

**Lidl Great Britain Limited**  
**PROPOSED LIDL FOODSTORE ON-SITE REPLACEMENT**  
**GREAT NORTH ROAD, MILFORD HAVEN**

**TRANSPORT STATEMENT**

20-00721/TS/01

DECEMBER 2020



**DOCUMENT SIGNATURE AND MODIFICATION SHEET****Project Details**

<b>Project Title:</b>	Proposed Lidl Foodstore on-site Replacement, Milford Haven		
<b>Project No:</b>	20-00721	<b>Document No:</b>	TS/01
<b>Client:</b>	Lidl Great Britain Limited		
-	<b>Name</b>	<b>Signature</b>	<b>Date</b>
<b>Prepared by</b>	Mark Murawski		December 2020
<b>Checked and Approved for Issue by</b>	Matthew Anderson		December 2020

**Modification Details**

Rev	Date	Description	Checked By

Issued By:

**Corun Associates Limited  
Swansea****T 01792 229155  
E swansea@corun.uk.com**

<b>CONTENTS</b>		<b>Page</b>
<b>1</b>	<b>INTRODUCTION</b>	<b>4</b>
1.1	Background	4
1.2	Scope	4
<b>2</b>	<b>EXISTING CONDITIONS</b>	<b>5</b>
2.1	Site Summary	5
2.2	Local Highway Network	5
2.3	Pedestrian Facilities	6
2.4	Cycle Facilities	8
2.5	Public Transport Facilities	9
2.6	Local Highway Safety	10
<b>3</b>	<b>LOCAL AND NATIONAL PLANNING GUIDANCE</b>	<b>13</b>
3.1	Overview	13
3.2	Overall Policy Objective	13
3.3	Local Policy Objectives	13
3.4	Conclusion	13
<b>4</b>	<b>DEVELOPMENT PROPOSAL</b>	<b>15</b>
4.1	Proposed Re-Development	15
4.2	Vehicular Access	15
4.3	Parking Provision	15
4.4	Sustainable Transport Enhancements	17
<b>5</b>	<b>DEVELOPMENT TRAFFIC GENERATION AND IMPACT</b>	<b>18</b>
5.1	Introduction	18
5.2	Proposed Lidl development trip generation	18
5.3	Development Modal Split	19
5.4	Existing Developments trip generation	20
5.5	Proposed Development Trip Generation Difference	23
5.6	Proposed Development Highway Impact	24
<b>6</b>	<b>SUMMARY AND CONCLUSION</b>	<b>27</b>
6.1	Summary	27
6.2	Conclusion	28

## FIGURES

Figure 2.1: Site location in Local Context

Figure 2.2: Site in Strategic Context

Figure 2.3: 1.2km and 2km indicative walking catchments from the site

Figure 2.4: 4km and 12km indicative cycle catchments from the site

Figure 2.5: PIA plot extract

Figure 2.6: DfT count site (ref: 10645) location

## **APPENDICES**

Appendix A – Proposed Development Plans

Appendix B – TRICS Outputs

# 1 INTRODUCTION

## 1.1 Background

- 1.1.1 This Transport Statement (TS) has been produced by Corun Associates Ltd (Corun) on behalf of Lidl Great Britain Limited, the applicant, to examine the highway and transportation issues associated with the on-site replacement of an existing Lidl foodstore along Great North Road in Milford Haven, with a larger unit.
- 1.1.2 The proposals involve the demolition of an existing Lidl foodstore unit, Enterprise car rental unit, and 3 residential dwellings on the site, and re-development of the site with construction of a replacement Lidl foodstore unit. This proposed new Lidl foodstore would have a GFA of 2,121m<sup>2</sup> (an increase of 908m<sup>2</sup> from the existing store), with 102 dedicated parking spaces. The proposed development plans are contained at **Appendix A**.
- 1.1.3 The aim of this report is to demonstrate that there are no reasons, in highway and transportation terms, why the proposed re-development site should not be allocated planning permission.

## 1.2 Scope

- 1.2.1 This report will discuss the following key transportation issues arising from the proposals:
- (i) the existing site location and transport infrastructure;
  - (ii) analysis of personal injury traffic accident data;
  - (iii) the site's compliance with applicable transport policy;
  - (iv) the development proposal in detail;
  - (v) development-generated vehicular traffic; and
  - (vi) development impact on the surrounding highway network.
- 1.2.2 Corun contacted the Local Highway Authority (LHA) directly in advance of submission to discuss the scope of works for the TS, which was agreed in advance.

## 2 EXISTING CONDITIONS

### 2.1 Site Summary

2.1.1 The proposed re-development site (hereon referred to as the 'site') is located along the A4076 Great North Road in Milford Haven, and measures approximately 0.7 Ha. The land is currently split between the following uses:

- An existing Lidl foodstore (4,500m<sup>2</sup> total site area, 1,213m<sup>2</sup> GFA);
- An Enterprise car rental site (910m<sup>2</sup> total site area); and
- 3 x residential units no. 61, 61A, and 61B Great North Road

2.1.2 The site is located in a central area of Milford Haven bordered by the residential developments of Vaynor Road to the north and west, Greville Road to the south, and Great North Road to the east. A Texaco garage is also located immediately to the south east of the site along Greville Road.

2.1.3 **Figure 2.1** below illustrates the site location in a local context, complete with indicative red line boundary.

**Figure 2.1: Site location in local context**



© BingMaps

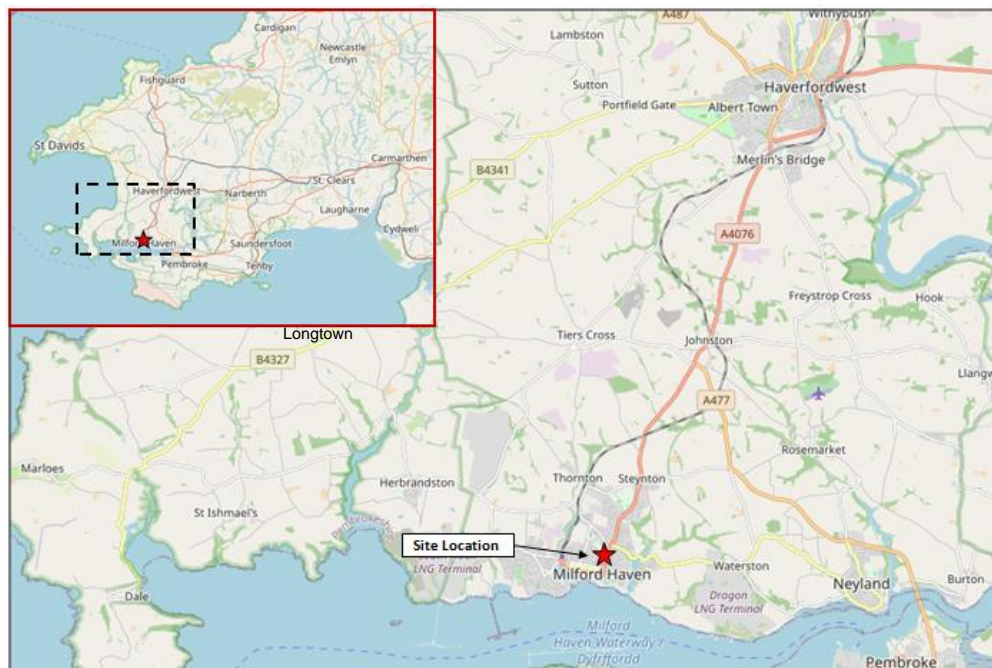
*Note – Site boundary line indicative only*

### 2.2 Local Highway Network

2.2.1 Vehicular access to each of the existing units on the proposed development site is provided via separate arrangements along Great North Road. The existing Lidl has a formal access junction arrangement with Great North Road, whereas the Enterprise car rental unit, and residential units have less formal access arrangements.

- 2.2.2 The Enterprise car rental unit access is set back from the carriageway (approximately 3m) providing direct access onto Great North Road with no formal give-way line defined.
- 2.2.3 The residential units of no. 61, 61A, and 61B Great North Road have vehicular access points formed by private driveways and dropped kerb arrangements over the existing footpath along Great North Road.
- 2.2.4 In the vicinity of the proposed development site, the A4076 Great North Road is approximately 8m in width with a central hatched area to divide the opposing flows. The road is subject to a 30mph speed limit, with footway provision on each side of the carriageway.
- 2.2.5 The A4076 Great North Road provides one of the primary routes through Milford Haven, providing direct access to the town centre and harbour / docks area to the south, and Haverfordwest to the north (approximately 11km). The A4076 also provides a direct connection to the A477 and A40 which in turn connect to the towns of Carmarthen to the east (approximately 60km), and Fishguard to the north (approximately 35km).
- 2.2.6 The site is shown in a wider strategic context in **Figure 2.2**.

**Figure 2.2: Site in Strategic Context**



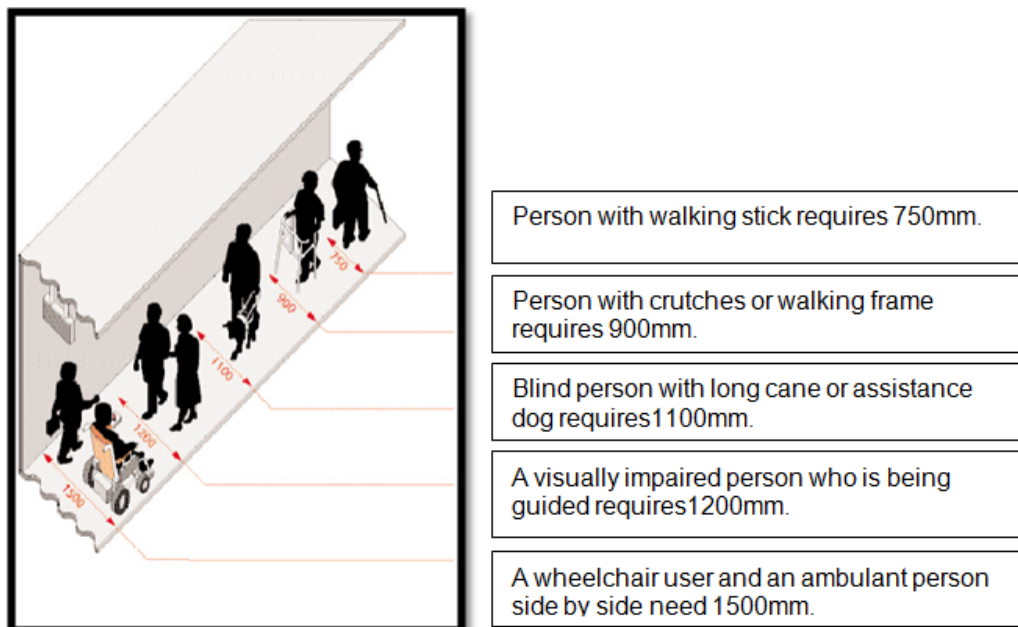
© openstreetmap contributors

## 2.3 Pedestrian Facilities

- 2.3.1 In the vicinity of the site, footways of approximately 2m in width are present on both sides of the A4076 Great North Road. Street lighting is also present along the length of the road.
- 2.3.2 Pedestrian access to the site is provided along the A4076 Great North Road, both at the vehicular access junction, and at a point approximately 10m further south along the eastern boundary of the site. Both points provide direct access into the existing footway along the western edge of the A4076 Great North Road carriageway.

- 2.3.3 The nearest crossing points along the A4076 Great North Road are provided near the junction with Vaynor Road (approximately a 120m walk north from the nearest site access point), and near the junction with Yorke Street (approximately a 140m walk south from the nearest site access point). These crossings take the form of a pedestrian refuge island with dropped kerbs, and a signalised crossing respectively.
- 2.3.4 Milford Haven has an extensive footway network running through the town. The footways along the A4076 Great North Road are part of this pedestrian network, providing routes into the town centre and harbour / docks area to the south, and to the residential areas of the town to the north, east, and west.
- 2.3.5 As shown in **Extract 2.1** from DfT's 'Inclusive Mobility' document (2002), the aforementioned footway widths of approximately 2m are more than suitable for a variety of users, including a wheelchair user and an ambulant person side by side.

**Extract 2.1: Footway widths (DfT 'Inclusive Mobility' 2002)**



- 2.3.6 Table 3.3 in The Chartered Institution of Highways and Transportation document 'Providing for Journeys on Foot' identifies suggested acceptable walking distances for pedestrians to a range of local facilities. For retail stores (under the elsewhere category) the preferred maximum walking distance specified is 1.2km, and for commuting trips (for staff to the site) the preferred maximum walking distance specified is 2km. **Figure 2.3** identifies the walking catchments to the site based on these suggested walking distances.



**Figure 2.3: 1.2km and 2km walking catchments from the site**

© Crown Copyright OS OpenData (2020)

2.3.7 **Figure 2.3** demonstrates that the entire central area of Milford Haven is located within a 1.2km walking distance from the site, with almost the entirety of the town within a 2km walking distance of the site. This identifies that the site is well located for residents in the local area to access the site by foot as a customer or staff member.

## 2.4 Cycle Facilities

2.4.1 Cycling in the vicinity of the site is accommodated on-carriageway, with limited off-road routes available. The lack of traffic-free routes in the vicinity is not considered to be a barrier to cycle travel. As advocated by the walking and cycling charity Sustrans, providing simple road safety advice is adhered to, on-road cycling is safe.

2.4.2 LTN1/04 identifies that the mean average length for cycling journeys is 4km (2.4 miles), although journeys of up to three times these distances are not uncommon for regular commuters. As such, a maximum 12km (7.4 miles) commuter distance applies.

2.4.3 **Figure 2.4** displays cycling isochrones for a 4km and 12km distance (approximately 20 and 60 minutes respectively based on a conservative cycle speed of 12km per hour). This shows that the whole of Milford Haven is within the 4km cycle catchment area, with the towns of Pembroke Dock and Haverfordwest also within the wider 12km cycle catchment area.

**Figure 2.4: 4km and 12km cycling catchments from the site**



© Crown Copyright OS OpenData (2020)

## 2.5 Public Transport Facilities

### Bus

2.5.1 Guidance relating to the accessibility of development proposals to public transport is provided in the Institution of Highways and Transportation (IHT) document 'Planning for Public Transport in Development' (March 1999). The IHT guidance recommends that:

*“new developments should be located so that public transport trips involve a walking distance of less than 400m from the nearest bus stop ...”.*

2.5.2 The nearest bus stop to the site is the Great North Road stop, located on the western side of the A4076 Great North Road carriageway, directly outside the existing Enterprise car rental site (less than a 5m walk from the site boundary). This stop operates via an on-road stop, with a pole marker and timetable.

2.5.3 As part of the pre-application discussions with Pembrokeshire County Council for this proposal, it has been identified that proposed improvements have been drafted for the Great North Road stop, which include widening and improvements to the footway in the vicinity of the stop, addition of a bus shelter, and addition of bus bay markings on the carriageway.

2.5.4 It has been agreed that the applicant will provide the above new bus stop and shelter within the S278 Highway Agreement associated with the proposed access works, subject to planning permission being granted.

2.5.5 The works will be designed and agreed with Welsh Government and Pembrokeshire Highway Authority as part of the S278 Agreement.

- 2.5.6 Regular services accessible from the Great North Road stop include First Bus Routes 302 and 356 (northbound services). Route 302 is a circular service operating between Milford Haven and Haverfordwest with a service frequency of approximately 30-minutes (Monday to Saturday), while Route 356 operates between Milford Haven and Monkton (via Pembroke Dock), with a service frequency of approximately 60-minutes (Monday to Saturday). A summary of these services is provided in **Table 2.1**.
- 2.5.7 The nearest bus stop offering access to the southbound services of Routes 302 and 356 is the Marble Hall stop, approximately a 170m walk north from the site boundary. These southbound routes operate with the same frequencies as the northbound services.

**Table 2.1 – Local bus service summary**

Service	Route	Approximate service frequency and operating hours		
		Mon – Fri	Sat	Sun
First Bus Route 302	Circular service between Haverfordwest (Withybush Hospital) and Milford Haven (Hubberston)	1 service every 30 minutes (0600 to 1900)	1 service every 30 minutes (0700 to 1900)	No Service
First Bus Route 302	Milford Haven to Monkton (via Pembroke Dock)	1 service every 60 minutes (0915 to 1930)	1 service every 60 minutes (0915 to 1930)	No Service

*Note: Data obtained from [www.firstgroup.com](http://www.firstgroup.com), and are subject to change. Times stated are approximations only.*

- 2.5.8 The site is therefore considered to be in a good location to offer staff and visitors to the site opportunities to travel via bus.

### Rail

- 2.5.9 The nearest train station to the site is Milford Haven, approximately a 1.4km walk away from the site.
- 2.5.10 Milford Haven station is operated by Transport for Wales (TfW) and is located at the eastern point of the Marches line, for services routing between south-east and south-west Wales stations. Services arrive and depart the station with a frequency of approximately one service every 120 minutes.
- 2.5.11 Stations within an approximate 30-minute rail travel time catchment to Milford Haven include Johnston (8-minutes), Haverfordwest (14-minutes), Clarberston Road (23-minutes), and Clunderwen (30-minutes). Stations in the larger towns / cities of Carmarthen and Swansea are approximately a 60-minute and 100-minute journey away respectively.
- 2.5.12 The site is therefore considered to be in a reasonable location to offer staff and visitors to the site opportunities to travel via rail.

## **2.6 Local Highway Safety**

- 2.6.1 A review has been carried out on local highway network safety in order to establish whether there are any current accident clusters or blackspots in the vicinity of the site that may be exacerbated by the development proposal. In this instance, a cluster is identified as a closely defined area of five or more accidents.

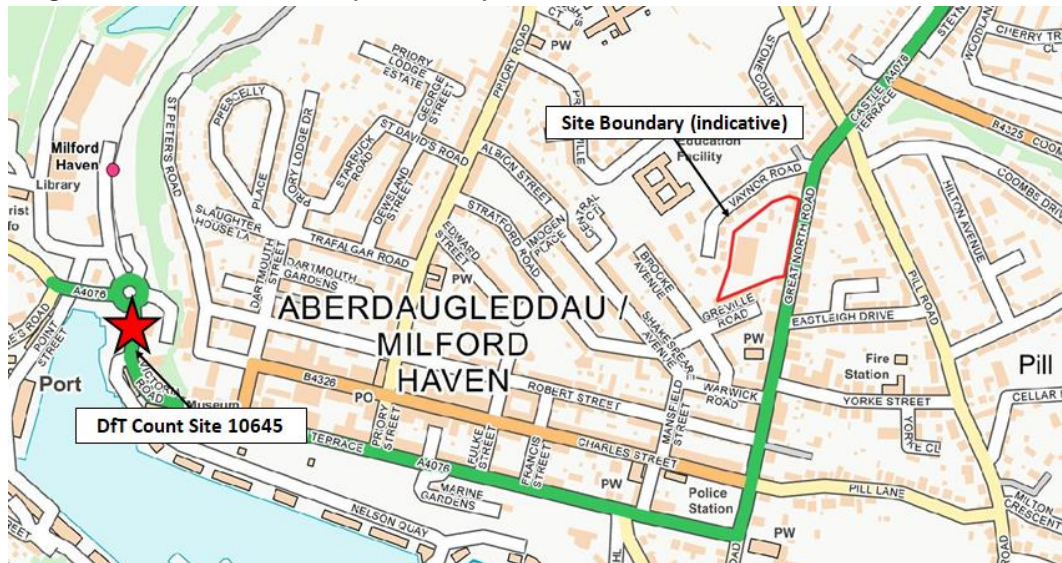
- 2.6.2 The website [www.crashmap.co.uk](http://www.crashmap.co.uk) has been interrogated to provide a review of accidents in the surrounding area.
- 2.6.3 CrashMap uses data collected by the police about road traffic crashes occurring on British roads where someone has been injured. This data is approved by the National Statistics Authority and reported on by the Department for Transport each year. The website uses data obtained directly from official sources and compiled in an easy to use format showing each incident on a map. Incidents are plotted to within 10 metres of their location and the data includes all incidents up to the end of 2019.
- 2.6.4 **Figure 2.5** provides an extract of all PIAs identified on CrashMap along the A4076 Great North Road in the vicinity of the site (approximately 200m north and south) over the 5-year period between 2015 and 2019. A total of 11 PIAs are identified, all being classed with a slight severity. This equates to an average of 2.2 PIAs per year. None of these accidents appear to be directly attributed to movements at the existing site access junction.

**Figure 2.5: PIA plot extract**



Source: [www.crashmap.co.uk](http://www.crashmap.co.uk) - data extracted December 2020

- 2.6.5 The nearest Department for Transport (DfT) count point to the site is located along the A4076 Hamilton Terrace (ref: 10645), approximately 1.3km south west from the site along the A4076, as identified on **Figure 2.6**. This count site identifies that the A4076 through Milford Haven has an average annual daily flow of approximately 16,000 vehicles. The accident rate observed along the A4076 in the vicinity of the site does not appear significantly greater than what might be expected for a major road carrying this volume of traffic.

**Figure 2.6: DfT count site (ref: 10645) location**

© Crown Copyright OS OpenData (2020)

- 2.6.6 The development proposals (discussed in **Section 4** of this report) will also involve the construction of a new access junction for the proposed Lidl store, and removal of the existing junctions for the Enterprise car rental, and residential developments along the A4076 Great North Road. This will in turn bring potential highway safety improvements along this section of the road.
- 2.6.7 The accident data does not therefore appear to identify any significant highway safety issue within the immediate area of the development site, and the minor increase in traffic generated by the proposed development (as discussed later in this report) is highly unlikely to exacerbate the existing safety record to a significant enough level to warrant concern.

### 3 LOCAL AND NATIONAL PLANNING GUIDANCE

#### 3.1 Overview

3.1.1 In transport terms the relevant policy guidance that applies to this site are contained in the following documents:

- Planning Policy Wales (Edition 10, December 2018);
- Technical Advice Note (Wales) (2007) 18 - Transport;
- Wales Transport Strategy (2008);
- Joint Transport Plan for South West Wales (2015 – 2020); and
- Pembrokeshire County Council Local Development Plan (LDP) up to 2021, adopted February 2013

3.1.2 Consideration is also given to the following legislation, which has an emphasis on sustainable transport provision:

- Active Travel Wales Act 2013;
- Well-being of Future Generations (Wales) Act 2015.

#### 3.2 Overall Policy Objective

3.2.1 The overarching desire at all tiers of planning policy guidance is to influence a modal shift from single occupancy car travel towards more sustainable modes such as walking, cycling, and public transport.

3.2.2 In order to achieve this, it is recognised that development should be located such that the need to travel by private car is reduced, by locating development where there is good access to high quality public transport, walking and cycling provision.

#### 3.3 Local Policy Objectives

3.3.1 With regards to transport, Policy GN.1 of the Pembrokeshire County Council LDP (up to 2021), identifies that development will be permitted where;

*“5. It would take place in an accessible location, would incorporate sustainable transport and accessibility principles and would not result in a detrimental impact on highway safety or in traffic exceeding the capacity of the highway network.*

*6. Necessary and appropriate service infrastructure, access and parking can be provided.”*

#### 3.4 Conclusion

3.4.1 As identified in **Section 2** of this report, the site is well located to encourage travel by sustainable modes for both staff and visitors of the proposed development.

3.4.2 **Section 4** and **Section 5** of this report identify that the re-development of the site will not lead to capacity or highway safety issues on the surrounding highway network, and that the levels of parking proposed are in line with local policy requirements.

- 3.4.3 The site is therefore concluded to comply with transport planning policy at local and national level.

## 4 DEVELOPMENT PROPOSAL

### 4.1 Proposed Re-Development

- 4.1.1 The proposed development involves the demolition the existing Lidl food store (Class 1A), Enterprise car rental, and existing dwellings (61 / 61B and 61A Great North Road) on the site, and re-development of the site with a new Lidl foodstore unit. The proposed new Lidl store would have a GFA of 2,121m<sup>2</sup> (an increase of 908m<sup>2</sup> from the existing store).
- 4.1.2 Indicative site layout plans of these proposals are contained at **Appendix A**.

### 4.2 Vehicular Access

- 4.2.1 Vehicular access to the re-developed site is proposed via a new access point along the A4076 Great North Road. The proposed access will be designed in accordance with DMRB design standards, given that the A4076 forms part of the trunk road network.
- 4.2.2 Swept path analysis for a max legal 16.5m articulated vehicle accessing the proposed site is shown on the indicative layout plans at **Appendix A**. This shows that there is sufficient room for a vehicle of this size to manoeuvre within the site, and safely enter and exit the site in a forward gear.

### 4.3 Parking Provision

- 4.3.1 The development proposal includes 102 parking spaces, made up of 85 (~83%) standard parking spaces, 6 (~6%) for disabled customers, 9 (~9%) parent and child spaces, and 2 (~2%) electric vehicle charging spaces.
- 4.3.2 The Pembrokeshire County Council supplementary planning document 'Parking Standards' adopted in June 2013 sets out detailed parking requirements according to land use and type of development across the county. These parking standards differ across six distinct zones identified within the document. The proposed development falls within 'Zone 2'.
- 4.3.3 As outlined in Section 3.5 of the document, the parking standards aim to set a maximum level of parking to be provided at developments, in line with national and regional policies to encourage a move to more sustainable modes of transport.
- 4.3.4 Parking standards for retail developments are identified at section 5.3 of the guidance. The Zone 2 parking standards for the 'Supermarkets and Superstores (predominantly food)' category with a GFA greater than 2,000m<sup>2</sup>, identify that a maximum of 1 space per 14 m<sup>2</sup> (GFA) should be provided. For the proposed development this equates to a maximum of 152 car parking spaces.
- 4.3.5 The proposed parking provision of 102 parking spaces is within the maximum provision suggested and based on the good accessibility to non-car modes of travel to the site, and the operator's extensive experience of demand at stores throughout the UK; this is considered to be appropriate for the intended food store use.
- 4.3.6 However, to further justify the parking provision, reference is made to the TRICS output files to represent the proposed Lidl development (discussed later in this report), whereby a vehicular parking accumulation study has been undertaken, as summarised in **Table 4.1**.



**Table 4.1: TRICS Parking Accumulation Study for proposed Lidl Development**

Time Period	Weekday			Saturday		
	Arr.	Dep.	Accum.	Arr.	Dep.	Accum.
07:00 - 08:00	10	5	5	10	2	8
08:00 - 09:00	48	32	21	53	37	24
09:00 - 10:00	76	62	35	76	65	35
10:00 - 11:00	88	79	44	99	87	47
11:00 - 12:00	97	96	45	133	122	58
12:00 - 13:00	90	93	42	123	129	52
13:00 - 14:00	89	96	35	119	115	56
14:00 - 15:00	95	89	41	118	113	61
15:00 - 16:00	95	97	39	113	123	51
16:00 - 17:00	94	98	35	108	116	43
17:00 - 18:00	86	91	30	89	92	40
18:00 - 19:00	66	70	26	51	71	20

Notes: Yellow highlight identifies peak car park accumulation

Values based on selected sites for TRICS category '01-Retail/C – Discount Food Store' (output contained at **Appendix B**) for a development of 2,121m<sup>2</sup> GFA

- 4.3.7 As shown in **Table 4.1**, the peak car parking occupancy using the TRICS data is forecast to be 45 vehicles on a weekday and 61 vehicles on a Saturday. This is only an estimate of potential accumulation values but identifies that based on surveys undertaken at similar developments to the proposed Lidl food store, 102 parking spaces are deemed adequate.
- 4.3.8 The Pembrokeshire County Council parking standards provide suggested minimum dimensions of car park space of 4.8m x 2.4m. The proposed layout includes car parking spaces of dimensions between 4.7m x 2.5m and 5.0m x 2.5m, with at least 6.5m provided between each opposing bay. The dimensions and layout of these parking spaces have been designed based on the operator's extensive experience of parking layout design at stores throughout the UK, to allow easy and safe manoeuvring of vehicles into the spaces and through the car park area.
- 4.3.9 The Pembrokeshire County Council parking standards identify that 3 parking spaces should be provided for commercial vehicles. The proposals include 1 loading bay space for vehicles at the western edge of the store. Based on the operator's extensive experience throughout the UK, this is deemed sufficient for the site's needs, and this loading bay will be managed to ensure that no more than one articulated vehicle is scheduled to arrive and park within the site at any one time.
- 4.3.10 As shown on the swept path analysis contained at **Appendix A**, there is sufficient room within the site for a max legal 16.5m articulated vehicle to manoeuvre in and out of the loading bay safely.

#### Enhanced Access Parking Bays

- 4.3.11 The Pembrokeshire County Council parking standards require retail sites to provide a minimum of 6% of the total car park capacity for disabled motorists. These spaces are preferably to be located within 50m of the facility served by the car park and designed with minimum suggested dimensions of car park space of 4.8m x 3.6m.
- 4.3.12 A total of 6 disabled parking bays are proposed at the site, representing 6% of the total 102 spaces proposed.

- 4.3.13 The proposed disabled bays will be reserved for vulnerable and impaired users and will measure 4.8m x 3.6m in size with an additional 1.2m buffer strip around each space to assist with access, especially for wheelchair users.
- 4.3.14 In addition to the disabled parking allocation, a further 9 enhanced parent and toddler parking bays are proposed.
- 4.3.15 All enhanced bays are conveniently located near the proposed entrance and within the parking guidelines recommended 50m distance.

#### Bicycle Parking

- 4.3.16 The Pembrokeshire County Council parking standards require 1 cycle stand per 200m<sup>2</sup> (GFA) at supermarket developments in Zone 2. This equates to a total of 11 cycle parking spaces at the proposed site.
- 4.3.17 A total of 6 Sheffield cycle stands are included within the site proposals, which will allow parking for up to 12 bicycles. These are to be located in a prominent and convenient location to promote natural surveillance and are covered. This generous provision will help encourage this mode of travel.

## **4.4 Sustainable Transport Enhancements**

- 4.4.1 As identified in **Section 1** of this report, it is considered that the site is well located to encourage pedestrian travel from all Milford Haven residential areas.
- 4.4.2 To further promote this mode of travel, the existing vehicular access junction will be improved to include tactile paving and dropped kerb crossings to assist mobility impaired users. Direct access from the internal pedestrian footway onto the existing pedestrian footway along the western edge of the A4076 Great North Road will also be included at the vehicular access point.
- 4.4.3 To promote the use of electric vehicles to the site, 2 electric vehicles charging parking spaces are also included within the proposals.
- 4.4.4 As identified previously in **Section 2** of this report, it has been agreed that the applicant will undertake improvements to existing the Great North Road bus stop located directly outside the existing Enterprise car rental development. These improvements will be designed and agreed with Welsh Government and Pembrokeshire Highway Authority as part of the S278 Agreement, and will help to further promote bus travel to and from the site.
- 4.4.5 A Travel Plan will also be created as part of the proposals, in line with an appropriately worded planning condition. This is a document that will be produced with the intention of promoting and increasing sustainable modes of travel to the site. This Travel Plan will be primarily targeted at trips made by staff of the proposed development.

## 5 DEVELOPMENT TRAFFIC GENERATION AND IMPACT

### 5.1 Introduction

5.1.1 Predicted site traffic flows have been forecast using the TRICS database. TRICS is a nationally accepted database providing information relating to the total number of trips generated by various land uses, based on existing trips observed at similar sites throughout the United Kingdom.

5.1.2 From the TRICS database, a Trip Rate is derived which provides the number of expected trips per unit of measurement (e.g. unit, bay or area). The TRICS good practice guide promotes an 'inclusive' rather than 'exclusive' approach to site selection.

### 5.2 Proposed Lidl development trip generation

5.2.1 The category '01-Retail/C – Discount Food Store' was used in TRICS to represent the proposed re-developed Lidl store. An initial filtering step was applied to remove all sites in Greater London and Ireland, and / or outside the town area locations from the selections. A site-by-site analysis was then made to only include those sites which would be representative of the proposed development (i.e. similar public transport accessibility, similar residential catchment area).

5.2.2 Sites were extracted from TRICS to develop both a weekday and Saturday trip rate separately. A total of 10 TRICS sites were identified as suitably representative of the proposed Lidl development. These TRICS sites included 8 Lidl stores, and 2 Aldi stores.

5.2.3 A copy of the TRICS selection criteria used, and trip rates calculated are included at **Appendix B**.

5.2.4 **Table 5.1** and **Table 5.2** show the total predicted vehicular trip generation for the proposed new Lidl foodstore, over both the weekday and Saturday 12-hour period (0700 to 1900) respectively.

**Table 5.1: Proposed Lidl foodstore, predicted weekday vehicular trip generation (based on 2,121m<sup>2</sup> GFA)**

Time Period	Trip Rates (per 100m <sup>2</sup> GFA)			Total Trips (all vehicles)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
07:00 - 08:00	0.461	0.217	0.678	10	5	14
08:00 - 09:00	2.253	1.532	3.785	48	32	80
09:00 - 10:00	3.568	2.911	6.479	76	62	137
10:00 - 11:00	4.167	3.748	7.915	88	79	168
11:00 - 12:00	4.565	4.544	9.109	97	96	193
12:00 - 13:00	4.257	4.364	8.621	90	93	183
13:00 - 14:00	4.194	4.538	8.732	89	96	185
14:00 - 15:00	4.464	4.178	8.642	95	89	183
15:00 - 16:00	4.491	4.581	9.072	95	97	192
16:00 - 17:00	4.443	4.602	9.045	94	98	192
17:00 - 18:00	4.051	4.268	8.319	86	91	176
18:00 - 19:00	3.128	3.293	6.421	66	70	136
12-Hour Trip Rate	44.042	42.776	86.818	934	907	1,841

Note: yellow highlight identifies peak hour in two-way vehicle trips.

**Table 5.2: Proposed Lidl foodstore, predicted Saturday vehicular trip generation (based on 2,121 m<sup>2</sup> GFA)**

Time Period	Trip Rates (per 100m <sup>2</sup> GFA)			Total Trips (all vehicles)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
07:00 - 08:00	0.461	0.099	0.56	10	2	12
08:00 - 09:00	2.477	1.728	4.205	53	37	89
09:00 - 10:00	3.563	3.07	6.633	76	65	141
10:00 - 11:00	4.691	4.082	8.773	99	87	186
11:00 - 12:00	<b>6.279</b>	<b>5.769</b>	<b>12.048</b>	<b>133</b>	<b>122</b>	<b>256</b>
12:00 - 13:00	5.786	6.074	11.86	123	129	252
13:00 - 14:00	5.613	5.415	11.028	119	115	234
14:00 - 15:00	5.555	5.341	10.896	118	113	231
15:00 - 16:00	5.316	5.794	11.11	113	123	236
16:00 - 17:00	5.086	5.448	10.534	108	116	223
17:00 - 18:00	4.189	4.321	8.51	89	92	180
18:00 - 19:00	2.428	3.333	5.761	51	71	122
<b>12-Hour Trip Rate</b>	<b>51.444</b>	<b>50.474</b>	<b>101.918</b>	<b>1,091</b>	<b>1,071</b>	<b>2,162</b>

Note: yellow highlight identifies peak hour in two-way vehicle trips

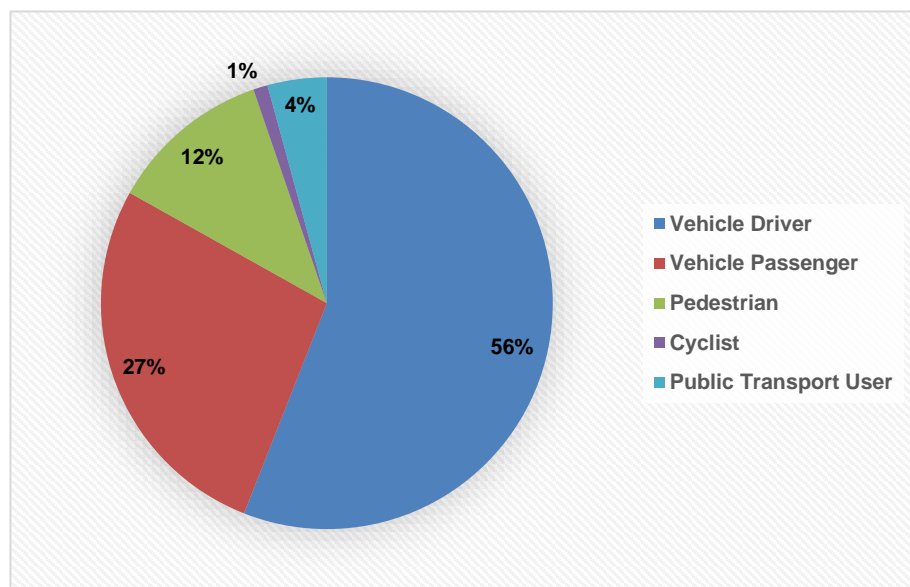
5.2.5 **Table 5.1** shows that the proposed Lidl foodstore is predicted to generate 1,841 two-way vehicular trips over the 12-hour weekday period between 07:00 to 19:00. The weekday peak hour in total two-way trips is predicted between 11:00 to 12:00, with 193 trips.

5.2.6 **Table 5.2** shows that the proposed Lidl foodstore is predicted to generate 2,162 two-way vehicular trips over the 12-hour Saturday period between 07:00 to 19:00. The Saturday peak hour in total two-way trips is predicted between 11:00 to 12:00, with 256 trips.

### 5.3 Development Modal Split

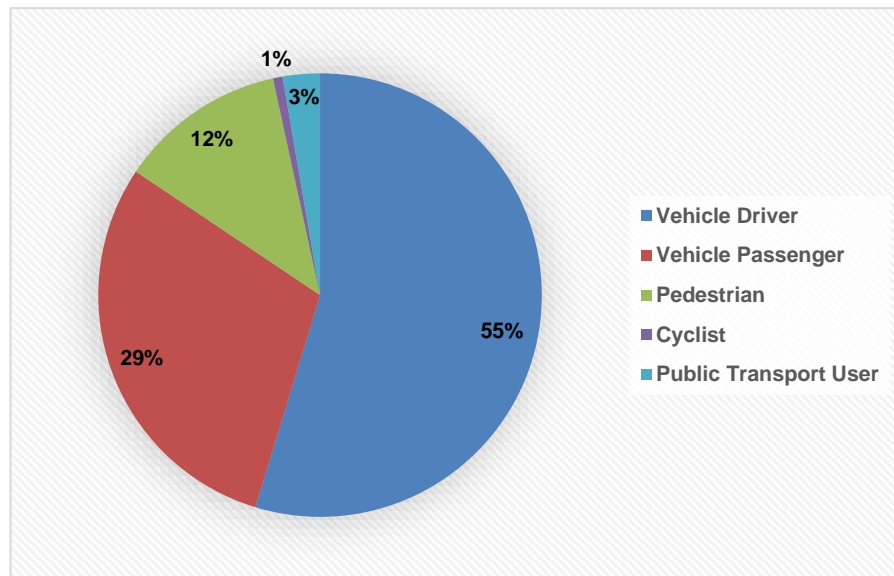
5.3.1 The TRICS database has been interrogated for multi-modal split data, as shown in **Chart 5.1 & 5.2** for a weekday and a Saturday respectively.

**Chart 5.1: TRICS selected '01-Retail/C – Discount Foodstore' sites – Daily weekday modal split of trips**



- 5.3.2 **Chart 5.1** identifies that the primary mode of travel for food retail trips such as this on a typical weekday is as a vehicle driver (56%) followed by vehicle passenger (27%), pedestrian (12%), public transport user (4%) and cyclist (1%).

**Chart 5.2: TRICS selected '01-Retail/C – Discount Foodstore' sites – Daily Saturday modal split of trips**



- 5.3.3 **Chart 5.2** again shows the primary mode of travel for food retail trips such as this on a typical Saturday is as a vehicle driver (55%) followed by vehicle passenger (29%), pedestrian (12%), public transport user (3%) and cyclist (1%).

## 5.4 Existing Developments trip generation

### Existing Lidl Foodstore

- 5.4.1 The trip generation for the existing Lidl foodstore on the site has been calculated using the same TRICS trip rates used for the proposed store (outlined in **Table 5.1** and **Table 5.2** for the weekday and Saturday periods respectively).
- 5.4.2 **Table 5.3** and **Table 5.4** show the total predicted vehicular trip generation for the existing Lidl foodstore on the site, over both the weekday and Saturday 12-hour period (0700 to 1900) respectively.
- 5.4.3 **Table 5.3** shows that the existing Lidl foodstore is predicted to generate 1,053 two-way vehicular trips over the 12-hour weekday period between 07:00 to 19:00. The weekday peak hour in total two-way trips is predicted between 11:00 to 12:00, with 110 trips.
- 5.4.4 **Table 5.4** shows that the existing Lidl foodstore is predicted to generate 1,236 two-way vehicular trips over the 12-hour Saturday period between 07:00 to 19:00. The Saturday peak hour in total two-way trips is predicted between 11:00 to 12:00, with 146 trips.

**Table 5.3: Existing Lidl foodstore, predicted weekday vehicular trip generation (based on 1,213m<sup>2</sup> GFA)**

Time Period	Trip Rates (per 100m <sup>2</sup> GFA)			Total Trips (all vehicles)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
07:00 - 08:00	0.461	0.217	0.678	6	3	8
08:00 - 09:00	2.253	1.532	3.785	27	19	46
09:00 - 10:00	3.568	2.911	6.479	43	35	79
10:00 - 11:00	4.167	3.748	7.915	51	45	96
11:00 - 12:00	<b>4.565</b>	<b>4.544</b>	<b>9.109</b>	<b>55</b>	<b>55</b>	<b>110</b>
12:00 - 13:00	4.257	4.364	8.621	52	53	105
13:00 - 14:00	4.194	4.538	8.732	51	55	106
14:00 - 15:00	4.464	4.178	8.642	54	51	105
15:00 - 16:00	4.491	4.581	9.072	54	56	110
16:00 - 17:00	4.443	4.602	9.045	54	56	110
17:00 - 18:00	4.051	4.268	8.319	49	52	101
18:00 - 19:00	3.128	3.293	6.421	38	40	78
<b>12-Hour Trip Rate</b>	<b>44.042</b>	<b>42.776</b>	<b>86.818</b>	<b>534</b>	<b>519</b>	<b>1,053</b>

Note: yellow highlight identifies peak hour in two-way vehicle trips

**Table 5.4: Existing Lidl foodstore, predicted Saturday vehicular trip generation (based on 1,213m<sup>2</sup> GFA)**

Time Period	Trip Rates (per 100m <sup>2</sup> GFA)			Total Trips (all vehicles)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
07:00 - 08:00	0.461	0.099	0.56	6	1	7
08:00 - 09:00	2.477	1.728	4.205	30	21	51
09:00 - 10:00	3.563	3.07	6.633	43	37	80
10:00 - 11:00	4.691	4.082	8.773	57	50	106
11:00 - 12:00	<b>6.279</b>	<b>5.769</b>	<b>12.048</b>	<b>76</b>	<b>70</b>	<b>146</b>
12:00 - 13:00	5.786	6.074	11.86	70	74	144
13:00 - 14:00	5.613	5.415	11.028	68	66	134
14:00 - 15:00	5.555	5.341	10.896	67	65	132
15:00 - 16:00	5.316	5.794	11.11	64	70	135
16:00 - 17:00	5.086	5.448	10.534	62	66	128
17:00 - 18:00	4.189	4.321	8.51	51	52	103
18:00 - 19:00	2.428	3.333	5.761	29	40	70
<b>12-Hour Trip Rate</b>	<b>51.444</b>	<b>50.474</b>	<b>101.918</b>	<b>624</b>	<b>612</b>	<b>1,236</b>

Note: yellow highlight identifies peak hour in two-way vehicle trips

#### Existing Enterprise Car Rental Site

- 5.4.5 The category '15-Vehicle Services/C – Car Hire Centre' was used in TRICS to represent the existing Enterprise car rental site. An initial filtering step was applied to remove all sites in Greater London and Ireland, and / or outside the town area locations from the selections. A site-by-site analysis was then made to only include those sites which would be representative of the proposed development (i.e. similar public transport accessibility, similar residential catchment area). A total of 6 TRICS sites were identified as suitably representative, which included 2 Enterprise car rental developments. A copy of all TRICS outputs are contained at **Appendix B**.

5.4.6 The TRICS database only included surveys at the selected sites undertaken over weekday periods. With a lack of Saturday surveys available for these sites, the weekday trip rates calculated have been used to represent both the predicted weekday and Saturday trip generation of the existing Enterprise car rental site.

5.4.7 **Table 5.5** shows the total predicted vehicular trip generation for the existing Enterprise car rental site, over both the weekday and Saturday 12-hour period (0700 to 1900).

**Table 5.5: Existing Enterprise car rental site, predicted weekday and Saturday vehicular trip generation (based on 910m<sup>2</sup> site area)**

Time Period	Trip Rates (per 100m <sup>2</sup> site area)			Total Trips (all vehicles)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
07:00 - 08:00	21.951	3.659	25.61	2	0	2
08:00 - 09:00	13.158	18.421	31.579	1	2	3
09:00 - 10:00	25.439	20.175	45.614	2	2	4
10:00 - 11:00	<b>35.965</b>	<b>25.439</b>	<b>61.404</b>	<b>3</b>	<b>2</b>	<b>6</b>
11:00 - 12:00	27.193	25.439	52.632	2	2	5
12:00 - 13:00	<b>29.825</b>	<b>34.211</b>	<b>64.036</b>	<b>3</b>	<b>3</b>	<b>6</b>
13:00 - 14:00	24.561	31.579	56.14	2	3	5
14:00 - 15:00	16.667	12.281	28.948	2	1	3
15:00 - 16:00	16.667	25.439	42.106	2	2	4
16:00 - 17:00	24.561	21.93	46.491	2	2	4
17:00 - 18:00	30.702	25.439	56.141	3	2	5
18:00 - 19:00	2.941	16.176	19.117	0	1	2
<b>12-Hour Trip Rate</b>	<b>269.63</b>	<b>260.188</b>	<b>529.818</b>	<b>25</b>	<b>24</b>	<b>48</b>

Note: yellow highlight identifies peak hour in two-way vehicle trips

5.4.8 **Table 5.5** shows that the existing Enterprise car rental site is predicted to generate 48 two-way vehicular trips over the 12-hour weekday and Saturday periods between 07:00 to 19:00. The peak hours in total two-way trips are predicted between 10:00 to 11:00, and 12:00 to 13:00 with 6 trips each.

#### Existing Dwellings

5.4.9 The category '03-Residential/A – Houses Privately Owned' was used in TRICS to represent the existing three dwellings on the site. An initial filtering step was applied to remove all sites in Greater London and Ireland, and / or outside the town area locations from the selections. A site-by-site analysis was then made to only include those sites which would be representative of the proposed development (i.e. similar public transport accessibility, similar residential catchment area). A total of 8 TRICS sites were identified as suitably representative. A copy of all TRICS outputs are contained at **Appendix B**.

5.4.10 The TRICS database only included surveys at the selected sites undertaken over weekday periods. With a lack of Saturday surveys available for these sites, the weekday trip rates calculated have been used to represent both the predicted weekday and Saturday trip generation of the existing dwellings on the site.

5.4.11 **Table 5.6** shows the total predicted vehicular trip generation for the existing three dwellings on the site, over both the weekday and Saturday 12-hour period (0700 to 1900).

5.4.12 **Table 5.6** shows that the existing three dwellings on the site are predicted to generate 15 two-way vehicular trips over the 12-hour weekday and Saturday periods between 07:00 to 19:00, with between 1 and 2 trips generated per each hour period.

**Table 5.6: Existing dwellings on site, predicted weekday and Saturday vehicular trip generation (based on 3 dwellings)**

Time Period	Trip Rates (per dwelling)			Total Trips (all vehicles)		
	Arr.	Dep.	Total	Arr.	Dep.	Total
07:00 - 08:00	0.114	0.33	0.444	0	1	1
08:00 - 09:00	<b>0.163</b>	<b>0.377</b>	<b>0.54</b>	<b>0</b>	<b>1</b>	<b>2</b>
09:00 - 10:00	0.175	0.16	0.335	1	0	1
10:00 - 11:00	0.13	0.146	0.276	0	0	1
11:00 - 12:00	0.121	0.142	0.263	0	0	1
12:00 - 13:00	0.153	0.172	0.325	0	1	1
13:00 - 14:00	0.15	0.153	0.303	0	0	1
14:00 - 15:00	0.135	0.21	0.345	0	1	1
15:00 - 16:00	0.29	0.186	0.476	1	1	1
16:00 - 17:00	<b>0.318</b>	<b>0.197</b>	<b>0.515</b>	<b>1</b>	<b>1</b>	<b>2</b>
17:00 - 18:00	<b>0.34</b>	<b>0.215</b>	<b>0.555</b>	<b>1</b>	<b>1</b>	<b>2</b>
18:00 - 19:00	0.276	0.209	0.485	1	1	1
<b>12-Hour Trip Rate</b>	<b>2.365</b>	<b>2.497</b>	<b>4.862</b>	<b>7</b>	<b>7</b>	<b>15</b>

Note: yellow highlight identifies peak hour in two-way vehicle trips

## 5.5 Proposed Development Trip Generation Difference

5.5.1 **Table 5.7** and **Table 5.8** identify the difference in the total two-way trip generation predicted at the site as a result of the proposed re-development.

5.5.2 **Table 5.7** shows that the proposed re-development is predicted to generate an extra 727 two-way vehicular trips from the site over the 12-hour weekday period between 07:00 to 19:00. The hours between 11:00 to 12:00, and 15:00 to 16:00 are expected to see the greatest increase, with 77 additional trips generated from the site each.

5.5.3 **Table 5.8** shows that the proposed re-development is predicted to generate an extra 861 two-way vehicular trips from the site over the 12-hour Saturday period between 07:00 to 19:00. The hour between 11:00 to 12:00 is expected to see the greatest increase, with 104 additional trips generated from the site.

**Table 5.7: Proposed site re-development, weekday trip generation difference**

Time Period	Existing Development Total Two-Way Trips	Proposed Development Total Two-Way Trips	Difference
07:00 - 08:00	12	14	+2
08:00 - 09:00	50	80	+30
09:00 - 10:00	84	137	+53
10:00 - 11:00	102	168	+66
11:00 - 12:00	116	193	<b>+77</b>
12:00 - 13:00	111	183	+72
13:00 - 14:00	112	185	+73
14:00 - 15:00	108	183	+75
15:00 - 16:00	115	192	<b>+77</b>
16:00 - 17:00	115	192	+77
17:00 - 18:00	108	176	+68
18:00 - 19:00	81	136	+55
<b>12-Hour Total</b>	<b>1,114</b>	<b>1,841</b>	<b>+727</b>

Notes: yellow highlight identifies peak hour in two-way trip generation increase

slight differences in 12-hour values may occur from Tables 5.1 to 5.6 due to trip rounding



**Table 5.8: Proposed site re-development, Saturday trip generation difference**

Time Period	Existing Development Total Two-Way Trips	Proposed Development Total Two-Way Trips	Difference
07:00 - 08:00	10	12	+2
08:00 - 09:00	56	89	+33
09:00 - 10:00	86	141	+55
10:00 - 11:00	113	186	+73
11:00 - 12:00	152	256	<b>+104</b>
12:00 - 13:00	151	252	+101
13:00 - 14:00	140	234	+94
14:00 - 15:00	136	231	+95
15:00 - 16:00	140	236	+96
16:00 - 17:00	134	223	+89
17:00 - 18:00	110	180	+70
18:00 - 19:00	73	122	+49
<b>12-Hour Total</b>	<b>1,301</b>	<b>2,162</b>	<b>+861</b>

Notes: yellow highlight identifies peak hour in two-way trip generation increase  
slight differences in 12-hour values may occur from Tables 5.1 to 5.6 due to trip rounding

## 5.6 Proposed Development Highway Impact

5.6.1 To understand the impact that the predicted increase in trips generated as a result of the proposed re-development will have on the surrounding highway network, the DfT traffic count site (ref:10645) has been utilised. This count site is located along the A4076 Hamilton Terrace, approximately 1.3km further south west along the A4076 from the site, as identified previously in **Figure 2.6**.

5.6.2 For 2019, the average annual daily flow (AADF) of traffic at the DfT count site was 16,134. The latest hourly breakdowns of flow available at this count site are for 2015 (count undertaken on Wednesday 16<sup>th</sup> September 2015). **Table 5.9** shows the 2019 proportional hourly flows at the count site (for the period between 0700 and 1900) based on the 2015 proportional hourly flows of the 2015 AADF.

**Table 5.9: 2015 and 2019 proportional hourly flows at DfT count site ref:10645**

Time Period	2015 Total Two-way Flow	2015 Proportion of AADF (14,992)	2019 Proportional Flow of AADF (16,134)
07:00 - 08:00	557	3.7%	599
08:00 - 09:00	886	5.9%	953
09:00 - 10:00	1,051	7.0%	1,131
10:00 - 11:00	956	6.4%	1,029
11:00 - 12:00	1,004	6.7%	1,080
12:00 - 13:00	1,029	6.9%	1,107
13:00 - 14:00	990	6.6%	1,065
14:00 - 15:00	1,104	7.4%	1,188
15:00 - 16:00	1,160	7.7%	1,248
16:00 - 17:00	1,332	8.9%	1,433
17:00 - 18:00	1,312	8.8%	1,412
18:00 - 19:00	1,015	6.8%	1,092
<b>12-Hour Total</b>	<b>12,396</b>	<b>82.6%</b>	<b>13,340</b>

5.6.3 **Table 5.9** suggests that a total two-way daily flow of 13,340 vehicles would be expected at the count point over the 12-hour period between 0700 and 1900, in 2019. The highway peak hours are identified between 09:00 and 10:00 in the AM period, and between 16:00 and 17:00 in the PM period, with two-way flows of 1,131 and 1,433 vehicles respectively.

5.6.4 Assuming a similar level of traffic along the A4076 in the vicinity of the site, **Table 5.10** shows the predicted weekday impact of the proposed development on the A4076 highway during the peak traffic periods.

**Table 5.10: Predicted weekday impact of the proposed development on the A4076 in the vicinity of the site**

Time Period	Total 2019 Two-way A4076 Flow (all motor vehicles) *	Proposed Development Weekday Increase in Trips	Combined Flow	% Impact on Observed Flow
<b>AM Highway Peak Hour (09:00 - 10:00)</b>	1,131	+53	1,184	+4.7%
<b>AM Highway Peak Hour (16:00 - 17:00)</b>	1,433	+77	1,510	+5.4%
<b>12-Hour Period Total (07:00 - 19:00)</b>	13,340	+725	14,065	+5.4%

\* 2019 AADF hourly flows calculated using 2015 proportions

5.6.5 The proposed development is predicted to increase trips along the A4076 by 5.4% over the total 12-hour weekday period between 07:00 and 19:00. During the AM and PM peak traffic hours, the proposed development is only predicted to increase traffic along the A4076 by 4.7% and 5.4% respectively.

5.6.6 Although no count data is available for a Saturday period from the DfT database, it would be expected that the impact on these days would be of similar levels to that of the weekday period.

5.6.7 It should be noted that this predicted increase in trips identified in **Table 5.10** assumes all trips generated by the site are 'primary' trips, with no reductions applied for 'secondary' trips.

5.6.8 Primary trips are those which are new to the road network and occur only as a result of the new development. Secondary trips however are those which already exist on the road network but would include a visit to the new development as part of the existing trip (whether as part of a pass-by, diverted, or transferred trip). Although part of the total trip generation, these secondary trips therefore do not generate additional vehicles on the road network and can be excluded when identifying the total vehicular impact of a development.

5.6.9 Although there is not currently any definitive guidance available providing levels of secondary trip reductions to be applied at certain developments, the 'TRICS Research Report 14/1 (2014)' provides a review on the subject. The report identifies that levels of secondary trips at any development will be dependent on variables such as its location, range of services offered, and size, and that a site-by-site approach should be taken in calculating these trip levels. The report also includes summaries of previous commercial and academic research on the subject, with one study identifying convenience stores experiencing secondary trip proportions up to 85%, with rates showing a positive relationship to adjacent street volumes.

- 5.6.10 As a retail store situated along an A-Road carrying a significant volume of traffic, it is not considered unreasonable to expect a large proportion (at least 50%) of trips from the proposed development to be secondary trips, and already exist on the road network.
- 5.6.11 As such, if only considering primary trip attractions to the development (i.e. completely new trips on the network) the actual impact on the local highway network would likely to be significantly lower than identified in **Table 5.10**, and these represent a very robust 'worst case' scenario highway impact for the proposed re-development of the site.
- 5.6.12 It should also be noted that the TRICS methodology used implements a linear method for calculating the predicted trip generation of a development (in this case based directly on expected trips per 100m<sup>2</sup> GFA for the supermarket units). As identified in the CSS Wales document 'Wales Parking Standards 2008' however, increases in transactions at supermarkets are not proportional to floor area (with extensions of 33% GFA producing just a 10% increase in transactions). The TRICS methodology used is therefore more applicable to new developments and does not take into account that the proposed Lidl foodstore will simply act as an extension to the existing Lidl foodstore operating on the site (and therefore act more to offer an increased choice of products to the existing customers, rather than generating a linear increase in new customers). As such the increase in the Lidl foodstore size proposed will likely generate a significantly lower number of trips than identified in **Table 5.10**.
- 5.6.13 On this basis, it is concluded that the re-development of the site will have a minor impact on traffic flows on the local highway network and raises no major congestion or highway safety concerns.

## 6 SUMMARY AND CONCLUSION

### 6.1 Summary

- 6.1.1 This Transport Assessment (TA) has been produced by Corun Associates Ltd (Corun) on behalf of Lidl Great Britain Limited, the applicants, to examine the highway and transportation issues associated with the proposed re-development of a Lidl foodstore (Class A1) along the A4076 Great North Road, Milford Haven.
- 6.1.2 The proposed development involves the re-development of the existing Lidl foodstore (Class 1A) on the site, and demolition of the neighbouring Enterprise car rental and existing dwellings (61 / 61B and 61A Great North Road) on the site. The proposed new Lidl foodstore would have a GFA 2,121m<sup>2</sup> (an increase of 908m<sup>2</sup> from the existing store).
- 6.1.3 The site is well located to encourage sustainable modes of travel for staff and visitors living in the surrounding residential areas of Milford Haven. The extended cycling, bus, and rail networks through the local area will also allow opportunities for sustainable travel for longer distance, or multi-modal trips.
- 6.1.4 It has also been agreed that the applicant will undertake improvements to existing the Great North Road bus stop located directly outside the existing Enterprise car rental development. These improvements will be designed and agreed with Welsh Government and Pembrokeshire Highway Authority as part of the S278 Agreement, and will help to further promote bus travel to and from the site.
- 6.1.5 Vehicular access will be provided via a new access point along the A4076 Great North Road. This access point will be designed to conform to DMRB design standards. Swept path analysis for a max legal 16.5m articulated vehicle accessing the proposed site shows that there is sufficient room for a vehicle of this size to manoeuvre within the site, and safely enter and exit this junction in a forward gear.
- 6.1.6 Pedestrian access to the proposed development will also be provided at the new access. The proposals include improvements to the existing layout, with inclusion of tactile paving and a dropped kerb crossing, and provision of direct access into the existing footway network along the A4076 Great North Road.
- 6.1.7 A total of 102 car parking spaces are proposed at the new Lidl foodstore unit. These are within the maximum guidelines identified by local guidelines set out by Pembrokeshire County Council and based on the operator's extensive experience of demand at stores throughout the UK, is considered to be appropriate for the intended food store use.
- 6.1.8 A total of 15 enhanced parking bays (6 disabled and 9 parent and child) are proposed out of the 102 bays. This represents 15% of the total provision.
- 6.1.9 A total of 6 Sheffield cycle stands (allowing parking for up to 12 bicycles), and 2 electric vehicle charging spaces are also included within the proposals. These will help encourage these more sustainable modes of travel to the site.
- 6.1.10 The re-development of the site is predicted to generate an extra 727 and 861 two-way vehicular trips to the site over the 12-hour period (07:00 to 19:00) on a weekday and Saturday respectively. The greatest increase in trips on a weekday is seen between 11:00 to 12:00 and 15:00 to 16:00 (+77 trips), and between 11:00 to 12:00 on a Saturday (+104 trips).

- 6.1.11 A robust highway impact assessment has been undertaken identifying that over the 12-hour weekday period between 07:00 to 19:00, the proposed re-development would lead to an increase in traffic of just 5.4% along the A4076 (in the vicinity of the site). During the weekday AM and PM highway peak hours, this increase in traffic is predicted to be just 4.7% and 5.4% respectively. These values represent a very 'worst case' scenario, and do not include any reductions expected as a result of linked or pass-by trip considerations.
- 6.1.12 The methodology applied to predict the vehicular trip generation at the proposed new Lidl foodstore has also been undertaken using a linear approach (in this case based directly on expected trips per 100m<sup>2</sup> GFA for the supermarket units). This linear approach however (which is more applicable for new developments), does not take into account that the proposed Lidl foodstore will simply act as an extension to the existing Lidl foodstore operating on the site (and therefore act more to offer an increased choice of products to the existing customers, rather than generating a linear increase in new customers). As such the increase in the Lidl foodstore size proposed will likely generate a significantly lower number of trips than identified in the assessment.
- 6.1.13 It is therefore concluded that the re-development of the site will have a minor impact on weekday traffic flows on the local highway network and raises no major congestion concerns.
- 6.1.14 Although no count data is available to undertake a highway impact assessment for a Saturday period, it would be expected that the impact on these days would be of similar levels to that of the weekday period.
- 6.1.15 A review of the accident record along the A4076 Great Road in the vicinity of the site does not appear to identify an accident rate greater than what would be expected for a major road carrying this volume of traffic. With the minor impact on traffic levels predicted from the proposed development, and it is not expected to have an adverse impact on this existing highway safety record. The removal of the three existing vehicular access points for the Enterprise car rental site and the existing dwellings on the site will in turn bring with it potential highway safety improvements along this section of the road.
- 6.1.16 A Travel Plan will also be developed as part of the proposals, which aims to maximise active modes of travel and public transport use associated with the site.

## **6.2 Conclusion**

- 6.2.1 This Transport Statement has demonstrated that the development should be considered acceptable in terms of highways and transportation.
- 6.2.2 There are no reasons in highway and transportation terms why the proposed development should not be granted consent.

# **APPENDIX A**

## **Proposed Development Plans**



SCHEDULE	
Sales Area	1399 m <sup>2</sup>
Warehouse gia inc freezer/chiller	434 m <sup>2</sup>
Ancillary gia inc all welfare & bakery	240 m <sup>2</sup>
Internal walls	48 m <sup>2</sup>
GIA	2121 m <sup>2</sup>
GEA	2216 m <sup>2</sup>
<b>Total Site Area Red (Approximate)</b>	<b>7216 m<sup>2</sup></b>
Standard Parking Spaces 2.5*5.0M	85. spaces
Disabled Parking Spaces	6. spaces
P&T Parking Spaces	9. spaces
EVC Spaces	2. spaces
<b>Total Parking Spaces</b>	<b>102. spaces</b>



Rev	Date	Description	Revised By	Checked By
B	22.07.20	P AND C SPACES AMENDED	DGH	OGH
A	20.07.20	CP SPACES ADDED	DGH	OGH

**Client:**  
LIDL GREAT BRITAIN LTD.  
Waterton Industrial Estate,  
Bridgend, CF31 3PH

**Project Name:**  
MILFORD HAVEN

**Project No:** 19226

**Drawing No:** AD 004 Rev B

**Drawn By:** CJP

**Checked By:**

**Drawing Title:**  
PROPOSED SITE LAYOUT

**Date:** JAN 2020

**Scale @ A3:** 1:500

**Drawing Status:** SKETCH SCHEME

**ARCHITECTURE**

**ONE DESIGN**  
ARCHITECTURAL SERVICES

One Design Architectural Services Ltd  
Unit 1 Merchants Quay,  
Phase II, Ashley Lane, Shipley,  
West Yorkshire, BD17 7DB  
Tel: 01274 591188  
www.onedesignarchs.com  
mail@onedesignarchs.com  
Registered in England & Wales No: 8355643

**IMPORTANT INFORMATION**  
Dimensions to be confirmed on site prior to start of works and ODAS to be informed of discrepancies immediately. No dimensions to be scaled from this drawing. All materials and works are to be carried out in accordance with current British Standards, Planning Approval, current Building Regulations and Codes of Practice. Party Wall Act - Notices under the Party Wall Act are to be served by the property owner or appointed third party by property owner. Health and Safety - CDW 2015 Regulations apply to all construction works to be carried out and apply to designers, contractors and the client. As such all parties have duties under these regulations.

**Notes**