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Proposed Mixed Use Development
Land at Cambridge Road, Stansted Mountfichet, Essex

Technical Note
Amendment to SLR Transport Statement (May 2015)
Concerning Existing (Historic) Site Trip Generation Potential

SLR Ref: 418.05186.00003

October 2015

Ford Wells Construction Group

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1.0 INTRODUCTION

1.1 Background

SLR Consulting Limited (SLR) was appointed by the Ford Wells Construction Group to provide consultancy services to support a planning application for a proposed mixed use development to the rear of 14 Cambridge Road, Stansted Mountfitchet, Essex.

SLR produced a Transport Statement (May 2015) to accompany the planning application ref: UTT/15/16666/FUL. The principal purpose of the Transport Statement was to provide a detailed consideration of the proposed development in terms of its implications for highway and transportation matters.

In order to assess the likely overall traffic and transport impact of the development proposals, the Transport Statement included an assessment of the existing (historic) site vehicular trip generation potential set against the proposed vehicular trip generation forecast (Section 6.0 Vehicular Trip Generation), in order to determine the net increase or decrease in potential traffic levels resulting from the development proposals (Section 7.0 Impact Assessment).

As the application site currently lies vacant and generates no traffic, details relating to the site's historic use and likely vehicular trip generation were sought, however as no trip data was available for the period when the site was in full occupation the TRICS v7.1.3 2015 database was interrogated to provide a relevant trip generation estimate for each weekday period to be assessed.

In order for TRICS to provide the required trip generation estimate, the trip rate generated by the software is multiplied by the GFA of the existing (historic) use. In this particular case, reliance was placed on the transport assessment work submitted in support of a previous planning application for the application site, ref: UTT/13/1126/FUL, whereby the existing (historic) GFA was deemed to be 7,973sqm. However, representations made on the application indicate that this figure is incorrect.

With the uncertainty that surrounds the existing (historic) GFA we are therefore unable to provide an accurate estimate of the existing (historic) site vehicular trip generation potential.

In light of the above, this Technical Note provides an amendment to the submitted Transport Statement (May 2015); the following sections to replace those previously written:

- 6.0 Vehicular Trip Generation;
- 7.0 Impact Assessment; and
- 8.0 Summary & Conclusions.

6.0 VEHICULAR TRIP GENERATION

An assessment considering the existing/historic and proposed land use trip generation potential will be undertaken.

6.1 Existing (Historic) Site Trip Generation Potential

At present the application site is a vacant plot of brownfield land.

The previous occupants of the site, Sworders Antiques, left the area approximately 8 years ago and during their tenancy the site was used as both an auction house and storage. Since their departure the site has hosted several short-term lease holders.

Details relating to the site's historic use and likely vehicular trip generation were sought, however no trip data was available for the period when the site was in full occupation and uncertainty surrounds the size of the buildings that previously occupied the application site.

It is reasonable to assume however that the previous site use, in addition to the daily staff and visitor movements associated with Sworders Antiques (and following this the short-term lease holders), generated a number of Heavy Goods Vehicle (HGV) trips associated with the storage and distribution element of the site.

6.2 Proposed Vehicular Trip Generation Forecast

In order to forecast the level of vehicular movement generated by the proposed development the TRICS v7.1.3 2015 database has been interrogated, selecting developments of a similar nature to the development proposals in order to provide a relevant trip rate estimate for each weekday period.

TRICS is the standard industry methodology for trip generation forecasting, comprising a database of transport surveys for a wide variety of developments in the UK and Ireland. The software provides an average trip rate based upon a selection of relevant sites identified which is then used to assist the trip generation forecast for the proposals.

6.2.1 Residential

Suitable sites were determined on the basis of 03: Residential - A: Houses Privately Owned, selecting sites ranging between 4,000 and 12,000sqm. Freestanding sites were filtered out, as were sites where the density of population exceeded 25,000 people within 1 mile and 125,000 people within 5 miles.

Weekday trip rates are provided which are subject to a calculation factor of the number of residential units. Therefore each trip rate has multiplied by 10.

The TRICS data is attached at **Appendix B** of the SLR Transport Statement (May 2015). The trip rates and calculated trips for the network peak periods and the development's operational peak are provided within **Table 6-1** below.

**Table 6-1
Proposed Residential Traffic Forecast**

	Arrivals		Departures		Two Way	
	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
AM Peak (0800-0900hrs)	0.212	2	0.394	4	0.606	6
PM Peak (1700-1800hrs)	0.439	4	0.303	3	0.742	7
Daily (0000-2400hrs)	3.030	30	3.471	35	6.501	65

The summary within **Table 6-1** shows that the proposed scheme is likely to generate in the region of 30 vehicular arrivals and 35 vehicular departures per day, which is a combined total of 65 movements.

During the AM peak period it has been forecasted that 2 vehicular arrivals and 4 vehicular departures will occur. During the PM peak period it has been forecasted that 4 vehicular arrivals and 3 vehicular departures will occur.

6.2.2 Commercial

Suitable sites were determined on the basis of 02: Employment - A: Office with B1 use, selecting sites ranging between 300 and 2,000sqm.

Weekday trip rates are provided which are subject to a calculation factor whereby they are multiplied by the proposed GFA (in 100sqm). Therefore each trip rate is multiplied by 7.37 (whilst this is actually the proposed Gross Internal Area (GIA) it is considered robust).

The TRICS data is attached at **Appendix B** of the SLR Transport Statement (May 2015). The trip rates and calculated trips for the network peak periods and the development's operational peak are provided within **Table 6-2** below.

**Table 6-2
Proposed Commercial Traffic Forecast**

	Arrivals		Departures		Two Way	
	Trip Rate	Trips	Trip Rate	Trips	Trip Rate	Trips
AM Peak (0800-0900hrs)	1.333	10	0.229	2	1.562	12
PM Peak (1700-1800hrs)	0.256	2	1.253	9	1.509	11
Daily (0000-2400hrs)	9.249	68	8.954	66	18.203	134

The summary shows that the proposed commercial element of the scheme is likely to generate 68 vehicular arrivals and 66 vehicular departures per day; a total of 134 vehicular movements.

During the AM peak period it has been forecasted that 10 vehicular arrivals and 12 vehicular departures will occur. During the PM peak period it has been forecasted that 2 vehicular arrivals and 9 vehicular departures will occur.

6.2.3 Total Development Traffic

The combined traffic forecast for the proposed development is summarised within **Table 6-3** below.

Table 6-3
Proposed Combined Development Traffic Forecast

	Arrivals	Departures	Two-way
AM Peak (0800-0900hrs)	12	6	18
PM Peak (1700-1800hrs)	6	12	18
Daily (0000-2400hrs)	98	101	199

The summary within **Table 6-3** shows that the proposed scheme is likely to generate 98 vehicular arrivals and 101 vehicular departures per day, equating to a total of 199 vehicle movements.

During the AM peak period it has been forecasted that 12 vehicle arrivals and 6 vehicle departures will occur. During the PM peak period it has been forecasted that 6 vehicle arrivals and 12 vehicle departures will occur.

The proposal site would generate the occasional HGV movement associated with refuse collection, servicing or deliveries.

7.0 IMPACT ASSESSMENT

7.1 Introduction

This section considers the potential impacts of the proposed development in terms of capacity and safety. The following assessments have been undertaken:

- Theoretical junction capacity; and
- Highway safety.

7.2 Theoretical Junction Capacity

The application site access road forms a simple priority junction with Cambridge Road.

Technical guidance provided within DMRB TD42/95¹ states that the use of 'simple' priority junctions, in new build situations, is appropriate up to a level of 300 vehicles Annual Average Daily Traffic (AADT) 2-way flow on the minor arm and that on the major road is not expected to exceed 13,000 vehicles 2-way AADT.

An AADT 2-way flow of 500 vehicles is quoted as being the desirable maximum level of use for an existing junction without upgrading being considered, or where vehicles waiting on the major road to turn right inhibit the through flow and create a hazard.

The traffic forecast has determined that the proposed development is likely to generate a total of 98 arrivals and 101 departures each day, well within the recommended 300 vehicles threshold recommended by DMRB.

Therefore, in terms of capacity, the site access in the form of a simple priority junction is considered appropriate for the level of vehicular movement that would be generated by the proposal site.

7.3 Highway Safety

Accident data has been reviewed based on the information obtained using the Essex Highways Traffweb website.

It has been determined that there have been two incidents recorded within the most recent three years period of data available on record in the vicinity of the site access. Both of the incidents were categorised as slight in severity.

The following observations have been made:

- Incidents in the study area are rare with only two occurrences within the three year study period;
- Only one of the two incidents occurred within relevant proximity of the development site; and
- No incidents were recorded at or adjacent to the application site access junction.

It is therefore concluded that on the basis of the recorded accident data in the area there are no existing highway safety concerns in the proximity of the application site.

¹ Design Manual for Roads & Bridges TD42/95 Geometric Design of Major/Minor Priority Junctions.

Furthermore, the site access has been reviewed in terms of junction visibility and it has been concluded that the level of visibility would be acceptable.

The proposed site access road width is designed as 4.8 metres which would be sufficient to allow a car to pass a large vehicle. It is very unlikely that the need would arise for 2 large vehicles to pass. A swept-path analysis has also been undertaken which demonstrates that a refuse collection vehicle and emergency vehicle can access and manoeuvre within the site without any issues.

7.4 Impact Summary

This section has demonstrated that the site access is adequate to accommodate the level of forecasted traffic without any safety or capacity issues.

It has therefore been concluded that the application proposals would be acceptable in traffic and transport terms.

8.0 SUMMARY & CONCLUSIONS

This report provides a detailed assessment of the highways and transportation matters relating to a proposed mixed use development on land to the rear of No. 14 Cambridge Road, Stansted Mounfitchet, Essex.

A detailed site audit has been undertaken which assessed the existing local highway conditions. This included a detailed accessibility appraisal to ensure the proposed development is located within a sustainable location in terms of transport and as a result the overall traffic and transport impact of the development proposals are acceptable in planning terms.

During the AM peak period it has been forecast that 12 vehicle arrivals and 6 vehicle departures will occur. During the PM peak period it has been forecast that 6 vehicle arrivals and 12 vehicle departures will occur. The proposal site would also generate the occasional HGV movement associated with refuse collection, servicing or deliveries.

It has also been demonstrated that the site access is adequate to accommodate the level of forecasted traffic without causing any safety or capacity issues.

The proposed development adheres to the local requirements in terms car and cycle parking provision.

The development also provides sufficient space for service vehicles off the main highway, with a commercial refuse store located within the development. Any emergency vehicles required to access the development (i.e. fire tenders) will be fully compatible with the proposed scheme, with direct access able to be gained from the B1383 Cambridge Road.

The proposed development of the site accords with the national and local planning policies outlined within Section 3.4 of this report. In particular, attention should be drawn to paragraph 32 of the National Planning Policy Framework (NPPF) which states that:

'...Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe'.

It is obvious from on-site observations and theoretical capacity consideration that this level of traffic can be safely accommodated within the operational capacity of the local highway network and it is unlikely that these levels of additional traffic will be perceptible when set against daily fluctuations.

For the above reasons, the proposed development of the site accords with the national and local planning policies and is considered to be acceptable in traffic and transport terms.

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