



TECHNICAL NOTE

STAKERS FARM, NORTH END ROAD

Proposed Residential Development

Date: August 2017

Ref: SEPS/17/3748s

1 INTRODUCTION

- 1.1 This Technical Note (TN) has been prepared by Russell Giles Partnership Ltd (RGP) on behalf of South Eastern Planning Services to support a proposed residential development at Stakers Farm, North End Road, Yapton. The proposals would involve the conversion of the existing agricultural barns to 2 residential dwellings.

Recent Planning Applications

- 1.2 The site has been subject to number of past planning applications. A summary of these applications is provided below:
- i) **Y/17/11** - Erection of 2 no. detached dwellings 2 double garage & provision of 4 additional street parking spaces. The application was withdrawn in June 2012. WSCC highways withdrew previous highway objection for earlier scheme.
 - ii) **Y/77/13/PD** - Prior Notification for change of use of agricultural building to Use Class B1 (Business). The application was approved in December 2013.
 - iii) **Y/77/14/PD** - Prior notification under Class MB for change of use from agricultural to 2 No. dwelling houses. The application was refused in November 2014. The reason for refusal was unrelated to highways.

2 BASELINE CONDITIONS

Site Location and Description

- 2.1 The application site is located on the western side of North End Road, c.250m to the north-west of Yapton village centre. Yapton village provides access to a range of convenience services and amenities within a desirable walking distance. The site is comprised of traditional barns with a courtyard area and shares access with the residential dwellings to the north of the access and agricultural buildings to the west of the site.

Local Highway Network

- 2.2 Stakers Farm fronts onto the B2132 North End Road which runs north-south between the B2233 (Yapton Road) and the A27. North End Road provides the function of a Local Distributor Road and carries modest traffic volumes.
- 2.3 North End Road is a single carriageway road with a width of approximately 6m in the vicinity of the site. The road is flanked by a c.1.5m footway on the western side of the carriageway, footways on the eastern side of the carriageway commence c.30m to the north and south of the site.
- 2.4 North End Road serves a number of residential dwellings as well as non-residential uses such as a doctor's surgery and nursing home which are served from individual or shared accesses adjoining North End Road.

Site Access

- 2.5 The Stakers Farm access is comprised of c.7.2m wide vehicle crossover adjoining the western side of North End Road. Access is taken between 2 flint walls/brick pillars, set back c.1.6m from the edge of the carriageway. A gate is situated c.10m from the edge of the road allowing vehicles to wait clear of the carriageway.
- 2.6 The width of the access allows concurrent 2-way movements at the access and allows vehicles to correctly position themselves on the left-hand side of the access when exiting. The Stakers Farm access benefits from an 'Access Protection Line' in the carriageway, primarily to deter vehicles from parking in a way which would obstruct access.
- 2.7 The access serves Stakers Farm, which comprises a number of distinct uses. The access presently serves a residential dwelling known as Stakers Farm House as well as a number of stable blocks. In addition, the access also serves the active farm and associated buildings with a significant number of traffic movements generated. Given the mix of uses on site, it is clear that the access is currently well used by a range of vehicles throughout the day.

Accident Data

- 2.8 To determine highway safety on the local road network, a 5-year study of personal injury accidents, between May 2012 and April 2017, has been undertaken using data obtained for the Sussex Safer Roads Partnership online data portal. The study area considered included North End Road up to the junctions with the B2333, and Ford Lane. A map demonstrating the extent of the study area and the location of recorded incidents is provided in **Figure 2.2**.

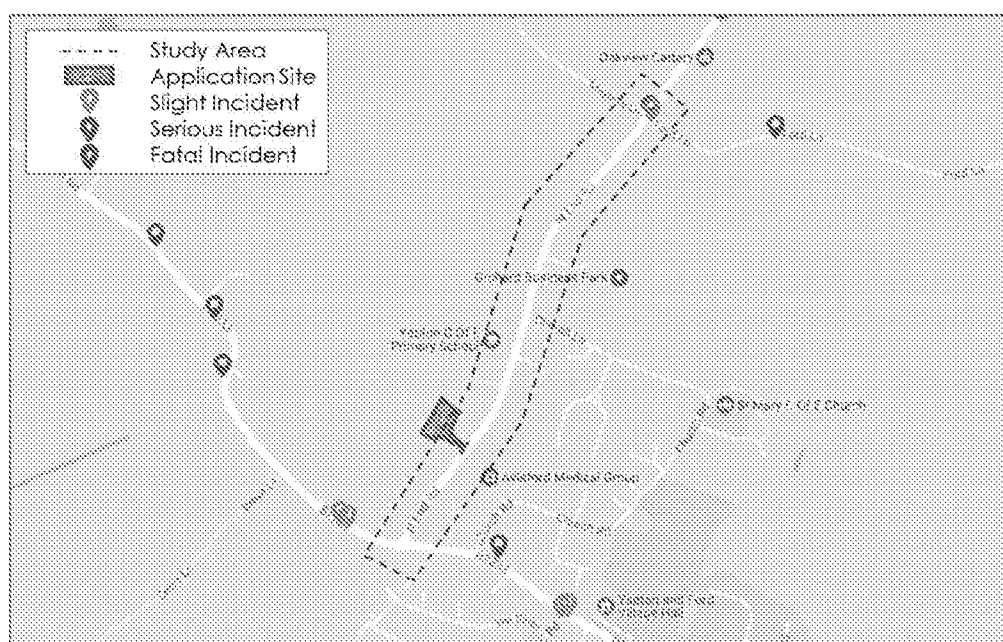


Figure 2.2: PIA Study Area and Recorded Incidents

- 2.9 The study found a total of 2 incidents over the 5-year period comprised of 1 'slight' and 1 'serious' incidents. The PIA data showed no pattern in terms of frequent, distribution, or severity that would be of concern to highway safety.

3 PROPOSED DEVELOPMENT

- 3.1 The proposal would involve the conversion of the existing agricultural barns into 2 residential dwellings. The existing access would be retained and would serve the proposed development as well as the existing uses.

Access

- 3.2 The proposed development would be served from the existing vehicle crossover. The access geometries allow 2 cars to concurrently pass at the access. The access markings and vehicle manoeuvres at the access are demonstrated in **Drawing 2017/3748/001**.
- 3.3 The access visibility requirements have been based on the 30mph speed limit on North End Road. Using the calculation coefficients set out in the Manual for Streets guidance, a stopping site distance (adjusted for bonnet length) of 43m would be required in both directions. Given the private nature of the access and the low flows through the access, a 2.0m setback distance is considered appropriate in accordance with Manual for Streets guidance section 7.7.7.
- 3.4 Visibility from the access accordingly achieves the necessary sight lines in both the primary (looking south) and secondary (looking north) directions as demonstrated in **Drawing 2017/3748/001**. Road markings including an indicative centre line would ensure that egressing vehicles are positioned on the left-hand side of the access such that visibility is optimised.

Servicing/ Emergency Access

- 3.5 Servicing would be carried out from the North End Road carriageway as per existing arrangement. Refuse would be transported from the bin store located within the site to a bin collection point located to the west of the access for collection.
- 3.6 Bin carry distances between properties and refuse collectors would be within the maximum thresholds set out in MIS from all properties (25m for collectors, 30m for residents).

Parking

- 3.7 The proposals would provide parking in line with the anticipated demand as determined by WSCC's Residential Parking Demand Calculator tool. The site is anticipated to require 4 allocated spaces and 1 unallocated/visitor spaces.
- 3.8 Car parking would be provided within the double garage associated with 1 of the dwellings and 2 spaces associated with the second dwelling. The site provides ample room for visitors of either dwelling to park within the curtilages of the properties.

- 3.9 Cycle parking would be provided in line with WSCCs cycle parking standards at a rate of 2 spaces per 3+ bed house. Cycles would be stored within the curtilage of the dwellings, within the proposed garage and storage rooms.

4 TRIP GENERATION

4.1 The TRICS database (version 7.4.1) has been interrogated to assess the likely traffic volumes that will be generated by the proposed development. For the purposes of this assessment the following parameters have been used to filter the TRICS data:

- i) Land Use – Residential (Houses Privately Owned)
- ii) Regions – Wales and England (excluding Greater London)
- iii) Scale of Development – 6 - 10 dwellings
- iv) Date Range – 01/01/09 - 16/09/15
- v) Count Type – Manual and Automated Traffic Count
- vi) Selected Days – Weekdays
- vii) Selected Locations – Edge of Town

4.2 A summary of the weekday peak hour and daily trips are displayed in **Figure 3.1**. The full results of the TRICS interrogation are provided in **Appendix A**.

TRICS Trip Rate per Dwelling (2 Dwellings)			
	Arrivals	Departures	Two-way Total
AM Peak Hour	0.150	0.300	0.450
PM Peak Hour	0.550	0.300	0.850
Daily Traffic	2.700	2.700	5.400
TRICS Vehicle Trip Generation			
AM Peak Hour	0	1	1
PM Peak Hour	1	1	2
Daily Traffic	5	5	11

Figure 3.1: Anticipated Traffic Generation

4.3 The TRICS assessment anticipates that the proposed development would generate a daily total of 11 two-way vehicle movements, of which 1/2 trips would occur within the AM/PM peak traffic hours respectively. The proposed trips would have a negligible impact on the local road network in terms of highway capacity and safety.

4.4 As previously identified, the site serves Stakers Farm which comprises a number of distinct uses including a residential dwelling, stable blocks and active farm buildings. The local highway authority's response identifies that vehicle trip generation is not a material concern for the consented B1 proposal (planning ref: Y/77/13/PD). The application for 2 residential dwellings would generate significantly less trips than the consented B1 proposal thereby offering improvement to the local road network over the consented proposal. Consultation response from WSCC relating to the previous B1 application is attached at **Appendix B**.

5 SUMMARY AND CONCLUSIONS

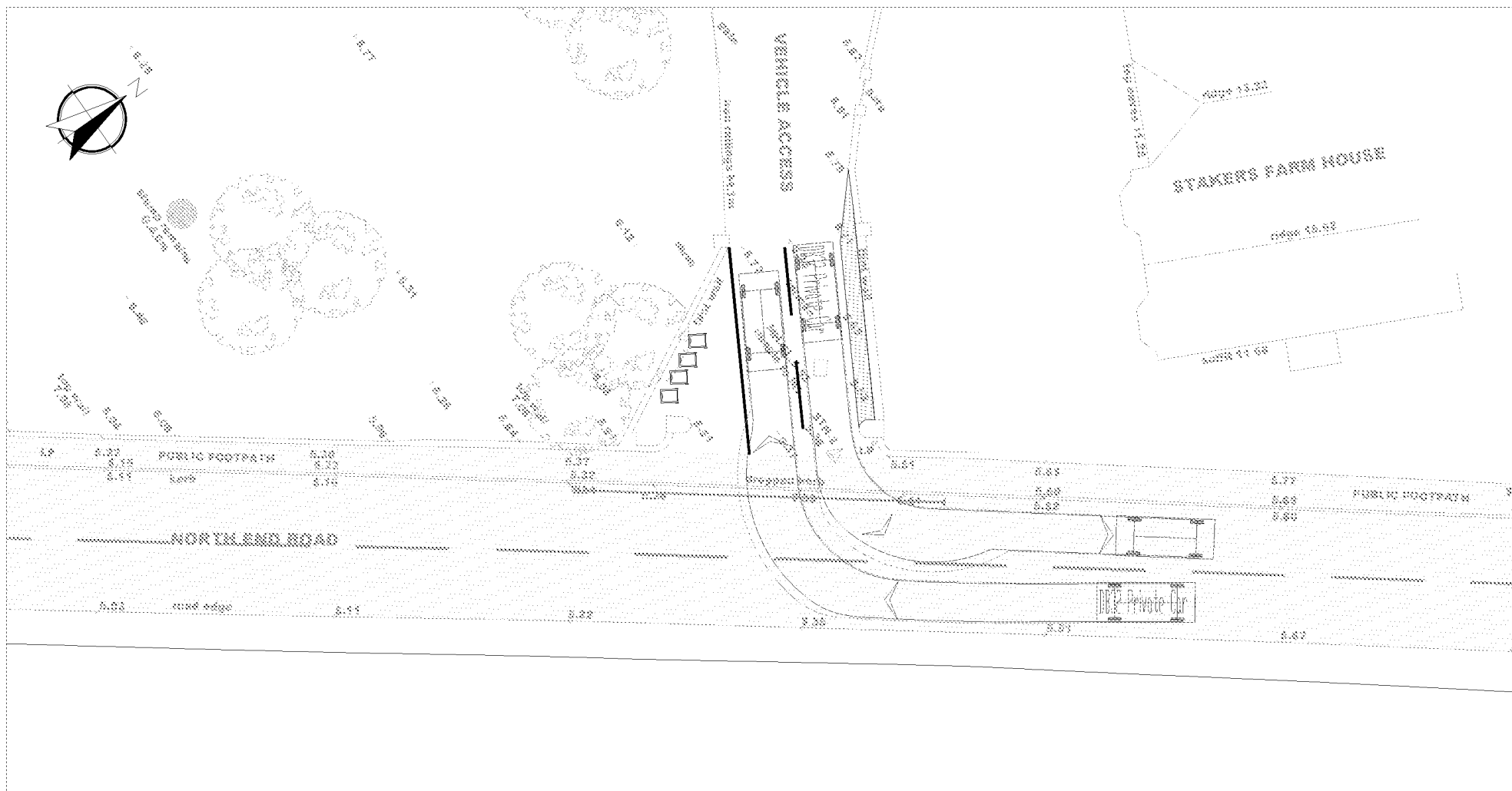
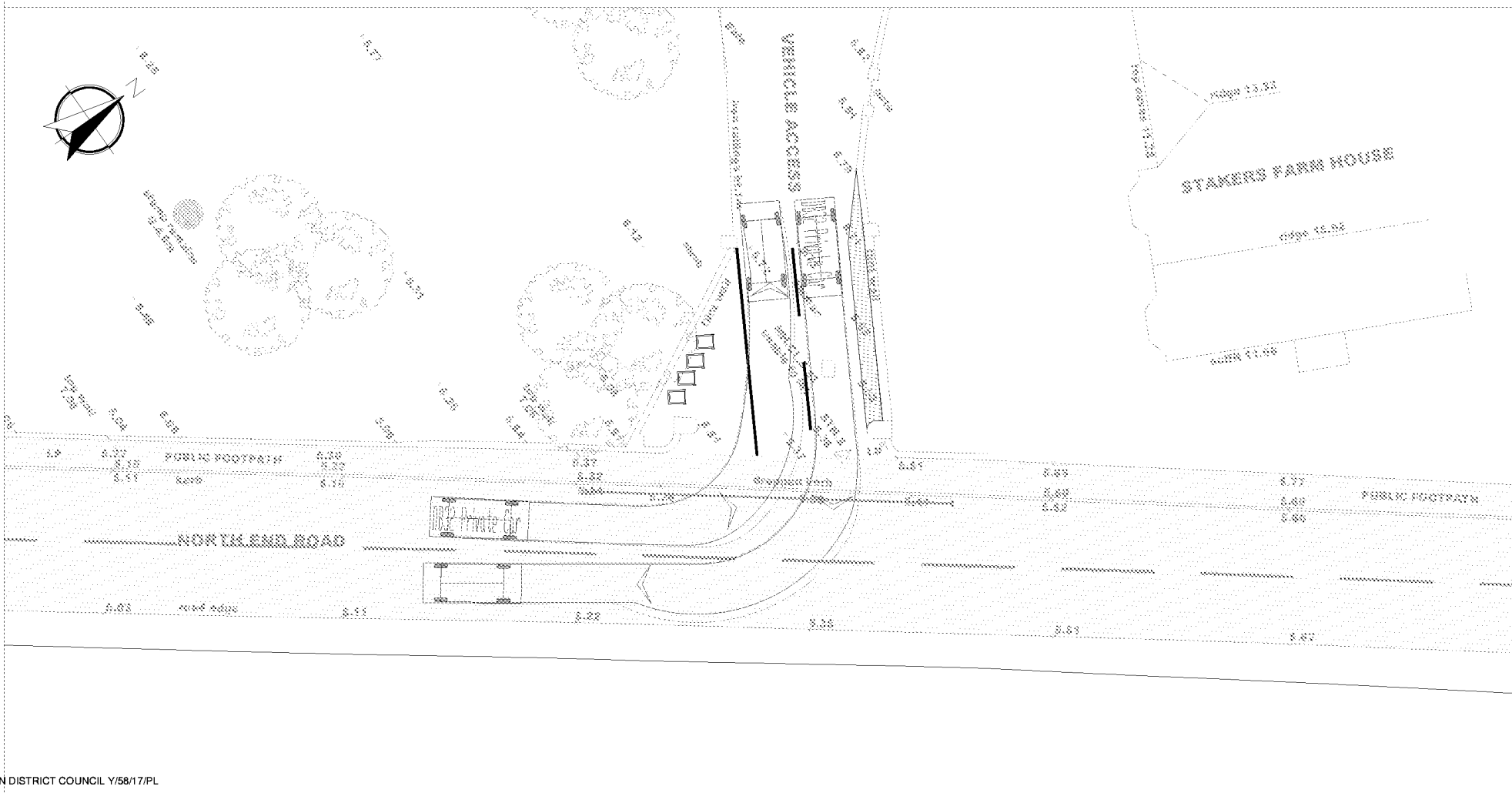
5.1 This TN has been prepared by RGP on behalf of South Eastern Planning Services to support the proposed residential development at Stakers Farm, Yapton. The proposal would involve the conversion of the existing barns to 2 residential dwellings. The conclusions from this report are as follows:

- i) The site is located to the north-east of Yapton village centre and currently comprises large traditional barns. The site shares access with the farm to the east and the residential dwellings to the west.
- ii) A study of PIA data has found no pattern in terms of frequency, location, or severity that would be of concern to highway safety on the local road network.
- iii) The proposed development would be served from the existing access adjoining North End Road. The access geometries would allow for concurrent car movements and access/egress by large emergency vehicles.
- iv) Visibility from the access achieves the necessary sight lines in both the primary and secondary directions in accordance with Manual for Streets requirements for 30mph roads.
- v) The proposed car parking provision has been provided in line with WSCC's Residential Parking Demand Calculator tool. Cars would be parking within the proposed garage and courtyard. Cycle parking would be provided in line with WSCC's cycle parking standards within the proposed garage and storage rooms.
- vi) The proposed development would generate less vehicle trips than the existing site's use and less trips than the consented B1 development proposal on the site.

DRAWINGS

-LEGEND-

- Site Boundary
- Existing Road Markings
- Highway Boundary



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Client: South Eastern Planning Services

Project: Stakers Farm, North End Road
Yapton, BN18 0DU

Drawing Title: Visibility Splay and
Swept Path Analysis

Scale: 1:250	Drawn By: SMO	Checked By: ALB	Approved By: PMR
Date: July 2017	Drawing No: 2017-3748-001	Rev: -	

APPENDIX A

Calculation Reference: AUDIT-728001-170718-0737

TRIP RATE CALCULATION SELECTION PARAMETERS:

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

VEHICLESSelected regions and areas:

04	EAST ANGLIA	
	NF NORFOLK	1 days
06	WEST MIDLANDS	
	SH SHROPSHIRE	1 days

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

Secondary Filtering selection:

This data displays the chosen trip rate parameter and its selected range. Only sites that fall within the parameter range are included in the trip rate calculation.

Parameter: Number of dwellings
 Actual Range: 10 to 10 (units:)
 Range Selected by User: 6 to 10 (units:)

Public Transport Provision:

Selection by: Include all surveys

Date Range: 01/01/09 to 16/09/15

This data displays the range of survey dates selected. Only surveys that were conducted within this date range are included in the trip rate calculation.

Selected survey days:

Wednesday	1 days
Friday	1 days

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

Selected survey types:

Manual count	2 days
Directional ATC Count	0 days

This data displays the number of manual classified surveys and the number of unclassified ATC surveys, the total adding up to the overall number of surveys in the selected set. Manual surveys are undertaken using staff, whilst ATC surveys are undertaken using machines.

Selected Locations:

Edge of Town	2
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This data displays the number of surveys per main location category within the selected set. The main location categories consist of Free Standing, Edge of Town, Suburban Area, Neighbourhood Centre, Edge of Town Centre, Town Centre and Not Known.

Selected Location Sub Categories:

Residential Zone	1
No Sub Category	1

This data displays the number of surveys per location sub-category within the selected set. The location sub-categories consist of Commercial Zone, Industrial Zone, Development Zone, Residential Zone, Retail Zone, Built-Up Zone, Village, Out of Town, High Street and No Sub Category.

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Secondary Filtering selection:Use Class:

C3 2 days

This data displays the number of surveys per Use Class classification within the selected set. The Use Classes Order 2005 has been used for this purpose, which can be found within the Library module of TRICS®.

Population within 1 mile:

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

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

Population within 5 miles:

25,001 to 50,000 1 days
75,001 to 100,000 1 days

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

Car ownership within 5 miles:

0.6 to 1.0 1 days
1.1 to 1.5 1 days

This data displays the number of selected surveys within stated ranges of average cars owned per residential dwelling, within a radius of 5-miles of selected survey sites.

Travel Plan:

No 2 days

This data displays the number of surveys within the selected set that were undertaken at sites with Travel Plans in place, and the number of surveys that were undertaken at sites without Travel Plans.

PTAL Rating:

No PTAL Present 2 days

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

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LIST OF SITES relevant to selection parameters

1	NF-03-A-03	DETACHED HOUSES	NORFOLK
	HALING WAY		
	THETFORD		
	Edge of Town		
	Residential Zone		
	Total Number of dwellings:	10	
	Survey date: WEDNESDAY	16/09/15	Survey Type: MANUAL
2	SH-03-A-03	DETACHED	SHROPSHIRE
	SOMERBY DRIVE		
	BICTON HEATH		
	SHREWSBURY		
	Edge of Town		
	No Sub Category		
	Total Number of dwellings:	10	
	Survey date: FRIDAY	26/06/09	Survey Type: MANUAL

This section provides a list of all survey sites and days in the selected set. For each individual survey site, it displays a unique site reference code and site address, the selected trip rate calculation parameter and its value, the day of the week and date of each survey, and whether the survey was a manual classified count or an ATC count.

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TRIP RATE for Land Use 03 - RESIDENTIAL/A - HOUSES PRIVATELY OWNED

VEHICLES**Calculation factor: 1 DWELLS****BOLD print indicates peak (busiest) period**

Time Range	ARRIVALS			DEPARTURES			TOTALS		
	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate	No. Days	Ave. DWELLS	Trip Rate
00:00 - 01:00									
01:00 - 02:00									
02:00 - 03:00									
03:00 - 04:00									
04:00 - 05:00									
05:00 - 06:00									
06:00 - 07:00									
07:00 - 08:00	2	10	0.250	2	10	0.150	2	10	0.400
08:00 - 09:00	2	10	0.150	2	10	0.300	2	10	0.450
09:00 - 10:00	2	10	0.000	2	10	0.250	2	10	0.250
10:00 - 11:00	2	10	0.250	2	10	0.150	2	10	0.400
11:00 - 12:00	2	10	0.200	2	10	0.400	2	10	0.600
12:00 - 13:00	2	10	0.200	2	10	0.200	2	10	0.400
13:00 - 14:00	2	10	0.200	2	10	0.150	2	10	0.350
14:00 - 15:00	2	10	0.250	2	10	0.150	2	10	0.400
15:00 - 16:00	2	10	0.300	2	10	0.200	2	10	0.500
16:00 - 17:00	2	10	0.200	2	10	0.250	2	10	0.450
17:00 - 18:00	2	10	0.550	2	10	0.300	2	10	0.850
18:00 - 19:00	2	10	0.150	2	10	0.200	2	10	0.350
19:00 - 20:00									
20:00 - 21:00									
21:00 - 22:00									
22:00 - 23:00									
23:00 - 24:00									
Total Rates:			2.700			2.700			5.400

This section displays the trip rate results based on the selected set of surveys and the selected count type (shown just above the table). It is split by three main columns, representing arrivals trips, departures trips, and total trips (arrivals plus departures). Within each of these main columns are three sub-columns. These display the number of survey days where count data is included (per time period), the average value of the selected trip rate calculation parameter (per time period), and the trip rate result (per time period). Total trip rates (the sum of the column) are also displayed at the foot of the table.

To obtain a trip rate, the average (mean) trip rate parameter value (TRP) is first calculated for all selected survey days that have count data available for the stated time period. The average (mean) number of arrivals, departures or totals (whichever applies) is also calculated (COUNT) for all selected survey days that have count data available for the stated time period. Then, the average count is divided by the average trip rate parameter value, and multiplied by the stated calculation factor (shown just above the table and abbreviated here as FACT). So, the method is: $COUNT/TRP \times FACT$. Trip rates are then rounded to 3 decimal places.

Parameter summary

Trip rate parameter range selected: 10 - 10 (units:)
 Survey date range: 01/01/09 - 16/09/15
 Number of weekdays (Monday-Friday): 2
 Number of Saturdays: 0
 Number of Sundays: 0
 Surveys automatically removed from selection: 0
 Surveys manually removed from selection: 0

This section displays a quick summary of some of the data filtering selections made by the TRICS® user. The trip rate calculation parameter range of all selected surveys is displayed first, followed by the range of minimum and maximum survey dates selected by the user. Then, the total number of selected weekdays and weekend days in the selected set of surveys are shown. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.

APPENDIX B

**WEST SUSSEX COUNTY COUNCIL
STRATEGIC PLANNING CONSULTATION**

DATE: 12th November 2013

**FROM: Alison Meeus TO: Arun District Council
FAO: Simon Davis**

**SUBJECT: Change of use from M class agricultural use to B1/B8 use at
Stakers Farm, North End Road, Yapton.**

RECOMMENDATION:

Advice	☒	Modification	☐	More Information	☐
Objection	☐	No Objection	☐	Refusal	☐

The proposal to change the existing agricultural building at Stakers Farm, Yapton into B1/B8 use has been considered by WSCC. Based on the information provided by Michael Fletcher of Landlink Estates, an assessment of the developments transport and highway impact is as follows.

The change of use from agricultural use to B1/B8 is not likely to intensify the use of the existing access. The existing access onto the B2132 is wide enough for two cars to pass each other and as such WSCC are satisfied this is a suitable access point.

It is considered that the existing traffic volume generated by the site is most likely to reduce as a result of the proposed change by a reduction in the number and size of vehicles. However WSCC are unable to predict the number of anticipated journeys as part of this new development as no information has been submitted regarding employee numbers and expected deliveries. The applicant has not submitted any information regarding car parking either, although it is very likely car parking will be required for the use. A typical B1/B8 site of 403sqm would be expected to generate between 14-16 car parking spaces and up to 4 lorry parking spaces. A desktop study of the site shows there to be additional space outside of the boundary of the site which could be used for parking and turning. As no formal car parking is provided WSCC would like to know that space is made available for car parking/lorry parking and turning for the use as otherwise this could have a detrimental impact on the highway network.

**Alison Meeus
Strategic Planning**