

TECHNICAL NOTE



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The Oast House, Snodland

Job Number: J323538

Date: 10 January 2020

Client: Castlebarn Limited

Prepared By : COR

Approved By : LF

Response to Committee Members

1 Introduction

- 1.1 This Technical Note (TN) has been prepared by mode transport planning (mode) on behalf of Castlebarn Limited who are a KFC franchisee. A planning application, reference 19/00786/FL, was submitted to Tonbridge and Malling Borough Council for a proposed A3/A5 Restaurant and Take-away unit with associated drive-thru at The Oast House, Malling Road, Snodland.
- 1.2 The application was sent to committee with a recommendation to grant permission from the Case Officer. The application was heard at the October 3rd 2019 Area Three Planning Committee meeting. Kent County Council (KCC) in its capacity as the Local Highway Authority also recommended the application be granted and were present at the October committee meeting to give evidence. Councillors decided to defer their decision to allow time for further clarification of highway information to be provided.
- 1.3 The purpose of this TN is to provide clarity on transport related points raised at the October committee meeting. Further clarification and justification of the assessment presented in the submitted Transport Assessment (TA) and a post-submission TN, is expanded in more detail.
- 1.4 This TN should be read in conjunction with the submitted transport documentation including the TA, Travel Plan (TP), Delivery and Servicing Plan (DSP) and a post-submission TN on parking accumulation.

2 Trip Assessment Site Selection

- 2.1 To provide a robust assessment of the predicted number of development trips, a similar operational KFC site was chosen as per that located on the A4 Bath Road, Hounslow. The submitted TA and post application TN provided justification as to why this site was chosen and this has been accepted in principle by KCC.
- 2.2 The Hounslow site is located on the edge of town adjacent to a dual carriageway linking near-by population centres. The KFC unit on-site also has a drive-thru and is larger than the proposed A3/A5 unit at the Oast House, Snodland (approx. 420m² compared to the proposed 228m²). As a comparable site survey, the Hounslow KFC unit is likely to generate more vehicle movements than the proposed unit.

2.3 The Hounslow site also contains a Starbucks unit with drive-thru facilities. The Starbucks drive-thru facility is ancillary to the main coffee shop use. The Starbucks unit is an A1 Retail / A3 Restaurant Use Class with

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a GEA of approximately 204m². In comparison, the KFC unit is an A3 Restaurant / A5 Hot Food TakeAway Use Class with a larger GEA of approximately 420m². Given the different land use class of each unit, the trip profile for each is likely to differ slightly. This is reflected in the survey data which showed the majority of drive-thru vehicle movements are for the KFC unit (73% of the total during the weekday and 65% during the weekend day)..

2.4 The submitted TA provided a robust assessment of the proposed development based on the principle of the Hounslow site as a singular site (i.e. individual KFC and Starbucks vehicle movements were not separated). The purpose for using the Hounslow data is outlined in section 4.4 of the TA, where the Hounslow trip rates were found to be higher than a TRICS comparison exercise for the peak weekend period (the highest generation period for an A3/A5 use). It therefore remains robust to utilise these trip rates as a guide for trip profiling for the proposed development in Snodland.

2.5 The combined floor area of the KFC and Starbucks is more than double that of the proposed development and would likely represent a larger trip generator in terms of vehicle movements. The following sections provide an expansion of the TA assessment in terms of the submitted survey data, to further quantify the breakdown of development trips by type and 15-minute time segments.

2.6 Appendix F of the submitted TA includes the raw survey data for the Hounslow site, albeit presented in an hourly format consistent with the assessment presented within the TA. This same raw survey data is presented in the 15-minute breakdown below to expand on the number of vehicle movements across the hourly period (previously presented in section 4, 5 and 6 of the TA and section 2 of the post-submission TN). The data is provided in [Appendix A](#) of this TN for ease of reference.

3 Proposed Parking to Accommodate Customer Traffic

3.1 The submitted TA detailed the predicted number of arrival and departure vehicle trips for the development proposal on an hourly basis during operational hours, as based on the sample KFC site (A4 Bath Road, Hounslow). This provided a profile of car parking accumulation within the development proposal and was further expanded on in the post-submission 'Response to Local Highway Authority Comments' TN.

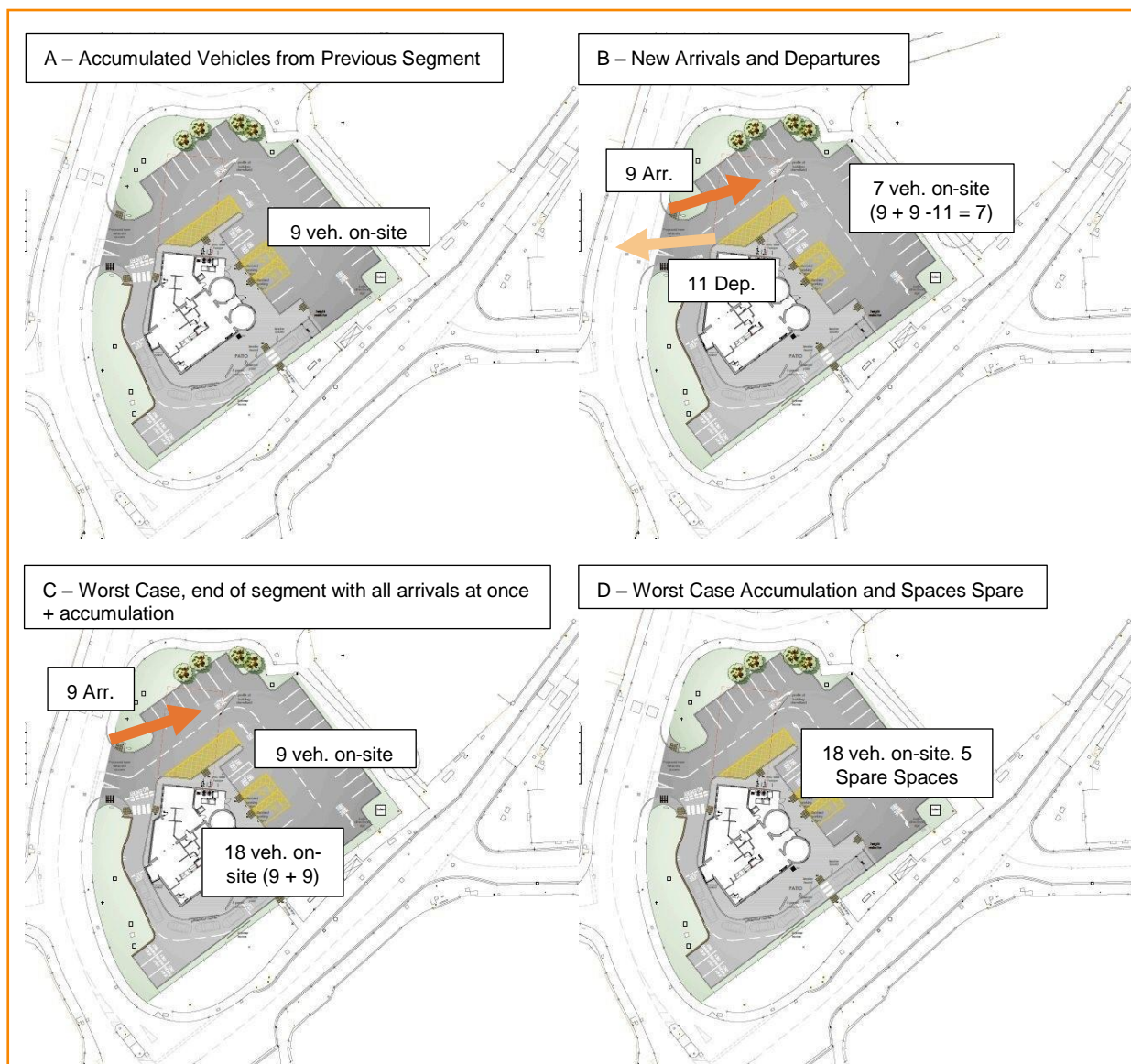
3.2 For further clarification, the car parking accumulation profile has been calculated by adding the number of vehicles already in the car park at the start of the time segment with the number arrivals, less the number of departures. The submitted assessments had assumed a robust scenario from a parking demand standpoint, in that all vehicles arriving at the site have been assumed to park before leaving. This approach has not excluded drive-thru only trips which in the most part will be expected to arrive and depart the site without using a parking space (although this is considered later in this TN).

3.3 The number of arrivals and departure trips per times segment is definitive and the accumulation profile assumes vehicles come and go at regular intervals per time segment. What is left at the end of the time segment (after some vehicles have arrived and some have departed), is the calculated parking

accumulation for that time period. This is irrespective of 'dwell' times as it is simply a function of calculated arrivals and departures, as per the Hounslow site survey.

3.4 Although unlikely to happen in practice, it is possible that all arrivals could occur prior to any departures occurring, which would relate to a high parking accumulation at that particular time. This may relate to particular dwell times during a time segment being unaccounted for. To allow for this possible effect, the time segments have been provided at 15-minute intervals, as per the same survey data in this TN (the original data was collected in 15-minute intervals). An extra worst-case allowance for arrivals preceding departures has also been assessed. A sample time segment is illustrated diagrammatically on **Figure 3.1**.

Figure 3.1 Sample 15-minute Time Segment



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3.5 **Figure 3.1** illustrates a 15-minute time segment, based on the busiest 15-minute time period during a weekday, 13:15 to 13:30. At the start of the time segment, 9 vehicles are present on-site, which is the accumulation from the previous 15-minutes. Over the next 15-minutes a total of 9 vehicles will arrive and 11 will depart which would leave an accumulation of 7 vehicles on-site at the end of the time period. As a worst case, if the 9 arrivals precede any of the 11 departures before the end of the time segment, a total of 18 vehicles would be on site at that time, leaving 5 spare parking spaces.

3.6 The 15-minute parking accumulation profile over the course of a weekday and weekend day has been assessed, allowing for the worst-case scenario for all arrivals preceding departures. This shows the expected maximum parking demand during that 15-minute segment. The capacity of the car park is assumed to be 23 standard spaces, which excludes the 'grill bays' and staff bays as these are designated and not for general use.

3.7 The 15-minute parking accumulation profile for a weekday and weekend on the above basis is demonstrated on **Figures 3.2** and **3.3**. This shows the number of accumulated spaces (orange), the potential for all arrivals preceding departures (grey) and the minimum number of spare spaces with the worst-case scenario (light orange). At the request of the Highway Officer, **Appendix B** contains a tabulated version of **Figure 3.2** and **3.3**.

Figure 3.2 Weekday Parking Accumulation

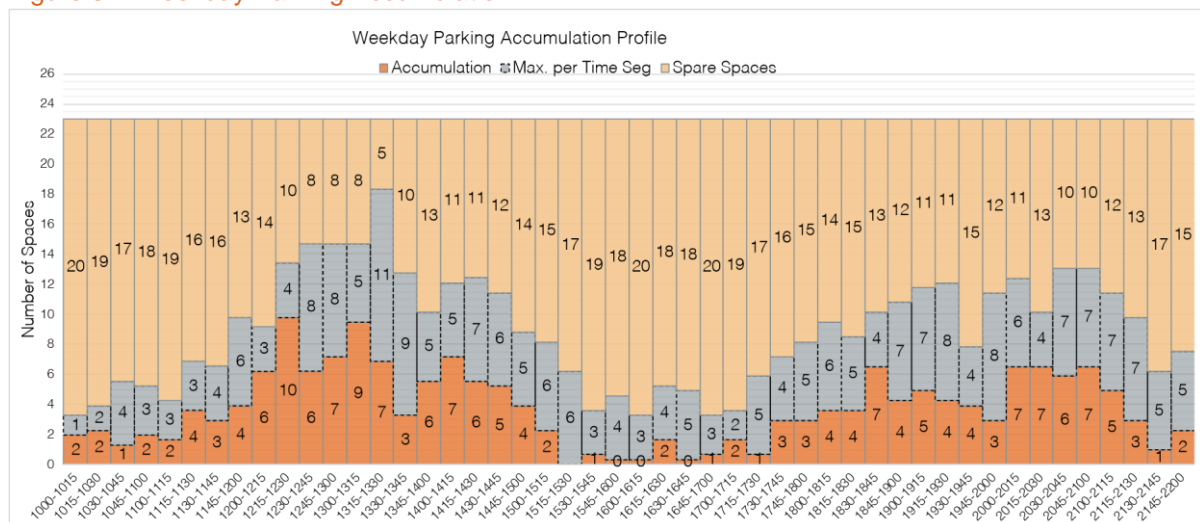
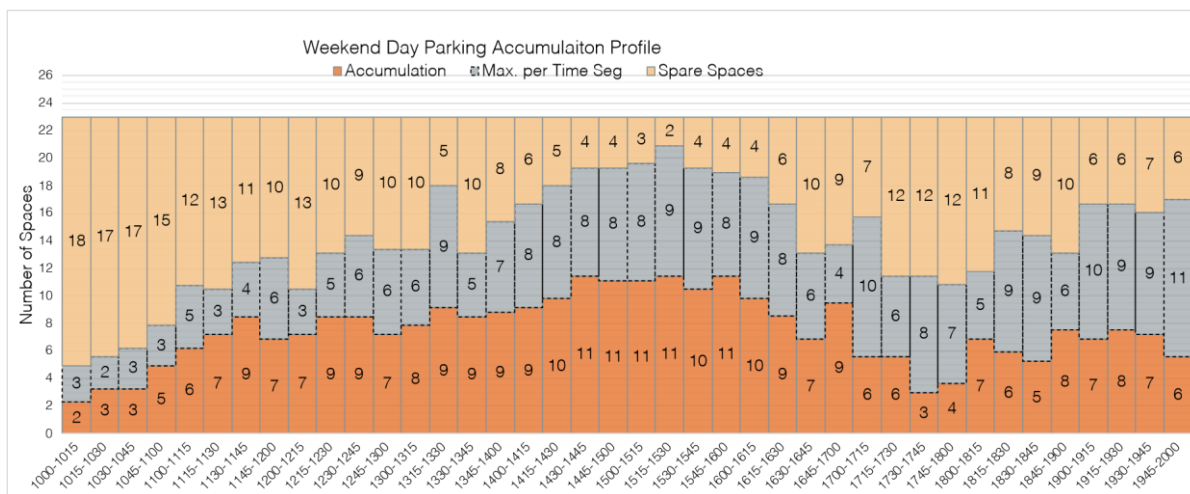


Figure 3.3 Weekend Day Parking Accumulation



3.8 Figures 3.2 and 3.3 demonstrate that the proposed parking provision has sufficient capacity to accommodate the predicted demand across both the weekday and weekend day, with spare capacity, even when allowing for the worst-case possibility of all arrivals preceding any departures (grey). The busiest time segment on the weekday is between 13:15 and 13:30, when up to 18 vehicles could be in the car park leaving 5 spaces free. On the weekend day this is between 15:15 and 15:30, when up to 20 vehicles could be in the car park leaving 2 spaces free.

3.9 Fundamentally, Figures 3.2 and 3.3 are based on the total arrival and departure vehicles trips, irrespective of being dine-in/restaurant take-away and drive-thru. This allows for any degree of dwell time and does not account for the many arrivals and departures that will not require use of the car park. Notwithstanding the demonstrated spare spaces, this is a significant overestimate of car parking demand because of this.

3.10 To provide an account of the drive-thru reducing car parking demand upon the worst-case car parking accumulation assessment, the submitted Hounslow survey data has been further interrogated in terms of the breakdown drive-thru movements during the survey period.

3.11 The total drive-thru vehicle movements recorded on a weekday and weekend day at the Hounslow site have been divided by the total number of vehicle movements to provide the percentage of total two-way vehicle movements being drive-thru only. It should be noted, for the purpose of this assessment the total drive-thru movements combine the drive-thru vehicle movements of the Starbucks and KFC units for an overall total number of drive-thru vehicle movements. However, given these trips do not relate to a dwell time in the car park and will only factor down the worst-case assessment (which demonstrates sufficient car parking capacity in any event), the assessment is considered suitable. Regardless, it is also possible that a Starbucks would have a lower rate of drive-thru to dine-in than the KFC, which would only mean a more robust assessment in consideration of car parking demand.

3.12 During the weekday (10:00 to 22:00 - same time period as the post submission TN assessment), the average percentage of development trips which would be utilising the drive-thru is 48% per hour, with a maximum of 63% of trips between 21:00 to 22:00 hours. For the weekend day (10:00 to 20:00), the average is 38% per hour and the expected maximum percentage is 53% between 20:00 to 21:00 hours.

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3.13 To assess only the non drive-thru trips, the expected number of drive-thru trips based on the above average percentages (48% on a weekday and 38% on a weekend day) have been removed from the arrivals and departures in the parking accumulation calculation. This leaves an accumulation profile based on solely non-drive thru trips, as demonstrated in **Figures 3.4 and 3.5**. Notwithstanding the removal of drive-thru trips, this retains the allowance for the worst-case of all arrivals preceding any departures. At the request of the Highway Officer, **Appendix C** contains a tabulated version of **Figure 3.4 and 3.5**.

Figure 3.4 Weekday Non Drive-Thru Parking Accumulation Profile

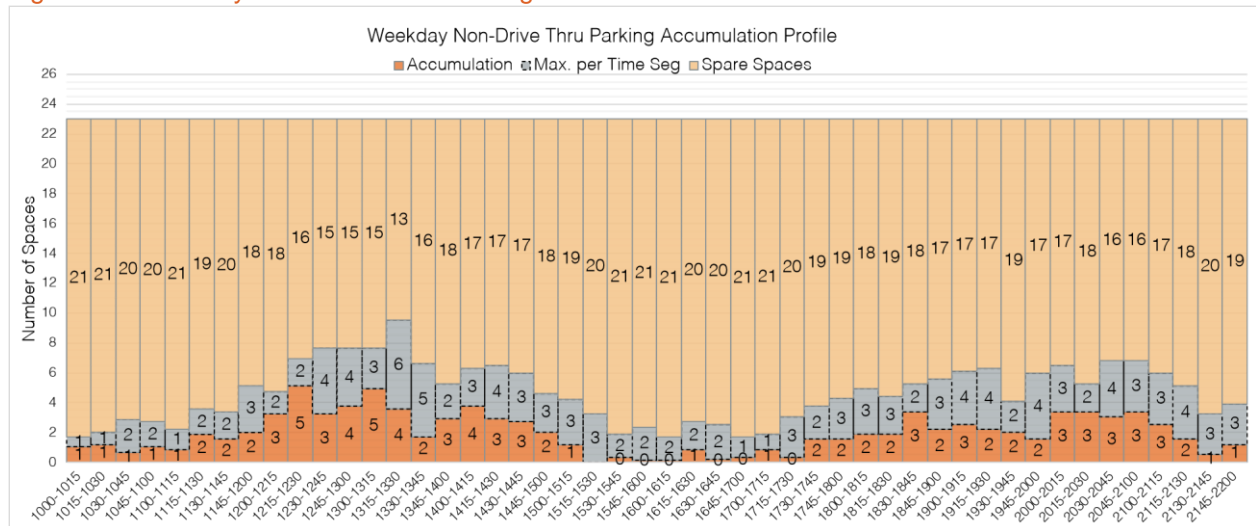
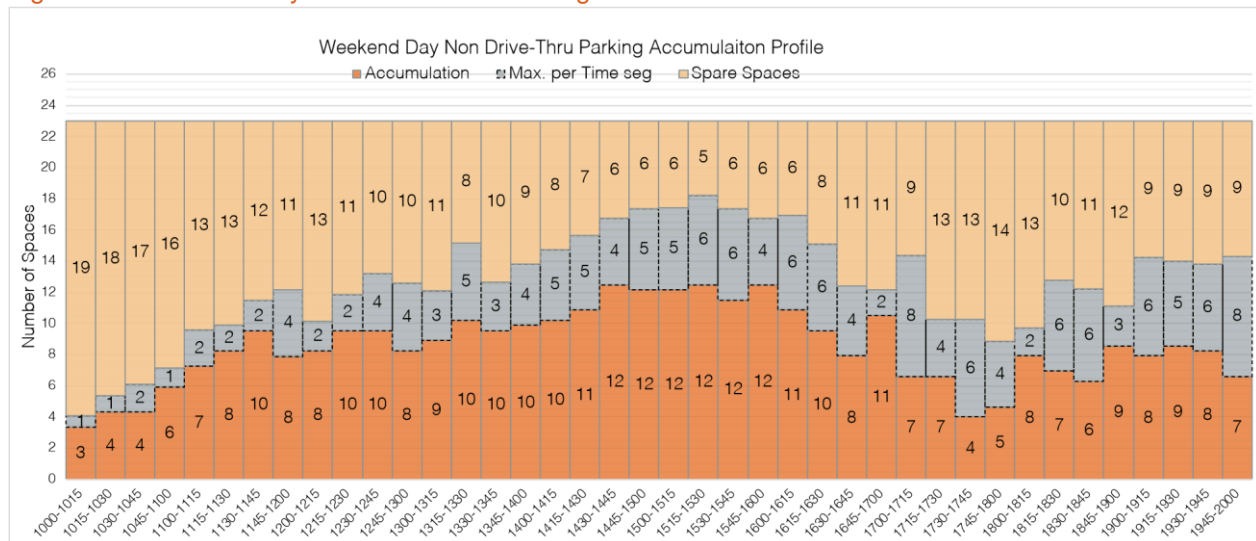


Figure 3.5 Weekend Day Non Drive-Thru Parking Accumulation Profile



3.14 **Figures 3.4 and 3.5** demonstrate that the proposed parking provision has greater capacity to accommodate the predicted demand across both the weekday and weekend day, when removing drivethru trips from the accumulation calculation. This is also inclusive of allowing for the worst-case possibility of all arrivals preceding any departures (grey). The busiest time segment on the weekday remains between 13:15 and 13:30, when up to 10 vehicles could be in the car park leaving 13 spaces free. On the weekend day this

also remains between 15:15 and 15:30, when up to 17 vehicles could be in the car park leaving 5 spaces free.

4 TRICS Accumulation Profile

4.1 At the request of the Highway Officer, a parking accumulation profile based on the TRICS trip rates detailed in the submitted TA are provided to allow a comparison with [Figures 3.2 and 3.3](#). TRICS provides hourly trip rates for arrivals and departures and the trip rates account for all expected trip types. The hourly parking accumulation profile for a weekday and weekend based on TRICS trip rates is demonstrated on [Tables 4.1 and 4.2](#). The tables also show the number of accumulated spaces.

Table 4.1 Weekday Trip Rates, Trips and Parking Accumulation (TRICS Trip Rates)

Time Period	Trip Calculations				Accumulation
	Arrival Trip Rate (p/100 sqm)	Departure Trip Rate (p/100 sqm)	Vehicular Arrivals (p/2.28 sqm)*	Vehicular Departures (p/ 2.28 sqm)*	
Cars Parked at Start of Survey					3
10:00 – 11:00	6.498	6.209	15	14	4
11:00 – 12:00	8.014	7.292	18	17	5
12:00 – 13:00	12.347	13.069	28	30	3
13:00 – 14:00	11.625	11.986	27	27	3
14:00 – 15:00	7.798	8.375	18	19	2
15:00 – 16:00	6.209	6.570	14	15	1
16:00 – 17:00	7.870	7.798	18	18	1
17:00 – 18:00	8.809	8.375	20	19	2
18:00 – 19:00	9.819	10.253	22	23	1
19:00 – 20:00	7.798	8.087	18	18	1
20:00 – 21:00	6.065	6.570	14	15	0
21:00 – 22:00	3.466	3.682	8	8	0

*Proposed unit floor area is 228sqm hence p/100 sqm for calculation of vehicle trips

Table 4.2: Weekend Trip Rates, Trips and Parking Accumulation (TRICS Trip Rates)

Time Period	Trip Calculations				Accumulation
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	Arrival Trip Rate (p/100 sqm)	Departure Trip Rate (p/100 sqm)	Vehicular Arrivals (p/2.28 sqm)*	Vehicular Departures (p/2.28 sqm)*	
Cars Parked at Start of Survey					0
10:00 – 11:00	1.920	1.440	4	3	1
11:00 – 12:00	7.040	5.760	16	13	4
12:00 – 13:00	16.480	13.120	38	30	12
13:00 – 14:00	15.520	16.960	35	39	8
14:00 – 15:00	12.000	13.280	27	30	5
15:00 – 16:00	9.920	8.640	23	20	8
16:00 – 17:00	10.400	12.800	24	29	3
17:00 – 18:00	13.600	12.000	31	27	7
18:00 – 19:00	12.000	13.760	27	31	3
19:00 – 20:00	9.760	10.560	22	24	1
20:00 – 21:00	8.000	8.160	18	19	0
21:00 – 22:00	6.560	6.400	15	15	1

*Proposed unit floor area is 228sqm hence p/100 sqm for calculation of vehicle trips

4.2 **Tables 4.1** and **4.2** demonstrate that when development trips are based on the TRICS trip rates the proposed parking provision has sufficient capacity to accommodate the predicted demand across both the weekday and weekend day.

5 Staff Parking

5.1 The TA presented a detailed assessment (**Section 5** and further supported by a post-submission TN) of the proposed parking provision including a breakdown of how many spaces are to be allocated solely for the use of staff members. The proposed layout includes 3 staff only car parking spaces. At committee and in the Case Officers follow up note, further justification for 3 staff parking space was requested. The proposed car park is principally for use by customers with some provision for staff. For the avoidance of doubt, the assessment of car parking accumulation detailed to-date and expanded on further in this TN is for customer parking accumulation and customer parking only.

5.2 Staff parking standards come from Kent County Council Supplementary Planning Guidance SPG4 2006. For an A3 or A5 land use, a maximum of 1 space per 2 members of staff is suggested. This is a maximum level and not necessarily a level that needs to (or should) be met by each development proposal, especially if

the accumulation assessment indicates spare capacity. As noted in the TP, the development proposal would be expected to employ up to 51 members of staff including up to 11 full time staff. Subject

to final operator details and seasonal demand, it could be expected that 11 to 13 staff members could be on-site per shift.

5.3 In practical terms, not all 51 members of staff will be on-site at any one time. The actual number will depend on a number of factors such as shift patterns, weekday or weekend customer demand and seasonal periods. Use of these 3 spaces by staff will be tightly restricted by the General Manager who will be the only one to assign usage of these spaces. As a starting point, staff will be advised parking is for customers and not general staff usage (excluding those granted parking privileges to use the 3 staff spaces).

5.4 Staff travel demand to the site is to be managed by the TP and an appointed Travel Plan Co-ordinator. All staff will be informed of the TP before commencing employment and encouraged to travel to and from the site by sustainable modes. Relevant and current information on sustainable travel modes to the site will be available to all staff members. The site is well connected to the surrounding area by footways (for shorter journeys) and a half hourly bus services pass the site on Malling Road. Staff members will be aware of parking restrictions in place at the site and the fact the car park is for customers along with the TP measures; staff will be encouraged to travel to and from the site by alternative sustainable travel modes.

6 Traffic Impact on the Local Highway Network

6.1 The submitted TA considered the cumulative impact of the proposed development on the local highway network in a baseline year and 2024 future year.

6.2 [Section 4](#) and [6](#) of the TA presented an assessment of the predicted number of development trips. The assessment considered the peak hours (weekday interpeak and PM peak and a weekend interpeak hour) and assessed the impact of development trips on surrounding junctions as well as the proposed site access. Background traffic growth over a 5-year period on the highway network (2019 to 2024) was taken into account in terms of a 'cumulative' effect. The assessment showed the proposed development traffic, even with the additional general background growth of network traffic, would have a negligible cumulative impact on the surrounding highway network.

6.3 To further consider the cumulative impact of the proposed development and at the request of the planning case officer, the development trips have been compared with the number of trips generated by the sites' existing extant B1 land use during the weekday peak hour periods (the site has an extant planning permission from 1987 for an industrial use with office store and showroom).

6.4 The existing site is unoccupied and so there is no readily available trip baseline. Instead, the TRICS database has been utilised to provide comparable vehicle trip rates for the 'industrial unit' land category. The corresponding vehicle trip rates and trips during the AM (08:00-09:00) and PM (17:00-18:00) weekday peak hour periods are summarised in [Table 6.1](#). A full TRICS output is provided in [Appendix D](#).

Table 6.1 Comparison of Trips from Existing Land Use

Time Period	Weekday AM Peak (08:00-09:00)			Weekday PM Peak (17:00-18:00)		
	Arrive	Depart	Total	Arrive	Depart	Total

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Trip rates	0.387	0.146	0.533	0.048	0.580	0.628
Trips (405 GEA sqm)	2	1	3	0	2	2

6.5 Considering the extant trips are already on the network in planning terms, the proposed development trips would therefore include these trips as they replace the extant land use. As such, the net number of trips on the local highway network would be less. Notwithstanding these trips that could be considered to already be on the network, the total development proposal vehicular movements have been fully assessed in the submitted TA. As noted above, the TA assessed the proposed development to have a negligible impact on the local highway network and that surrounding junctions would still have spare capacity in the future year, even with the addition of background traffic growth and the addition of development trips.

7 HGV Access Controls

7.1 The Case Officer has noted committee members would like further consideration of the HGV movements at the site and whether such movements may overspill onto the local highway network, specifically onto Hollow Lane.

7.2 HGVs are not expected to utilise the site and the proposed layout has not specifically been designed to encourage such vehicles, although allowance is made for a rigid HGV for servicing and delivery purposes.

7.3 Deliveries to the proposed development will be actively managed as detailed in the submitted DSP. The DSP aims to efficiently manage the number of trips and, when they occur, to avoid highway network peaks and peak restaurant times. The layout provides an off-highway delivery bay, designed to accommodate the largest vehicle expected to visit the site, an 11.52m rigid HGV. The delivery bay ensures the rigid vehicle can park in a dedicated space, whilst not inhibiting the movement of other vehicles around the site or onto the local highway when unloading and loading.

7.4 Considering the wider highway network in the vicinity of the site (Hollow Lane, Malling Road and its junction with the A228), HGV movements are currently restricted or advised against. For instance, a 7.5t weight restriction is in place on Malling Road north from its junction with Hollow Lane. In addition, advanced signage is in place at the A228 roundabout advising of the weight restriction. Hollow Lane is not part of the weight restriction however advisory signage noting the route as 'Unsuitable for HGVs' is in place at its junction with Malling Road. Waiting restrictions in the form of double yellow lines are in place along Malling Road.

7.5 It is unlikely HGVs will attempt to access the site given the nature of the local highway, restrictions in place and the proposed layout of the site. Nor would HGVs be expected to temporally park on Hollow Lane to access the site on foot.

8 Summary

8.1 This TN has been prepared by mode on behalf of Castlebarn Limited (a KFC franchisee) in response to the request for further clarification of the transport evidence submitted to Tonbridge and Malling Borough

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Council for the proposed development of an A3/A5 restaurant and drive-thru unit at The Oast House, Snodland. The additional information is provided following the request of committee members.

- 8.2 The TN has clarified the selection of the Hounslow KFC operational site for use as a suitably comparable survey site for the proposed unit at the Oast House, Snodland. Further assessment of the predicted number of development trips, a breakdown of drive-thru and non drive-thru trips along with 15-minute parking accumulation profile has been provided. In addition, staff parking and HGV movements were also raised at the committee meeting. The TN has also addressed these outstanding points. This TN along with the submitted transport documents (TA, TP etc.) have assessed the potential transport impact of the proposed development to be negligible. This is supported by the Local Highway Authority who recommended the planning application for approval.