

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



ENVIRONMENTAL  
STATEMENT

**CHAPTER 15**  
TRAFFIC AND  
TRANSPORT

## 15 Traffic and transport

### Introduction

- 15.1 This chapter addresses impacts in relation to effects of traffic and transport associated with the proposals. It also includes an assessment of impacts on pedestrians, cyclists, equestrians and drivers or passengers in vehicles, for example cars, light goods vehicles, buses and heavy goods vehicles (HGVs).
- 15.2 The chapter describes the methods used to assess the baseline conditions currently existing at the site and surroundings, the potential direct and indirect effects of the development on traffic and access, the mitigation measures required to prevent, reduce or offset the effects and the residual effects.

### Legislation and policy

- 15.3 The following section introduces the national, regional and local planning policy which has been used to guide the traffic and transport chapter.

#### ***National policy***

*National Planning Policy Framework, 2019*

- 15.4 The National Planning Policy Framework<sup>1</sup> (NPPF) is a key part of the reforms to make the planning system less complex and more accessible, to protect the environment and to promote sustainable growth. There is an overarching presumption in favour of sustainable development that should be the basis of every plan and every decision. The NPPF notes at paragraph 8 that there are three dimensions to sustainable development: economic, social and environmental. The role of the planning process is to contribute to building a strong, responsive and competitive economy, and to identify and coordinate development requirements, including the provision of infrastructure. Chapter 9 of the NPPF refers to promoting sustainable transport.
- 15.5 Paragraph 102 states “*Transport issues should be considered from the earliest stages of plan making and development proposals...*”
- 15.6 Paragraph 109 states “*Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network would be severe.*”
- 15.7 In addition, paragraph 111 states “*All developments that will 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*”.

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<sup>1</sup> National Planning Policy Framework, 2019

[[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/810197/NPPF\\_Feb\\_2019\\_revised.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/810197/NPPF_Feb_2019_revised.pdf)]

### **Local policy**

#### *West Sussex Transport Plan 2011-2026 (LTP3)*

15.8 The West Sussex Transport Plan (WSTP) LTP3 is the county council'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
- Improving safety, security and health

15.9 Under section 1.4.9 of the plan, the LTP3 sets out the council'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, the council will maintain and promote a lorry route network for the main lorry movements in the county.

15.10 The A259 is identified as a strategic lorry route on the council's Advisory Lorry Routes map.

#### *Walking and Cycling Strategy 2016-2026*

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

15.12 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.”*

15.13 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
- 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 to 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
- Encourage use of public transport (e.g. providing cycle parking)

*West Sussex Waste Local Plan (WSWLP)*

- 15.14 The West Sussex Waste Local Plan (WSWLP), which covers both West Sussex County Council (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.
- 15.15 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.
- 15.16 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
  - 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
- 15.17 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.
- 15.18 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;*
- *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.”*

### **Guidance**

#### *Guidelines for Environmental Impact Assessment, 2004*

- 15.19 The *Guidelines for Environmental Impact Assessment*<sup>2</sup> which were written by the Institute of Environmental Management and Assessment (IEMA) aim at assisting all participants in the development process and contributing to the improvement of environmental impact assessment (EIA) practice by setting out the requirements and the expectations relating to good practice.
- 15.20 In the short-term EIA informs decision makers of the likely environmental consequences of development proposals. In the longer-term EIA contributes to the maintenance of critical environmental systems and the well-being of communities.

#### *Guidelines for the Environmental Assessment for Road Traffic, 1993*

- 15.21 The purpose of the *Guidelines for the Environmental Assessment for Road Traffic*<sup>3</sup> is to provide the basis for a systematic, consistent and comprehensive coverage for the appraisal of traffic impacts for a wide range of development projects. The environmental assessment process should be a continuous activity running throughout the planning and design stages of a project.
- 15.22 To ensure the comprehensive coverage of the environmental impacts arising from changes in traffic levels, the guidelines identify a check list of potential impacts such as driver severance and delay, pedestrian severance and delay, pedestrian amenity, accidents and safety, hazardous and dangerous roads, etc.
- 15.23 According to the Guidelines the assessment of the environmental impacts of traffic requires a number of stages, namely:
- Determination of existing and forecast traffic levels and characteristics
  - Determining the time period suitable for assessment
  - Determining the year of assessment
  - Identifying the geographical boundaries of assessment

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<sup>2</sup> Guidelines for Environmental Impact Assessment, Institute of Environmental Management and Assessment, 2004.

<sup>3</sup> Guidelines for the Environmental Assessment for Road Traffic, Institute of Environmental Management & Assessment, 1993.

- 15.24 Further, the study area will be defined by identifying any link or location where it is considered that significant environmental effects may occur as a result of the proposed scheme.
- 15.25 The IEMA guidelines state two rules to be considered when assessing the impact of development traffic on a highway link:
- Rule 1 - include highway links where traffic flows will increase by more than 30% (or the number of heavy goods vehicles (HGVs) will increase by more than 30%)
  - Rule 2 - include any other specifically sensitive areas where traffic flows will increase by 10% or more
- 15.26 Less than a 30% increase is considered to result in imperceptible changes in the environmental effects of traffic. The IEMA guidelines considered that projected changes in traffic flows of less than 10% create no discernible environmental effect.

## **Methodology**

### ***Consultation***

- 15.27 A formal pre-application process has been undertaken with WSCC, in their capacity as the local highway authority. The EIA scoping report was issued to WSCC on 24<sup>th</sup> January 2020. WSCC issued its scoping opinion on 13<sup>th</sup> March 2020. A copy of the scoping report and WSCC's scoping opinion can be seen in Technical Appendix A.

### ***Study area***

- 15.28 The study area has been discussed and agreed with WSCC as part of the pre-application engagement and through the EIA scoping process. In accordance with the IEMA guidelines, the study area has been defined by identifying any link or location where it is considered that significant environmental impacts could occur as a result of the proposed development.
- 15.29 Pedestrian facilities within walking distance of the application site have been considered, plus local public transport access points. Cycle routes passing through the site, or adjacent to the site have been identified. No equestrian routes have been identified within the study area, and therefore have not been considered further in this assessment.
- 15.30 Access to bus stops and public transport stations / interchanges within walking distance of the application site have been considered.
- 15.31 The traffic and transport study area for the ES has been informed by the two rules, as set out in '*Guidelines for the Environmental Assessment of Road Traffic*' in paragraph 15.25 above.
- 15.32 The assessment should be undertaken when the perceived environmental impact is at its greatest, which is considered to be when the site is fully operational in 2031. The assessment considers the 'Do Nothing', which assumes no proposed development, against the 'Do Something', which includes

the same baseline traffic as the 'Do Nothing' but also includes proposed development traffic.

- 15.33 The accident and safety study area is based upon the local highway network within the vicinity of the application site and includes any key links with an increase of 30% or more in traffic.

### ***Baseline and impact assessment***

- 15.34 The following scenarios have been considered within this chapter of the ES:

- Baseline 2018
- Future baseline + cumulative development
- Future baseline + cumulative development + proposed development

- 15.35 Specific traffic surveys were not undertaken for the Transport Assessment 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, the assessment was based upon the traffic data contained within the Ford Airfield Transport Assessment<sup>4</sup> (Planning Application Reference F/4/20/OUT). The traffic survey took place over a period of 7 days between 02 July - 08 July 2018, and forms the 2018 Baseline.

- 15.36 The construction phase assessment is limited to the roads immediately adjacent to the application site and any roads further afield where the 30% increase in traffic threshold is breached. Potential construction traffic impacts from the proposed development have been assessed based upon the number of vehicle movements identified within the Transport Assessment.

- 15.37 The operational assessment has been undertaken when the perceived environmental impact is at its greatest, which is considered to be when the site is fully operational.

- 15.38 The assessment considers the value of delays or benefits occurring to road users on the local highway network based upon the estimated increase in traffic resulting from the proposed development.

- 15.39 There is no formal guidance for assessing the environmental effects of developments on the public transport network. Therefore, the assessment has considered access to key public transport access points and has been undertaken by application of professional judgement. It should be noted that the use of public transport should be encouraged and therefore an increase in demand would be considered as beneficial.

- 15.40 Pedestrian and cyclist severance, delay, amenity, fear and intimidation has been assessed by considering baseline traffic flows, future year traffic flows for 2026, as well as the potential impact of the proposed development in terms of change in traffic flows on each link within the study area. Consideration has been given to daily traffic flows (24-hour annual average daily traffic (AADT)) in respect of pedestrian severance, amenity, fear and intimidation.

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<sup>4</sup> Ford Airfield Transport Assessment DS/EF/AI/ITB13091-003E R, i-Transport, 23 October 2019

- 15.41 The assessment considers the likely increase or decrease in the number of accidents resulting from the changes in traffic flows and composition. Personal injury accident (PIA) data has been obtained from Crashmap for the five year period 2015-2019.
- 15.42 Construction traffic assessment is be limited to the roads immediately adjacent to the application site and any roads further afield where Rule 1 is breached.
- 15.43 The proposed development opening year is anticipated to be 2026 for the purposes of this assessment.
- 15.44 To address cumulative impacts, the analysis in the TA (Technical Appendix K) uses baseline traffic flow data that has been growthed to 2026. Factors to derive the growth have been obtained from the National Transport Model (NTM) adjusted by the Department for Transport's (DfT) TEMPRO software, using Arun district as the locational criteria. This is an industry recognised method for forecasting future base traffic flows and accounts for increases in vehicle usage including due to ownership, mileage and planning data.

### ***Significance criteria***

- 15.45 The IEMA guidelines were reviewed in order to identify appropriate significance criteria applicable to the assessment. Paragraph 4.5 of the IEMA guidelines states that:

*“For many effects there are no simple rules or formulae which define thresholds of significance and there is, therefore, a need for interpretation and judgement on the part of the assessor, backed-up by data or quantified information wherever possible”.*

- 15.46 The effects are described as either:
- Beneficial – meaning that the changes produce benefits in terms of transportation and access (such as reduction of traffic, travel time or patronage, or provision of a new service, access or facility); or
  - Adverse – meaning that changes produce dis-benefits in terms of transportation and access (such as increase of traffic, travel time, patronage or loss of service or facility).

- 15.47 The proposed approach to assessing the significance of impacts on transport and accessibility is identified below.

#### *Driver delay*

- 15.48 IEMA guidelines note that driver delay can occur at several points on the network, although the effects are only likely to be significant when the traffic on the highway network is predicted to be at, or close to, the capacity of the system. Professional judgment has been applied to determine the significance of residual effects.

### *Public transport*

- 15.49 There is no formal published guidance for the assessment of effects on public transport. The assessment has been undertaken by applying professional judgment to determine the significance of the residual effect.

### *Pedestrian and cyclist severance, delay, amenity, fear and intimidation*

- 15.50 The significance of pedestrian and cyclist severance, delay, amenity, fear and intimidation effects has been determined by considering future baseline traffic flows obtained from the traffic surveys, as well as the potential impact of the proposed development in terms of change in traffic flows on each link within the study area by reference to the IEMA guidelines and applying professional judgment. It should be noted that IEMA guidelines refer specifically to pedestrians, but in this assessment have also been applied to consider potential impacts on cyclists who are also vulnerable users.

### *Pedestrian and cyclist severance*

- 15.51 The IEMA guidelines acknowledge that the measurement and prediction of severance is extremely difficult and that the correlation between the extent of severance and the physical barrier of a road is not clear. It notes that there are no predictive formulae which give simple relationships between traffic factors and levels of severance. However, the IEMA guidelines do accept that in general, marginal changes in traffic flows are, by themselves, unlikely to create or remove severance.
- 15.52 Factors which need to be considered when determining severance comprise road width, traffic flows, speed of traffic, the presence of pedestrian crossing facilities and the number of pedestrian movements across the affected route. Similarly, increases in traffic flows may deter cyclists.
- 15.53 The IEMA guidelines suggest that:
- Changes in flow of up to 30 % would produce slight changes in severance
  - Changes in flow of up to 60 % would produce moderate changes in severance
  - Changes in flow of up to 90 % would produce substantial changes in severance
- 15.54 It is recognised that these are guidelines only and are highly dependent on existing ambient traffic levels. They are not considered to be definitive measures of severance and should be used with care and regard paid to specific local conditions.
- 15.55 The guidelines have been used to inform impact magnitude criteria for the assessment. Professional judgment has been applied to identify the likely scale of effects.

### *Pedestrian delay*

- 15.56 The IEMA guidelines note that changes in the volume, composition and or speed of traffic may affect the ability of people to cross roads. Typically, increases in

traffic levels result in increased pedestrian delay, although increased pedestrian activity itself also contributes. The IEMA guidelines do not set any thresholds for absolute or actual changes in delay, recommending instead that assessors use their judgment to determine the significance of the impact.

- 15.57 Any road with a two-way flow of less than 1,400 vehicles is deemed to have a negligible effect. Roads above this are assessed on the basis of professional judgment.

*Pedestrian and cyclist amenity*

- 15.58 IEMA guidelines define pedestrian amenity as the relative pleasantness of a journey that may be influenced by fear and intimidation if they are relevant. As with pedestrian delay, pedestrian amenity is considered to be affected by traffic volumes and composition, along with pavement width and pedestrian activity. The IEMA guidelines suggest that a tentative threshold for judging the significance of changes in pedestrian amenity would be where the traffic flows are halved or doubled. Similarly, this guidance has been applied to consider amenity for cyclists.

- 15.59 The guidelines have been used to inform impact magnitude criteria for the assessment. Professional judgment has been applied to identify the likely scale of effects.

*Pedestrian and cyclist fear and intimidation*

- 15.60 A number of factors are considered relevant in determining changes in the level of fear and intimidation experienced by pedestrians and cyclists, including: volume of traffic, percentage of HGVs, speed of traffic, proximity to people and the availability and quality of pedestrian infrastructure. The IEMA guidelines set out the criteria in table 15.1 for measuring the effects of fear and intimidation.

Degree of Hazard	Average Traffic Flow over 18hr day (vehicles per hour)	Total 18-hr HGV Flow	Average Speed (mph)
<b>Extreme</b>	1,800+	3,000+	20+
<b>Great</b>	1,200 – 1,800	2,000 – 3,000	15-20
<b>Moderate</b>	600-1,200	1,000 – 2,000	10-15

**Table 15.1: Pedestrian fear and intimidation criteria**

- 15.61 The IEMA guidelines stress the need for professional judgment when applying the above criteria. Accordingly, the guidelines have been used to inform impact magnitude criteria for the assessment. Professional judgment has been applied to identify the likely scale of effects for both pedestrians and cyclists.

*Accidents and safety*

- 15.62 There is no formal published guidance for the assessment of accidents and safety. Therefore, professional judgment has been applied to assess the implications of local circumstances and the proposed development's likely effect which may increase or decrease the risk of accidents.

### *Receptor sensitivity*

15.63 The potential receptors are the users of transport networks within the relevant study area. The sensitivity of a road can be defined by the vulnerability of the user groups who are likely to use it, i.e. the elderly or children. A sensitive area may be where pedestrian activity is high, near a school, or an accident black spot. It also takes into account the existing nature of the road, i.e. an existing residential area is likely to be more sensitive than an A road.

15.64 Professional judgement has been used to define the value of receptors in accordance with LA 104<sup>5</sup> Section 3.1. Table 15.2 presents the criteria for identifying receptor sensitivity.

<b>Receptor sensitivity</b>	<b>Criteria</b>
High	Receptors of greatest sensitivity to traffic flow: schools, colleges, playgrounds, accident clusters, retirement homes, roads without footways that are used by pedestrians.
Medium	Receptors of moderate sensitivity to traffic flow: congested junctions, doctors' surgeries, hospitals, shopping areas with roadside frontage, roads with narrow footways, recreation facilities.
Low	Receptors with some sensitivity to traffic flow: places of worship, public open space, tourist attractions and residential areas with adequate footway provision.
Negligible	Receptors with very low sensitivity to traffic flows and those sufficiently distant from affected roads and junctions.

**Table 15.2: Receptor sensitivity**

15.65 The key highway links and associated receptors considered within this chapter are:

- Yapton Road – adjacent residential properties on Horsemere Green Lane
- Ford Road – residential properties on Nelson Row
- Public rights of way (PRoW) and cycle routes and users within the study area
- Road users on the local network

15.66 These are considered to be receptors of low sensitivity according to the above criteria, with the exception of pedestrians and cyclists who would be considered to be receptors of medium sensitivity.

### *Magnitude of effects*

15.67 The determination of the importance and sensitivity of the receptors and the magnitude of change specifically relating to road traffic has been informed by the IEMA guidelines<sup>6</sup>.

15.68 Where the existing baseline HGV or total traffic flows are very minor, a small increase in vehicles would produce a large change in magnitude, whereas in real terms the increase in traffic may still be considered to be negligible or slight.

<sup>5</sup> LA 104 Environmental assessment and monitoring, Rev 01, DMRB, July 2019.

<sup>6</sup> Guidelines for Environmental Impact Assessment, Institute of Environmental Management and Assessment, 2004.

Such an assessment requires appropriate professional and experienced judgements to be made.

15.69 The criteria for assessing the impact magnitude is identified in table 15.3.

Impact	Assessment Criteria			
	Negligible	Small	Medium	Large
Severance	Increase in total traffic flows of 30% or under	Increase in total traffic flows of 30% – 60%.	Increase in total traffic flows of 60% - 90%.	Increase in total traffic flows of 90% and above.
Pedestrian Delay	This will be assessed on a case by case basis using professional judgement subject to the sensitivity and vulnerability of the receptor [to determine whether pedestrian delay is a significant impact].			
Pedestrian Amenity	Threshold for judging the significance of changes to pedestrian amenity where the traffic flows (or HGV component) is halved or doubled.			
Driver Delay	This will be assessed on a case by case basis using professional judgement subject to the sensitivity and vulnerability of the receptor and the results of any capacity assessments/traffic modelling undertaken as part of the TA. Impacts are only likely to be significant when the traffic on the network surrounding the development is already at, or close to, the capacity of the system.			
Public transport	There is no formal guidance for assessing the environmental effects of developments on the public transport network. Therefore, the assessment has been undertaken by application of professional judgement			
Accidents and Safety	Accident data for the local area will be reviewed and professional judgement will be applied to assess the implications of potential increase/decrease in traffic.			

**Table 15.3: Magnitude of impact**

*Significance of effects*

15.70 The significance of the environmental effect has been derived by considering both the sensitivity of the receptor and magnitude of impact, as demonstrated in table 15.4. The matrix has been informed by the DMRB LA 104 guidelines<sup>7</sup>.

Magnitude	Sensitivity			
	High	Medium	Low	Negligible
Large	Very Substantial	Substantial	Moderate	Slight
Medium	Substantial	Moderate	Slight	Slight
Small	Moderate	Slight	Slight	Negligible
Negligible	Negligible	Negligible	Negligible	Negligible

**Table 15.4: Significance of effect**

15.71 Very substantial, substantial and moderate effects are considered to be significant.

15.72 The determination of the importance and sensitivity of the receptors and the magnitude of change specifically relating to road traffic has been informed by the IEMA guidelines<sup>8</sup>.

15.73 Where the existing baseline HGV or total traffic flows are very minor, a small increase in vehicles would produce a large change in magnitude, whereas in real

<sup>7</sup> LA 104 Environmental assessment and monitoring, Rev 01, DMRB, July 2019.

<sup>8</sup> Guidelines for Environmental Impact Assessment, Institute of Environmental Management and Assessment, 2004.

terms the increase in traffic may still be considered to be negligible or slight. In these instances, appropriate professional and experienced judgements have been made.

15.74 The temporal scope of effects is described as short, medium, long-term or permanent. For the operational assessment the effects are long-term, whereas the construction effects are likely to be medium-term:

- Short term: <12 months
- Medium term: 1-10 years
- Long term: +10 years
- Permanent: effects that are considered to be irreversible or long-lasting

15.75 In all cases a degree of professional judgement has been applied to assess whether the effect is considered significant.

### ***Limitations and uncertainties***

15.76 The following assumption is relevant to this assessment:

- The assessment has been based upon the information made available at the time. The assessment has been informed by data from the Ford ERF and WSTF Transport Assessment as contained in Technical Appendix K.

15.77 The following limitations are relevant to this assessment:

- Due to the unprecedented current travel restrictions resulting from COVID19 it has not been feasible to undertake new traffic surveys. Baseline data has therefore relied upon historic data from the Ford Airfield Transport Assessment scheme (otherwise referred to as The Landings). This assessment is based upon survey data from July 2018. The survey data was reviewed against historic data and deemed to be representative of typical network conditions, and therefore considered appropriate for the assessment.

### **Baseline**

15.78 The application site is located at the Ford Circular Technology Park (the former Tarmac blockworks site) which forms part of the former Ford Airfield to the west of the village of Ford, as shown in figure 1.1. The application site boundary is shown in figure 1.2. An aerial photograph of the site is shown in figure 2.1.

15.79 There are several public rights of way in the vicinity of the site to the north, including footpaths 366 and 366/1, which run north-south to Ford Lane, and footpath 200/3, which runs from Ford along the site's north eastern edge and joins footpath 363, which runs to Yapton. Details of the public rights of way can be found in Technical Appendix K.

### ***Local highway network***

15.80 The site is located approximately 500 m west of Ford Road. The site access road runs from the south east corner of the main site to the junction with Ford

Road. The site access road comprises the southern link road (SLR) (i.e. the new access road for which Grundon received planning permission in August 2019 and completed construction of in January 2020) which joins the proposed development site to Viridor's existing site access road, that runs from Viridor's existing materials recycling facility that is situated to the south of Southern Water's waste water treatment works to Ford Road.

- 15.81 The SLR section of the access road is a private road and does not form part of the adopted highway. It is designed to an appropriate standard with a road width of 7.3 m and a 2 m footway on the west side of the carriageway. The route is approximately 180 m in length and has a near straight alignment with no active frontages along its route.
- 15.82 The road link is 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 SLR, demonstrating the road is appropriate for two-way HGV usage.
- 15.83 The SLR planning application also demonstrated that the priority junction with Viridor's existing 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 demonstrated that the priority junction can safely accommodate turning movements for two 16.5 m articulated HGVs at the junction.
- 15.84 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 mostly unlit.
- 15.85 Station Road has a controlled railway level crossing approximately 1 km to the north of the site access road, which is situated to the east of Ford Railway Station. Ford Railway Station is situated on the busy Southampton to Brighton railway line along the south coast and therefore the level crossing is in regular operation.
- 15.86 Ford Road to the south of the site is generally straight and has limited frontages. Nelson Row is a residential street set back and running parallel to Ford Road approximately 120 m south of the site access road. 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. There are 23 residential properties along Nelson Row with the frontages of the houses set back approximately 25 m from the carriageway's eastern boundary with Ford Road.
- 15.87 HMP Ford is located approximately 550 m south of the site access road on Ford Road and is situated on either side of the 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.
- 15.88 The southern end of Ford Road is known as Church Lane. Church Lane forms a roundabout junction with the A259 at its southern extent. This junction, known

as the Crookthorn Roundabout, is located approximately 1.7 km to the south of the site access road on Ford Road.

15.89 The A259 is a strategic route that links Chichester with Worthing via Bognor Regis and Littlehampton. The A259 between the junction of Yapton Road and Ford Road has a 40 mph speed restriction. This section of highway is heavily trafficked, with no frontages and a shared footway / cycleway running along the northern side of the carriageway between the Yapton Road junction to the west and the Crookthorn Roundabout to the east.

15.90 Table 15.5 identifies the 2018 baseline (24 AADT) traffic flows for all vehicles and the HGV component on the local highway network.

Road Name	Baseline 2018 24 AADT	
	All veh.	HGV
North End Road (north of Ford Lane)	10474	557
Ford Lane (west)	6445	257
Ford Lane (east)	5787	157
Station Road	8270	314
Ford Road (north of site access)	12356	343
Site access road	129	61
Ford Road (south of site access)	12421	518
A259 Crookthorn Lane	29255	1172
B2233 Yapton Road	9903	200
A259 Grevatt's Lane	22904	879
B2233 Yapton Road	9960	293
A259 Burndell Road	11060	364
Bilsham Road	7645	229
B2233 Main Road	16376	493
North End Road (south of Ford Lane)	7631	293

**Table 15.5: 2018 Baseline traffic data**

15.91 No specific data for the site access road was available in the baseline survey data (based on the Ford Airfield Transport Assessment, 2018). Therefore, an estimate of vehicles using the site access road has been derived based upon an understanding of the current WTS and Viridor operation. These vehicles have been distributed throughout the highway network in accordance with the assumptions presented in the Transport Assessment. This states no HGV movements to / from the north of the site access road along Ford Road, with all HGV movements to / from the south via Church Lane and assumes a 50 / 50 split distribution at the Church Lane / A259 roundabout. All other vehicles will be distributed as 10% to / from the north of the site access road on Ford Road and 90% to / from the south via Church Lane, again splitting 50 / 50 at the Church Lane / A259 roundabout.

15.92 The 7.11 ha site is currently used for an existing WTS operation under the current permission with the remainder of the site being vacant. As part of the permission for the SLR was that HGV movements were capped to a maximum number of movements per day. 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) are permitted.

### ***Pedestrian accessibility***

15.93 Public rights of way within the vicinity of the proposed development have been extracted from West Sussex County Council's website are identified in figure 15.1 and 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
- Footpaths 200.3 and 200.4 which run to the north east 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
- Footpath 175 which runs to the south of the site and provides a connection between Ford Road and Yapton Road

15.94 A footway of circa 2.5 m wide running north-south along the west side of Ford Road crosses the access road without deviation from its course. Dropped kerbs are provided across the access road.

15.95 There is no footway provision along the site access road from the Ford Road junction to the entrance of the Southern Water waste water treatment works site, however, a footway is provided on the SLR section of the access road, that runs from the Southern Water entrance to the main part of the proposed development site.

15.96 To the north of the site, Ford Road leads into Station Road and along its length the footway is separated by a wide grass verge circa 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 signalised pedestrian crossing is located on Ford Road, approximately 550 m south of the site access road. 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.

15.97 A pedestrian footway is also present on the east side of Yapton Road, along its entire length to the north west of its junction with Rollaston Park and until the bus stop at approximately 50 m south-east of the junction. On Rollaston Park footways are present on both sides of the road, apart from a section of approximately 90m to the north-west of its junction with Sproule Close. It should be noted there is no direct pedestrian access from the site to Rollaston Park.

15.98 No footways are present on either side of Ford Lane.

### ***Cycle accessibility***

15.99 There are no dedicated cycling facilities within the study area. Figure 15.2 has been extracted from West Sussex County Council's website, and identifies the section of Yapton Road between Horsemere Green Lane and Bilsham Road as part of the Local Cycle Network 38. It should be noted that this section of Yapton Road is subject to a 40 mph speed limit.

15.100 National Route 5 of the National Cycle Network (NCN) which is located beyond the study area, runs along the A259 to the south of the development site and the closest access points to NCN5 are the junctions of the A259 Crookthorn Lane with Yapton Road and Church Lane.

### ***Public transport network***

15.101 There are no bus stops within a reasonable walking distance to the site.

15.102 The nearest railway station to the site is Ford Railway Station which is approximately 1.8 km to the north east and is served by Southern Railway with a large number of services throughout the day. The station has step-free access and ramps are available for train access. There is sheltered storage provided for 14 cycles with CCTV coverage.

### ***Accident analysis***

15.103 Personal injury accident (PIA) data for the highway network in the vicinity of the development site have been obtained from the CrashMap website for a five-year period from 01/01/2015 to 31/12/2019.

15.104 Locations of the accidents are shown in figure 15.3 and accidents that occurred within the study area (highlighted in blue) are summarised in table 15.6.

Year	Severity			Total Accidents	Vulnerable Road Users			Total Casualties
	Slight	Serious	Fatal		Pedestrians	Cyclists	Motorcycle	
2015	4	0	0	4	0	2	0	5
2016	2	1	0	3	0	0	0	3
2017	2	1	0	3	0	0	1	4
2018	3	0	0	3	1	0	0	7
2019	0	0	1	1	0	0	1	2
Total	11	2	1	14	1	2	2	21

**Table 15.6: Summary of PIA data within study area**

15.105 In total 14 accidents have been recorded within the study area during the five-year time period, of which 11 were slight, two serious and one fatal. One serious and one fatal accident occurred in 2017 and 2019 respectively, at Rollaston Park / Yapton Road junction, both involving a motorcycle.

### ***Key trip generators***

15.106 Key trip generators and local amenities within the study area have been identified in figure 15.4 and table 15.7.

15.107 Table 15.7 identifies local amenities within the vicinity of the application site that could be attractive to pedestrians, cyclists and equestrians. It should be noted that the distances have been measured using Google maps and based upon the PRow map (figure 15.1) extracted from the West Sussex County Council (WSCC) website. There are no direct links between the application site and some of the existing local amenities presented in table 15.7.

Purpose	Existing Local Amenities	Total Distance (m)
Employment	Rudford Industrial Estate	1,000
	Ford Lane Industrial Estate	800
	Ford Airfield Industrial Estate	600
	Southern Water Waste Water Treatment Works	100
	HM Prison Ford	800
Leisure	Arun Sports Arena	300

**Table 15.7 Existing Local Amenities**

### ***Future baseline***

15.108 The assessment has considered a future year of 2026 and includes traffic from the following committed developments, as shown in figure 15.5:

- Application Y/80/16 – development of up to 100 units at North End Road
- Application WA/44/17 – development of 175 units at Walberton
- Application Y/5/17 – development of up to 51 units on Cinders Lane
- Y/44/17 – development of up to 70 units at Stakers Farm
- Application Y/9/17 and Y/92/17 – development of 550 units at Bilsham Road
- Application CM/1/17 and CM/13/18 – 300 units at land south of Horsemere Green
- Application F/4/20 – Outline planning for 1,500 dwellings, care home, employment, retail/commercial, education and community facilities at the land at Ford Airfield (application undecided)

15.109 In the absence of the proposed development, the site will remain in its current use (i.e. the WTS will continue in operation) and access / egress to the site will continue from the site access road.

15.110 A review has been undertaken of the proposed improvements to walking, cycling and public transport facilities associated with the committed development identified above. There are a number of local improvements to walking and cycling facilities, providing connectivity between local networks and the proposed new developments. These are considered to have limited benefits to users of the proposed development site.

15.111 Application F/4/20/OUT includes 1,500 dwellings, employment space and improvements to pedestrian and cycle connectivity along Rollaston Park, Horsemere Green Lane and Ford Road. The scheme also includes improved pedestrian and cycling connectivity to Ford Railway Station via PRow 200.3. The scheme will also provide connectivity to footpaths 363, 366, 366.1 and 175. Improving pedestrian connectivity within the local area.

### **Effects during construction**

- 15.112 The construction traffic effects relate to the arrival and departure of construction workers, construction materials / equipment and waste, and the impact on existing traffic, the highway network and walking and cycling routes in the area. Full details of the construction phase of the development is set out in chapter 3.
- 15.113 All vehicles would access the proposed ERF and WSTF from Ford Road. No construction HGV vehicles will be permitted to leave or access the site to / from the northern stretch of Ford Road.
- 15.114 The existing WTS will continue to operate during construction of the northern part of the new WSTF (construction phase 1). Once the WSTF is operational the existing WTS will be demolished to make way for the new ERF (construction phase 2). The new WSTF will then continue to operate during the construction of the ERF (construction phase 3) and the completion of the southern half of the WSTF (construction phase 4).
- 15.115 Based on experience of similar projects elsewhere, an estimation has been made for the volume of construction traffic for each of the four stages of the construction programme, which will include the following vehicle types: passenger vehicles (expected to be cars and vans), material removal vehicles (excavation arisings and for site clearance), concrete delivery vehicles and engineering fill deliveries.
- 15.116 The number of passenger vehicles for each stage has been calculated using the construction workforce numbers previously stated (in chapter 3) and a vehicle occupancy of 1.5, which is in line with standard practice. All construction staff will park on site and as staff will be working shifts, it is assumed that construction staff movements to and from site will occur mainly between the hours of 07:00 – 09:00 and 17:00 – 19:00 hours.
- 15.117 The outline construction environmental management plan (CEMP) provided in Technical Appendix L seeks to minimise the impact of the construction of the proposed development on the local area. Once a contractor is appointed in due course the outline CEMP will be reviewed and updated in line with the construction programme and include details of the following:
- Preferred hours of deliveries and removals (out of peak hours)
  - Agreed construction traffic routing
  - Road cleaning facility provisioning
  - Off-loading and storage areas
  - Personnel and vehicle segregation
  - Equipment e.g. temporary fencing, signage etc.
  - Site inductions

### ***Local highway network and driver delay***

- 15.118 The combined peak construction vehicle movements for the construction phase is presented in table 15.8. The 2025 baseline includes committed development flows within the area. The 2025 construction scenario includes the 2025 baseline

flows (including committed development) and construction flows resulting from the proposed development. Details of the baseline and construction flows are presented further in the Transport Assessment (Technical Appendix K).

Road Name	2025 Baseline (+committed developments)		2025 Construction Baseline		% Change	
	All veh.	HGV	All veh.	HGV	All veh.	HGV
North End Rd (north of Ford Lane)	13089	557	13089	557	0%	0%
Ford Ln (west)	9410	257	9410	257	0%	0%
Ford Ln (east)	8817	157	8817	157	0%	0%
Station Rd	9756	314	9838	314	1%	0%
Ford Rd (North of Site Access Road)	14728	343	14811	343	1%	0%
Site Access Road	835	61	1695	148	103%	142%
Ford Rd (South of Site Access Road)	15400	526	16192	612	5%	16%
A259 Croockthorn Ln	32920	1193	33317	1237	1%	4%
B2233 Yapton Rd	12882	200	12882	200	0%	0%
A259 Grevatt's Ln	26354	929	26751	972	2%	5%
B2233 Yapton Rd	12489	293	12489	293	0%	0%
A259 Burndell Rd	13861	364	13861	364	0%	0%
Bilsham Rd	9767	229	9767	229	0%	0%
B2233 Main Rd	20413	493	20413	493	0%	0%
North End Rd (south of Ford Lane)	11239	293	11239	293	0%	0%

**Table 15.8 2025 Baseline and Construction Flows**

15.119 Table 15.8 identifies a minimal percentage increase in HGVs as a result of the construction of the proposed development across the local highway network, including the sensitive links identified in section 15.65. The exception is the site access road which will experience a significant increase in construction traffic movements (i.e. over 30%) but this is an internal access link, is within the planning application site boundary and is not considered a sensitive receptor.

15.120 There would be an increase in vehicle movements resulting from construction workers accessing the site. However, the percentage increase against the existing background traffic is considered to be minimal. Construction workers will be encouraged to car share and use sustainable travel to the site in the CEMP.

### ***Driver Delay***

15.121 It is anticipated that there may be some delay to road users at times due to construction vehicles entering / exiting the application site. However, the outline CEMP commits to ensuring deliveries are co-ordinated to avoid vehicles being held up on the local highway and that, wherever feasible, deliveries would be undertaken outside of peak hours.

15.122 Based upon the above the receptor sensitivity is considered to be low. The magnitude of impact is considered to be small due to the overall marginal

increase in construction traffic movements on the local highway network. In addition, measures would be implemented as set out in the outline CEMP to manage the volume of construction traffic and propose safety measures. The overall significance of impact is therefore considered to be slight adverse and not significant.

### ***Public transport***

15.123 During the construction phase there would be no anticipated change to access to local public transport services.

15.124 Construction workers will be encouraged to use public transport services, where feasible. Any potential additional demand in public transport services is considered beneficial.

15.125 Based upon the above the receptor sensitivity is considered to be medium. The magnitude of impact is considered to be negligible with no change anticipated to access or demand to public transport. The overall significance of impact is therefore considered to be negligible and not significant.

### ***Pedestrian and cyclist severance, delay, amenity, fear and intimidation***

15.126 The PRowS identified within the study area are separate from the proposed construction route and will not be affected. Access to the site for pedestrians would remain unchanged via footpaths 200.3 and 200.4, 363, 366.1 and 366. There are no dedicated cycleways along the construction route, although cyclists will use the local highway network.

15.127 Due to the required construction traffic routing there are no effects predicted on the following sensitive receptors:

- Yapton Road – adjacent residential properties on Horsemere Green Lane
- Designated PRow within the study area

15.128 During the construction peak, there would be a 16% increase in HGV movements along Ford Road, adjacent to the residential properties on Nelson Row. The IEMA guidelines suggest that changes in flow of up to 30% could produce negligible changes in pedestrian severance.

15.129 Pedestrians heading south from Nelson Row along Ford Road, will be able to use the signalised crossing to the south to safely cross Ford Road. Pedestrians walking north from Nelson Row will be required to cross Ford Road to the footway on the opposite side and may incur some delay due to the increase in construction traffic. The number of pedestrians using this route is considered to be low in view of the limited number of residential properties on Nelson Row.

15.130 Pedestrians and cyclists on Ford Road may experience increased fear and intimidation due to the increase in HGV movements on this link. Minimal increase in HGV movements are anticipated on A259 Crookthorn Lane and A259 Grevatt's Lane.

15.131 Based upon the above, the receptor sensitivity is considered to be medium. The magnitude of impact is considered to be small due to the marginal increase in

construction movements identified in table 15.8 There would be little change in severance, pedestrian delay, amenity or fear and intimidation for pedestrians and cyclists resulting from this change in HGV movements against the existing background traffic. The overall significance of impact for pedestrians and cyclists is therefore considered to be slight adverse and not significant.

### ***Accidents and safety***

15.132 An outline CEMP has been prepared (see Technical Appendix L) which seeks to minimise the impact of construction activities and traffic on the surrounding area and recognises the safety of other road users, pedestrians and cyclists.

15.133 Based upon the marginal increase in construction traffic along Ford Road, adjacent to the residential properties at Nelson Row and the potential impact on pedestrians and cyclists, the receptor sensitivity is considered to be medium. The magnitude of impact is considered to be small due to the minor increase in traffic and the measures outlined in the CEMP to manage the volume of construction traffic and proposed safety measures. The overall significance of impact for accidents and safety is therefore considered to be slight adverse and not significant.

### ***Grid connection***

15.134 The proposed ERF will export the majority of the power generated to the National Grid. The local distribution network operator will be responsible for connecting the ERF to the National Grid. It will also be responsible for obtaining any permissions or permits required to develop the necessary connection infrastructure. As such the planning application boundary does not include the grid connection route from the proposed development site to the existing substation to the north of Arundel Road / A27 near Crockerhill, which is the closest available point of connection for the ERF.

15.135 It is assumed that the off-site grid connection provided by SSE will involve the excavation of a trench within public highway (i.e. along existing roads and paths). It is likely that the installation contractor will seek to open as much trench at a time as possible so that suitable ducts can be laid quickly. Once the trench is backfilled and reinstated the electricity cable will be drawn through the ducts. Where the cable crosses the railway line, it is anticipated that directional drilling will be employed to install the cable beneath the railway lines to ensure minimal disturbance to both road traffic and rail movements.

15.136 For the purposes of the assessment the 12.1 km connection route indicated by SSE in correspondence with the applicants in April 2020 has been assessed, as shown in figure 5.1. In the short term the installation of the cable is likely to affect traffic flows on:

- Ford Road
- Ford Lane
- North End Road / B2132 / Yapton Lane
- A27 / Arundel Road
- Earham Lane at Crockerhill

15.137 The effects of the construction would be mitigated through the implementation of traffic management measures and consultation with key stakeholders. The outline CEMP would include details of the following:

- Preferred hours of deliveries and removals (out of peak hours)
- Agreed construction traffic routing
- Road cleaning facility provisioning
- Off-loading and storage areas
- Personnel and vehicle segregation
- Equipment e.g. temporary fencing, signage etc.
- Site inductions

### **Effects post-construction**

15.138 All vehicles will access the proposed ERF and WSTF from Ford Road and the existing site access road. No changes are proposed to the local highway network, footways or cycleways.

15.139 Full details of the site's operation are provided in chapter 3. The ERF and WSTF will operate from 06:00 to 20:00 Mondays to Fridays, 08:00 to 18:00 on Saturdays.

15.140 The ERF will employ a total of 40 staff, mostly in a shift pattern. At any given time approximately 27 personnel will be present on site during the day, four of these will be in administration roles (working from 08:00 to 17:00) and approximately five personnel will be present overnight and at weekends. The site will operate 24 hours per day, with the shift changeover taking place outside of the peak traffic flow hours on the public highway. Overall staff traffic generation will be minimal.

15.141 The WSTF will also employ a total of 40 staff. These staff will work on a single shift basis, with start and finish times varying depending on the unique nature of each individual role.

15.142 All operational HGVs will access / depart the site via the existing access road, from / to the south onto Ford Road and then onto the A259 and the wider network. No operational vehicles will be permitted to leave or access the site from the northern stretch of Ford Lane.

### ***Local highway network and driver delay***

15.143 Table 15.9 presents the baseline traffic figures for the 2026 Do Nothing (including background traffic growth and committed development), the Do Something AADT flow (i.e. 2026 with the proposed development) and the percentage change.

Road Name	2026 Do Nothing		2026 Do Something		% Change	
	All veh.	HGV	All veh.	HGV	All veh.	HGV
North End Rd (north of Ford Lane)	13183	561	13089	557	-1%	-1%
Ford Ln (west)	9477	259	9410	257	-1%	-1%
Ford Ln (east)	8880	158	8817	157	-1%	-1%
Station Rd	9826	317	9778	314	0%	-1%
Ford Rd (North of Site Access Road)	14834	345	14744	343	-1%	-1%
Site Access Road	835	61	1082	185	30%	203%
Ford Rd (South of Site Access Road)	15510	529	15638	650	1%	23%
A259 Crockthorn Ln	33157	1201	33042	1254	0%	4%
B2233 Yapton Rd	12975	201	12882	200	-1%	-1%
A259 Grevatt's Ln	26544	935	26476	990	0%	6%
B2233 Yapton Rd	12579	295	12489	293	-1%	-1%
A259 Burndell Rd	13961	367	13861	364	-1%	-1%
Bilsham Rd	9837	230	9767	229	-1%	-1%
B2233 Main Rd	20560	497	20413	493	-1%	-1%
North End Rd (south of Ford Lane)	11320	295	11239	293	-1%	-1%

**Table 15.9 2026 Do Nothing and Do Something**

15.144 In accordance with the IEMA Guidelines, the assessment has focused on the site access road, where a potential increase in traffic of greater than 30 % has been identified (as shown in red). Table 15.9 identifies a 1% reduction in traffic flows between the 2026 Do Nothing and Do Something scenario, this is due to a rounding issue with the overall change in traffic flow anticipated to be 0%.

15.145 Table 15.9 identifies a minimal percentage increase in vehicles as a result of the proposed development across the local highway network, including the sensitive links identified in section 15.65 The exception is the site access road which will have a significant increase in traffic movements, but is not considered a sensitive receptor.

15.146 It is noted, there would be a 23% increase in HGV movements along Ford Road, adjacent to the residential properties on Nelson Row. An assessment of the site access / Ford Road junction is presented in the Transport Assessment (Technical Appendix K). The junction assessment demonstrates that the site access / Ford Road junction will operate within capacity with minimal delays during the AM and PM peaks.

15.147 An assessment of the A259/Church Lane roundabout is presented in the Transport Assessment (Technical Appendix K). The Arun Transport Study<sup>9</sup> (ATS) assessed the impacts of planned growth arising from the Adoption Arun Local Plan<sup>10</sup> upon strategic junctions across the local highway network. The ATS identified junctions that would experience a “severe” impact as a result of traffic associated with the planned development and establishes the proportional

<sup>9</sup> <https://www.arun.gov.uk/transport-study/>

<sup>10</sup> <https://www.arun.gov.uk/download.cfm?doc=docm93jjjm4n12844.pdf&ver=12984>

impact of each strategic development upon the junction. The ATS identified a potential mitigation scheme (the widening of the west-bound approach) at the A259/Church Lane roundabout. Under the ATS "With Mitigation" scenario, the identified impact is reduced. If the estimated trips associated with the Ford ERF and WSTF were to be added it is not expected that the junction performance would revert back to indicating a significant impact (based on ATS criteria and thresholds). The design and implementation of the widening of the westbound approach is understood to be under consideration by WSCC Highways, in response to the ATS.

15.148 The operational traffic flows identified in table 15.9 fall within the permitted HGV cap for the SLR. With 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) permitted.

### ***Driver Delay***

15.149 It is anticipated that there may be some delay to road users at times due to vehicles associated with the proposed development entering / exiting the proposed development site. An assessment of the site access / Ford Road junction is presented in the Transport Assessment, based upon the previously accepted Callidus and Wates/Redrow TA. The junction assessment demonstrates that the site access/Ford Road junction will operate within capacity.

15.150 Based upon the above the receptor sensitivity is considered to be low. The magnitude of impact is considered to be medium due to the overall marginal increase in traffic movements on the local highway network related to the proposed development, and potential delay to drivers. The overall significance of impact is therefore considered to be slight adverse and not significant.

### ***Public transport***

15.151 There are no known changes to public transport access from the site or changes to services in the future baseline. Workers will be encouraged to use public transport services, where feasible. Any potential additional demand in public transport services is considered beneficial.

15.152 Based upon the above the receptor sensitivity is considered to be medium. The magnitude of impact is considered to be negligible. The overall significance of impact is therefore considered to be negligible and not significant.

### ***Pedestrian and cyclist severance, delay, amenity, fear and intimidation***

15.153 There are minimal changes to traffic resulting from the proposed development at the following sensitive receptors identified:

- Yapton Road – adjacent residential properties on Horsemere Green Lane
- Designated PRow within the study area

15.154 There is a 23% increase in HGV movements resulting from the proposed development along Ford Road, adjacent to the residential properties on Nelson

Road. The IEMA guidelines suggest that changes in traffic flow of 30% of under would produce negligible changes in pedestrian severance.

15.155 Pedestrians heading south from Nelson Row along Ford Road, would be able to use the signalised crossing to the south to safely cross Ford Road. Pedestrians walking north from Nelson Row would be required to cross Ford Road to the footway on the opposite side and may incur some delay due to the increase in construction traffic. The number of pedestrians using this route is considered to be low in view of the limited number of residential properties on Nelson Row.

15.156 Pedestrians and cyclists on Ford Road may experience increased fear and intimidation due to the increase in HGV movements on this link. Minimal increase in HGV movements are anticipated on A259 Crookthorn Lane and A259 Grevatt's Lane.

15.157 Based upon the above the receptor sensitivity is considered to be medium. The magnitude of impact is considered to be small noting the overall increase in vehicle movements identified in table 15.8. Overall, there would be little change in severance, pedestrian delay, amenity or fear and intimidation resulting from this change in traffic movements against the existing background traffic. The overall significance of impact for pedestrians is therefore considered to be slight adverse and not significant.

#### ***Accidents and safety***

15.158 No changes to the highway network are proposed as a result of the proposed development. Receptor sensitivity is considered to be low. The magnitude of impact is considered to be small due to the overall minor increase in traffic. The overall significance of impact for accidents and safety is therefore considered to be slight adverse and not significant.

#### **Mitigation and monitoring**

15.159 No additional mitigation measures beyond those already incorporated into the proposed development would be required during either the construction phase or for the completed, operational proposed development.

#### **Residual effects**

15.160 No significant residual traffic and transport effects are predicted as a result of the proposed development.

#### **Cumulative effects**

15.161 The assessment has considered committed (cumulative) development traffic as identified in detail in the Transport Assessment (Technical Appendix K) and summarised in 15.109. No significant traffic and transport effects are predicated as a result of the proposed development.

#### **Fall-back position**

15.162 In 2015, Grundon Waste Management Ltd secured planning permission for an energy from waste facility and a materials recovery facility, known as the Circular Technology Park (application reference: WSCC/096/13/F). The application was

subject to environmental impact assessment (EIA) and was accompanied by an environmental statement (ES) that was written in October 2013. The extant consent for the site represents a theoretical alternative development scenario *or fall back position* with its own potential effects. The potential traffic and transport effects of the consented scheme have been summarised for comparative purposes.

15.163 The 2013 ES identified the following impacts on the wider road network:

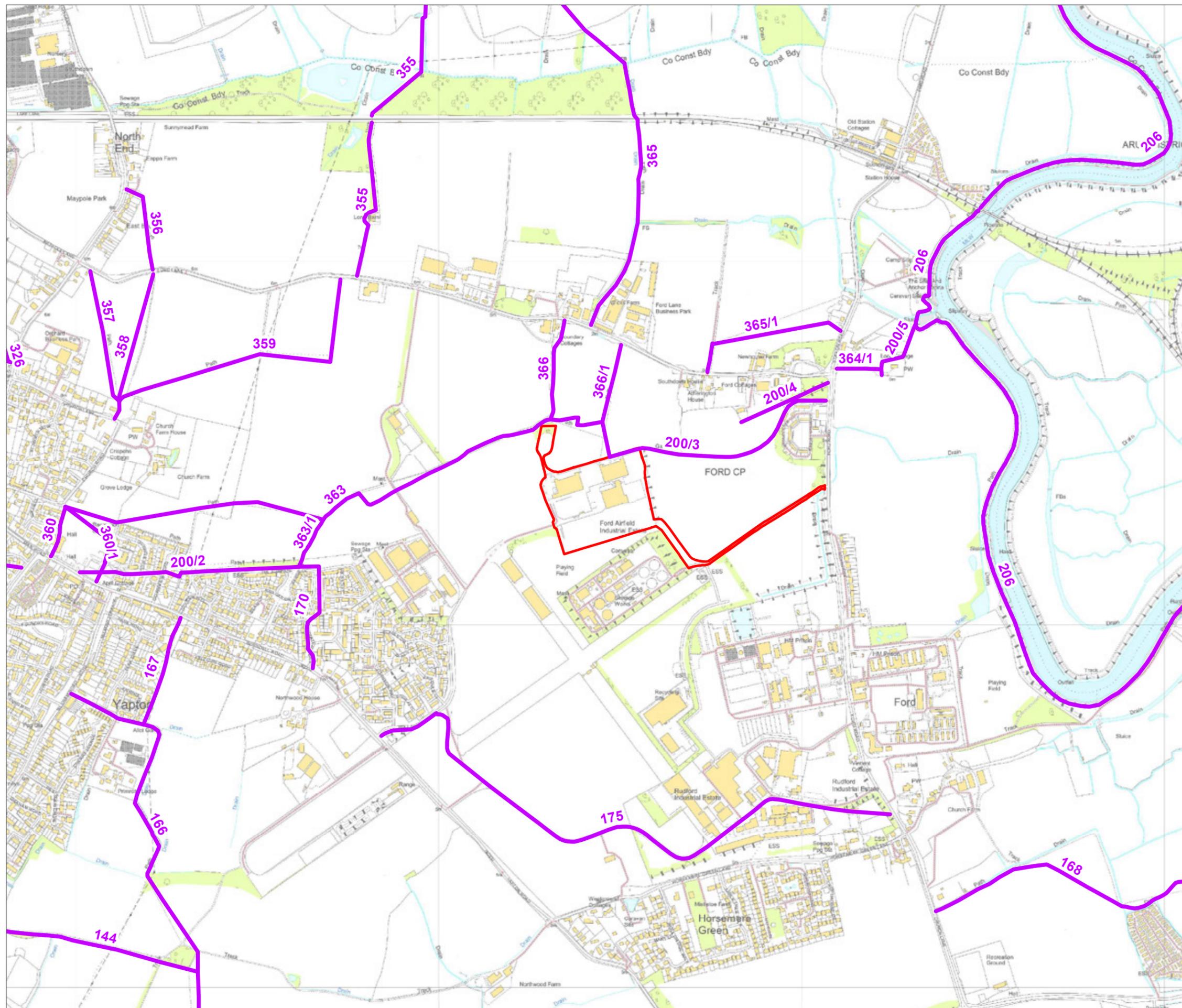
Construction phase:

- Site access east – Minor Adverse
- Site access west and Rollaston Park – Minor Adverse
- Ford Road – Negligible
- Yapton Road – Negligible
- A259 – Negligible

Operational phase:

- Site access east – Minor Beneficial
- Site access west and Rollaston Park – Minor Adverse
- Ford Road – Negligible
- Yapton Road – Negligible
- A259 – Negligible

15.164 None of the impacts noted above were considered to be significant. The assessment undertaken within this ES has also not identified any significant impacts, thus the findings of both assessments are considered to be consistent.

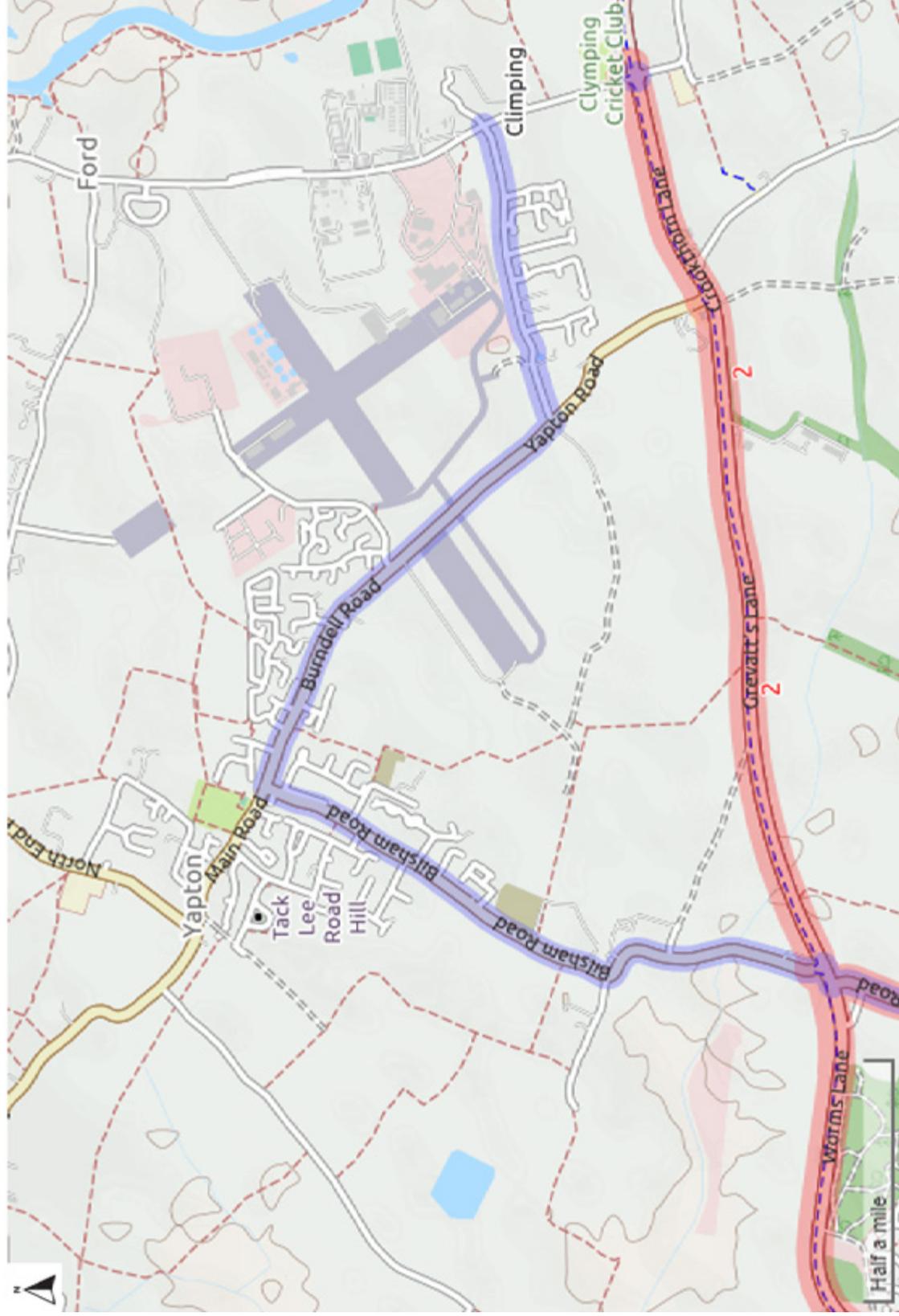


- Site boundary
- Public Rights of Way

0 250 m



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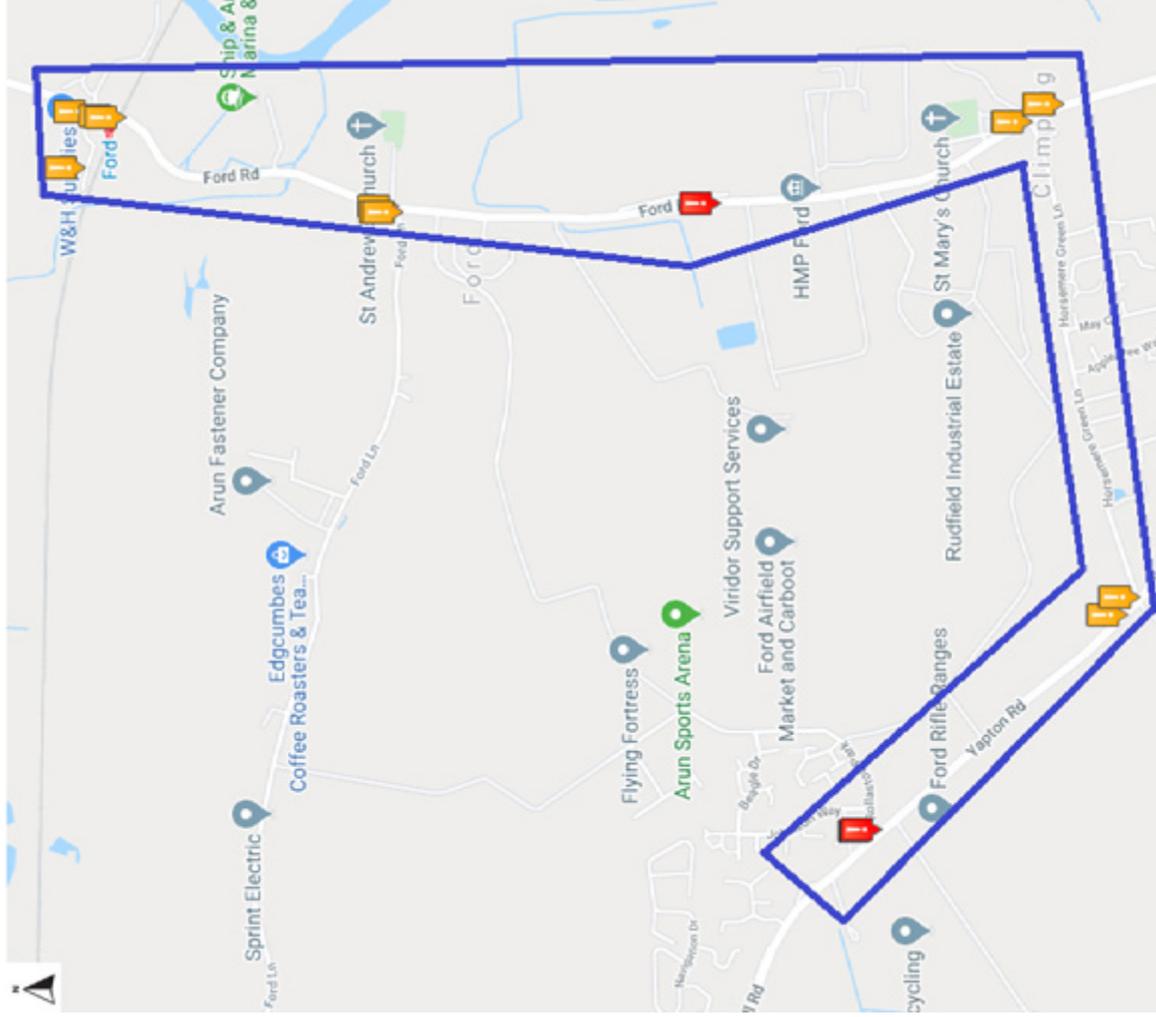
Key

Local Cycle Network

National Cycle Network

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

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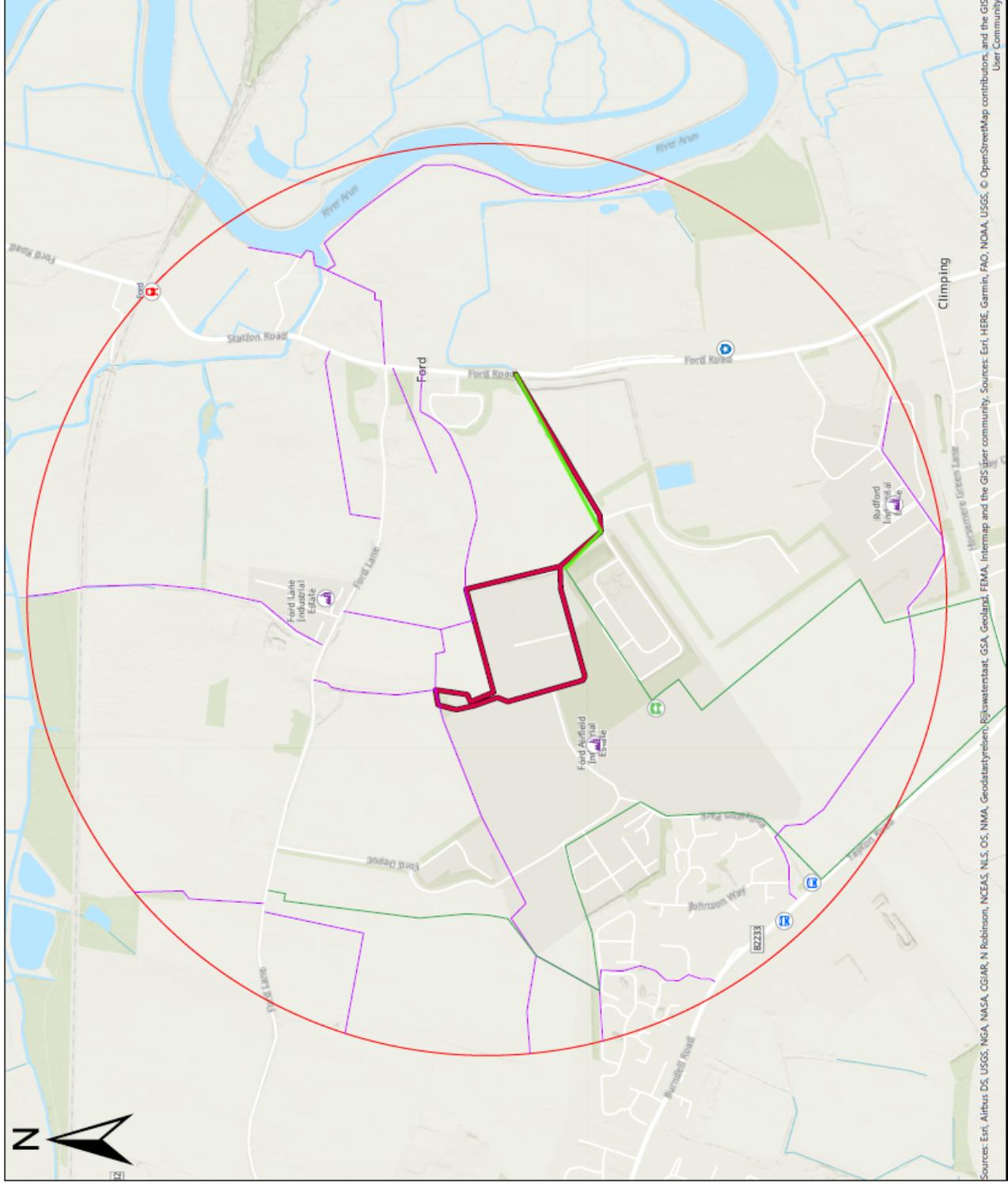
Source: <https://www.crashmap.co.uk/Search>

Copyright Map Data © 2020



not to scale

**Figure 15.3**  
Locations of accidents



**KEY**

- Study Area
  - Proposed Development Site
  - Bus Stops
  - Rail Station
  - PROW
- Existing Local Amenities**
- Employment Land Use
  - Leisure Land Use
  - Prison



not to scale

**Figure 15.4**  
Key trip generators / local amenities within the study area

Sources: Eri, Airbus DS, USGS, NGA, NASA, CGIAR, N Robinson, NCEAS, NLS, OS, NMA, Geodätisches Institut, Rijswaterstaat, GSA, Geoplid, FEMA, Intermap and the GIS user community. Sources: Eri, HERE, Garmin, FAO, NOAA, USGS, © OpenStreetMap contributors, and the GIS User Community

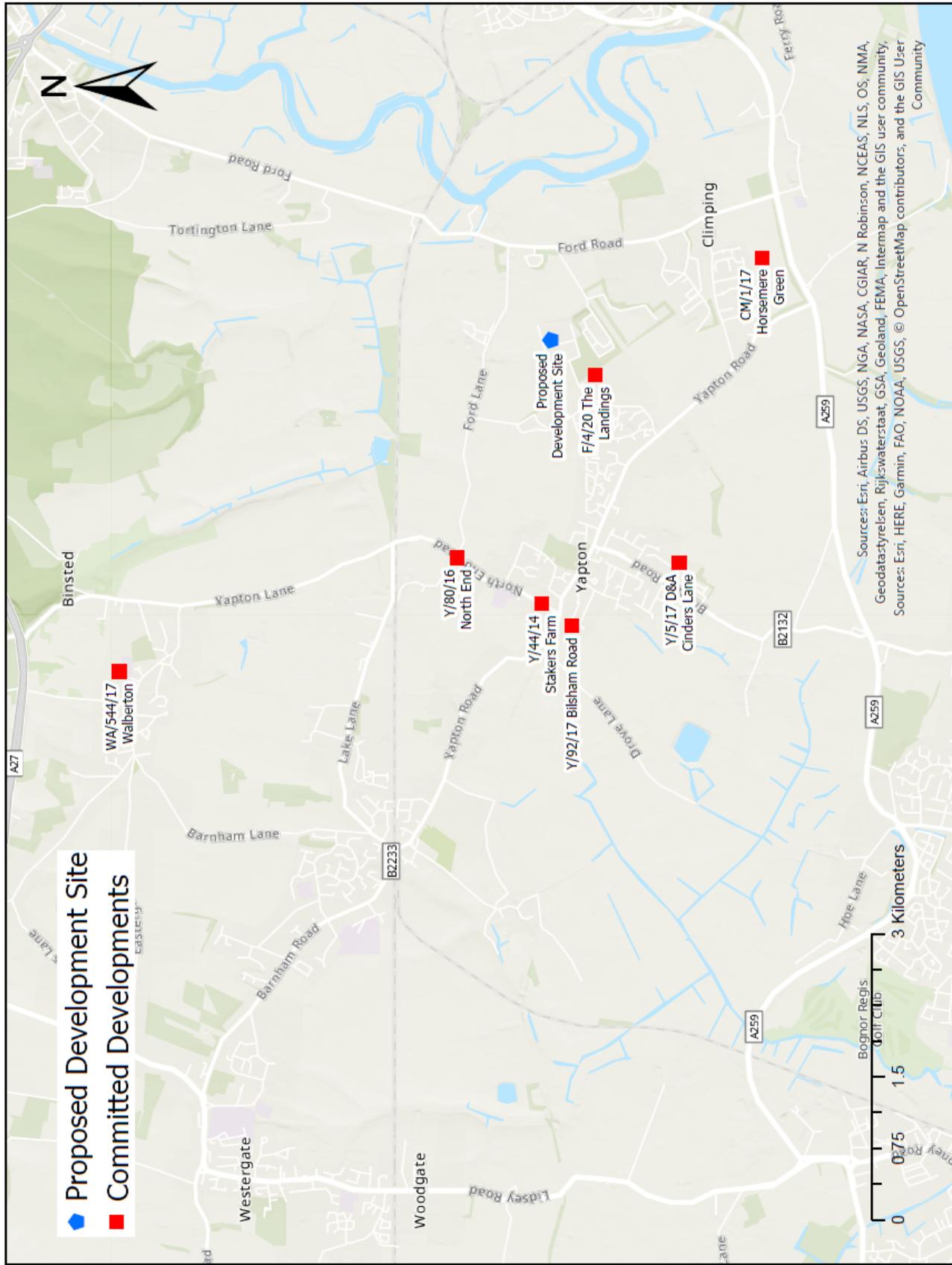


Figure 15.5  
Committed developments