

TRANSPORT STATEMENT



SYSTRA

ASDA FERRING WORTHING

TRANSPORT STATEMENT

IDENTIFICATION TABLE	
Client/Project owner	ASDA
Project	ASDA Ferring Worthing
Study	Transport Statement
Type of document	Final Report
Date	15/05/2018
File name	ASDA Ferring Worthing TS 18_10A
Reference number	18_10A (Ferring Worthing)
Number of pages	21

APPROVAL					
Version	Name		Position	Date	Modifications
18_10A	Author	Elaine Moran	Transport Planner	15/05/2018	
	Checked by	Keith McGillivray	Principal Transport Planner	15/05/2018	
	Approved by	Keith McGillivray	Principal Transport Planner	15/05/2018	

TABLE OF CONTENTS

1.	INTRODUCTION	5
1.1	BACKGROUND	5
1.2	PURPOSE OF REPORT	5
2.	EXISTING CONDITIONS	6
2.1	SITE LOCATION	6
2.2	EXISTING TRANSPORT NETWORK	7
3.	PROPOSED DEVELOPMENT	8
3.1	PFS LOCATION & LAYOUT	8
3.2	ACCESS & EGRESS ARRANGEMENTS	8
3.3	PFS OPERATIONAL CHARACTERISTICS	9
3.4	SITE SERVICING	10
3.5	EFFECT ON CUSTOMER PARKING	10
4.	PFS TRIP GENERATION	11
4.1	BACKGROUND METHODOLOGY	11
4.2	TRICS ANALYSIS	12
4.3	DEVELOPMENT TRIPS	15
5.	SUMMARY & CONCLUSIONS	16
5.2	CONCLUSION	16
A.	SITE LAYOUT AND SWEEPED PATH ANALYSIS	17

LIST OF FIGURES

Figure 2.1 : Site Location	6
Figure 2.2 : Existing Site Layout (Courtesy of C+A Design)	7
Figure 3.1 : Proposed PFS Layout (Courtesy of C+A Design)	8
Figure 3.2 : Access and egress arrangements for proposed development	9
Figure 3.3 : AutoTrack ATR01 – PFS Tanker	10
Figure A.1 : Existing Site Layout	18
Figure A.2 : Proposed Site Layout	19
Figure A.3 : Swept Path Analysis	20

LIST OF TABLES

Table 4.1 : Weekday and Weekend PFS Trip Rates (06:00 – 22:00) (From TRICS)	13
Table 4.2 : Weekday and Weekend PFS Trip Generation (06:00 – 22:00) (From TRICS)	13
Table 4.3 : Weekday and Weekend “new” PFS Trip Generation (06:00 – 22:00) (From TRICS)	14
Table 4.4 : Weekday and Weekend PFS “new” trips on the road network (06:00 – 22:00)	15

1. INTRODUCTION

1.1 Background

- 1.1.1 This Transportation Statement is prepared on behalf of ASDA Stores Limited (ASDA) in support of an application for planning permission for a six pump, twelve filling position Petrol Filling Station (PFS) at the existing ASDA store on the A259 Littlehampton Road (A259), Ferring, West Sussex.
- 1.1.2 The existing food store is open 06:00 to 00:00 Monday to Friday and between the hours of 10:00 – 16:00 on Sundays. While there is not currently a PFS at the store, ASDA wishes to improve the offer to existing customers. SYSTRA Ltd (SYSTRA) was appointed to provide transportation advice and to prepare a Transportation Statement in support of the planning application.
- 1.1.3 The proposed PFS will operate as a fully automated facility, meaning that each filling position will be 'Pay-at-Pump' for card only payments.
- 1.1.4 There will be no BIO or higher grade fuel provided and, in line with ASDA's other sites, no LPG offer. The proposed PFS will replicate the operational characteristics of equivalent facilities which have been incorporated into existing ASDA stores throughout the United Kingdom.

1.2 Purpose of Report

- 1.2.1 This report discusses the transportation matters associated with the revised proposals. This includes consideration of the operation and design of the PFS and the trip making characteristics of the proposed development. Ultimately, the report will conclude that, while the proposals will generate some additional vehicle trips, the extent of any uplift is limited and that because of the established food store operation, many of the PFS trips will already be associated with the site.
- 1.2.2 Swept path assessments have been undertaken to ensure the PFS design provides sufficient space for articulated tanker vehicles servicing the site.

2. EXISTING CONDITIONS

2.1 Site Location

- 2.1.1 The store is situated to the south of the A259, in a mixed-use location. The store is bounded to the west by farming land, to the east by a plant nursery and residential development and to the south by a railway line.
- 2.1.2 The food store is located in the southern section of the site, with the customer car park occupying land to the front of the store. The service yard is located to the west of the site, and is accessed via the main site access junction on the A259.
- 2.1.3 A general location plan showing the site in the context of the wider area is shown in Figure 2.1

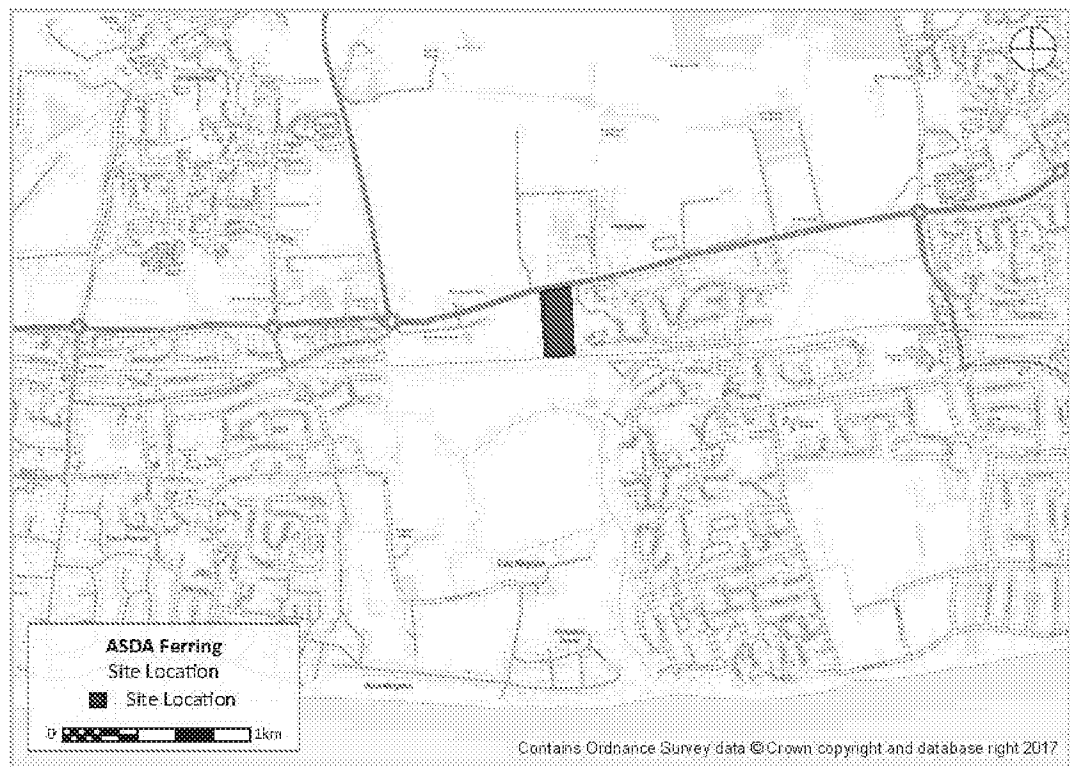


Figure 2.1 : Site Location

- 2.1.4 The layout of the existing ASDA store is indicated by Figure 2.2. The area highlighted in red shows ASDA's preferred location for the PFS.

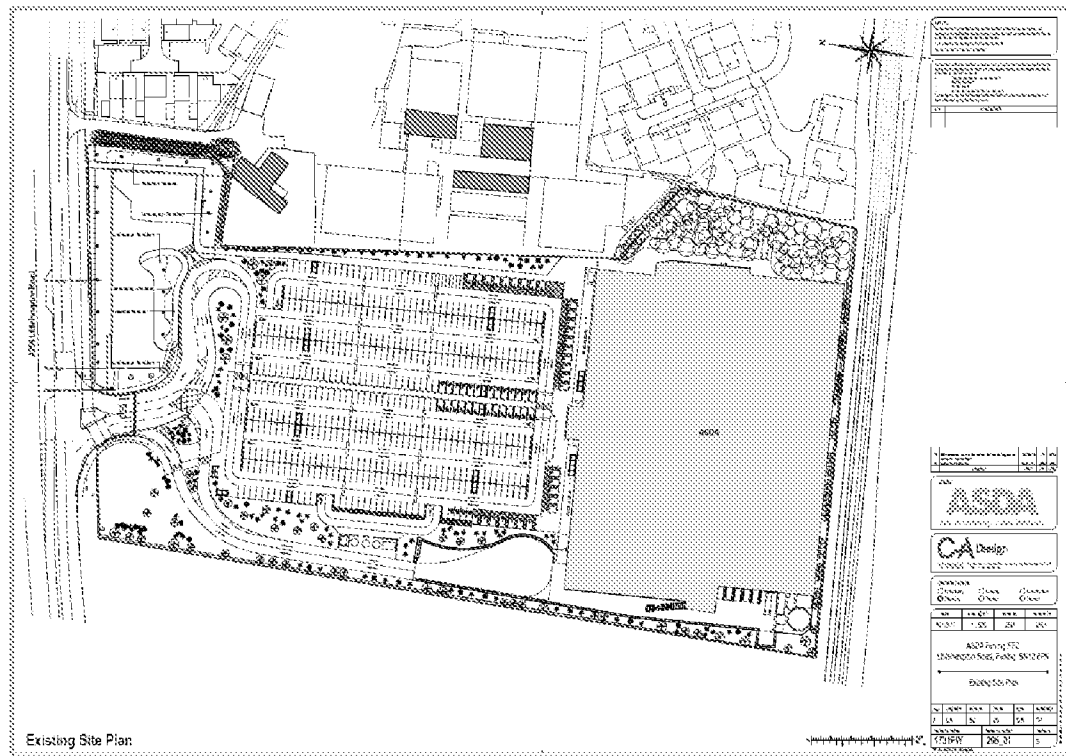


Figure 2.2 : Existing Site Layout (Courtesy of C+A Design)

2.2 Existing Transport Network

- 2.2.1 The site is well connected through the local road network to the surrounding area. The A259 is a two-way dual carriageway road running along the northern boundary of the site and provides the point of vehicular access between the ASDA Ferring store and the external road network.
- 2.2.2 The A259 provides connections to settlements west of Ferring such as East Preston, Angmering and Littlehampton. To the east, the A259 connects to Goring-by-Sea and Worthing.
- 2.2.3 The main pedestrian access to the store is via the footway links from the A259. Footways are provided on both sides of the internal access road. Cycling access is accommodated via a shared use pedestrian cycle path running adjacent to the westbound carriageway of the A259 which in turn provides links to Ferring to the east and East Preston to the west.
- 2.2.4 Local bus services serving the ASDA Ferring Store are operated by Stagecoach (Service 700 Coastliner). A bus stop and layby is incorporated into the existing ASDA food store site adjacent to the northern part of the car park.
- 2.2.5 Through a combination of pedestrian and public transport facilities, the site can be regarded as being accessible to non-car-based uses, as required.

3. PROPOSED DEVELOPMENT

3.1 PFS Location & Layout

- 3.1.1 ASDA wishes to increase the customer offer at the store with the introduction of a PFS. The proposals comprise the installation of a six pump, twelve filling position PFS on land located in the north-east section of ASDA's overall site footprint, adjacent to the external store access.
- 3.1.2 The proposals do not set out to alter the external store access, with only a slight reconfiguration of the internal access road to accommodate the PFS entrance. The site layout of the proposed PFS is indicated by Figure 3.1.

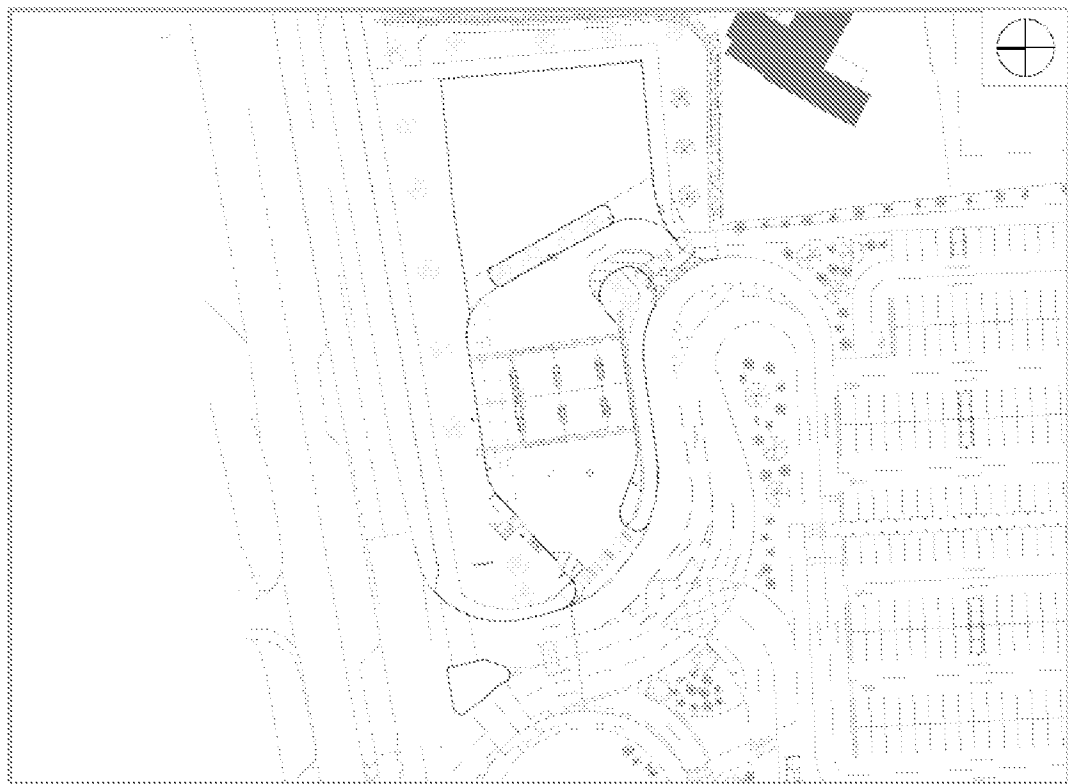


Figure 3.1 : Proposed PFS Layout (Courtesy of C+A Design)

3.2 Access & Egress Arrangements

- 3.2.1 The proposals comprise of a "stand-alone" PFS facility within the ASDA site. The PFS will have its own access and egress to be taken from the access road. The access strategy will include give-way markings and direction arrows to direct traffic accordingly. A short description of the internal access/egress arrangements is provided, as follows:

- **Access:**
From the store, customers will turn right from the access road into the PFS forecourt, immediately before the signalised junction on the A259.
From the A259, customers will turn left shortly after turning into the access road.

● **Egress:**

Once leaving the PFS forecourt (via a give-way), vehicles will be able to turn left or right to re-join the access road.

- 3.2.2 Within the car park, it is proposed that the internal road way is reconfigured slightly. The proposed movement and circulation arrangements for the PFS are illustrated by Figure 3.2.

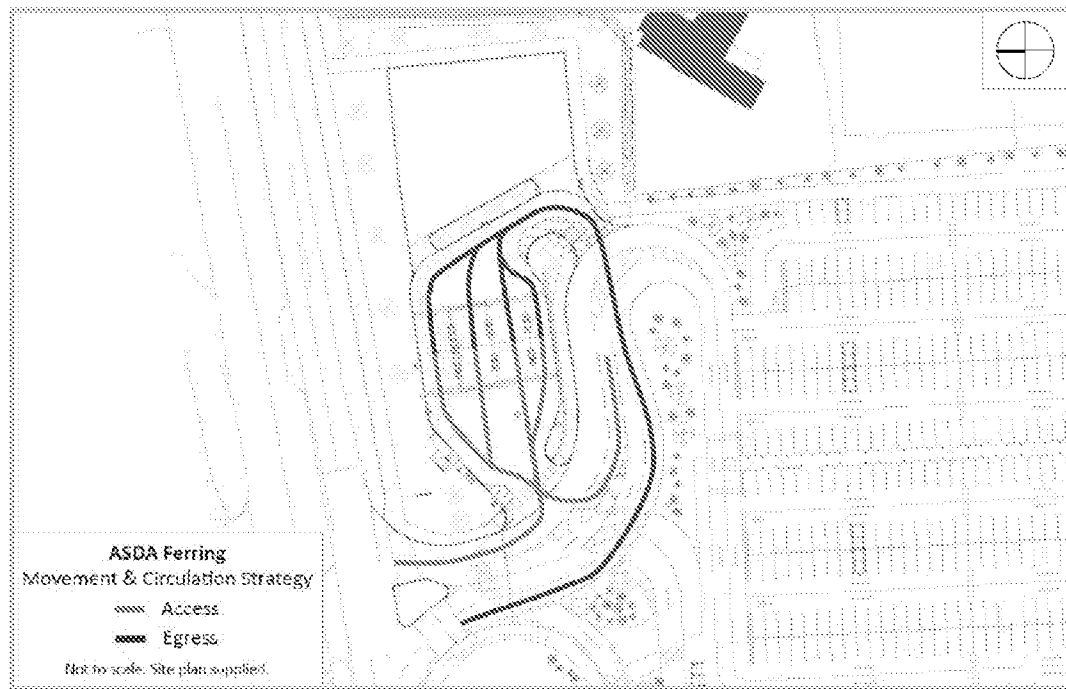


Figure 3.2 : Access and egress arrangements for proposed development

- 3.2.3 The PFS is located on a portion of land that is outwith the main store car park, therefore the development will not have an impact on or alter the number of car parking spaces currently provided.

3.3 PFS Operational Characteristics

- 3.3.1 The PFS will incorporate extendable pump hoses, allowing customers to use any pump, regardless of the position of their petrol cap. Removing the restriction in pump selection significantly reduces the likelihood of customer queues forming for a particular filling position. The PFS is more efficient than equivalent facilities which have short hoses and it can manage arrival demands in a more dynamic manner.
- 3.3.2 A Forecourt Greeter will be available during busier trading times as is standard practice at comparable ASDA facilities throughout the UK. In the event of infrequent instances of operational disruption, ASDA reserves the right to close the PFS as required.

3.4 Site Servicing

3.4.1 The servicing arrangements will replicate the practices which are adopted at many already operational facilities. The local road network already supports service vehicle trips to nearby retail outlets. As such, articulated vehicle movements are well established on the surrounding road network.

3.4.2 An AutoTrack swept path assessment (ATR01 in Figure 3.3, and Appendix A) has been undertaken to determine that the PFS can accommodate appropriate vehicle movements. Figure 3.3 shows the swept path requirements of a standard 15.2m ASDA articulated oil tanker movement through the PFS and demonstrates that this size of vehicle can manoeuvre safely and efficiently within the site.

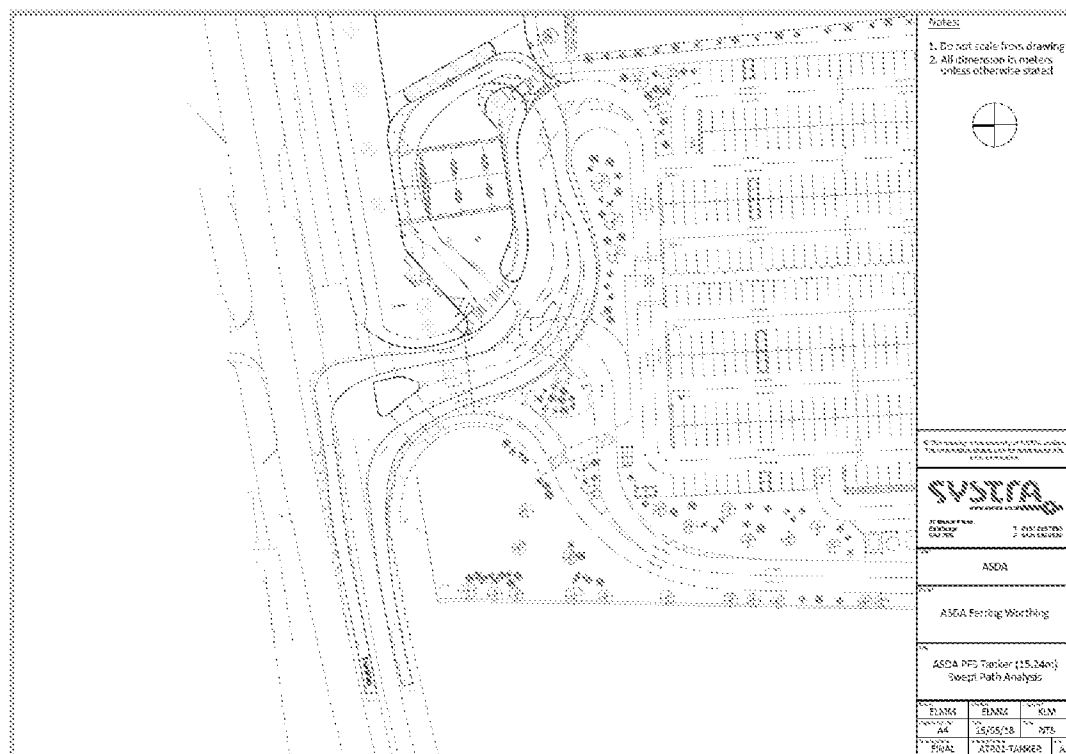


Figure 3.3 : AutoTrack ATR01 -- PFS Tanker

3.5 Effect on Customer Parking

3.5.1 The proposal does not remove car parking spaces and the main store car park will remain unchanged.

4. PFS TRIP GENERATION

4.1 Background Methodology

- 4.1.1 The key test when considering total trip generation associated with the proposed PFS is the extent to which trip making associated with an established food store increases as a result of the new offer.
- 4.1.2 Drivers typically purchase fuel when it is convenient for them to do so, incorporating the activity into a pre-existing trip, for example a trip to or from work or education, or as part of a shopping trip. Experience suggests that very few trips are made specifically for the purpose of purchasing fuel.
- 4.1.3 With this in mind, when considering trip generation, it is important to recognise that while some trips associated with the PFS might be judged to be “new” to the local road network, a larger proportion of PFS trips will already be present in local traffic. Rather than simply considering the question of how many new trips the PFS might generate, it is important to acknowledge that the completed development will attract drivers who are already trip makers, simply adjusting their journey slightly to purchase fuel.
- 4.1.4 Quantification of PFS trip generation at an ASDA store is typically underpinned by the following key assumptions
- Of all trips attracted to the PFS, 70% will already be associated with the food store, being made by staff and customers who already travel to the site.
 - Of trips which are judged to be “new” to the site (i.e. trips made by customers who are attracted to enter the site specifically because of the fuel offer), a proportion will already be passing the store, as users of the adjoining transport corridor for another, separate purpose. These trips, referred to as “pass-by trips” are assumed to take place at a rate of 30% and 10% for weekday and weekend trips, respectively.
 - It is further assumed that drivers purchase fuel when it is convenient to them, so would be unlikely to make a specific trip for that sole purpose in the busy peak periods.
- 4.1.5 Trip making forecasts for the proposed PFS are set out in Section 4.2. The methodology adopted uses outputs relating to typical trip making rates per fuel pump, enabling pro rata calculations to determine the total trip-making associated with 6 pumps, 12 filling positions.

4.2 TRICS Analysis

4.2.1 Petrol Filling Stations are listed as land use Category 13 in TRICS. Sub land-use classifications are included for:

- ⊗ **13/A**
PFS: “Traditional” PFS with only a small shopping element such as a newsagent-type store. Trip rates are calculated by Site Area or Filling Bays
- ⊗ **13/B**
PFS with Retail: PFS with a significant retail element, possibly a smaller version of a branded supermarket or an extended store run by the PFS company. Trip rates are calculated by Site Area or Filling Bays.

4.2.2 As the PFS is proposed to be ‘Pay-at-Pump’ the sub-category 13/A is considered to best match the characteristics of the proposed development.

4.2.3 An assessment using TRICS 7.5.1 has been undertaken considering all PFS sites within Great Britain, with only sites in Republic of Ireland and Northern Ireland excluded. This was undertaken so that a full range of circumstances could be considered.

4.2.4 Table 4.1 shows the arrival trip rates for both Land Use 13/A and 13/B petrol filling stations. Information is provided for each hour between 06:00 – 22:00. Peak hour trip generation occurs between 17:00 – 18:00 on a weekday and between 12:00 – 13:00 on a weekend.

4.2.5 As the proposed PFS will operate as ‘Pay-at-Pump’ and will fully automated, therefore, the land use 13/A is considered to have the most appropriate trip rate values for this planning application.

Table 4.1 : Weekday and Weekend PFS Trip Rates (06:00 – 22:00) (From TRICS)

Time	Weekday	Weekday	Weekend	Weekend
	Land Use 13A	Land Use 13B	Land Use 13A	Land Use 13B
06:00-07:00	3.94	4.65	1.88	1.39
07:00-08:00	5.68	7.77	3.53	4.62
08:00-09:00	6.02	8.45	4.91	6.35
09:00-10:00	5.65	8.10	4.82	8.21
10:00-11:00	5.67	7.48	6.21	9.44
11:00-12:00	5.40	7.44	6.18	10.64
12:00-13:00	5.90	8.56	6.18	10.98
13:00-14:00	5.68	8.30	5.79	9.38
14:00-15:00	5.73	7.99	5.00	8.68
15:00-16:00	6.33	8.21	5.24	8.77
16:00-17:00	6.46	8.58	5.15	9.70
17:00-18:00	6.45	9.59	4.68	9.58
18:00-19:00	5.96	8.78	4.77	8.90
19:00-20:00	5.04	7.46	3.62	7.36
20:00-21:00	3.87	5.16	3.00	6.08
21:00-22:00	2.67	3.90	1.97	3.89

- 4.2.6 A total of 6 pumps, 12 filling positions will be provided at the PFS at ASDA Ferring. The application of trip rates presented in Table 4.1 gives rise to the trip generation values shown in Table 4.2.

Table 4.2 : Weekday and Weekend PFS Trip Generation (06:00 – 22:00) (From TRICS)

Time	Weekday	Weekday	Weekend	Weekend
	Land Use 13A	Land Use 13B	Land Use 13A	Land Use 13B
06:00-07:00	47	56	23	17
07:00-08:00	68	93	42	55
08:00-09:00	72	101	59	76
09:00-10:00	68	97	58	98
10:00-11:00	68	90	74	113
11:00-12:00	65	89	74	128
12:00-13:00	71	103	74	132
13:00-14:00	68	100	70	113
14:00-15:00	69	96	60	104
15:00-16:00	76	99	63	105
16:00-17:00	77	103	62	116
17:00-18:00	77	115	56	115
18:00-19:00	72	105	57	107
19:00-20:00	60	90	43	88
20:00-21:00	46	62	36	73
21:00-22:00	32	47	24	47

- 4.2.7 The results in Table 4.2 show the typical trip generation that would be expected for a PFS with 6 pumps, 12 filling positions. With reference to Land Use “13/A” columns, peak trip generation occurs between 16:00 – 18:00 (77 arrivals each hour) and 10:00 – 13:00 (74 arrivals each hour) on a weekend. It is considered that the proposed PFS at this site is consistent with Land Use “13/A” rather than Land Use “13/B” and in these circumstances, we have gone on to consider trip generation characteristics under this category.

4.2.8 As discussed previously in the context of an existing stand-alone PFS at an ASDA store, it is expected that 70% of vehicles would be associated with existing shopping trips to the store; the number of “new” trips to the PFS is only expected to account for 30% of the total trips to the facility.

4.2.9 Table 4.3 shows the number of “new” trips that would be generated on the basis of the total trips shown in Table 4.2 (the values in Table 4.2 multiplied by 0.3) provides a forecast of total trip generation associated with a 6 pump PFS.

Table 4.3 : Weekday and Weekend “new” PFS Trip Generation (06:00 – 22:00) (From TRICS)

Time	Weekday	Weekday	Weekend	Weekend
	Land Use 13A	Land Use 13B	Land Use 13A	Land Use 13B
06:00-07:00	14	17	7	5
07:00-08:00	20	28	13	17
08:00-09:00	22	30	18	23
09:00-10:00	20	29	17	30
10:00-11:00	20	27	22	34
11:00-12:00	19	27	22	38
12:00-13:00	21	31	22	40
13:00-14:00	20	30	21	34
14:00-15:00	21	29	18	31
15:00-16:00	23	30	19	32
16:00-17:00	23	31	19	35
17:00-18:00	23	35	17	34
18:00-19:00	21	32	17	32
19:00-20:00	18	27	13	26
20:00-21:00	14	19	11	22
21:00-22:00	10	14	7	14

4.2.10 Assuming the pro-rata of 70% of trips to the PFS being associated with the existing ASDA store, the maximum number of additional vehicles attracted to the site from the local network would be 23 vehicles each hour in the peak period on a weekday (15:00 – 18:00), and 22 vehicles each hour during the peak period (10:00 – 13:00) on weekends.

4.2.11 However, consideration needs to be given to the fact that drivers purchase fuel when it is convenient to them, so would be unlikely to make a specific trip for that sole purpose in the busy peak periods. Therefore, an application of pass-by traffic (30% weekday and 10% weekend) needs to be considered as part of this development proposal.

4.2.12 The values presented in Table 4.4 suggest that the number of new trips that might be attracted to the proposed PFS once pass-by traffic has been deducted (30% weekday and 10% weekend) from the values in Table 4.3.

4.2.13 For the purposes of this theoretical exercise, these trips are considered to represent actual additional trips on the adjoining road network.

Table 4.4 : Weekday and Weekend PFS "new" trips on the road network (06:00 – 22:00)

Time	Weekday	Weekday	Weekend	Weekend
	Land Use 13A	Land Use 13B	Land Use 13A	Land Use 13B
06:00-07:00	10	12	6	5
07:00-08:00	14	20	11	15
08:00-09:00	15	21	16	21
09:00-10:00	14	20	16	27
10:00-11:00	14	19	20	31
11:00-12:00	14	19	20	34
12:00-13:00	15	22	20	36
13:00-14:00	14	21	19	30
14:00-15:00	14	20	16	28
15:00-16:00	16	21	17	28
16:00-17:00	16	22	17	31
17:00-18:00	16	24	15	31
18:00-19:00	15	22	15	29
19:00-20:00	13	19	12	24
20:00-21:00	10	13	10	20
21:00-22:00	7	10	6	13

- 4.2.14 On this basis, the maximum number of "additional new trips" on the road network as a result of the PFS development is likely to be 16 vehicles each hour in the weekday peak (15:00 – 18:00) and 20 vehicles each hour in the weekend peak period (10:00 – 13:00).

4.3 Development Trips

- 4.3.1 With the PFS in place, the TRICS assessment forecasts that a maximum of 20 trips (weekend peak) will be added to the entry and exit flows at the store access. To clarify, the additional trips represent peak hour values, based on the number of pumps/filling positions at the PFS. Given that ASDA Ferring is an established food store, there is a strong likelihood that a large proportion of trips to the PFS will be made by existing "pass by" trips.
- 4.3.2 It can be assumed that the distribution of additional trips would replicate the existing traffic patterns associated with the store. The maximum forecast uplift of 20 additional vehicles would be distributed from the east and west on Littlehampton Road, this distribution will dilute the overall impact of additional traffic.
- 4.3.3 The arrival and departure of any additional trips would be dispersed throughout the course of an hour, meaning that the effect of PFS trips on the operation of the access junction would be minimal. Outwith the peak hour periods there will be fewer trips associated with the PFS.

5. SUMMARY & CONCLUSIONS

- 5.1.1 SYSTRA was appointed by ASDA to prepare a Transport Statement in support of proposals to develop a six pump, twelve filling position, fully automated 'Pay-at-Pump' petrol filling station facility at its food-store at A259 Littlehampton Road, Ferring.
- 5.1.1 The development is standalone from ASDA's existing store operations and is located on land adjacent to the A259 Littlehampton Road, to the north of the store car park. As it is already part of the ASDA site, the principles of site access / egress arrangements and trip generation are already established. No material adjustment to the external site access / egress is proposed for customer traffic.
- 5.1.2 The design of the PFS balances the requirements of existing ASDA customers arriving by car / non-car based travel modes and users of the adjoining road network, with the operational and access requirements of the PFS. SYSTRA has considered the demand characteristics associated with PFS customers and the need for articulated delivery vehicles to access and manoeuvre in the facility. Swept path analysis has been undertaken using AutoTrack to determine the spatial requirements of articulated delivery vehicles.
- 5.1.3 The proposals will result in no change to the existing car parking facilities.
- 5.1.4 A TRICS assessment has been undertaken and is summarised in Section 4.2. Assuming a pro rata uplift in trip generation based on the expected pump capacity, the anticipated uplift in trip generation would be as follows (A single demand at the PFS will generate an entry and exit trip, hence a doubling of the values shown):
- 16 additional trips per hour during the weekday peak period (15:00 – 18:00)
 - 20 additional trips per hour during the weekend peak period (10:00 – 13:00)
- 5.1.5 This forecast takes into account the fact that the site is already operational and that ASDA's proposals set out to increase the efficiency of an established operation.

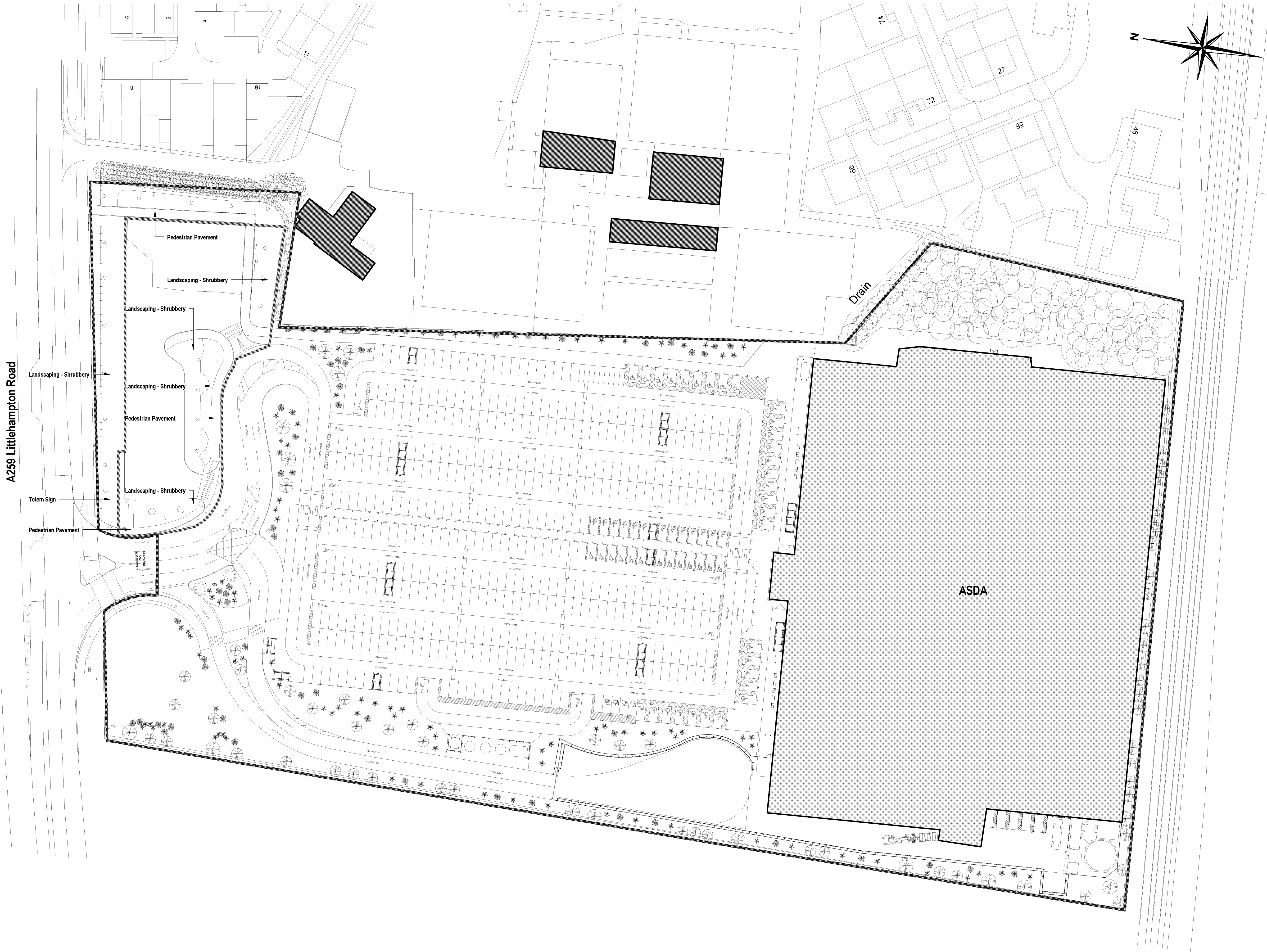
5.2 Conclusion

- 5.2.1 This Transport Statement is prepared in support of ASDA's proposals to incorporate a PFS at the existing Ferring store.
- 5.2.2 The design and location of the PFS ensures that there is stacking capacity leading into the forecourt and the swept path assessments confirm that the PFS is capable of accommodating a standard 15.2m ASDA articulated oil tanker in a safe and efficient manner.
- 5.2.3 Following a review of the proposals SYSTRA concludes that the proposed PFS can be accommodated without detriment to existing operations at ASDA Ferring, or on the adjoining road network. Consideration of the extent to which trip generation might increase following delivery of the proposals suggests that the effect of ASDA's proposals will be negligible.

A. SITE LAYOUT AND SWEEPED PATH ANALYSIS

Existing Site Plan

A259 Littlehampton Road



NOTES
All dimensions to be verified on site, and the Architect informed of any discrepancy. All drawings and specifications should be read in conjunction with the Health and Safety Plan; all conflicts should be reported to the Principal Designer.
This drawing is the copyright of C+A Design Limited. ©
DO NOT SCALE FROM THIS DRAWING

Construction staff and operatives must ensure the principle contractor has provided thorough and accurate information on all health and safety aspects relating to the designs identified on this drawing include the review of:

- Designers/contractors risk assessments
- Method statement
- Permit to work
- Construction phase health and safety plan

The designers note that the following health and safety risk relating to this drawing have not been eliminated during the design process:

ref	residual risk

B	Site revised to be automated. Jet wash bays and vacuum unit omitted.	04/05/18	JF	MRJ
A	Issue For Planning	05/12/17	JEM	MRJ
	revision	date	by	chk

CLIENT

ASDA
Save money. Live better.

C+A Design

C+A Design Ltd. 2b - 3b Hathersage Business Park, Hathersage Lane, Hathersage, S32 1DP
Tel: 01453 952220 Web: www.c-a-design.co.uk

DRAWING ISSUE

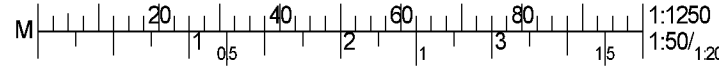
☐ Preliminary ☐ Costing ☐ Construction
☒ Planning ☐ Tender ☐ Record

date	scale @ A1	drawn by	checked by
05/12/17	1 : 500	JEM	MRJ

ASDA Ferring PFS
Littlehampton Road, Ferring, BN12 6PN

Existing Site Plan

role	originator	volume	levels	type	suitability
A	CA	S0	00	DR	S4
project number	drawing number	revision			
1731FW	200_01	B			



file reference: C:\wdr\wdr\1731FW\CA-S000-00-A-APP\A1731FW.dwg

Construction staff and operatives must ensure the principle contractor has provided thorough and accurate information on all health and safety aspects relating to the designs identified on this drawing includes the review of:

- Designers/contractors risk assessments
- Method statement
- Permit to work
- Construction phase health and safety plan

The designers note that the following health and safety risk relating to this drawing have not been eliminated during the design process:

ref	residual risk

C	Site revised to be automated. Jet wash bays and vacuum unit omitted.	04/05/18	JF	MRJ
B	Updated Planning Drawings	11/04/18	JF	ATS
A	Issue For Planning	05/12/17	JEM	MRJ
	revision	date	by	chk

ASDA
Save money. Live better.

C+A Design Ltd, 2b - 3b Hathersage Business Park, Heather Lane, Hathersage, S32 1DP
Tel: 01433 652220 Web: www.cad-ltd.co.uk

☐ Preliminary ☐ Costing ☐ Construction
☒ Planning ☐ Tender ☐ Record

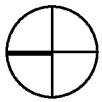
date	scale @ A1	drawn by	checked by
05/12/17	1 : 500	JEM	MRJ

Proposed Site Plan

role	originator	volume	levels	type	suitability
A	CA	S0	00	DR	S4
project number		drawing number		revision	
1731FW		200_02		C	



- Notes:**
1. Do not scale from drawing
 2. All dimension in meters unless otherwise stated



© This drawing is the property of SYSTRA Limited.
The information should only be reproduced with prior permission.



37 Manor Place,
Edinburgh,
EH3 7EB

T 0131 225 7900
F 0131 225 9229

Client

ASDA

Project

ASDA Ferring Worthing

Title

ASDA PFS Tanker (15.24m)
Swept Path Analysis

Drawn:	Checked:	Approved:
ELMM	ELMM	KLM
Original sig. size	Date	Scale
A4	15/05/18	NTS
Drawing Status:	Drawing Number	Rev.
FINAL	ATR01-TANKER	A

COUNCIL FG/10518/PL

SYSTRA provides advice on transport, to central, regional and local government, agencies, developers, operators and financiers.

A diverse group of results-oriented people, we are part of a strong team of professionals worldwide. Through client business planning, customer research and strategy development we create solutions that work for real people in the real world.

For more information visit www.systra.co.uk

SYSTRA