North Bound Bus Lane Along A4 Rowden Hill
4.2.4 The proposed bus priority measures will enhance the attractiveness of bus use, and help improve journey time reliability, with an overall aim to reduce vehicle trips to the town centre.

**Bus Service Proposals**

4.2.5 Two options exist for bus service provision at the site: the diversion and enhancement of the X34 service, and the extension of the 55 service. The options are discussed in detail as follows:

**Diversion and Enhancement of Service X34**

4.2.6 The bus service proposals involve the diversion and enhancement of existing service X34, which currently operates every 30 minutes on Mondays to Fridays between Chippenham, Melksham, Trowbridge and Frome.

4.2.7 In April 2014, in response to customer requests, Faresaver took the commercial decision to re-route the service away from the B4634 through the site in favour of a less direct route via Methuen Park and Sainsbury's. However, discussions with Faresaver have indicated that they may be willing to return the service to its original route once the development is in place.

4.2.8 Currently, there is no early morning, late evening, Saturday or Sunday service on this route, although Faresaver tickets are accepted on the First 234 evening service. The first service arrives in Chippenham at 0845, which is too late for the majority of commuters.
4.2.9  The proposal for service X34 would be to:

- Restore the service to its original route via Rowden Park;
- Introduce two new early morning journeys on Mondays to Fridays from Melksham to Chippenham, and two new evening return journeys from Chippenham to Melksham;
- Increase the peak hour service frequency to every 15 minutes on Mondays to Fridays between Rowden Park and Chippenham, with the addition of one new vehicle (potential to extend to Sainsburys if recent changes to the current service are successful);
- Introduce a 30 minute headway Saturday service between Melksham and Chippenham between 0745 and 1845; and
- Introduce an hourly headway Sunday service between Melksham and Chippenham between 0800 and 1800.

**Extension of Service 55**

4.2.10  This option involves the extension of existing service 55, which currently operates every 20 minutes on Mondays to Saturdays between Swindon, Woodshaw, Royal Wootton Bassett, Calne and Chippenham. The 55A service operates with a 30 minute frequency on Sundays.

4.2.11  The service currently terminates at Chippenham rail station. However, Stagecoach have indicated that they would be keen to extend the service to serve Rowden Park once the development is in place.

4.2.12  The proposal for service 55 would be to extend the service from Chippenham rail station to serve the development.

4.3  **Vehicle Access**

4.3.1  Primary vehicular access will be provided via a new roundabout on Patterdown Road at the south west edge of the site, as shown in Figure 4-6.
4.3.2 The roundabout will provide connection between the site, Patterdown Road, and Showell Farm, as shown in Figure 4-7.
4.3.3 A further three other access points would be provided, as illustrated in Figure 4-6. These would likely take the form of priority T-junctions.

- The northern junction would provide vehicle access from Coppice Close, through an existing Redcliffe Homes residential development, into the northern residential area only.
- The central northern junction on Patterdown Road would connect to the primary street through the development.
- The central southern junction on Patterdown Road would connect to a secondary street, which will meet the primary street in the vicinity of the local centre.

4.3.4 The primary street will route through the site between the new primary site access roundabout on Patterdown Road and the central northern priority T-junction.

4.4 Parking

Car Parking

4.4.1 Car parking provision on site will be in line with Wiltshire Council’s parking standards. Residential car parking standards are shown in Table 4-1. It is anticipated the development will at least meet the minimum requirements.
Table 4-1: Proposed Residential Car Parking Provision

<table>
<thead>
<tr>
<th>Bedrooms</th>
<th>Minimum Spaces</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Allocated Residential</td>
<td>Unallocated Visitor</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>2 to 3</td>
<td>2</td>
<td>0.2</td>
<td></td>
</tr>
<tr>
<td>4+</td>
<td>3</td>
<td>0.2</td>
<td></td>
</tr>
</tbody>
</table>

4.4.2 Table 4-2 shows the parking standards for other uses:

Table 4-2: Other Use Car Parking Standards

<table>
<thead>
<tr>
<th>Use</th>
<th>Maximum Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Food Retail</td>
<td>&gt;1000m²: 1 per 14m²; &lt;1000m²: 1 per 35m²</td>
</tr>
<tr>
<td>A1 Non-Food Retail</td>
<td>&gt;1000m²: 1 per 20m²; &lt;1000m²: 1 per 35m²</td>
</tr>
<tr>
<td>D1 Education Centres (Primary School)</td>
<td>2 per 3 staff, plus 1 per 7 staff for visitors, plus 1 per 20 pupils</td>
</tr>
<tr>
<td>Sports Facilities</td>
<td>&gt;1000m²: 1 per 22m²; &lt;1000m²: 1 per 2 players plus 1 per 5m²</td>
</tr>
<tr>
<td>Field Sports</td>
<td>Number of participants</td>
</tr>
</tbody>
</table>

Cycle Parking

4.4.3 Cycle parking for the neighbourhood centre, and visitor cycle parking for the residential homes and school will be located in areas with natural surveillance, as close to the building entrances as possible.

4.4.4 Residential cycle parking will be located either in an internal area or within a covered, lockable enclosure.

4.4.5 Cycle parking will be provided in accordance with the cycle parking standards given in the WCC LTP3 Cycling Strategy (March 2014), as shown in Tables 4-3 and 4-4 below.

Table 4-3: Residential Cycle Parking Standards

<table>
<thead>
<tr>
<th>Bedooms</th>
<th>Minimum Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Allocated Residential</td>
</tr>
<tr>
<td>1 to 3</td>
<td>1 per bedroom</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 4.4: Other Use Cycle Parking Standards

<table>
<thead>
<tr>
<th>Use</th>
<th>Maximum Spaces</th>
</tr>
</thead>
<tbody>
<tr>
<td>A1 Retail (Food and Non-Food)</td>
<td>1 covered space per 10 employees, plus 1 visitor space per 15 car parking spaces</td>
</tr>
<tr>
<td>D1 Education Centres (Primary School)</td>
<td>1 covered space per 10 staff, plus 1 per 45 pupils for visitors, plus 1 covered space per 5 pupils</td>
</tr>
<tr>
<td>D2 Sports Facilities</td>
<td>1 covered cycle space per 10 employees, plus visitor spaces on merit</td>
</tr>
<tr>
<td>C3 Residential</td>
<td>Up to 3 bedrooms: 1 covered space per bedroom 4 bedrooms: 3 covered spaces 5 bedrooms: 4 covered spaces plus 1 visitor space per 20 bedrooms</td>
</tr>
</tbody>
</table>
5 Trip Generation, Distribution, Mode Share & Assignment

5.1 Trip Generation

C3 Residential

5.1.1 The vehicle trip generation for C3 Residential will be calculated using the trip rates used in Wiltshire Council’s Chippenham PARAMICS Model. The residential trip rates have also been applied to the Extra Care units. The TRICS v7.1.1 database has been examined, and confirmed that Extra Care units are likely to generate fewer vehicle trips than standard residential homes. Therefore applying the residential trip rates to the Extra Care units is considered to be robust.

5.1.2 The residential trip rates are shown in Table 5-1.

Table 5-1: Residential Vehicular Trip Generation Rates from the Chippenham PARAMICS Model

<table>
<thead>
<tr>
<th>Peak Period</th>
<th>Generations</th>
<th>Attractions</th>
<th>Two-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak (07:00 – 10:00)</td>
<td>1.080</td>
<td>0.500</td>
<td>1.580</td>
</tr>
<tr>
<td>PM Peak (16:00 – 19:00)</td>
<td>0.660</td>
<td>1.160</td>
<td>1.820</td>
</tr>
</tbody>
</table>

5.1.3 SKM has confirmed that the matrices for Rowden Park in the PARAMICS model were assigned using a flat profile; therefore trip rates for the three-hour peak periods have been split equally over each hour. The resulting vehicle trip rates are shown in Table 5-2.

Table 5-2: Peak Hour Residential Vehicular Trip Generation Rates

<table>
<thead>
<tr>
<th>Peak Hour</th>
<th>Generations</th>
<th>Attractions</th>
<th>Two-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak (08:00 – 09:00)</td>
<td>0.360</td>
<td>0.167</td>
<td>0.527</td>
</tr>
<tr>
<td>PM Peak (17:00 – 18:00)</td>
<td>0.220</td>
<td>0.387</td>
<td>0.607</td>
</tr>
</tbody>
</table>

D1 Primary School

5.1.4 The 1 form entry (1FE) primary school on site is expected to serve the development, with all pupil trips being internal to the site. However, staff trips are likely to originate from outside the site. Staff trips have therefore been calculated as follows:

5.1.5 November 2012 School Workforce Census data from the Department for Education (DfE) has been used to calculate the number of staff (full-time equivalent) at the school. Schools were selected on the basis of:

- 180 to 230 pupils
- Primary school (age 4-11)
- Local Authority maintained
- Within Chippenham
5.1.6 Full details of the schools selected can be found in Appendix A.

5.1.7 Four primary schools were within these criteria. These sites have an average ratio of 0.113 staff per pupil. When applied to the proposed primary school, 24 full time equivalent staff are expected to be employed at the school.

5.1.8 It is assumed that all staff trips arrive by car, as a worse case, and that 75% of staff arrive and leave in peak hours.

5.1.9 A summary of the predicted vehicle trips from the primary school is provided in Table 5-3.

Table 5-3: Peak Hour Primary School Vehicular Trips

<table>
<thead>
<tr>
<th>Peak Hour</th>
<th>Generations</th>
<th>Attractions</th>
<th>Two-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak (08:00 – 09:00)</td>
<td>0</td>
<td>18</td>
<td>18</td>
</tr>
<tr>
<td>PM Peak (17:00 – 18:00)</td>
<td>18</td>
<td>0</td>
<td>18</td>
</tr>
</tbody>
</table>

A1 Neighbourhood Centre

5.1.10 The neighbourhood centre is expected to consist of up to six small shops and an express foodstore. Consequently, it is considered that all trips to the neighbourhood centre are likely to be internal to the site, or pass-by trips already on the highway network.

Proposed Bus Service

5.1.11 In line with the potential bus options, it is proposed to include four inbound and four outbound bus trips per hour travelling between the site and Chippenham town centre (at a frequency of every 15 minutes), as shown in Table 5-4.

Table 5-4: Total Peak Hour Bus Trips

<table>
<thead>
<tr>
<th>Peak Hour</th>
<th>Generations</th>
<th>Attractions</th>
<th>Two-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak (08:00 – 09:00)</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>PM Peak (17:00 – 18:00)</td>
<td>4</td>
<td>4</td>
<td>8</td>
</tr>
</tbody>
</table>

Summary

5.1.12 Table 5-5 shows total peak hour vehicle trips expected to be generated by the development.

Table 5-5: Total Peak Hour Vehicular Trips

<table>
<thead>
<tr>
<th>Land Use</th>
<th>AM Peak (08:00 – 09:00)</th>
<th>PM Peak (17:00 – 18:00)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generations</td>
<td>Attractions</td>
</tr>
<tr>
<td>Residential</td>
<td>360</td>
<td>167</td>
</tr>
<tr>
<td>(1000 homes)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary School</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>(1FE)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bus Service</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>360</td>
<td>185</td>
</tr>
</tbody>
</table>
5.2 Trip Distribution

5.2.1 The trips generated by the development will be distributed as in the Chippenham Transport Strategy using the WCC PARAMICS model.

5.3 Mode Share

Residential

5.3.1 Mode share information, shown in Figure 5-1, has been obtained from Travel to Work data from the 2011 Census.

5.3.2 WCC previously advised that mode share should be based on the Cepen Park ward. As ward boundaries have changed since the 2001 Census, the mode share has been based on two 2011 Census wards: ‘Chippenham Cepen Park and Derriads’ and ‘Chippenham Cepen Park and Redlands’.

Figure 5-1: Proposed Residential Mode Share

- Car Driver 72.4%
- Walk 12.7%
- Car Passenger 6.0%
- Rail 3.8%
- Cycle 2.9%
- Bus 1.2%
- Motorcycle 0.8%
- Taxi 0.3%

5.3.3 The mode share provided in Figure 5-1 has been used to establish residential person trip rates for the development, based on the vehicle trip rates taken from the PARAMICS model, provided in Table 5-2. Table 5-6 shows the proposed person trip rates.

Table 5-6: Proposed C3 Residential Person Trip Rates

<table>
<thead>
<tr>
<th>Peak Hour</th>
<th>Generations</th>
<th>Attractions</th>
<th>Two-Way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak (08:00 – 09:00)</td>
<td>0.497</td>
<td>0.230</td>
<td>0.728</td>
</tr>
<tr>
<td>PM Peak (17:00 – 18:00)</td>
<td>0.304</td>
<td>0.534</td>
<td>0.838</td>
</tr>
</tbody>
</table>

Primary School Staff

5.3.4 All primary school staff trips are assumed to be made by car, to provide a worst-case assessment.
5.4  Reduction in Car Driver Trips to and from Chippenham Town Centre

Improvements to Sustainable Accessibility

5.4.1  The development proposals include significant sustainable accessibility improvements, which will influence travel choice. These are described as follows:

Bus Improvements

5.4.2  The proposed bus improvements are detailed in Section 4.2.

Frequency Enhancement

5.4.3  The overall bus mode share of 1.2% (see Figure 5-1) is based on 2011 Census data for two wards within Chippenham. The bus service provision that was in place in these areas at the time of the census has been reviewed. Areas of these wards within 400 metres walking distance of a bus stop that provided access to services to Chippenham town centre with hourly or better peak hour frequencies are highlighted in Figure 5-2. The bus routes and services that have been included are:

- **35/35A:** Castle Combe – Chippenham
- **44A:** Chippenham Town Service
- **44D:** Chippenham Town Service
- **231/232/233:** Bath – Corsham – Chippenham
- **X31:** Bath – Corsham – Chippenham
- **91:** Malmesbury – Little Somerford – Chippenham
- **92:** Malmesbury – Chippenham
- **99:** Kington St. Michael – Chippenham
5.4.4 Figure 5-2 illustrates that a large proportion of the two wards are served by no regular buses. The majority of the two wards are served by four or fewer buses per hour, with a few areas...
having better access to services. Overall, it is considered that a large proportion of residents had limited access to only infrequent bus services, and consequently, bus use was relatively low.

**5.4.5** Depending on the bus service option that is taken forward, it is proposed that either three or four buses per hour will serve Rowden Park in the peak hours.

**5.4.6** Figures 5-3 and 5-4 illustrates that the vast majority of residents of Rowden Park would be located within 400 metres of a bus stop providing access to the X34 or 55 (depending on which service is taken forward). These areas would be served by either three or four buses per hour.

**5.4.7** Furthermore, approximately one third of the site will also be located within 400 metres of bus stops served by service 234. These areas would be served by four or five buses per hour. The northern-most part of the site would also be located within 400 metres of bus stops served by service 44D, and so would be served by seven or eight buses per hour. Therefore, it is considered that residents of Rowden Park would have excellent access to frequent bus services to and from Chippenham town centre.
Figure 5-3: Option 1 – Service X34 Diversion and Enhancement Rowden Park Potential Bus Service Provision

Key
- 4 Buses per hour
- 5 Buses per hour
- 7 Buses per hour

Contains Ordnance Survey data © Crown Copyright and database right 2014.
Figure 5-4: Option 2 – Service 55 Extension Rowden Park Potential Bus Service Provision

Key
- 3 Buses per hour
- 4 Buses per hour
- 8 Buses per hour
5.4.8 On this basis, it is considered that, regardless of which bus option is taken forward, Rowden Park will have a significantly enhanced bus frequency in comparison to the two wards upon which mode share has been based. The bus service will route directly to and from the town centre, with a 15- or 20-minute frequency during the peak hours.

Journey Time

5.4.9 WC’s Chippenham PARAMICS model has been used to calculate the average expected difference in journey time for buses between the site and Chippenham town centre, with and without the proposed bus lanes. Journey time savings for journeys with the proposed bus lanes, as a proportion of total journey time without bus lanes, are shown in Table 5-7 below.

Table 5-7: Proportional Bus Journey Time Savings

<table>
<thead>
<tr>
<th>Peak Hour</th>
<th>From Rowden Park to Town Centre</th>
<th>From Town Centre to Rowden Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak (08:00 – 09:00)</td>
<td>22%</td>
<td>8%</td>
</tr>
<tr>
<td>PM Peak (17:00 – 18:00)</td>
<td>24%</td>
<td>11%</td>
</tr>
</tbody>
</table>

5.4.10 The time associated with travelling to the bus stop and waiting for the bus (an average wait time of 7.5 minutes is expected) is considered to be easily comparable to the time associated with finding a parking space and paying for a parking ticket, and therefore these times have been discounted.

5.4.11 Table 5-7 shows that the proposed bus lanes would have a significant positive impact on bus journey times, making it quicker to catch the bus than to drive for journeys between Rowden Park and Chippenham town centre.

5.4.12 Additionally, the introduction of bus lanes will improve journey time reliability for bus services. The standard deviation in journey time for bus trips between Rowden Park and Chippenham town centre have been calculated for the peak hours, both with and without bus lanes, and are shown in Table 5-8.

Table 5-8: Bus Journey Time Standard Deviations

<table>
<thead>
<tr>
<th></th>
<th>Without Bus Lanes</th>
<th>With Bus Lanes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Standard Deviation in Bus Journey Time (seconds)</td>
<td>78</td>
<td>56</td>
</tr>
</tbody>
</table>

5.4.13 Table 5-8 shows an average reduction in bus journey time standard deviation of 28% with the introduction of bus lanes. The bus lanes will make travelling by bus a more reliable mode than travelling by car, reducing the likelihood of severe delays to journeys.

Wider Network Impacts

5.4.14 It is considered that the significant improvements to bus frequency, journey times and reliability will lead to a substantial increase in bus mode share, from which both Rowden Park and existing residential areas would benefit.
5.4.15 Regular bus services X34 and 234 both utilise the A4 Rowden Hill, and would experience an increase in reliability and journey time, due to the introduction of the bus lanes:

- 234
- X34

5.4.16 These services extend from Chippenham to Melksham, Trowbridge and Frome, and would also route past the committed Hunters Moon and proposed Showell Farm developments. Therefore the proposed bus priority measures would have significant beneficial impacts to a much wider bus catchment area than just Rowden Park.

Walk and Cycle Improvements

5.4.17 There are a number of walk and cycle improvements proposed at Rowden Park that will enhance accessibility to the town centre. Routes will be provided both through urban, overlooked residential areas, and through the riverside park, allowing choice by residents of, and visitors to, the site.

The Rowden Mile

5.4.18 The Rowden Mile will provide a direct walk and cycle connection from the site to the town centre. The route will pass through the riverside park, and will be easily accessible from all residential areas of the site. The Rowden Mile will also provide connection towards the railway and bus stations.

Connection to A4 Footway/Cycleway

5.4.19 A footway connection will be provided along Patterdown Road connecting to the proposed shared footway/cycleway along the A4 (to be delivered as part of the Hunters Moon development application).

5.4.20 An additional walk and cycle connection will be provided to the Hunters Moon development, via Queens Bridge, which will link to the A4 footway/cycleway.

Additional Town Centre Connections

5.4.21 A network of walk and cycle routes through the site and riverside park will be provided. These will provide connection to existing footpaths towards the A4, two existing Public Rights of Way towards the town centre, in addition to the Rowden Mile, as shown in Figure 5-5.
Travel Planning

5.4.22 A residential Travel Plan will be implemented at the development, which will have the overall aim of reducing single-occupancy car trips and creating a shift towards more sustainable modes of travel. Measures within the Travel Plan could include bus season tickets, vouchers towards bicycle purchases, promotion of events such as ‘Walk to Work Week’ and information highlighting the financial and health benefits of walking and cycling.

5.4.23 Although the Travel Plan will aim to reduce single-occupancy car trips across the network, it is considered that the greatest impact is likely to be made on trips to and from Chippenham town centre, as this is within easy walking and cycling distance, and will be easily accessible by bus from the site. Therefore, the greatest reduction in car trips is likely to be on trips to and from Chippenham town centre.

Mode Shift Effect

5.4.24 The development is providing significant improvements to sustainable modes. These will have substantial benefits, not only for development trips, but also for existing trips to/from Chippenham town centre.

5.4.25 Trips generated by the development travelling to/from the town centre will have the option of both good quality walk/cycle connections and an efficient reliable bus service. It is considered that a number of these trips will choose to travel by sustainable modes of transport, rather than the private car, for a wide range of reasons, including:
- Bus travel times will be reduced following the introduction of bus lanes;
- Bus travel and walking/cycling is significantly cheaper than the cost of driving and paying for parking;
- Walking and cycling provide significant health benefits;
- The Travel Plan will provide incentives to residents to travel by sustainable modes;
- Bus travel will be more reliable than driving, following the introduction of bus lanes; and
- Walking/cycling is more reliable than driving.

5.4.26 Bus operators responsible for services 55 (Stagecoach) and X34 (Faresaver) believe that the bus proposals (Section 4.2) will be commercially viable, with patronage from the development being sufficient to support the proposals in the long term.

5.4.27 It is also considered that car drivers currently travelling on the A4 could alter their mode of travel and be attracted to use the bus, due to the proposed enhancements and their effects, which include improved journey times and reliability to other bus routes using the A4 corridor.

5.4.28 It is considered that the shift from private car to sustainable modes is likely to be made from Rowden Park, Showell Farm, Hunters Moon, and existing car drivers on the A4. However, in order to undertake a robust assessment, it is proposed to remove car driver trips from Rowden Park only, limiting the overall reduction in trips across the wider highway network, in particular along the strategic routes including the A350.

Evidence Base and Proposed Mode Shift

5.4.29 The DfT’s ‘The Effects of Smarter Choice Programmes in the Sustainable Travel Towns: Research Report’ (March 2010) has looked at the effects of sustainable travel measures. The study found an average reduction in car driver trips of 9%.

5.4.30 The approved Hunters Moon Transport Assessment includes a reduction in trips (based on the inclusion of a Travel Plan) of 7%.

5.4.31 In order to provide a robust assessment, and to be comparable with other approved planning applications in the local area, an overall reduction of 7% of car driver trips is proposed, as shown in Table 5-9.

Table 5-9: 7% Reduction in Residential Car Driver Trips

<table>
<thead>
<tr>
<th>Generations</th>
<th>Attractors</th>
<th>Residential Car Driver Trips</th>
<th>7% Reduction</th>
<th>Residential Car Driver Trips</th>
<th>7% Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM Peak (08:00 – 09:00)</td>
<td></td>
<td>360</td>
<td>25</td>
<td>167</td>
<td>12</td>
</tr>
<tr>
<td>PM Peak (17:00 – 18:00)</td>
<td></td>
<td>220</td>
<td>15</td>
<td>387</td>
<td>27</td>
</tr>
</tbody>
</table>

5.4.32 However, it is considered that this reduction in trips cannot simply be applied to all development trips. The shift is based upon bus services and walk/cycle routes to the town centre, and careful and effective travel planning to support this shift towards sustainable modes. Therefore, it is not appropriate to reduce overall development trips by 7%, as the majority of destinations cannot be accessed by utilising the sustainable travel improvement measures.
5.4.33 On this basis, it is proposed to remove the 7% of residential trips from trips that have an
origin/destination within or near Chippenham town centre, and therefore would be able to
realistically use the supporting sustainable transport measures.

Summary

5.4.34 Sustainable travel improvements and travel planning measures are expected to lead to a
reduction in car driver trips generated by the development, as well as from Showell Farm,
Hunters Moon and trips from further afield using the A4 to travel to/from Chippenham.

5.4.35 In order to undertake a robust assessment, it is proposed to reduce car driver trips generated
by the development only, limiting the overall reduction in trips across the wider highway
network, in particular along the strategic routes including the A350.

5.4.36 A reduction of 7% of total residential development trips is proposed; this is comparable to
other approved planning applications in the local area, and within the 9% reduction observed
in the DfT’s Sustainable Travel Towns study.

5.4.37 This mode shift and resultant reduction in trips is based upon bus services and walk/cycle
routes to the town centre, and supporting careful and effective travel planning. Therefore, it is
not appropriate to reduce overall development trips by 7%, as the majority of destinations
cannot be accessed by utilising the sustainable travel improvements.

5.4.38 The 7% of residential trips to be removed will therefore be removed from trips that have an
origin/destination within or near Chippenham town centre, and therefore would be able to
realistically use the supporting sustainable transport measures.

5.4.39 Table 5-10 shows the resultant overall development vehicular trips proposed for assessment
in this TA.

Table 5-10: Total Peak Hour Vehicular Trips Proposed for Assessment

<table>
<thead>
<tr>
<th>Land Use</th>
<th>AM Peak Hour (08:00 – 09:00)</th>
<th>PM Peak Hour (17:00 – 18:00)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generations</td>
<td>Attractions</td>
</tr>
<tr>
<td>Residential (1000 homes)</td>
<td>335</td>
<td>155</td>
</tr>
<tr>
<td>Primary School (1FE)</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Bus Service</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Total</td>
<td>339</td>
<td>177</td>
</tr>
</tbody>
</table>
5.5 Assignment

5.5.1 Assignment will be carried out using Wiltshire Council’s Chippenham PARAMICS Model.

5.5.2 Following discussions with WCC, it is proposed that the following scenarios are tested:

Table 5-11: Proposed Modelling Scenarios

<table>
<thead>
<tr>
<th>Case</th>
<th>2026 Base</th>
<th>2026 Base + Development</th>
<th>2026 Base + Development + Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worst Case</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S1)</td>
<td>North Chippenham plus identified highway improvements</td>
<td>North Chippenham plus identified highway improvements</td>
<td>North Chippenham plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Rawlings Green plus identified highway improvements</td>
<td>Rawlings Green plus identified highway improvements</td>
<td>Rawlings Green plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
</tr>
<tr>
<td>S2)</td>
<td>North Chippenham plus identified highway improvements</td>
<td>North Chippenham plus identified highway improvements</td>
<td>North Chippenham plus identified highway improvements</td>
</tr>
<tr>
<td>S3)</td>
<td>North Chippenham plus identified highway improvements</td>
<td>North Chippenham plus identified highway improvements</td>
<td>North Chippenham plus identified highway improvements</td>
</tr>
</tbody>
</table>

Alternative Case 1

<table>
<thead>
<tr>
<th>Case</th>
<th>2026 Base</th>
<th>2026 Base + Development</th>
<th>2026 Base + Development + Mitigation</th>
</tr>
</thead>
<tbody>
<tr>
<td>S4)</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
</tr>
<tr>
<td></td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
</tr>
<tr>
<td>S5)</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
</tr>
<tr>
<td>S6)</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
</tr>
<tr>
<td>S7)</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
</tr>
<tr>
<td></td>
<td>Rowden Park</td>
<td>Rowden Park</td>
<td>Rowden Park</td>
</tr>
<tr>
<td>S8)</td>
<td>Rowden Park</td>
<td>Rowden Park</td>
<td>Rowden Park</td>
</tr>
<tr>
<td>S9)</td>
<td>Rowden Park</td>
<td>Rowden Park</td>
<td>Rowden Park</td>
</tr>
</tbody>
</table>

5.5.3 The identified highway improvements for each development are listed below:

- North Chippenham: A350/B4158 Roundabout Access, B4069/Parsonage Way Roundabout Access, Link road connecting the two roundabouts
- Rawlings Green: Access onto Cocklebury Road, new bridge over railway, access onto Parsonage Way (connecting with northern link road)
- Hunters Moon: Pheasant Roundabout improvements, Methuen Park Roundabout improvements, Chequers Roundabout improvements, Bumpers Farm Roundabout improvements, Malmesbury Road Roundabout junction improvements
- Showell Farm: A350 site access roundabout, Chequers Roundabout improvements
5.6 **Framework Travel Plan**

5.6.1 A framework travel plan will be included alongside the final Transport Assessment.
6 Assessment

6.1 Highways Assessment

6.1.1 The WCC Chippenham PARAMICS model will be used to model the scenarios detailed in Section 5.4.

6.2 Junction Assessment

6.2.1 Detailed junction assessments will be undertaken on the junctions within the study area:

- A4 Rowden Hill / Patterdown Road mini roundabout
- Northern Access Priority Junction
- Central Northern Access Priority Junction
- Central Southern Access Priority Junction
- Primary Site Access Roundabout
- Queens Bridge signal junction
- A350 Showell Farm roundabout
- Lackham roundabout
- Bridge Centre Junction

6.2.2 Scenarios with and without the Showell Farm A350 access will be carried out using manual assignment and junction modelling.

6.3 Impact at M4 Junction 17

6.3.1 Any increases in traffic at junction 17 of the M4 motorway will be reported within the Transport Assessment, in order that an assessment can be made as to the significance of the development’s impact on the operation of this junction.

6.3.2 The development traffic at each approach during both the AM and PM peak hours will be calculated, based upon the trip rates and distributions detailed in the WCC Chippenham PARAMICS model.
7 Transport Proposals

7.1 Summary

7.1.1 The final transport proposals and travel planning measures will be proposed based on the Transport Assessment.
Appendix A  Primary School Information
<table>
<thead>
<tr>
<th>School Name</th>
<th>Location</th>
<th>Number of Pupils</th>
<th>Age Range</th>
<th>Full-time equivalent number of all teachers in a school</th>
<th>Full-time equivalent number of all teaching assistants in a school</th>
<th>Full-time equivalent number of all support (exc. auxiliary) staff in a school</th>
<th>Total</th>
<th>Staff per Pupil</th>
</tr>
</thead>
<tbody>
<tr>
<td>Charter Primary</td>
<td>SN15 3EA</td>
<td>197</td>
<td>4 to 11</td>
<td>14.4</td>
<td>11.3</td>
<td>2.4</td>
<td>28</td>
<td>0.143</td>
</tr>
<tr>
<td>Frogwell Primary</td>
<td>SN14 0DG</td>
<td>222</td>
<td>4 to 11</td>
<td>13.4</td>
<td>7.8</td>
<td>4.2</td>
<td>25</td>
<td>0.114</td>
</tr>
<tr>
<td>Monkton Park Primary</td>
<td>SN15 3PN</td>
<td>224</td>
<td>4 to 11</td>
<td>11.0</td>
<td>6.2</td>
<td>1.4</td>
<td>19</td>
<td>0.083</td>
</tr>
<tr>
<td>St Paul's Primary</td>
<td>SN15 1DU</td>
<td>227</td>
<td>4 to 11</td>
<td>16.5</td>
<td>6.4</td>
<td>2.7</td>
<td>26</td>
<td>0.113</td>
</tr>
<tr>
<td>Proposed New Primary School</td>
<td>Rowden Park</td>
<td>210</td>
<td>4 to 11</td>
<td></td>
<td></td>
<td></td>
<td>24</td>
<td>0.113</td>
</tr>
</tbody>
</table>
Dale Harvey

From: Tilley, Phil <Phil.Tilley@wiltshire.gov.uk>
Sent: 25 November 2013 12:20
To: Dale Harvey
Subject: RE: Rowden Park - Updated Scope

Dale

Thank you for the attachment. I make the following comments on the scoping report draft:

2.1.1 Note draft cycle strategy for Wiltshire. Reference only to ‘saved’ policies for North Wilts Plan

3.1 Do the mode share figures represent e.g. West Cepen, or are these Chippenham-wide? My previously stated concern related to need to compare proposed with relatively new development re transport mode share. Fig 3.6 North access is existing?

3.3.9 PICs only required for B4528 A4 to Lackham.

4.1 Whilst not a development proposal, there is no reference on the map to the southern link road from the site to Pewsham Way. This is specifically referred to in the Showell Farm TA and it would be helpful to show it indicatively within this proposed development, so that options for provision can be recognised and a route ‘protected’.

4.2 The scope should include reference to the purpose of route improvements, and whether cycle or pedestrian or both.

4.2.2 The scope should describe whether measures are to be effected in conjunction with the proposed development, not merely state that improvements can be made.

4.2.4 The CTS assumes a 9% shift away from car, but the start point has to be agreed; it does not appear to have been to date.

4.3.5 The scope should indicate that the TA will consider the merits of a bus gate, rather that make a presumption that one will be provided.

5.3.2 I’m not sure what message is being conveyed here. I want Cepen Park to be used as a comparator because it is a stand alone estate of the type of property likely to be replicated at Rowden Park. Both have easy access to the M4 via the A350 and both have reasonable connections to the town centre. Also, consider re-assigning % of train trips, to other modes in terms of trips to/from the site.

5.5 The FTP should be the driver for the TA, and will need to demonstrate how the assumed 9% mode transfer will be effected, how inducements and persuasion measures will be funded, by whom and over what period of time.

Section 6 There is probably more information included that is strictly necessary to determine the acceptability of the proposals. In particular, I understand the HA accepted the impacts of the draft Core Strategy, so there is little merit in raising the issue.

Regards

Phil Tilley
Development Control Engineer
Sustainable Transport
Wiltshire Council

NB Mondays, Thursdays and Fridays are my working days.

Tel: 01225 713442
Mob: 07747 622819
email: phil.tilley@wiltshire.gov.uk
web: www.wiltshire.gov.uk

Follow Wiltshire Council
From: Dale Harvey [mailto:dharvey@peterbrett.com]
Sent: 22 November 2013 11:37
To: Tilley, Phil
Cc: Sarah Matthews; Sarah White; Francois Chate
Subject: Rowden Park - Updated Scope

Phil,

Please see attached revised scoping report following the meeting with Sarah Matthews and Francois Chate on 24th October.

Regards,

Dale Harvey
Senior Technician

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520653
f 0118 9597498
e dharvey@peterbrett.com
w www.peterbrett.com

Peter Brett Associates LLP is a limited liability partnership registered in England and Wales. Registered number: OC334398. Roger Tym & Partners, Baker Associates and Hannah, Reed and Associates are part of Peter Brett Associates LLP. A list of members is open to inspection at our registered office. Registered Office: Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN. UK T: +44 (0)118 950 0761 F: +44 (0)118 959 7498. Brett Consulting Limited is wholly owned by Peter Brett Associates LLP. Registered number: 07765026. Registered address: as above.

Email is used as a convenient medium for rapid data transfer. Any contractual correspondence sent or received by email will not be held to be such unless and until it is received in writing by fax or letter. Likewise, file attachments must be treated as uncontrolled documents until issued as hard copy. This email and any files transmitted with it are confidential and may be legally privileged, and are intended solely for the use of the individual or entity to which they are addressed. If an addressing or transmission error has misdirected this email please notify the author by replying to this email and delete the email. If you are not the intended recipient you must not use or disclose, print or rely on this email. You are advised that you open any attachment at your own risk.

Any OS Data attached to this email is issued in accordance with Licence No. 100021575 under condition that it is used to plot once and not retained on the recipients computer system.

This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification and distribution of the contents of the email is strictly prohibited. Email content may be monitored by Wiltshire Council to ensure compliance with its policies and procedures. No contract is intended by this email, and any personal opinions expressed in this message are those of the sender and should not be taken as representing views of Wiltshire Council. Please note Wiltshire Council utilises anti-virus scanning software but does not warrant that any e-mail or attachments are free from viruses or other defects and accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.

This message has been scanned for viruses by Websense
Dale Harvey

From: Tilley, Phil <Phil.Tilley@wiltshire.gov.uk>  
To: Dale Harvey  
Cc: Sarah Matthews; Sarah White  
Subject: RE: Rowden Park TA Scope

Dale

1. **Bridge Centre** – Please consider existing arrangement. We can look at options to mitigate separately (perhaps things will have moved on by the time we need to address this!)

2. **NMU Audit** – An informal note, along the lines you suggest, please. What I’d like to know is what can be achieved in terms of upgrades, where these are required, and where constraints apply.

3. **Hunters Moon** is to deliver route through bridge on south side of bridge; east side not looked at yet– this will be one for you to consider alongside any other alterations in the vicinity of the signals junction. We’ll probably be able only to achieve 1.5m width, as overall width is circa 4.9 m; but no reason why cyclists should not use c’way through bridge. We’ll consider TRO to limit LVs on route.

Regards

Phil Tilley  
Development Control Engineer  
Sustainable Transport  
Wiltshire Council

NB Mondays and Thursday are my normal working days.

Tel: 01225 713442  
Mob: 07747 622819  
email: phil.tilley@wiltshire.gov.uk  
web: www.wiltshire.gov.uk

Follow Wiltshire Council

---

From: Dale Harvey [mailto:dharvey@peterbrett.com]  
Sent: 23 June 2014 14:47  
To: Tilley, Phil  
Cc: Sarah Matthews; Sarah White  
Subject: RE: Rowden Park TA Scope

Phil,

Thank you for the comments. Could you please clarify a few of points, we will then revise the scope and re-issue for agreement.

1) **Bridge Centre junction.** Yes we can take this into account within our junction assessments. Please could you clarify any design we should be testing? Are we to test its current design and potentially suggest improvements based on the existing layout and highway boundary, or the scheme included within the (out of date) Transport Strategy?

2) **Do you require a full NMU audit in line with DMRB for each route for outline planning?** Or, a less formal audit of the routes describing lighting, widths, materials, constraints etc. (something similar to the attached Hunters Moon app drawing)

3) **Based on our understanding, the Hunters Moon development is required to provide a foot/cycle connection from the development to the east side of Queens Bridge.** Therefore, in the revised scope for agreement we will propose a foot/cycle connection to be delivered from Rowden Park towards the Queens Bridge signal...
junction (east side of Patterdown Road), thus providing a connection between the two developments. Would it be possible to provide details/drawing of the Hunters Moon proposals for this connection?

Kind Regards,

Dale Harvey
Senior Technician

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520653
f 0118 9597498
e dharvey@peterbrett.com
w www.peterbrett.com

From: Tilley, Phil [mailto:Phil.Tilley@wiltshire.gov.uk]
Sent: 20 June 2014 11:07
To: Dale Harvey
Cc: Sarah Matthews; Sarah White
Subject: RE: Rowden Park TA Scope

Dale

Apologies for the delay in responding on this.

In general I am comfortable with your proposed scope of work, but I would like you to include for the following:

The Bridge Centre is a significant issue for traffic in Chippenham. Please consider this junction alongside others for assessment.

For walk/cycle route between site and town centre, please ensure TA identifies proposed widths of routes and any constraints on provision. Please also ensure that an NMU audit is identified as a requirement for all routes. We need to concentrate efforts of securing good quality walk and cycle routes.

Please ensure that walk-cycle links to Hunters Moon are addressed; this site has a minded to approve decision, and the development proposes east facing links to the strategic SW housing and employment sites. Also consider link to identified local facility at Lackham.

We will require some firm proposals in relation to bus service improvements, rather than an identification of possibilities.

On-going issues with Core Strategy transport testing work present some difficulties in agreeing test scenarios, but the suggested options are acceptable in the absence of better information to inform how the town might be developed; we reserve our position to require some additional testing in the event that circumstances change prior to the determination of the Rowden Park proposals.

Regards

Phil Tilley
Development Control Engineer
Sustainable Transport
Wiltshire Council

NB Mondays and Thursday are my normal working days.

Tel: 01225 713442
Mob: 07747 622819
email: phil.tilley@wiltshire.gov.uk
From: Dale Harvey [mailto:dharvey@peterbrett.com]
Sent: 21 May 2014 17:06
To: Tilley, Phil
Cc: Sarah Matthews; Sarah White
Subject: Rowden Park TA Scope

Phil,

Please find attached updated draft TA scope for Rowden Park for your review and comment.

Kind Regards,

Dale Harvey
Senior Technician

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520653
f 0118 9597498
e dharvey@peterbrett.com
w www.peterbrett.com

Peter Brett Associates LLP is a limited liability partnership registered in England and Wales. Registered number: OC334398. Roger Tym & Partners, Baker Associates and Hannah, Reed and Associates are part of Peter Brett Associates LLP. A list of members is open to inspection at our registered office.
Registered Office: Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN. UK T: +44 (0)118 959 0761 F: +44 (0)118 959 7498. Brett Consulting Limited is wholly owned by Peter Brett Associates LLP. Registered number: 07765026. Registered address: as above.
Email is used as a convenient medium for rapid data transfer. Any contractual correspondence sent or received by email will not be held to be such unless and until it is received in writing by fax or letter. Likewise, file attachments must be treated as uncontrolled documents until issued as hard copy. This email and any files transmitted with it are confidential and may be legally privileged, and are intended solely for the use of the individual or entity to whom they are addressed. If an addressing or transmission error has misdirected this email please notify the author by replying to this email and delete the email. If you are not the intended recipient you must not use or disclose, print or rely on this email. You are advised that you open any attachment at your own risk.
Any OS Data attached to this email is issued in accordance with Licence No. 100021575 under condition that it is used to plot once and not retained on the recipients computer system.

---------------------------------------------------
---------------------------------------------------

This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification and distribution of the contents of the email is strictly prohibited. Email content may be monitored by Wiltshire Council to ensure compliance with its policies and procedures. No contract is intended by this email, and any personal opinions expressed in this message are those of the sender and should not be taken as representing views of Wiltshire Council. Please note Wiltshire Council utilises anti-virus scanning software but does not warrant that any e-mail or attachments are free from viruses or other defects and accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.
This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification and distribution of the contents of the email is strictly prohibited. Email content may be monitored by Wiltshire Council to ensure compliance with its policies and procedures. No contract is intended by this email, and any personal opinions expressed in this message are those of the sender and should not be taken as representing views of Wiltshire Council. Please note Wiltshire Council utilises anti-virus scanning software but does not warrant that any e-mail or attachments are free from viruses or other defects and accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.
Thanks for this. Following an internal meeting recently, Mark Wiltshire will be the highways officer dealing with this site from now, so please address any further communications directly to him. We work in the same office so I can brief him on any matters arising in the future where there might be considered to be conflicting advice/views/requirements from this side.

Hopefully all will proceed smoothly!

Regards,

Phil Tilley
Development Control Engineer
Sustainable Transport
Wiltshire Council

NB Mondays and Thursday are my normal working days.

Tel: 01225 713442
Mob: 07747 622819
email: phil.tilley@wiltshire.gov.uk
web: www.wiltshire.gov.uk

Follow Wiltshire Council

---

Phil,

Please see attached updated scope, based on your comments, for agreement.

We have also included a new section detailing mode shift from private car to bus for trips toward the town centre as a result of the bus priority and frequency enhancements.

For ease all updates are highlighted in yellow.

Regards,

Dale Harvey
Senior Technician
Dale

Apologies for the delay in responding on this.

In general I am comfortable with your proposed scope of work, but I would like you to include for the following:

The Bridge Centre is a significant issue for traffic in Chippenham. Please consider this junction alongside others for assessment.

For walk/cycle route between site and town centre, please ensure TA identifies proposed widths of routes and any constraints on provision. Please also ensure that an NMU audit is identified as a requirement for all routes. We need to concentrate efforts of securing good quality walk and cycle routes.

Please ensure that walk-cycle links to Hunters Moon are addressed; this site has a minded to approve decision, and the development proposes east facing links to the strategic SW housing and employment sites. Also consider link to identified local facility at Lackham.

We will require some firm proposals in relation to bus service improvements, rather than an identification of possibilities.

On-going issues with Core Strategy transport testing work present some difficulties in agreeing test scenarios, but the suggested options are acceptable in the absence of better information to inform how the town might be developed; we reserve our position to require some additional testing in the event that circumstances change prior to the determination of the Rowden Park proposals.

Regards

Phil Tilley
Development Control Engineer
Sustainable Transport
Wiltshire Council

NB Mondays and Thursday are my normal working days.

Tel: 01225 713442
Mob: 07747 622819
email: phil.tilley@wiltshire.gov.uk
web: www.wiltshire.gov.uk

Follow Wiltshire Council
To: Tilley, Phil
Cc: Sarah Matthews; Sarah White
Subject: Rowden Park TA Scope

Phil,

Please find attached updated draft TA scope for Rowden Park for your review and comment.

Kind Regards,

Dale Harvey
Senior Technician

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
0118 950 0761 F: +44 (0)118 959 7498
dharvey@peterbrett.com
www.peterbrett.com

Peter Brett Associates LLP is a limited liability partnership registered in England and Wales. Registered number: OC334398. Roger Tym & Partners, Baker Associates and Hannah, Reed and Associates are part of Peter Brett Associates LLP. A list of members is open to inspection at our registered office. Registered Office: Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN. UK T: +44 (0)118 950 0761 F: +44 (0)118 959 7498. Brett Consulting Limited is wholly owned by Peter Brett Associates LLP. Registered number: 07765026. Registered address: as above.

Email is used as a convenient medium for rapid data transfer. Any contractual correspondence sent or received by email will not be held to be such unless and until it is received in writing by fax or letter. Likewise, file attachments must be treated as uncontrolled documents until issued as hard copy. This email and any files transmitted with it are confidential and may be legally privileged, and are intended solely for the use of the individual or entity to which they are addressed. If an addressing or transmission error has misdirected this email please notify the author by replying to this email and delete the email. If you are not the intended recipient you must not use or disclose, print or rely on this email. You are advised that you open any attachment at your own risk.

Any OS Data attached to this email is issued in accordance with Licence No. 100021575 under condition that it is used to plot once and not retained on the recipient's computer system.

This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification and distribution of the contents of the email is strictly prohibited. Email content may be monitored by Wiltshire Council to ensure compliance with its policies and procedures. No contract is intended by this email, and any personal opinions expressed in this message are those of the sender and should not be taken as representing views of Wiltshire Council. Please note Wiltshire Council utilises anti-virus scanning software but does not warrant that any e-mail or attachments are free from viruses or other defects and accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.

This message has been scanned for viruses by Websense
Hiya Sarah

Sorry I have been in meetings all day.

We cannot say that the Dennis vehicles will be definitely service development, as in the future private contractors may be collecting the waste and recycling on behalf of Wiltshire Council, if this does happen, we have no authority to state what vehicles are used to service any area.

Please find attached a guidance note which has up to date vehicle dimensions included, this is what has been agreed with the Wiltshire Council planning department.

Please read through this before just referring to the website information.

Comments from the Waste and Recycling Manager are reflected in the above, but also, the roads will need to be to a highway standard which all other roads in Chippenham will be built too. The normal issues we have with the lorry size is if cars are parked on the highway, and this can cause access issues.

Many Thanks

Karina Kearney
Waste Technical Officer
Waste Management
Waste and Environment
Wiltshire Council

Internal extn: 21774
Direct Dial: 01249 706774
Mobile: 07776230910
Email address: karina.kearney@wiltshire.gov.uk
Web: www.wiltshire.gov.uk

Follow Wiltshire Council

Dear Karina,

We have found refuse vehicle specifications for road layout design on the Wiltshire Council website below:
The specification matches that of the Dennis Eagle vehicle that you previously sent through details of; therefore we will use this for design purposes in line with Wiltshire Council guidance.

Kind regards,

Sarah White
Graduate Engineer

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520604
f 0118 9597498
e swhite@peterbrett.com
w www.peterbrett.com

From: Sarah White
Sent: 22 July 2014 08:51
To: ‘Kearney, Karina’
Cc: gordon.marriott@wiltshire.gov.uk; Dale Harvey
Subject: RE: Refuse Vehicles in Chippenham

Dear Karina,

Please could you advise as to when you expect to receive a response from the waste and recycling manager?

Thank you.

Kind regards,

Sarah White
Graduate Engineer

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520604
f 0118 9597498
e swhite@peterbrett.com
w www.peterbrett.com

From: Sarah White
Sent: 16 July 2014 12:40
To: ‘Kearney, Karina’
Cc: gordon.marriott@wiltshire.gov.uk; Dale Harvey
Subject: RE: Refuse Vehicles in Chippenham

Dear Karina,

I was just wondering whether you have heard anything yet from the waste and recycling manager regarding this?
Kind regards,

Sarah White  
Graduate Engineer  
For and on behalf of Peter Brett Associates LLP  
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN  
t 01189520604  
f 0118 9597498  
e swite@peterbrett.com  
w www.peterbrett.com

From: Sarah White  
Sent: 08 July 2014 12:23  
To: ‘Kearney, Karina’  
Subject: RE: Refuse Vehicles in Chippenham

Dear Karina,

Thank you very much, I look forward to hearing from you again.

Kind regards,

Sarah White  
Graduate Engineer  
For and on behalf of Peter Brett Associates LLP  
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN  
t 01189520604  
f 0118 9597498  
e swite@peterbrett.com  
w www.peterbrett.com

From: Kearney, Karina [mailto:Karina.Kearney@wiltshire.gov.uk]  
Sent: 08 July 2014 12:03  
To: Sarah White  
Cc: Dale Harvey; Marriott, Gordon  
Subject: RE: Refuse Vehicles in Chippenham

Good afternoon Sarah

Just to keep you in the loop, I have sent your reply to the waste and recycling manager for comment, as soon as I have received her reply I will be back in contact.

Many Thanks

Karina Kearney  
Waste Technical Officer  
Waste Management  
Waste and Environment
Dear Karina,

Thank you very much for sending this through.

Due to the large size of the Mercedes vehicle, we are proposing to design the residential masterplan to accommodate the slightly smaller Dennis vehicle. Rowden Park is a garden village, we would have to provide excessive hardstanding and carriageway widths if we design all streets to accommodate the larger vehicle, detracting from the character of the proposed development.

There are proposals for some small shops and a primary school on-site. These could be accessed by the Mercedes if required as they have been designed to accommodate articulated lorry deliveries.

We assume that most of Chippenham is served by the Dennis vehicles, as the Mercedes may not fit in certain existing areas? Please could you confirm if you are happy with our approach to the masterplan design.

I look forward to hearing from you.

Kind regards,

Sarah White
Graduate Engineer

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
+44 118 959 2064
+44 118 959 7498
+44 118 959 9988
+44 118 959 7498
www.peterbrett.com

---

Good morning Sarah
Thank you for your email regarding the size of refuse vehicles servicing the Chippenham area.

Please see the PDF’s attached with all the information,

If you require anymore, please do not hesitate to contact me.

Many Thanks

Karina Kearney
Waste Technical Officer
Waste Management
Waste and Environment
Wiltshire Council

Internal extn: 21774
Direct Dial: 01249 706774
Mobile: 07776230910
Email address: karina.kearney@wiltshire.gov.uk
Web: www.wiltshire.gov.uk

Follow Wiltshire Council

---------------

From: Sarah White [mailto:swhite@peterbrett.com]
Sent: 18 June 2014 11:53
To: WasteandrecyclingNorth
Cc: Dale Harvey
Subject: Refuse Vehicles in Chippenham

Dear Sir/Madam,

We are currently working of the design of a site masterplan in Chippenham, and wish to ensure that appropriate sized refuse vehicles can be accommodated. Therefore, please could you advise as to the make and model of refuse vehicles that are used in Chippenham.

Thank you very much.

Kind regards,

Sarah White
Graduate Engineer

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520604
f 0118 9597498
e swhite@peterbrett.com
w www.peterbrett.com

Peter Brett Associates LLP is a limited liability partnership registered in England and Wales. Registered number: OC334398. Roger Tym & Partners, Baker Associates and Hannah, Reed and Associates are part of Peter Brett Associates LLP. A list of members is open to inspection at our registered office. Registered Office: Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN. UK T: +44 (0)118 950 0761 F: +44 (0)118 959 7498. Brett Consulting Limited is wholly owned by Peter Brett Associates LLP. Registered number: 07765026. Registered address: as above.
This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification and distribution of the contents of the email is strictly prohibited. Email content may be monitored by Wiltshire Council to ensure compliance with its policies and procedures. No contract is intended by this email, and any personal opinions expressed in this message are those of the sender and should not be taken as representing views of Wiltshire Council. Please note Wiltshire Council utilises anti-virus scanning software but does not warrant that any e-mail or attachments are free from viruses or other defects and accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.
accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.
WASTE STORAGE AND COLLECTION
GUIDANCE FOR NEW DEVELOPMENTS

Wiltshire Council

Contents

1. INTRODUCTION .................................................................................................................. 2
2. PLANNING APPLICATIONS .................................................................................................. 3
   2.1 After planning permission has been granted ................................................................. 3
3. INTERNAL SEGREGATION AND STORAGE OF WASTE ................................................. 3
4. HOUSING DEVELOPMENTS ............................................................................................. 4
   4.1 Container collection ..................................................................................................... 5
5. APARTMENT DEVELOPMENTS ......................................................................................... 5
   5.1 Containers required for storage of waste ................................................................. 5
   5.2 Mixed Use Developments ......................................................................................... 8
   5.3 Waste Compaction ..................................................................................................... 8
   5.4 Bulky Household Waste Collections ....................................................................... 8
   5.5 Chutes ......................................................................................................................... 8
6. COMMERCIAL DEVELOPMENTS ..................................................................................... 8
   6.1 Containers required for storage of waste ................................................................. 8
   6.2 Storage areas for containers .................................................................................... 8
   6.3 Container Collection .................................................................................................. 9
7. COMMUTED SUM FOR SECTION 106 PROVISION CALCULATIONS ......................... 9
   7.1 Waste and Recycling Provision Costs ..................................................................... 9
8. CONTACTS ......................................................................................................................... 10
9. DEFINITIONS .................................................................................................................... 10
10. PROVISIONS ..................................................................................................................... 11
APPENDICES .......................................................................................................................... 13
   A. Container Dimensions ................................................................................................ 13
   B. Collection Vehicle Dimensions ............................................................................. 14
   C. Storage Areas And Container Collection For Apartment, Commercial And Mixed Use Developments .......................................................... 15
   D. Examples Of Good And Bad Practice .................................................................... 17
1. INTRODUCTION

As part of the ongoing sustainable development in the county, the council is required to detail waste and recycling collection contributions as part of the Section 106 provision for all new developments. This requirement ties in with other legal obligations we have to meet as a local authority, focusing on how we manage our waste in order to ensure that we increase the rate of recycling that our residents achieve and to reduce the reliance on the unsustainable option of landfill.

Wiltshire Council’s waste strategy seeks the significant reduction of waste to landfill, with great emphasis upon reducing household waste and increasing the proportion that is either recycled or composted. Wiltshire is already well provided with household recycling centres and smaller local recycling sites (about 11 and 170 respectively at April 2011). Therefore, the main priority is to extend recycling at the kerbside.

The new council also now has the objective of providing the same waste and recycling collection in all areas. Service changes will take place during 2011-12 to create this harmonised kerbside collection scheme. In agreeing this service, the council has brought forward its target for recycling. The specifications for housing development in Section 4 reflect the harmonised services. The new services will help to deliver the following Wiltshire Council corporate and strategy targets:

- A reduction in landfill to less than 25% of the total tonnage collected by 2014 (37% achieved 2010-11)
- An increase in recycling and composting to 50% of household waste, by 2014 (41% achieved 2010-11)
- The provision of alternating weekly collections of waste and recycling to all householders by 2011 (target date now March 2012 – approx 50% achieved 2010-11)
- The provision of kerbside collections of multiple recyclates to all householders by 2011 (98% achieved 2010-11)

In order to ensure that these objectives are attainable, it is vital that new buildings are designed to enable waste to be segregated for recycling and composting, and to be stored and collected in such a way that is mutually beneficial to all parties involved.

The council would also like to see non-residential buildings designed and managed in a way that better facilitates the recycling of waste, to assist with the landfill reduction target.
This document will help all those involved in the design and management of buildings to produce waste management strategies that best facilitate the storage of waste and maximise the amount which can be sent for recycling. It is a material planning consideration that developers are conscious of the waste that will be generated by their developments and that their proposals satisfy all the requirements of this document.

This guidance was developed by the council’s Waste Collection team, with assistance from the Waste Management Service, in consultation with the Planning Department, to ensure that the guidance is useable and useful for all parties.

This document is part of an evolving process to develop best practice guidance for the design and management of buildings in Wiltshire and should be read within the context of other Wiltshire Council policies and legislation. The guidance offered also serves to ensure that developments have adequate storage capacity and that access is in line with the domestic waste and recycling services offered by the council.

Following the guidance in this document is intended to help you produce successful waste management strategies and will also assist in complying with Part H of the Building Regulations 2002.

This guidance applies to proposals for all new builds and any developments to existing properties which will result in inadequate waste and recycling storage and collection facilities as outlined in Sections 2-7.

2. PLANNING APPLICATIONS

New developments are expected to include a waste management strategy incorporating all areas covered in this document. The guide is designed to help achieve this outcome. The guidance should be used from the earliest stages of building design. Designing inadequately sized bin storage areas, access for collection crews and vehicles and other aspects of waste management are difficult and costly to rectify retrospectively. The recommendations are integral to the design of a building and they provide information that is useful for building designers, and assures Planning Officers that a suitable waste management strategy has been developed.

2.1 After planning permission has been granted

Developers must notify the Waste Collection team at least one month before a development is due to be occupied, in order that suitable containment for the site can be identified and processed prior to occupation.

3. INTERNAL SEGREGATION AND STORAGE OF WASTE
To encourage occupants to recycle their waste, internal storage areas should be designed into each unit of a new development. This will enable occupants to segregate their waste into residual waste and recyclables, and store it temporarily until transferring it to the external waste and recycling containers available. Occupants must be supplied with a container(s) for the internal segregation of their waste for recycling. Wiltshire Council does not provide such containers.

Options that developers/architects may wish to consider are kitchen units with pull out cupboards, with two containers attached (one for waste and one for dry recyclables), under the sink storage solutions or an area of storage available in the kitchen/utility room to enable the separation of waste within the home.

Consideration should be given to the materials that residents can recycle at the kerbside in when designing storage solutions.

4. HOUSING DEVELOPMENTS

Individual households (not dependant on number of bedrooms) will require the following containers for waste collection:

<table>
<thead>
<tr>
<th>Containment</th>
<th>Size</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Height (mm)</td>
<td>Width (mm)</td>
</tr>
<tr>
<td>1 x 180</td>
<td>1100</td>
<td>505</td>
</tr>
<tr>
<td>1 x 240</td>
<td>1100</td>
<td>740</td>
</tr>
<tr>
<td>1 x 180</td>
<td>1100</td>
<td>505</td>
</tr>
<tr>
<td>2 x black box</td>
<td>375</td>
<td>590</td>
</tr>
</tbody>
</table>

- All properties must be able to present containers at the kerbside without having to drag bins through the house.
- The containers described above should be accommodated within the boundary of each property.
- Containers should have designated storage areas which are sensitively located and designed, taking into account the aesthetics of the area and the distance to the collection point. Storage areas should
be large enough to house up to at least the container provision outlined in the table above. Storage area capacity must bear relation to property size.

- The council offers a fortnightly collection service for residual waste.
- Capacity must also be sufficient to allow for the storage of additional materials that may be collected by Wiltshire Council in the future (e.g. food waste, batteries etc.).
- Container storage areas should be in a position that makes it convenient for the householder to get the containers to the kerbside for collection. Storage areas should also be accessible to collection crews in order to accommodate any assistance which may be required by current or future occupants under the council’s assisted collection policy.

4.1. Container collection

- Householders are required to present their bins and boxes at the kerbside on collection day and return them to the storage area, as soon as possible following collection.
- The collection vehicles used by Wiltshire Council and its contractors are described in Appendix B. New developments and their access roads should be designed to accommodate these vehicles. Parking (including visitors’ parking) on the development should be managed so that parked vehicles cannot obstruct the collection vehicle’s access to the collection point(s).

5. APARTMENT DEVELOPMENTS

5.1. Containers required for storage of waste

*Flats 1 – 5*

A block of flats or individual flats which do not exceed 5 in number at one location are provided with the same individual provision of bins as an individual household, as above. However, the provision for garden waste bins is not included, given that most flats do not require this type of containment. However, if this is not the case, then a garden waste bin should also be included, as detailed above.

<table>
<thead>
<tr>
<th>Containment</th>
<th>Size</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Height (mm)</td>
<td>Width (mm)</td>
</tr>
</tbody>
</table>

1 The council will provide an assisted collection where it is satisfied that the householder is unable to place their household waste at the appropriate point for collection by reason of illness, physical ability or infirmity, whether permanent or temporary, and there is no other able bodied person available in the household to assist.
<table>
<thead>
<tr>
<th>Containment</th>
<th>Size</th>
<th>Height (mm)</th>
<th>Width (mm)</th>
<th>Depth (mm)</th>
<th>Space required (sq m) per bin</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 x 1100</td>
<td></td>
<td>1470</td>
<td>1375</td>
<td>1120</td>
<td>1.75</td>
<td>Residual waste</td>
</tr>
<tr>
<td>1 x 660</td>
<td></td>
<td>1470</td>
<td>1375</td>
<td>785</td>
<td>7.07</td>
<td>Plastic bottles and cardboard</td>
</tr>
<tr>
<td>1 x 180</td>
<td></td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td>Cans, Foil and Aerosols</td>
</tr>
<tr>
<td>1 x 180</td>
<td></td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td>Green Glass</td>
</tr>
<tr>
<td>1 x 180</td>
<td></td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td>Brown Glass</td>
</tr>
<tr>
<td>1 x 180</td>
<td></td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td>Clear Glass</td>
</tr>
<tr>
<td>1 x 180</td>
<td></td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td>Paper</td>
</tr>
</tbody>
</table>

Storage area requirements: 400cm x 260cm with a door opening of at least 200cm wide. The minimum height must be 200cm.

**Flats 11 – 14**

<table>
<thead>
<tr>
<th>Containment</th>
<th>Size</th>
<th>Height (mm)</th>
<th>Width (mm)</th>
<th>Depth (mm)</th>
<th>Space required (sq m) per bin</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 x 1100</td>
<td></td>
<td>1470</td>
<td>1375</td>
<td>1120</td>
<td>1.75</td>
<td>Residual waste</td>
</tr>
<tr>
<td>1 x 1100</td>
<td></td>
<td>1470</td>
<td>1375</td>
<td>1120</td>
<td>1.75</td>
<td>Plastic bottles and cardboard</td>
</tr>
<tr>
<td>Containment</td>
<td>Size</td>
<td>Materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------</td>
<td>-----------</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 x 180</td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td>Green Glass</td>
<td></td>
</tr>
<tr>
<td>1 x 180</td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td>Brown Glass</td>
<td></td>
</tr>
<tr>
<td>1 x 180</td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td>Clear Glass</td>
<td></td>
</tr>
<tr>
<td>2 x 180</td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td>Paper</td>
<td></td>
</tr>
<tr>
<td>2 x 180</td>
<td>1100</td>
<td>505</td>
<td>755</td>
<td>0.35</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Storage area requirements: 530cm x 320xm with a door opening of at least 200cm wide. The minimum height must be 200cm.

**Flats 15 – 18**

<table>
<thead>
<tr>
<th>Containment</th>
<th>Size</th>
<th>Materials</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3 x 1100</td>
<td>1470</td>
<td>1375</td>
</tr>
<tr>
<td>1 x 1100</td>
<td>1470</td>
<td>1375</td>
</tr>
<tr>
<td>2 x 180</td>
<td>1100</td>
<td>505</td>
</tr>
<tr>
<td>2 x 180</td>
<td>1100</td>
<td>505</td>
</tr>
<tr>
<td>2 x 180</td>
<td>1100</td>
<td>505</td>
</tr>
<tr>
<td>2 x 180</td>
<td>1100</td>
<td>505</td>
</tr>
<tr>
<td>2 x 180</td>
<td>1100</td>
<td>505</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Storage area requirements: 2 bin stores, each measuring 530cm x 320xm with a door opening of at least 200cm wide. The minimum height must be 200cm.

- The council offers a fortnightly collection service for residual waste and for recycling. Storage areas should be designed to accommodate the containers calculated above.
- Where appropriate, an internal access door from the residential part of the development should be provided to allow residents internal access to the storage area. This door should be connected to the residential area by a lobby, so as to prevent nuisance odours entering the residence.
- The distance that residents will be required to travel to waste storage areas from their apartments should not exceed 30m, in line with the Building Regulations 2002, Part H.
- Consideration should also be given to the inclusion of hydraulic underground bin systems for recyclable materials in new developments.
- Further information on the requirements for storage space is included in the appendices A, B and C.
5.2. Mixed Use Developments

Requirements for mixed-use developments are given in Appendix C.

5.3. Waste Compaction

On-site waste compaction is not an option for residential developments as it presents problems for collection purposes.

5.4. Bulky Household Waste Collections

- Wiltshire Council currently offers a collection service for the removal of bulky waste (e.g. fridges, furniture, mattresses, IT equipment etc) from residential properties. Collections are made on a request basis with a collection date allocated to the customer. The collection on the specified date may take place at any time between 07:00 and 18:00.
- An area must be provided for residents to place items of bulky waste for collection, on an appointment date specified by the council.
- The area provided must cover an area of approximately 10m$^2$. The area does not have to be designated solely for the purpose of bulky waste collection (e.g. hatched area to the car park etc), but must be clearly identifiable for when the collection takes place.
- The area must satisfy all of the requirements of Appendix C.
- Collections can be arranged directly with Customer Services at the council. Contact details are in Section 7.

5.5. Chutes

Chutes should not be included in apartment developments as they can create problems for segregating and storing waste for recycling.

6. COMMERCIAL DEVELOPMENTS

6.1. Containers required for storage of waste

The number and type of containers that a commercial development requires are ultimately dependent on the activity of the premises because the volume of waste and the type and amount of recyclable material generated are governed by the nature of the business.

6.2. Storage areas for containers

- Containers should be provided for the maximum number of materials that are segregated and sent for recycling by commercial waste collection businesses.
- **Envirowise** is a government-funded programme for UK businesses that gives advice on waste collection and disposal (www.envirowise.org.uk).
- Storage areas should be within the confines of the development. Additional requirements for commercial developments are given in Appendix A.

6.3. Container Collection

- Container collection requirements are given in Appendix C.

7. COMMUTED SUM FOR SECTION 106 PROVISION CALCULATIONS

7.1. Waste and Recycling Provision Costs

<table>
<thead>
<tr>
<th>Containment</th>
<th>Cost (prices are subject to change)</th>
</tr>
</thead>
<tbody>
<tr>
<td>180 litre wheeled bin 17p per litre</td>
<td>£30</td>
</tr>
<tr>
<td>240 litre wheeled bin 19p per litre</td>
<td>£45</td>
</tr>
<tr>
<td>660 litre wheeled bin 22p per litre</td>
<td>£145</td>
</tr>
<tr>
<td>1100 litre wheeled bin 26p per litre</td>
<td>£286</td>
</tr>
<tr>
<td>55 litre black box 15p per litre</td>
<td>£8</td>
</tr>
</tbody>
</table>

This equates to the cost per scenario table below (i.e. one household needing 2 x 180 litre bins, 1 x 240 litre bin and 2 x 55 litre box = £121 etc)

<table>
<thead>
<tr>
<th>Scenario</th>
<th>Cost per scenario</th>
</tr>
</thead>
<tbody>
<tr>
<td>Households</td>
<td>£121</td>
</tr>
<tr>
<td>Flats 6 - 10</td>
<td>£656</td>
</tr>
<tr>
<td>Flats 11 - 14</td>
<td>£1126</td>
</tr>
<tr>
<td>Flats 15 - 18</td>
<td>£1639</td>
</tr>
</tbody>
</table>

**For example:**

A development of 130 houses and a block of 12 flats is being built. The contribution is worked out as follows:

- Multiply the number of households (130) by the “cost per scenario” for households (£121) = £15,730.
- Add the “cost per scenario” for the number of flats in the development. In this case there are 12 flats so the scenario for “Flats 11 – 14” is used - £1126.
- £15,730 + £1126 = £16,856 s106 contribution for waste and recycling services.
NOTES

Please note that:

- if the development includes flats which have gardens, then allowances will have to be made to store garden waste bins for the flats in the bin store
- these costs are subject to change depending on what services are in place at the time the development is completed.

8. CONTACTS

Planning Department and Building Control, Wiltshire Council

developmentmanagementwest@wiltshire.gov.uk
developmentmanagementeast@wiltshire.gov.uk
developmentmanagementsouth@wiltshire.gov.uk / 01722 434541
developmentmanagementnorth@wiltshire.gov.uk / 01249 706444

Section 106 enquiries, Wiltshire Council

S106 & Community Infrastructure Monitoring & Admin officer
01380 734780
Debbie.evans@wiltshire.gov.uk

Waste Collection General Enquiries

www.wiltshire.gov.uk
wasteandrecycling@wiltshire.gov.uk
0300 456 0102

Waste Collection, Section 106 contact

Gareth Jones
Senior Waste Technical Officer
01225 776655
garethi.jones@wiltshire.gov.uk

Envirowise 0800 585 794 www.envirowise.org.uk

9. DEFINITIONS

“Refuse and Recycling Commuted Sum” means the sum payable by the Owner to the Council in accordance with Schedule [1 part 1] and calculated in accordance with Schedule [1 ]Part [ ]
[the sum calculated in accordance with Part [4/5] of Schedule 1 payable to the Council in accordance with paragraph 1.4 of Part 1 of Schedule 1 to be utilised by the Council for its responsibilities related to the provision of waste and recycling apparatus referred to in Part [4/5] of Schedule 1]]

Payment covenant

Not to Commence Development until the Owner has paid to the Council:

the Refuse and Recycling Commuted Sum calculated in accordance with [Part I of this Schedule ] within three months of the Commencement of Development or within three months of the Commencement of Development on each area included in any applications for reserved matters approval for such part of the Refuse and Recycling Commuted Sum which relates to dwellings in such reserved matters approval if more than one

10. PROVISIONS

Refuse and Recycling Facilities

1. The Owners shall notify in writing the Council's officer responsible for refuse and recycling on Commencement of Development of the first Dwelling and every six months thereafter of the proposed completion of Dwellings during the following six months so that arrangements can be made for bins to be provided to those Dwellings by the Council.

2. The Refuse and Recycling Commuted Sum shall be calculated on the basis of provision by the Council of all the above bins in accordance with paragraphs 1 and 2 above at the prices current at the date the Refuse and
Recycling Commuted Sum is due to be paid and not the prices current at the date of this Agreement which are set out in the said Annex 4 for illustrative purposes only.

3 If the housing/flat mix changes the Waste and Recycling Commuted Sum shall be re-calculated in accordance with current prices at the date the Refuse and Recycling Commuted Sum is due to be paid.

4 If the Council makes changes to the way household waste is collected the Council shall notify in writing the Owners of these changes and the use of the Refuse and Recycling Commuted Sum will not be limited to the purchase and provision of the items set out or referred to in this Part but may be used to pay for any alternative refuse and recycling facilities for the Development.
APPENDICES

A. CONTAINER DIMENSIONS

<table>
<thead>
<tr>
<th>Container</th>
<th>Dimensions (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1100ltr Eurobin</td>
<td>Width: 1375</td>
</tr>
<tr>
<td></td>
<td>Depth: 1120</td>
</tr>
<tr>
<td></td>
<td>Height: 1470</td>
</tr>
<tr>
<td></td>
<td>Height (with open lid): 2470</td>
</tr>
<tr>
<td>660ltr Eurobin</td>
<td>Width: 1375</td>
</tr>
<tr>
<td></td>
<td>Depth: 785</td>
</tr>
<tr>
<td></td>
<td>Height: 1330</td>
</tr>
<tr>
<td></td>
<td>Height (with open lid): 2060</td>
</tr>
<tr>
<td>360ltr Wheeled Bin</td>
<td>Width: 580</td>
</tr>
<tr>
<td></td>
<td>Depth: 880</td>
</tr>
<tr>
<td></td>
<td>Height: 1100</td>
</tr>
<tr>
<td></td>
<td>Height (with open lid): 1690</td>
</tr>
<tr>
<td>240ltr Wheeled Bin</td>
<td>Width: 740</td>
</tr>
<tr>
<td></td>
<td>Depth: 580</td>
</tr>
<tr>
<td></td>
<td>Height: 1100</td>
</tr>
<tr>
<td></td>
<td>Height (with open lid): 1750</td>
</tr>
<tr>
<td>180ltr Wheeled Bin</td>
<td>Width: 505</td>
</tr>
<tr>
<td></td>
<td>Depth: 755</td>
</tr>
<tr>
<td></td>
<td>Height: 1100</td>
</tr>
<tr>
<td></td>
<td>Height (with open lid): 1560</td>
</tr>
<tr>
<td>55ltr Box</td>
<td>Width: 590</td>
</tr>
<tr>
<td></td>
<td>Depth: 395</td>
</tr>
<tr>
<td></td>
<td>Height: 375</td>
</tr>
<tr>
<td></td>
<td>Height (with open lid): n/a</td>
</tr>
</tbody>
</table>
B. COLLECTION VEHICLE DIMENSIONS

The figures below are based on the vehicles used by Wiltshire Council:

- Sufficient room should be allowed to manoeuvre and load a vehicle of the following dimensions:
  - Length – 11m
  - Length, when loading – 13.1m
  - Width – 2.4m
  - Height – 6m (including toploader arms)
  - Turning Circle, between kerbs – 17.99m
  - Turning Circle, between walls – 19.39m

- Fully laden collection vehicles weigh approximately 32 tonnes. Service manholes and road surfaces should be constructed with this in mind.

- Overhead service cables, pipes, archways and other potential obstacles must be at least 7 metres from ground level.

- If Waste Management Services are unable to verify the suitability of a proposal in terms of collection vehicle access, accurate technical drawings detailing the proposed route of collection vehicles around the development should be included in plans submitted to the council.

- It should be noted that all refuse and some recycling containers are picked up from the rear of the waste collection vehicles, while some other recycling containers are picked up from the nearside of recycling vehicles. This should also be reflected in the proposed routes of the collection vehicles.

- Collection vehicles should not reverse into the development from a major road, or reverse onto a major road when exiting the development (http://www.highways.gov.uk for the definition of a “major road”).

- Parking on site (including visitors’ parking) should be managed to avoid on-street parking that might prevent the collection vehicle accessing collection points.
C. STORAGE AREAS AND CONTAINER COLLECTION FOR APARTMENT, COMMERCIAL AND MIXED USE DEVELOPMENTS

Storage areas for containers

1. External space must be provided within the curtilage of each dwelling (excluding any to which paragraph 2 applies) for the storage of:
   - 2 x 180 litre wheeled bins (one for household waste and, if the residents elect to join the scheme, one bin for garden waste to be collected by the council) and
   - 1 x 240 litre wheeled bin (for plastic bottles and cardboard for recycling) and
   - 2 x 55 litre kerbside box (for cans, glass, paper, foil, textiles and aerosols for recycling).

1.1. The storage space for the wheeled bins and kerbside boxes shall have easy access to the public highway, without the need to transport containers through the dwelling.

2. Unless the council otherwise agrees, blocks of flats shall be provided (in lieu of the facilities set out in paragraph 1 above) with a screened and fenced compound or compounds with a reinforced concrete surface(s) within 10 metres of the public highway. The compound(s) should be large enough to accommodate the bins in accordance with the tables set out in Appendix A.

2.1. Storage areas should be adequately lit, free from trip hazards and include sufficient natural ventilation if they are integral within a building.

3. Containers should have designated external storage areas which are sensitively located and designed.

4. Container storage areas should be in a position that is mutually convenient and easily accessible for the occupants and the collection crew (see container collection section below.)

5. The design of storage areas should allow for easy removal of the containers, over smooth, continuous surfaces.

6. Doorways should provide at least 1.3m clearance (including thickness of doors).

7. A walkway at least 1.3m wide should be provided within the store that allows access to each of the individual containers and ensures that an individual container can be removed from the store without the need to move any other containers.

8. Where there are separate storage areas for residual waste and recycling, the recycling store should be the easiest to access (e.g. closest, least restricted access etc).

9. Containers should be located away from windows and ventilators, to avoid any nuisance odours entering the premises.

Container Collection
• There are two options for the collection of containers from blocks of flats:
  i. Containers are collected directly from the containers’ store, in accordance with the points below
  ii. Containers are collected from an agreed collection point, in accordance with the points below
• It is the responsibility of the caretaker/management company (or similar) to allow the collection crews access to the container stores/collection point on collection day and to ensure that access is not restricted, for example by parked cars.
• Collection crews will generally not be expected to hold keys, codes or electronic fobs in order to collect bins. However, where necessary, and subject to agreement, arrangements such as these may be made. This must be discussed prior to the submission of the development plans.
• The collection vehicle shall be able to approach the agreed collection point in the collection vehicle whereby no container will have to be manually handled over a distance of greater than 10m.
• Collection operatives cannot load containers into the collection vehicle which are presented on a slope exceeding 1:12. Also the gradient of a slope that containers need to be moved over shall not exceed 1:12. Surfaces that containers need to be moved over shall be of a smooth continuous finish and free from steps or other obstacles. Any steps shall incorporate a drop-kerb. Following collection, containers should be returned to the point at which they were placed out for collection.

Mixed Use Developments

For mixed use developments, separate stores for residual waste and recycling containers should be installed for commercial and residential parts of the development. No mixing of commercial waste and residential waste is permitted.
D. EXAMPLES OF GOOD AND BAD PRACTICE

There are a number of factors which need to be taken into consideration when designing residual waste and recycling storage facilities for flats/apartment, commercial premises and housing developments, to ensure efficient collection by the collection team. By following this document closely, many issues that are experienced relating to residual waste and recycling provision of a new development in Wiltshire will have been eliminated. Forward planning with regard to residual waste and recycling storage and collection will provide benefits to developers, residents and the council. Developers are able to disguise and screen bin areas making developments more attractive to potential buyers, residents are provided with a secure bin area which will further encourage recycling and reduce the likelihood of contamination issues, and sufficient capacity will have been provided, encouraging the area to maintain a clean and tidy appearance.

In order to provide examples of some of the problems encountered by the domestic residual waste and recycling collection service across Wiltshire, actual examples are described below. Individual problems are also described, and details of how such problems could have been avoided are also provided.

Housing Developments

Problem

The storage area provided is not a suitable size to accommodate all the necessary residual waste and recycling receptacles. Additionally the area is shared by three properties.

Solution

All containers required should be accommodated within the boundary of each property. Storage areas should also be large enough house up to, at least, 2 x 180 litre bins (one each for residual waste and garden waste) a 240 litre bin for plastic bottles and cardboard recycling and two 55 litre boxes for recycling paper, glass, cans, foil, aerosols and textiles. The area should be sufficient to allow for the storage of additional materials that may be collected by the council in the future (e.g. food waste, batteries etc).

Flat/Apartment Developments

Problem

This storage area does not meet the requirements laid out in section 5. The floor space is insufficient for the bins required. A walkway is not provided within the store that allows access to each of the individual containers. It is
also not possible to remove individual containers without the need to move all other containers.

Solution

The necessary amount of floor space should be allowed for each receptacle as detailed in 4.17 and a walkway of at least 1.3m wide. Developers should use the table in section 3 in order to calculate the containers required for residual waste and recyclables and subsequently the appropriate floor space required.

Problem

This storage area is located in a central courtyard area of the development. To access this area it is necessary to manoeuvre bins over a distance greater than 10m through a narrow alleyway. Additionally in order for the bins to be taken to the collection vehicle they must be moved over a surface which is not smooth or free of steps and other obstacles. Also steps which the bins must be moved over do not incorporate a drop kerb.

Solution

The collection vehicle must be able to approach the agreed collection point whereby no container will have to be manually handled over a distance of greater than 10m (wherever possible the actual distance will be less than this figure). Where this is not possible, a collection point must be proposed and agreed by Wiltshire Council. This eventuality can easily be avoided by proper planning and design in the early stages of a proposal. Steps in new developments must incorporate drop-kerbs.

Problem

A development is at the bottom of a steep winding slope. Consequently access to the bins stores is inadequate and the room available is not sufficient to allow full manoeuvrability of the collection vehicle. Additionally the surface that the containers need to be moved over is not smooth and continuous. It is not possible for the council to move the containers up the slope, greater than 1:12, over a distance greater than 10m.

Solution

The bin stores should be placed at ground level, within 10m of the vehicle access road. If this is not possible then the developer needs to be aware that a private arrangement is necessary to present the containers to ground level for collection by the council, where a management company or similar body is responsible for getting the containers to within 10m of the access road. Developers must also take into consideration the room necessary to manoeuvre the collection vehicles. See Appendix B.
The bin store is very badly designed. It is only large enough to incorporate one bin which is accessed by residents through the use of chutes. Additionally there are no drop kerbs and the bin store is blocked by several cars.

Solution

Proper planning and design in the early stages of a proposal will avoid having badly designed bin storage areas. Chutes should not be included in flat/apartment developments as they create problems for segregating and sorting materials for recycling. It is also the responsibility of the caretaker/management company (or similar) to ensure that access to the bin store/collection point is not restricted on collection day (e.g. by parked cars.)

Problem

The bin store is blocked by parked cars. Additionally, the surface that the containers need to be moved over is not smooth and continuous. Bin areas are also located internally without natural ventilation and outside access in a secured building. Consequently there is no access for collection vehicles or crews and private arrangements are required to be made in association with the management company.

Solution

Where parking areas are located close to bin stores, it must be ensured that parked vehicles do not prevent access to the bin store. The surface that the containers are moved over must be smooth and continuous. Storage areas must also have natural ventilation and must be adjacent to an external wall where joined to a habitable part of the development.

Commercial Developments

Problem

This commercial property has been extended to its boundaries leaving no storage area for the necessary refuse/recycling receptacles. Consequently bins are stored on the back street causing access problems for collection vehicles and creating litter issues.

Solution

Storage areas should be within the confines of the developments. Any external storage areas should be sensitively designed and located, and should be in a position which is mutually convenient and accessible to the collection crew.
The collections from a set of commercial properties take place from the rear where access for collection vehicles is tight. Parked cars restrict access even further and reduce bin storage areas.

**Solution**

Commercial properties should have designated external storage areas which are sensitively located and designed. Additionally it is the responsibility of the caretaker/management company (or similar) to allow the collection crews access to the containers stores/collection point on collection day and to ensure that access is not restricted, for example by parked car.
Sarah

1. Yes
2. Garages count as a parking space if they are 3 x 6

I am about to go on leave for 2 weeks and have just not had time to look at the em re scenarios, Please could you run that past Phil Tilley next week (I have copied him in) as he should be able to quickly check it out and give you a considered response.

Yours sincerely,
Mark Wiltshire,
Major Projects Officer,
Sustainable Transport,
Highways and Transport,
Wiltshire Council,
County Hall, Trowbridge, Wiltshire, BA14 8JN.

telephone 01225 713448      fax 01225 713207
e mail mark.wiltshire@wiltshire.gov.uk

Sarah

Please could you provide answers to the following questions regarding parking standards:

1) The LTP3 Car Parking Strategy does not differentiate between affordable and market housing – Do the minimum residential car parking requirements apply to both?

2) The LTP3 Car Parking Strategy states in paragraph 7.5 that “the council has decided not to include garages as part of the allocated parking provision except where there are overriding design considerations.”

The development will provide garages for 4 and 5 bedroom houses. In line with the minimum parking requirements this would lead to each 4/5 bed plot including a double garage and 3 driveway parking spaces. This would lead to excessive hardstanding areas across the layout which would be of detriment to the garden village aspirations. We note that within the Hunters Moon application, garages were accepted as allocated parking spaces, providing that they had minimum internal dimensions of 6m x 3m – Please could you confirm if WCC would accept garages (with internal dimensions of 6m x 3m) as allocated parking spaces at Rowden Park?

Please could you also provide an indication as to when you may be able to respond to my previous email below?

I look forward to receiving your comments.

Kind regards,

Sarah White
Dear Mark,

Following your meeting with Sarah Matthews last week, please see the attached technical note regarding the proposed reduction in car driver trips to/from the town centre associated with the bus improvements for your comment/review.

Additionally, we are proposing to alter the scenario tests under “Alternative Case 2”. Phil Tilley requested the worst case and alternative case 1 scenarios, and the Alternative Case 2 was agreed to help us/Crest/Redcliffe understand solely Rowden Park’s impacts, but was not really a test required by yourselves. Since the contribution to the wider Transport Strategy has not be agreed for Showell Farm and Hunters Moon, and therefore their full mitigation cannot be included in the tests, we propose remove Showell Farm and Hunters Moon from these last scenario tests, as follows:

<table>
<thead>
<tr>
<th>Case</th>
<th>2026 Base, including</th>
<th>2026 Base + Development, including</th>
<th>2026 Base + Development + Mitigation, including</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worst Case S1)</td>
<td>North Chippenham plus identified highway improvements</td>
<td>North Chippenham plus identified highway improvements</td>
<td>North Chippenham plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Rawlings Green plus identified highway improvements</td>
<td>Rawlings Green plus identified highway improvements</td>
<td>Rawlings Green plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Rowden Park</td>
<td>Rowden Park</td>
<td>Rowden Park</td>
</tr>
<tr>
<td>Alternative Case 1 S4)</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
</tr>
<tr>
<td></td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
</tr>
<tr>
<td>Alternative Case 2 S7)</td>
<td>Rowden Park</td>
<td>S8) Rowden Park</td>
<td>S9) Rowden Park</td>
</tr>
</tbody>
</table>

Please could you confirm that this is acceptable to you.

I look forward to receiving your comments.

Kind regards,

Sarah White
Sarah, 

In view of this you must amend the scoping note to 10% (rounded from 9%) reduction in town centre trips and amend the table accordingly.

Thank you

Yours sincerely,

Mark Wiltshire,
Major Projects Officer,
Sustainable Transport,
Highways and Transport,
Wiltshire Council,
County Hall, Trowbridge, Wiltshire, BA14 8JN.

telephone 01225 713448      fax 01225 713207
e mail mark.wiltshire@wiltshire.gov.uk

---

Hi Both,

The Chippenham Strategic Transport Study (2013) states that with the preferred package of transport measures outlined in the strategy, which does include bus lanes in new developments sites, a 9% reduction in motorised trips from new development areas is considered a robust assumption.

The Chippenham Transport Strategy can be viewed here

Kind Regards

Laura

Laura Gosling
Senior Transport Planner - Transport Strategy
Sustainable Transport Group
Wiltshire Council
Sarah,

Thank you for your comments I have agreed your points as yellow below.

Phil Tilley has agreed that your Section 5.5 Assignment is correct and as he agreed with you.

The only other point of concern is that we do not agree that at 5.4.18 you can go as far as to discount 75% of trips to and from TC due to mode shift to buses. The Buchanans study for the Chippenham Strategic Transport Study did not discount by this large amount albeit without the bus lanes etc. I have asked my transport planning colleague Laura Gosling to check out for me how much discount was applied due to mode shift at that time, and suggest you speak directly to her on Monday and agree a significantly reduced % discount for this section and Table 5.11 copying me in. This is necessary anyway to give a robust case. There is no guarantee at this stage that the bus lanes will be agreed, there could be land, traffic, political difficulties Also the effects on existing traffic journey times will be taken into account.

Yours sincerely,

Mark Wiltshire,
Major Projects Officer,
Sustainable Transport,
Highways and Transport,
Wiltshire Council,
County Hall, Trowbridge, Wiltshire, BA14 8JN.

telephone 01225 713448      fax 01225 713207
e mail mark.wiltshire@wiltshire.gov.uk
Thank you for the information regarding the A350 dualling. Please see our comments/responses to your comments on the scoping report in red below. We look forward to hearing from you regarding these, and also for your comments on Section 5.5 Assignment of the scoping report.

Kind regards,

Sarah White
Graduate Engineer

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520604
f 0118 9597498
e swhite@peterbrett.com
w www.peterbrett.com

From: Wiltshire, Mark [mailto:mark.wiltshire@wiltshire.gov.uk]
Sent: 16 July 2014 15:24
To: Sarah White
Cc: Sarah Matthews
Subject: RE: Chippenham - A350 Dualling Draft Email

Sarah,

There is no plan of the dualling scheme, but the dualling will run from Badgers roundabout down as far as Chequers which is the A4/A350 junction. Therefore the dualling will not at this time extend on down the A350 to Showell Farm and your site.

Table 3.1 should probably include the other services on Rowden Hill ie to and from Bath.

Agreed – will include other services along A4 Rowden Hill.

At 4th bullet point in 4.2.1 should be altered to state “Therefore a foot/cycle connection will be delivered from Rowden Park to the Queens Bridge signal junction with cycle facilities to assist crossing the B4643 the thus providing a connection between the two developments”

Agreed – will alter text.

At 4.2.3 the second sentence should be adjusted “…..are proposed subject to land searches and detailed investigation via the PARAMICS model as to the degree that the lanes would detriment the link capacity for existing non bus traffic.”

Agreed – will alter text.

At 5.1.3 Any primary school generates some pupils from further afield than the immediate locality. There must be an allowance for this, suggest 10% of pupils assumed to arrive by car from outside the development to give a robust case.

The 1FE primary school is proposed to cater for the 1000 homes on the development only. Trip generation and rates have previously been agreed with Phil Tilley, and this is in line with the Hunters Moon and North Chippenham TAs.

2011 Census data for ‘Cepen Park and Derriads’ and ‘Cepen Park and Redlands’ wards has been examined. The ‘Household Size’ dataset has been used to calculate the number of people per household as 2.51. The ‘Age by Single Year’ dataset has been used to calculate the percentage of the population aged 4-10 (primary school age); this has
been found to be 9.15%. Applying this to the proposed development of 1000 homes, there are expected to be 229 primary school children living at the development.

A one-form-entry primary school is expected to cater for 210 children (seven classes of 30 children). Therefore the development is expected to fill the proposed primary school, and it is very unlikely that children who live outside the development will attend the primary school.

**OK will accept**

5.1.9 Similarly neighbourhood centre will also generate some trips from nearby rural villages and southern areas of Chippenham. Please include trips for this. Suggest TRICS and considering numbers of those trips that could generate from outside development.

Trip generation and rates have previously been agreed with Phil Tilley and are in line with the Hunters Moon and North Chippenham TAs. Peak hour trips to the neighbourhood centre from nearby rural villages and southern areas of Chippenham are not expected to be new trips on the highway network. Instead it is assumed that peak hour trips will be pass-by/diverted trips already on the highway network. Trips from the development will stop on their way to/from work.

**Ok will accept**

Adjust Table 5.4 to reflect these increases.

As above.

Other scoping points generally agreed, although please note I shall check out Section 5.5 with Phil Tilley tomorrow (when he is in) and provide final confirmation of that section to you tomorrow.

Yours sincerely,
Mark Wiltshire,
Major Projects Officer,
Sustainable Transport,
Highways and Transport,
Wiltshire Council,
County Hall, Trowbridge, Wiltshire, BA14 8JN.

telephone 01225 713448      fax 01225 713207
e mail mark.wiltshire@wiltshire.gov.uk

---

**From:** Sarah White [mailto:swhite@peterbrett.com]
**Sent:** 16 July 2014 14:19
**To:** Sarah Matthews; Wiltshire, Mark
**Cc:** Tilley, Phil; Dale Harvey
**Subject:** RE: Chippenham - A350 Dualling Draft Email

Dear Mark,

Work is rapidly progressing on this project, therefore please could you provide an indication as to when you may be able to respond to the email below (particularly with comments on our scoping report)?

Thank you very much.

Kind regards,

Sarah White
Graduate Engineer

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520604
f 0118 9597498
From: Sarah Matthews  
Sent: 08 July 2014 16:35  
To: mark.wiltshire@wiltshire.gov.uk  
Cc: phil.tilley@wiltshire.gov.uk; Sarah White; Dale Harvey  
Subject: Chippenham - A350 Dualling Draft Email

Dear Mark,

We are now progressing with the TA on the basis of our scoping report, as our client is requiring the modelling to be completed by the end of the month - Any last comments on the scope would therefore be greatly appreciated asap?

Would it also be possible to provide us with details of the A350 Chippenham Bypass from Badger Roundabout to Chequers Roundabout improvement, which has been allocated funding by Swindon and Wiltshire LEP?

The improvements being progressed at northern section of dualling from Badger Roundabout to Jacksom’s Lane are available on the WCC website (Pinchpoint funding), we have been unable to find further details of the LEP dualling from Badger Roundabout to Chequers Roundabout. Please could you advise as to where we could obtain plans submitted for the LEP funding?

Thanks

Sarah

Sarah Matthews  
LLP Director  

For and on behalf of Peter Brett Associates LLP  
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN  
t 01189520693  
t 0118 9597498  
m 07720 883712  
e smatthews@peterbrett.com  
w www.peterbrett.com

Peter Brett Associates LLP is a limited liability partnership registered in England and Wales. Registered number: OC334398. Roger Tym & Partners, Baker Associates and Hannah, Reed and Associates are part of Peter Brett Associates LLP. A list of members is open to inspection at our registered office. Registered Office: Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN. UK T: +44 (0)118 950 0761 F: +44 (0)118 959 7498. Brett Consulting Limited is wholly owned by Peter Brett Associates LLP. Registered number: 07765026. Registered address: as above.

Email is used as a convenient medium for rapid data transfer. Any contractual correspondence sent or received by email will not be held to be such unless and until it is received in writing by fax or letter. Likewise, file attachments must be treated as uncontrolled documents until issued as hard copy. This email and any files transmitted with it are confidential and may be legally privileged, and are intended solely for the use of the individual or entity to which they are addressed. If an addressing or transmission error has misdirected this email please notify the author by replying to this email and delete the email. You are advised that you open any attachment at your own risk.

Any OS Data attached to this email is issued in accordance with Licence No. 100021575 under condition that it is used to plot once and not retained on the recipients computer system.

--------------------------------------------------------------------

This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification
This message has been scanned for viruses by Websense

This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification and distribution of the contents of the email is strictly prohibited. Email content may be monitored by Wiltshire Council to ensure compliance with its policies and procedures. No contract is intended by this email, and any personal opinions expressed in this message are those of the sender and should not be taken as representing views of Wiltshire Council. Please note Wiltshire Council utilises anti-virus scanning software but does not warrant that any e-mail or attachments are free from viruses or other defects and accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.
1. Car Driver Trips to Town Centre

1.1. Residential car driver trips generated by the development travelling between the site and the town centre in the peak hours for employment, education and retail purposes have been calculated as described in the Scoping Report v3 (SRv3). A discrepancy was discovered in the figures displayed in the SRv3, therefore these figures have been revised and are displayed in Table 1.

Table 1: Rowden Park Residential Car Driver Trips Travelling to/from Chippenham Town Centre for Employment, Education and Retail

<table>
<thead>
<tr>
<th>Peak Hour</th>
<th>From Rowden Park to Town Centre</th>
<th>From Town Centre to Rowden Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM (08:00 – 09:00)</td>
<td>32</td>
<td>14</td>
</tr>
<tr>
<td>PM (17:00 – 18:00)</td>
<td>16</td>
<td>31</td>
</tr>
</tbody>
</table>

2. Bus Improvements

2.1. The proposed bus improvements are detailed in Section 4.2 of the SRv3.

2.2. The SRv3 demonstrates that Rowden Park will have a significantly enhanced bus frequency in comparison to the two wards upon which mode share has been based. The bus service will route directly to and from the town centre, with a 15 minute frequency during the peak hours.

2.3. The SRv3 also demonstrates that the proposed bus lanes would lead to significant journey time savings for bus use, and enhance journey time reliability, making travelling by bus a more reliable mode than travelling by car, reducing the likelihood of severe delays to journeys.

3. Walk and Cycle Improvements

3.1. There are a number of walk and cycle improvements proposed at Rowden Park that will enhance accessibility to the town centre. Routes will be provided both through urban, overlooked residential areas, and also through the riverside park, allowing choice by residents of, and visitors to, the site.

The Rowden Mile

3.2. The Rowden Mile will provide a direct walk and cycle connection from the site to the town centre. The route will pass through the riverside park, and will be easily accessible from all residential areas of the site. The Rowden Mile will also provide connection towards the railway and bus stations.
Connection to A4 Footway/Cycleway

3.3. A footway connection will be provided along Patterdown Road connecting to the proposed shared footway/cycleway along the A4 (to be delivered as part of the Hunters Moon development application).

3.4. An additional walk and cycle connection will be provided to the Hunters Moon development, via Queens Bridge, which will link to the A4 footway/cycleway.

Additional Town Centre Connections

3.5. A network of walk and cycle routes through the site and riverside park will be provided. These will provide connection to existing footpaths towards the A4, two existing Public Rights of Way towards the town centre, in addition to the Rowden Mile, as shown in Figure 1.

Figure 1: Proposed Walk and Cycle Routes

4. Travel Planning

4.1. A residential Travel Plan will be implemented at the development, which will have the overall aim of reducing single-occupancy car trips and creating a shift towards more sustainable modes of travel. Measures within the Travel Plan could include bus season tickets, vouchers towards bicycle purchases, promotion of events such as ‘Walk to Work Week’ and information highlighting the financial and health benefits of walking and cycling.

4.2. Although the Travel Plan will aim to reduce single-occupancy car trips across the network, it is considered that the greatest impact is likely to be made on trips to and from Chippenham town centre, as this is within easy walking and cycling distance, and will be easily accessible by bus.
5. **Proposed Mode Shift**

5.1. Due to the proposed bus improvements (increased frequency, improved journey time, greater reliability), walking and cycling route enhancements, and travel planning measures, it is considered that many car drivers travelling between Rowden Park and the town centre could alter their mode of travel.

5.2. The mode shift from private car to bus/walk/cycle will only be applied to residential trips with employment, education and retail purposes. All non-home based trips and HGV trips will retain their original mode share.

5.3. Given the significant improvements to bus services and walking and cycling routes and the travel planning measures proposed, it is considered a reasonable assumption that, in the peak hours, 75% of all car driver trips between the site and town centre for employment, education and retail purposes will shift from private car.

5.4. Residential car driver trips generated by the development travelling between the site and the town centre in the peak hours for employment, education and retail purposes have been calculated as described in the Scoping Report v3 (SRv3).

5.5. This methodology is in line with the SRv3, although a discrepancy was discovered in the figures displayed in the SRv3, therefore these figures have been revised. This results in the reduction of car driver trips shown in Table 2.

<table>
<thead>
<tr>
<th>Peak Hour</th>
<th>From Rowden Park to Town Centre</th>
<th>From Town Centre to Rowden Park</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Before Mode Shift</td>
<td>Reduction</td>
</tr>
<tr>
<td>AM (08:00 – 09:00)</td>
<td>32</td>
<td>24</td>
</tr>
<tr>
<td>PM (17:00 – 18:00)</td>
<td>16</td>
<td>12</td>
</tr>
</tbody>
</table>

5.6. **Table 3** shows the resultant overall vehicular trips proposed to be generated by the development and proposed for assessment in the Transport Assessment.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>AM Peak Hour (08:00 – 09:00)</th>
<th>PM Peak Hour (17:00 – 18:00)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generations</td>
<td>Attractions</td>
</tr>
<tr>
<td>Residential (1000 homes)</td>
<td>336</td>
<td>156</td>
</tr>
<tr>
<td>Primary School (1FE)</td>
<td>0</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>336</td>
<td>174</td>
</tr>
</tbody>
</table>
6. **Comparison to Other Sites**

6.1. The proposed mode shift results in slightly lowered overall residential trip rates, as shown in Table 4.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>AM Peak Hour (08:00 – 09:00)</th>
<th>PM Peak Hour (17:00 – 18:00)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generations</td>
<td>Attractions</td>
</tr>
<tr>
<td>Residential</td>
<td>0.336</td>
<td>0.156</td>
</tr>
</tbody>
</table>

6.2. These trip rates have been factored up to three-hour peak period trip rates by reversing the methodology used in the SRv3 to calculate peak hour trip rates. The resulting vehicle trip rates are shown in Table 5.

<table>
<thead>
<tr>
<th>Land Use</th>
<th>AM Peak Period (08:00 – 09:00)</th>
<th>PM Peak Period (17:00 – 18:00)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generations</td>
<td>Attractions</td>
</tr>
<tr>
<td>Residential</td>
<td>1.008</td>
<td>0.468</td>
</tr>
</tbody>
</table>

**Hunters Moon**

6.3. The approved Hunters Moon development Transport Assessment (HM TA) was based on trip rates derived using the TRICS database. These trip rates are shown in Table 6 below, and compared to the trip rates contained within the Chippenham Transport Strategy (CTS) (2013).

<table>
<thead>
<tr>
<th>Peak Period</th>
<th>Trip Rate</th>
<th>Generations</th>
<th>Attractions</th>
<th>Two-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM (07:00 – 10:00)</td>
<td>HM TA TRICS</td>
<td>1.000</td>
<td>0.442</td>
<td>1.442</td>
</tr>
<tr>
<td></td>
<td>CTS</td>
<td>1.080</td>
<td>0.500</td>
<td>1.580</td>
</tr>
<tr>
<td>PM (16:00 – 19:00)</td>
<td>HM TA TRICS</td>
<td>0.662</td>
<td>1.043</td>
<td>1.705</td>
</tr>
<tr>
<td></td>
<td>CTS</td>
<td>0.660</td>
<td>1.160</td>
<td>1.820</td>
</tr>
</tbody>
</table>

6.4. Table 6 demonstrates that the TRICS trip rates used in the HM TA are lower than the CTS, with the exception of generations in the PM peak period.

6.5. Furthermore, the HM TA included a 7% reduction of all residential car trips, for the reason stated in Paragraph 6.6 of the HM TA:

“A reduction to the trip rates will be made to account for the implementation of a Residential Travel Plan. A factor of 7% has therefore been applied to the residential trip rates in Table 6.1, based on findings from the Department for Transport’s Sustainable Travel Towns Evaluation.”

6.6. This led to an overall reduction in vehicle trips generated by residential element of the development. This reduction was agreed by Wiltshire Council and all traffic modelling was undertaken using these reduced trip rates.

6.7. Travel Plan measures that may be implemented at the Hunters Moon development (contained within the FTP) include public transport season tickets, a foot/cycleway to Chippenham town
centre, travel packs etc. These measures are likely to have greatest impact on trips to the town centre, therefore the 7% of overall trips that are discounted are expected to be made up of primarily trips to and from the town centre. It should be noted that the bus improvements proposed at Rowden Park are more significant than that offered at Hunters Moon, as they include frequency enhancement and bus lanes, as opposed to purely a route diversion.

6.8. The proposed 75% reduction in town centre car driver trips from Rowden Park equates to an overall reduction in car driver trips of 6.6% in the AM peak and 5.8% in the PM peak. This is significantly less than the agreed 7% overall reduction at the Hunters Moon development, and is therefore considered robust.

6.9. **Table 7** shows the reduced trip rates tested in the HM TA.

<table>
<thead>
<tr>
<th>Peak Period</th>
<th>Generations</th>
<th>Attractions</th>
<th>Two-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM (07:00 – 10:00)</td>
<td>0.930</td>
<td>0.411</td>
<td>1.341</td>
</tr>
<tr>
<td>PM (16:00 – 19:00)</td>
<td>0.616</td>
<td>0.969</td>
<td>1.585</td>
</tr>
</tbody>
</table>

6.10. The HM TA assessed trip rates are shown in **Table 8** below, and compared to the reduced Rowden Park (RP) trip rates proposed to be assessed.

<table>
<thead>
<tr>
<th>Peak Period</th>
<th>Trip Rate</th>
<th>Generations</th>
<th>Attractions</th>
<th>Two-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM (07:00 – 10:00)</td>
<td>HM TA Assessed</td>
<td>0.930</td>
<td>0.411</td>
<td>1.341</td>
</tr>
<tr>
<td></td>
<td>RP to be Assessed</td>
<td>1.008</td>
<td>0.468</td>
<td>1.476</td>
</tr>
<tr>
<td>PM (16:00 – 19:00)</td>
<td>HM TA Assessed</td>
<td>0.616</td>
<td>0.969</td>
<td>1.585</td>
</tr>
<tr>
<td></td>
<td>RP to be Assessed</td>
<td>0.624</td>
<td>1.092</td>
<td>1.716</td>
</tr>
</tbody>
</table>

6.11. **Table 8** demonstrates that the trip rates assessed in the HM TA are up to 12.2% lower than the trip rates proposed to be used at Rowden Park.

**North Chippenham**

6.12. The approved North Chippenham development Transport Assessment (NC TA) took into account trip internalisation for trips generated by both the residential and employment elements of the development. The internalisation proportions used for the residential element were:

- 10% of all home-work and work-home trips were assumed to remain onsite
- 30% of all home-education and education-home trips were assumed to remain on site
- 20% of all home-retail and retail-home trips were assumed to remain on site
- 10% of all non-home based trips were assumed to remain on site

6.13. This led to an overall reduction in vehicle trips generated by residential element of the development. This reduction was agreed by Wiltshire Council and all traffic modelling was undertaken using these reduced trip rates.

6.14. The resultant trip rates used for assessment in the NC TA are shown in **Table 9**, and compared to the reduced Rowden Park (RP) trip rates proposed to be assessed in **Table 10**.
Table 9: North Chippenham Transport Assessment Tested Trip Generation

<table>
<thead>
<tr>
<th></th>
<th>AM Peak Period (07:00 – 10:00)</th>
<th>PM Peak Period (16:00 – 19:00)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Generations</td>
<td>Attractions</td>
</tr>
<tr>
<td>Trip Rate</td>
<td>0.929</td>
<td>0.397</td>
</tr>
<tr>
<td>Percentage of Trips</td>
<td>14%</td>
<td>21%</td>
</tr>
<tr>
<td>Internalised</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 10: Comparison of North Chippenham Trip Rates and Chippenham Transport Strategy (2013)

<table>
<thead>
<tr>
<th>Peak Period</th>
<th>Trip Rate</th>
<th>Generations</th>
<th>Attractions</th>
<th>Two-way</th>
</tr>
</thead>
<tbody>
<tr>
<td>AM (07:00 – 10:00)</td>
<td>NC TA Assessed</td>
<td>0.929</td>
<td>0.397</td>
<td>1.326</td>
</tr>
<tr>
<td></td>
<td>RP to be Assessed</td>
<td>1.008</td>
<td>0.468</td>
<td>1.476</td>
</tr>
<tr>
<td>PM (16:00 – 19:00)</td>
<td>NC TA Assessed</td>
<td>0.546</td>
<td>0.996</td>
<td>1.542</td>
</tr>
<tr>
<td></td>
<td>RP to be Assessed</td>
<td>0.624</td>
<td>1.092</td>
<td>1.716</td>
</tr>
</tbody>
</table>

6.15. **Table 10** demonstrates that the trip rates assessed in the NC TA are up to 15.2% lower than the trip rates proposed to be used at Rowden Park.

7. **Summary**

7.1. It is proposed to reduce car driver trips generated by the development for employment, education and retail purposes that travel to and from Chippenham town centre by 75%. This equates to an overall reduction in car driver trips of 6.6% in the AM peak and 5.8% in the PM peak.

7.2. This is significantly lower than trip reductions that have been accepted at other, similar, developments in Chippenham and the reductions are made on the movements where mode shift could occur realistically. The development proposals contain supporting infrastructure and improvements that will support this reduction in car driver trips, and encourage a shift towards sustainable travel.
Dear Phil,

Thanks for your confirmation.

As discussed with Mark Wiltshire, we are keen that Crests/Redcliffs proposed investment in public transport, walking and cycling is reflected in the Transport Assessment – which could be £300,000 to £750,000 in bus subsidy depending upon the option agreed with the operators and £500,000 in bus lanes, if agreed, as well as considerable improvements in the footways including a possible footbridge across the river. Alternatively, it may be better to reduce investment in public transport and focus on highway improvements in the town centre. (My view, is that the alternative approach would not be in line with policy and would attract more traffic into the town centre rather than giving people alternative means [walk, cycle and public transport] to travel there – Do you agree?).

We would expect to see reductions in travel to the town centre with the walk, cycle and bus improvements. These improvements would affect not only the development trips, but other trips made to the town centre within the vicinity of site (existing residents along Rowden Hill and employees at Showell Farm) and along the bus route, particularly if the town centre parking charges are set to discourage car use.

Please could you confirm the planning obligation you would be proposing?

We understood that the Transport Strategy for Chippenham is being superseded. It is not clear from the Transport Assessments supporting Hunters Moon and North Chippenham what wider transport mitigation they are delivering or providing contribution to, and both the Hunters Moon and Showell Farm developments propose similar improvements at Chequers roundabout. Therefore our tests only include their access proposals and the highway improvements delivered or underway. Our tests within the TA will identify wider mitigation required for:

- Scenario 1 – North Chippenham, Rawlings Green, Hunters Moon, Showell Farm and Rowden Park
- Scenario 2 – 50% North Chippenham, Hunters Moon, Showell Farm and Rowden Park
- Scenario 3 - Rowden Park

This will therefore address the cumulative impacts.

Please let me know if you have any concerns with this approach?

Regards

Sarah
I refer to our telephone conversation this morning in relation to the changes made to the scoping report.

With particular reference to trip generation rates proposed for the development, I accept that the proposed reduction of 7% (based on successful travel planning outcomes, and to be locked in by way of a planning obligation) is consistent with the reduction made for the HM development, and that the reduction should focus on town centre movements.

At 5.4.28 I suggest you acknowledge that HM trips already assume a shift of mode; bus mode will not be double counted if trip reduction applied to RP alone.

5.4.31 and 5.4.32 and 5.4.33 should be amended so as to deliver a consistent message in relation to the trip reduction.

The scope of the TA should, as I implied in my previous email, include reference to the Transport Strategy for Chippenham, and how the RP site will deliver in relation to the cumulative impacts of development in the wider Chippenham area. This should help reduce the potential for later debate as to what is required to mitigate immediate local impacts, and what is required to address cumulative impacts on the town in general. Along with the Core Strategy, this is perhaps the most important local policy document to address.

The scoping note makes reference to the views of local bus operators in relation to commercial viability; it would usefully include a note as to potential for support funding as a matter to be covered in the TA.

Regards

Phil Tilley
Development Control Engineer
Sustainable Transport
Wiltshire Council

NB Mondays and Thursday are my normal working days.

Tel: 01225 713442
Mob: 07747 622819
email: phil.tilley@wiltshire.gov.uk
web: www.wiltshire.gov.uk

Follow Wiltshire Council

---

From: Sarah White [mailto:swhite@peterbrett.com]
Sent: 07 August 2014 16:48
To: Tilley, Phil
Cc: Wiltshire, Mark; Sarah Matthews; Dale Harvey
Subject: RE: Chippenham
Importance: High

Dear Phil,

Please see attached our Scoping Report version 4 for your comment/agreement. For ease, the sections which have changed since version 3 are highlighted in yellow.

Please feel free to give me a call to discuss.

I look forward to hearing from you.

Kind regards,

Sarah White
Graduate Engineer
Dear Phil,

Thank you very much for your comments.

We are keen to meet with you in order to further discuss and agree the proposed mode shift in order to allow us to complete the draft TA. I am aware that Mondays and Thursdays are your working days, and was therefore wondering if you are available at all this coming Monday (11 August) at the most convenient location for you?

I look forward to hearing from you.

Kind regards,

Sarah White
Graduate Engineer

From: Sarah White
Sent: 05 August 2014 16:21
To: phil.tilley@wiltshire.gov.uk
Cc: Sarah Matthews; Mark Wiltshire (mark.wiltshire@wiltshire.gov.uk); Dale Harvey
Subject: RE: Chippenham - A350 Dualling

Dear Phil,

Thank you very much for your comments.

We are keen to meet with you in order to further discuss and agree the proposed mode shift in order to allow us to complete the draft TA. I am aware that Mondays and Thursdays are your working days, and was therefore wondering if you are available at all this coming Monday (11 August) at the most convenient location for you?

I look forward to hearing from you.

Kind regards,

Sarah White
Graduate Engineer

From: Tilley, Phil [mailto:Phil.Tilley@wiltshire.gov.uk]
Sent: 04 August 2014 12:36
To: Sarah White
Cc: Wiltshire, Mark
Subject: RE: Chippenham - A350 Dualling

Dear Sarah

I refer to our telephone conversation, and confirm the following;

Technical Note TN004: As discussed, the mode transfer away from the private car for town centre trips appears to be overly optimistic at 75%. The town centre is the critical part of the network from a congestion point of view, and, despite the RP overall peak period rates being consistent with those used for NCC and HM, we must have confidence that the trip rates have not been manipulated in order to avoid the model demonstrating issues. If bus frequency between the site and the town centre is such that other (non-site) car trips to the town centre can be
removed, then the 75% may be a reasonable proxy. TN004 does not address the ability of buses to impact other town centre trips, and you should, in your TA submission, offer a better justification for the 75% reduction you propose, if it is to be accepted as credible. You would need to demonstrate how the non-car mode peak hour trips will be reduced by 75%, rather than assuming it to be the case. Have we previously been advised about the nature of the bus service enhancements proposed? These (bus) trips are to be added to the total movements.

The drawing 20399-043-SK004 shows proposed bus lane provision on Patterdown and the A4; it is not clear whether this is proposed in addition to a CTS contribution, or as part of it. There could be delivery issues in relation to these improvements, as previously pointed out, but I am content that the modelling proceeds on the basis of what is proposed. I am not convinced that the outbound bus lane will actually deliver in terms of queue avoidance – perhaps this could be considered against model outputs.

As for the scenarios to be tested, I do not raise any issues about what is included. In the S9 scenario, I presume that any highway improvements that might be tested could replicate what has been proposed in conjunction with the HM development.

Regards

Phil Tilley
Development Control Engineer
Sustainable Transport
Wiltshire Council

NB Mondays and Thursday are my normal working days.

Tel: 01225 713442
Mob: 07747 622819
email: phil.tilley@wiltshire.gov.uk
web: www.wiltshire.gov.uk

Sarah White [mailto:swhite@peterbrett.com]
Sent: 04 August 2014 10:30
To: Tilley, Phil
Cc: Wiltshire, Mark; Sarah Matthews; Dale Harvey
Subject: FW: Chippenham - A350 Dualling

Dear Phil,

Following our telephone conversation, please see the email below and attachment for your comment/agreement.

I look forward to hearing from you.

Kind regards,

Sarah White
Graduate Engineer

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520604
f 0118 9597498
e swhite@peterbrett.com
w www.peterbrett.com
Dear Mark,

Following your meeting with Sarah Matthews last week, please see the attached technical note regarding the proposed reduction in car driver trips to/from the town centre associated with the bus improvements for your comment/review.

Additionally, we are proposing to alter the scenario tests under “Alternative Case 2”. Phil Tilley requested the worst case and alternative case 1 scenarios, and the Alternative Case 2 was agreed to help us/Crest/Redcliffe understand solely Rowden Park’s impacts, but was not really a test required by yourselves. Since the contribution to the wider Transport Strategy has not be agreed for Showell Farm and Hunters Moon, and therefore their full mitigation cannot be included in the tests, we propose remove Showell Farm and Hunters Moon from these last scenario tests, as follows:

<table>
<thead>
<tr>
<th>Case</th>
<th>2026 Base, including</th>
<th>2026 Base + Development, including</th>
<th>2026 Base + Development + Mitigation, including</th>
</tr>
</thead>
<tbody>
<tr>
<td>Worst Case</td>
<td>S1) North Chippenham plus identified highway improvements</td>
<td>S2) North Chippenham plus identified highway improvements</td>
<td>S3) North Chippenham plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Rawlings Green plus identified highway improvements</td>
<td>Rawlings Green plus identified highway improvements</td>
<td>Rawlings Green plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rowden Park</td>
<td>Rowden Park</td>
</tr>
<tr>
<td>Alternative Case 1</td>
<td>S4) North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>S5) North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
<td>S6) North Chippenham: 50% development occupied, 50%/50% split between accesses, no link road</td>
</tr>
<tr>
<td></td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
<td>Hunters Moon plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
<td>Showell Farm plus identified highway improvements</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Rowden Park</td>
<td>Rowden Park</td>
</tr>
<tr>
<td>Alternative Case 2</td>
<td>S7)</td>
<td>S8) Rowden Park</td>
<td>S9) Rowden Park plus identified highway improvements</td>
</tr>
</tbody>
</table>

Please could you confirm that this is acceptable to you.

I look forward to receiving your comments.

Kind regards,

Sarah White
Graduate Engineer

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520604
f 0118 9597498
e swhite@peterbrett.com
w www.peterbrett.com
From: Wiltshire, Mark [mailto:mark.wiltshire@wiltshire.gov.uk]
Sent: 21 July 2014 09:45
To: Sarah White
Cc: Gosling, Laura; Sarah Matthews
Subject: RE: Chippenham - A350 Dualling

Sarah,
In view of this you must amend the scoping note to 10%(rounded from 9%) reduction in town centre trips and amend the table accordingly.

Thank you

Yours sincerely,
Mark Wiltshire,
Major Projects Officer,
Sustainable Transport,
Highways and Transport,
Wiltshire Council,
County Hall, Trowbridge, Wiltshire, BA14 8JN.

telephone 01225 713448      fax 01225 713207
e mail mark.wiltshire@wiltshire.gov.uk

From: Gosling, Laura
Sent: 21 July 2014 09:22
To: Wiltshire, Mark; Sarah White
Subject: RE: Chippenham - A350 Dualling

Hi Both,

The Chippenham Strategic Transport Study (2013) states that with the preferred package of transport measures outlined in the strategy, which does include bus lanes in new developments sites, a 9% reduction in motorised trips from new development areas is considered a robust assumption.

The Chippenham Transport Strategy can be viewed [here](#)

Kind Regards

Laura

Laura Gosling
Senior Transport Planner - Transport Strategy
Sustainable Transport Group
Wiltshire Council

Tel: 01225 713481
Email: laura.gosling@wiltshire.gov.uk
Web: [www.wiltshire.gov.uk](http://www.wiltshire.gov.uk)
Follow Wiltshire Council
From: Wiltshire, Mark  
Sent: 18 July 2014 19:54  
To: Sarah White  
Cc: Gosling, Laura  
Subject: RE: Chippenham - A350 Dualling

Sarah,
Thank you for your comments I have agreed your points as yellow below.

Phil Tilley has agreed that your Section 5.5 Assignment is correct and as he agreed with you.

The only other point of concern is that we do not agree that at 5.4.18 you can go as far as to discount 75% of trips to and from TC due to mode shift to buses. The Buchanans study for the Chippenham Strategic Trasport Study did not discount by this large amount albeit without the bus lanes etc. I have asked my transport planning colleague Laura Gosling to check out for me how much discount was applied due to mode shift at that time, and suggest you speak directly to her on Monday and agree a significantly reduced % discount for this section and Table 5.11 copying me in. This is necessary anyway to give a robust case. There is no guarantee at this stage that the bus lanes will be agreed, there could be land, traffic, political difficulties Also the effects on existing traffic journey times will be taken into account.

Yours sincerely,
Mark Wiltshire,
Major Projects Officer,
Sustainable Transport,
Highways and Transport,
Wiltshire Council,
County Hall, Trowbridge, Wiltshire, BA14 8JN.

telephone 01225 713448     fax 01225 713207
e mail mark.wiltshire@wiltshire.gov.uk

From: Sarah White [mailto:swhite@peterbrett.com]  
Sent: 18 July 2014 16:54  
To: Wiltshire, Mark  
Cc: Sarah Matthews; Dale Harvey  
Subject: RE: Chippenham - A350 Dualling

Dear Mark,

Thank you for the information regarding the A350 dualling. Please see our comments/responses to your comments on the scoping report in red below. We look forward to hearing from you regarding these, and also for your comments on Section 5.5 Assignment of the scoping report.

Kind regards,

Sarah White
Sarah,

There is no plan of the dualling scheme, but the dualling will run from Badgers roundabout down as far as Chequers which is the A4/A350 junction. Therefore the dualling will not at this time extend on down the A350 to Showell Farm and your site.

Table 3.1 should probably include the other services on Rowden Hill ie to and from Bath.

Agreed – will include other services along A4 Rowden Hill.

At 4th bullet point in 4.2.1 should be altered to state “Therefore a foot/cycle connection will be delivered from Rowden Park to the Queens Bridge signal junction with cycle facilities to assist crossing the B4643 the thus providing a connection between the two developments”

Agreed – will alter text.

At 4.2.3 the second sentence should be adjusted “…..are proposed subject to land searches and detailed investigation via the PARAMICS model as to the degree that the lanes would detriment the link capacity for existing non bus traffic.”

Agreed – will alter text.

At 5.1.3 Any primary school generates some pupils from further afield than the immediate locality. There must be an allowance for this, suggest 10% of pupils assumed to arrive by car from outside the development to give a robust case.

The 1FE primary school is proposed to cater for the 1000 homes on the development only. Trip generation and rates have previously been agreed with Phil Tilley, and this is in line with the Hunters Moon and North Chippenham TAs.

2011 Census data for ‘Cepen Park and Derriads’ and ‘Cepen Park and Redlands’ wards has been examined. The ‘Household Size’ dataset has been used to calculate the number of people per household as 2.51. The ‘Age by Single Year’ dataset has been used to calculate the percentage of the population aged 4-10 (primary school age); this has been found to be 9.15%. Applying this to the proposed development of 1000 homes, there are expected to be 229 primary school children living at the development.

A one-form-entry primary school is expected to cater for 210 children (seven classes of 30 children). Therefore the development is expected to fill the proposed primary school, and it is very unlikely that children who live outside the development will attend the primary school.

OK will accept
5.1.9 Similarly neighbourhood centre will also generate some trips from nearby rural villages and southern areas of Chippenham. Please include trips for this. Suggest TRICS and considering numbers of those trips that could generate from outside development.

Trip generation and rates have previously been agreed with Phil Tilley and are in line with the Hunters Moon and North Chippenham TAs. Peak hour trips to the neighbourhood centre from nearby rural villages and southern areas of Chippenham are not expected to be new trips on the highway network. Instead it is assumed that peak hour trips will be pass-by/diverted trips already on the highway network. Trips from the development will stop on their way to/from work.

Ok will accept

Adjust Table 5.4 to reflect these increases.

As above.

Other scoping points generally agreed, although please note I shall check out Section 5.5 with Phil Tilley tomorrow (when he is in) and provide final confirmation of that section to you tomorrow.

Yours sincerely,
Mark Wiltshire,
Major Projects Officer,
Sustainable Transport,
Highways and Transport,
Wiltshire Council,
County Hall, Trowbridge, Wiltshire, BA14 8JN.

telephone 01225 713448      fax 01225 713207
email mark.wiltshire@wiltshire.gov.uk

From: Sarah White [mailto:swhite@peterbrett.com]
Sent: 16 July 2014 14:19
To: Sarah Matthews; Wiltshire, Mark
Cc: Tilley, Phil; Dale Harvey
Subject: RE: Chippenham - A350 Dualling Draft Email

Dear Mark,

Work is rapidly progressing on this project, therefore please could you provide an indication as to when you may be able to respond to the email below (particularly with comments on our scoping report)?

Thank you very much.

Kind regards,

Sarah White
Graduate Engineer

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520604
f 0118 9597498
e swhite@peterbrett.com
w www.peterbrett.com
Dear Mark,

We are now progressing with the TA on the basis of our scoping report, as our client is requiring the modelling to be completed by the end of the month - Any last comments on the scope would therefore be greatly appreciated asap?

Would it also be possible to provide us with details of the A350 Chippenham Bypass from Badger Roundabout to Chequers Roundabout improvement, which has been allocated funding by Swindon and Wiltshire LEP?

The improvements being progressed at northern section of dualling from Badger Roundabout to Jackson’s Lane are available on the WCC website (Pinchpoint funding), we have been unable to find further details of the LEP dualling from Badger Roundabout to Chequers Roundabout. Please could you advise as to where we could obtain plans submitted for the LEP funding?

Thanks

Sarah

Sarah Matthews
LLP Director

For and on behalf of Peter Brett Associates LLP

Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN

t 0118 959 20683
f 0118 959 7498
m 07720 883712
e smatthews@peterbrett.com
w www.peterbrett.com

Peter Brett Associates LLP is a limited liability partnership registered in England and Wales. Registered number: OC334398. Roger Tym & Partners, Baker Associates and Hannah, Reed and Associates are part of Peter Brett Associates LLP. A list of members is open to inspection at our registered office. Registered Office: Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN. UK T: +44 (0)118 950 0761 F: +44 (0)118 959 7498. Brett Consulting Limited is wholly owned by Peter Brett Associates LLP. Registered number: 07765026. Registered address: as above.

Email is used as a convenient medium for rapid data transfer. Any contractual correspondence sent or received by email will not be held to be such unless and until it is received in writing by fax or letter. Likewise, file attachments must be treated as uncontrolled documents until issued as hard copy. This email and any files transmitted with it are confidential and may be legally privileged, and are intended solely for the use of the individual or entity to which they are addressed. If an addressing or transmission error has misdirected this email please notify the author by replying to this email and delete the email. If you are not the intended recipient you must not use or disclose, print or rely on this email. You are advised that you open any attachment at your own risk.

Any OS Data attached to this email is issued in accordance with Licence No. 100021575 under condition that it is used to plot once and not retained on the recipients computer system.

--------------------------------------------------------------------

This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification and distribution of the contents of the email is strictly prohibited. Email content may be monitored by Wiltshire Council to ensure compliance with its policies and procedures. No contract is intended by this email, and any personal opinions expressed in this message are those of the sender and should not be taken as representing views of Wiltshire Council. Please note Wiltshire Council utilises anti-virus scanning software but does not warrant that any e-mail or attachments are free from viruses or other defects and accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council
will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.

This message has been scanned for viruses by Websense

This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification and distribution of the contents of the email is strictly prohibited. Email content may be monitored by Wiltshire Council to ensure compliance with its policies and procedures. No contract is intended by this email, and any personal opinions expressed in this message are those of the sender and should not be taken as representing views of Wiltshire Council. Please note Wiltshire Council utilises anti-virus scanning software but does not warrant that any e-mail or attachments are free from viruses or other defects and accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.
accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.
Dale Harvey

From: Wiltshire, Mark <mark.wiltshire@wiltshire.gov.uk>
Sent: 05 November 2014 10:36
To: Dale Harvey
Cc: Sarah Matthews; Sarah White
Subject: RE: Rowden Park

Dale,
I have just spoken to Sarah White re cycle visitor cycle parking. I confirm that on a development such as Rowden Park with most dwellings with gardens, and garages etc I would not expect to see specific provision. A note should be put in the TA to explain this. If there are any flats there should be visitor cycle provision for those..

I confirm that I expect the shared cycle footways to be 3 metres.

I have not yet had a chance to look at the site access designs, but will do so as soon as possible.

Perhaps you could give me a ring to discuss the bus lanes?

Yours sincerely,
Mark Wiltshire,
Major Projects Officer,
Sustainable Transport,
Wiltshire Council,
County Hall, Trowbridge, Wiltshire, BA14 8JN.

telephone 01225 713448      fax 01225 713207
e mail mark.wiltshire@wiltshire.gov.uk

From: Dale Harvey [mailto:dharvey@peterbrett.com]
Sent: 29 October 2014 10:09
To: Wiltshire, Mark
Cc: Sarah Matthews; Tilley, Phil
Subject: Rowden Park

Dear Mark,

Please find attached notes of your meeting with Sarah and Kenny.

I believe you have been issued a plan illustrating the proposed path network hierarchy through Rowden Park by Des Dunlop? This shows a number of proposed shared footpath/cyclepaths through the Riverside Park area of the development. We are currently working to provide these routes at a width of 3m, please can you confirm that this width is acceptable to WC for shared pedestrian/cycle use in this location.

Have you any initial comment on the Transport Assessment, issued at the end of last month?

Have you any comments on the principle of the site access designs issued last week?

Regards,

Dale Harvey
Senior Technician

For and on behalf of Peter Brett Associates LLP
Caversham Bridge House, Waterman Place, Reading, Berkshire, RG1 8DN
t 01189520653
f 0118 9597498
This email originates from Wiltshire Council and any files transmitted with it may contain confidential information and may be subject to Copyright or Intellectual Property rights. It is intended solely for the use of the individual or entity to whom they are addressed. If you have received this email in error please notify the sender and delete the email from your inbox. Any disclosure, reproduction, dissemination, modification and distribution of the contents of the email is strictly prohibited. Email content may be monitored by Wiltshire Council to ensure compliance with its policies and procedures. No contract is intended by this email, and any personal opinions expressed in this message are those of the sender and should not be taken as representing views of Wiltshire Council. Please note Wiltshire Council utilises anti-virus scanning software but does not warrant that any e-mail or attachments are free from viruses or other defects and accepts no liability for any losses resulting from infected e-mail transmissions. Receipt of this e-mail does not imply consent to use or provide this e-mail address to any third party for any purpose. Wiltshire Council will not request the disclosure of personal financial information by means of e-mail any such request should be confirmed in writing by contacting Wiltshire Council.

This message has been scanned for viruses by Websense

_