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FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK TRANSPORT ASSESSMENT

TRANSPORT ASSESSMENT

FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK

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CONTENTS

1.	INTRODUCTION AND BACKGROUND	1
1.1	Introduction	1
1.2	Background	1
1.3	Consultation	1
1.4	Purpose of Report	2
1.5	Limitations	2
2.	POLICY REVIEW	2
2.1	National Planning Policy Framework (February 2019)	2
2.2	West Sussex Transport Plan 2011-2026 (LTP3)	3
2.3	West Sussex Walking and Cycling Strategy 2016-2026	3
2.4	West Sussex Waste Local Plan 2014 (WSWLP)	4
2.5	Arun District Council Parking Standards Supplementary Planning Document	5
3.	BASELINE CONDITIONS	6
3.1	Site Location	6
3.2	Local Highway Network	7
3.3	Existing Site Operation	8
3.4	Parking	8
3.5	Sustainable Accessibility	9
3.6	Accident Analysis	11
3.7	Baseline Traffic Flows	13
4.	PROPOSED DEVELOPMENT	15
4.1	Introduction	15
4.2	Parking	15
4.3	Cycle and Motorbike Parking Provision	16
4.4	Access	16
4.5	Operating Hours	17
5.	DEVELOPMENT TRIP GENERATION	17
5.1	Construction Phase Trips	18
5.2	Operational Phase Trips	21
6.	IMPACT ON THE LOCAL NETWORK	25
6.1	Methodology	25
6.2	Junction Assessments	29
6.3	Annual Average Daily Traffic	33
7.	POLICY COMPLIANCE	34
8.	SUMMARY AND CONCLUSION	36

TABLES

Table 2. 1: Vehicular and Cycle Parking Provision in Non-residential Developments	6
Table 2. 2: Electric Vehicle Points, Minimum Requirements	6
Table 3. 1: Rail Service Information	11
Table 3. 2: Summary of PIA Data within Study Area	12
Table 4. 1: Car Parking Provision	15
Table 5.1: ERF Construction Staff Vehicles Trip Profile	18
Table 5.2: ERF Operational HGV Trip Profile (During Construction Phase)	19

Table 5.3: WSTF Operational Staff Vehicles Trip Profile (During Construction Phase)	19
Table 5.4: WSTF Operational HGV Trip Profile (during construction phase)	20
Table 5.5: Total Construction Phase Trips	21
Table 5.6: ERF Operational Staff Vehicles Trip Profile	21
Table 5.7: ERF Operational HGVs Trip Profile	23
Table 5.8: WSTF Operational Staff Vehicles Trip Profile	23
Table 5.9: WSTF Operational HGVs Trip Profile	24
Table 5.10: Total Operational Phase Trips	25
Table 6.1: Car Driver Growth Factors for Arun Area	26
Table 6.2: RTF-18 HGV Growth Factors	27
Table 6.3: Summary Schedule of Assessment Scenarios	28
Table 6.4: Definition of Assessment Scenarios by Junction	29
Table 6.5: Site Access/Ford Road Junction – 2025 Without and With Construction PICADY Results (AM and PM Peak)	30
Table 6.6: Site Access/Ford Road Junction – 2026 Without and With Development PICADY Results (AM and PM Peak)	31
Table 6.7: Site Access/Ford Road Junction – 2025 With Construction + FMCB PICADY Results (AM and PM Peak)	31
Table 6.8: Church Lane/A259 Roundabout - 2025 With Construction PICADY Results (AM and PM Peak)	33
Table 7.1: Policy Compliance Schedule	34

FIGURES

Figure 3. 1: Site Location	7
Figure 3. 2: Location of Public Rights of Way	10
Figure 3. 3: Cycle Network	11
Figure 3. 4: Locations of Accidents	12
Figure 3. 5: Access to Ford CTP via Rollaston Park, Active at the Time of the 2018 Traffic Surveys	14
Figure 3. 6: Access to Ford CTP via SLR, Consented in August 2019 and Operational Since January 2020	14

APPENDICES

Appendix 1

TA Scoping & WSCC Response

Appendix 2

WSCC Advisory Lorry Routes Map

Appendix 3

Stage 1 Road Safety Audit

Appendix 4

Accident Data

Appendix 5

Site Layout Plan

Appendix 6

Construction Phase Daily Trip Generation

Appendix 7

Construction and Operational Hourly Trip Generation Profiles

Appendix 8

Committed Developments Schedule

Appendix 9

Committed Development Trip Distributions

Appendix 10

Ford Market and Car Boot Data

Appendix 11

Traffic Flow Trip Distribution Diagrams

Appendix 12

Junction Turning Matrices

Appendix 13

Junction Modelling Outputs

Appendix 14

AADT and AAWT Data

1. INTRODUCTION AND BACKGROUND

1.1 Introduction

This Transport Assessment has been prepared by Ramboll to support a full planning application for the proposed Ford Energy Recovery Facility (ERF) and Waste Sorting and Transfer Facility (WSTF) at the Ford Circular Technology Park (CTP) (therein referred to as the 'Ford ERF and WSTF'). The Ford ERF and WSTF are proposed by Ford EfW Limited, a joint venture between Grundon Waste Management Limited (Grundon) and Viridor Energy Limited (Viridor) (therein referred to as 'the applicants').

The application site is located at the Ford Circular Technology Park (CTP) (the former Tarmac blockworks site) which is situated to the southwest of the village of Ford. The 6.72 ha site is partially used for the existing Waste Transfer Station (WTS) operation and is partially vacant. The existing WTS building is located towards the centre of the site and portacabins, parking and containers associated with this operation are situated to the west of the WTS. There are two vacant former hangar buildings towards the north of the site and a large area of hardstanding is situated towards the south and east of the site.

1.2 Background

There are two previous planning permissions for the site. The first permission was granted in 2013 for a new Waste Treatment Facility (WTF) which is currently active on site. The second planning permission was granted in 2018 for a new link road (referred to as the Southern Link Road or the SLR) that links the application site to an internal junction with a link to Ford Road and access roads to the Southern Water and Viridor sites to the south of the site. All are collectively referred to as the site access road.

It is noted that the planning permission for the SLR (WSCC/027/18/F) imposes a HGV capacity cap of up to 240 HGV movements to and from the application site on the SLR per day (120 HGVs in and 120 HGVs out) between 06:00 and 20:00 (Monday to Friday); and up to 120 HGV movements to and from site per day (60 HGVs in + 60 HGVs out) between 08:00 and 18:00 on Saturday.

1.3 Consultation

On 30 January 2020, Ramboll sent a scoping checklist to West Sussex County Council (WSCC) to seek early engagement with the local highway authority and to agree the proposed scope of the transport work.

The scope was agreed with Stephen Gee (Highways Development Control, WSCC) who responded to the scoping checklist email on 10 March 2020. Stephen's reply confirmed the scope and that a Transport Statement (TS) would be required. A copy of the WSCC response can be found in Appendix 1.

The scope then subsequently expanded to become this Transport Assessment (TA) in response to the WSCC Environmental Impact Assessment (EIA) Scoping Opinion response from WSCC (10 March 2020). The main change in scope was to consider traffic impact with respect to cumulative development in the local area, in line with the Environmental Statement.

A further consultation response from WSCC Highways in relation to the previous TA (Ref WSC/036/20) for the proposed ERF and WSTF was received on 11 August 2020 and this report reflects the response.

1.4 Purpose of Report

As agreed with WSCC, the purpose of the document is to support the planning application for the Ford ERF and WSTF and associated ancillary buildings. This TA will contain the following elements:

- Chapter 1 Introduction (this chapter);
- Chapter 2 Policy Review – A review of national, regional and local development and transport planning policies;
- Chapter 3 Baseline Conditions – A review of baseline transport conditions;
- Chapter 4 Proposed Development – A description of the development proposals;
- Chapter 5 Development Trip Generation – Calculation of the estimated operational and construction trip generation;
- Chapter 6 Impact on the Local Network – Assessment of the impact of the proposal on the operation of the local road network;
- Chapter 7 Policy Compliance – A review of how the proposed development complies with local and national policies: and
- Chapter 8 Summary and Conclusion.

1.5 Limitations

This report has been prepared for the applicants and shall not be relied upon by any third party unless that party has been granted a contractual right to rely on this report for the purpose for which it was prepared. The findings and opinions in the report are based upon information derived from a variety of information sources. Ramboll believe these information sources to be reliable.

This report has been prepared on the basis of the proposed end land use defined by the applicants. If this proposed end land use is altered or changed then it will be necessary to review the findings of this report.

It should be noted that some of the aspects considered in this study are subject to change with time. Therefore, if the development is delayed or postponed for a significant period then it should be reviewed to confirm that no changes have taken place, either at the application site or within relevant legislation.

2. POLICY REVIEW

Planning applications in WSCC are currently determined with reference to the following policies:

- National Planning Policy Framework (February 2019);
- West Sussex Transport Plan 2011-26 (LTP3);
- The West Sussex Walking and Cycling Strategy 2016-2026;
- West Sussex Waste Local Plan 2014; and
- Arun District Council Parking Standards Supplementary Parking Document.

2.1 National Planning Policy Framework (February 2019)

At the national level, the key relevant policy consideration is the National Planning Policy Framework (NPPF)¹, which was updated in February 2019. It sets out the Government's planning policies for England and how these are expected to be applied. The NPPF constitutes guidance for local planning authorities and decision-makers both in drawing up plans and as a material consideration in determining applications.

¹ https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf

Within the NPPF, it details (at Paragraph 111) that all developments that generate significant amounts of movement should be required to provide a Travel Plan, and the application should be supported by a Transport Statement or Transport Assessment so that the likely impacts of the proposal can be assessed.

Paragraph 106 states "*Maximum parking standards for residential and non-residential development should only be set where there is clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport.*"

2.2 West Sussex Transport Plan 2011-2026 (LTP3)

The West Sussex Transport Plan² (WSTP) LTP3 is WSCC's main plan for transport in West Sussex and sets out the strategies and policies for transport in the authority area. It has four overriding strategies:

- Promoting economic growth;
- Tackling climate change;
- Providing access to services, employment and housing; and,
- Improving safety, security and health.

Under Section 1.4.9 of the plan, the LTP3 sets out WSCC's approach for freight movements. It recognises that the efficient and safe movement of freight is vital to the success and growth of the West Sussex economy and to help achieve this, WSCC will maintain and promote a lorry route network for the main lorry movements in the county.

The A259 is identified as a strategic lorry route on the Council's Advisory Lorry Routes map (Appendix 2).

2.3 West Sussex Walking and Cycling Strategy 2016-2026

The West Sussex Walking and Cycling Strategy³ (WSWCS) is designed to complement the Government's emerging Cycling and Walking Investment Strategy and sets out WSCC's aims and objectives for walking and cycling together with their priorities for investment in infrastructure improvements.

As stated in Section 3.1 of the Strategy, the key design principles that will apply to new infrastructure are:

- *"Cycling and walking are recognised as a key part of the transport mix;*
- *All new (development) and improvement / maintenance schemes will consider, and wherever possible prioritise, the needs of cyclists and walkers; and*
- *The differing needs of users will be recognised in the design of routes and those needs will, wherever possible, be incorporated e.g. people with pushchairs, equestrians, etc."*

Infrastructure improvements will reflect Government and other best practice guidance (e.g. Design Manual for Roads and Bridges, Manual for Streets etc.) and are considered in the following way:

- Segregated inter-community routes that connect places and are designed primarily for utility journeys e.g. commuting and accessing facilities;

² https://www.westsussex.gov.uk/media/3042/west_sussex_transport_plan_2011-2026_low_res.pdf

³ https://www.westsussex.gov.uk/media/9584/walking_cycling_strategy.pdf

- Off road and / or less busy inter-community routes that enable access to and through the countryside and are designed primarily for leisure;
- Routes and facilities in built up areas which are designed primarily to:
 - Re-allocate road space and improve safety at junctions on key distributor roads and public transport hubs;
 - Manage traffic speeds (where appropriate with 20 mph limits), through traffic and safety at junctions in residential streets;
 - Create safer links to encourage sustainable journeys in particular travel to and from schools, employment sites, leisure destinations and transport hubs; and
 - Encourage use of public transport (e.g. providing cycle parking).

2.4 West Sussex Waste Local Plan 2014 (WSWLP)

The West Sussex Waste Local Plan⁴ (WSWLP), which covers both WSCC and South Downs National Park, covers the period to 2031 and is the most up-to-date statement of the Authorities' land-use planning policy for waste.

Policy W10: Strategic Waste Site Allocations, allocates the Ford Airfield site as being acceptable in principle for the development of proposals for the transfer, recycling and / or treatment of waste of up to 250,000 tonnes per annum.

As stated in Paragraph 7.3.9 the key Transport development principles for the Ford site are:

- Assessment of the possible closure of the existing access north of Rodney Crescent and the use of an alternative access to the site from Ford Road;
- Assessment of impact of additional HGV movements on highway capacity and road safety, including at the Church Lane / A259 junction and possible mitigation required; and
- A routing agreement is required to ensure vehicles enter and exit via Ford Road to the south, and not to or from the A27 to the north. Access via Rollaston Park/B2233 for HGVs should also be prevented.

The strategic objective recognises that where transport by rail and water is not possible, facilities should be located as close as possible to the lorry route network to minimise the impact of road transport in local communities and rural areas. This is repeated in Policy W3 on the location of built waste management facilities.

Policy W18: Transport, states that proposals for waste development will be permitted provided that:

- *“Where practicable and viable, the proposal makes use of rail or water for the transportation of materials to and from the site;*
- *Transport links are adequate to serve the development or can be improved to an appropriate standard without an unacceptable impact on amenity, character, or the environment; and*
- *Where the need for road transport can be demonstrated:*
 - *materials are capable of being transported using the Lorry Route Network with minimal use of local roads, unless special justification can be shown;*
 - *vehicle movements associated with the development will not have an unacceptable impact on the capacity of the highway network;*
 - *there is safe and adequate means of access to the highway network and vehicle movements associated with the development will not have an adverse impact on the safety of all road users;*

⁴ https://www.westsussex.gov.uk/media/3241/waste_local_plan_april2014.pdf

- *satisfactory provision is made for vehicle turning and parking, manoeuvring, loading, and, where appropriate, wheel cleaning facilities; and*
- *vehicle movements are minimised by the optimal use of the vehicle fleet.”*

With regards to the level of car and other parking, it should be sufficient to prevent environmental or safety problems and not exceed agreed maximum standards other than in exceptional circumstances. Convenient, attractive, and safe cycle and motorcycle parking and parking for those with impaired mobility should be provided to agreed minimum standards.

2.5 Arun District Council Parking Standards Supplementary Planning Document

The Arun District Council Parking Standards Supplementary Parking Document⁵ (SPD) January 2020 was officially adopted on the 15th January 2020 and sets out the quantum of car parking, cycle parking and electric vehicle charging points expected to be provided within new developments. The SPD states:

“Parking for non-residential uses needs to consider the accessibility of the site, the likely demand for parking and the viability of the site. In determining the amount of parking that should be provided at non-residential developments, developers should seek to balance operational needs, space requirements, efficient use of land and cost attributed to providing parking and where relevant, attracting/ retaining staff.”

“Businesses are obliged to minimise their effect on the environment, and they should promote sustainable travel behaviour by encouraging employees to travel by non-car modes and reducing the number of single occupancy car journeys.”

“It is the responsibility of the developer to provide evidence that adequate facilities are provided on site for the proposed use, including cycle parking, changing and storage facilities. Due regard should be paid to unique characteristics of each land use. This may include providing details of the proposed operation of the site once in use such as whether the site will need to store vehicles not in use or on layover periods, the frequency of vehicles visiting the site for deliveries or the type and size of vehicles using the site.

In addition, the following should be taken into account:

- *The volume of staff/visitor parking should be demonstrated through survey or business data to ascertain the peak parking periods and demand;*
- *The geographical location of the site along with the levels of accessibility for non-car mode users; and*
- *Local mode share data, baseline or forecast mode shares detailed in supporting travel plans.”*

Table 2.1 sets out the overall vehicular and cycle parking standards for non-residential development land uses. Whilst the requirements are based on maximum standards for car parking and minimum cycle parking standards in 2003, they should now be used as a guide for developers and justified on the above criteria through a site-specific assessment.

⁵ <https://www.arun.gov.uk/download.cfm?doc=docm93jjjm4n14832.pdf&ver=15210>

Table 2. 1: Vehicular and Cycle Parking Provision in Non-residential Developments

Use Class	Vehicular	Cycle
B2 General Industrial	1 space per 40 sqm	One space per 200 sqm for staff and one space per 500 sqm for visitors
B8 Storage	1 space per 100 sqm	One space per 500 sqm for staff and one space per 1000 sqm for visitors

It is also noted that WSCC 'Guidance on Parking at New Developments' (September 2020)⁶ also supports the notion that such parking standards "should only be used as an initial guide for developers, who should undertake a site-specific assessment and seek to balance operational needs, space requirements, efficient use of land and cost attributed to providing parking and where relevant, attracting/retaining staff".

With regards to the provision of electric vehicle charging points, the Government's 'Road to Zero Strategy' sets out an ambition for at least 50% and as many as 70% of new car sales to be ultra-low emission by 2030 and it is important that developers consider the likely demand for EV charging facilities within new developments, and how this is likely to change over time.

Table 2.2 presents the minimum requirements for electric vehicle charging points for new developments in Arun District Council.

Table 2. 2: Electric Vehicle Points, Minimum Requirements

Year	% of Parking Spaces with Active EV Charging Points
2018	20
2023	30
2028	50
2033	100

In terms of disabled parking provision, it should be provided at a minimum of 5% of the total number of parking spaces being provided on the site, in line with WSCC Guidance on Parking at New Developments (September 2020) and Manual for Streets.

3. BASELINE CONDITIONS

3.1 Site Location

The application site is located at the Ford CTP to the southwest of Ford village in Arun, West Sussex, as shown in Figure 3.1. Yapton is situated approximately 1 km to the west of the site, Climping approximately 1 km to the south, Littlehampton approximately 2 km to the east, and Arundel approximately 3 km to the northeast.

⁶ https://www.westsussex.gov.uk/media/1847/guidance_parking_res_dev.pdf

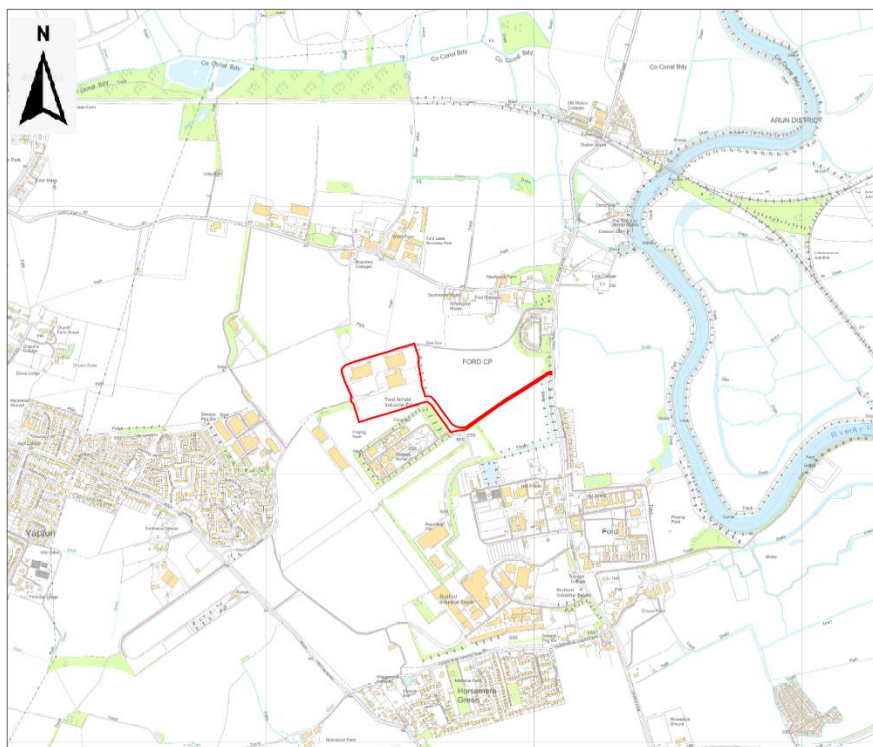


Figure 3. 1: Site Location

Source: Map Data @2020

The site is surrounded by agricultural land to the north, east and west, while a sewage treatment works, and area of sports pitches lie to the south. Ford Airfield Industrial Estate lies beyond the agricultural land to the west, beyond which is the residential area of Yapton. Viridor's Materials Recovery Facility lies beyond the sewage treatment works to the south, beyond which there is another industrial estate, Her Majesty's Prison (HMP) Ford and the residential area of Climping.

Ford village lies beyond the agricultural land to the north east, while Ford Lane and a small number of commercial premises lie beyond the agricultural land to the north. There is agricultural land and the Ford to Barnham railway line beyond these. Beyond the agricultural land to the east of the site is Ford Road, more agricultural land and the River Arun.

3.2 Local Highway Network

The site forms part of the former Ford Airfield and is located approximately 500 m east of Ford Road to the southwest of Ford village. Ford Road is an unclassified road and is moderately trafficked, connecting the A259 in the south with the A27 at Arundel to the north. Throughout much of its length, Ford Road and Station Road have 40 mph speed restrictions with a footway along its entire length along its western boundary and is mostly unlit.

Station Road has a controlled railway level crossing approximately 1 km to the north of the application site, which is situated to the east of Ford Railway Station. Ford Railway Station is situated on the busy Southampton and Brighton railway line and therefore the level crossing is in regular operation.

Ford Road to the south of the site is generally straight and has limited frontages. Nelson Row is a residential street of 23 properties, set back approximately 25 m from the eastern boundary with Ford Road, and running parallel to Ford Road approximately 120 m south of the site. It provides three

access points onto Ford Road, including an 'entry only' connection at its northern end and an 'exit only' connection at its southern end.

HMP Ford Prison is located approximately 550 m south of the site on Ford Road and is located on both sides of Ford Road, with a pelican crossing joining the two sites. Around this area, there are also several accesses to the west of Ford Road to predominately commercial and light industrial sites.

The southern end of Ford Road is known as Church Lane. Church Lane forms a roundabout junction with the A259 at its southern extent and is located approximately 1.7 km to the south of the site on Church Lane.

The southern arm of the Church Lane/A259 roundabout is formed by Crookthorn Lane, a minor road providing access to an industrial site, a small number of residential properties, and Clymping C of E Primary School.

The eastern and western arms of Church Lane/A259 roundabout are formed by the A259. The A259 is a strategic route that links Chichester with Worthing via Bognor Regis and Littlehampton. To the west of the roundabout, between the junction of Yapton Road and Ford Road, the A259 is a 40 mph, unlit single-carriageway road. This section of highway is heavily trafficked, with no frontages other than an aquatics shop. This link continues towards Bognor Regis. To the east of the Church Lane/A259 Roundabout, the A259 maintains these characteristics for approximately 660 m, until the speed restriction increases to 60 mph. The A259 then connects to Bridge Road roundabout across the River Arun and continues to Wick and Littlehampton.

3.3 Existing Site Operation

The 6.72 ha site is currently used for an existing WTS operation under the current permission with the remainder of the site being vacant. It is noted that the current permission imposes a HGV capacity cap of up to 240 HGV movements to and from the application site on the SLR per day (120 HGVs in and 120 HGVs out) between 06:00 and 20:00 (Monday to Friday); and up to 120 HGV movements to and from site per day (60 HGVs in + 60 HGVs out) between 08:00 and 18:00 on Saturday.

3.4 Parking

Currently parking is undefined and occurs on open ground within the site. Generally, approximately 24 staff cars and approximately 20 HGVs park on site on a typical day. Only staff, maintenance contractors, visitors and refuse HGVs currently park on site.

No parking is provided or permitted along the site access road, or indeed on Ford Road.

Southern Link Road (SLR)

The SLR was approved under planning permission WSCC/027/18/F and opened in January 2020. The SLR provides access for all the development traffic arriving and departing the proposed site, and has a footpath running alongside. The SLR is part of the site access road, which forms a T-junction with Ford Road.

The site access road link is considered of sufficient width to accommodate all potential vehicles. Swept path analysis undertaken as part of the SLR planning application identified that two 3-axle articulated HGVs (at the maximum legal length of 16.5 m) could pass each other at all points along the site access road, demonstrating the road is appropriate for two-way HGV usage at the same time.

The SLR planning application also demonstrated that the internal junction on the site access road is designed to appropriate highways standards. The junction has good sightline visibility to the left and right from the minor arm and further swept path analysis (prepared by others as part of previous SLR permission) demonstrated that the priority junction can safely accommodate turning movements for two 16.5 m articulated HGVs at the junction.

A Stage 1 Road Safety Audit (RSA) has been conducted, at the request of WSCC, at the junction of the site access road with Ford Road. The RSA report is attached in Appendix 3.

3.5 Sustainable Accessibility

Pedestrian Accessibility

The site can currently be accessed by foot from the highway network via the following pedestrian routes:

- **Route 1** – this route is from the east and links the north-eastern corner of the site with Ford Road via County Footpath No. 200.3. The route follows the previous exit road from site and has no dedicated footpath; and
- **Route 2** - this route is from the east and links the south-eastern corner of the site with Ford Road via site access road.

Public Rights of Way⁷ that have been extracted from West Sussex County Council website can be found in Figure 3.2 and are summarised below:

- Footpath 363 which runs to the north of the site and provides a connection to Footpaths 170, 200.2, 360 on towards Burndell and Yapton (there is no direct access between the site and footpath 363);
- Footpaths 200.3 and 200.4 which run to the northeast of the site and provide a connection between the site and Ford Road;
- Footpath 366 and 366.1, which provide a connection to Ford Lane and Footpath 365; and
- Footpath 175, which runs to the south of the site and provides a connection between Ford Road and Yapton Road.

⁷ <https://www.westsussex.gov.uk/land-waste-and-housing/public-paths-and-the-countryside/public-rights-of-way/public-rights-of-way-imap/imap/>

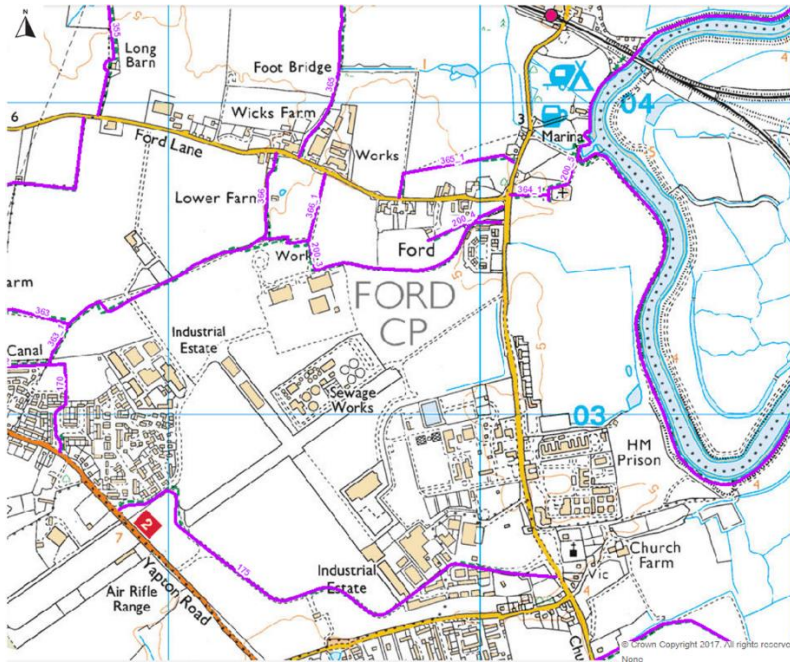


Figure 3. 2: Location of Public Rights of Way

Source: <https://www.westsussex.gov.uk/land-waste-and-housing/public-paths-and-the-countryside/public-rights-of-way/public-rights-of-way-imap/imap/>

A footway of approximately 2.5 m wide running north-south along the west side of Ford Road crosses the site access road without deviation from its course. Dropped kerbs are provided across the site access road. The visibility between the footway and the access road i.e. between pedestrian and site vehicles is good. To the north, Ford Road leads into Station Road and along its length the footway is separated by a wide grass verge approximately 2.5 m wide.

To the south, Ford Road leads into Church Lane where the pedestrian footway continues on the western side of the carriageway. A pedestrian refuge island is provided to the north of the access to Rudford Industrial Estate allowing pedestrians to cross to the eastern side of the carriageway. The footway on the western side ends to the south of the junction with Horsemere Green Lane, but the route continues on the A259 on the eastern side. A Puffin Crossing is also located on Ford Road approximately 500 m south of the Viridor site access.

Cycle Accessibility

There are no dedicated cycling facilities within the study area.

Figure 3.3, extracted from the West Sussex County Council website⁸, shows the section of Yapton Road between Horsemere Green Lane and Bilsham Road is part of the Local Cycle Network. It should be noted that this section of Yapton Road is subject to a 40 mph speed limit.

National Route 2 of the National Cycle Network (NCN) runs along the A259 to the south of the application site and the closest access points to NCN2 are the junctions of the A259 Crookthorn Lane with Yapton Road and Church Lane.

⁸ Cycle Journey Planner, West Sussex County Council Website: <https://cyclejourneyplanner.westsussex.gov.uk>

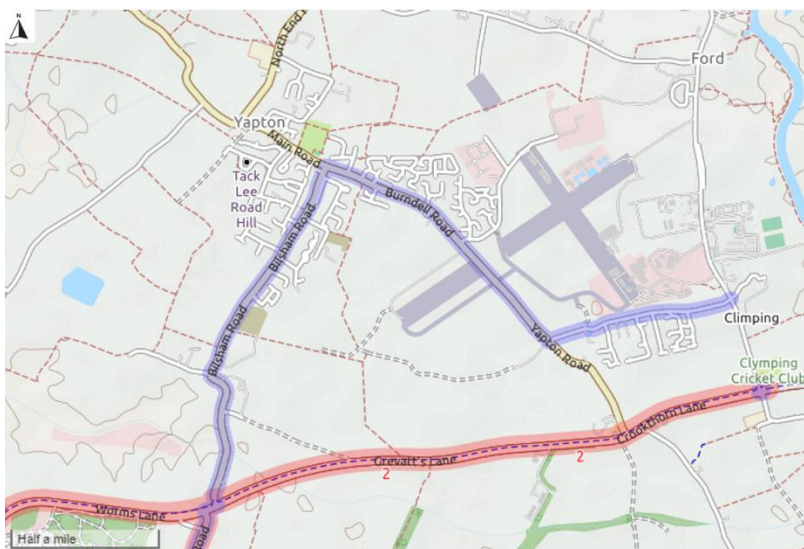


Figure 3. 3: Cycle Network

Source: <https://cyclejourneyplanner.westsussex.gov.uk/>

Bus Accessibility

There are no bus stops within a reasonable walking distance to the site. The nearest bus stops are on Yapton Road at the junction with Rollaston Park served by 2 buses per hour to Littlehampton and two buses per hour to Chichester.

Rail Accessibility

Ford Rail Station is located approximately 1.6 km to the northeast of the application site and is served by Southern Railway. Table 3.1 summarises the ‘pre-Covid’ service destinations and frequencies available from the station, as of January 2020. It is noted that current service provision may be variable due to the ongoing effects of the pandemic on travel behaviour.

Table 3. 1: Rail Service Information

Destination	Service Frequency per Hour			Average Journey Time
	Weekdays	Saturday	Sundays	
Littlehampton	2 services	2 services	1 service	5 mins
Portsmouth	2 services	3 services	2 services	46 mins
Southampton	2 services	2 services	2 services	1 hr 15 mins
Brighton	2-3 services	2 services	2 services	43 mins
London	3-4 services	3 services	2 services	1 hr 37 mins

The whole station has step-free access and ramps are available for train access. There is also sheltered storage provided for 14 cycle spaces with CCTV coverage.

3.6 Accident Analysis

Personal Injury Accident (PIA) data for the highway network in the vicinity of the application site have been obtained from Sussex Police for a five-year period from 1 January 2016 to 31 December 2020.

The extent of the accident study area is shown in Figure 3.4 and accidents that occurred within the study area are summarised in Table 3.2. A detailed summary of the accidents is attached in Appendix 4.

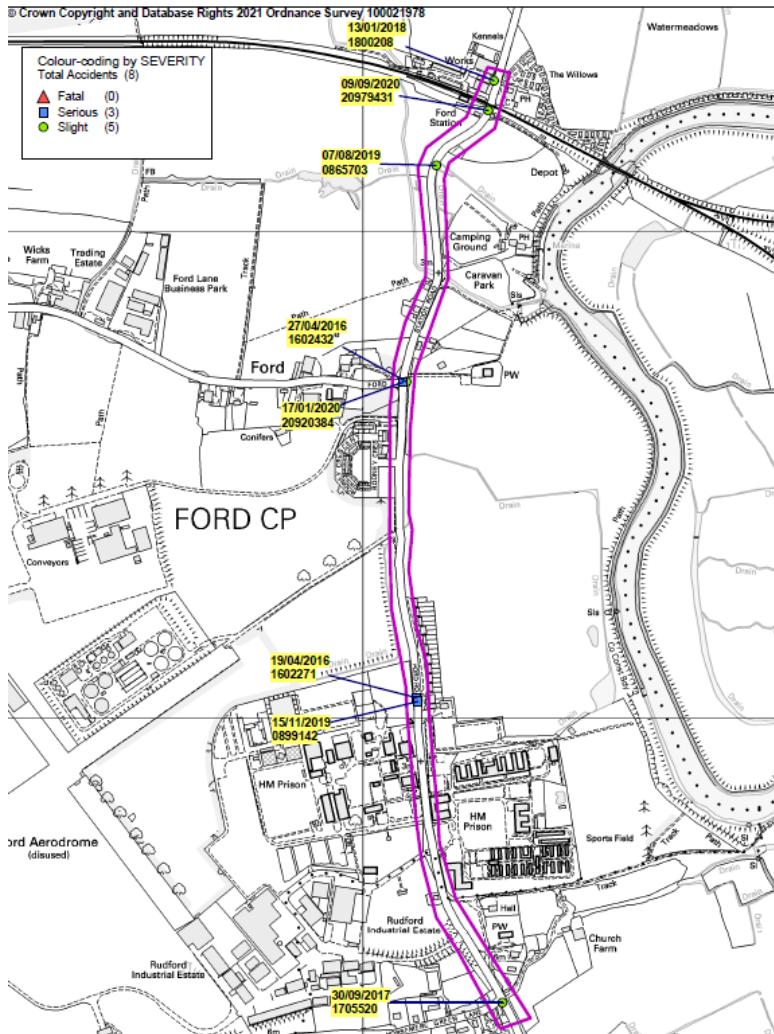


Figure 3. 4: Locations of Accidents

Source: Sussex Police

Table 3. 2: Summary of PIA Data within Study Area

Year	Severity			Total Accidents	Vulnerable Road Users			Total Casualties
	Slight	Serious	Fatal		Pedestrians	Cyclists	Motorcycle	
2016	1	1	0	2	0	0	0	2
2017	1	0	0	1	0	0	0	2
2018	1	0	0	1	0	0	0	3
2019	1	1	0	2	0	0	0	2
2020	1	1	0	2	0	0	0	2
Total	5	3	0	8	0	0	0	11

In total, eight accidents have been recorded within the study area between 2016 and 2020, out of which five were slight, three serious and none were fatal. No vulnerable road users were involved in any of the accidents recorded. Therefore, there is not considered to be any significant existing safety issues in the study area.

3.7 Baseline Traffic Flows

Specific traffic surveys have not been undertaken for this TA due to the current COVID-19 pandemic and resultant lock-down restrictions leading to significantly reduced and therefore non-representative traffic flows on the local highway network. As an alternative, it is considered that the traffic data contained within the recently submitted Ford Airfield Transport Assessment⁹ (Ref DS/EF/AI/ITB13091-003E R) enables this TA to proceed in accordance with the agreed TA scope of assessment.

The Ford Airfield Transport Assessment includes traffic flow diagrams (AM 08:00 to 09:00 and PM 17:00 to 18:00 peak hour) based on a survey campaign carried out in 2018. This survey took place over a period of seven days, commencing 2 July 2018 and concluding 08 July 2018. The survey was undertaken during peak periods of 07:00 to 10:00 hrs and 16:00 to 19:00 hrs at the following junctions:

- Ford Lane/Ford Road;
- Ford Lane/North End Road;
- North End Road/B2233 Mini Roundabout;
- Rollaston Park/Burndell Road Mini Roundabout;
- Rollaston Park/Yapton Road;
- Yapton Road/A259;
- B2132 Bilsham Road/A259 "Comet Corner";
- A259/Hoe Lane/B2259 Roundabout;
- A259/Church Lane/Crookthom Lane Roundabout;
- A259/Broad Piece/B2187 Roundabout;
- A27/A284/Maltravers St/Ford Road Roundabout;
- A27/Yapton Lane; and
- Yapton Lane/The St Mini Roundabout.

It is noted that the permitted scheme active at the time of the 2018 traffic surveys (WSCC/006/13/F) allowed for a one-way access route to the site, with traffic entering via Rollaston Park and exiting via a northern access road to Ford Road¹⁰ (Figure 3.5). Subsequently, the SLR permission was granted in 2019 (WSCC/027/18/F) allowing for a new access arrangement to connect the application site to Viridor's existing site access road to the south off Ford Road. All access and egress to the application site is therefore now permitted to be along the Viridor site access road from the existing priority junction with Ford Road¹¹ (Figure 3.6). The SLR became operational in January 2020, and as such access via Rollaston Park and egress via the northern link to Ford Road ceased.

It is therefore necessary to adjust the 2018 traffic survey data to reflect the changes in access arrangement between the survey date and the future assessment years (the Adjusted 2018 Baseline). This adjustment has been made on the basis of the 'Development Only – Consented Planning Scheme' AM and PM peak traffic flows contained within Appendix D to the approved Transport Statement for planning application WSCC/027/18/F. Furthermore, it is assumed that all

⁹ Ford Airfield Transport Assessment, prepared by i-transport (Ref DS/EF/AI/ITB13091-003E R) for Redrow Homes Ltd/Wates Development Ltd, 23 October 2019

¹⁰ 'Circular Technology Park, Ford Airfield Transport Assessment', prepared by Callidus Transport & Engineering (Ref TE/1093/301) for Grundon Waste Management Ltd, 03 October 2013. Planning application WSCC/096/13/F

¹¹ 'CTP Ford Airfield, Alternative Site Access Transport Statement', prepared by Callidus Transport & Engineering (Ref TE/1093/501) for Grundon Waste Management Ltd, 16 April 2018. Planning application WSCC/027/18/F

application site traffic arrives from and departs to the south, with a 50/50 east-west split on A259, as per the consented planning scheme. Where the adjustment resulted in a negative number of HGVs on a link, the number of HGVs has been manually set to 0; this occurred due to a small discrepancy between the survey data and consented development trip data.

The Adjusted 2018 Baseline traffic flows are presented in the trip distribution diagrams attached in Appendix 11 on this basis.

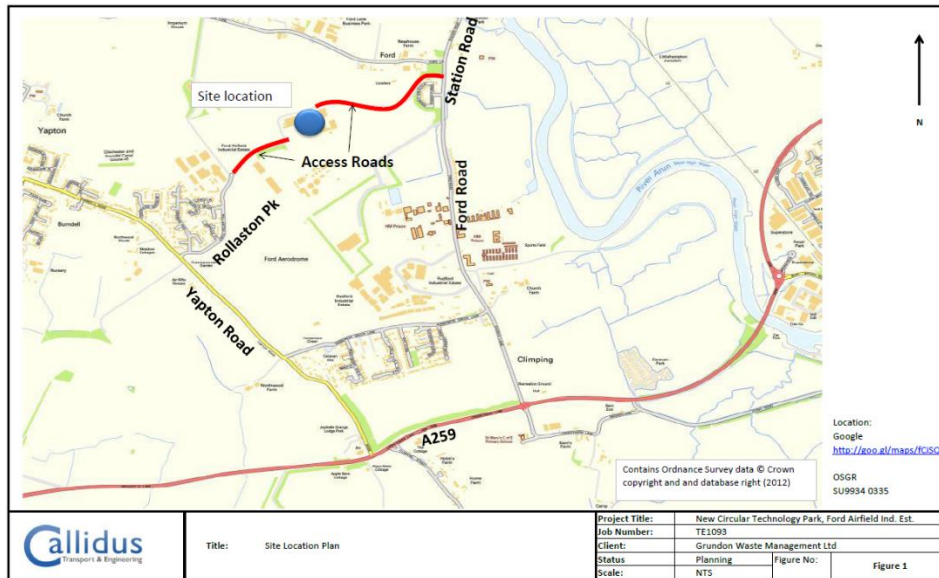


Figure 3. 5: Access to Ford CTP via Rollaston Park, Active at the Time of the 2018 Traffic Surveys

Source: Circular Technology Park, Ford Airfield Transport Assessment (October 2013)

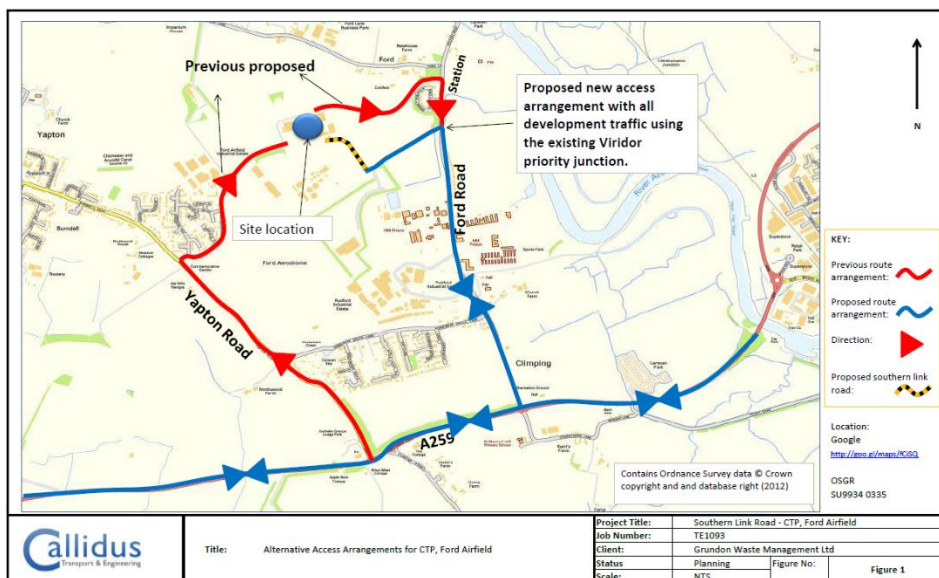


Figure 3. 6: Access to Ford CTP via SLR, Consented in August 2019 and Operational Since January 2020

Source: CTP Ford Airfield, Alternative Site Access Transport Statement (April 2018)

4. PROPOSED DEVELOPMENT

4.1 Introduction

The proposed development put forward in this planning application by the applicants is for demolition of the existing WTS and construction, operation and maintenance of a new ERF and WSTF on the Ford CTP site, with associated excavation of a -1.5 m level, waste bunker at -3.0 m level drainage, landscaping, access and parking. The application site layout is attached in Appendix 5. This section summarises the access components of the proposals.

4.2 Parking

Car Parking Provision

Car parking for employees, visitors and maintenance contractors will be split into two parking areas to the northeast of the main ERF building (ERF Car Park) and to the southeast of the WSTF (WSTF Car Park), as shown on the site layout plan in Appendix 5. Table 4.1 presents the breakdown of car parking spaces proposed.

Table 4. 1: Car Parking Provision

Type of Space	ERF Car Park	WSTF Car Park
Car Spaces	64	6
Of Which: Electric Charging Spaces	64	6
Of Which Disabled Spaces	4	1
Plus Minibus/Coach Space	1	0

As per Table 4.1, 64 car parking spaces including four disabled car parking spaces (6.3%) will be provided in the ERF Car Park. This parking will be for the use of ERF employees, visitors and maintenance contractors. The hatched area to the northwest of the turbine hall has been designated for minibus/coach parking (up to two minibuses or one coach) to cater for larger groups of visitors attending the site. All visits will be by prior appointment.

A further six car parking spaces, including one disabled car parking spaces, will be provided to the south-east of the WSTF building. This parking will be used by WSTF staff, visitors and maintenance contractors.

As per Table 4.1, 100% of staff and visitor parking spaces will be enabled for electric charging.

The quantum of parking provided has been derived based on operational requirements; on the maximum anticipated staff on site concurrently, to ensure adequate parking provision during shift turnover periods. While parking may be under-utilised most of the day, the level of parking proposed is considered beneficial in terms of a smooth and safe staff shift turnover with no risk of overspill, and to provide space for visitors and maintenance contractors to park safely. It is considered that the parking provision is in line with policy requirement for parking provision to be site-specific and balance operational needs, space requirements, efficient use of land and cost attributed to providing parking, as discussed in Section 2.5.

4.3 Cycle and Motorbike Parking Provision

The proposed development will provide 32 covered, secure cycle parking spaces for staff and visitors in the northeast corner of ERF. The cycle parking will consist of 16 Sheffield stands. Showers and lockers will be provided as part of the on-site staff welfare facilities in both buildings. Furthermore, up to seven motorcycle parking spaces are provided in the ERF car park (in addition to the car parking spaces detailed in Section 4.1).

4.4 Access

Site Access

The application site will continue to be accessed from the SLR as part of the site access road off Ford Road. All access and egress to/from the site will be via this route to/from Ford Road. As part of the consented SLR scheme, daily HGV movements associated with the application site along the SLR are capped as follows:

- Up to 240 HGV movements to and from the application site on the SLR per day (120 HGVs in and 120 HGVs out) between 06:00 and 20:00 (Monday to Friday); and,
- Up to 120 HGV movements to and from site per day (60 HGVs in + 60 HGVs out) between 08:00 and 18:00 on Saturday.

Daily HGV numbers associated with the proposed development cannot be greater than the approved SLR HGV cap or arrive/depart the site outside of the approved hours.

On the vast majority of days (normal days) the number of HGVs making deliveries and collections will sit within the approved cap. However, by exception (on peak days) HGVs making deliveries and / or collections may meet or slightly exceed the cap. This will be in exceptional circumstances, to prevent the build-up of waste at the WSTF, due to holiday peak periods or other operational reasons

Internal Site Circulation

All cars accessing the ERF will use a two-way access road from the main site entrance to the ERF car park along the eastern boundary of the site. This route does not require passing through the weighbridges on entry or exit.

All cars accessing the WSTF will use the internal circulation road along the southern boundary of the site which links the main site entrance directly to the WSTF car park. All cars will need to pass over the weighbridge on entry and exit, and therefore be registered on the weighbridge ANPR system.

Refuse Collection Vehicles (RCVs) and HGVs will enter at the main site entrance and pass over the entry weighbridge, and therefore must be registered on the weighbridge ANPR system. Vehicles accessing the ERF Reception Hall will turn right after the weighbridge and proceed up the ramp on entry; and then proceed down the ramp and merge with the internal circulation road to the weighbridge on exit. All other vehicles, including WSTF deliveries and collections, ERF reagent delivery, and ERF residue collection, will use the one-way internal circulation road to progress from the entry weighbridge to their intended destination on site, and then progress to the exit weighbridge.

The internal circulation route is shown on the site plan in Appendix 5.

Cycle and Pedestrian Access

Cycle and pedestrian access to the site will be via the site access road and SLR, noting that the SLR includes a shared 3 m wide footpath and cycleway. Cyclists and pedestrians will use the two-way access road from the main site entrance to the ERF car park along the eastern boundary of the site, which connects to the cycle parking. Pedestrians can access the main ERF building from the car park via a designated pedestrian route including bridge over the internal circulation road.

4.5 Operating Hours

The ERF will operate 24 hours a day, seven days a week, though there will be periods of annual maintenance when waste processing is reduced. The majority of deliveries and collections will be received / made between 06:00 and 20:00 Monday to Friday and 08:00 and 18:00 on Saturday. By exception, some deliveries and / or collections may take place outside these hours to prevent the build-up of waste at the WSTF. The WSTF will operate from 06:00 to 20:00 Monday to Friday and 08:00 to 18:00 on Saturday.

5. DEVELOPMENT TRIP GENERATION

For the purposes of this TA, operational phase trips (trips associated with the general day to day operation of the site) and construction phase trips (trips associated with the construction of the site) are presented in Sections 5.1 and 5.2, based upon assumptions made by the ERF and WSTF plant designers (Fichtner). The construction phase daily trip generation profile is presented in Appendix 6. The hourly trip generation profile for both 2025 construction and 2026 operational phases is presented in Appendix 7.

For the construction phase, daily trip generation has been estimated for each month of the 51-month construction programme according to programme Option 3. The dates assigned to each month are based on an anticipated commencement date in 2022. The total estimated daily trip generation includes both construction and operational trips, to reflect the peak trip generation at the application site.

An estimate of daily trips is profiled across the day according to the following hourly profile estimates:

- ERF Construction staff vehicles – estimated by the ERF and WSTF plant designers (Fichtner), based on similar schemes;
- ERF Construction HGVs – Construction HGV trip estimates have been distributed throughout the day based upon assumptions made by the ERF and WSTF plant designers (Fichtner), so as to avoid large numbers of HGVs arriving and departing during the network peak hours and for movements to be spread throughout the day;
- ERF Operational staff vehicles – based on estimates of shift patterns from the ERF and WSTF plant designers (Fichtner);
- ERF Operational HGVs - HGV arrival and departure trip profile as applied to another ERF facility: Lakeside ERF, near Slough;
- WSTF Operational staff vehicles - estimated based on the current operation provided by the ERF and WSTF plant designers (Fichtner); and
- WSTF Operational HGVs – HGV arrival and departure trip profile at the existing Ford WTS recorded by the on-site weighbridge from October 2019 to January 2020.

It should be noted that the existing WTS will have been demolished prior to the assessed Construction Year (2025).

5.1 Construction Phase Trips

As presented in Appendix 6, the peak trip generation for construction phase trips (considering passenger cars and HGVs) occurs in month 44 of the construction programme, when the ERF is in the commissioning phase of construction and the WSTF is operational.

It is noted that the maximum HGV trip generation in the construction phase occurs during months 44 to 51 of the construction programme, when landscaping bunds are being constructed and the ERF and WSTF are operational; however, passenger car movements are much lower for this period. During this period, it is anticipated that the cap of 120 daily HGV vehicles (240 daily two-way movements) imposed under the consented planning scheme will not be exceeded (maximum 238 daily two-way HGV vehicles expected).

Daily trip profiles for the ERF construction phase (staff passenger vehicles and HGVs) and WSTF operational phase (staff passenger vehicles and HGVs) are shown in Tables 5.1-5.5 and attached in Appendix 7, based on the average daily trip generation anticipated in month 44 of the construction programme.

Table 5.1: ERF Construction Staff Vehicles Trip Profile

Hour Begin	ERF Construction Passenger Vehicles		Trip Totals		
	Arrive %	Depart %	Arrive	Depart	Total
06:00	10	0	23	0	23
07:00	65	0	147	0	147
08:00	25	0	57	0	57
09:00	0	0	0	0	0
10:00	0	0	0	0	0
11:00	0	0	0	0	0
12:00	0	0	0	0	0
13:00	0	0	0	0	0
14:00	0	0	0	0	0
15:00	0	0	0	0	0
16:00	0	65	0	147	147
17:00	0	25	0	57	57
18:00	0	10	0	23	23
19:00	0	0	0	0	0
	100%	100%	227	227	454

Table 5.2: ERF Operational HGV Trip Profile (During Construction Phase)

ERF Operational HGVs					
Trip Profile			Trip Totals		
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total
06:00	0	0	0	0	0
07:00	10	5	10	5	15
08:00	10	10	10	10	20
09:00	15	10	15	10	25
10:00	15	10	15	10	25
11:00	15	10	15	10	25
12:00	10	15	10	15	25
13:00	10	15	10	15	25
14:00	10	15	10	15	25
15:00	5	10	5	10	15
16:00	0	0	0	0	0
17:00	0	0	0	0	0
18:00	0	0	0	0	0
19:00	0	0	0	0	0
	100%	100%	102	102	204

Table 5.3: WSTF Operational Staff Vehicles Trip Profile (During Construction Phase)

WSTF Operational Passenger Vehicles					
Trip Profile			Trip Totals		
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total
06:00	74	15	3	0	3
07:00	5	0	0	0	0
08:00	6	0	0	0	0
09:00	0	0	0	0	0
10:00	0	0	0	0	0
11:00	0	0	0	0	0
12:00	0	0	0	0	0

WSTF Operational Passenger Vehicles					
Trip Profile					Trip Totals
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total
13:00	0	0	0	0	0
14:00	0	0	0	0	0
15:00	0	0	0	0	0
16:00	0	38	0	2	2
17:00	15	18	1	1	2
18:00	0	30	0	1	1
19:00	0	0	0	0	0
	100%	100%	4	4	8

Table 5.4: WSTF Operational HGV Trip Profile (during construction phase)

WSTF Operational HGV					
Trip Profile					Trip Totals
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total
06:00	1	0	0	0	0
07:00	4	3	1	1	2
08:00	7	6	1	1	2
09:00	7	7	1	1	2
10:00	8	8	1	1	2
11:00	12	12	2	2	4
12:00	19	18	2	2	4
13:00	16	16	2	2	4
14:00	15	15	2	2	4
15:00	10	11	1	1	2
16:00	2	3	0	0	0
17:00	0	0	0	0	0
18:00	0	0	0	0	0
19:00	0	0	0	0	0
	100%	100%	13	13	26

Table 5.5: Total Construction Phase Trips

Trip Totals			
Hour Begin	Arrive	Depart	Total
06:00	26	0	26
07:00	159	5	164
08:00	68	11	79
09:00	16	11	27
10:00	16	11	27
11:00	17	12	29
12:00	12	17	29
13:00	12	17	29
14:00	12	17	29
15:00	6	11	17
16:00	0	150	150
17:00	1	58	59
18:00	0	24	24
19:00	0	0	0
	346	346	692

5.2 Operational Phase Trips

Once construction is complete, all functions of the proposed development will become operational in 2026, so the Opening Year is defined as 2026. Average daily trip profiles for the ERF operational phase (staff passenger vehicles and HGVs) and WSTF operational phase (staff passenger vehicles and HGVs) are shown in Table 5.6 to Table 5.10. The average daily trip generation is based upon assumptions made by the ERF and WSTF plant designers (Fichtner).

During the operational phase, it is anticipated that the cap of 120 daily HGV vehicles (240 daily two-way movements) imposed under the consented planning scheme will not be exceeded.

Table 5.6: ERF Operational Staff Vehicles Trip Profile

ERF Operational Passenger Vehicles					
Trip Profile			Trip Totals		
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total
00:00	0	0	0	0	0

ERF Operational Passenger Vehicles					
Trip Profile			Trip Totals		
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total
01:00	0	0	0	0	0
02:00	0	0	0	0	0
03:00	0	0	0	0	0
04:00	0	0	0	0	0
05:00	30	0	13	0	13
06:00	30	11	13	5	18
07:00	0	0	0	0	0
08:00	0	0	0	0	0
09:00	0	0	0	0	0
10:00	0	0	0	0	0
11:00	18	0	8	0	8
12:00	0	0	0	0	0
13:00	11	0	5	0	5
14:00	0	30	0	13	13
15:00	0	0	0	0	0
16:00	0	30	0	13	13
17:00	0	0	0	0	0
18:00	0	0	0	0	0
19:00	0	18	0	8	8
20:00	0	0	0	0	0
21:00	11	0	5	0	5
22:00	0	0	0	0	0
23:00	0	0	0	0	0
	100%	100%	44	44	88

Note that, while the ERF is proposed to have 54 staff in total, only 44 staff vehicles are expected to arrive at the ERF site per day, given that not all staff are working every day, as estimated by the ERF and WSTF plant designers (Fichtner).

It should also be noted that Table 5.6 refers to ERF staff only; the WSTF is proposed to have four staff vehicle trips in and four staff vehicle trips out per day, as per Table 5.3.

Table 5.7: ERF Operational HGVs Trip Profile

		ERF Operational HGVs				
		Trip Profile		Trip Totals		
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total	
06:00	7	9	7	9	16	
07:00	9	5	9	5	14	
08:00	9	10	9	10	19	
09:00	8	11	8	11	19	
10:00	17	15	16	14	30	
11:00	13	9	12	9	21	
12:00	10	16	10	15	25	
13:00	6	6	6	6	12	
14:00	9	5	9	5	14	
15:00	2	6	2	6	8	
16:00	1	1	1	1	2	
17:00	2	1	2	1	3	
18:00	3	5	3	5	8	
19:00	2	1	2	1	3	
	100%	100%	96	96	192	

Table 5.8: WSTF Operational Staff Vehicles Trip Profile

		WSTF Operational Passenger Vehicles				
		Trip Profile		Trip Totals		
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total	
06:00	74	15	3	0	3	
07:00	5	0	0	0	0	
08:00	6	0	0	0	0	
09:00	0	0	0	0	0	
10:00	0	0	0	0	0	

WSTF Operational Passenger Vehicles					
Trip Profile			Trip Totals		
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total
11:00	0	0	0	0	0
12:00	0	0	0	0	0
13:00	0	0	0	0	0
14:00	0	0	0	0	0
15:00	0	0	0	0	0
16:00	0	38	0	2	2
17:00	15	18	1	1	2
18:00	0	30	0	1	1
19:00	0	0	0	0	0
	100%	100%	4	4	8

Table 5.9: WSTF Operational HGVs Trip Profile

WSTF Operational HGVs					
Trip Profile			Trip Totals		
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total
06:00	1	0	0	0	0
07:00	4	3	1	1	2
08:00	7	6	1	1	2
09:00	7	7	1	1	2
10:00	8	8	1	1	2
11:00	12	12	2	2	4
12:00	19	18	2	2	4
13:00	16	16	2	2	4
14:00	15	15	2	2	4
15:00	10	11	1	1	2
16:00	2	3	0	0	0
17:00	0	0	0	0	0
18:00	0	0	0	0	0

WSTF Operational HGVs					
Trip Profile			Trip Totals		
Hour Begin	Arrive %	Depart %	Arrive	Depart	Total
19:00	0	0	0	0	0
	100%	100%	13	13	26

Table 5.10: Total Operational Phase Trips

Trip Totals			
Hour Begin	Arrive	Depart	Total
06:00	23	14	37
07:00	10	6	16
08:00	10	11	21
09:00	9	12	21
10:00	17	15	32
11:00	22	11	33
12:00	12	17	29
13:00	13	8	21
14:00	11	20	31
15:00	3	7	10
16:00	1	16	17
17:00	3	2	5
18:00	3	6	9
19:00	2	9	11
	139	154	293

6. IMPACT ON THE LOCAL NETWORK

6.1 Methodology

In order to determine the impact of the proposed development on the local highway network and based upon a further consultation response from WSCC Highways on 11 August 2020, the following junctions have been assessed for capacity as agreed with WSCC Highways:

- Site access/Ford Road junction; and,

- Existing Church Lane/A259 roundabout.

The priority site access/Ford Road junction has been assessed using PICADY 9 and the existing Church Lane/A259 roundabout using ARCADY 9. ARCADY and PICADY are industry-standard computer programs for predicting capacities, queues, delays and accident risk at roundabouts and priority junctions and have been used to calculate the likely queues generated for each approach within each peak period for all the roundabouts and priority junctions.

When analysing the output, the primary focus is on link capacity and queues. The software results output refers to the Ratio of Flow to Capacity (RFC) and queue lengths (in Passenger Car Unit (PCUs)) predicted on each arm of the junction.

An RFC of 1.00 indicates that the arm in question is operating at its theoretical capacity and this figure could cause undesirable queuing on an approach lane. An RFC of 0.85 or less indicates that the arm is operating within capacity and queues can be accommodated.

The methodology applied to analyse traffic data used to inform the junctions models is as follows:

- Sourcing of baseline traffic survey data (Section 3.6);
- Adjustment of baseline traffic survey data to reflect changes in the operation of the existing site use (Section 6.1.1);
- Introducing background traffic growth to the adjusted baseline using TEMPro growth factors and relevant committed development trips in addition, to estimate the future 'without construction' / 'without operational' traffic assessment scenarios in the Construction Year / Opening Year; and
- Discounting of existing site use (demolition) and addition of proposed development trips to the future 'without construction' / 'without development' traffic assessment scenarios to estimate the future 'with construction' / 'with development' assessment scenarios in the Construction Year / Opening Year.

Adjustment of Baseline Survey Data for New Ford CTP Access Arrangement

As summarised in Section 3.6, it is first necessary to adjust the 2018 baseline to reflect the changes in access arrangement to the application site between the survey date and the future assessment years. This adjustment has been made on the basis of the 'Development Only – Consented Planning Scheme' AM and PM peak traffic flows contained within Appendix D to the approved Transport Statement for planning application WSCC/027/18/F.

Traffic Growth Factors

Building on the base year (2018), to estimate the network flows for the forecast years (Construction Year 2025 and Operational Year 2026), growth factors have been calculated. TEMPro software was used to provide projections of growth in trip making; TEMPro provides summarised National Trip End Model (NTEM) forecast data. Table 6.1 presents the Local Car Driver Growth figures obtained for the local area of Arun (MSOA Arun 006).

Table 6.1: Car Driver Growth Factors for Arun Area

Weekday Period	2018 to 2025	2018 to 2026
AM peak (07:00–09:59)	1.09085	1.09688
PM peak (16:00–18:59)	1.08862	1.09465

Source: TEMPro 7.2 – NTM AF 15 Dataset

Separate growth factors have been derived for background growth of HGV traffic, using Road Traffic Forecast 2018¹² (RTF-18) data which presents the latest forecasts of traffic demand in England and Wales using the NTM. Growth factors are derived for South East England and Principal A road type. The growth factors applied to 2018 Adjusted Baseline HGV traffic are shown in Table 6.2.

Table 6.2: RTF-18 HGV Growth Factors

Weekday Period	2018 to 2025	2018 to 2026
AM peak (07:00–09:59)	1.02342	1.02715
PM peak (16:00–18:59)	1.02342	1.02715

Committed Developments

A review of committed developments and their potential impacts on traffic flows on the local highway network has been undertaken.

The committed developments considered in the future scenarios have been shortlisted from the 23 schemes identified on ES Figure 5.2 'Location of projects considered in the assessment of cumulative effects.

Schemes have been discounted where the committed development is not anticipated to generate trips on the network links / junctions identified for assessment prior to the Construction Year and Opening Year, either given the distance from the proposed development or where no increase in trips is anticipated compared to the existing use.

Furthermore, trips generated by strategic allocated developments under the Arun Local Plan Housing Implementation Strategy are accounted for within TEMPro background growth factors, so are not manually added to avoid double-counting. This includes the 1,500 units allocated at Ford for residential development, which has come forward as the Ford Airfield (aka 'The Landings') development (F/4/20/OUT). The full schedule of committed developments with justification for their inclusion/exclusion from the assessment is included in Appendix 8.

The traffic data associated with the selected committed developments has been sourced from their respective Transport Planning documents on the Arun District Council planning portal. Based on their modelled opening year, all the selected committed developments are anticipated to be online in both the Construction Year and Opening Year. Therefore, the same selected committed development trips are included in all Construction Year and Opening Year assessment scenarios.

Trip Distribution

Trip distribution and assignment for the 2018 Baseline flows have been extracted from the "Ford Airfield" TA.

Traffic flows for the various committed developments have been distributed based on a combination of the available information supplied as part of the various applications/allocations and the 2018 Baseline traffic surveys. As mentioned in Section 6.1.3, where the respective Transport Planning documents do not offer sufficient granularity on the distribution of trips across the network links identified for assessment here, committed development trips have been distributed across the network according to the 2018 Adjusted Baseline turning proportions at each junction. Traffic flow

¹² Road Traffic Forecasts 2018. Scenario 1, Table 1. Department for Transport. July 2018

diagrams associated with the various selected committed schemes individually as well as combined are included within Appendix 9.

In respect of the trip distribution for the proposed development flows, they will follow the existing trip distribution for the site put forward under the consented SLR planning scheme:

- Staff: 10% to/from north, 90% to/from south on Ford Rd (based on census data).
- LGV/HGV: 0% to/from north, 100% to/from south on Ford Rd (based on HGV cap and movement restrictions imposed by planning permission).

Furthermore, as per the consented planning scheme, it is assumed that all traffic to/from the south will split 50% east and 50% west on the A259.

Assessment Year Scenarios

The following assessment years and associated scenarios have been agreed with WSCC Highways, to allow for assessment of traffic impact in both the construction and operational phases of the proposed development. These assessment years are based on the 2025 Construction Year (as per the projected construction programme in Appendix 6) and the 2026 Opening Year.

It should be noted that additional modelling has been undertaken to provide a sensitivity test of peak construction phase traffic plus traffic associated with the Ford Market and Car Boot (FMCB) with busiest hour 09:00-10:00, as per the new access arrangement using the site access road from Ford Road to the eastern runway of Ford Airfield, put forward in the currently undecided planning application F/5/20/PL. The sensitivity test assumes all FMCB traffic accesses via the site access road and FMCB is operating at full capacity of 2,000 car parking spaces. Trip generation and distribution for the FMCB has been extracted from the associated Transport Statement¹³, and the FMCB data used for the sensitivity test attached in Appendix 10.

Table 6.3 below summarises the schedule of data requirement for each assessment scenario.

Table 6.3: Summary Schedule of Assessment Scenarios

Scenario Name	Adjusted 2018 Baseline	Background Growth to 2025	Background Growth to 2026	Committed Development	Discount Existing Site Use	Construction Trip Generation	Operational Trip Generation	FMCB Trip Generation
2025 Without Construction	✓	✓		✓				
2025 With Construction	✓	✓		✓	✓	✓		
2025 With Construction + FMCB	✓	✓		✓	✓	✓		✓
2026 Without Development	✓		✓	✓				
2026 With Development	✓		✓	✓	✓		✓	

The complete set of assessment scenarios by junction are summarised in Table 6.4 below.

¹³ Ford Market and Car Boot, Transport Statement', prepared by i-Transport (ref: DS/EF/ITB13091-022B TS) for Ford Airfield Market, 19 December 2019. Planning application F/5/20/PL.

Table 6.4: Definition of Assessment Scenarios by Junction

Scenario Name	Definition	Hours
Site Access/Ford Road Junction		
2025 Without Construction	Adjusted 2018 Baseline + background growth to 2025 + committed development	AM Peak: 08:00-09:00 PM Peak: 17:00-18:00
2025 With Construction	Adjusted 2018 Baseline + background growth to 2025 + committed development + discount existing site use + construction trip generation	AM Peak: 08:00-09:00 PM Peak: 17:00-18:00
2025 With Construction + FMCB (sensitivity test)	Adjusted 2018 Baseline + background growth to 2025 + committed development + discount existing site use + busiest hour construction trip generation + busiest hour FMCB trip generation	AM Peak: 08:00-09:00 Coalesced peak hour comprising of: <i>Construction busiest hour: 07:00-08:00</i> <i>FMCB busiest hour: 09:00-10:00</i>
2026 Without Development	Adjusted 2018 Baseline + background growth to 2026 + committed development	AM Peak: 08:00-09:00 PM Peak: 17:00-18:00
2026 With Development	Adjusted 2018 Baseline + background growth to 2026 + committed development + discount existing site use + operational trip generation	AM Peak: 08:00-09:00 PM Peak: 17:00-18:00
Existing Church Lane/A259 roundabout		
2025 Without Construction	Adjusted 2018 Baseline + background growth to 2025 + committed development	AM Peak: 08:00-09:00 PM Peak: 17:00-18:00
2025 With Construction	Adjusted 2018 Baseline + background growth to 2025 + committed development + discount existing site use + construction trip generation	AM Peak: 08:00-09:00 PM Peak: 17:00-18:00

To understand the impact of the proposed development on the Site Access/Ford Road junction and existing Church Lane/A259 roundabout, the future 'without construction' / 'without development' traffic assessment scenarios are compared with the future 'with construction' / 'with development' assessment scenarios.

The '2025 With Construction + FMCB' sensitivity test is provided at the request of WSCC to understand the performance of the site access / Ford Road junction with maximum flows, coalescing the network, proposed development construction and FMCB busiest hours.

Traffic flow diagrams for all the assessment scenarios described above are presented in Appendix 11. Junction turning count matrices are attached in Appendix 12.

6.2 Junction Assessments

Site Access/Ford Road Junction

The site access/Ford Road junction is an existing three-arm priority junction providing access to the proposed development. The junction has been assessed for capacity using PICADY 9 for the scenarios presented in Table 6.4.

The geometry of the site access/Ford Road junction has been extracted from the 'Highway Safety and Network Capacity Technical Note' (ref: ITB13091-030 TN) dated July 2020, submitted as part of the planning application F/4/20/OUT, prepared in response to WSCC comments related to the provision of safe and suitable access and matters of network impact.

Results of the assessments for the construction and operational phase as well as the FMCB sensitivity test are presented in Table 6.5 to Table 6.7.

The results in the summary tables below that are highlighted in red indicate they exceed the threshold of the modelling software.

The full junction assessment outputs are presented in Appendix 13.

Construction Phase

Table 6.5: Site Access/Ford Road Junction – 2025 Without and With Construction PICADY Results (AM and PM Peak)

Arm	AM			PM		
	Queues (PCUs)	Delay (s)	RFC	Queues (PCUs)	Delay (s)	RFC
2025 without Construction						
Site Access (Left)	0.0	7.53	0.02	0.0	6.53	0.02
Site Access (Right)	0.1	23.39	0.07	0.1	15.85	0.08
Ford Road North (Right)	0.0	7.74	0.02	0.0	6.57	0.02
Junction LOS = A Junction Delay (s) = 0.60 Network Residual Capacity = 40%				Junction LOS = A Total Delay (s) = 0.60 Network Residual Capacity = 85%		
2025 with Construction						
Site Access (Left)	0.0	7.90	0.03	0.0	6.90	0.03
Site Access (Right)	0.2	24.53	0.10	0.2	12.52	0.18
Ford Road North (Right)	0.0	7.86	0.03	0.0	6.53	0.02
Junction LOS = A Junction Delay (s) = 0.83 Network Residual Capacity = 31%				Junction LOS = A Junction Delay (s) = 0.95 Network Residual Capacity = 77%		

Table 6.5 shows that the site access/Ford Road junction is expected to operate within capacity in 2025 with and without construction phase traffic and good progression of traffic through the junction will be achieved.

Operational Phase

Table 6.6: Site Access/Ford Road Junction – 2026 Without and With Development PICADY Results (AM and PM Peak)

Arm	AM			PM		
	Queues (PCUs)	Delay (s)	RFC	Queues (PCUs)	Delay (s)	RFC
2026 without Development						
Site Access (left)	0.0	7.55	0.02	0.0	6.53	0.02
Site Access (right)	0.1	23.51	0.07	0.1	15.97	0.08
Ford Road North (right)	0.0	7.76	0.02	0.0	6.55	0.02
	Junction LOS = A Junction Delay (s) = 0.59 Network Residual Capacity = 39%			Junction LOS = A Total Delay (s) = 0.61 Network Residual Capacity = 84%		
2026 with Development						
Site Access (left)	0.0	7.82	0.03	0.0	6.15	0.02
Site Access (right)	0.2	23.98	0.10	0.1	17.41	0.04
Ford Road North (right)	0.0	7.82	0.02	0.0	6.55	0.02
	Junction LOS = A Junction Delay (s) = 0.81 Network Residual Capacity = 35%			Junction LOS = A Junction Delay (s) = 0.36 Network Residual Capacity = 89%		

Table 6.6 indicates that the site access/Ford Road junction is expected to operate within capacity (RFC<0.85) in 2026 with and without development (operational phase) and queues can be accommodated.

Sensitivity Test (FMCB)

As requested by WSCC Highways, Table 6.7 presents the sensitivity test results of peak construction phase traffic plus traffic associated with the Ford Market and Car Boot (FMCB). Table 6.7 presents AM peak results only, given that FMCB is only operational on Thursday AM and Sunday AM.

Table 6.7: Site Access/Ford Road Junction – 2025 With Construction + FMCB PICADY Results (AM and PM Peak)

Arm	AM			PM		
	Queues (PCUs)	Delay (s)	RFC	Queues (PCUs)	Delay (s)	RFC
2025 with Construction + FMCB						
Site Access (left)	723.1	35359.58	999999999.00	N/A	N/A	N/A
Site Access (right)	780.2	35358.09	999999999.00	N/A	N/A	N/A
Ford Road North (right)	145.8	928.36	1.43	N/A	N/A	N/A
	Junction LOS = F Junction Delay (s) = 13,835.7 Network Residual Capacity = -63%			Junction LOS = N/A Junction Delay (s) = N/A Network Residual Capacity = N/A%		

It is noted that this sensitivity test uses maximum vehicle flows expected to and from FMCB based on the maximum permitted car park accumulation of 2,000 vehicles. The maximum vehicle flows are based on factoring up the January 2019 car park accumulation survey data to a maximum car park accumulation of 2,000 vehicles, as per the FMCB Transport Statement¹⁴. The data used in the sensitivity test is attached in Appendix 10. These high flows are considered very much a worst case, as car park capacity may not be reached in practice.

As shown in Table 6.7, the site access/Ford Road junction is well over capacity, with 2025 construction traffic, FMCB and baseline network traffic combined. PICADY reaches a limit of RFC's on the site access road and records a RFC of 9999999.9 which exceeds PICADY RFC values and results in disproportionately big queues and delays. This output means the site access road arm is well over theoretical capacity and long delays and queues are expected. It should be noted that the high values of FMCB flows during the busiest hour (09:00-10:00) cause the long queues and delays at the site access/Ford Road junction. It is noted that without the FMCB flows all the arms of the junction operate within capacity in 2025 (as per Table 6.5). Therefore, the proposed application site does not result in the site access/Ford Road junction being over capacity; rather, this is attributed to the FMCB traffic.

Given that this assessment is a sensitivity test which shows that the junction is over capacity due to the FMCB traffic, any mitigation measures would therefore fall within the remit of the FMCB proposals and therefore are not considered further in this TA. However, if the FMCB proposals are permitted; to protect Ford ERF and WSTF operations it may be prudent for the ERF and WSTF operator to engage with the FMCB operator to identify peak Thursdays, and for contingency plans to stagger Ford ERF and WSTF HGV scheduled arrivals/departures and staff shift changes to outside the FMCB peak hours during high season Thursday mornings.

It is also noted that the above sensitivity test assumes a scenario that is worse than the FMCB Transport Statement, which uses lower vehicle flows that are not consistent with the maximum permitted car park accumulation.

Existing Church Lane/A259 Roundabout

The existing Church Lane/A259 roundabout is a four-arm priority roundabout to the south of the proposed development.

The geometry of the Church Lane/A259 roundabout has been extracted from the 'Highway Safety and Network Capacity Technical Note' (ref: ITB13091-030 TN) dated July 2020, submitted as part of the planning application F/4/20/OUT. The results of the assessments for the construction phase are presented in Table 6.8.

¹⁴ Ford Market and Car Boot, Transport Statement', prepared by i-Transport (ref: DS/EF/ITB13091-022B TS) for Ford Airfield Market, 19 December 2019. Planning application F/5/20/PL

Construction Phase

Table 6.8: Church Lane/A259 Roundabout - 2025 With Construction PICADY Results (AM and PM Peak)

Arm	AM			PM		
	Queues (PCUs)	Delay (s)	RFC	Queues (PCUs)	Delay (s)	RFC
2025 without Construction						
Church Lane	25.6	96.91	1.01	95.5	397.25	1.19
A259 East	92.5	180.55	1.11	188.0	448.38	1.22
Crookthorn Lane	0.2	14.80	0.18	0.1	14.21	0.08
A259 West	446.8	1883.94	1.68	581.2	2101.02	1.69
	Junction LOS = F Junction Delay (s) = 728.31 Network Residual Capacity = -39%			Junction LOS = F Junction Delay (s) = 1028.59 Network Residual Capacity = -43%		
2025 with Construction						
Church Lane	26.2	97.70	1.01	123.7	520.97	1.24
A259 East	109.9	229.42	1.13	188.4	450.15	1.22
Crookthorn Lane	0.2	14.92	0.18	0.1	14.25	0.08
A259 West	506.2	2201.44	1.74	572.1	2067.41	1.68
	Junction LOS = F Junction Delay (s) = 858.14 Network Residual Capacity = -41%			Junction LOS = F Junction Delay (s) = 1039.51 Network Residual Capacity = -43%		

Table 6.8 indicates that the existing Church Lane/A259 roundabout is expected to have capacity issues in 2025 without the ERF construction phase traffic on Church Lane, A259 East and A259 West, and the addition of ERF construction traffic (73 total vehicles in AM Peak and 53 total vehicles in PM peak) is expected to have minimal impact on the estimated poor performance of the roundabout in 2025.

Operational Phase

The development is anticipated to generate 21 AM and 5 PM peak total vehicle trips through the existing Church Lane/A259 roundabout in the peak period during operation phase and as such the level of trips generated would not result in a severe impact on the roundabout.

6.3 Annual Average Daily Traffic

To support the Environmental Statement for the proposed development, 24-hour annual average daily traffic (AADT-24) and 18-hour annual average weekday traffic (AAWT-18) has also been derived. The AM and PM peak hour flows (as presented in the trip distribution diagrams in Appendix 11) have been converted to AADT-24 and AAWT-18, using conversion factors derived from WSCC automatic traffic count data. The AADT-24 and AAWT-18 outputs, and the WSCC automatic traffic count data used to derive the conversion factors, are attached in Appendix 14.

7. POLICY COMPLIANCE

Table 7.1 below summarises how the development proposals comply with appropriate policy standards.

Table 7.1: Policy Compliance Schedule

Item	Policy	Policy Provision
National Planning Policy		
Transport Assessment	All developments that generate significant amounts of movement should be required to provide a Travel Plan, and the application should be supported by a Transport Statement or Transport Assessment	The development will generate daily car, LGV and HGV trips during both the operational phase and construction and therefore this Transport Assessment has been prepared to present these numbers in support of the planning permission.
Parking	Maximum parking standards for residential and non-residential development should only be set where there is clear and compelling justification that they are necessary for managing the local road network	Section 4.2 outlines the parking provision and justification for the parking numbers for the proposed development.
WSCC Walking and Cycling Strategy 2016-2026		
WSCC Walking and Cycling Policy	As stated in Section 3.1 of the Strategy, the key design principles that will apply to new infrastructure are: <ul style="list-style-type: none"> • Cycling and walking are recognised as a key part of the transport mix; • All new (development) and improvement / maintenance schemes will consider, and wherever possible prioritise, the needs of cyclists and walkers; and • The differing needs of users will be recognised in the design of routes and those needs will, wherever possible, be incorporated e.g. people with pushchairs, equestrians, etc. 	The development integrates with existing walking and cycling routes as part of the local highway network.
West Sussex Waste Local Plan		
Policy W10L Strategic Waste Site Allocations	This policy allocates the Ford Airfield site as being acceptable in principle for the development of proposals for the transfer, recycling and / or treatment of waste of up to 250,000 tonnes per annum. Transport development principles for the Ford site are: <ul style="list-style-type: none"> • assessment of the possible closure of the existing access north of Rodney Crescent and the use of an alternative access to the site from Ford Road; • assessment of impact of additional HGV movements on highway capacity and road safety, including at the existing and 	All access to/from site will be via the site access road / Ford Road priority junction. The assessment of HGV highway impact was undertaken as part of the SLR planning application and concluded that the increase in HGV activity on the site will have minimal or no impact on the highway network. The proposed development will operate with the SLR HGV capacity cap for the site and therefore the same conclusions still stand that

Item	Policy	Policy Provision
	<p>mitigated Church Lane / A259 roundabout; and</p> <ul style="list-style-type: none"> a routing agreement is required to ensure vehicles enter and exit via Ford Road to the south, and not to or from the A27 to the north. Access via Rollaston Park/B2233 for HGVs should also be prevented. 	<p>the proposed development will have minimal or no impact on the highway network.</p> <p>It is confirmed that all HGVs will follow the agreed HGV route to/from the site access road/ Ford Road priority junction and no HGVs will be able to access the site from the west / Rollaston Park.</p>
Parking Policy	<p>With regards to the level of car and other parking, it should be sufficient to prevent environmental or safety problems and not exceed agreed maximum standards other than in exceptional circumstances.</p> <p>Convenient, attractive, and safe cycle and motorcycle parking and parking for those with impaired mobility should be provided to agreed minimum standards.</p>	<p>The proposed development includes a level of staff car parking to ensure a smooth and safe shift turnover with no overspill. Ample disabled parking, cycle parking and electric parking is provided with the option for expansion/conversion should demand arise.</p>
Arun District Council Parking Standards Supplementary Parking Document		
Parking Policy	<p>Parking for non-residential uses needs to consider the accessibility of the site, the likely demand for parking and the viability of the site. In determining the amount of parking that should be provided at non-residential developments, developers should seek to balance operational needs, space requirements, efficient use of land and cost attributed to providing parking and where relevant, attracting / retaining staff.</p>	<p>Section 4.2 outlines the parking provision and justification for the parking numbers for the proposed development.</p> <p>As per Section 4.2, the level of parking proposed is to enable safer shift turn-over, to enable visitor parking and to enable safe contractor parking during maintenance periods.</p>
Disabled Parking Provision	<p>Disabled parking provision, it should be provided at a minimum of 5% of the total number of parking spaces being provided on the site.</p>	<p>The development will provide 5% disabled access spaces and is compliant with Arun District Council disabled car parking standards.</p>
Electric Vehicles Charging Spaces	<p>The minimum requirements for electric vehicle charging points for new developments in Arun District Council are: 30% of space by 2023, 50% of spaces by 2028 and 100% of spaces of 2033.</p>	<p>In line with local policy, the development 100% of spaces will be EV enabled.</p> <p>In order to comply with policy in the future, all spaces will be designed so that they are easily converted with electric charging spaces in the future.</p>
Cycle Parking	<p>WSCC guidance indicates cycle parking provision at one space per 200 sqm for staff and one space per 500 sqm for visitors.</p>	<p>The scheme is to provide 32 covered, secure cycle parking spaces for staff and visitors in the north-east corner of ERF. This is considered consistent with policy.</p>

As part of the future Travel Plan (post-submission/pre-occupation), strategies to encourage cycling and walking to/from the development will be promoted. The Travel Plan will be designed to provide information for all staff and visitors to travel more sustainably and to seek to reduce vehicular traffic to/from the site where possible.

8. SUMMARY AND CONCLUSION

This Transport Assessment has considered the potential transport issues of the proposed Ford ERF and WSTF off Ford Road to the south of Ford Village in Arundel, West Sussex.

It has been demonstrated that the proposed development complies with national and local policy. It has also been demonstrated through a detailed trip generation analysis, that the fully operational site will operate within the existing/permitted site SLR HGV capacity cap, both in terms of numbers and delivery times.

With respect to the highways impacts and as agreed with WSCC Highways, junction assessments have been carried out for the site access/Ford Road junction and existing Church Lane/A259 roundabout in the construction (2025) and operational (2026) year. Additional modelling at the site access/Ford Road junction has been undertaken to provide a sensitivity test of peak construction phase traffic plus traffic associated with the Ford Market and Car Boot (FMCB), as per the new access arrangement using the site access road from Ford Road to the eastern runway of Ford Airfield, put forward in the currently undecided planning application F/5/20/PL.

A summary table with the junction assessment results and the scenarios tested for the site access/Ford Road junction and the existing Church Lane roundabout, as agreed with WSCC Highways, is presented below. Assessment results for the existing Church Lane/A259 roundabout in the Operational Year (2026) are not available (N/A), as the Operational Year (2026) traffic flow through the roundabout is less than that of the Construction Year (2025), and an Operational Year assessment was not required by WSCC Highways.

Junction Assessment Results	2025 without Construction	2025 with Construction	2025 with Construction + FMCB	2026 without Development	2026 with Development
Site Access/Ford Road Junction					
Church Lane/A259 Roundabout			N/A	N/A	N/A

The high values of FMCB flows during the busiest hour (09:00-10:00) cause capacity issues and long queues and delays at the site access/Ford Road junction, whilst without the FMCB flows all the arms of the junction operate within capacity. Therefore, the proposed application site does not result in the site access/Ford Road junction being over capacity; rather, this is attributed to the FMCB traffic, which is operational on Thursday AM and Sunday AM.

The existing Church Lane/A259 roundabout is expected to already have capacity issues in 2025 without ERF construction traffic, and with the addition of ERF construction traffic this is expected to have minimal impact on expected poor performance of the roundabout in 2025.

A future Workplace Travel Plan and the Interim Delivery and Servicing Plan (submitted as part of this application) will provide further opportunity to manage staff travel demand and encourage sustainable, safe and efficient site access.

Further trip generation analysis of the construction phase traffic demonstrates that the proposed construction of the development will generate HGV levels within the HGV SLR capacity cap and therefore is considered acceptable. Construction HGVs will also only route to/from the south. To further mitigate the impact of construction worker vehicles it is suggested that a detailed CTMP should be prepared by the Contractor prior to commencement; the heads-of-terms of which will be to

develop further initiatives relating to staggered departure, car share, shuttles and raising awareness of the issues and supporting non-car based access where possible.

In conclusion, it is considered that the proposed development for the construction of the Ford ERF and WSTF should be supported on highway and transport grounds.

APPENDIX 1 TA SCOPING & WSCC RESPONSE

TECHNICAL NOTE

Project name **Ford ERF**
Project no. **1620007830**
Client **Ford EfW**
Date **30/01/2020**
From **Ramboll**
Copy to **West Sussex County Council Highways Department**

Prepared by **Tom Craven**
Checked by **Thaddaeus O'Higgins**
Approved by **Steve Chewins**

Transport Assessment Scoping Checklist

Date 30/01/2020

This technical note sets out a checklist of items to be discussed and agreed with West Sussex County Council Highways (WSSCC Highways) to inform the scope of the Transport Assessment (TA) for the proposed Ford Energy Recovery Facility (ERF) and waste transfer station (WTS) off Ford Road in Ford, Arun, West Sussex.

The application site is located at the Ford Circular Technology Park (CTP) (the former Tarmac blockworks site) to the west of the village of Ford. The 7.14 ha site is partially used for existing WTS operations and is partially vacant. The existing WTS building is located towards the centre of the site and portacabins, parking and containers associated with this operation are situated to the west of the WTS. There are two vacant former hangar buildings towards the north of the site and a large area of hardstanding is situated towards the south and east of the site.

Ford EfW Ltd, a joint venture between Grundon Waste Management Limited and Viridor, is now proposing to build and operate a conventional energy recovery facility (ERF) at the site. Grundon Waste Management, the sole owner / operator of the existing WTS, is proposing to continue this operation in a new, purpose built facility on site. A full planning application, including the ERF and WTS and ancillary uses, will be submitted later this year.

There are two previous planning permissions for the site. The first permission was granted in 2013 for a new Waste Treatment Facility which was only partially developed into a 20,000 tonnes per annum (tpa) WTS which is currently active on site. The second planning permission was granted in 2018 for a new link road (referred to as 'Southern Link Road') that links the application site (CTP) with the access road to the Southern Water and Viridor sites to the south of the site. The Southern Link Road (SLR) has now been constructed and all access and egress to the CTP is via the SLR from the existing Southern Water/Viridor Access Road and priority junction with Ford Road.

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As part of the planning permission for the SLR, the access road has an HGV cap of up to 240 HGV movements to and from site per day (120 HGVs in and 120 HGVs out) between 06:00 to 20:00 (Mon-Fri) and up to 120 HGV movements to and from site per day (60 HGVs in + 60 HGVs out) between 08:00 to 18:00 (Sat). All HGV activity from the CTP has to stay under these thresholds.

It is not proposed to undertake a junction assessment at the Ford Road / Southern Water/Viridor Access Road priority junction on the grounds that the junction was assessed in the permitted 2018 SLR application and was found to operate with plenty of spare capacity in 2017 (opening year) and the future year of 2024 under all scenarios tested. The Transport Assessment submitted as part of the SLR application was prepared by Callidus (WSCC planning ref: WSCC/027/18/F, permitted on 15/08/2019) and was based on turning count data collected by surveys undertaken in 2013.

On the basis that the proposed development will not increase traffic levels at the junction above the current permitted vehicle capacity cap (as described above), the previously estimated performance of the permitted/existing Ford Road / Southern Water/Viridor Access Road priority junction stands.

Table 1 below presents a summary of the proposed scope for the TA to be agreed in support of the planning application for the proposed development.

The current scheme layout and site location plan are presented in the attached Appendix.

Table 1: Transport Assessment Scoping Checklist

Item	Brief Justification
Transport Assessment	Based on the location and nature of the proposed development, it is considered that a Transport Assessment focussing on highway impact, local access (including walking and cycling) and safety.
Policy Review to focus on policy relevant to the development type and location	Policy review to refer to the West Sussex Local Plan (2013) and West Sussex Local Transport Plan 2011-2026 (LTP3).
Junction capacity assessment	No junction assessments have been proposed due to the fact that the proposed development will not increase traffic levels at the existing Ford Road / Southern Water/Viridor Access Road priority junction above the current permitted vehicle capacity cap for the Ford CTP site, which was found to operate with plenty of spare capacity at 2024 in the 2018 SLR application. Due to no assessment being proposed, no surveys will be undertaken.
Accident stats to be reviewed	To ensure safety objective is covered for all modes. Review to cover last 5 years subject to WSCC agreement. Review to cover local adjacent highway network (including SLR junction and Crookham Lane roundabout).
On-site parking	Proposed parking to be confirmed.
TA will review public transport facilities/services	Review to be included.
TA to review pedestrian facilities	Review to be included.
TA to review cycle facilities	Review to be included.
Consideration of committed development	Committed development to be included within future year traffic growth rates. No specific consideration of other Committed Developments proposed, subject to WSCC agreement.
TA will review servicing and delivery facilities	Review to be included.
Proposed site access	Access to the site to/from the highway network to be taken off Ford Road via the newly constructed SLR. The SLR access road to/from Ford Road will be shared with the Viridor Support Services business to the south of the site.
Estimation of trip generation	Trip generation and mode choice will be based on estimated operational phase data supplied by Ford Energy from Waste Ltd,
Consideration of construction traffic	Construction Traffic Management Plan expected as a pre-commencement condition. Details of estimated construction phase trips to be supplied by Ford Energy from Waste Ltd.
Consideration of impacts	Included to estimate the potential impact of trips to/from development, focusing on local access, HGVs numbers and highway. Impact for both construction and operational phase will be assessed.
Travel Plan	Requirement to be confirmed by WSCC.

Construction Traffic Management Plan	Requirement to be confirmed by WSCC.
Delivery & Servicing Plan	Requirement to be confirmed by WSCC.

From: [Stephen Gee](#)
To: [Tom Craven](#)
Cc: [Tom Smith](#); [Thaddaeus O'Higgins](#); [Chara Sifaki](#); [James Neave](#)
Subject: RE: Ford Circular Technology Park - Energy Recovery Facility and Transfer Station - Transport Assessment Scoping
Date: 10 March 2020 09:09:18
Attachments: [Ford Circular Technology Park - Energy Recovery Facility and Transfer St....pdf](#)

Tom,

Thanks for confirmation that the TA scoping figures can be utilised in regards to the EIA.

Background

It is acknowledged that the southern link road provided an assessment for 240 two way HGV movements and that any future development would remain under these HGV thresholds.

Policy Review

Include WSCC walking and cycling strategy <https://www.westsussex.gov.uk/about-the-council/policies-and-reports/roads-and-travel-policy-and-reports/west-sussex-walking-and-cycling-strategy-2016-2026/>

Consideration of committed development

Since the previous application Yapton Strategic Development (Y/91/17 and Y/92/17) and Climping Strategic Development CM/1/17/OUT have been approved. A planning application has also been submitted for Ford Airfield F/4/20.

Is this data just being utilised to identify the % vehicle increase on links? If so compare flows to previous TEMPRO assumptions.

Trip Generation / Junction Assessment

The site is anticipated to generate a maximum total of 462 vehicle movements with a total of 29 two way movements in the network AM peak and 30 in the network PM peak. The previous TA for the SLR assessed the site access for a worst case 2024 scenario with 17AM and 17PM two way vehicle movements and resulted in a maximum RFC of 0.133. Given the significant level of capacity and increase of 12/13 two way trips at the junction then no junction modelling of the site access is required.

The TA for the SLR also assessed the impact of the development on the Church Lane/ A259 junction as the baseline and future year scenarios were operating over capacity, the TA concluded the development did not have a severe impact on the junction. Given a significant improvement to Church Lane / A259 is secured via planning application ref CM/1/17/OUT and the limited increase in peak period trips then no formal assessment is required.

Additional documents

I can confirm that a Travel Plan, Construction Management Plan and Delivery and Servicing Plan would be required.

All other items within the TN are acceptable

Other items

Safety Audit

Whilst it is acknowledged that the site access is newly constructed. The WSCC safety audit policy

(https://www.westsussex.gov.uk/media/5556/roadsafety_auditpolicy.pdf) identifies that where a development would increase daily trips by over 50 vehicles then a safety audit should be provided with the application. If necessary a designers response should be provided in line with the requirements of GG119.

Conditions

Given the information provided on the shift patterns that avoid the network peaks it is also anticipated that a condition restricting vehicle movements or staff work patterns would be required. Should the applicant not wish to have the recommendation of a condition then junction modelling showing the shift patterns happening in the network peak would be need to be agreed and assessed.

If you have further questions then let me know

Regards

Stephen

Stephen Gee | Principal Planner County Highways (Development Management), Planning Services, [West Sussex County Council](#) | Location: Ground Floor, Northleigh, County Hall, Chichester, PO19 1RH | Internal 23306 | External 0330 222 3306 | E-mail: Stephen.Gee@westsussex.gov.uk

From: Tom Craven <tom.craven@ramboll.co.uk>

Sent: 02 March 2020 12:20

To: Stephen Gee <Stephen.Gee@westsussex.gov.uk>

Cc: Tom Smith <thomas.smith@ramboll.co.uk>; Thaddaeus O'Higgins <thad.ohiggins@ramboll.co.uk>; Chara Sifaki <chara.sifaki@ramboll.co.uk>

Subject: RE: Ford Circular Technology Park - Energy Recovery Facility and Transfer Station - Transport Assessment Scoping

Hi Stephen,

Please see attached the operational trip generation data for the proposed development of the Waste Transfer Station (WTS) and Energy Recovery Facility (ERF) at the Ford CTP site as requested.

The operational trip generation has been broken down into 3 types of trips;

- **Staff Car Trips** – these trips are made up of all staff car trips to/from site for the duration of the day.
- **LGV Trips** – these trips are primarily made up of contractor and deliveries to/from site for the duration of the day.
- **HGV Trips** – these trips are made up of all the HGV trips to/from site going to/from the Waste Transfer Station (WTS) and the Energy Recovery Facility (ERF) for the duration of the day.

The trip types have also been broken down into 'Average Day' and 'Peak Day'. The only difference between the two 'days' is in the HGV totals as staff and LGV trips will be the same

during each type of day. An 'Average Day' presents the normal number of operational HGV trips anticipated to/from the WTS and ERF. A 'Peak Day' is an infrequent event occurring approximately once a month and presents the peak operational HGV trips anticipated when there is an uplift in fuel and/or reagents/residues deliveries for the WTS and ERF. A 'Peak Day' is therefore presented as a sensitivity test and the assessment will be based on the 'Average Day'.

Staff Car Trips

Staff car trips have been derived using first principles. Ford EfW Ltd (the proposed site operators) have estimated that there will be approximately 80 staff working at the site split between 40 at the WTS and 40 at the ERF. Ford EfW Ltd have given us the estimated start and finish times for all these staff, so it was possible to work out the staff distribution from this data.

It has been assumed that all staff drive to/from site in single occupancy cars for a 'worst-case' trip generation scenario. This has been done so we can see what the potential maximum trips are to/from site for staff but it is noted that some site staff might be able to travel more sustainably, which will be addressed in the site travel plan.

Also, please note that the proposed number of staff to work at the ERF has been refined since the EIA scoping

LGV Trips

Due to their being no available LGV data for Ford CTP, LGV trips have been derived by considering LGV trips at the existing Lakeside EfW facility in Slough. We (Ramboll) have been involved in preparing the detailed planning application at the replacement Lakeside EfW facility to the one which is currently operational. A survey of the operational Lakeside facility identified some LGV trips at the site and therefore, for our assessment LGVs have been for the proposed Ford site. It was noted that the LGV trips at Lakeside were attributed to contractors for maintenance/planned shut downs and also some deliveries. As we do not have any site specific LGV maintenance/delivery data for the Ford site, LGV trips for the Lakeside EfW site have been assumed to be the same for the Ford site.

Lakeside EfW is also owned and operated by a JV of Grundon and Viridor which is exactly how the proposed Ford ERF will be structured and therefore, for the purpose of the assessment it has been assumed that LGV trips at the Lakeside site will be representative of the proposed Ford site. In reality, the Lakeside LGV trip generation is probably higher than for the proposed Ford site, as Lakeside is over 10 years old and maintenance could be more onerous. Therefore, the estimated LGV trips is considered a robust estimate as there will likely be less maintenance LGV trips associated to a state of the art modern facility.

HGV Trips

HGV trips have been based on proposed HGV movements supplied by the Ford ERF plant designers (Fitchner), who also designed the replacement Lakeside EfW facility as well as other recent EfW facilities around the UK. The HGV trips to/from the site have been split between HGVs to/from the WTS and ERF.

The estimated profile of HGV arrival and departures for the WTS has been based on the existing trip profile recorded by weighbridge data at the existing site and is considered robust. Due to the lack of trip profile data for the Ford ERF, the HGV trip profile for the Lakeside facility is assumed to be representative of ERF HGV trips to/from the proposed Ford site.

I hope the attached information proves useful in your consideration of the proposed scope of assessment for the proposed Ford EfW and we look forward to hearing from you. If you have any queries or would like any further information, please do not hesitate to contact me.

Kind regards

Tom Craven

Consultant Transport Planner

tom.craven@ramboll.co.uk

Ramboll UK Limited Registered in England & Wales Company No: 03659970
Registered office: 240 Blackfriars Road, London SE1 8NW

From: Stephen Gee <Stephen.Gee@westsussex.gov.uk>
Sent: 07 February 2020 09:12
To: Tom Craven <tom.craven@ramboll.co.uk>
Cc: Tom Smith <thomas.smith@ramboll.co.uk>; Thaddaeus O'Higgins <thad.ohiggins@ramboll.co.uk>; Chara Sifaki <chara.sifaki@ramboll.co.uk>
Subject: RE: Ford Circular Technology Park - Energy Recovery Facility and Transfer Station - Transport Assessment Scoping

Tom,
Can you supply the trip generation information before I can provide further information.
I note the cap the on HGV movements but in addition to this there appears to be approx. 100 car/van parking spaces on site which could have impacts on offsite junction assessments.

Regards

Stephen

Stephen Gee | Principal Planner County Highways (Development Management), Planning Services, [West Sussex County Council](#) | Location: Ground Floor, Northleigh, County Hall, Chichester, PO19 1RH | Internal 23306 | External 0330 222 3306 | E-mail: Stephen.Gee@westsussex.gov.uk

From: Tom Craven [<mailto:tom.craven@ramboll.co.uk>]
Sent: 03 February 2020 20:49
To: Steven Shaw
Cc: Tom Smith; Thaddaeus O'Higgins; Chara Sifaki; Stephen Gee
Subject: RE: Ford Circular Technology Park - Energy Recovery Facility and Transfer Station - Transport Assessment Scoping

Hi Steven,

Thanks for the quick response.

We are looking to submit our application in April, so if are you able to provide comment a little earlier than the 21 days that would be much appreciated as our programme is extremely tight.

I'm able to discuss on the phone if helps?

Kind regards

Tom Craven

Consultant Transport Planner

tom.craven@ramboll.co.uk

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Registered office: 240 Blackfriars Road, London SE1 8NW

From: Steven Shaw <Steven.Shaw@westsussex.gov.uk>
Sent: 03 February 2020 20:41
To: Tom Craven <tom.craven@ramboll.co.uk>
Cc: Tom Smith <thomas.smith@ramboll.co.uk>; Thaddaeus O'Higgins <thad.ohiggins@ramboll.co.uk>; Chara Sifaki <chara.sifaki@ramboll.co.uk>; Stephen Gee <Stephen.Gee@westsussex.gov.uk>

Subject: RE: Ford Circular Technology Park - Energy Recovery Facility and Transfer Station - Transport Assessment Scoping

Thank you Tom my colleague Stephen Gee will review and provide comment as soon as he can. For pre-apps we state that we will provide comment within 21 days of receipt.

Regards

Steven Shaw BA (Hons) MSc MCIHT

County Highways (Development Management) Team Manager

County Highways Team, Planning Services

West Sussex County Council, Ground Floor, Northleigh, County Hall,

Chichester PO19 1RH

Phone: 0330 222 4674

Email: steven.shaw@westsussex.gov.uk | Web: www.westsussex.gov.uk

From: Tom Craven [<mailto:tom.craven@ramboll.co.uk>]

Sent: 03 February 2020 15:09

To: Steven Shaw

Cc: Tom Smith; Thaddaeus O'Higgins; Chara Sifaki; Stephen Gee

Subject: RE: Ford Circular Technology Park - Energy Recovery Facility and Transfer Station - Transport Assessment Scoping

Hi Steven,

I'd like to confirm we'd just like your free written advice to our TA scoping document please.

Kind regards

Tom Craven

Consultant Transport Planner

tom.craven@ramboll.co.uk

Ramboll UK Limited Registered in England & Wales Company No: 03659970
Registered office: 240 Blackfriars Road, London SE1 8NW

From: Steven Shaw <Steven.Shaw@westsussex.gov.uk>

Sent: 03 February 2020 14:36

To: Tom Craven <tom.craven@ramboll.co.uk>

Cc: Tom Smith <thomas.smith@ramboll.co.uk>; Thaddaeus O'Higgins

<thad.ohiggins@ramboll.co.uk>; Chara Sifaki <chara.sifaki@ramboll.co.uk>; Stephen Gee

<Stephen.Gee@westsussex.gov.uk>

Subject: RE: Ford Circular Technology Park - Energy Recovery Facility and Transfer Station - Transport Assessment Scoping

Tom,

Thank you for your email in relation to the Energy Recovery Facility.

WSCC currently operate a chargeable pre-app service; details of which can be found here <https://www.westsussex.gov.uk/roads-and-travel/information-for-developers/pre-application-advice-for-roads-and-transport/>. Charges only apply if you wish to have a meeting. Should you just want free written advice we can provide that on the TA scoping document.

Please could you confirm which level of service you would like?

Regards

Steven Shaw BA (Hons) MSc MCIHT

County Highways (Development Management) Team Manager

County Highways Team, Planning Services

West Sussex County Council, Ground Floor, Northleigh, County Hall,

Chichester PO19 1RH

Phone: 0330 222 4674

Email: steven.shaw@westsussex.gov.uk | Web: www.westsussex.gov.uk

From: Tom Craven [<mailto:tom.craven@ramboll.co.uk>]

Sent: 30 January 2020 17:25

To: Steven Shaw

Cc: Tom Smith; Thaddaeus O'Higgins; Chara Sifaki

Subject: Ford Circular Technology Park - Energy Recovery Facility and Transfer Station - Transport Assessment Scoping

Hi Steve,

I'm writing to you with regards to the Ford Circular Technology Park Energy Recovery Facility and Transfer Station planning application off Ford Road in Ford, West Sussex.

Please find attached our Transport Assessment scoping checklist, which is a checklist of items to be agreed with yourself (West Sussex County Council Highways) which will inform the scope of the Transport Assessment for the proposed development/application.

I would be grateful if you could read our document and could confirm the scope of our assessment at your nearest convenience.

If you require further information please do not hesitate to msg me back here or call me on 07805-523646.

Kind regards

Tom Craven

Consultant Transport Planner

tom.craven@ramboll.co.uk

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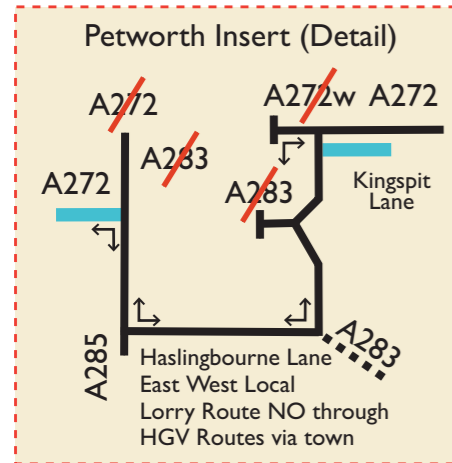
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APPENDIX 2 WSCC ADVISORY LORRY ROUTES MAP

Notes for Guidance to Operators & Drivers of Lorries:

- 1. Strategic Lorry Routes (coloured red)**
All movements crossing the County should use these routes, with those starting or ending within the County using them in preference to local lorry routes wherever possible.
- 2. Local Lorry Routes (coloured blue)**
Used for the starting or final leg of longer distance lorry trips or for travelling between built-up areas in West Sussex.
- 3. Local access trips using roads not shown on the map** must be made in accordance with traffic signing and these roads should be avoided as far as possible.
- 4. The procedure for the routing of abnormal loads** remains unchanged.



A286 Not suitable further North due to low bridge 13'0" (3.96m)

N.B. Drivers should note a signed lorry diversion route is in operation, for A272 and journeys via A285 and A283.

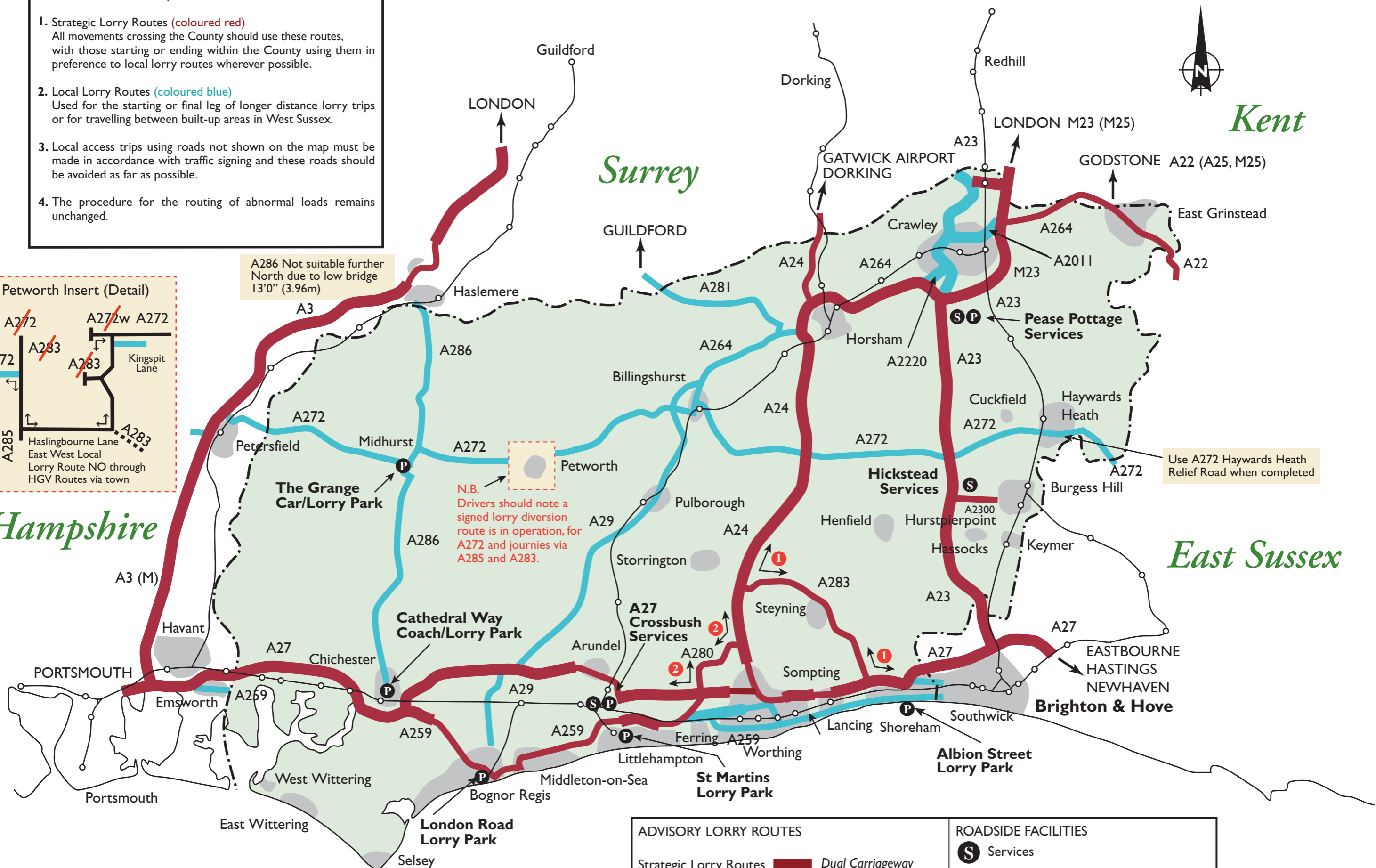
Use A272 Haywards Heath Relief Road when completed

Hampshire

Surrey

Kent

East Sussex



ADVISORY LORRY ROUTES		ROADSIDE FACILITIES	
Strategic Lorry Routes	Dual Carriageway Single Carriageway	S	Services
Local Lorry Routes	Dual Carriageway Single Carriageway	P	Overnight Lorry Parking
Railway Lines		1	Use in preference for A24 to A27 eastbound movements and A27 to A24 northbound movements
County Boundary		2	Use in preference for A24 to A27 westbound movements and A27 to A24 northbound movements
Red and Blue routes are free from height and width restrictions within West Sussex. Routes not shown may carry restrictions.			