

SHURGARD UK LIMITED

**OLDFIELD ROAD, HAMPTON** 

## LONDON BOROUGH OF RICHMOND UPON THAMES

**TRANSPORT ASSESSMENT** 

REPORT REF. 2305220-R01

March 2024

 HEAD OFFICE: 3rd Floor, The Hallmark Building, 52-56 Leadenhall Street, London, EC3M 5JE T | 020 7680 4088

 EDINBURGH: Suite 35 4-5 Lochside Way Edinburgh EH12 9DT T | 0131 516 8111

 ESSEX: 1 - 2 Crescent Court, Billericay, Essex, CM12 9AQ T | 01277 657 677

 KENT: Suite 10, Building 40, Churchill Business Centre, Kings Hill, Kent, ME19 4YU T | 01732 752 155

 MIDLANDS: Office 3, The Garage Studios, 41-43 St Mary's Gate, Nottingham, NG1 1PU T | 0115 697 0940

 SOUTH WEST: Temple Studios, Bristol, England, BS1 6QA T | 0117 456 4994

 SUFFOLK: Suffolk Enterprise Centre, 44 Felaw Street, Ipswich, IP2 8SJ T | 01473 407 321

## Contents

# 1. INTRODUCTION12. EXISTING SITUATION33. PROPOSED DEVELOPMENT84. TRAFFIC ASSESSMENT125. SUMMARY AND CONCLUSIONS16

## **Appendices**

**Appendix A** 

**Proposed Masterplan** 

## **Drawings**

2305220-ACE-X-00-DR-C-0511

Swept Path Analysis

## Page

## **Document Control Sheet**

REV	ISSUE PURPOSE	AUTHOR	CHECKED	APPROVED	DATE
-	Draft Issue	SL	BS	DRAFT	18/03/2024
-	Final Issue	SL	BS BS	рн 🕅	21/03/2024
			$\varphi.\varphi$	$\varphi.\varphi$	

## Distribution

This report has been prepared for the exclusive use of SHURGARD UK LIMITED. It should not be reproduced in whole or in part, or relied upon by third parties, without the express written authority of Ardent Consulting Engineers.

## **1. INTRODUCTION**

#### Background

- 1.1. Ardent Consulting Engineers (ACE) has been appointed by Shurgard UK LTD to advise on the highways/transportation and infrastructure planning/engineering aspects of the proposals for a new Shurgard self-storage facility at 74 Oldfield Road, Hampton, London Borough of Richmond upon Thames (LBRUT).
- 1.2. This Transport Assessment (TA) has been prepared to accompany a planning application submission to LBRUT as both planning and highway authority.
- 1.3. The proposed development description is as follows:

"Demolition and redevelopment of the site to provide self-storage unit (Use Class B8) and business centre (Use Class E) with associated car and cycle parking, and landscaping."

- 1.4. The planning application seeks to deliver all non-mezzanine floorspace within the proposed warehouse extension. Built floorspace will comprise 5,434sqm GIA. However, a maximum of 8,084sqm GIA can be accommodated within the warehouse building through the use of demountable mezzanine floors.
- 1.5. In accordance with Section 55(2)(a) of the Town and Country Planning Act 1990, planning permission is not required for the carrying out of maintenance, improvement or other alteration to a building where works affect only the interior of the building and do not materially affect the external appearance of the building; this includes mezzanine floors for non-retail use. As such, additional floors can be installed at a later date through the use of demountable mezzanines, without requiring planning permission.
- 1.6. Therefore, this report assesses the maximum level of floorspace that can be accommodated within the building.
- 1.7. This assessment has been prepared in-line with the National Planning Policy Framework (NPPF) and in-line with guidance from LBRUT policy documents.
- 1.8. Following this introduction, this report is structured as follows: -
  - **Section 2.0** provides a review of the accessibility of the site by all relevant modes of transport;

# OLDFIELD ROAD, HAMPTON

#### TRANSPORT ASSESSMENT

- **Section 3.0** outlines the proposed development in terms of built form, access, parking and servicing;
- **Section 4.0** sets out the traffic assessment of the proposed development;
- **Section 5.0** provides a summary and concludes the report.

## 2. EXISTING SITUATION

#### Introduction

2.1. This section of the report provides a review of the accessibility of the proposal site in transport terms.

#### Site Location

- 2.2. The site is located in a mixed-use area, with residential and retail uses in the immediate vicinity with more dominant residential uses beyond the railway line (to the north) and Oldfield Road (to the south).
- 2.3. The site is bound to the north by the Shepperton branch railway line, to the east by a supermarket and associated car park, to the south by Oldfield Road, and to the west by a residential apartment building fronting Oldfield Road.



2.4. **Plate 2.1** shows the site location in context of the surroundings.

Plate 2.1: Site Location

#### Existing Use

- 2.5. The site comprises an existing distribution centre (use class B8) with approximately1,629 sqm of floorspace and an on-site car park.
- 2.6. Vehicular access is provided via a singular point of access from Oldfield Road at the southeastern corner of the site. Pedestrian and cycle access can also be gained from this point, with an additional pedestrian access sited approximately 20 metres to the west of the vehicle access along Oldfield Road.

#### Local Highway Network

- 2.7. Oldfield Road is a single carriageway road subject to a 20mph speed limit. There are footways provided on both sides of the carriageway, with dropped kerb crossings provided on the approach the most junctions. The road is fronted mostly by residential dwellings on the southern side, with a mixture of dwellings and commercial uses set back from the main carriageway on the northern side.
- 2.8. Further south the A308 Upper Sunbury Road is a single carriageway local distributor road providing access to the M3 (to the west) and the A309 Hampton Court Road (to the east). The road is subject to a 30mph speed limit in the vicinity of the site and there are footways provided along both sides of the carriageway.

#### Site Accessibility

#### Pedestrian & Cycle Access

- 2.9. Existing pedestrian and cycle access to the site is provided from Oldfield Road, along the site's southern boundary. Oldfield Road benefits from footways along both sides of the carriageway, as well as extensive street lighting.
- 2.10. The local footway provision is excellent with wide footways in good condition. The local pedestrian network provides convenient access to nearby bus stops and the local facilities within walking distance of the site.
- 2.11. A number of cycle routes are provided in the vicinity of the site as shown in **Plate**2.2 below.



Plate 2.2: Local Cycle Routes (Source: OpenCycleMap.org)

2.12. Considering the presence of footways and cycle routes, the site is considered accessible on foot or by cycle.

#### **Public Transport**

#### **PTAL Mapping**

2.13. A Public Transport Accessibility Level (PTAL) assessment has been conducted for the proposal site, using the TfL WebCat tool. A plan showing the PTAL map of the site and surrounding areas is provided at **Plate 2.3** below.



Plate 2.3: Extract from PTAL Map (Source: TfL WebCAT)

2.14. The extract above indicates the site has a PTAL score of 2 in the current and future year scenario. The following sections will provide some more detail on the existing public transport infrastructure in the surrounding area.

#### Bus

- 2.15. The closest bus stops to the site are the 'Hampton Station' stops located along Station Road. The westbound stop is located approximately 220m to the east of the site, with the eastbound stop situated approximately 50m further east along Station Road. Both bus stops are within a 3-4 minute walk of the site.
- 2.16. The above stops are served by routes 111 and 216 which provide frequent connections to key local destinations such as Hampton, Kingston, Hounslow, Staines and Sunbury, as well as to Heathrow Airport.

#### Rail

2.17. The nearest railway station to the site is Hampton, located approximately 300m (4minute walk) to the east of the site. The station and all trains serving it are operated by South Western Railway. 2.18. Weekday services are generally two per hour to Waterloo (via Kingston, Wimbledon and Clapham Junction) and two per hour southbound to Shepperton. There are additional services to Waterloo provided during morning and evening rush-hour periods.

#### Highway Safety

2.19. A review of the most recent 5-year personal injury collision data has been undertaken using Crashmap.co.uk. An extract of the map is included in **Plate 2.4** below, and it can be that there were no incidents resulting in personal injury along the site frontage or at the existing access point over the most recent 5-year period.



Plate 2.4: Collision Data in the Vicinity of the Site (Source: CrashMap.co.uk)

2.20. The personal injury collision record does not indicate a significant existing safety concern in the vicinity of the site.

## 3. PROPOSED DEVELOPMENT

#### Introduction

3.1. This section of the report provides an overview of the proposed development, in terms of built form, access arrangements, servicing and parking provision. The proposed development description is as follows:

"Demolition and redevelopment of the site to provide self-storage unit (Use Class B8) and business centre (Use Class E) with associated car and cycle parking, and landscaping."

3.2. The proposed ground floor layout plan is provided at **Appendix A**.

#### Access Arrangements

- 3.3. It is proposed to consolidate vehicular access off Oldfield Road by narrowing the existing vehicular access at the southeastern corner of the site and converting it to a one-way (access only) junction. To facilitate this change, it is proposed to provide an egress junction at the southwestern corner of the site. This is presented within **ACE Drawing 2305220-ACE-X-00-DR-C-0511**.
- 3.4. This approach is considered an improvement on the existing situation as it reduces the potential for conflicting vehicle movements, not only for vehicles accessing/egressing the proposed development, but also for those using the adjacent supermarket access junction. This is further improved by the fact there will be fewer movements utilising the access overall, as detailed in **Section 4.0** below.
- 3.5. Pedestrian and cycle access will also be via the upgraded vehicular access to the site.

#### Servicing

3.6. All servicing is proposed to be undertaken on-site, off the public highway. Swept path analysis of a refuse vehicle (the largest vehicle expected to access the site) is shown on **ACE Drawing 2305220-ACE-X-00-DR-C-0511** and demonstrates that access can be easily achieved. The results of the swept path analysis demonstrate that service vehicles are able to enter and exit the site in forward gear using the proposed one-way system on-site.

3.7. Based on operational experience of other comparable sites it is envisaged that the largest vehicle that will require regular access to the site would be a 3.5T panel van though, as outlined above, the site has been designed to accommodate occasional larger vehicles including a refuse vehicle/7.5T box van.

#### **Parking Provision**

Car Parking

3.8. The parking standards applicable to the proposed development are found in the adopted LBRUT Local Plan (July 2018) and the London Plan 2021. Policy LP 45 (Parking Standards and Servicing) of the adopted Local Plan requires new development to:

'... provide for car, cycle, 2 wheel and, where applicable, lorry parking and electric vehicle charging points, in accordance with the standards set out in Appendix 3.'

3.9. **Plate 3.1** below is an extract from Appendix 3 of the adopted Local Plan, looking specifically at the requirements for Use Class B8, as proposed.

LAND USE	PARKING STANDARD	CYCLE PARKING STANDARD
USE CLASS B8	As per London Plan. Servicing to be provided off street	As per London Plan

Plate 3.1: LBRUT Local Plan Car Parking Standards

3.10. Table 10.4 of the London Plan 2021 provides maximum parking standards for office uses (also applicable to B2 / B8 developments). Table 10.4 is replicated in **Plate 3.2** below.

Location	Maximum parking provision*				
Central Activities Zone and inner London	Car free^				
Outer London Opportunity Areas	Up to 1 space per 600 sq.m. gross internal area (GIA)				
Outer London	Up to 1 space per 100 sq.m. (GIA)				
Outer London locations identified through a DPD where more generous standards apply	Up to 1 space per 50 sq.m. (GIA)				
* Where Development Plans specify lower local maximum standards for general or operational parking, these should be followed					
<ul> <li>With the exception of disabled persons particular disabled persons parking</li> </ul>	rking, see Policy T6 .5 Non-residential				

Plate 3.2: London Plan 2021 Maximum Car Parking Standards

- 3.11. Considering that the site lies within Outer London, the standards would allow a maximum of 88 car parking spaces ( $8,084 \div 100 = 81$ ).
- 3.12. Policy T6.2(C) of the London Plan 2021 states that:

'B8 (storage or distribution) employment uses should have regard to these office parking standards and take account of the significantly lower employment density in such developments. A degree of flexibility may also be applied to reflect differing trip-generating characteristics.'

- 3.13. The proposed development provides a total of ten on-site vehicle parking spaces of which one will be reserved for disabled users. Two spaces will provide active electric vehicle charging infrastructure with passive infrastructure provided for the remaining bays.
- 3.14. The level of on-site parking provision is based on the anticipated operational needs of the proposed development, based upon historical demand of other comparable Shurgard self-storage sites. As such the proposed site layout is considered appropriate to the needs of the proposed use. As detailed in **Section 4.0**, the vehicular attraction of the site is extremely low, with vehicular parking requirement equally low.

#### **Cycle Parking**

- 3.15. As outlined above, the adopted LBRUT cycle parking standards require the minimum levels set out within the London Plan 2021 to be applied.
- 3.16. Table 10.2 of the London Plan 2021 provides minimum levels of cycle parking for B2-B8 developments. An extract of Table 10.2 showing the standards required at the proposed development is provided in **Plate 3.3** below.

Use Clas	55	Long-stay (e.g. for resi- dents or employees)	Short-stay (e.g. for visi- tors or customers)
B2-B8	general industrial, storage or distribution	1 space per 500 sqm (GEA)	1 space per 1000 sqm (GEA)

Plate 3.3: London Plan Minimum B2/B8 Cycle Parking Standards

3.17. Furthermore, cycle parking for the business centre use has been based on B1 business office parking standards. An extract from Table 10.2 is provided in Plate 3.4 below.

## 2305220-R01 March 2024

B1	business offices	<ul> <li>areas with higher cycle parking standards (see Figure 10.3): 1 space per 75 sqm</li> <li>rest of London: 1 space per 150 sqm (GEA)</li> </ul>	<ul> <li>first 5,000 sqm: 1 space per 500 sqm</li> <li>thereafter: 1 space per 5,000 sqm (GEA)</li> </ul>
	light industry and research and development	1 space per 250 sqm (GEA)	1 space per 1000 sqm (GEA)

Plate 3.4: London Plan Minimum B1 Cycle Parking Standards

- 3.18. The proposed development provides a total of 31 cycle spaces (21 long-stay and 10 short-stay), in accordance with the minimum LBRUT/London Plan standards.
- 3.19. Cycle parking within the site will be provided at ground floor level and has been designed in accordance with Chapter 8 (Cycle Parking) of TfL's 'London Cycling Design Standards' (September 2016). Furthermore, of the spaces provided; 2 cargo bike parking spaces are proposed to encourage the sustainable transport of goods.

## 4. TRAFFIC ASSESSMENT

#### Introduction

- 4.1. This section examines the likely change in trip movements between the existing land use and the proposed development, and the overall impact on the surrounding highway and public transport networks.
- 4.2. Weekday network peak hour periods of 0800 0900 and 1700 1800 typically represent the periods when new development could impact on the operation of the local road network. Considering the typical network peak hour for the existing and proposed uses ensures a robust net change in trip attraction assessment.

#### **Trip Attraction – Existing Use**

- 4.3. The site is currently occupied by a distribution centre (use class B8) comprising approximately 1,629 sqm of floor space. It is considered that the most representative example within the TRICS database which accurately estimates the trip rates associated with the land use is 'Employment Warehousing (commercial)', and hence trip rates for this use have been derived.
- 4.4. A total of two sites have been selected, and the AM and PM peak network period trips are summarised in **Table 4.1** below. It should be noted that average trip rates have been calculated as there is insufficient data to use the 85th percentile.

	Weekday AM Peak Period (08:00-09:00) – Two-Way Trips							
	Cars	LGV	OGV	PSV	M/B	Peds	Cycle	
Trip Rate (per 100sqm)	0.482	0.095	0.104	0.000	0.005	0.023	0.018	
Trip Generation (1,629sqm – B8)	8	2	2	0	0	0	0	
	١	Weekday PM	l Peak Peri	od (17:00-1	.8:00) – Tw	o-Way Trip	s	
	Cars	LGV	OGV	PSV	M/B	Peds	Cycle	
Trip Rate (per 100sqm)	0.605	0.091	0.077	0.023	0.023	0.032	0.032	
Trip Generation (1.629sgm - B8)	10	1	1	0	0	1	1	

**Table 4.1:** Existing Site Trip Attraction and Resultant Trips

4.5. As demonstrated in **Table 4.1** above, the existing site generates 12 vehicular movements (two-way) in the AM peak, and 12 vehicular movements (two-way) in the PM peak.

#### **Trip Attraction – Proposed Development**

#### Self-Storage

- 4.6. The trip attraction for the self-storage element of the proposed use has been derived from traffic survey data from a comparable site occupied by Shurgard in North Kensington.
- 4.7. Shurgard sites are typically located in similar positions relative to local populations, hence the use of an existing site is a reasonable approximation of the proposed development.
- 4.8. Trip rates have been derived from the survey data by factoring the observed trips against the 7,820 sqm GFA of the surveyed Kensington store, to provide multi-modal trip rates per 100 sqm.
- 4.9. The trip rates shown in **Table 4.2** have been factored against the potential 7,914sqm of B8 floorspace to forecast the number of trips associated with the proposed development.

	Weekday AM Peak Period (08:00-09:00) – Two-Way Trips							
	Cars	LGV	OGV	PSV	M/B	Peds	Cycle	
Trip Rate (per 100sqm)	0.064	0.051	0.000	0.000	0.000	0.115	0.000	
Trip Generation (7,914sqm – B8)	5	4	0	0	0	9	0	
		Weekday Pl	M Peak Peri	od 17:00-1	8:00) – Tw	o-Way Trips	5	
	Cars	Weekday Pl	M Peak Peri OGV	od 17:00-1 PSV	8:00) – Tw M/B	o-Way Trips Peds	s Cycle	
Trip Rate (per 100sqm)	<b>Cars</b> 0.064	Weekday Pi LGV 0.026	<b>9 Peak Peri</b> OGV 0.000	od 17:00-1 PSV 0.000	<b>8:00) – Тw</b> М/В 0.000	o-Way Trips Peds 0.141	<b>Cycle</b> 0.000	

 Table 4.2: Proposed Self-Storage Use Trip Attraction and Resultant Trips

#### Office

4.10. The category 'Employment – Office' from the TRICS database has been utilised to derive the trip rates for the proposed business centre element of the scheme. A total of two sites have been selected, and the AM and PM peak network period trips are summarised in **Table 4.3** below. It should be noted that average trip rates have been calculated as there is insufficient data to use the 85th percentile.

	Weekday AM Peak Period (08:00-09:00) – Two-Way Trips						
	Cars	LGV	OGV	PSV	M/B	Peds	Cycle
Trip Rate (per 100sqm)	0.614	0.021	0.004	0.032	0.043	0.101	0.109
Trip Generation (170sgm – E(g)(i))	1	0	0	0	0	0	0
( , (),(),(),(),(),(),(),(),(),(),(),(),(),(							
		Weekday Pl	M Peak Peri	od 17:00-1	8:00) – Two	o-Way Trips	
	Cars	Weekday Pl LGV	M Peak Peri OGV	od 17:00-1 PSV	8:00) – Two M/B	o-Way Trips Peds	Cycle
Trip Rate (per 100sqm)	<b>Cars</b> 0.702	Weekday Pl LGV 0.009	M Peak Peri OGV 0.000	od 17:00-1 PSV 0.033	<b>8:00) – Т</b> wo М/В 0.038	o-Way Trips Peds 0.146	Cycle

Table 4.3: Proposed Office Use Trip Attraction and Resultant Trips

Trip Attraction – Proposed Development (Combined)

4.11. **Table 4.4** below shows the combined trip rates for the proposed uses on-site.

	Cars	LGV	OGV	PSV	M/B	Peds	Cycle
AM Peak (08:00-09:00)	6	4	0	0	0	9	0
PM Peak (17:00-18:00)	6	2	0	0	0	12	0

Table 4.4: Proposed Uses Combined Trip Attraction

- 4.12. It should be noted that the above calculations will include some multi-modal trips involving public transport into the pedestrian category, with some visitors to the site completing the last leg of their otherwise public transport-based journey on foot.
- 4.13. It can be seen from the table above that the proposed development is expected to attract up to 10 vehicle movements (two-way) in the AM peak period, with up to 8 vehicle movements (two-way) in the PM peak period.

#### **Net Change in Vehicular Trip Attraction**

4.14. **Table 4.5** below details the net change in vehicular trips as a result of the development (two-way trips).

Two-Way Vehicle Movements	AM Peak Period (08:00-09:00)	PM Peak Period (17:00-18:00)	Daily (07:00-19:00)
Existing Use	14	12	106
Proposed Development	10	8	71
Net Impact	-4	-4	-35

Table 4.5: Net Change in Vehicular Trip Attraction

- 4.15. It can be seen from the table above that the proposals result in a net decrease of four (two-way) vehicle movements in both the AM and PM peak periods. There is also a decrease in vehicle movements across the day and it is therefore considered that the proposals will have no adverse impact on the free-flow and safety of the local highway network.
- 4.16. Given the nature of the site, the impact on bus, train, cycle and pedestrian infrastructure is also likely to be negligible.

## 5. SUMMARY AND CONCLUSIONS

#### Summary

- 5.1. Ardent Consulting Engineers has been appointed by Shurgard UK Limited to advise on the highways/transportation and infrastructure planning/engineering aspects of the proposals for a new Shurgard self-storage facility (with some E(g)(i) office floorspace) at 74 Oldfield Road, Hampton, in the London Borough of Richmond upon Thames.
- 5.2. The site is within walking distance of a range of facilities and residential population, as well as numerous public transport services. Whilst many site users will need to travel to/from the site using a vehicle owing to the nature of the site, a substantial number of visitors, including staff, will be able to travel to the site via non-car modes of transport.
- 5.3. The layout of the proposed development accords with local car and cycle parking standards.
- 5.4. A trip assessment of the site, based on data from the existing Shurgard site shows that the potential trip attraction of the proposed development will result in a net decrease in vehicle trips when compared to the existing use on-site.

#### Conclusions

5.5. The results of the above highlight that the proposed development will have a negligible impact on the free-flow and safety of the immediate highway network, and that the development can be accommodated within the existing highway and public transport networks, both in highway safety and capacity terms.

Drawings



Appendix A

