Queens Court Farm

Water Lane, Ospringe

TRANSPORT STATEMENT

for Residential Development

On behalf of Shepherd Neame Ltd

21/5629/TS01

August 2022

www.rgp.co.uk

DOCUMENT CONTROL

Project:	Queens Court Farm for Residential Development
Project Location:	Water Lane, Ospringe
Report Type:	Transport Statement
Client:	Shepherd Neame Ltd
Reference:	21/5629/TS01

Document Checking

Author:	SAJ		Date:	03/08/2022
Checked by:	CMB		Date:	03/08/2022
Approved by:	NDR		Date:	03/08/2022

Document Status

Issue	Date	Status	Issued by
1.	01/08/2022	Draft	SAJ
2.	03/08/2022	Final	SAJ
3.			
4.			
5.			
6.			

TABLE of CONTENTS

List of Drawings/Plans

List of Appendices

List of Figures

List of Photos

1 INTRODUCTION

1.1 Background

1.1.1 RGP is commissioned by Shepherd Neame Limited to provide highway and transport planning advice in respect to a proposed redevelopment of redundant farmyard land at Queens Court Farm, Water Lane, Ospringe.

1.1.2 Queens Court Farm lies within the Borough of Swale and falls within the administrative boundaries of Swale Borough Council (SBC) as Local Planning Authority and Kent County Council (KCC) as County Highway Authority.

1.1.3 The existing site comprises barns/sheds and outbuildings with access currently provided off Water Lane. Although no formalised car parking is provided at the existing site, there are external courtyards and barn storage to accommodate agricultural vehicles and produce.

1.1.4 The development proposals seek the demolition of these existing outbuildings to construct 7 new residential dwellings with associated parking facilities and a new access from Water Lane. A copy of the proposed site layout is provided at **Appendix A**.

1.1.5 This Transport Statement is prepared in order to fully assess and demonstrate the likely transport implications associated with the development proposals.

1.2 Pre-application Consultation

1.2.1 As a precursor to the preparation of this report, pre-planning application (pre-app) advice has been sought from KCC with respect to the transport-related considerations of the scheme. A copy of the formal pre-app advice from KCC dated 23rd May 2022 is attached at **Appendix B**.

1.2.2 The pre-app response confirms KCC's support to the proposals in principle, with the following key points noted:

i) The first principles approach to the existing traffic generation is acceptable and the numbers agreed;

ii) Trip rates for the proposed residential development are agreed. The proposed levels of traffic and the associated minor impacts on the local highway network are also confirmed as acceptable;

iii) The proposed access arrangements are considered to be acceptable to serve the proposed level of development, including the proposed visibility splays;

1.2.3 The comments from KCC include a number of aspects for further consideration, which have been set out in this Transport Statement.

1.3 Site Planning History & Local Development

1.3.1 In 2019, planning consent 19/505888/FULL was granted by SBC for the conversion and refurbishment of two main barn buildings adjacent to the application site, which form part of the main Queens Court Farm complex, to provide two residential dwellings. A copy of the details relating to that application are provided at **Appendix C**.

1.3.2 The consented development included the re-use of an existing access off Water Lane, to serve 6 formalised parking spaces (2 spaces per dwelling).

1.3.3 In addition, there has been a small number of permitted residential developments in close proximity to the site along Water Lane and Mutton Lane to the north, as follows:

i) SW/13/0653 (July 2013) – Kentish Barn, Vicarage Lane. Conversion of rural building to residential use, with access from Vicarage Lane;

ii) 19/502706/OUT (Sept 2019) – Karussel, Mutton Lane. Demolition of existing garage and erection of one dwelling. New access provided from Mutton lane to accommodate 2 off-street parking spaces for the new dwelling;

iii) 19/505890/FULL (Nov 2020) – Queen Court Farm, Water Lane. Listed Building Consent for conversion/refurbishment of barns to provide two dwellings. Six parking spaces with additional visitor parking in courtyard. Access retained from Water Lane;

iv) 20/500844/FULL (Oct 2020) – Ashdown, Water Lane. Resubmission of planning application 19/504178/FULL for the demolition of existing bungalow and erection of three dwellings;

1.3.4 A further planning application 21/503788/FULL is currently being considered for detailed amendments associated with the conversion of a barn to create a new dwelling. Due to the minor nature of the development it has not been subject to consideration by KCC Highways.

1.3.5 As summarised above, there have been a small number of permitted small-scale residential developments located along Water Lane and Mutton Lane in the vicinity of the site in the last 5-years, resulting in a small increase in traffic over this time that would not affect the operations of the highway network. Similarly, the development proposals would generate a modest level of vehicle movements that would replace the existing traffic generated by the agricultural use of the site. This would include the removal of the use of large agricultural vehicles and machinery which would have been required for the operation of the existing farm. Further details regarding the anticipated trip generation of the site and potential net impact are assessed within Section 4 of this report.

1.3.6 It is also noted that these permitted residential developments along Water Lane and Mutton Road provide in the region of 2-3 parking spaces per dwelling, ensure sufficient capacity is provided to prevent any overspill onto the public highway. The proposed development would also ensure that sufficient levels of parking is provided, with all deliveries and servicing to be accommodated on site to ensure that the safety and capacity of the local highway network is not compromised.

2 BASELINE CONDITIONS

2.1 Site Location & Local Highway Network

2.1.1 Queens Court Farm is situated on Water Lane, approximately 350 metres to the southwest of the centre of Ospringe. Ospringe is principally sited on the northern side of Ospringe Street, a Roman Road forming part of the A2, a principal route through Ospringe and through much of Kent.

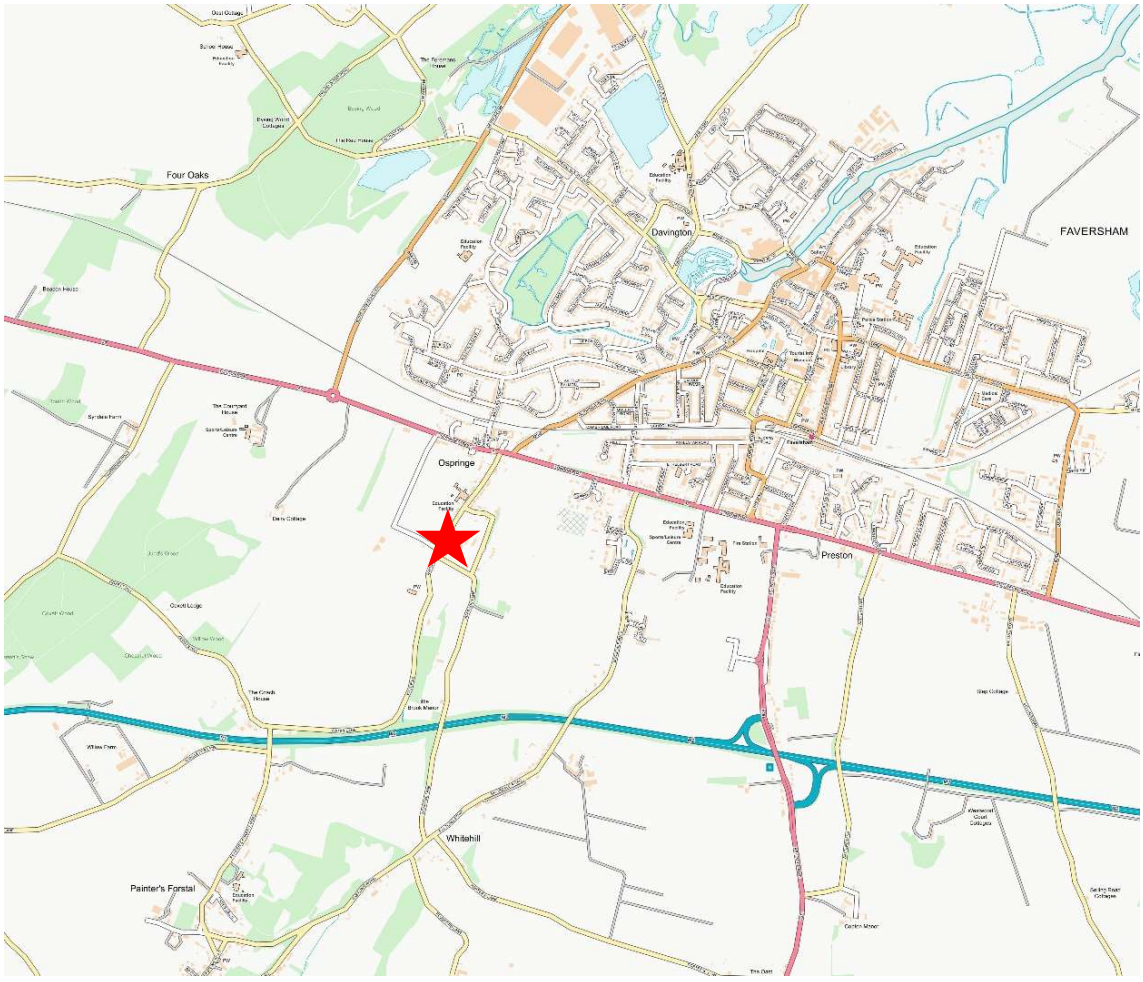

Figure 1 – Site Location Plan

2.1.2 The site is located to the south of the A2 and Ospringe. The site is served by Water Lane, a residential collector road linking the site and a number of houses with the A2 to the north. To the south, Water Lane becomes more rural in nature, providing sporadic access to a small number of agricultural and residential uses heading south/south-west.

2.1.3 The adjacent section of Water Lane is formed with a narrow carriageway but generally providing for two-way vehicle movements (car traffic), with on-street parking along its length. The photographs below illustrate the current conditions along Water Lane in the vicinity of the site.


Photograph 1 & Photograph 2– Existing Highway Conditions on Water lane

2.1.4 In the vicinity of the site, Water Lane is subject to a 30mph speed limit which continues north. However, to the south of Vicarage Lane the speed limit changes to a national speed limit (60mph speed restriction).

2.1.5 To provide an indication of actual vehicle speeds on Water Lane, an Automatic Traffic Counter (ATC) survey was positioned on Water Lane for a 7-day period during the week commencing 8th December 2020. A full copy of the results from the ATC survey are attached at **Appendix D**.

2.1.6 It should be noted that the ATC results confirm the recorded traffic flows and speeds of vehicles utilising Water Lane during the survey period. However, given the current COVID-19 travel restrictions in place during the time of the survey, the traffic flow figures have not been considered representative of 'normal' conditions and have not been considered in this Transport Statement. However, the recorded measurements of vehicle speed are not considered to be materially affected by the changes in traffic conditions and have therefore been reviewed. As confirmed by KCC in its pre-app comments, the use of the survey for vehicle speeds is confirmed as acceptable.

2.1.7 As confirmed by the ATC results, the current 85th percentile speeds on Water Lane have been recorded at 31mph in both directions, with average speed at 24mph. This indicates that the majority of drivers are travelling at speeds representative of the posted speed limit.

2.1.8 Approximately 400 metres to the north of the site, Water Lane forms a priority junction with A2 Ospringe Street. The existing junction provides restricted forward visibility on the Water Lane approach to the junction, with all drivers required to 'stop' rather than 'give-way' before exiting. However, from the existing stop-line suitable visibility is provided to oncoming traffic (A2 Ospringe Street is subject to a 30mph speed limit). The photographs below illustrate the visibility for a driver wishing to exit Water Lane.

Photograph 3 & Photograph 4 – Existing Visibility from Water Lane along Ospringe Street

2.1.9 Despite the pedestrian guardrail being 'visi-rail', or similar, to the west of the junction, it is noted that some private signs have been attached to the guardrail which restricts visibility. KCC, as Local Highway Authority are advised to remove these signs as part of its maintenance programme and ensure that private individuals/businesses do not erect advertisement signs on the public highway.

2.1.10 A key constraint with the junction is the carriageway width and junction radii, limited by the proximity of properties on either side. This existing width restricts some simultaneous turning movements (requiring some vehicles on A2 to 'give-way' to those exiting Water Lane) and does not easily permit access for larger goods vehicles.

2.1.11 A2 Ospringe Street comprises a single-carriageway route in the vicinity of the site on the southern edge of Faversham connecting Dover to London. The A2 provides a major route from the locality via Sittingbourne, Rochester, Gravesend and Dartford to the west and Canterbury to the east. The A2 forms a grade separated junction with the M2 (Junction 7) and the A299, approximately 3.75km to the east of Water Lane. The M2 also provides a principal route to the west towards the M25 (Junction 3).

2.1.12 To provide an indication of current traffic levels, the Department for Transport (DfT) publishes traffic count data from permanent traffic counters located in the vicinity of the Water Lane junction.

2.1.13 The DfT publishes data from two permanent ATC's located approximately 380 metres to the west of Water Lane (Counter Ref: 56100) and 670 metres east of Water Lane (Counter Ref: 28687). A full copy of the outputs of the counters is attached at **Appendix E**. A summary of the recorded Annual Average Daily Traffic (AADT) levels between 2019 and 2015 is presented in **Figure 2**. It is noted that both surveys recorded the same levels of AADT flows due to the minor nature of the use of Water Lane.

Figure 2 – Recorded DfT (AADT) Traffic Flows on A2 (2015-2019) by direction

Year	Westbound	Eastbound	Total Two-way
2020	6025	6622	12,647
2019	7882	8410	16,292
2018	9094	9063	18,157
2017	9140	9110	18,250
2016	9100	9071	18,171
2015	8845	8817	17,662

2.1.14 The above table confirms that current traffic flows on the adjacent section of the A2 are relatively consistent between 2015 and 2019. In 2019 the surveys recorded an average AADT of around 16,000 two-way vehicle movements, reducing to 12,647 in 2020. The results of the traffic counts confirm that around 6% of all traffic is from HGVs. In 2020, as a result of the COVID-19 pandemic the A2 saw a significant decline in traffic flow, down to below 13,000 two-way vehicle movements AADT.

2.1.15 In terms of pedestrian connections, Ospringe Street provides good footway connections on both sides, with a signalised pedestrian crossing point provided across the A2 approximately 20m to the east of its junction with Water Lane, which enables sporadic intervals/breaks for traffic from Water Lane to join the A2 unimpeded.

2.2 Existing Site Operations & Access Arrangements

2.2.1 The site has for some time been redundant, but formerly operated as an agricultural site for Shepherd Neame Ltd. As such, the site would have generated a number of vehicle movements associated with the agricultural operations of Shepherd Neame, including the growth and manufacture and storage of produce, and the distribution of that produce to other parts of the business.

2.2.2 As such, the site is occupied by a number of barns, outbuilding and open storage areas that would have accommodated agricultural vehicles/plant and storage of materials/ produce.

2.2.3 The farm is currently served by two points of access off Water Lane, serving the existing operations of the site. At its southern end, a gated access is provided to serve the main Queens Court Barns, serving a number of barn buildings and farmhouses.

Photograph 5 – Existing Access Serving Queens Court Barns off Water Lane

2.2.4 A further vehicle crossover with a gated access from Water Lane is provided further north, likely to have been the main access utilised by agricultural vehicles required for the operational needs of Queens Court Farm.

Photograph 6 – Existing Agricultural Access off Water Lane

2.2.5 As detailed in Section 1, the existing barn buildings have been granted planning consent through Planning Application 19/505888/FUL for the conversion to residential use. This would include the retention of the main site access to the barns, with the closure of the existing agricultural access to the north.

2.3 Road Safety Review

2.3.1 RGP has undertaken an investigation and review of local road accidents to identify any potential issues regarding the safety of the local road network, with particular consideration given to site's access from Water Lane, as well as the Water Lane junction with the A2 London Road.

2.3.2 This review has examined all Personal Injury Accidents (PIA) in the vicinity of the site over the latest 5-year period available (2016 – 2021 inclusive), using data provided from the Crashmap website (www.crashmap.co.uk). The study area includes the full length of Water Lane between the A2 and Abbots Hill.

2.3.3 No accidents have been reported along the entirety of Water Lane over the latest 5-year period. Moreover, there have been no reported accidents at the Water Lane/A2 junction to the north. It is envisaged that the signalised crossing provided in close proximity to this junction and the presence of speed camera restrictions nearby assist in reducing vehicle speeds and affords safe pedestrian movement across the A2.

2.3.4 Based on the above assessment, it is evident that the road safety record in the vicinity of the site is excellent and no significant underlying deficiencies on the local highway are present. As such, RGP considers that there is no requirement for further detailed analysis of local road safety conditions.

2.4 Accessibility Credentials

2.4.1 Due to the semi-rural nature of the site, it is acknowledged that use of the private vehicle would be a popular choice for journeys to and from the site. However, there are also opportunities for some residents to make trips into Faversham by foot, or conveniently by bicycle. Onward journeys can also be made via rail services from Faversham station within the town centre. Furthermore, the bus services provided from the A2 would facilitate convenient travel into Faversham, Sittingbourne or Whitstable town centres. This section identifies the sustainable travel options that would be available to future residents of the site.

2.4.2 **Plan 01** attached hereto illustrates the location of the site in relation to local amenities and facilities in close proximity that would benefit prospective residents.

Walking and Cycling

2.4.3 It is proposed that a footway connection would be provided from the development to connect with the existing available infrastructure. These pedestrian links would connect to the existing footway provided along the eastern side of Water Lane.

2.4.4 The footways on Water Lane continue to the north of the site onto the A2, where a crossing point with dropped kerbs and guard railings is provided across the Water Lane/A2 junction. Furthermore, as noted above there is a signalised pedestrian crossing with dropped kerbs and tactile paving provided across the A2, approximately 20 metres to the east of its junction with Water Lane. This crossing point would facilitate residents with safe and convenient access to the bus stops on either side of the A2, as well as enabling onward journeys by foot into the town centre (an approximate 20-minute walk from the site).

2.4.5 The network of footways continues throughout the wider residential areas to the north towards Faversham, where trips could be made on foot or by bicycle to access local amenities.

2.4.6 Owing to the straight alignment of Water Lane and a good level of visibility along the carriageway, cycling would form an attractive mode of transport for some residents making local trips into Faversham town centre, which is accessible via a 5-minute cycle journey to the northeast of the site.

2.4.7 Prospective residents would therefore be afforded with convenient access to the local rail station by bike, where onward commuting trips into London or Canterbury, for example, can be completed via rail services from Faversham.

2.4.8 National Cycle Route (NCR) 1 forms a route through Faversham and can be accessed approximately 1.75km (a 6-7 minute cycle journey) to the northwest via South Road in the town centre. NCR1 comprises a long-distance cycle route from Dover to Scotland and passes through Faversham and alongside the southern banks of the rivers Medway and Thames. Although this would not necessarily form a principal commuting route, NCR1 would provide residents with an attractive route for recreational cycle trips.

Access to Public Transport

2.4.9 The nearest bus stops to the site are located on the A2 Ospringe Street, approximately 550m (a 6-minute walk) to the north of the site via Water Lane. These stops provide full timetables, whilst a shelter and seating are also provided at the westbound stop (for services towards Sittingbourne), but current provisions from these bus stops are limited to a school service only.

2.4.10 However, further services are also provided further to the east on The Mall (B2041) and west on A2 London Road around 1.5km from the site which offer further bus connections within what would be considered an acceptable walking distance. These services offer regular connections to key destinations A summary of bus routes serving these stops is provided in **Figure 3**.

Figure 3 – Summary of Local Bus Services

Service	Route Summary (Key Destinations)	Typical Frequency	Approximate Hours of Operation
3	Canterbury, Harbledown, Dunkirk, Boughton, Faversham, Bysing Wood	Mon-Sun: Hourly	Mon-Fri: 06:40-21:00 Sat: 09:00-21:00 Sun: 08:00-18:00
345	Newnham, Doddington, Lynsted, Teynham, Snipeshill, Sittingbourne	School Service	School days only
638	Faversham, Boughton, Hernhill, Dargate, Whistable	Mon-Fri: 2 hours Sat: 2 hours	Mon-Fri: 08:00-18:00 Sat: 10:30-14:30
660	Stalisfield - Faversham - Graveney - Whitstable - Tankerton	Mon-Fri: Hourly Sat: every 2 hours	Mon-Fri: 07:00-17:38 Sat: 08:20-16:06
662	Sittingbourne, Snipeshill, Teynham, Lynstead, Doddington, Newnham, Ospringe, Sheldwich, Faversham	School Service	School days only

X3	Canterbury, Harbledown, Dunkirk, Boughton, Faversham, Bysing Wood, Teynham, Sittingbourne, Stockbury, Maidstone	Mon-Sat: Hourly	Mon-Sat: 07:30-19:30

2.4.11 It is also noted that further services are also provided further to the east on The Mall (B2041) and west on A2 London Road around 1.5km from the site which offer further bus connections within what would be considered an acceptable walking distance.

2.4.12 As well as accessible by bus, Faversham rail station is located approximately 1.75km, a 20-minute walk or a 6-minute cycle journey to the northeast of the site via the A2 Canterbury Road and The Mall. The station is operated by Southeastern and step-free access is provided by lifts onto each platform, whilst accessible taxis are available from the taxi rank at the station's frontage.

2.4.13 The station provides 33 secure and sheltered cycle parking spaces provided for public use at Faversham rail station and there are 170 car parking spaces available with varied tariffs. A daily rate of £5.60 is charged, whilst a weekly rate of £25.20 and a monthly rate of £95.60 are also available amongst other arranged payment plans.

2.4.14 Frequent services towards London (Victoria and St Pancras), Ramsgate and Dover Priory are provided from Faversham station, offering realistic commuting opportunities to prospective residents. These services are summarised fully in **Figure 4**.

Figure 4 – Summary of Local Rail Services (Faversham Station)

Destination	Typical Frequency	Journey Time	Calling Points
London Victoria	2 per hour	75 mins	Sittingbourne, Rainham (Kent), Gillingham (Kent), Chatham, Rochester, Meopham, Longfield, Bromley South
Dover Priory	Hourly	42 mins	Selling, Canterbury East, Bekesbourne, Adisham, Aylesham, Snowdown, Shepherds Well, Kearsney (Kent)
Ramsgate	Hourly	40-45 mins	Whitstable, Chesterfield & Swalecliffe, Herne Bay, Birchington-on-Sea, Westgate-on-Sea,Margate, Broadstairs, Dumpton Park
London St Pancras	Hourly	68 mins	Sittingbourne, Rainham (Kent), Gillingham (Kent), Chatham, Rochester, Strood (Kent), Gravesend, Ebbsfleet International, Stratford International

Review of Census Data

2.4.15 The potential for sustainable travel is reflected in Census 2011 data for the local area. 'Method of Travel to Work' data provides a strong indication of the travel habits of existing local residents at peak times. **Figure 5** outlines the current proportions of travel by various modes for commuting purposes, by residents of the local area.

2.4.16 RGP has examined the 'middle super output area' pertaining to the site's location, which includes Ospringe. A full copy of the Census 2011 data is attached at **Appendix F**.

Figure 5 – Census 2011 data (Method of Travel to Work)

Method of Travel to Work	Percentage
Work from home	10%
Train	0%
Bus	8%
Taxi	1%
Motorcycle/scooter/moped	0%
Driving (or passenger of) a car or van	68%
Bicycle	5%
Walking	1%
Other	6%

2.4.17 The above results indicate that in the region of 68% of local residents would drive or car-share to their place of employment, whilst around 15% of residents choose sustainable modes of travel and a further 10% work predominantly from home. The redeveloped site would include measures to promote and encourage sustainable travel, including good connections to existing pedestrian and cycle infrastructure and provisions for cycle storage on site.

Accessibility Summary

2.4.18 Due to the site's proximity to major highway links, such as the A2 / M2 (J7), it is anticipated that a proportion of trips made to/from the site would be completed by use of the private car. However, there are also opportunities for trips to be completed by walking and cycling in order to access local amenities within Faversham town centre, whilst there is a relatively good provision of public transport infrastructure locally, particularly with consideration given to regular daily commuting trips.

2.4.19 The development site benefits from bus services provided in the vicinity of the site that provide regular services every 30-60 minutes which could be utilised for primary trips into Faversham, Sittingbourne or Whitstable, and to make connecting trips via rail services.

3 TRAFFIC IMPACT ASSESSMENT

3.1 Existing Traffic Generation

3.1.1 The development proposals include the construction of 7 new residential dwellings, replacing the currently permitted agricultural operations of the site.

3.1.2 The existing site comprises a plot of agricultural land, measuring approximately 16,500m^2, containing associated cattle sheds and outbuildings with an open field in the northern section of the site. The site is currently accessed from Water Lane via a gravel track and there is vehicle storage/parking provided for agricultural vehicles within barns and the central courtyard area.

3.1.3 These existing cattle sheds, barns and outbuildings would have the potential to generate daily activity under its agricultural use, with the previous occupier Shepherd Neame likely to have utilised the barns for the storage and distributions of produce to other parts of the business, utilising the good connections by road locally. This level of activity would have principally been via Heavy Goods Vehicles (HGV) and agricultural traffic that would have utilized the A2 for many journeys.

3.1.4 However, more recently the site would have been used for smaller agricultural means, likely to operate seasonally with varying levels of traffic across the year. Whilst these levels of traffic are difficult to quantify, an indication of existing potential traffic levels to at least maintain the site have been provided on a first principles basis.

3.1.5 Based on these first principles assumptions, the storage barn which would accommodate vehicles and machinery required for operational purposes could generate in the region of 8 two-way daily movements (i.e. 2 arrivals and departures during the morning and 2 in the afternoon/evening period). It is also anticipated that two cattle sheds would likely generate in the region of 4 two-way vehicle trips per day in relation to feeding, cleaning and transporting, for example.

3.1.6 It is therefore assumed that the combined agricultural uses of the site would generate a total of 12 two-way vehicle movements, with 2 of these likely to occur during each conventional peak hour period (08:00-09:00 and 17:00-18:00). These assumptions establish a baseline trip generation that have been used to determine the likely net impact of the proposals.

3.1.7 **Figure 6** provides a summary of the existing trip generation based on the above assumptions, including the levels of traffic likely generated during the traditional morning and evening highway peak hours (08:00-09:00 hours and 17:00-18:00 hours respectively).

Figure 6 – Existing Trip Generation

Time Period	Arrivals	Departures	Two-Way
AM Peak (08:00-09:00)	1	1	2
PM Peak (17:00-18:00)	1	1	2
Daily Total (24hr)	**6**	**6**	**12**

3.1.8 It is important to note that whilst these levels of traffic are low, a large proportion of these vehicle movements would be from larger slow-moving agricultural vehicles that are likely to have a greater effect on the operations of the public highway than cars, for example.

3.1.9 It is noted that as part of the pre-app process, KCC has suggested further confirmation of the extant use (in planning terms) to confirm that these existing traffic movements are valid. Notwithstanding, the Highways Officers comments confirmed that:

…*"However, given relatively small number of vehicle movements likely to be generated by the development proposals in the AM and PM peak hours, and noting the proximity of the school and the volumes of traffic that would attract on Water Lane, I wouldn't necessarily be concerned at just considering the robust worst-case assessment without subtracting the extant use"*…

3.1.10 Therefore, whilst the references to the historic/extant use is useful to provide an indication of the levels of activity that have been experienced previously, KCC has confirmed that the development proposal in isolation would not have an unacceptable impact on the local highway network.

3.2 Proposed Traffic Generation

3.2.1 The proposed redevelopment of the site would replace the existing agricultural uses of the site to provide 7 new residential dwellings.

3.2.2 An assessment of the likely levels of traffic that would be generated by the site has been undertaken using the Trip Rate Information Computer System (TRICS). The TRICS database is an industry-standard tool used to estimate the trip generation potential for new developments across a range of land uses. The TRICS database was therefore interrogated for the purpose of this report to identify and evaluate the trip generation potential of the proposed use of the site.

3.2.3 In order to establish the likely trip generation credentials of the existing site, a TRICS assessment has been undertaken based on the following selection criteria:

v) Regions: England & Wales (excluding Greater London);

vi) Land Use: Residential, Houses Privately Owned;

vii) Survey Days: Weekdays only;

viii) Selected Locations: Neighbourhood Centre, Village;

ix) Use Classes: C3.

3.2.4 Based on the above criteria, RGP has selected 11 sites considered to afford a comparable representation of the development site. These TRICS sites are located within semi-rural villages with comparable levels of parking and some limited access to local public transport services and nearby town/ village centres.

3.2.5 It should be noted that several survey sites were manually deselected from the TRICS interrogation due to their unrepresentative local land uses and urban locations, as well as having no access to public transport or resulting in a disproportionately high level of on-site parking.

3.2.6 As confirmed in the pre-app comments from KCC at Appendix B, the derived trip rates are considered to be acceptable.

3.2.7 **Figure 7** provides a summary of the residential trip rates derived from the TRICS database, as well as the corresponding trip generation associated with the 7 proposed residential units. The full TRICS outputs are attached at **Appendix G**.

Figure 7 – Trip Rates & Traffic Generation (Proposed Site)

	Arrivals		Departures		Total Two-way	
	Trip Rate	Traffic	Trip Rate	Traffic	Trip Rate	Traffic
AM Peak Hour	0.11	1	0.36	2	0.47	3
PM Peak Hour	0.33	2	0.15	1	0.48	3
Daily Total	**2.07**	**14**	**2.13**	**15**	**4.20**	**29**

3.2.8 As demonstrated above, the site would generate in the region of 29 two-way trips over the course of a typical weekday, comprising 14-15 arrivals and departures. It is anticipated that 3 of these two-way vehicle movements would occur during each of the conventional highway peak hour periods, representing approximately 1 vehicle arrival/departure every 20 minutes, on average, as a worst-case scenario.

3.3 Net Impact of Development

3.3.1 To determine the net impact of the proposed redevelopment, the anticipated traffic generation has been compared with that assumed to be generated by the existing site to illustrate the likely change in vehicle trips to / from the site. **Figure 8** provides a summary of the net impact associated with the residential redevelopment.

Figure 8 – Net traffic Impact

	Arrivals	Departures	Two-Way
AM Peak Hour	0	1	1
PM Peak Hour	1	0	1
Daily Total	**8**	**9**	**17**

3.3.2 As summarised in the table above, the proposed site would result in a net impact of up to 17 two-way vehicle movements over the course of a typical weekday, representing approximately 8-9 vehicle departures/arrivals. This is considered to be a worst-case scenario, assuming minimal traffic generated by the existing use of the site.

3.3.3 It is anticipated 1 additional two-way vehicle movement would be generated by the site during both the AM and PM peak hour periods when compared to the historic use of the site. The proposed level of increased traffic is negligible and no more than the expected fluctuation in daily movements along Water Lane.

3.3.4 The proposed vehicular trip generation associated with the residential dwellings would predominantly comprise car journeys with only occasional delivery and service vehicle trips. Trips of this nature would replace the existing heavy agricultural vehicles utilised by the existing farm. The removal of journeys made using cattle boxes and tractors, for example, would represent a benefit to the function of the site's access, as well as Water Lane and the A2.

3.3.5 Heavy Goods vehicles such as these would result in a greater level of obstruction to the carriageway, and it is considered that journeys made by prospective residents in smaller vehicles would improve the free-flow of traffic on the adjacent highway network and in particular the Water Lane/A2 junction.

3.3.6 RGP has also given consideration to the cumulative impact associated with other recently permitted developments in the local area. As illustrated in Section 1 of this report, there are consented residential developments located along Water Lane and Mutton Lane to the north, each of which would be principally accessed via the A2. These developments would provide a combined total of 4 residential dwellings in the vicinity of the site.

3.3.7 When these additional trips are combined with the net impact generated by the application site at Queens Court Farm, a total of 34 additional two-way vehicle movements would be generated daily, with up to 3 additional vehicle movements occurring in both the AM and PM peak hour periods, as a worst-case. The cumulative impact of local development, inclusive of the proposed redevelopment at Queens Court Farm, would still result in a negligible impact on the operation of the local highway network.

3.4 Impact on the A2

3.4.1 As detailed in Section 2, the A2 Ospringe Street generated an AADT of around 13,000 vehicle movements in 2020, although this appears to be a reduction from the fairly consistent flow of 16,000 two-way movements AADT in previous years. The traffic generated by the proposed residential development, equivalent to 16 two-way vehicle movements AADT, would result in 0.0016% increase in traffic on the A2. This in itself would not amount to a severe impact in capacity terms.

3.4.2 As detailed in Figure 3.3, the proposed development would likely generate 1 additional movement at the Water Lane/Ospringe Street junction during each of the peak hours. This additional traffic would be no more than the daily fluctuations that already occur at the junction and would not materially affect its capacity.

3.4.3 As detailed in Section 2, the existing highway is better suited to use by cars rather than HGV traffic, with the existing Water Lane/A2 junction particularly constrained for larger vehicles. The proposed development would therefore represent a betterment in terms of the composition of traffic that would be generated.

3.5 Summary

3.5.1 Based on the above trip generation assessment, it is considered that the proposed operation of the site, as well as the cumulative impact of local development, would have a negligible impact on the functioning of the local highway network, inclusive of the Water Lane / A2 junction to the north.