APPENDIX 3
STAGE 1 ROAD SAFETY AUDIT

Intended for
Viridor Energy Limited
Grundon Waste Management Limited
Ford Energy from Waste Limited
West Sussex County Council

Document type
Road Safety Audit Stage 1 Response Report

Date
March 2021

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

STAGE 1 ROAD SAFETY AUDIT RESPONSE REPORT

RAMBOLL

FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CICULAR TECHNOLOGY PARK
STAGE 1 ROAD SAFETY AUDIT RESPONSE REPORT

Project name	**FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK**
Project no.	**16200007830**
Recipient	**Viridor Energy Limited, Grundon Waste Management Limited, Ford Energy from Waste Limited / West Sussex County Council**
Document type	**Report**
Doc ref	**1620007830-001-RAM-XX-XX-RP-C-00001-Stage 1 RSA Response Report Rev P02**
Date	**26/03/2021**
Prepared by	**Jess Dimond**
Checked by	**Thad O'Higgins**
Approved by	**Ed Kerr**
Description	**Stage 1 Road Safety Audit Response Report**

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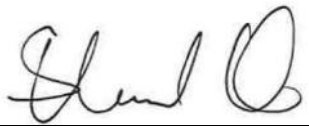
APPENDICES

1. PROJECT DETAILS

Report title	Stage 1 RSA Response Report
Date	25/03/2021
Document reference and revision	1620007830-001-RAM-XX-XX-RP-C-00001-Stage 1 RSA Response Report Rev P02
Prepared by	Ramboll UK Limited
On behalf of	Viridor Energy Limited, Grundon Waste Management Limited, Ford Energy from Waste Limited, West Sussex County Council

1.1 Authorisation Sheet

Project	1620007830
Report title	Stage 1 RSA Response Report
Prepared by	Ramboll UK Limited
Name	Jess Dimond
Position	Graduate Engineer
Signed	
Organisation	Ramboll UK Limited
Date	25/03/2021
Approved by	
Name	Ed Kerr
Position	Director
Signed	
Organisation	Ramboll UK Limited
Date	26/03/2021

2. INTRODUCTION

This Stage 1 RSA Response Report relates to the Stage 1 Road Safety Audit Report for Ford Energy Recovery Facility and Waste Sorting and Transfer Facility, Ford Circular Technology Park, produced by Brian Parry of Ramboll UK as presented in Appendix A. For reference, the Stage 1 RSA Brief for this audit is presented in Appendix B. This Response Report has been produced by Jess Dimond of Ramboll UK.

3. KEY PERSONNEL

Overseeing Organisations:	Viridor Waste Management Ltd, Grundon Waste Management Ltd, Ford Energy Ltd, West Sussex County Council
RSA Team:	Brian Parry, Road Safety Audit Team Leader Simon Hawley Road Safety Audit Team Member
Design Organisation:	Ramboll UK Ltd https://uk.ramboll.com

4. ROAD SAFETY AUDIT DECISION LOG

RSA PROBLEM	RSA RECOMMENDATIONS	DESIGN ORGANISATION RESPONSE	OVERSEEING ORGANISATION REPSPONSE	AGREED RSA ACTIONS
Location The existing junction generally. Summary Traffic levels including market and car boot exceed available junction capacity. Details The inclusion of the market and car boot traffic albeit only included as a sensitivity test but based on a qualitative assessment, if realised may lead to exceptional queuing on the site access road at the junction, in the scenario's peak hour. This could lead to impatience/frustration and make drivers seek smaller gaps in Ford Road traffic. The types of collisions that may occur if drivers misjudge gaps are side-swipe resulting car occupant casualties.	Confirm that the ghost-island junction form is suitable to cater for the market and car boot traffic flows or examine alternative means of junction that may include whether part-time signal control is appropriate, during these events.	The junction flows have been modelled as operating within capacity for the scenario: *2026 with Development*. These flows refer to the long-term operational traffic scenario. It is confirmed that the existing junction has been granted permission for use with both facilities (an ERF and a market) as currently operating. The proposed development sits within the permitted use of the junction and does not change the permitted layout therefore examining alternative junction layouts is not an option proposed unless directed by WSCC in their role as Highway Authority.		

RSA PROBLEM	RSA RECOMMENDATIONS	DESIGN ORGANISATION RESPONSE	OVERSEEING ORGANISATION REPSPONSE	AGREED RSA ACTIONS
Location On Ford Road within the junction (Problem Location A, Appendix A refers) Summary Existing damaged road surface presents low/variable skid resistance issues. Details The existing road surface is damaged, within the junction, which may cause stability issues for Powered Two Wheelers (PTWs) especially. The damage will also lower the skid resistance for traffic generally in a braking area. Loss of control in the braking/turning area may cause head-on or side-swipe type collisions resulting in casualties to PTW riders at the most serious.	Resurface carriageway over damaged areas to prevent identified collisions.	The resurfacing of Ford Road is within the remit of maintenance work undertaken by West Sussex County Council and the Designer requests WSCC to share its forward programme of pavement renewals to assist in responding to the RSA recommendation.		

RSA PROBLEM	RSA RECOMMENDATIONS	DESIGN ORGANISATION RESPONSE	OVERSEEING ORGANISATION REPSPONSE	AGREED RSA ACTIONS
Location East side of Ford Road (Problem Location B, Appendix A refers) Summary Existing damaged VRS non-compliant and presents a launch opportunity due to ramping Details The existing VRS on the east verge of Ford Road at the junction, opposite the entrance to the site, is damaged and the non-compliant P4 terminal unit presents and launch opportunity for southbound errant vehicles due to a ramping effect. The types of collisions that may occur are vehicle overturning, especially those travelling southbound at speed. Such overturning vehicle collisions are likely to result in casualties with grave consequences.	Install a compliant terminal to the VRS to prevent identified collisions. Repairs to the damaged VRS should be undertaken.	It is understood that a compliant terminal installation is the responsibility of West Sussex County Council, and a replacement should be provided at the end of life. The Designer requests WSCC to share its forward programme of barrier renewals to assist in responding to the RSA recommendation.		

RSA PROBLEM	RSA RECOMMENDATIONS	DESIGN ORGANISATION RESPONSE	OVERSEEING ORGANISATION REPSPONSE	AGREED RSA ACTIONS
Location North channel of site access road (Problem Location C, Appendix A refers) Summary Ponding of water encroaching onto carriageway Details Despite the weather being sunny and warm with no obvious evidence of recent rain, during the site visit the Auditors noted ponding of water in the north channel of the site access road, close to the junction. The types of collisions that may occur if vehicles encounter such ponding is loss of control, either due to water in spring, summer or autumn, or due to ice in winter.	Install drainage system to deal with surface run-off and discharge away from road and nearby footway.	It is likely this issue is related to maintenance of roadside drainage systems (a blocked gully, an outlet silted up, etc.). The Designer requests WSCC to share its forward programme of drainage renewals to assist in responding to the RSA recommendation. If the drainage system in question is not owned by WSCC, the Designer will request the appropriate landowner to attend to the maintenance required.		

RSA PROBLEM	RSA RECOMMENDATIONS	DESIGN ORGANISATION RESPONSE	OVERSEEING ORGANISATION REPSPONSE	AGREED RSA ACTIONS
Location Junction generally Summary Adequacy of junction to cater for turning traffic. Details The Auditors noted that large vehicles were having difficulty in maintaining lane discipline when turning into or out of the junction, partially caused by higher than suitable speeds of vehicles and partly because the junction is too narrow for the configuration that includes the angle formed by the site access road. These difficulties were observed for the movements: 1. South to west (south into the site access road) 2. North to west (north into the access road) 3. West to south (site access road to the south) The resultant types of collisions are likely to be, respectively: 1. Large vehicles entering the site access road were in danger of meeting outcoming traffic head-on	Widen the junction to permit large vehicles to maintain lane discipline and complete manoeuvres without crossing into oncoming lanes. Special care will be required to accommodate the drainage channels and box culverts noted in section 2.8 of this Audit Report.	The Designer notes previous RSA comments: "The existing access already has space for two HGVs to pass each other in the access, including two right turning vehicles and visibility at the junction is adequate for a road covered by the National Speed Limit (60mph)." As noted by the Auditors, no PIAs have been recorded at this location. The Designer requests that WSCC shares its data on damage only collisions if available to assist in responding to the RSA recommendation.		

2. Incoming traffic clipping the front of outcoming traffic turning right 3. Outgoing traffic clipping the front of incoming traffic, especially those entering from the south In all cases, the types of casualties that may occur are likely to be in-vehicle occupants. The Audit Team acknowledges that although there have been no reported PIAs, there may be damage-only collisions that the Audit Team are not aware of and furthermore the increased vehicle flows as a result of intensification of use of the junction will increase the likelihood of a vehicle/vehicle collision type accident.				

RSA PROBLEM	RSA RECOMMENDATIONS	DESIGN ORGANISATION RESPONSE	OVERSEEING ORGANISATION REPSPONSE	AGREED RSA ACTIONS
Location Ford Road at Junction (Problem Location D Appendix A refers) Summary Carriageway marking generally illegible Details The Auditors noted that ghost-island carriageway markings on Ford Road were generally illegible. Illegible carriageway markings could lead to badly positioned turning vehicles resulting in head-on collisions on Ford Road, particularly during hours of darkness. The types of casualties that may occur are likely to be in-vehicle occupants.	Refresh the carriageway markings to guide drivers to take up correct positioning at the junction.	This is understood to be within the remit of maintenance work to be undertaken by West Sussex County Council and the Designer requests WSCC to share its forward programme of road marking renewals to assist in responding to the RSA recommendation.		

5. DESIGN ORGANISATION AND OVERSEEING ORGANISATION STATEMENTS

Include the following statements to be signed by the design organisation and the Overseeing Organisation.

On behalf of the design organisation, I certify that: 1) **The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the Overseeing Organisation.**	
Name	
Signed	
Position	
Organisation	
Date	

On behalf of the Overseeing Organisation, I certify that: 1) **The RSA actions identified in response to the road safety audit problems in this road safety audit have been discussed and agreed with the design organisation; and** 2) **The agreed RSA actions will be progressed.**	
Name	
Signed	
Position	
Organisation	
Date	

APPENDIX A
STAGE 1 ROAD SAFETY AUDIT REPORT

Intended for
Viridor Energy Limited
Grundon Waste Management Limited
Ford Energy from Waste Limited

Document type
Road Safety Audit Stage 1 - Report

Date
March 2021

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

STAGE 1 ROAD SAFETY AUDIT REPORT

RAMBOLL

FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK
STAGE 1 ROAD SAFETY AUDIT REPORT

Project name	**FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK**
Project no.	**16200007830**
Recipient	**Viridor Energy Limited, Grundon Waste Management Limited, Ford Energy from Waste Limited / West Sussex County Council**
Document type	**Report**
Doc ref	**1620007830-001-RAM-XX-XX-RP-YE-10012 P01**
Date	**04/03/2021**
Prepared by	**Brian Parry**
Checked by	**Simon Hawley**
Approved by	**Brian Parry**
Description	**Stage 1 Road Safety Audit Report**

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APPENDICES

1. PROJECT DETAILS

Report Title:	FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK STAGE 1 RSA REPORT
Date:	4th March 2021
Document reference and revision:	1620007830-001-RAM-XX-XX-RP-YE-10012 P01
Prepared by:	Eur Ing Brian A Parry
On behalf of:	Viridor Energy Limited, Grundon Waste Management Limited, Ford Energy from Waste Limited / West Sussex County Council

2. INTRODUCTION

2.1 Description of the Scheme, Objective and the Locality

General

The development site is located at the Ford Circular Technology Park (CTP) (the former Tarmac blockworks site) which is situated to the south-west of the village of Ford. The 6.72ha site is partially used for the existing Waste Transfer Station (WTS) operation and is partially vacant. The proposed development is to be called Ford Energy Recovery Facility (ERF) and Waste Sorting and Transfer Facility (WSTF) (therein referred to as the 'Ford ERF and WSTF'). The Ford ERF and WSTF are proposed by Grundon Waste Management Limited (Grundon), Viridor Energy Limited (Viridor) and Ford Energy from Waste Limited (Ford EfW) (therein referred to as 'the applicants').

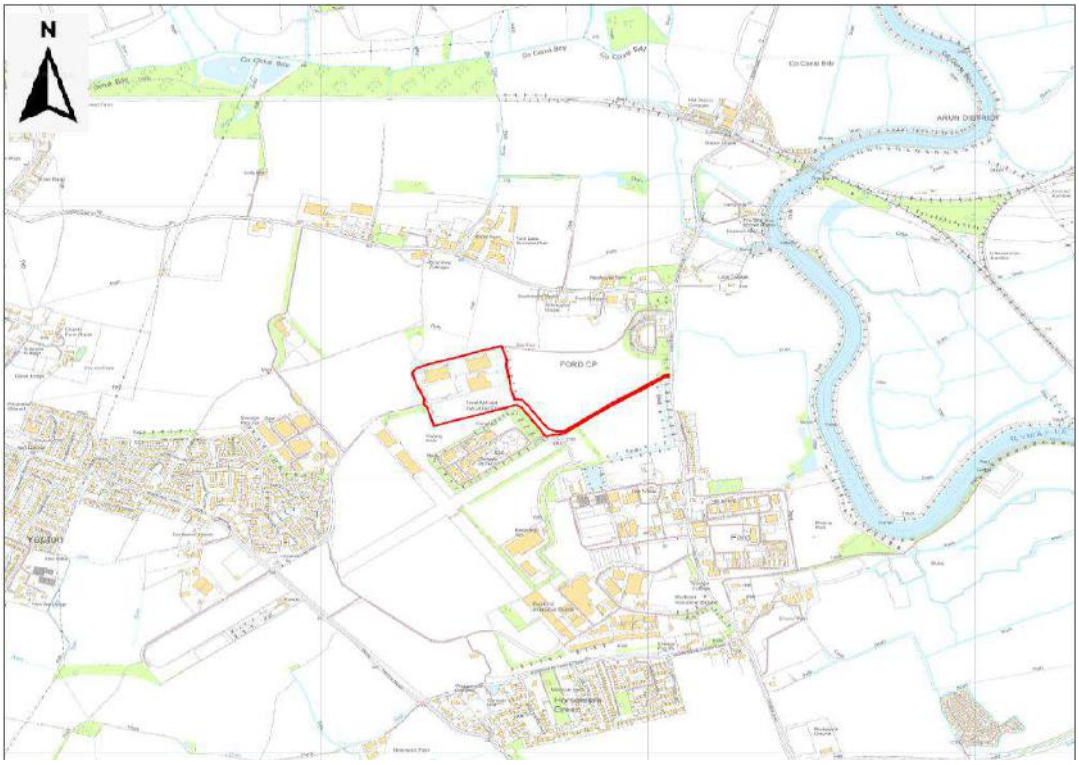
Proposal description

The applicants are proposing to build and operate a conventional energy recovery facility (ERF) at the site. Grundon, the sole owner/operator of the existing waste transfer station (WTS), is proposing to continue this operation in a new, purpose-built waste sorting and transfer facility (WSTF) on site. Cycle, motorbike and car parking will be provided, whilst the site will continue to be accessed from the site access/Ford Road junction.

Site Access (Access Road/ Ford Road Priority Junction)

The proposed development site (Figure 1.1) will be accessed from the existing site access/Ford road junction.

Figure 1.1: Development Site Location Plan



Source: Map Data @2020

The access is a ghost island priority junction (Figure 1.2) and appears to have been constructed with compound curve radii, as is typical of junctions with a high proportion of HGV movements. The junction has good visibility in either direction along Ford Road. A unique feature of the junction

is the siting of a Hawker Hunter mounted on a large concrete plinth and steel column. The RSA team have not raised this feature as a PROBLEM as there are no recorded PIAs at the junction and it is sited outside of the junction visibility splay, hence should not be considered as a directly attributable hazard to road safety.

Figure 1.2: Development Site Access/Ford Road junction

Source: Map Data @2020

The study area noted to the RSA Team is the site access/Ford Road junction (Figure 1.3).

Figure 1.3: Site Access Junction Location

The Road Safety Audit Team

The Road Safety Audit (RSA) Team comprised:

RSA Team Leader	Eur Ing B A Parry, BSc, MSc, CEng, MICE, FCIHT, FSoRSA, Director of Bricolby Consulting Limited acting on behalf of Ramboll Limited and holder of EC Directive 2008/96/EC Certificate of Competency for audit work on the TERN and UK motorways and trunk roads (unreferenced TMS certificate, issued on behalf of Highways England)
RSA Team Member	S. Hawley, BEng (Hons), CEng, MICE, MCIHT, Director of Highways, Ramboll Limited and holder of EC Directive 2008/96/EC Certificate of Competency for audit work on the TERN and UK motorways and trunk roads (unreferenced TMS certificate, issued on behalf of Highways England).

The terms of reference of the RSA are as described in GG119 Road Safety Audit, Chapter 5, paragraphs 5.1 to 5.3 and are inclusive of Notes 1 to 4 included therein. The RSA team has examined and reported only on the road safety implications of the scheme as presented and has not examined or verified the compliance of the designs to any other criteria.

In line with its policy and as directed by West Sussex County Council, the RSA Team was approved by the Design Team on behalf of the Client; a policy that *"puts the onus on the applicant* [the Client] *to ensure the RSA is undertaken correctly and CV requirements are met."* The relevant part of the policy "Safety Audit Adopted Policy: Guidance Notes for Scheme Promoters Revision: September 2015." is contained within its "Process" section, which states:

> *"It will be the responsibility of the developer to commission an independent audit team to consider the safety implications affecting their scheme. As of 1 March 2015, WSCC will require all Road Safety Audit teams to include at least one team member who has one or more of the following industry recognised accreditation or qualification:*
>
> - *be an IHE Registered Road Safety Auditor, entitled to use the designatory letters RegRSA(IHE) or*
> - *be a Fellow or Member of the IHT Society of Road Safety Auditors, entitled to use the letters MSoRSA or FSoRSA or*
> - *be a holder of a Highways Agency Approved Certificate of Competency for Road Safety Audit, and otherwise comply with the requirements of IAN 152/11."*

The RSA Team was instructed by the Ramboll Design Team on behalf of the joint Council/Client team. The RSA was carried out in accordance with the Road Safety RSA Brief issued by Ioannis Spyropoulos of Ramboll Limited.

2.2 Road Safety Audit Method

The RSA was based on the information contained within the Audit Brief, provided by the Design Team and on observations obtained during a daylight site visit attended by all RSA Team members together, undertaken between 1115hrs to 1215hrs on Tuesday, 23rd February 2021. The weather during the site visit was sunny and dry. Road surfaces were dry, however there was a pool of standing water on the left/north channel of the access road, close to the junction. Visibility was good.

It should be noted that the instruction to conduct the Stage 1 RSA was issued during the Covid-19 pandemic. Accordingly, the Audit Team observed best practice of social distancing along with the use of face masks. The RSA team also conducted various earlier and follow-up discussions via the Microsoft Teams application.

The revised formal RSA Brief was issued to the RSA Team on 10th February 2021 with a further revised version issued to the Audit Team on 25th February 2021. The RSA Report was subsequently prepared at the Bricolby Consulting Limited/Ramboll Limited premises during February 2020.

2.3 General Commentary on Subject Site

The RSA has been requested for and undertaken on an existing junction with no alternative design available to assess. Accordingly, the Audit Team has assessed the junction as presented and despite having been designed and constructed in the past, the Team have applied current standards during deliberations.

2.4 Design Standards Applied to Scheme Design

Since the junction is assessed in its current form, as noted in section 2.3 of this report, no information on the Design Standards was provided in the Audit Brief nor advised to the Audit Team.

2.5 Design Speeds

Since the junction is assessed in its current form, as noted in section 2.3 of this report, no information on the Design Speeds was provided in the Audit Brief nor advised to the Audit Team.

2.6 Speed Limits

The speed limit on Ford Road was advised as 40MPH in the Audit Brief and observed as such during the site visit.

2.7 Existing and Forecast Traffic Flows

Within the Audit Brief, the RSA Team was provided with the 2018 Baseline and 2026 Forecast Traffic Flows for both the AM and PM peak hours. In addition, traffic flows for a sensitivity test that include a market and car boot peak hour flows, on Thursdays and Sundays were also made available to the RSA Team.

For the 2018 AM peak hour, the junction caters for 870 vehicles in total comprising:

- 545 vehicles south to north (10 HGVs)
- 19 vehicles from the south, turning left into the development (3 HGVs)
- 284 vehicles north to south (10 HGVs)
- 8 vehicles from the north, turning right into the development (1 HGV)
- 10 vehicles from the development, turning left to the north (0 HGVs)
- 4 vehicles from the development, turning right to the south (4 HGVs)

For the 2018 PM peak hour, the corresponding movements are:

- 293 vehicles south to north (2 HGVs)
- 19 vehicles from the south, turning left into the development (3 HGVs)
- 503 vehicles north to south (8 HGVs)
- 8 vehicles from the north, turning right into the development (1 HGV)
- 10 vehicles from the development, turning left to the north (0 HGVs)
- 4 vehicles from the development, turning right to the south (4 HGVs)

Forecast traffic flows were provided for the year 2026, when the site is expected to be fully operational. For the 2026 AM peak hour, the junction is expected to deal with:

- 630 vehicles south to north (10 HGVs)

- 34 vehicles from the south, turning left into the development (16 HGVs)
- 338 vehicles north to south (4 HGVs)
- 9 vehicles from the north, turning right into the development (1 HGV)
- 11 vehicles from the development, turning left to the north (0 HGVs)
- 15 vehicles from the development, turning right to the south (15 HGVs)

For the 2026 PM peak hour, the junction is expected to deal with:

- 328 vehicles south to north (2 HGVs)
- 24 vehicles from the south, turning left into the development (5 HGVs)
- 559 vehicles north to south (0 HGVs)
- 9 vehicles from the north, turning right into the development (1 HGV)
- 11 vehicles from the development, turning left to the north (0 HGVs)
- 7 vehicles from the development, turning right to the south (5 HGVs)

The additional sensitivity test flow scenario noted to the Audit Team, which included the addition of a market and car boot, on Thursdays and Sundays, produced hourly vehicular flows of:

- 626 vehicles south to north (10 HGVs)
- 596 vehicles from the south, turning left into the development (18 HGVs)
- 336 vehicles north to south (4 HGVs)
- 444 vehicles from the north, turning right into the development (1 HGV)
- 618 vehicles from the development, turning left to the north (0 HGVs)
- 635 vehicles from the development, turning right to the south (9 HGVs)

During the site visit noted in section 2.2, it was apparent that the peak hour traffic flows into or out of the site are not necessarily the development peak flows. The Auditors noted a significant number of movements, which were primarily HGVs, during the 1115 to 1215hrs time spent on-site. However, it can still be seen from the data that the junction is expected to experience increases in traffic levels on all arms from the 2018 Base to the year 2026. The addition of the market and car boot traffic adds significantly to peak hour traffic levels at the junction.

A Non-Motorised User (NMU) Audit Report, undertaken by Callidus Transport & Engineering in September 2017, was included in the Audit Brief. In the NMU Audit, Callidus found that the site fell into the "good" category, meaning *"that the access provides a good level of provision for non-motorised users"*. The only "issue" that the NMU Auditors raised related to the possible provision of tactile paving at the junction however they noted:

> *"The NMU audit has raised no major issues with the layout of the access. The main issue that is outstanding is the lack of any kind of legibility for sensory impaired people, such as tactile paving. However, given the rural nature of the site and the low level of pedestrians, this is unlikely to be necessary in this location. Furthermore, tactile paving is easily damaged should trucks accidentally override the footway, which would become a maintenance issue."*

*

Consequently, the NMU Auditors suggested that "No actions" were required.

2.8 Environmental Constraints

None were noted in the Brief, however, during the site visit the Auditors observed a network of ditches, with invert levels in excess of two metres below finished road levels. The system also incorporated box culverts to take any transported water beneath the access road and Ford Road.

Should any physical works be required to the junction then the ditches and subterranean box culverts may feature significantly in any solution.

2.9 Street Lighting

The junction is situated within a rural setting and is unlit. However, the access road to the site benefits from a system of street lighting, starting some 25 metres from the give-way line of the junction.

2.10 Drawings/documents

As it is intended to use the junction without modification, no scheme drawings were made available to the Audit Team.

2.11 Collision Analysis

The Brief contains an analysis of personal injury collision data in the vicinity of the site for the five-year period of 1st January 2016 to 31st December 2020, inclusive. The data indicate that there were no personal injury collisions on Ford Road close to the site, in the five-year period.

The collisions nearest the site in the 5-year period occurred at the Ford Lane junction with Ford Road, some 320 metres to the north, where two collisions occurred and to the south at the southernmost Nelson Row junction with Ford Road, some 330 metres to the south, where two collisions occurred.

2.12 Departures and relaxations from Standard

No Departures or Relaxations have been proposed.

2.13 Strategic Decisions

No items outside the scope of this RSA, relating to the proposals, have been identified.

3. ITEMS RAISED AT PREVIOUS ROAD SAFETY AUDITS

A Stage 1 Road Safety Audit was undertaken by The Safety Forum in April 2018.

This Audit noted that:

> *"No new highway proposals are included in this audit report and report is on the effects of an increase in the number of HGVs through the access."*

The Audit did not identify any PROBLEMS but did include a narrative under a COMMENT section within the Report. The narrative was:

> *"It is understood that that access to and from the highway will be achieved via a new access road served by the existing access to the Viridor site and all vehicles accessing the site would use the existing access off Ford Road.*
>
> *The existing access already has space for two HGVs to pass each other in the access, including two right turning vehicles and visibility at the junction is adequate for a road covered by the National Speed Limit (60mph).*
>
> *The Audit Team do not know the current flows from the access road but we have been told that the proposals are expected to increase movements on to the site with an additional 240 movements per day (120 in and 120 out).*
>
> *During AM and PM network hours, it is anticipated that the site will generate 18 movements in the AM peak (9 in and 9 out, all of which would be HGV movements) and 26 in the PM peak (9 in, 17 out, of which 18 would be HGV movements).*
>
> *It is the opinion of the Audit Team that the junction, which has a right turn lane on Ford Road, is of reasonable design and that the increase in the number of HGV movements should not affect road safety. Note that this report deals with the safety at the junction only and other issues have not been considered."*

Some of this narrative is debated within Section 4 of this Audit Report, based on observations gathered by the Audit Team during the site visit and dealt with as PROBLEMS, as appropriate.

4. ITEMS RAISED AT THIS COMBINED STAGE 1 & 2 ROAD SAFETY AUDIT

4.1 Basic Design Principles

4.1.1 PROBLEM 1

Location: *Junction Generally*

Summary: *Traffic levels including market and car boot exceed available junction capacity*

The Audit Team notes that the inclusion of the market and car boot traffic (Figure 2.7 in the Audit Brief), albeit only included as a sensitivity test but based on a qualitative assessment, if realised may lead to exceptional queuing on the site access road at the junction, in the scenario's peak hour. This could lead to impatience/frustration and make drivers seek smaller gaps in Ford Road traffic.

The types of collisions that may occur if drivers misjudge gaps are side-swipe resulting car occupant casualties.

RECOMMENDATION
Confirm that the ghost-island junction form is suitable to cater for the market and car boot traffic flows or examine alternative means of junction that may include whether part-time signal control is appropriate, during these events.

4.2 Skid Resistance

4.2.1 PROBLEM 2

Location: *On Ford Road within the junction (Location A on Plan in Appendix 2)*

Photograph: *Photos A in Appendix 1*

Summary: *Existing damaged road surface presents low/variable skid resistance issues*

The existing road surface is damaged, within the junction, which may cause stability issues for Powered Two Wheelers (PTWs) especially. The damage will also lower the skid resistance for traffic generally in a braking area.

Loss of control in the braking/turning area may cause head-on or side-swipe type collisions resulting in casualties to PTW riders at the most serious.

RECOMMENDATION
Resurface carriageway over damaged areas to prevent identified collisions.

4.3 Fences and Road Restraint Systems

4.3.1 PROBLEM 3

Location: *East side of Ford Road (Location B on Plan in Appendix 2)*

Photograph: *Photos B & C in Appendix 1*

Summary: *Existing damaged VRS non-compliant and presents a launch opportunity due to ramping*

The existing VRS on the east verge of Ford Road at the junction, opposite the entrance to the site, is damaged and the non-compliant P4 terminal unit presents and launch opportunity for southbound errant vehicles due to a ramping effect.

The types of collisions that may occur are vehicle overturning, especially those travelling southbound at speed. Such overturning vehicle collisions are likely to result in casualties with grave consequences.

RECOMMENDATION
Install a compliant terminal to the VRS to prevent identified collisions. Repairs to the damaged VRS should be undertaken.

4.4 Drainage

4.4.1 PROBLEM 4

Location: *North channel of site access road (Location C on Plan in Appendix 2)*

Photograph: *Photos D & E in Appendix 1*

Summary: *Ponding of water encroaching onto carriageway*

Despite the weather being sunny and warm with no obvious evidence of recent rain, during the site visit the Auditors noted ponding of water in the north channel of the site access road, close to the junction.

The types of collisions that may occur if vehicles encounter such ponding is loss of control, either due to water in spring, summer or autumn, or due to ice in winter.

RECOMMENDATION
Install drainage system to deal with surface run-off and discharge away from road and nearby footway.

4.5 Junctions

4.5.1 PROBLEM 5

Location: *Junction generally*

Photograph: *Photos F, G, H & I in Appendix 1*

Summary: *Adequacy of junction to cater for turning traffic*

The Auditors noted that large vehicles were having difficulty in maintaining lane discipline when turning into or out of the junction, partially caused by higher than suitable speeds of vehicles and partly because the junction is too narrow for the configuration that includes the angle formed by the site access road. These difficulties were observed for the movements:

1. South to west (south into the site access road)
2. North to west (north into the access road)
3. West to south (site access road to the south)

The resultant types of collisions are likely to be, respectively:

1. Large vehicles entering the site access road were in danger of meeting outcoming traffic head-on
2. Incoming traffic clipping the front of outcoming traffic turning right
3. Outgoing traffic clipping the front of incoming traffic, especially those entering from the south

In all cases, the types of casualties that may occur are likely to be in-vehicle occupants.

The Audit Team acknowledges that although there have been no reported PIAs there may be damage-only collisions that the Audit Team are not aware of and furthermore the increased vehicle flows as a result of intensification of use of the junction will increase the likelihood of a vehicle/vehicle collision type accident.

RECOMMENDATION
Widen the junction to permit large vehicles to maintain lane discipline and complete manoeuvres without crossing into oncoming lanes. Special care will be required to accommodate the drainage channels and box culverts noted in section 2.8 of this Audit Report.

4.6 Carriageway Markings

4.6.1 PROBLEM 6

Location: *Ford Road at Junction (Location D on Plan in Appendix 2)*

Photograph: *Photos J, K, L & M in Appendix 1*

Summary: *Carriageway marking generally illegible*

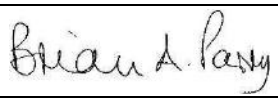
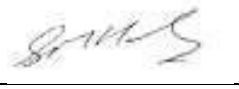
The Auditors noted that ghost-island carriageway markings on Ford Road were generally illegible.

Illegible carriageway markings could lead to badly positioned turning vehicles resulting in head-on collisions on Ford Road, particularly during hours of darkness. The types of casualties that may occur are likely to be in-vehicle occupants.

RECOMMENDATION
Refresh the carriageway markings to guide drivers to take up correct positioning at the junction.

5. RSA TEAM STATEMENT

We certify that this Road Safety Audit has been carried out in accordance with GG 119.

ROAD SAFETY AUDIT TEAM LEADER	
Name:	Eur Ing Brian Parry BSc, MSc, CEng, MICE, FCIHT, FSoRSA
Signed:	
Position:	Director
Organisation:	Bricolby Consulting Limited, 71-75 Shelton Street, Covent Garden, London WC2H 9JQ
Date:	1st March 2021
ROAD SAFETY AUDIT TEAM MEMBER	
Name:	Simon Hawley, BEng (Hons), CEng, MICE, MCIHT
Signed:	
Position:	Director of Highways
Organisation:	Ramboll Limited, 240 Blackfriars Road, London SE1 8NW
Date:	1st March 2021

APPENDIX 1
PHOTOGRAPHS TAKEN DURING SITE VISIT

Photo A Damaged and hazardous road surface on Ford Road

Photo B Existing damaged VRS non-compliant on east side of Ford Road

Photo C Ford Road showing existing VRS opposite site entrance

Photo D Ponding of water on site access road

Photo E Ponding of water on site access road

Photo F Large vehicle turning right out of site access road

Photo G Large vehicle turning right into site access road

Photo H Large vehicle turning left into site access road

Photo I Large vehicle turning left into site access road

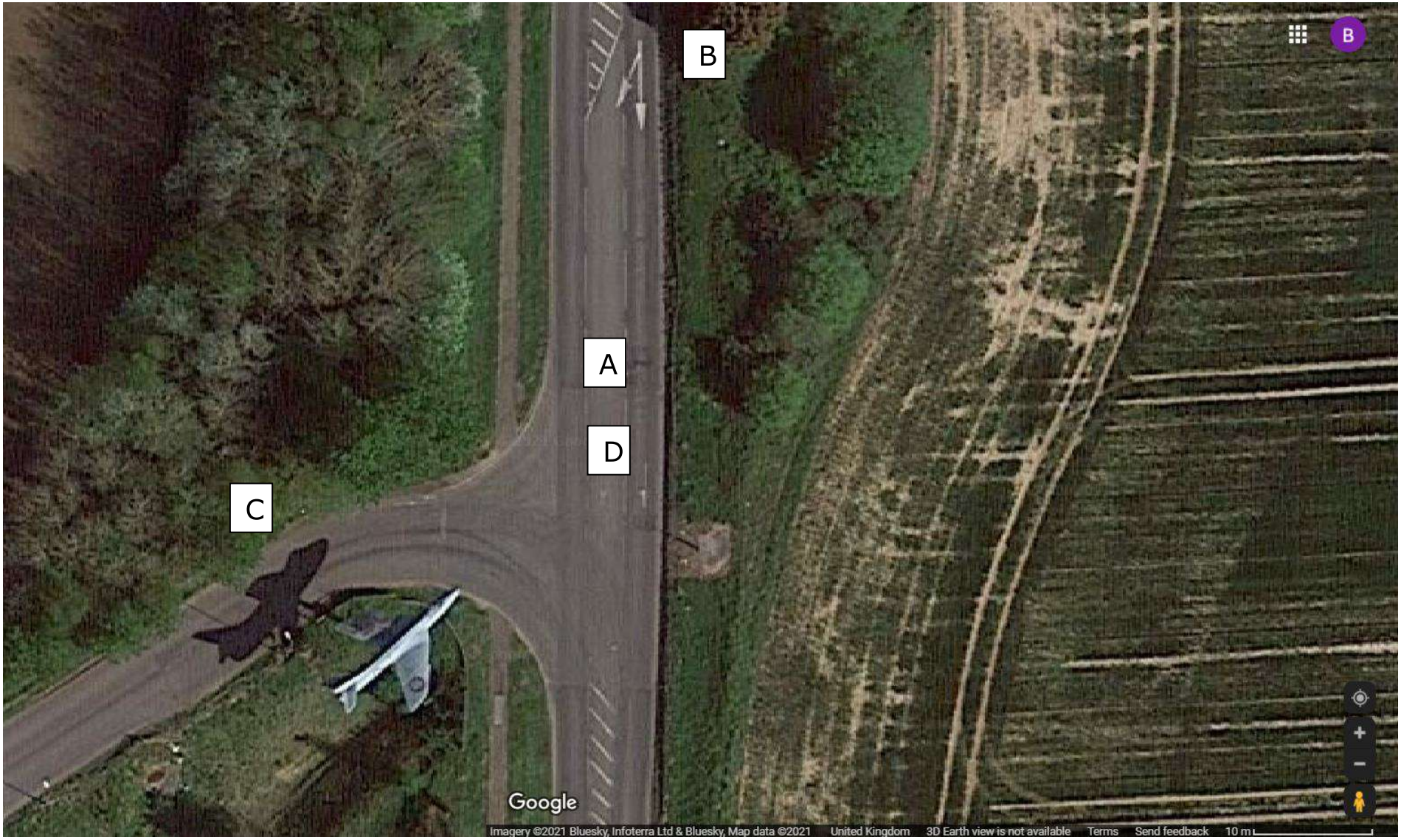
Photo J Ford Road carriageway markings illegible

Photo K Ford Road carriageway markings illegible

Photo L Ford Road carriageway markings illegible

Photo M Ford Road carriageway markings illegible

APPENDIX 2
PROBLEM LOCATION PLAN


B
A
D
C
Google
Imagery ©2021 Bluesky, Infoterra Ltd & Bluesky, Map data ©2021
United Kingdom
3D Earth view is not available
Terms
Send feedback
10 m

APPENDIX B
STAGE 1 ROAD SAFETY AUDIT BRIEF

Intended for

Viridor Waste Management Limited
Grundon Waste Management Limited
Ford Energy from Waste Limited

Document type

Report

Date

February 2021

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

ROAD SAFETY AUDIT (RSA) STAGE 1 BRIEF

RAMBOLL Bright ideas. Sustainable change.

FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK
ROAD SAFETY AUDIT (RSA) STAGE 1 BRIEF

Project name	**FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK**
Project no.	**1620007830**
Document type	**Report**
Version	**P02**
Date	**10/02/2021**
Prepared by	**Ioannis Spyropoulos**
Checked by	**Nicola Evans**
Approved by	**Ed Kerr**
Description	**Road Safety Audit Brief**
Document Reference	**1620007830-RAM-XX-XX-RP-YE-00011**

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Registered office:
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CONTENTS

APPENDICES

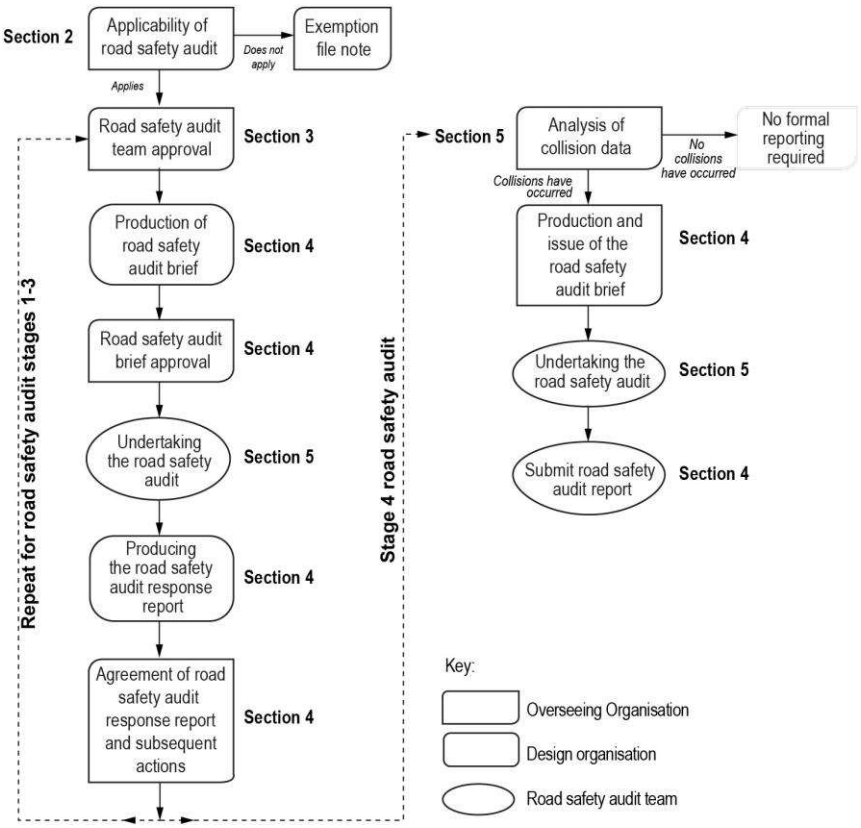
1. PURPOSE OF THE DOCUMENT

The objective of the road safety audit process is to provide an effective, independent review of the road safety implications of the proposed interventions for all road users.

The RSA Stage 1 will be carried out in accordance with the guidelines from the DMRB General Principles and Scheme Governance requirements of GG 119, which replaces HD 19/15, as stated in GG 119 Paragraph 1.3, at the "**Completion of the preliminary design**". As acknowledged in Paragraph 5.17, "The end of the preliminary design stage is often the last occasion at which land requirements can have the potential to be changed."

At this stage the aim is to identify relevant road safety issues and communicate these in the form of road safety audit problems and recommendations. It shall follow the process described in the figure below, which references the various sections of GG 119.

Figure 1: Extract from GG 119 (Figure 1.3) providing an overview of the Road Safety Audit Process



The purpose of this document is to describe the proposed brief for the RSA Stage 1. This brief consists of instructions to the road safety audit team defining the scope and details of the proposed scheme to be subject to road safety audit, including sufficient project information in order for this stage of the road safety audit to be undertaken.

2. THE RSA BRIEF

2.1 Project Summary (GG 119 Table C.1)

Date:	10/02/2021
Document reference:	1620007830-RAM-XX-XX-RP-YE-00011
Prepared by:	Ramboll UK
On behalf of:	FORD ENERGY RECOVERY FACILITY AND WASTE SORTING AND TRANSFER FACILITY, FORD CIRCULAR TECHNOLOGY PARK
AUTHORISATION SHEET	
Project:	FORD ERF AND WSTF
Report title:	Road Safety Audit (Stage 1) Report
PREPARED BY:	
Name:	Ioannis Spyropoulos
Signed:	
Organization:	Ramboll UK
Date:	10/02/2021

2.2 General Details (GG 119 Table C.2)

General details				
Highway scheme name and road number:		Ford Road and Site Access priority junction, Ford		
Type of scheme:	The applicants are proposing to build and operate a conventional energy recovery facility (ERF) at the site. Grundon, the sole owner/ operator of the existing waste transfer station (WTS), is proposing to continue this operation in a new, purpose-built waste sorting and transfer facility (WSTF) on site.			
RSA stage tick as appropriate.	1 ✓	2	3	4
	Interim			
Overseeing Organization details		**Design organization details**		
West Sussex County Council Highways Dept Stephen Gee Principal Planner County Highways (Development Manager) Stephen.gee@westsussex.gov.uk 0330 222 3306		Ramboll UK Ioannis Spyropoulos Transport Planner Ioannis.Spyropoulos@Ramboll.co.uk		
Police contact details				
Not required (Required for stage 1 RSA)				

RSA team membership

It is proposed that the RSA team will consist of the following persons from the SBC approved auditors list.

Role	Name
RSA Team Leader	Brian Parry - Bricolby Consulting Limited
RSA Team Member	Simon Hawley – Ramboll
RSA Team Observer (if proposed)	None proposed

Terms of reference

The Stage 1 Road Safety Audit (RSA) shall be undertaken fully in accordance with the DMRB Standard GG 119 (which supersedes HD 19/15) and this Road Safety Audit Brief.

Preliminary findings are to be reported on or before **27th February 2021.**

The RSA 1 Report is to be produced for Approval by the Developer Client by the **5th March 2021**.

2.3 Scheme Details (GG 119 Table C.3)

2.3.1 Scheme description

General

The development site is located at the Ford Circular Technology Park (CTP) (the former Tarmac blockworks site) which is situated to the south-west of the village of Ford. The 7.11 ha site is partially used for the existing Waste Transfer Station (WTS) operation and is partially vacant. The proposed development is to be called Ford Energy Recovery Facility (ERF) and Waste Sorting and Transfer Facility (WSTF) (therein referred to as the 'Ford ERF and WSTF'). The Ford ERF and WSTF are proposed by Grundon Waste Management Limited (Grundon), Viridor Waste Management Limited (Viridor) and Ford Energy from Waste Limited (Ford EfW) (therein referred to as 'the applicants').

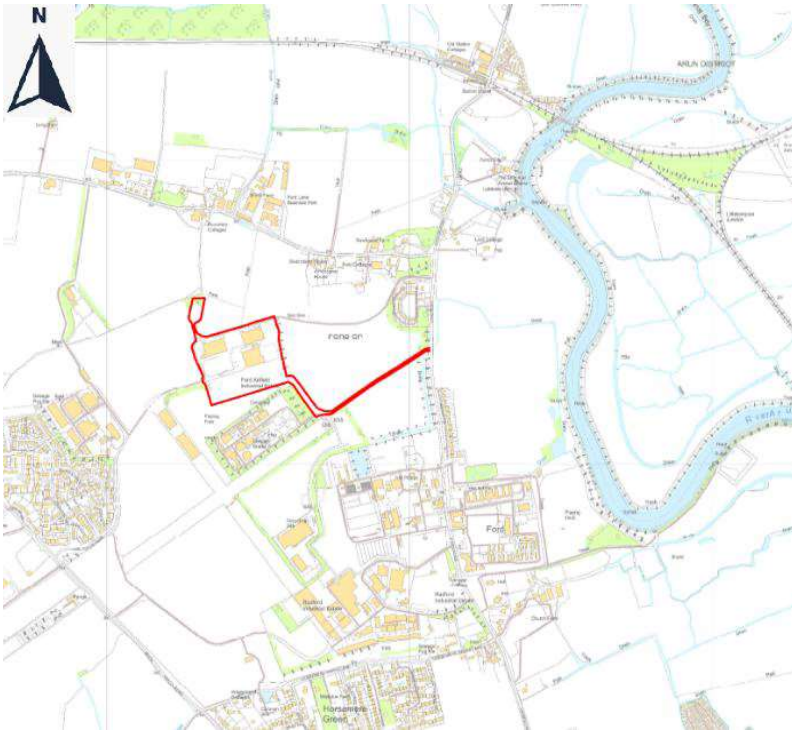
Proposal description

The applicants are proposing to build and operate a conventional energy recovery facility (ERF) at the site. Grundon, the sole owner/ operator of the existing waste transfer station (WTS), is proposing to continue this operation in a new, purpose-built waste sorting and transfer facility (WSTF) on site. Cycle, motorbike and car parking will be provided, whilst the site will continue to be accessed from the site access/Ford Road junction.

Site Access (Access Road/ Ford Road Priority Junction)

The proposed development site (Figure 2.1) will be accessed from the existing site access/Ford road junction.

Figure 2.1: Site Location Plan



Source: Map Data @2020

The access is a ghost island priority junction (Figure 2.2) and appears to have been constructed with compound curve radii, as is typical of junctions with a high proportion of HGV movements. The junction has good visibility in either direction along Ford Road.

Figure 2.2: Site Location Plan

The study area that needs to be considered by the RSA Team is the site access/Ford Road junction (Figure 2.3).

Figure 2.3: Site Access/Ford Road junction

2.3.2 Design standards applied to the scheme design

Not applicable.

2.3.3 Design speeds

Not applicable.

2.3.4 Speed limits

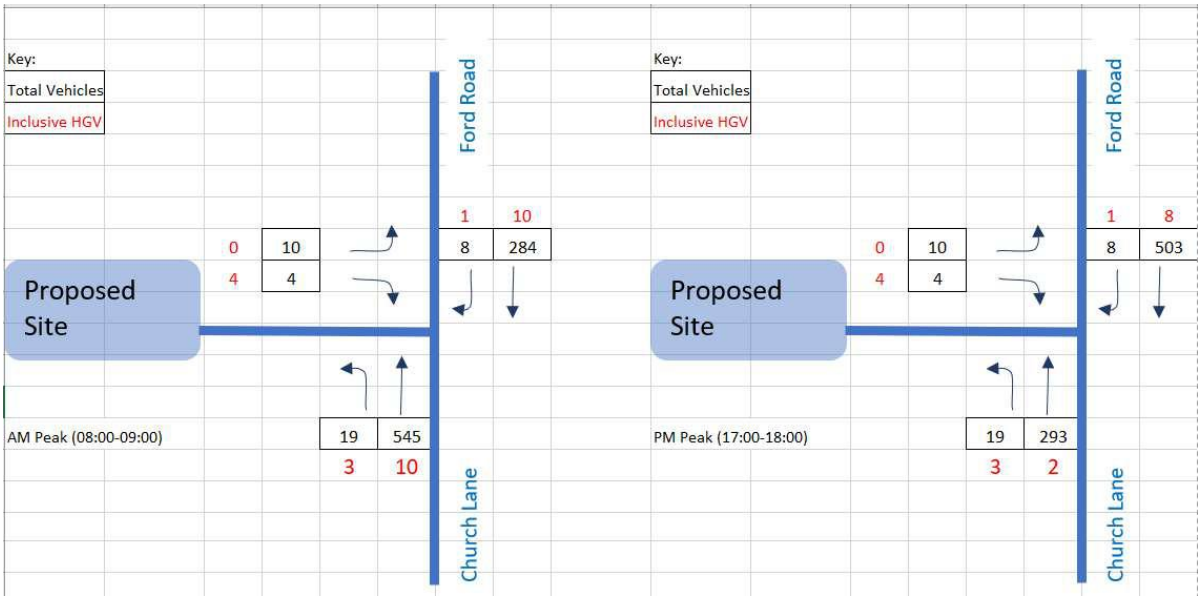
Ford Road: 40 mph.

2.3.5 Existing 2018 baseline traffic flows

Manual Classified Counts were undertaken on the 5th July 2018 at the site access road/Ford Road junction. No pedestrian and cyclist surveys have been undertaken in the vicinity of the site.

AM (08:00-09:00) and PM Peak (17:00-18:00) hour 2018 baseline traffic flows are included in Figure 2.4.

Figure 2.4: 2018 Baseline Traffic Flows, AM + PM



2.3.6 Forecast traffic flows

Forecast traffic flows for the 2025 (construction year) and 2026 (opening year) can be found in Figures 2.5 and 2.6.

Figure 2.5: 2025 Baseline + Com Dev + Construction Traffic Flows, AM + PM

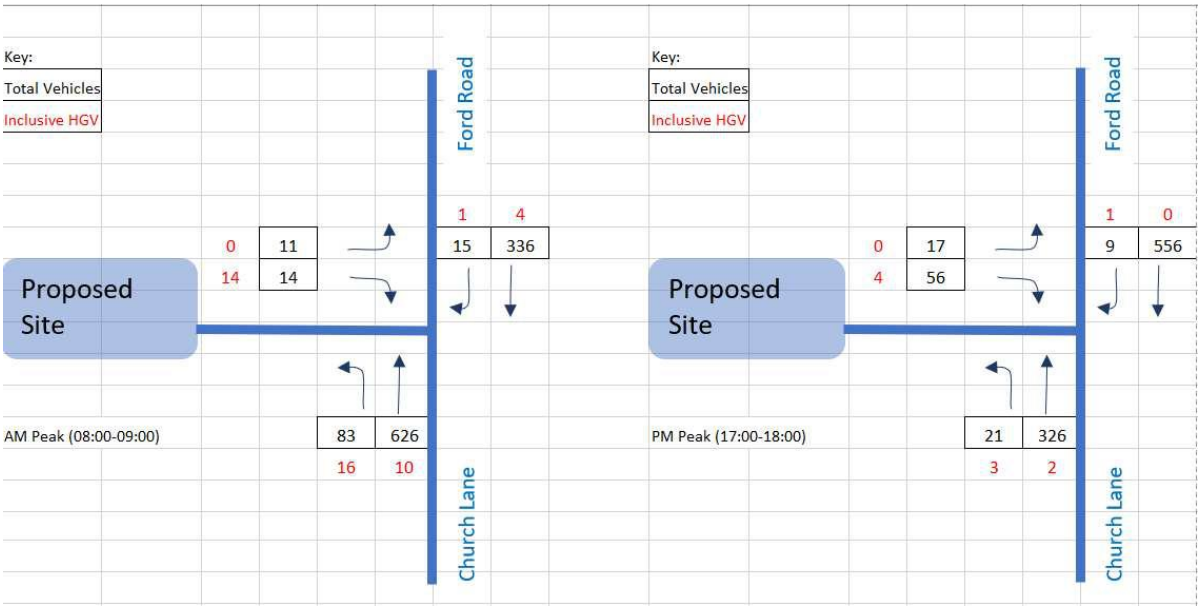
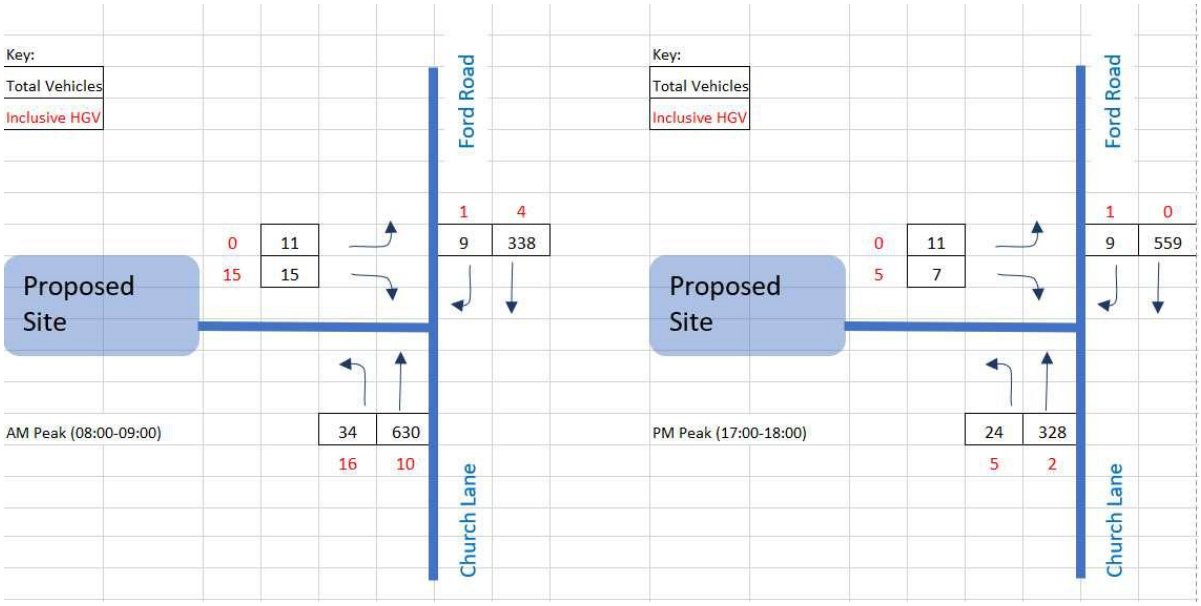


Figure 2.6: 2026 Baseline + Com Dev + Operational Traffic Flows, AM + PM



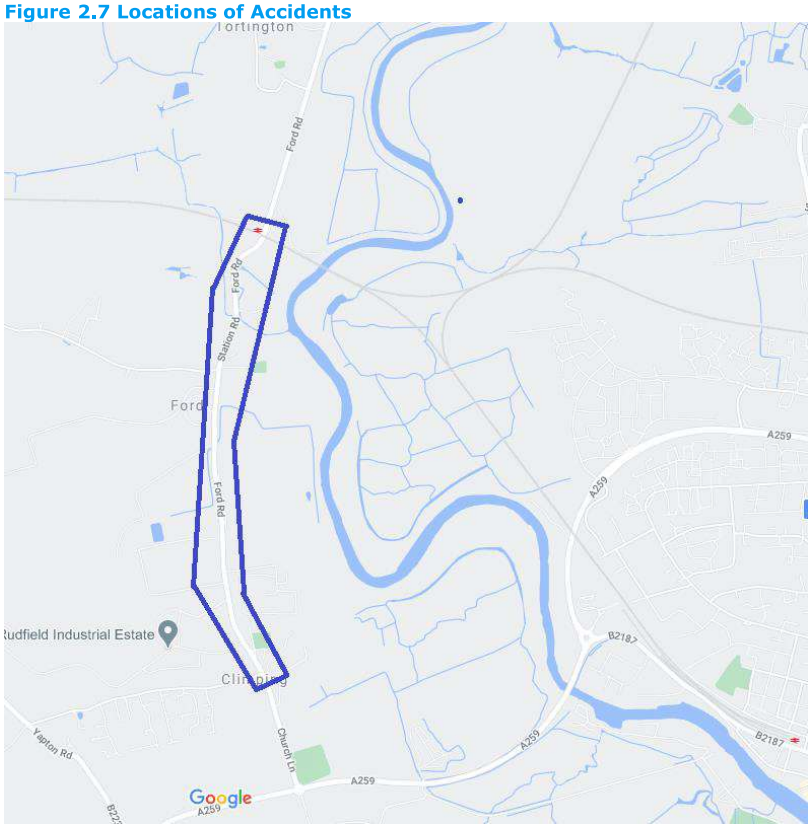
2.4 Analysis (GG 119 Table C.5)

Collision data analysis

Road Traffic Accident data for the local highway network around the proposed development has been provided by Sussex Police for a five-year period from 01/01/2016 to 31/12/2020.

Locations and detailed description of the accidents can be found in Appendix 1.

Figure 2.7 Locations of Accidents



Departures from standards
Not applicable

Previous road safety audit stage reports, road safety audit response reports and evidence of agreed actions
Previous RSA can be found in Appendix 2 and was prepared to support previous planning application for the Southern Link Road (permitted and built).

Walking, cycling and horse-riding assessment and reviews
Previous Walking, cycling and horse-riding assessment can be found in Appendix 3.

List of included documents and drawings
N/A

3. CHECKLIST (GG 119 TABLE C.6)

Tick all that are included and provide reasons for those that are not included			
Site location plan **Section 2.3.1 Figure 2.1**	✓	Scale layout plans **N/A**	
Departures and relaxations from standards **N/A**	×	Construction/ typical details **N/A for Stage 1 Audit**	×
Previous RSA reports **Appendix 2**	✓	Previous RSA response reports and evidence of agreed actions **N/A**	×
Collision data and collision data analysis **Appendix 1**	✓	Road traffic collision plot **Appendix 1**	✓
Traffic signal staging **N/A**	×	Traffic counts **Section 2.3.5**	✓
Speed surveys **none carried out**	×	Pedestrian, cyclist and horse riding desire lines and volumes **N/A**	✓
Walking, cycling and horse-riding assessment and reviews **Appendix 3**	✓	Adjacent land uses **N/A**	×
Other factors that may impact on road safety **N/A**	×	Design speeds/ speed limits **N/A**	×
Design standards used **N/A**			

APPENDIX 1
PIA

Ford Road – Climping – Ramboll Ltd

Collision report 01/01/2016 – 31/12/2020

Date produced
26 January 2021

This report is marked as **Official – Sensitive**

- The information included in this report is provided for analysis purposes and is for the exclusive use of the applicant, the information must only be used for the purposes for which it has been obtained.
- The data has been provided by Sussex Police and should not be transmitted to any other person without their consent, including reports for the general public.
- Be aware that any improper disclosure, copying, distribution or use of the contents of this information is prohibited and criminal proceedings may follow.

Sussex Safer Roads
PARTNERSHIP

Safer Roads
Safer Communities
Sharing the Responsibility

Produced by Sussex Safer Roads Partnership on behalf of Sussex Police

Data regarding personal injury collisions is recorded by Sussex Police in accordance with the DfT Stats 19 requirements. The data is subsequently used by Sussex Safer Roads Partnership for monitoring and planning. While every effort is made to ensure that this data is accurate, it is subject to change should further information become available.

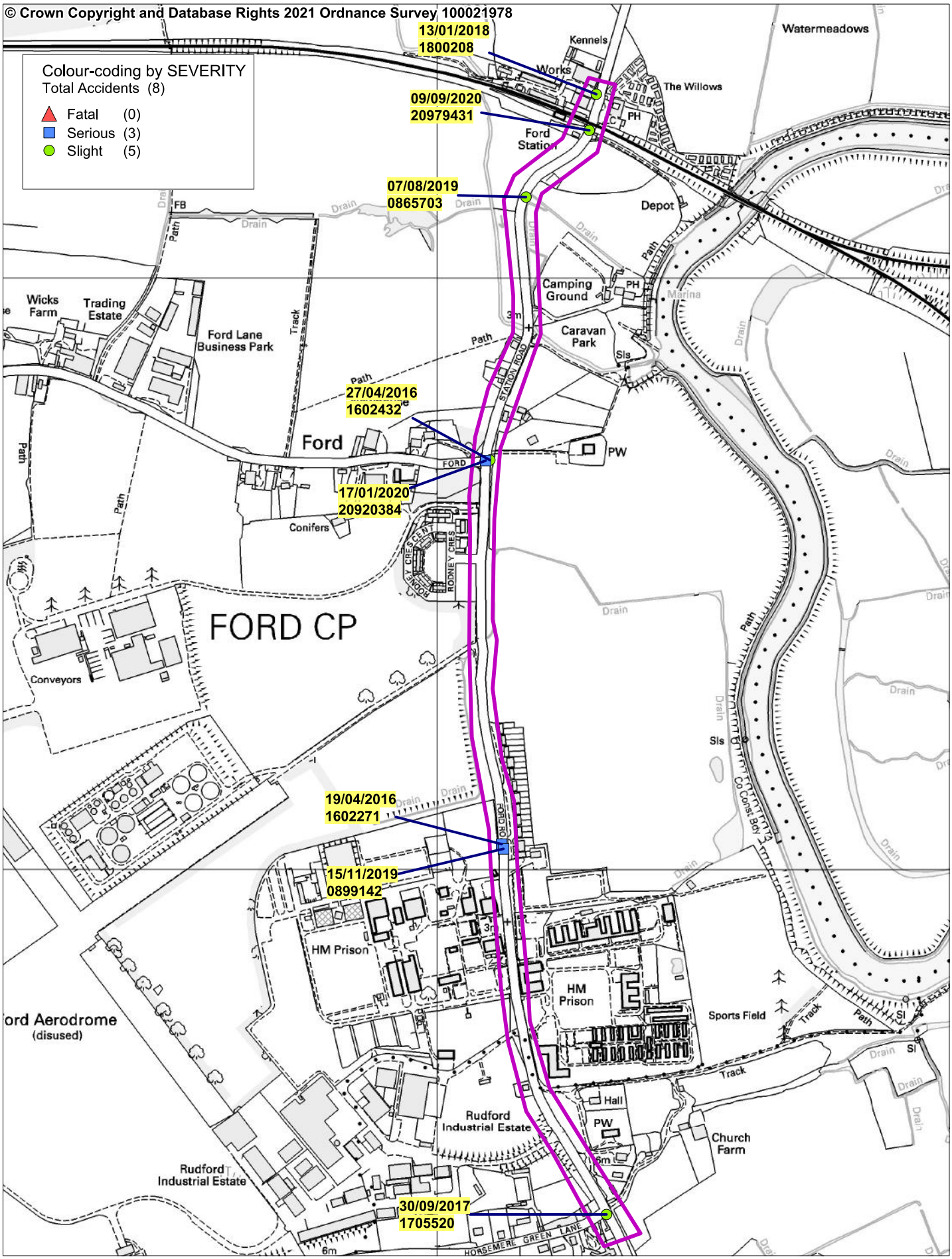
This data may not be fully validated and while every effort is made to ensure its accuracy any statistics provided may not match those published elsewhere.

Sussex Safer Roads Partnership does not hold collision data either where there are no recorded casualties or the incident has not been reported to Sussex Police.

For further information:

web: www.sussexsaferroads.gov.uk

email: data@sussexsaferroads.gov.uk



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Sussex Safer Roads PARTNERSHIP

Ford Road, Climping
Collision Dates 01/01/2016 - 31/12/2020
Ramboll Ltd

SCALE	1 : 8500
DATE	26/01/2021
DRAWING No.	
DRAWN BY	

Details of Personal Injury Accidents for Period - **01/01/2016** **to** **31/12/2020** (60) months

Selection:
Selected using Manual Selection

Notes:

			Vehicles					Casualties			
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class					Sex / Age / Sev			
	Date										
Road No.											
2nd Road No.	Time										
Grid Ref.	D/L										
	R.S.C										
	Weather										
	Speed										
	Account of Accident										
Causation Factor:											

1602271
Tuesday 19/04/2016 0732hrs
R1: U
R2: U
E 500,109
N 103,042
U FORD ROAD FORD AT JUNCTION OF U NELSON ROW OUTSIDE AT JUNCTION
Daylight:street lights present
Dry
Fine without high winds
40 mph

Veh 1	Taxi	Going ahead	S	to N						
Veh 2	Car	Wait to turn right	S	to N	Dri	M	38	Serious		

Causation Factor: **Participant:** **Confidence:**

1st: Failed to look properly — Vehicle 1 — Very Likely

VEHICLE 2 TRAVELLING NORTH ON FORD ROAD, SLOWED WITH INTENTION TO TURN INTO NELSON ROW WHEN VEHICLE 1 FOLLOWING BEHIND FAILED TO NOTICE V2 SLOWING AND DROVE INTO REAR OF V2 CAUSING MINOR NECK PAIN INJURY TO DRIVER OF V2.

1602432
Wednesday 27/04/2016 0820hrs
R1: C 17
R2: U
E 500,089
N 103,692
C17 STATION ROAD ARUNDEL AT JUNCTION OF U FORD LANE
Daylight:street lights present
Wet/Damp
Fine without high winds
30 mph

Veh 1	Car	Turning right	W	to S	Dri	M	74	Slight		
Veh 2	Goods < 3.5t	Going ahead	S	to N						

Causation Factor: **Participant:** **Confidence:**

1st: Careless/Reckless/In a hurry — Vehicle 1 — Possible

V1 TURNING RIGHT/SOUTH, FROM FORD LANE JUNC INTO STATION ROAD FORD ARUNDEL. V1 COLLIDED WITH V2 WHICH WAS TRAVELLING NORTH BOUND ON STATION ROAD.

1705520
Saturday 30/09/2017 1143hrs
R1: U
R2: U
E 500,286
N 102,415
U CHURCH LANE CLIMPING AT JUNCTION OF U HORSEMERE GREEN LANE
Daylight:street lights present
Dry
Fine without high winds
40 mph

Veh 1	Car	Starting	W	to S	Dri	M	90	Slight		
Veh 2	Car	Going ahead	S	to N	Dri	F	31	Slight		

Causation Factor: **Participant:** **Confidence:**

1st: Disobeyed Give Way or Stop sign or markings — Vehicle 1 — Very Likely
2nd: Failed to look properly — Vehicle 1 — Very Likely

V1 AT T JUNCTION FACING EAST FAILS TO GIVE WAY AT JUNCTION AND PULLS DIRECTLY INTO THE PATH OF V2 TRAVELLING NORTH CAUSING COLLISION RESULTING IN DAMAGE AND INJURY TO BOTH PARTIES

Details of Personal Injury Accidents for Period - 01/01/2016 to 31/12/2020 (60) months

Selection:
Selected using Manual Selection

Notes:

			Vehicles					Casualties		
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class					Sex / Age / Sev		
	Date									
Road No.	Time									
2nd Road No.										
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1800208 Saturday 13/01/2018 2027hrs — U FORD ROAD FORD AT JUNCTION OF U GAUGEMASTER WAY OUTSIDE JUNCTION RTC

Veh 1	Car	Turning right	W to S	Dri	F	25	Slight		
Veh 1	Car	Turning right	W to S	RSP	F	0	Slight		
Veh 1	Car	Turning right	W to S	RSP	M	29	Slight		
Veh 2	Car	Going ahead	N to S						

R1: U
R2: U
E 500,269
N 104,311
Darkness: street lights present a
Dry
Fine without high winds
40 mph

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 1	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 1	Possible

V2 S/B TOWARDS JUNCTION O/S V1 ENTERS MAIN ROAD FROM JUNCTION INTO PATH OF V2.

0865703 Wednesday 07/08/2019 0338hrs — FORD ROAD - 150 METRES FROM JUNCTION WITH UNCLASSIFIED ROAD

Veh 1	Car	Going ahead RH bend	S to NE						
Veh 2	Car	Going ahead LH bend	NE to S	Dri	M	56	Slight		

R1: U
E 500,150
N 104,137
Daylight:street lights present
Dry
Fine without high winds
60 mph

Causation Factor:		**Participant:**	**Confidence:**
1st:	Inexperience of driving on the left	Vehicle 1	Very Likely
2nd:	Illegal turn or direction of travel	Vehicle 1	Very Likely

V1 AND V2 TRAVELLING IN OPPOSITE DIRECTIONS ON FORD ROAD. V1 WAS DRIVING ON THE WRONG SIDE OF THE RIDE AND HIT V2 HEAD ON. V1 IS FROM SWITZERLAND AND WAS HEADING HOME HAVING ONLY JUST LEFT A CAMPSITE. V1 WAS DRIVING ON THE RIGHT AS FORGOT DUE TO NO O
THER TRAFFIC AROUND.

0899142 Friday 15/11/2019 1852hrs — FORD ROAD NEAR JUNCTION WITH NELSON ROW

Veh 1	Car	Turning right	N to W						
Veh 2	Car	Going ahead	N to S	Dri	F	48	Serious		
Veh 3	Car	Going ahead	N to S						
Veh 4	Goods < 3.5t	Turning left	N to E						

R1: U
R2: U
E 500,112
N 103,034
Darkness: no street lighting
Wet/Damp
Raining without high winds
40 mph

Causation Factor:		**Participant:**	**Confidence:**
1st:	Careless/Reckless/In a hurry	Vehicle 2	Possible
2nd:	Following too close	Vehicle 3	Possible
3rd:	Slippery road (due to weather)	Vehicle 2	Possible
4th:	Slippery road (due to weather)	Vehicle 3	Possible
5th:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely

V1 BROKE SUDDENLY IN FRONT CAUSING V2 TO GO INTO THE BACK OF IT AND V3 WENT INTO THE BACK OF V2

Details of Personal Injury Accidents for Period - 01/01/2016 to 31/12/2020 (60) months

Selection:
Selected using Manual Selection

Notes:

			Vehicles					Casualties			
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class					Sex / Age / Sev			
	Date										
Road No.	Time										
2nd Road No.											
Grid Ref.	D/L										
	R.S.C										
	Weather										
	Speed										
	Account of Accident										
Causation Factor:											

20920384	Friday	STATION ROAD AT JUNCTION WITH	Veh 1	Car	Turning right	W	to S				
	17/01/2020	FORD LANE	Veh 2	Car	Going ahead	S	to N	FSP	F	74	Serious
R1: U	1215hrs		Veh 3	Car	Wait to turn right	N	to W				
R2: U	Daylight:street lights present										
E 500,082	Dry										
N 103,691	Fine without high winds										
	40 mph										

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 1	Very Likely

V1 WAITING TO EXIT THE JUNCTION OF FORD LANE. V3 HELD IN STATION ROAD WAITING TO TURN RIGHT IN TO FORD LANE. THEY HELD BACK FROM THE JUNCTION TO ALLOW V1 TO EXIT. V1 PULLS OUT OF THE JUNCTION ON TO STATION ROAD WITHOUT LOOKING AND HITS V2 TRAVELLIN
G NORTH ON STATION ROAD. THIS CAUSES V2 TO COLLIDE IN TO V3. V1 MINOR DAMAGE, V2 AND V3 BOTH HAVE EXTENSIVE DAMAGE AND WILL BE WRITTEN OFF.

20979431	Wednesday	FORD ROAD NEAR JUNCTION WITH	Veh 1	Car	Stopping	SW	to NE	Dri	F	54	Slight
	09/09/2020	UNCLASSIFIED ROAD	Veh 2	Car	Going ahead	SW	to NE				
R1: U	1230hrs										
R2: U	Daylight:street lights present										
E 500,257	Dry										
N 104,250	Fine without high winds										
	40 mph										

Causation Factor:		**Participant:**	**Confidence:**
1st:	Distraction outside vehicle	Vehicle 2	Very Likely
2nd:	Sudden braking	Vehicle 1	Possible
3rd:	Failed to judge other persons path or speed	Vehicle 2	Very Likely
4th:	Failed to look properly	Vehicle 2	Very Likely

V1 TRAVELLING NORTH ALONG STATION ROAD, FORD, ARUNDEL. V1 HAS STOPPED PRIOR TO LEVEL CROSSING OUTSIDE FORD RAILWAY STATION DUE TO AMBER SIGNAL ON LEVEL CROSSING. V2 ALSO TRAVELLING NORTH ALONG STATION ROAD HAS THEN DRIVEN IN TO THE BACK OF V1 WHICH W
AS STATIONARY. C1 COMPLAINED OF NECK AND BACK PAIN AND TAKEN VIA AMBULANCE TO ST RICHARDS HOSPITAL, CHICHESTER.

APPENDIX 2
PREVIOUS ROAD SAFETY AUDIT

NEW CIRCULAR TECHNOLOGY PARK

FORD AIRFIELD INDUSTRIAL ESTATE ACCESS ARRANGEMENTS

Stage 1 Road Safety Audit Revision A

April 2018

LS/SR/17/1543/RSA1/RevA

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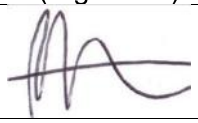
Registered in England No.04514601. Registered office: Shackleford Suite, Mill Pool House, Mill Lane, Godalming, Surrey GU7 1EY

Revision Status	Prepared by: (Name)	Checked by: (Name)	Approved by: (Signature)	Date Approved:
Rev A	L Shaw	S Richards		27 April 2018
Designer's Response				
Authority's Response				
Audit Response				

Client:	
Callidus Transport & Engineering Ltd	The Safety Forum Ltd
Shackleford Suite Mill Pool House Mill Lane Godalming GU7 1EY	3 Chapel Row Bath BA1 1HN
	27 April 2018

TABLE OF CONTENTS

1.0 INTRODUCTION

1.1 This report results from a Stage 1 Road Safety Audit (RSA) carried out on the proposal to provide modified access arrangements for a new Waste Treatment Facility at New Circular Technology Park at the former Ford Airfield, Ford, West Sussex. The site being audited is at the junction of Ford Road/unnamed road just south of Rodney Crescent. The site is known as Hunterford.

1.2 No new highway proposals are included in this audit report and report is on the effects of an increase in the number of HGVs through the access.

1.3 The original report was produced in September 2017 however this is a new report, Revision A, required following revised information on the number of vehicle movements generated by the development on the site.

1.4 The Stage 1 RSA was carried out at the request of Callidus Transport & Engineering Ltd.

1.5 The Audit was carried out between 11th – 12th September 2017 by consultants working on behalf of The Safety Forum Limited. The Audit Team, which is established from The Safety Forum Ltd and independent of the project design team, has had no involvement with the project The Auditors were:

The Auditors were:

Laurence Shaw – Team Leader (MSoRSA, RSA Cert Comp)

Steve Richards – Team Member (MCIHT, MSoRSA)

1.6 The report has been prepared in accordance with the Design Manual for Roads and Bridges (DMRB) Highways Directive (HD) 19/15.

1.7 The Audit consisted of a desktop study and a site visit. The site visit was carried out on 11th September 2017, between 11:00 and 11:30 hours by all members of the Audit Team together. The weather was dry and sunny and the road surface was dry. Traffic conditions were low.

1.8 Issues relating to the health & safety of operatives constructing, operating or maintaining the highway are not covered by Road Safety Audit. Only issues relating to the design and construction of facilities for highway maintenance that may potentially contribute to a Road Safety Matter are considered by the Road Safety Audit process.

Road Safety Audit is not a technical check that the design conforms to Standards and/or best practice guidance. Design Organisations are responsible for ensuring that their designs have been subjected to the appropriate design reviews (including, where applicable, Non-Motorised User (NMU) assessment and review) prior to Road Safety Audit.

Road Safety Audit is not a check that the scheme has been constructed in accordance with the design.

Whilst reference is made to certain design standards, where safety may be compromised by a reduction in standard, this report is not intended to provide a design check. The Auditors have only reported on matters that might have an adverse effect on road safety in the context of the chosen design. No attempt has been made to comment on the justification of the scheme or the appropriateness of the design. Consequently, the Auditors accept no responsibility for the design or construction of the scheme.

1.9 The recommendations in this report are aimed at addressing the road safety problems; however there may be other alternative acceptable ways to overcome a specific problem, when other practical issues are considered. The recommendations contained herein do not absolve the Designer of his/her responsibilities.

1.10 The Auditors would be pleased to discuss the acceptability of alternative solutions to problems identified during the Audit, and would encourage the Designer to consult them on this matter.

1.11 The LHA response to the RSA should be formally recorded and reported to the Designer and the RSA Team so that a record of the Audit process is contained in the *As Built* design pack to be provided and retained by the LHA on final completion.

1.12 All problems identified in this Road Safety Audit Report are indicated on a location plan in Appendix A

2.0 ITEMS CONSIDERED

2.1 The Road Safety Audit was undertaken on the scheme detailed in the following Callidus Transport & Engineering Ltd documentation.

Title
CTP Ford Alternative Site Access TS Appendices Final Issue Report
CTP Ford Alternative Site Access TS Appendices Final Issue Appendix A
WSSC High Response

2.2 No departure from standards or other information was submitted to the Audit Team.

3.0 MATTERS ARISING FROM THIS STAGE 1 AUDIT.

COMMENT

It is understood that that access to and from the highway will be achieved via a new access road served by the existing access to the Viridor site and all vehicles accessing the site would use the existing access off Ford Road.

The existing access already has space for two HGVs to pass each other in the access, including two right turning vehicles and visibility at the junction is adequate for a road covered by the National Speed Limit (60mph).

The Audit Team do not know the current flows from the access road but we have been told that the proposals are expected to increase movements on to the site with an additional 240 movements per day (120 in and 120 out).

During AM and PM network hours, it is anticipated that the site will generate 18 movements in the AM peak (9 in and 9 out, all of which would be HGV movements) and 26 in the PM peak (9 in, 17 out, of which 18 would be HGV movements).

It is the opinion of the Audit Team that the junction, which has a right turn lane on Ford Road, is of reasonable design and that the increase in the number of HGV movements should not affect road safety. Note that this report deals with the safety at the junction only and other issues have not been considered.

4.0 AUDITOR STATEMENT

4.1 We certify that this audit has been carried out in accordance with HD 19/15.

AUDIT TEAM LEADER
L Shaw
The Safety Forum Ltd
PO Box 831
Godalming
Surrey
GU7 9HT

Signed: ……

Date: 24 April 2018

AUDIT TEAM MEMBER
S Richards

Signed: ……

Date: 24 April 2018

APPENDIX A: LOCATION PLAN

No site plan was provided for this audit.

APPENDIX B: Road Safety Audit Response

Auditors: L Shaw (Team Leader) and S Richards (Team Member).

Date Response Completed:

Scheme: CPT at Ford Airfield Access Arrangements

This response is to a Stage 1 Road Safety Audit to the design standard detailed within HD19/15 of Volume 5, Section 2, Part 2, of the Design Manual for Roads and Bridges, as detailed by the Highways Agency.

This report did not raise any problems.

Principal Engineer's / Audit Project Sponsor's Statement:

Road Safety Audit for CPT at Ford Airfield – Access Arrangements

I certify that I have considered the items raised in the Stage 1 Road Safety Audit Report and I am content to accept all of its recommendations except for the ones listed above. I have stated my reasons for not accepting them and I seek the Chief Engineer's endorsement of my proposals.

..... Date.....

Principal Engineer

Chief Engineer's / Director's Decision:

I accept these proposals by the Principal Engineer.

..... Date.....

Chief Engineer

APPENDIX 3
SLR NMU

TECHNICAL NOTE

Project: Circular Technology Park, Ford Airfield – Alternative Access
Date: September 2017 (REVISED 09/07/18)
Author: RS/TE1093

Title: Non-Motorised User Audit (NMU) – Access Road junction, Ford Road

Introduction

1. This Technical Note reports on a Non-Motorised User (NMU) audit undertaken for the access road junction to the Ford Rd Materials Recycling Facility (Viridor site) and the water treatment works from Ford Road. It is proposed that this access road will form an alternative access route to the proposed Circular Technology Park at Ford Airfield (former Ford Blockworks), which has planning consent (WSCC/096/13/F). The location of the junction is shown in Appendix A, Figure 1.

2. A planning application (WSCC/027/18/F) for the alternative means of access to the consented site using the route to Viridor and the water treatment works has been submitted and a Highways consultation response received from the Highway Authority. This required that a Non-Motorised User Audit (NMU) be undertaken of the access junction with Ford Road. The reason given for this was because of the intensification of this junction for motorised vehicles and the impact that this might have on non-motorised users.

3. A Transport Statement has already been submitted as part of the planning application for alternative access to the site.

Methodology

4. Guidance for NMU audits is set out in HD42/05[1]. Strictly speaking, this guidance applies to new transport schemes on trunk roads. However, the methods employed are similar to PERS and CERS (Pedestrian / Cycle Environmental Review Systems), which have been undertaken for a number of years, and there is documented guidance on how to carry them out. PERS/CERS can be undertaken at a very detailed level but a review typically consists of the following stages:
    i. Definition of the study area and desire lines
    ii. Desk-top identification of links, crossings, routes and spaces to be reviewed
    iii. On-street evaluation (if an existing transport system)
    iv. Data analysis (if an existing transport system)

[1] Design Manual for Roads and Bridges Volume 5 Section 2 Part 5 – HD 42/05

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T 01225 303 523 **E** info@callidusgroup.co.uk **W** www.callidusgroup.co.uk

v. Display and review of outputs

5. For the alternative site access on Ford Road, the key desire lines routes have been established. These are limited to pedestrians and cyclists travelling north – south on Ford Road. Movements for pedestrians and cyclist to and from the Circular Technology Park itself are catered for by the access routes identified as part of the original planning consent for the site; these are from Rollaston Park to the west and the established existing site access from Ford Road to the east.

6. Cycle and pedestrian movements on Ford Road have been observed to be low. However, pedestrians are catered for with a footway extending along much of the length of Ford Road. There are no specific cycle facilities in the areas but Ford Road is a reasonably good route for cyclists being flat and straight with clear visibility.

7. For the purposes of a NMU, a network of routes is normally divided up into collections of links for analysis. In this case there is just a single link that crosses the access junction road.

   - Link collection: This is formed of a single link that crosses the access road to the site. This route provides an important north – south link for local trips within the area. Pedestrians and motorised traffic are segregated i.e. the highway is divided between footway and carriageway. The speed limit for motorised traffic is 40mph on Ford Road. No specific speed restriction is shown for the access road. Adult and teenage cyclists would be expected to use the carriageway.

8. The method employed by this NMU audit includes a set of key quality factors against which the assessment has been carried out. Each factor is then scored according to the following range:

Score	Description
Very Good	3
Good	1 to 2
Average	0
Poor	-1 to -2
Very Poor	-3

Table 1: NMU scores

9. The scores are then weighted according to the importance of the parameter they represent. The weightings are derived from the PERS framework, which has a set of fixed weighting values.

10. Table 2 provides a qualitative rating of the total weighted score for any link collection, ranging from the 'very poor' to the 'very good'. This can be used for reference purposes

when comparing actual scores for individual links, crossings or public spaces.

Rating	Links
Very Good	50 to 80
Good	20 to 50
Average	-20 to 20
Poor	-20 to -50
Very Poor	-50 to -80

Table 2: Range of weighted PERS scores

11. The evaluation was undertaken as a desk top study following a previous visit to the site. The audit form is contained in Appendix B.

Summary of site layout

12. The access junction is shown in the figure below. The access is a ghost island priority junction and appears to have been constructed with for compound curve radii, as is typical of junctions with a high proportion of HGV movements. The junction has good visibility in either direction along Ford Road.

13. A footway 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. The visibility between the footway and the access road i.e. between pedestrian and site vehicles, is good.

Figure 1: Access junction with Ford Road (looking west)

Audit of Access

14. The following table summarise key quality factors observed by the audit. The table also shows their weighted score for Non-Motorised Users:

Crossing Name:	1) Ford Road / Site Access		
Factor	**Score**	**Weight factor**	**Weighted score**
Crossing provision	1	5	5
Deviation from the desire line	2	3	6
Performance	1	5	5
Crossing capacity	1	1	1
Delay	0	3	0
Legibility	0	1	0
Legibility for sensory impaired	-1	3	-3
Dropped kerbs	2	3	6
Gradient	1	1	1
Obstruction	2	1	2
Surface quality	1	3	3
Maintenance	1	1	1
		TOTAL	27

Comment: A good crossing point that is direct and with dropped kerbs. However, there are no tactiles. There is good visibility between pedestrians and vehicles exiting the access road.

Works: None proposed

Table 3: Site access summary results

NMU Audit Summary

15. The weighted score for the assessed site access is shown in Table 4. This shows that the site access is rated as 'Good' meaning that the access provides a good level of provision for non-motorised users.

16. It is estimated that there will be an average vehicle flow rate of around 8 additional cars and 18 additional trucks cars during the peak hours using the access road. Given the low level of pedestrian and cycle movements along this part of Ford Road, it is very unlikely that the additional vehicles will result in any kind of severance. Such a flow would therefore not be considered to represent a barrier to pedestrian or cycle movement.

Crossing	Name	Weighted Score	Rating
1	Site access crossing	27	Good

Table 4: Summary of weighted scores

Issues and Actions

17. This section considers the issues identified by the audit for the access junction. Any proposed actions are then identified.

Crossing

Issues

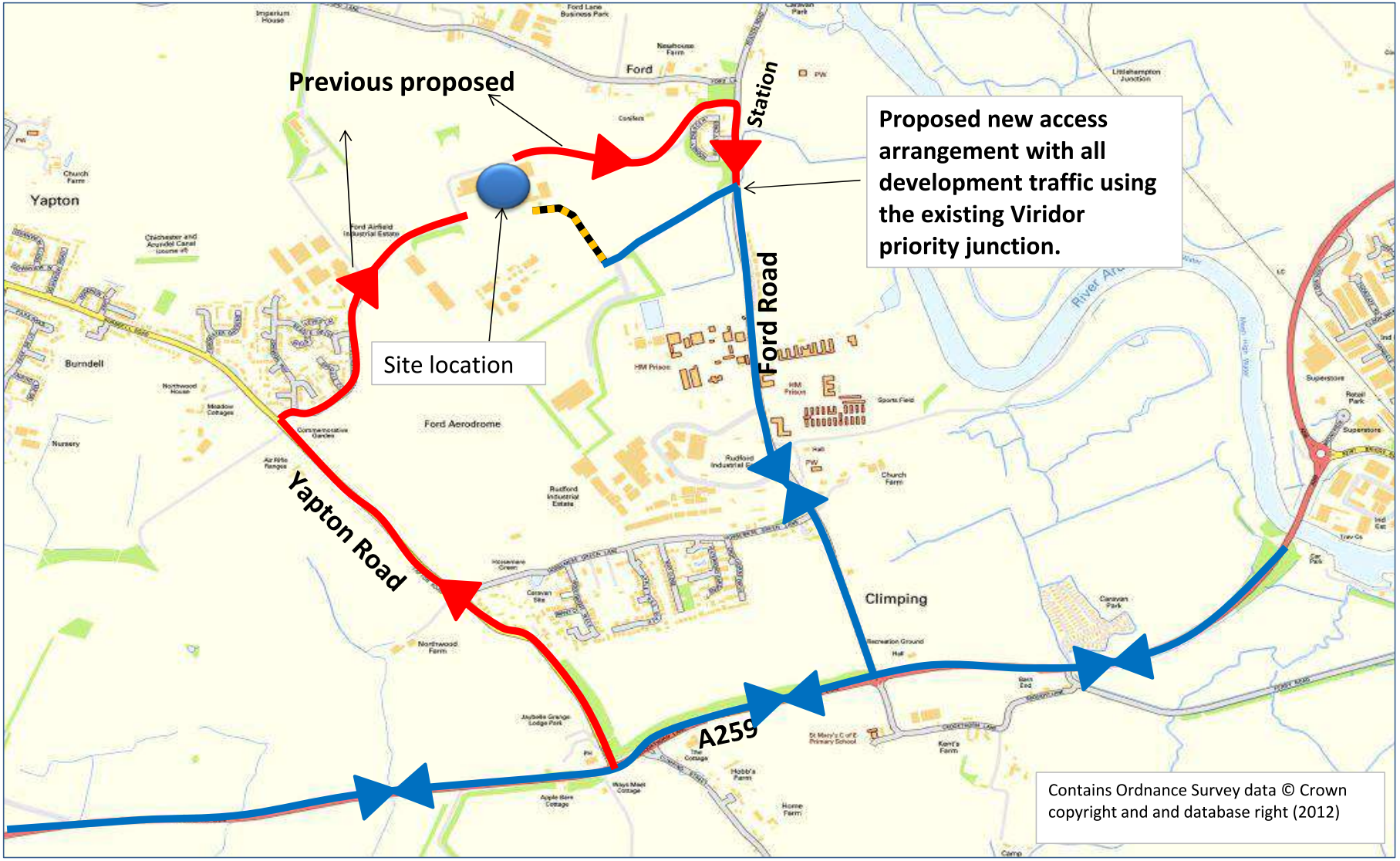
18. The NMU audit has raised no major issues with the layout of the access. The main issue that that is outstanding is the lack of any kind of legibility for sensory impaired people, such as tactile paving. However, given the rural nature of the site and the low level of pedestrians, this is unlikely to be necessary in this location. Furthermore, tactile paving is easily damaged should trucks accidentally override the footway, which would become a maintenance issue.

Actions

19. No actions.

Appendix A

Figures



Title:	Alternative Access Arrangements for CTP, Ford Airfield		
Project Title:	Southern Link Road - CTP, Ford Airfield		
Job Number:	TE1093		
Client:	Grundon Waste Management Ltd		
Status	Planning	Figure No:	**Figure 1**
Scale:	NTS		

Appendix B

Audit Form

Crossing Assessment Form

Location:	Ford Road	Crossing ref:	1
Crossing Name:	Hunterford - access to industrial park	Date:	15/09/2017
Auditor:	RS	Time:	PM

Parameter	Checklist Factors	Checklist +ve	Checklist +/-	Checklist -ve	Overall Score -3 to +3		Comments
Crossing provision	Type suitable context		x		1	+	Standard crossing appropriate to location
	Suitable for pedestrian type	x					
	Suitable for pedestrian volume	x					
	Suitable for type of road		x			-	
	Traffic speeds		x				
	Traffic volumes		x				
Deviation from the desire line	Deviations	x			2	+	Direct crossing located on desire line
	Serve likely desire lines	x					
	At grade/by level change	x					
	Pedestrian priority		x			-	
	Distance minimisation		x				
	Barriers causing deviation		x				
Performance	Crossing operational		x		1	+	
	Safety/protection of peds		x				
	Vehicle behaviour		x				
	Traffic control measures		x			-	
	Space ownership		x				
	Obstructions to sight lines		x				
Crossing capacity	Min dimensions standards met		x		1	+	Low demand by pedestrians
	Peak hour performance		x				
	Pedestrian flows coped with	x					
	Waiting areas/widths		x			-	
	Refuge capacity		n				
	Width for wheelchair users		x				
Delay	Crossing stages		n		0	+	
	Effect of crossing type		x				
	Traffic flow		x				
	Pedestrian phase		n			-	
	Waiting time		n				
	Crossing time		n				
Legibility	Surface type continuity		x		0	+	Clear point to cross
	Obvious where to cross	x					
	Driver stop line in place		n				
	Delineation for pedestrians		x			-	Un-lit but rural location
	Positioning of infrastruture		x				
	Lighting			x			
NOT USED						+	
						-	

OTHER NOTES Note:

Parameter	Checklist Factors	Checklist +ve	+/-	-ve	Overall Score -3 to +3		Comments
Legibility for sensory impaired people	Button position		n		-1	+	
	Audible information		n				
	Rotating cones		n				
	Tactile info provided/intact			x		-	little provision
	Appropriate tactile information			x			
	Colour contrast			x			
Dropped kerbs	Suitable locations	x			2	+	Droppers on either side of access road
	Capacity		x				
	Level dropped/flush	x					
	Gradient of drop		x			-	
	Provision	x					
	Profile		x				
Gradient	Crossing at grade	x			1	+	Flat crossing but slight camber towards main road
	Crossfall evident		x				
	Impedance to access		x				
	Camber		x			-	
	Severity of gradient on approach	x					
	Severity of gradient on exit	x					
Obstruction	Obstructions on approach	x			2	+	
	Obstructions on crossing	x					
	Location/alignment		x				
	Overhead obstructions		n				
	Opaque/tapering obstruction		x				
	Tactile warnings			x			
	Sight line reduction	x				-	
	Permanent obstructions	x					
Surface quality	Smoothness/trip hazards		x		1	+	
	Context suitability		x				
	Consistency		x				
	Quality of reinstatements		x			-	
	Drainage		x				
	Slippery surfaces		x				
Maintenance	Cleanliness	x			1	+	Generally in good condition
	State of repair		x				
	Littering		x				
	Evidence of neglect		x			-	
	Impact on seasonal foliage	x					
	Graffiti/stickers/chewing gum	x					
	Evidence of debris		x				
NOT USE							
						-	

LINKAGES TO OTHER REVIEW FORMS

NAME:	Ford Road	REF:	Crossing of Hunterford ind. Access
NAME:		REF:	
NAME:		REF:	
NAME:		REF:	
NAME:		REF:	
NAME:		REF:	

OTHER NOTES

Callidus

TRANSPORT

HIGHWAYS

DRAINAGE

FLOOD RISK

PLANNING SUPPORT SERVICES

Callidus Transport & Engineering Ltd
3 Chapel Row, Bath BA1 1HN
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APPENDIX 4
ACCIDENT DATA

Ford Road – Climping – Ramboll Ltd

Collision report 01/01/2016 – 31/12/2020

Date produced
26 January 2021

This report is marked as **Official – Sensitive**

- The information included in this report is provided for analysis purposes and is for the exclusive use of the applicant, the information must only be used for the purposes for which it has been obtained.
- The data has been provided by Sussex Police and should not be transmitted to any other person without their consent, including reports for the general public.
- Be aware that any improper disclosure, copying, distribution or use of the contents of this information is prohibited and criminal proceedings may follow.

Sussex Safer Roads
PARTNERSHIP

Safer Roads
Safer Communities
Sharing the Responsibility

Produced by Sussex Safer Roads Partnership on behalf of Sussex Police

Data regarding personal injury collisions is recorded by Sussex Police in accordance with the DfT Stats 19 requirements. The data is subsequently used by Sussex Safer Roads Partnership for monitoring and planning. While every effort is made to ensure that this data is accurate, it is subject to change should further information become available.

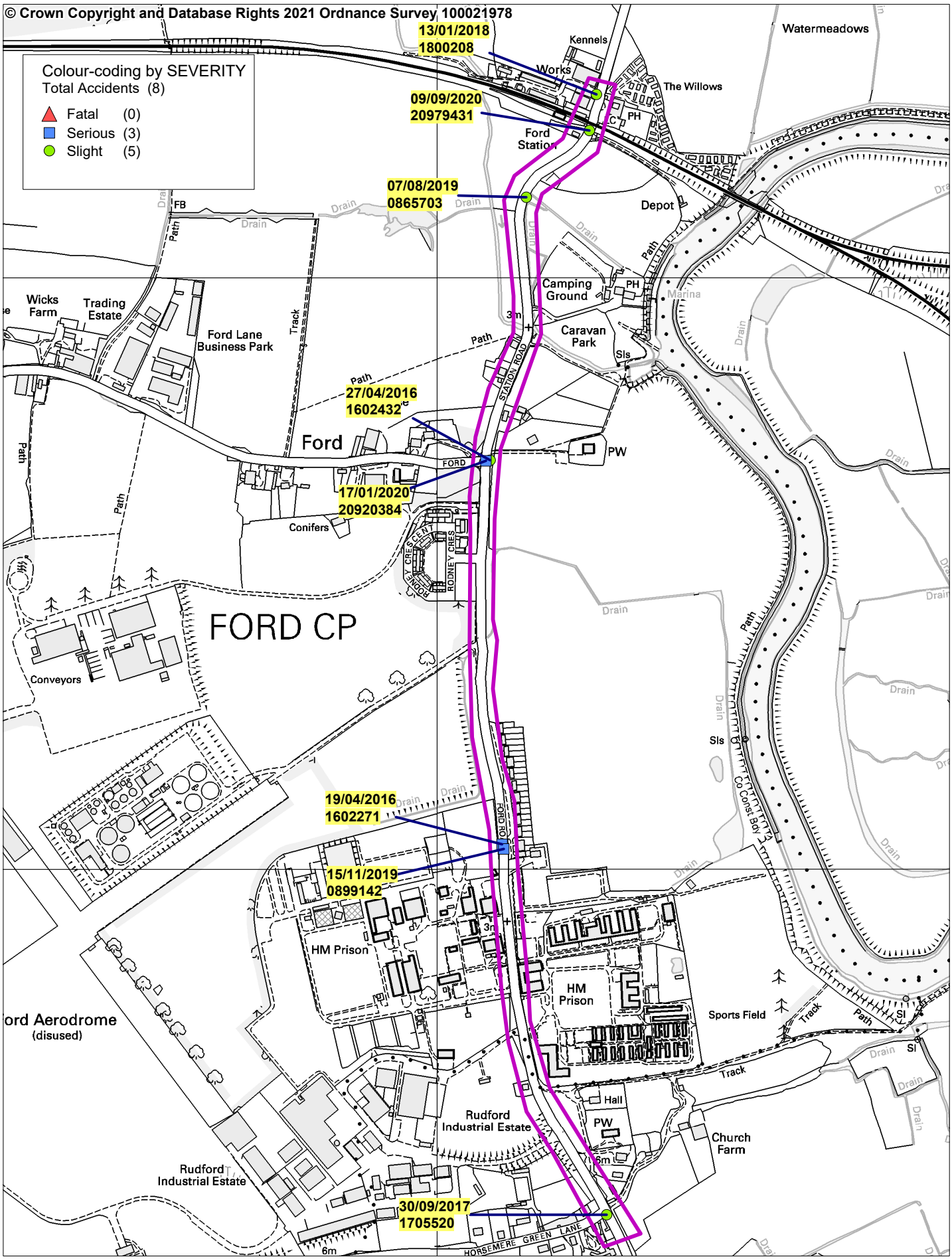
This data may not be fully validated and while every effort is made to ensure its accuracy any statistics provided may not match those published elsewhere.

Sussex Safer Roads Partnership does not hold collision data either where there are no recorded casualties or the incident has not been reported to Sussex Police.

For further information:

web: www.sussexsaferroads.gov.uk

email: data@sussexsaferroads.gov.uk



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Sussex Safer Roads PARTNERSHIP

Ford Road, Climping
Collision Dates 01/01/2016 - 31/12/2020
Ramboll Ltd

SCALE	1 : 8500
DATE	26/01/2021
DRAWING No.	
DRAWN BY	

Details of Personal Injury Accidents for Period - **01/01/2016** **to** **31/12/2020** (60) months

Selection:
Selected using Manual Selection

Notes:

			Vehicles					Casualties		
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class					Sex / Age / Sev		
	Date									
Road No.	Time									
2nd Road No.										
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1602271 Tuesday 19/04/2016 0732hrs — U FORD ROAD FORD AT JUNCTION OF U NELSON ROW OUTSIDE AT JUNCTION

Veh 1	Taxi	Going ahead	S	to	N				
Veh 2	Car	Wait to turn right	S	to	N	Dri	M	38	Serious

R1: U
R2: U
Daylight:street lights present
E 500,109
Dry
N 103,042
Fine without high winds
40 mph

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 1	Very Likely

VEHICLE 2 TRAVELLING NORTH ON FORD ROAD, SLOWED WITH INTENTION TO TURN INTO NELSON ROW WHEN VEHICLE 1 FOLLOWING BEHIND FAILED TO NOTICE V2 SLOWING AND DROVE INTO REAR OF V2 CAUSING MINOR NECK PAIN INJURY TO DRIVER OF V2.

1602432 Wednesday 27/04/2016 0820hrs — C17 STATION ROAD ARUNDEL AT JUNCTION OF U FORD LANE

Veh 1	Car	Turning right	W	to	S	Dri	M	74	Slight
Veh 2	Goods < 3.5t	Going ahead	S	to	N				

R1: C 17
R2: U
Daylight:street lights present
E 500,089
Wet/Damp
N 103,692
Fine without high winds
30 mph

Causation Factor:		**Participant:**	**Confidence:**
1st:	Careless/Reckless/In a hurry	Vehicle 1	Possible

V1 TURNING RIGHT/SOUTH, FROM FORD LANE JUNC INTO STATION ROAD FORD ARUNDEL. V1 COLLIDED WITH V2 WHICH WAS TRAVELLING NORTH BOUND ON STATION ROAD.

1705520 Saturday 30/09/2017 1143hrs — U CHURCH LANE CLIMPING AT JUNCTION OF U HORSEMERE GREEN LANE

Veh 1	Car	Starting	W	to	S	Dri	M	90	Slight
Veh 2	Car	Going ahead	S	to	N	Dri	F	31	Slight

R1: U
R2: U
Daylight:street lights present
E 500,286
Dry
N 102,415
Fine without high winds
40 mph

Causation Factor:		**Participant:**	**Confidence:**
1st:	Disobeyed Give Way or Stop sign or markings	Vehicle 1	Very Likely
2nd:	Failed to look properly	Vehicle 1	Very Likely

V1 AT T JUNCTION FACING EAST FAILS TO GIVE WAY AT JUNCTION AND PULLS DIRECTLY INTO THE PATH OF V2 TRAVELLING NORTH CAUSING COLLISION RESULTING IN DAMAGE AND INJURY TO BOTH PARTIES

Details of Personal Injury Accidents for Period - **01/01/2016** **to** **31/12/2020** (60) months

Selection:
Selected using Manual Selection

Notes:

			Vehicles					Casualties		
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class					Sex / Age / Sev		
	Date									
Road No.	Time									
2nd Road No.										
Grid Ref.	D/L									
	R.S.C									
	Weather									
	Speed									
	Account of Accident									
Causation Factor:										

1800208 Saturday 13/01/2018 2027hrs — U FORD ROAD FORD AT JUNCTION OF U GAUGEMASTER WAY OUTSIDE JUNCTION RTC

Veh 1	Car	Turning right	W to S	Dri	F	25	Slight		
Veh 1	Car	Turning right	W to S	RSP	F	0	Slight		
Veh 1	Car	Turning right	W to S	RSP	M	29	Slight		
Veh 2	Car	Going ahead	N to S						

R1: U
R2: U
Darkness: street lights present a
E 500,269
Dry
N 104,311
Fine without high winds
40 mph

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 1	Possible
2nd:	Failed to judge other persons path or speed	Vehicle 1	Possible

V2 S/B TOWARDS JUNCTION O/S V1 ENTERS MAIN ROAD FROM JUNCTION INTO PATH OF V2.

0865703 Wednesday 07/08/2019 0338hrs — FORD ROAD - 150 METRES FROM JUNCTION WITH UNCLASSIFIED ROAD

Veh 1	Car	Going ahead RH bend	S to NE						
Veh 2	Car	Going ahead LH bend	NE to S	Dri	M	56	Slight		

R1: U
Daylight:street lights present
E 500,150
Dry
N 104,137
Fine without high winds
60 mph

Causation Factor:		**Participant:**	**Confidence:**
1st:	Inexperience of driving on the left	Vehicle 1	Very Likely
2nd:	Illegal turn or direction of travel	Vehicle 1	Very Likely

V1 AND V2 TRAVELLING IN OPPOSITE DIRECTIONS ON FORD ROAD. V1 WAS DRIVING ON THE WRONG SIDE OF THE RIDE AND HIT V2 HEAD ON. V1 IS FROM SWITZERLAND AND WAS HEADING HOME HAVING ONLY JUST LEFT A CAMPSITE. V1 WAS DRIVING ON THE RIGHT AS FORGOT DUE TO NO O
THER TRAFFIC AROUND.

0899142 Friday 15/11/2019 1852hrs — FORD ROAD NEAR JUNCTION WITH NELSON ROW

Veh 1	Car	Turning right	N to W						
Veh 2	Car	Going ahead	N to S	Dri	F	48	Serious		
Veh 3	Car	Going ahead	N to S						
Veh 4	Goods < 3.5t	Turning left	N to E						

R1: U
R2: U
Darkness: no street lighting
E 500,112
Wet/Damp
N 103,034
Raining without high winds
40 mph

Causation Factor:		**Participant:**	**Confidence:**
1st:	Careless/Reckless/In a hurry	Vehicle 2	Possible
2nd:	Following too close	Vehicle 3	Possible
3rd:	Slippery road (due to weather)	Vehicle 2	Possible
4th:	Slippery road (due to weather)	Vehicle 3	Possible
5th:	Careless/Reckless/In a hurry	Vehicle 1	Very Likely

V1 BROKE SUDDENLY IN FRONT CAUSING V2 TO GO INTO THE BACK OF IT AND V3 WENT INTO THE BACK OF V2

Details of Personal Injury Accidents for Period - **01/01/2016** **to** **31/12/2020** (60) months

Selection:
Selected using Manual Selection

Notes:

			Vehicles						Casualties			
Police Ref.	Day	Location Description	Veh No / Type / Manv / Dir / Class						Sex / Age / Sev			
	Date											
Road No.	Time											
2nd Road No.												
Grid Ref.	D/L											
	R.S.C											
	Weather											
	Speed											
	Account of Accident											
Causation Factor:												

20920384	Friday	STATION ROAD AT JUNCTION WITH FORD LANE	Veh 1	Car	Turning right	W	to	S				
	17/01/2020		Veh 2	Car	Going ahead	S	to	N	FSP	F	74	Serious
R1: U	1215hrs		Veh 3	Car	Wait to turn right	N	to	W				
R2: U	Daylight:street lights present											
E 500,082	Dry											
N 103,691	Fine without high winds											
	40 mph											

Causation Factor:		**Participant:**	**Confidence:**
1st:	Failed to look properly	Vehicle 1	Very Likely

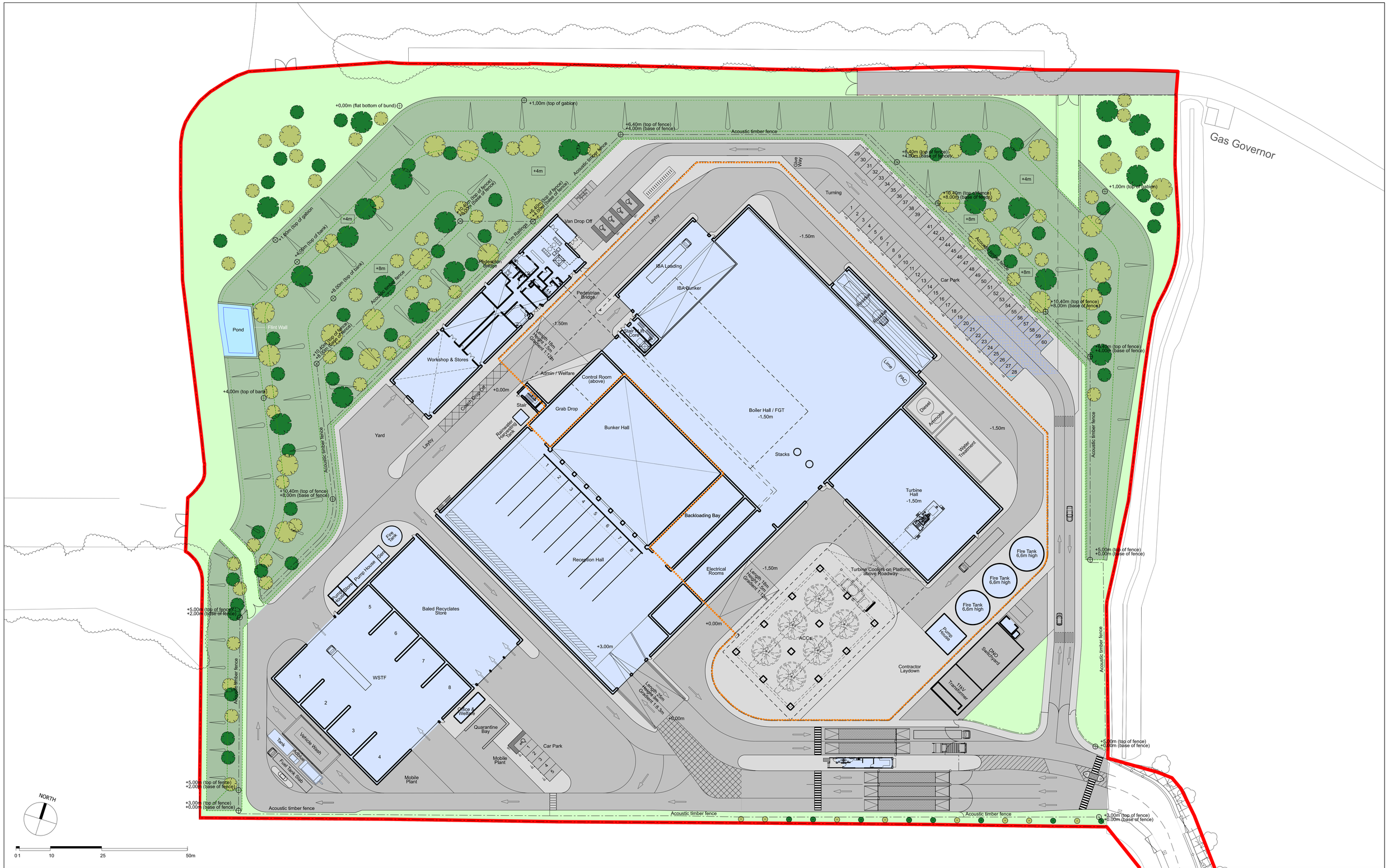
V1 WAITING TO EXIT THE JUNCTION OF FORD LANE. V3 HELD IN STATION ROAD WAITING TO TURN RIGHT IN TO FORD LANE. THEY HELD BACK FROM THE JUNCTION TO ALLOW V1 TO EXIT. V1 PULLS OUT OF THE JUNCTION ON TO STATION ROAD WITHOUT LOOKING AND HITS V2 TRAVELLIN
G NORTH ON STATION ROAD. THIS CAUSES V2 TO COLLIDE IN TO V3. V1 MINOR DAMAGE, V2 AND V3 BOTH HAVE EXTENSIVE DAMAGE AND WILL BE WRITTEN OFF.

20979431	Wednesday	FORD ROAD NEAR JUNCTION WITH UNCLASSIFIED ROAD	Veh 1	Car	Stopping	SW	to	NE	Dri	F	54	Slight
	09/09/2020		Veh 2	Car	Going ahead	SW	to	NE				
R1: U	1230hrs											
R2: U	Daylight:street lights present											
E 500,257	Dry											
N 104,250	Fine without high winds											
	40 mph											

Causation Factor:		**Participant:**	**Confidence:**
1st:	Distraction outside vehicle	Vehicle 2	Very Likely
2nd:	Sudden braking	Vehicle 1	Possible
3rd:	Failed to judge other persons path or speed	Vehicle 2	Very Likely
4th:	Failed to look properly	Vehicle 2	Very Likely

V1 TRAVELLING NORTH ALONG STATION ROAD, FORD, ARUNDEL. V1 HAS STOPPED PRIOR TO LEVEL CROSSING OUTSIDE FORD RAILWAY STATION DUE TO AMBER SIGNAL ON LEVEL CROSSING. V2 ALSO TRAVELLING NORTH ALONG STATION ROAD HAS THEN DRIVEN IN TO THE BACK OF V1 WHICH W
AS STATIONARY. C1 COMPLAINED OF NECK AND BACK PAIN AND TAKEN VIA AMBULANCE TO ST RICHARDS HOSPITAL, CHICHESTER.

APPENDIX 5
SITE LAYOUT PLAN



NOTE

1. THIS DRAWING IS COPYRIGHT GSDA LTD.
2. THE CONTRACTOR MUST NOT SCALE FROM THE DRAWING ALL DIMENSIONS TO BE TAKEN FROM DIMENSION STRINGS.
3. WHERE ANY DISCREPANCIES ARE FOUND BETWEEN DIMENSIONS THESE MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS FOR RESOLUTION.
4. WHERE DISCREPANCIES EXIST BETWEEN REFERENCE OR ASSEMBLY DRAWINGS & DETAIL DRAWINGS, THE LATTER TAKE PREFERENCE.

Key

- Planning Application Boundary
- -1.5m Lowered Area
- Extent of bunding
- Fencing Line
- Pastel Blue Block Paving Symbolising Path of Old Canal
- Indicative Landscaping

PROJECT	FORD CIRCULAR TECHNOLOGY PARK				
DRAWING	Proposed Site Layout				
FOR PLANNING		-	21/03/16	Issued for planning	
1:500@A1 SCALE	21/03/16 DATE				
1404 PL106 DWG. NO.	- REVISION				

GSDA
GARRY STEWART DESIGN ASSOCIATES
Highlands House, Office 300A, 165 The Broadway, Wimbledon, London, SW19 1NE
T. 020 8544 8085

APPENDIX 6
CONSTRUCTION PHASE DAILY TRIP GENERATION

FORD ERF & WSTF
Construction Phase Average Daily Vehicles Profile
v1 - 18.02.21
Made: JW / Check: IS / Approve: TOH

Source: estimates made by Ford ERF & WSTF plant designers (Fichtner).

	2022						2023												2024												2025												2026								
Indicative date	**Jul-22**	**Aug-22**	**Sep-22**	**Oct-22**	**Nov-22**	**Dec-22**	**Jan-23**	**Feb-23**	**Mar-23**	**Apr-23**	**May-23**	**Jun-23**	**Jul-23**	**Aug-23**	**Sep-23**	**Oct-23**	**Nov-23**	**Dec-23**	**Jan-24**	**Feb-24**	**Mar-24**	**Apr-24**	**May-24**	**Jun-24**	**Jul-24**	**Aug-24**	**Sep-24**	**Oct-24**	**Nov-24**	**Dec-24**	**Jan-25**	**Feb-25**	**Mar-25**	**Apr-25**	**May-25**	**Jun-25**	**Jul-25**	**Aug-25**	**Sep-25**	**Oct-25**	**Nov-25**	**Dec-25**	**Jan-26**	**Feb-26**	**Mar-26**	**Apr-26**	**May-26**	**Jun-26**	**Jul-26**	**Aug-26**	**Sep-26**
Construction Programme Month	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**	**31**	**32**	**33**	**34**	**35**	**36**	**37**	**38**	**39**	**40**	**41**	**42**	**43**	**44**	**45**	**46**	**47**	**48**	**49**	**50**	**51**
Construction of the WS&TF																																																			
Passenger vehicles	11	16	24	24	17	17	14																																											
Material removals (HGV - 20T)	8	8	0	0	0	0	0																																											
Concrete delivery (HGV - 8m3)	0	4	4	4	0	0	0																																											
Engineering fill delivery (HGV - 20T)	0	3	3	3	0	0	0																																											
Demolition of existing buildings																																																		
Passenger vehicles						8	8	8	8																																										
Material removals (HGV - 20T)						2	2	2	2																																										
Construction of the ERF																																																		
Passenger vehicles										10	14	17	20	30	40	102	117	130	141	151	160	170	179	189	200	212	225	239	254	270	285	300	312	322	328	331	328	320	297	274	245	222	206	188	182								
Concrete delivery (HGV - 8m3)										0	0	0	0	0	0	9	13	13	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
Engineering fill delivery (HGV - 20T)										0	0	0	0	0	0	2	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0								
Equipment delivery (HGV)										0	0	0	0	0	2	2	2	2	2	3	3	4	4	4	4	4	4	4	3	3	2	2	2	2	2	2	2	0	0	0	0	0	0	0							
Landscaping										*Excavation of -1.5m level*																																			*Landscaping bunds*												
Passenger vehicles										9	9	9	9	9	9																										5	5	5	5	5	5	7	7	7	7	7	7
Material removals (HGV - 20T)										23	23	23	23	23	23																																					
Landscape fill delivery (HGV - 20T)																																									10	10	10	10	10	10	10	10	10	10	10	10
Operation of the existing WTS																																																		
Passenger vehicles	25	25	25	25	25	25	25																																											
WTS deliveries (HGV - 6T)	23	23	23	23	23	23	23																																											
WTS collections (HGV - 24.5T)	5	5	5	5	5	5	5																																											
Operation of the new WSTF																																																	
Passenger vehicles								4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
WTS deliveries (HGV - 6T)								11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
WTS collections (HGV - 24.5T)								2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Operation of the ERF																																								*Commissioning operations*						Full operations						
Passenger vehicles																																													44	44	44	44	44	44
Bulkers (HGV - 24.5T)																																								*14*	*20*	*27*	*27*	*28*	*28*	28	28	28	28	28	28
RCVs (HGV - 6.5T)																																								*28*	*40*	*53*	*53*	*56*	*56*	56	56	56	56	56	56
Consumables delivery (HGV - 10-32T)																																								*1*	*1*	*2*	*2*	*2*	*2*	2	2	2	2	2	2
Ash/residues collection (HGV - 14-29T)																																								*5*	*7*	*10*	*10*	*10*	*10*	10	10	10	10	10	10
TOTALS																																																		
Passenger vehicles	36	41	49	49	42	50	47	12	12	23	27	30	33	43	53	106	121	134	145	155	164	174	183	193	204	216	229	243	258	274	289	304	316	326	332	335	332	324	301	283	254	231	215	197	191	55	55	55	55	55	55
Material removals (HGV - 20T)	8	8	0	0	0	2	2	2	2	23	23	23	23	23	23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Concrete delivery (HGV - 8m3)	0	4	4	4	0	0	0	0	0	0	0	0	0	0	0	9	13	13	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Engineering fill delivery (HGV - 20T)	0	3	3	3	0	0	0	0	0	0	0	0	0	0	0	2	3	3	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Landscape fill delivery (HGV - 20T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10	10	10	10	10	10	10	10	10	10	10	10
Equipment delivery (HGV)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	2	2	2	2	3	3	4	4	4	4	4	4	4	3	3	2	2	2	2	2	2	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0
WTS deliveries (HGV - 6T)	23	23	23	23	23	23	23	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
WTS collections (HGV - 24.5T)	5	5	5	5	5	5	5	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
Bulkers (HGV - 24.5T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	20	27	27	28	28	28	28	28	28	28	28
RCVs (HGV - 6.5T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	28	40	53	53	56	56	56	56	56	56	56	56
Consumables delivery (HGV - 10-32T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	2	2	2	2	2	2	2	2	2	2
Ash/residues collection (HGV - 14-29T)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	7	10	10	10	10	10	10	10	10	10	10
OVERALL TOTAL	**72**	**84**	**84**	**84**	**70**	**80**	**77**	**27**	**27**	**59**	**63**	**66**	**69**	**79**	**91**	**132**	**152**	**165**	**171**	**171**	**180**	**191**	**200**	**210**	**221**	**233**	**246**	**260**	**274**	**290**	**304**	**319**	**331**	**341**	**347**	**350**	**347**	**339**	**314**	**354**	**345**	**346**	**330**	**316**	**310**	**174**	**174**	**174**	**174**	**174**	**174**
Of Which Passenger Vehicles	*36*	*41*	*49*	*49*	*42*	*50*	*47*	*12*	*12*	*23*	*27*	*30*	*33*	*43*	*53*	*106*	*121*	*134*	*145*	*155*	*164*	*174*	*183*	*193*	*204*	*216*	*229*	*243*	*258*	*274*	*289*	*304*	*316*	*326*	*332*	*335*	*332*	*324*	*301*	*283*	*254*	*231*	*215*	*197*	*191*	*55*	*55*	*55*	*55*	*55*	*55*
Of Which HGVs	*36*	*43*	*35*	*35*	*28*	*30*	*30*	*15*	*15*	*36*	*36*	*36*	*36*	*36*	*38*	*26*	*31*	*31*	*26*	*16*	*16*	*17*	*17*	*17*	*17*	*17*	*17*	*17*	*16*	*16*	*15*	*15*	*15*	*15*	*15*	*15*	*15*	*15*	*13*	*71*	*91*	*115*	*115*	*119*	*119*	*119*	*119*	*119*	*119*	*119*	*119*

APPENDIX 7
CONSTRUCTION AND OPERATIONAL HOURLY TRIP GENERATION PROFILES

Construction Staff Vehicles Trip Profile

			Daily Vehicles:	227	227
Start	**Finish**	**Arrive %**	**Depart %**	**Arrive**	**Depart**
00:00	01:00				
01:00	02:00				
02:00	03:00				
03:00	04:00				
04:00	05:00				
05:00	06:00				
06:00	07:00	10%	0%	23	0
07:00	08:00	65%	0%	148	0
08:00	09:00	25%	0%	57	0
09:00	10:00	0%	0%	0	0
10:00	11:00	0%	0%	0	0
11:00	12:00	0%	0%	0	0
12:00	13:00	0%	0%	0	0
13:00	14:00	0%	0%	0	0
14:00	15:00	0%	0%	0	0
15:00	16:00	0%	0%	0	0
16:00	17:00	0%	65%	0	148
17:00	18:00	0%	25%	0	57
18:00	19:00	0%	10%	0	23
19:00	20:00			0	0
20:00	21:00				
21:00	22:00				
22:00	23:00				
23:00	00:00				
		100%	**100%**	**228**	**228**

ERF Construction HGV Trip Profile

			Daily HGVs:	102	102
Start	**Finish**	**Arrive %**	**Depart %**	**Arrive**	**Depart**
00:00	01:00				
01:00	02:00				
02:00	03:00				
03:00	04:00				
04:00	05:00				
05:00	06:00				
06:00	07:00	0%	0%	0	0
07:00	08:00	10%	5%	10	5
08:00	09:00	10%	10%	10	10
09:00	10:00	15%	10%	15	10
10:00	11:00	15%	10%	15	10
11:00	12:00	15%	10%	15	10
12:00	13:00	10%	15%	10	15
13:00	14:00	10%	15%	10	15
14:00	15:00	10%	15%	10	15
15:00	16:00	5%	10%	5	10
16:00	17:00	0%	0%	0	0
17:00	18:00	0%	0%	0	0
18:00	19:00	0%	0%	0	0
19:00	20:00			0	0
20:00	21:00				
21:00	22:00				
22:00	23:00				
23:00	00:00				
		100%	**100%**	**100**	**100**

WSTF Operational HGV Trip Profile

			Average Day HGVs:	13	13
Start	**Finish**	**Arrive %**	**Depart %**	**Arrive**	**Depart**
00:00	01:00				
01:00	02:00				
02:00	03:00				
03:00	04:00				
04:00	05:00				
05:00	06:00				
06:00	07:00	1%	0%	0	0
07:00	08:00	4%	3%	1	0
08:00	09:00	7%	6%	1	1
09:00	10:00	7%	7%	1	1
10:00	11:00	8%	8%	1	1
11:00	12:00	12%	12%	2	2
12:00	13:00	19%	18%	2	2
13:00	14:00	16%	16%	2	2
14:00	15:00	15%	15%	2	2
15:00	16:00	10%	11%	1	1
16:00	17:00	2%	3%	0	0
17:00	18:00	0%	0%	0	0
18:00	19:00	0%	0%	0	0
19:00	20:00	0%	0%	0	0
20:00	21:00				
21:00	22:00				
22:00	23:00				
23:00	00:00				
		100%	**100%**	**13**	**12**

WSTF Operational Staff Trip Profile

			Average Day Staff:	4	4
Start	**Finish**	**Arrive %**	**Depart %**	**Arrive**	**Depart**
00:00	01:00				
01:00	02:00				
02:00	03:00				
03:00	04:00				
04:00	05:00				
05:00	06:00				
06:00	07:00	74%	15%	3	0
07:00	08:00	5%	0%	0	0
08:00	09:00	6%	0%	0	0
09:00	10:00	0%	0%	0	0
10:00	11:00	0%	0%	0	0
11:00	12:00	0%	0%	0	0
12:00	13:00	0%	0%	0	0
13:00	14:00	0%	0%	0	0
14:00	15:00	0%	0%	0	0
15:00	16:00	0%	0%	0	0
16:00	17:00	0%	38%	0	2
17:00	18:00	15%	18%	1	1
18:00	19:00	0%	30%	0	1
19:00	20:00	0%	0%	0	0
20:00	21:00			0	
21:00	22:00			0	
22:00	23:00				
23:00	00:00				
		100%	**100%**	**4**	**4**

Total Construction Trip Profile

Start	**Finish**	**Arrive %**	**Depart %**	**Arrive**	**Depart**
00:00	01:00	0%	0%	0	0
01:00	02:00	0%	0%	0	0
02:00	03:00	0%	0%	0	0
03:00	04:00	0%	0%	0	0
04:00	05:00	0%	0%	0	0
05:00	06:00	0%	0%	0	0
06:00	07:00	8%	0%	26	0
07:00	08:00	46%	1%	159	5
08:00	09:00	20%	3%	68	11
09:00	10:00	5%	3%	16	11
10:00	11:00	5%	3%	16	11
11:00	12:00	5%	3%	17	12
12:00	13:00	3%	5%	12	17
13:00	14:00	3%	5%	12	17
14:00	15:00	3%	5%	12	17
15:00	16:00	2%	3%	6	11
16:00	17:00	0%	44%	0	150
17:00	18:00	0%	17%	1	58
18:00	19:00	0%	7%	0	24
19:00	20:00	0%	0%	0	0
20:00	21:00	0%	0%	0	0
21:00	22:00	0%	0%	0	0
22:00	23:00	0%	0%	0	0
23:00	00:00	0%	0%	0	0
		100%	**100%**	**345**	**344**

ERF Operational Staff Vehicles Trip Profile

Start	**Finish**	**Staff In**	**Staff Out**	**Staff on site**
00:00	01:00	0	0	5
01:00	02:00	0	0	5
02:00	03:00	0	0	5
03:00	04:00	0	0	5
04:00	05:00	0	0	5
05:00	06:00	13	0	18
06:00	07:00	13	5	26
07:00	08:00	0	0	26
08:00	09:00	0	0	26
09:00	10:00	0	0	26
10:00	11:00	0	0	26
11:00	12:00	8	0	34
12:00	13:00	0	0	34
13:00	14:00	5	0	39
14:00	15:00	0	13	26
15:00	16:00	0	0	26
16:00	17:00	0	13	13
17:00	18:00	0	0	13
18:00	19:00	0	0	13
19:00	20:00	0	8	5
20:00	21:00	0	0	5
21:00	22:00	5	0	10
22:00	23:00	0	5	5
23:00	00:00	0	0	5
		44	**44**	

WSTF Operational Staff Vehicles Trip Profile

			Average Day Staff:	4	4
Start	**Finish**	**Arrive %**	**Depart %**	**Arrive**	**Depart**
00:00	01:00				
01:00	02:00				
02:00	03:00				
03:00	04:00				
04:00	05:00				
05:00	06:00				
06:00	07:00	74%	15%	3	1
07:00	08:00	5%	0%	0	0
08:00	09:00	6%	0%	0	0
09:00	10:00	0%	0%	0	0
10:00	11:00	0%	0%	0	0
11:00	12:00	0%	0%	0	0
12:00	13:00	0%	0%	0	0
13:00	14:00	0%	0%	0	0
14:00	15:00	0%	0%	0	0
15:00	16:00	0%	0%	0	0
16:00	17:00	0%	38%	0	2
17:00	18:00	15%	18%	1	1
18:00	19:00	0%	30%	0	1
19:00	20:00	0%	0%	0	0
20:00	21:00				
21:00	22:00				
22:00	23:00				
23:00	00:00				
		100%	**100%**	**4**	**5**

ERF Operational HGV Trip Profile

			Average Day HGVs:	96	96
Start	**Finish**	**Arrive %**	**Depart %**	**Arrive**	**Depart**
00:00	01:00				
01:00	02:00				
02:00	03:00				
03:00	04:00				
04:00	05:00				
05:00	06:00				
06:00	07:00	7%	9%	7	9
07:00	08:00	9%	5%	9	5
08:00	09:00	9%	10%	9	10
09:00	10:00	8%	11%	8	11
10:00	11:00	17%	15%	16	14
11:00	12:00	13%	9%	12	9
12:00	13:00	10%	16%	10	15
13:00	14:00	6%	6%	6	6
14:00	15:00	9%	5%	9	5
15:00	16:00	2%	6%	2	6
16:00	17:00	1%	1%	1	1
17:00	18:00	2%	1%	2	1
18:00	19:00	3%	5%	3	5
19:00	20:00	2%	1%	2	1
20:00	21:00				
21:00	22:00				
22:00	23:00				
23:00	00:00				
		100%	**100%**	**96**	**98**

WSTF Operational HGV Trip Profile

			Average Day HGVs:	13	13
Start	**Finish**	**Arrive %**	**Depart %**	**Arrive**	**Depart**
00:00	01:00				
01:00	02:00				
02:00	03:00				
03:00	04:00				
04:00	05:00				
05:00	06:00				
06:00	07:00	1%	0%	0	0
07:00	08:00	4%	3%	1	0
08:00	09:00	7%	6%	1	1
09:00	10:00	7%	7%	1	1
10:00	11:00	8%	8%	1	1
11:00	12:00	12%	12%	2	2
12:00	13:00	19%	18%	2	2
13:00	14:00	16%	16%	2	2
14:00	15:00	15%	15%	2	2
15:00	16:00	10%	11%	1	1
16:00	17:00	2%	3%	0	0
17:00	18:00	0%	0%	0	0
18:00	19:00	0%	0%	0	0
19:00	20:00	0%	0%	0	0
20:00	21:00				
21:00	22:00				
22:00	23:00				
23:00	00:00				
		100%	**100%**	**13**	**12**

Total Operational Trip Profile

Start	**Finish**	**Arrive %**	**Depart %**	**Arrive**	**Depart**
00:00	01:00	0%	0%	0	0
01:00	02:00	0%	0%	0	0
02:00	03:00	0%	0%	0	0
03:00	04:00	0%	0%	0	0
04:00	05:00	0%	0%	0	0
05:00	06:00	8%	0%	13	0
06:00	07:00	15%	9%	23	14
07:00	08:00	6%	3%	10	5
08:00	09:00	6%	7%	10	11
09:00	10:00	6%	8%	9	12
10:00	11:00	11%	9%	17	15
11:00	12:00	14%	7%	22	11
12:00	13:00	8%	11%	12	17
13:00	14:00	8%	5%	13	8
14:00	15:00	7%	13%	11	20
15:00	16:00	2%	5%	3	8
16:00	17:00	1%	10%	1	16
17:00	18:00	2%	1%	3	2
18:00	19:00	2%	4%	3	6
19:00	20:00	1%	6%	2	9
20:00	21:00	0%	0%	0	0
21:00	22:00	3%	0%	5	0
22:00	23:00	0%	3%	0	5
23:00	00:00	0%	0%	0	0
		100%	**100%**	**157**	**159**