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Change of Use of Existing Agricultural Land to B8 Storage to Accommodate 20 No. Shipping Containers
South Farm, Water Eaton, Cricklade, Wiltshire, SN6 6JU

Introduction

This Highway Technical Note has been commissioned by KES ventures Ltd in support of a planning application submission to Wiltshire Council for a change of use of existing agricultural at South Farm, Water Easton, Cricklade, to provide 20 No. Shipping Containers for self-storage. The location of the site is shown below.



The site is located north of the settlement of Water Eaton and will utilise the existing southern access to the site from the unclassified road between Castle Eaton and the A419. The access benefits from good visibility in both directions along the unclassified road.

Planning History

There has been some recent planning history to the site, and this is set out below.

PL/2023/07605 – This planning application is for the demolition of an agricultural building and replacement with a building for Use Class E (g) (i) - (iii). This application is currently under consideration although the Highway Officer has commented and on 5th October he said:

There is not sufficient cause for an objection on highway safety grounds, with the information provided.

PL/2022/05824 – This planning application was for a change of use and extension of agricultural buildings to Use Class E (g) (i) - (iii). This was supported with a Highway Technical Note which set out the likely traffic impact, which was considered to be acceptable from a highway point of view.

PL2021/05142 – This was a Class R application made under the GPDO for a change of use of approximately 300sqm of agricultural buildings to a Flexible Commercial use. On 18th May 2021, Wiltshire Council confirmed that Prior Approval would not be required.

21/00972/CLASSR – This was a separate application made to Wiltshire Council for the change of use of 150sqm of agricultural floor area to a flexible commercial use, and again, Prior Approval was not required.

19/06241/PNCOU – This application sought to change the use of agricultural buildings to 5 dwelling houses under Class Q. The Highway Officer who responded to the Class Q Prior Notification application confirmed that the access was wide enough to serve 5 dwellings and raised no objection to the additional vehicular trip generation.

Proposed Development

The application now to be considered is for the installation of 20 shipping containers to be used for self-storage and these will be served from the existing southern access.

Traffic Impact

The proposals seek to provide 20 shipping containers to be used for a B8 – self storage use. Each container measures 6.06m by 2.43m giving a total floor area of 14.72sqm. The overall area proposed is therefore (14.72 x 20) 294.5 sqm.

In order to determine the likely traffic impact that the use may have, the TRICS database V7.10.3 has been interrogated. Very limited data is available for the uses now sought as TRICS contains data relating to purpose built self-storage which are generally located within built up areas. Notwithstanding this, an estimate of likely traffic is given below based on purpose-built self-storage units of 2675 sqm or less, located outside of town centres.

B8 Self Storage Trip Rates			
	Arrivals	Departures	Total Movements
AM Peak	0.179	0.076	0.255
PM Peak	0.039	0.204	0.243
Daily per 100 sqm	1.253	1.253	2.506

Utilising the above Trip Rates, the table below gives the likely traffic generation from purpose built self-storage units.

B8 Self Storage Traffic Generation (294.5 sqm)			
	Arrivals	Departures	Total Movements
AM Peak	0.53 (1)	0.22 (0)	1
PM Peak	0.12 (0)	0.60 ()	1
Daily	3.69 (4)	3.69 (4)	8

From the table above it can be seen that a B8 purpose built self-storage facility of 294.5 sqm would generate just 1 traffic movement in each of the AM and PM peak periods and just 8 daily traffic movements. The TRICS Data is included as Appendix 1 to this Note.

Self-Storage B8 Uses

Whilst TRICS gives some idea of the likely traffic from purpose built self-storage units, these are generally much larger, covered facilities located within towns and cities with small individual storage lockers used by a higher number of customers, relative to the floor area.

Self-storage facilities in these locations would generate more vehicle movements because they are of a much more intensive use due to their relative convenience, meaning that they are often used for shorter term storage. In contrast, the proposed container storage is anticipated to be used for longer term storage of bulky goods which customers would visit on a less frequent basis.

A planning application submitted to Basingstoke and Deane Borough Council under reference 19/03353/FUL at Cotttismore Garden Centre in Kingsclere was for a total of 307 shipping containers, to be used for self-storage purposes. Research submitted as part of that proposal suggested that such a use would only generate 10 customer per week, or 4 traffic movements per day. Hampshire County Council (HCC) as highway authority were consulted on the application and accepted these figures and in doing so, they raised no highway objections.

Another similar planning application was approved by Test Valley Borough Council under reference 19/02257/FULLN for the installation of 143 shipping containers for self-storage on land at the rear of Eastfield House, Amesbury Road, SP11 8ED. HCC as highway authority once again commented on the application and said:

"The proposal is considered to be a low traffic generator once available."

A further planning application was submitted to the Southdown's National Park Authority for a B8 Storage use consisting of 106 self-storage containers and the highway implications were once again considered by HCC. This application was accompanied with a Highway Technical Note that set out the likely trip generation for a purpose-built B8 Storage use based on TRICS Data. It also gave data based on an established self-storage use located on the outskirts of Winchester in Hampshire.

Hall and Burge Self Storage is located at Vale Farm, Enmill Lane, Pitt, Winchester SO22 5QW and can be found at https://www.hallandburge.co.uk . This site has over 300 self-storage containers used by both domestic and commercial customers. The site is monitored by CCTV and vehicle number plate recognition equipment. This allows the owners to keep accurate records of the usage of the site. A recent investigation into the types of uses, length of storage term, vehicle type and number of monthly visits has been undertaken. A random sample of 20 customers has been undertaken and the results of the survey are shown below.

Customer	Type	Storage Term (months)	Vehicle Type	Visits Per Month
A	Domestic	2	Car	2
B	Domestic	17	Car	2
C	Business	50+	Van	0
D	Business	23	Car	1
E	Domestic	5	Car	3
F	Domestic	7	Car	4
G	Domestic	9	Car	1

H	Business	11	Van	2
I	Business	16	Van	4
J	Domestic	23	Car	0
K	Domestic	32	Car	0
L	Business	36	Car	8
M	Domestic	2	Car	0
N	Business	50+	Van	10
O	Domestic	22	Car	0
P	Domestic	11	Car	1
Q	Domestic	45	Car	0
R	Business	32	Car	3
S	Business	45	Van	0
T	Domestic	32	Car	1
Average	60% Domestic	17 Months	75% Car	2.1 / Month

The table above demonstrates that based on a similar site to this current application, the majority of users are domestic customers with an average self-storage term of 17 months. Based on the 20 samples taken, it was shown that each container generates an average of just 2.1 visits per month.

Given the above data, and the recent planning applications for similar uses that have been accepted by an adjacent Highway Authority, it would appear that the actual traffic generation from such uses are indeed low, once established.

Based on the Hall and Burge data, it can be seen that the average trip rate for each container would be 0.07 trips per day (2.1 ÷ 30). Therefore, with a total of 20 containers, the site is likely to generate a total of some 1.4 vehicles per day or 2 to 3 traffic movements.

Using either the TRICS data or the data based on the Hall and Burge site, the likely increase in traffic from the self-storage use is considered to have no material impact on the highway network and is deemed to be acceptable in this instance.

Car Parking

Car parking requirements are set out with the Wiltshire Local Transport Plan 2011 – 2026 – Car Parking Strategy. For B8 developments the document suggests a standard of 1 space per 30sqm up to 235sqm and a minimum of 8 spaces for developments greater than 235sqm.

In this case, no formal parking is proposed for the self-storage units as it is anticipated that vehicles will just drive up to their allocated unit, load and unload and depart. The site is large enough however to accommodate any informal parking needs that may arise without the possibility of overspill onto the public highway.

Servicing

It is recognised that there will be some concentration of HGV movements as and when the containers are brought to the site, however this operation will be staged and containers will be brought to site individually, as they are let and the demand for storage grows. HGV movements will therefore be spread over a number of months as the business evolves.

Summary and Conclusion

This Technical Note has been produced in support of a planning application for the provision of 20 No. self-storage containers at South Farm, Water Easton, Cricklade. The existing southern access is to be utilised, which has been found to be acceptable by the Highway Authority for other development at South Farm.

Using both TRICS Data and data taken from a similar site in Hampshire, if permitted, the development will generate a small number of traffic movements in the AM and PM peak periods and a modest increase of traffic over the course of a 12-hour day.

Adequate parking is to be provided for each unit and it is likely that the units will generate nothing larger than a transit type van.

Given the above, the development is found to be acceptable from a highway point of view.

Nick Culhane November 2023

Appendix 1

TRICS Data

Calculation Reference: AUDIT-405201-200728-0744

TRIP RATE CALCULATION SELECTION PARAMETERS:

Land Use : 02 - EMPLOYMENT
Category : E - WAREHOUSING (SELF STORAGE)
VEHICLES

Selected regions and areas:

04	EAST ANGLIA		
	CA	CAMBRIDGESHIRE	1 days
	NF	NORFOLK	1 days
07	YORKSHIRE & NORTH LINCOLNSHIRE		
	WY	WEST YORKSHIRE	1 days

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

Primary Filtering selection:

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

Parameter: Gross floor area
Actual Range: 2500 to 2675 (units: sqm)
Range Selected by User: 2500 to 2675 (units: sqm)

Parking Spaces Range: All Surveys Included

Public Transport Provision:
Selection by: Include all surveys

Date Range: 01/01/02 to 16/10/09

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

Selected survey days:

Monday	1 days
Wednesday	1 days
Friday	1 days

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

Selected survey types:

Manual count	3 days
Directional ATC Count	0 days

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

Selected Locations:

Suburban Area (PPS6 Out of Centre)	3

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

Selected Location Sub Categories:

Industrial Zone	2
Built-Up Zone	1

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

Secondary Filtering selection:

Use Class:

B8	3 days

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

Secondary Filtering selection (Cont.):

Population within 1 mile:

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

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

Population within 5 miles:

125,001 to 250,000	3 days

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

Car ownership within 5 miles:

0.6 to 1.0	1 days
1.1 to 1.5	2 days

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

Travel Plan:

No	3 days

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

PTAL Rating:

No PTAL Present	3 days

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

LIST OF SITES relevant to selection parameters

The 'browse and select' feature in TRICS was used to choose the sites to be included in this selected set. The TRICS user browsed the full list of sites for this land use category and selected directly from this list.

1	CA-02-E-02	SELF STORAGE		CAMBRIDGESHIRE
	CLIFTON WAY			
	CAMBRIDGE			
	Suburban Area (PPS6 Out of Centre)			
	Built-Up Zone			
	Total Gross floor area:		2675 sqm	
	Survey date: FRIDAY		*16/10/09*	*Survey Type: MANUAL*
2	NF-02-E-01	BIX BOX STORAGE		NORFOLK
	VULCAN ROAD NORTH			
	NORWICH			
	HELLESDON			
	Suburban Area (PPS6 Out of Centre)			
	Industrial Zone			
	Total Gross floor area:		2650 sqm	
	Survey date: WEDNESDAY		*30/07/03*	*Survey Type: MANUAL*
3	WY-02-E-01	SELF STORAGE		WEST YORKSHIRE
	ST ANDREWS ROAD			
	HUDDERSFIELD			
	Suburban Area (PPS6 Out of Centre)			
	Industrial Zone			
	Total Gross floor area:		2500 sqm	
	Survey date: MONDAY		*17/03/03*	*Survey Type: MANUAL*

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

TRIP RATE for Land Use 02 - EMPLOYMENT/E - WAREHOUSING (SELF STORAGE)
VEHICLES
Calculation factor: 100 sqm
BOLD print indicates peak (busiest) period

	ARRIVALS			DEPARTURES			TOTALS		
Time Range	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate	No. Days	Ave. GFA	Trip Rate
00:00 - 00:30									
00:30 - 01:00									
01:00 - 01:30									
01:30 - 02:00									
02:00 - 02:30									
02:30 - 03:00									
03:00 - 03:30									
03:30 - 04:00									
04:00 - 04:30									
04:30 - 05:00									
05:00 - 05:30									
05:30 - 06:00									
06:00 - 06:30									
06:30 - 07:00									
07:00 - 07:30	3	2608	0.000	3	2608	0.000	3	2608	0.000
07:30 - 08:00	3	2608	0.089	3	2608	0.000	3	2608	0.089
08:00 - 08:30	3	2608	0.064	3	2608	0.038	3	2608	0.102
08:30 - 09:00	3	2608	0.115	3	2608	0.038	3	2608	0.153
09:00 - 09:30	3	2608	0.077	3	2608	0.089	3	2608	0.166
09:30 - 10:00	3	2608	0.026	3	2608	0.026	3	2608	0.052
10:00 - 10:30	3	2608	0.077	3	2608	0.064	3	2608	0.141
10:30 - 11:00	3	2608	0.000	3	2608	0.064	3	2608	0.064
11:00 - 11:30	3	2608	0.051	3	2608	0.026	3	2608	0.077
11:30 - 12:00	3	2608	0.051	3	2608	0.089	3	2608	0.140
12:00 - 12:30	3	2608	0.051	3	2608	0.026	3	2608	0.077
12:30 - 13:00	3	2608	0.064	3	2608	0.026	3	2608	0.090
13:00 - 13:30	3	2608	0.089	3	2608	0.077	3	2608	0.166
13:30 - 14:00	3	2608	0.051	3	2608	0.077	3	2608	0.128
14:00 - 14:30	3	2608	0.064	3	2608	0.038	3	2608	0.102
14:30 - 15:00	3	2608	0.077	3	2608	0.077	3	2608	0.154
15:00 - 15:30	3	2608	0.051	3	2608	0.115	3	2608	0.166
15:30 - 16:00	3	2608	0.051	3	2608	0.051	3	2608	0.102
16:00 - 16:30	3	2608	0.077	3	2608	0.051	3	2608	0.128
16:30 - 17:00	3	2608	0.089	3	2608	0.026	3	2608	0.115
17:00 - 17:30	3	2608	0.026	3	2608	0.102	3	2608	0.128
17:30 - 18:00	3	2608	0.013	3	2608	0.102	3	2608	0.115
18:00 - 18:30	3	2608	0.000	3	2608	0.051	3	2608	0.051
18:30 - 19:00	3	2608	0.000	3	2608	0.000	3	2608	0.000
19:00 - 19:30									
19:30 - 20:00									
20:00 - 20:30									
20:30 - 21:00									
21:00 - 21:30									
21:30 - 22:00									
22:00 - 22:30									
22:30 - 23:00									
23:00 - 23:30									
23:30 - 24:00									
Total Rates:			1.253			1.253			2.506

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

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

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Parameter summary

Trip rate parameter range selected:	2500 - 2675 (units: sqm)
Survey date date range:	01/01/02 - 16/10/09
Number of weekdays (Monday-Friday):	3
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 show. Finally, the number of survey days that have been manually removed from the selected set outside of the standard filtering procedure are displayed.