Thurrock Flexible Generation Plant

Preliminary Environmental Information Report
Appendix 10.1: Transport Assessment

Date: September 2018

Environmental Impact Assessment

Preliminary Environmental Information Report

Volume 6

Appendix 10.1

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This report is also downloadable from the Thurrock Flexible Generation Plant website at:
http://www.thurrockpower.co.uk

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Summary

This PEIR document considers the traffic and transport impact of the proposed Thurrock Flexible Generation Plant development. It is a supporting appendix to Chapter 10: Traffic and Transport.

Qualifications

This document has been prepared by Joanna Gunn, a Consultant Transport Planner who has three years' experience of environmental impact assessment.

It has been checked by David Archibald, Director, a Member of the Chartered Institution of Highways and Transportation with 18 years' experience of environmental impact assessment.

1. Introduction

1.1.1 This Transport Assessment (TA) assesses the transport impact of the construction phase of the Thurrock Flexible Generation Plant. The report has been prepared as an appendix to the Traffic and Transport Chapter of the Preliminary Environmental Information Report (PEIR).

1.1.2 Full details of the proposed development are set out in Volume 2, Chapter 2: Project Description of the PEIR and this TA should be read in conjunction with that.

1.1.3 The site is located immediately to the north of the existing Tilbury Substation within Thurrock, Essex, as shown on Figure 9.1.

1.1.4 The intention is to develop a temporary access road (option A) but if there is any insurmountable issue with that option then a fall back option (option B) will be progressed. Option A is the A13, the A1089, Marshfoot Road, St Chads Road, the haul road and Gun Hill to Station Road. Option B is to come from the A13 Orsett Cock roundabout, Brentwood Road, High House Lane, Muckingford Road, Turnpike Lane and Gun Hill to Station Road. These access routes to the site from Junction 30 of the M25 are shown on Figure 9.2 and the highway links on Figure 9.1 form the study area of this TA.

1.1.5 The TA has been prepared in accordance with the National Policy Statements for Energy Infrastructure (NPSs), published by the Department of Energy and Climate Change in 2011, the Ministry of Housing, Communities and Local Government publications 'National Planning Policy Framework', 2018, 'Planning Practice Guidance: Travel Plans, Transport Assessments and Statements in Decision-Taking', 2014, and the Department for Transport (DfT) publication Circular 02/2013: 'The Strategic Road Network and the Delivery of Sustainable Development', 2013.

1.1.6 Section 2 of the TA sets out the existing situation and assesses the local and strategic highway network, road safety, facilities for pedestrians and cyclists, public transport facilities and existing traffic flows. Section 2 provides details of the proposed development, whilst an assessment is made against current local and national policies in respect to transport in Section 4.

1.1.7 Future year traffic flows are set out in Section 5 and details of the likely trip generation, distribution, assignment and modal share of trips is set out in Section 6. An assessment of the likely transport impact is set out in Section 7.

1.1.8 A summary is provided in Section 8 along with a conclusion that there are no transport or highways related reasons for not granting consent to the proposed development.

2. Existing Situation

2.1 Site Location

2.1.1 The site is located immediately to the north of the existing Tilbury Substation and the site of the decommissioned Tilbury Coal fired power station, with the River Thames further to the south. The eastern edge of Tilbury is approximately 800 m north west of the main development site, the village of West Tilbury is approximately 1.25 km to the north and East Tilbury village is approximately 2.1 km to the east.

2.1.2 Part of the main development site is known as Walton Common (registered common land number CL228). It forms part of the common known as The Green, Hall Hill, Fort Road, Parsonage, Walton and Tilbury Fort Commons (ID 33611).

2.1.3 The other land within the application boundary generally comprises grass or arable fields separated by drainage channels and some man-made ponds.

2.1.4 Existing access to the site is via a farm track to Station Road, which then connects to West Tilbury via Church Road and East Tilbury via Princess Margaret Road. To the north, the A13 dual carriageway provides a strategic highway route to the M25 and London.

2.2 Highway Network

Local Highway Network

2.2.1 The local transport network providing access to the site is shown on Figure 9.1. The vehicular access to the site is to the north of the main development site onto Station Road.

2.2.2 Station Road is a 4.5 m – 6.2 m wide single carriageway road routing broadly west to east between Church Road and Princess Margaret Road respectively with a national speed limit of 60 mph. It has no footways, no street lighting and no parking restrictions. At the narrow sections of Station Road are a number of passing places.

2.2.3 At its eastern end, Station Road forms the minor arm of a bifurcated simple priority junction with Princess Margaret Road. To the west, Station Road passes over an at-grade level crossing and becomes Church Road at its junction with Low Street Lane.

2.2.4 To the north east of the site access Love Lane forms the minor arm of a simple priority junction with Station Road and routes to Princess Margaret Road with a 7.5 tonne weight restriction. Love Lane is a one-way road in the south west bound direction.

2.2.5 Church Road is a single carriageway road with a national speed limit of 60 mph and is approximately 4.7 m – 6 m wide. It has no footways, no street lighting and no parking restrictions. Church Road continues west from Station Road into West Tilbury. Approximately halfway between Station Road and West Tilbury, Church Road becomes Coopers Shaw Road and continues as the major priority arm to the south west. At this point, Church Road forms the minor arm of a simple priority junction to provide access to West Tilbury with a 7.5 tonne weight restriction along it.

2.2.6 Coopers Shaw Road is a single carriageway road with a national speed limit of 60 mph and an approximate carriageway width of 6 m. There are no footways, no street lighting and no parking restrictions. It continues to the south west to Gun Hill where it becomes Fort Road and continues south west into Tilbury.

2.2.7 Gun Hill forms the minor arm of a bifurcated simple priority junction with Coopers Shaw Road and Fort Road. It is generally 6 m wide and is a single carriageway road with no footways, streetlighting or parking restrictions and it is subject to a national speed limit of 60 mph. There is a 7.5 tonne weight restriction along the entirety of its length.

Route Option A

2.2.8 For route option A, a haul road would be constructed between St Chad's Road and Gun Hill, details of which are set out in Section 3.

2.2.9 St Chad's Road is a 30 mph single carriageway road with an approximate width of 7.3 m and a 7.5 tonne weight restriction. There is also a combined footway/cycleway on its eastern side. It has no parking restrictions and has street lighting on both sides of the carriageway. St Chad's Road connects to The Gateway Academy via a roundabout to the south of Biggin Lane. It then continues south into Tilbury. To the north it forms a roundabout junction with Chadwell Hill, the B149 and Marshfoot Road.

2.2.10 From the roundabout junction with St Chads Road, Marshfoot Road continues west to form a roundabout junction with the northern access to The Gateway Academy with a 30 mph speed limit, street lighting on both sides and a combined footway/cycleway on its northern side. There is a signal-controlled crossing (puffin type) to the west of the roundabout junction with St Chads Road which connects the Gateway Academy.

2.2.11 Marshfoot Road then continues west from The Gateway Academy with a speed limit of 50 mph, street lighting and a combined footway/cycleway along its northern side crossing over the A1089 and forming a five arm roundabout with Old Dock Approach and the northbound A1089 slip roads. Access to and from the southbound carriageway of the A1089 is taken via a priority junction on the eastern side of the A1089.

2.2.12 The A1089 is a dual carriageway road subject to the national speed limit of 70 mph with street lighting, two lanes in both directions and forms merge and diverge lanes with both directions of the A13 at its northern end. There are no at grade junctions or any other merge or diverge lanes on the A1089 between Marshfoot Road and the A13.

Route Option B

2.2.13 To the north of Biggin Hill, Gun Hill becomes Turnpike Lane and forms the minor arm of a simple priority junction with Linford Road and Muckingford Road. Turnpike Lane has an approximate width of 6 m and is a single carriageway road with a 7.5 tonne weight restriction along its length.

2.2.14 Muckingford Road routes west to east between Turnpike Lane and Princes Margaret Road as a single carriageway road generally 6.5 m wide with a national speed limit of 60 mph. Approximately 85 m east of Turnpike Lane, High House Lane forms the minor arm of a simple priority junction with Muckingford Road. It is a private road of varying width, standard and surfacing and forms a simple priority junction with the eastern side of Brentford Road at its northern end. Its northern end, including its junction with Brentwood Road, provides access to the reservoir construction at Mill House Farm and was improved in association with this to accommodate Heavy Goods Vehicle (HGV) movement under planning application reference 11/50397.

2.2.15 Brentwood Road routes north from High House Lane to the A13 Orsett Cock roundabout as a single carriageway road generally 6 m to 6.5 m wide with a 7.5 tonne weight restriction. There are no footways, no street lighting and no parking restrictions and a 50 mph speed restriction is in place along its length. Between Welling Road and the A13 Orsett Cock roundabout, there is a footway on its eastern side and street lighting.

Strategic Highway Network

2.2.16 The A1089 forms part of the Trunk Road network and is described as part of route option A, above.

2.2.17 The A13 to the east of the A1089 is also a dual carriageway road and continues to Stanford Le Hope, Basildon and Southend on Sea. It connects to the grade separated Orsett Cock roundabout and is subject to the national speed limit of 70 mph. The A13 also continues west of the A1089 and connects to the M25 at junction 30 via a grade separated signalised gyratory. It has street lighting along the entirety of its length in the vicinity of the A1089.

2.2.18 The A13 is currently undergoing improvement works to widen it between the Orsett Cock roundabout and the A1014 from two to three lanes in both directions. As part of the work, the Orsett Cock roundabout will be widened, and new traffic lights will be installed. Works are planned to be complete by Autumn 2020.

2.3 Facilities for Pedestrians and Cyclists

Pedestrian Routes

2.3.1 There are a number of public rights of way (PRoWs) within the vicinity of the application site (to the north of the railway and the coastal path on the Thames bank), though none within the main development site. These link the nearby residential areas and provide connections to the River Thames to the south. Full details are set out in Volume 3, Chapter 8: Land Use, Agriculture and Socio-Economics of the PEIR.

2.3.2 In the northern section of Area H, the construction access road joins Footpath 78 for a short length, as it is routed along part of a farm track, to the north-east of Chadwell St. Mary.

2.3.3 There are no footways along Station Road which connect to the site, however there are well lit footways along Princess Margaret Road in Linford, which connects the East Tilbury Rail Station to the bus stops and services within Linford.

Cycle Routes

2.3.4 Cycle linkage in the vicinity of the site is good with Station Road designated as a local cycle link which connects to Linford and East Tilbury in the east and Tilbury via Fort Road in the west. A Thurrock Cycle map is shown at Annex A.

Bus Services

2.3.5 The closest bus stops to the site are just off Princess Margaret Road on Gloucester Avenue, approximately 1 km east of the site, and are served by bus service number 374 which provides a direct link. Tilbury East Station and runs via Chadwell St Mary, East Tilbury and Stanford Le Hope in one direction and from West Horndon to Grays via Bulphan, Stanford Le Hope, East Tilbury and Chadwell St Mary in the other. This service runs 8 times a day Monday to Friday and 4 times a day on Saturdays. There is no Sunday Service.

2.3.6 A bus service map for the routes in the Thurrock area are shown at Annex B.

Train Services

2.3.7 East Tilbury Train Station is located approximately 1.5 km to the north east of the site. The station is served by the C2C service which provides frequent linkage to destinations including Shoeburyness, Southend Central, Upminster, Barking and London Fenchurch Street.

2.4 Observed Traffic Flows

2.4.1 In order to determine the existing traffic flows on the adjacent local highway network, 24-hour AADT traffic data has been attained from Highways England, DfT and recent planning applications in the vicinity of the site.

2.4.2 The source and details of the traffic data for each link on the local highway network are shown in Table 2.1.

Table 2.1: Source of Observed Traffic Flows.

Road Link ID	Road Link / Description	Data Available	Year	Data Source
1	A13 between M25 junction 30 and A126	24-hour data	2014	Highways England, Webtris And Department for Transport, Traffic Counts
2	A13 between A126 and A1012	24-hour Data	2014	Highways England, Webtris And Department for Transport, Traffic Counts
3	A13 between A1089 and A1012	24-hour Data	2014	Highways England, Webtris And Department for Transport, Traffic Counts
4	A1089 between Marshfoot Road roundabout and A13	24-hour Data	2018	Highways England, Webtris
5	Marshfoot Road between, A1089 slip road and Marshfoot Road junction	24-hour Data	2017	Department for Transport, Traffic Counts
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	24-hour Data	2017	Department for Transport, Traffic Counts
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	24-hour Data	2017	Department for Transport, Traffic Counts
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	24-hour Data	2017	Department for Transport, Traffic Counts
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	24-hour Data	2014	Department for Transport, Traffic Counts
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	24-Hour Data	-	Estimated using professional judgement
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	12-Hour Data	2017	18/00458/FUL - Pulverised Fuel Ash Extraction, Ashfields Site Transport Statement and TR030003 – Tilbury 2 Transport Assessment
12	Turnpike Lane, between Gun Hill Road and Linford Road	24-Hour Data	-	Estimated using professional judgement
13	Linford Road, between Turnpike Lane and Muckingford Road	Peak Hour Data	2013	13/01163/FUL – Thames Industrial Estate Transport Assessment and and 14/01274/FUL – Former Chads School Residential Development Transport Assessment
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	24-Hour Data	2010	11/50397/TTGMIN – Mill House Farm Transport Statement
15	A13, between Orsett Cock roundabout and A1089	24-Hour Data	2016	Department for Transport, Traffic Counts

2.4.3 Traffic data were available for the majority of links. However, for links 10 and 12, Gun Hill Road and Turnpike Lane respectively, there were no data available. Therefore, the total and heavy vehicle traffic flows on the links have been estimated using the traffic flows observed on the adjacent highway and applying professional judgement. This resulted in an estimation of a 24-hour AADT of 2,000 for the number of total vehicles and no heavy vehicles, due to the Traffic Regulation Order (TRO) in place on both Gun Hill Road and Turnpike Lane which restricts vehicles in excess of 7.5 tonnes.

2.4.4 The resulting base 24-hour traffic data for all links are shown in Table 2.2.

Table 2.2: Observed Traffic Flows.

Road Link ID	Road Link / Description	Data	24 Hour AADT
			Observed
1	A13 between M25 junction 30 and A126	Total	105742
		HGV	11686
2	A13 between A126 and A1012	Total	87145
		HGV	11066
3	A13 between A1089 and A1012	Total	92240
		HGV	10988
4	A1089 between Marshfoot Road roundabout and A13	Total	26691
		HGV	7047
5	Marshfoot Road between, A1089 slip road and Marshfoot Road junction	Total	5277
		HGV	285
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	Total	10589
		HGV	334
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	Total	7743
		HGV	194
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	Total	7743
		HGV	194
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	Total	10794
		HGV	195
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	Total	2000
		HGV	0
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	Total	977
		HGV	190
12	Turnpike Lane, between Gun Hill Road and Linford Road	Total	2000
		HGV	0
13	Linford Road, between Turnpike Lane and Muckingford Road	Total	4905
		HGV	50
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	Total	8348
		HGV	362
15	A13, between Orsett Cock roundabout and A1089	Total	86272
		HGV	8142

2.5 Road Safety

2.5.1 Personal injury accident (PIA) data have been obtained for the most recently available 5 year period from the website Crashmap (crashmap.co.uk), which provides a summary of PIAs from data recorded by the police.

2.5.2 The area of study is the surrounding local road network for route options A and B including Brentwood Road, Coopers Shaw Lane, Marshfoot Road, the A1089 slip roads, Turnpike Lane and the St. Chads Gateway roundabout.

2.5.3 A summary of the accident locations and severity is shown on Figure 9.3. Crashes are categorised by severity as follows:

- fatal - a crash resulting in a death;
- serious - detention in hospital, includes paralysis, fractures and severe lacerations; and
- slight - includes whiplash, sprains and minor lacerations.

2.5.4 The Crashmap output reports are attached at Annex C.

2.5.5 During the five year period there was a total of 32 PIAs in the study area. Three resulted in serious injury and the remainder were classified as slight injury accidents. There were no fatal injury accidents.

2.5.6 Of the total accidents one involved a taxi, one involved a pedal cycle, two involved motorcyclists, two involved goods vehicles and one involved a van, with the remainder of the accidents involving cars only.

2.5.7 All three serious PIAs occurred at different locations. One occurred at the Brentwood Road / Welling Road junction when a driver failed to give way, one occurred at the Marshfoot Road priority junction between the northbound and southbound carriageways of the A1089 when a driver failed to give way and the other occurred on Marshfoot Road immediately north of the A1089 roundabout when a driver lost control.

2.5.8 The analysis shows a cluster of accidents at the Marshfoot Road priority junction between the northbound and southbound carriageways of the A1089 where 12 PIAs occurred during the five year period, 11 of which were slight and one classified as serious (as described above). Only one of these involved a goods vehicle although it was of unknown weight.

2.5.9 Of the 12 PIAs, nine occurred when a vehicle was waiting to turn or were in the process of turning right. It is noted that visibility meets the requisite standard at this junction. Of the remaining three, one was a shunt, one occurred when a car collided with another car moving away from the junction, and the other occurred when a vehicle proceeding along the carriageway had slowed for the junction and collided with another vehicle.

2.5.10 From the analysis undertaken at this section of the road network, it appears that driver error is the common contributory factor in the PIA data obtained. There does not appear to be anything in relation to the existing highway layout or geometries that contributes to a road safety concern.

3. Development Proposals

3.1 Introduction

3.1.1 Full details of the development proposals are set out in Volume 2, Chapter 2: Project Description of the PEIR.

3.1.2 Those parts that require assessment as part of this TA are described below.

3.2 Construction Phasing and Timescales

3.2.1 Details on the construction phasing and timescales are set out in Volume 2, Chapter 2: Project Description of the PEIR.

3.3 Construction Site: Internal Arrangements and Parking

3.3.1 Suitable construction compounds, laydown areas, loading / unloading areas and parking provisions for construction staff will be made so as to ensure that there will be no overspill of parking onto the public highway and that all delivery vehicles can access and egress the site without creating any requirement to wait on the public highway due to on-site activities.

3.4 Construction Hours

3.4.1 Construction working hours are set out in Volume 2, Chapter 2: Project Description of the PEIR.

3.5 Construction Staff and Construction HGV Deliveries

3.5.1 Estimates of construction staff and construction deliveries have been made in conjunction with the construction contractor for Creyke Beck, which is a similar scheme near Cottingham, Humberside, and was developed by the applicant.

3.5.2 The construction contractors at Creyke Beck have used their experience of that scheme and have estimated the following for the proposed Thurrock Flexible Generation Plant:

- an average of 80 staff on site per day;
- a peak of up to 120 staff on site per day;
- an average of 10 HGV deliveries per day (average of 20 HGV movements per day); and
- a peak of 20 to 30 HGV deliveries per day (40 to 60 HGV movements per day).

3.5.3 These estimates include all associated construction activities including all deliveries (including Abnormal Indivisible Loads (AIL) vehicles) and all removal of material / waste etc.

3.6 Abnormal Indivisible Loads

3.6.1 The largest items of plant that will be delivered as part of the construction of site include the gas turbines, steam turbines, generators and transformers.

3.6.2 The vehicles required to deliver the largest items of plant to the construction site are likely to fall outside of the Construction and Use Regulations 1986, and so are likely to be deemed as AILs and require the appropriate notification to be given to the relevant authorities to obtain an Order to enable their movement on the highway via the Motor Vehicles (Authorisation of Special Use) General Order (HMSO, 2003).

3.6.3 The escort and management requirements will be agreed with the highway authorities as part of obtaining the AIL permissions in accordance with the regulations.

3.6.4 The largest delivery is envisaged to be a transformer. In advance of a detailed design of the infrastructure, the applicant has estimated, in conjunction with the construction contractors at Creyke Beck, this may be in the order of 240 Tonnes (T) and be transported on an AIL vehicle similar to the AL100 Girder Frame vehicle which can transport up to 320T. This vehicle has informed the requirements for the haul road and any highway works, as set out below.

3.6.5 The applicant is in ongoing discussions with Network Rail about AIL delivery to the site over the railway line. These discussions are ongoing, but Network Rail have not advised of any insurmountable issues.

3.7 Construction Access

Construction Access Route

3.7.1 The intention is to develop a temporary access road (option A) but if there is any insurmountable issue with that option then a fall back option (option B) will be progressed. Option A is the A13, the A1089, Marshfoot Road, St Chads Road, the haul road and Gun Hill to Station Road. Option B is to come from the A13 Orsett Cock roundabout, Brentwood Road, High House Lane, Muckingford Road, Turnpike Lane and Gun Hill to Station Road.

3.7.2 The alignment of the haul road (option A) and its connections with St Chad's Road and Gun Hill have been informed through site visits and in liaison with a Highway Officer at Thurrock Council.

3.7.3 The haul road will route west to east to the south of Biggin Lane and will link the eastern side of the St Chad's Road / Gateway Academy roundabout to the western side of Gun Hill, approximately 120 m north of Coopers Shaw Road. A concept design drawing (1:500 scale) is attached at Annex D. No parts of the adopted highway would be used for the haul road, save for its access points at its western and eastern ends.

3.7.4 This alignment has been discussed with a Highway Officer at Thurrock Council who has confirmed this is acceptable, as attached at Annex E.

3.7.5 The haul road would be used for all construction access, including AIL vehicles. The width required to enable AIL vehicles to travel along it means that delivery HGVs (everyday HGV operating under the Construction and Use Regulations, 1986) will be able to pass one-another along its entirety and thus there is no requirement for any passing places along it.

3.7.6 A dropped kerb will be provided on the eastern side of the St Chad's Road / Gateway Academy roundabout in lieu of its temporary use and strengthening works will be provided to the verge and the footway/cycleway to enable HGVs to cross these. Suitable signage and markings will be provided to allow the safe crossing of the footway and for vehicular movement to / from the roundabout and this will all be subject to detailed design in liaison with Highway Officers at Thurrock Council.

3.7.7 At its eastern end, a simple priority junction arrangement will be provided onto Gun Hill. The precise location of the junction is to the south of the line of trees to avoid their removal and also to provide an optimum visibility splay. Further details will be provided within the ES.

3.7.8 For option B, the Development Consent Order (DCO) provisions would provide for HGVs to travel along it safely for both themselves and for other road users.

3.7.9 Provisions would be made for a temporary reduction in speed to 30 mph along Muckingford Road and Linford Road past their junctions with High House Lane and Turnpike Lane. This would reduce the stopping sight distance for vehicles along Muckingford Road and Linford Road and thus enable safe movement of construction traffic between High House Lane and Turnpike Lane.

3.7.10 The DCO will also provide for a temporary removal of the 7.5 tonne weight restricted Traffic Order on Turnpike Lane, Gun Hill, St. Chad's Road and Brentwood Road thus enabling construction HGVs to access via this route. The DCO will also include a Requirement for road condition surveys to be undertaken and any damage to these roads caused by the construction vehicles will be fixed at the Applicants expense.

3.7.11 There are five locations on the highway whereby works will be required to accommodate the AIL vehicle. These form part of Zone H and are listed as follows:

- High House Lane including its junctions with Brentwood Road and Muckingford Road (route option B only);
- Linford Road / Turnpike Road junction (route option B only);
- Gun Hill / Coopers Shaw Road junction (route options A and B);
- Coopers Shaw Road between Gun Hill and Church Road (route options A and B); and
- Coopers Shaw Road where it becomes Church Road (route options A and B).

3.7.12 A swept path analysis of the AIL vehicle travelling through these locations is attached at Annex F.

Access to the Construction Site

3.7.13 Access for construction traffic will be taken from the southern side of Station Road into Zone C and the southern side of Coopers Shaw Road into Zone I. Simple priority junctions will be provided. For Station Road, the access will be provided to the south of the level crossing and to the south of the existing field access, such that any westbound vehicles waiting for other oncoming vehicles to cross the level crossing would not block the access. Concept design drawings (1:500 scale) for the accesses onto Coopers Shaw Road and Station Road will be submitted with the application for development consent.

3.8 Operational Phase

3.8.1 Details on access requirements when the plant is operational is set out in Volume 2, Chapter 2: Project Description of the PEIR.

3.8.2 Permanent road access will be provided through Zone C to the public highway at Station Road. The construction access provided on the southern side of Station Road (described above) will be retained for operational access. A concept design drawing (1:500 scale) will be submitted with the application for development consent.

3.8.3 It is noted that the Lower Thames Crossing link road to Tilbury is expected to route through Zone C. The alignment of this proposed access road should not affect the Lower Thames Crossing due to the varying standards of road and their connection points to the west.

3.8.4 The access road to Zone C will be a private access road for the irregular vehicles associated with the operational phase and its alignment could be adjacent to the railway line in the northern part of this parcel of land. The Lower Thames Crossing link road will be an All Purpose Road with a connection further south which means it will be located far away from the railway line and continue to diverge even further from it at its western end. It is not expected that the access to Zone C would prejudice the delivery of the Lower Thames Crossing.

4. Compatibility with Transport Policies

4.1 National Policy Statements

4.1.1 National Policy Statements (NPSs) have been developed to guide the decision-making process for NSIPs. The NPSs define the national need for certain types of infrastructure, as well as the issues to be considered by the examining body when assessing whether a location is acceptable for the type and scale of development proposed.

Overarching National Policy Statement for Energy (EN-1)

4.1.2 EN-1 (DECC, 2011a) sets out national policy for energy infrastructure projects defined as NSIPs under the Planning Act 2008. It is noted that this document makes reference to the former Infrastructure Planning Commission (IPC), whose functions are now replaced by the Planning Inspectorate's National Infrastructure Directorate. Section 1.1 of this document states that:

"For such applications this NPS, when combined with the relevant topic-specific energy NPS, provides the primary basis for decisions by the IPC."

4.1.3 In relation to Combined Heat and Power (CHP), paragraph 4.6.3 of EN-1 states:

"Using less fuel to generate the same amount of heat and power reduces emissions, particularly CO_2. The Government has therefore committed to promoting Good Quality CHP, which denotes CHP that has been certified as highly efficient under the CHP Quality Assurance programme."

4.1.4 In relation to traffic and transport it states that the consideration and mitigation of transport impacts is an essential part of the Government's wider policy objectives for sustainable development.

4.1.5 It highlights that for the applicant if a project is likely to have significant transport implications, the applicant's ES should include a transport assessment. Applicants should consult the Highways Agency (now Highways England) and Highways Authorities as appropriate on the assessment and mitigation. Where appropriate a travel plan should also be prepared and if additional transport infrastructure is proposed, applicants should discuss with network providers the possibility of co-funding by Government for any third-party benefits.

4.1.6 Where mitigation is needed, possible demand management measures must be considered and if feasible and operationally reasonable, required, before considering requirements for the provision of new inland transport infrastructure to deal with remaining transport impacts. PINS should have regard to the cost-effectiveness of demand management measures compared to new transport infrastructure.

4.1.7 PINS may attach requirements to a consent where there is likely to be substantial HGV traffic that:

- *"Control numbers of HGV movements to and from the site in a specified period during its construction and possibly on the routing of such movements;*
- *Make sufficient provision for HGV parking, either on the site or at dedicated facilities elsewhere, to avoid 'overspill' parking on public roads, prolonged queuing on approach roads and uncontrolled on-street HGV parking in normal operating conditions; and*
- *Ensure satisfactory arrangements for reasonably foreseeable abnormal disruption, in consultation with network providers and the responsible police force."*

4.1.8 It is noted that if an applicant suggests that the costs of meeting any obligations or requirements would make the proposal economically unviable this should not in itself justify the relaxation by PINS of any obligations or requirements needed to secure the mitigation.

Fossil Fuel Electricity Generation (EN-2)

4.1.9 Paragraph 2.2.6 of EN-2 states:

"Government policy encourages multi-modal transport and materials (fuel and residues) may be transported by water or rail routes where possible. (See Section 5.13 of EN-1 on transport impacts). Applicants should locate new fossil fuel generating stations in the vicinity of existing transport routes wherever possible. Although there may in some instances be environmental advantages to rail or water transport, whether or not such methods are viable is likely to be determined by the economics of the scheme. Road transport may be required to connect the site to the rail network, waterway or port. Any application should therefore incorporate suitable access leading off from the main highway network. If the existing access is inadequate and the applicant has proposed new infrastructure, the IPC should satisfy itself that the impacts of the new infrastructure are acceptable as set out in Section 5.13 of EN-1."

4.1.10 A further four technology-specific NPSs were published for the energy sector covering renewable electricity generation (both onshore and offshore) (EN-3), gas supply infrastructure and gas and oil pipelines (EN-4), the electricity transmission and distribution network (EN-5), and nuclear electricity generation (EN-6).

4.2 National Policy Guidance

National Planning Policy Framework (2018)

4.2.1 The National Planning Policy Framework (NPPF) adopted in July 2018, replaces the previous version adopted in March 2012. The NPPF aims to enable local people and their accountable councils to produce their own distinctive local and neighbourhood plans, which reflect the needs and priorities of their communities.

4.2.2 National policy in relation to the transport planning of developments is set out in Section 9 'Providing Sustainable Transport – considering development proposals' and states the following:

4.2.3 Paragraph 108 states that:

"In assessing sites that may be allocated for development in plans, or specific applications for development, it should be ensures that:

- *Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;*
- *Safe and suitable access to the site can be achieved for all users; and*
- *Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree."*

4.2.4 Paragraph 109 states that:

"Development should only be prevented or refuse on highway grounds if there would be an unacceptable impact on highway safety or residual cumulative impacts on the road network would be severe."

4.2.5 Paragraph 111 states that:

"All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a transport statement or transport assessment so that the likely impacts of the proposal can be assessed."

4.2.6 Paragraph 106 states that:

"Maximum parking standards for residential and non-residential development should only be set where there is a clear and compelling justification that they are necessary for managing the local road network, or for optimising the density of development in city and town centres and other locations that are well served by public transport (in accordance with Chapter 11 of this Framework). In town centres, local authorities should seek to improve the quality of parking so that it is convenient, safe and secure, alongside measures to promote accessibility for pedestrians and cyclists."

4.2.7 Having regard to the above, the proposed development's access and movement will ensure that the development is connected to the wider highway network.

Planning Policy Guidance (NPPG) (March 2014)

4.2.8 National Planning Practice Guidance (NPPG) – Travel Plans, Transport Assessments and Statements in Decision-Taking was published in March 2014 and provides a concise report on the use and importance of Transport Assessments / Statements and Travel Plans. With regard to whether to provide a Transport Assessment, Transport Statement or no assessment, the guidance states:

"Local planning authorities, developers, relevant transport authorities, and neighbourhood planning organisations should agree what evaluation is needed in each instance.

4.2.9 The guidance states that Transport Assessments / Statements and Travel Plans can positively contribute to:

- *'encouraging sustainable travel;*
- *lessening traffic generation and its detrimental impacts;*
- *reducing carbon emissions and climate impacts;*
- *creating accessible, connected, inclusive communities;*
- *improving health outcomes and quality of life;*
- *improving road safety; and*
- *reducing the need for new development to increase existing road capacity or provide new roads."*

4.2.10 The guidance states that Transport Assessments / Statements and Travel Plans should be proportionate to the size and scope of the proposed development, be tailored to particular local circumstances and be established at the earliest practicable possible stage of a development proposal.

4.2.11 The guidance continues by stating that these reports should be brought forward through collaborative ongoing working between the Local Planning Authority / Transport Authority, transport operators, Rail Network Operators, Highways Agency and other relevant bodies.

4.2.12 The proposed development will alter the volume of traffic on the adjacent road network during the construction stage. Vehicle movements will be associated with construction staff, HGV movements and AILs; however, the volume of construction vehicle is not anticipated to be significant. The construction process is expected to generate an average of 20 two-way HGV movements per day and a peak of 40 to 60 two-way HGV movements per day.

4.2.13 The vehicle movements generated by construction are temporary; therefore, the impact of the development on the highway network is temporary. When the site is operational, there will be a limited number of irregular vehicle movements at the site.

4.2.14 As the NPPG states that Transport Assessments / Statements and Travel Plans should be proportionate to the size and scope of the proposed development, a Transport Assessment has been prepared to consider the transport related effects associated with construction.

Circular 02/2013: The Strategic Road Network and the Delivery of Sustainable Development

4.2.15 Circular 02/2013: The Strategic Road Network and the Delivery of Sustainable Development, was published by the Department for Transport in September 2013. The Circular sets out the way in which the Highways Agency (now Highways England) will engage with communities and the development industry to deliver sustainable development and economic growth whilst safeguarding the primary function and purpose of the strategic road network.

4.2.16 Circular 02/2013 replaces Circular 02/2007 and 01/2008. Circular 02/2013 states that '*the Highways Agency supports the economy through the provision of a safe and reliable strategic road network, which allows for the efficient movement of people and goods'*. Similarly, to the NPPF, Circular 02/2013 states that 'development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.

4.3 Local Policy

4.3.1 National policy on transport and land use establishes broad policy objectives that reflect the Government's aspirations for integrating land development and transport. The role of local government is to develop strategies based on specific local social and spatial requirements, which deliver the national aspirations.

4.3.2 Local strategy with respect to land use and transport is articulated in statutory documents prepared by planning and highway authorities which, for this development, comprises of:

- Thurrock Core Strategy and Policies for Management of Development;
- Thurrock Transport Strategy;
- Thurrock Council – Parking Strategy and Policies; and
- Essex County Council Development Management Policies.

Thurrock Core Strategy and Policies for Management of Development (January 2015)

4.3.3 The Thurrock Borough Core Strategy and Policies for Management of Development (Adopted December 2011, amended 2015), is a strategic document providing broad guidance on the scale and distribution of development and the provision of supporting infrastructure. It sets out the spatial vision, spatial objectives, the spatial development strategy and policies for Thurrock to 2026 and beyond together with a monitoring and implementation framework.

4.3.4 The Transport and Access section sets out the council's strategy for tackling congestion, road safety, air quality and enabling better access to services. Its aims are to reduce the need to travel and encourage the location of new development and delivery of services in places that have good levels of accessibility for people.

4.3.5 Policy CSTP14 (Transport in the Thurrock Urban Area) identifies the measures to be promoted to increase the uptake of travel by sustainable modes, it is identified that the Council will work to deliver at least a 10% reduction in car traffic from forecast 2026 levels. Within Policy CSTP14 it is stated that new development should:

"promote high levels of accessibility by sustainable transport modes and local services are conveniently located to reduce the need to travel by car."

4.3.6 Policy CSTP16 (National and Regional Transport Networks) states that the Council will work with partners to deliver improvements to national and regional networks. In particular to:

"Support the delivery of additional highway capacity, including through the use of technology and information, but only where modal shift will be insufficient to address congestion. Opportunities will be taken to improve public transport as part of any enhancements. Priority will be given to routes that provide access, especially for freight, to Strategic Employment Sites, the ports at London Gateway, Tilbury and Purfleet, and regeneration areas. This will include:

- *M25 between junctions 27 and 30*
- *M25 junction 30*
- *A13 from A128 to A1014*
- *A13 and A1089 junction improvement*
- *A1014 from A13 to London Gateway"*

4.3.7 Policy CSTP17 (Strategic Freight Movement and Access to Ports) states that the Council will support the logistics and port sectors, and the positive impacts of freight activity in Thurrock and beyond, by:

- *"Facilitating a shift to rail freight and freight carried on the River Thames. This will be through;*
- *Protecting inter-modal, rail and water-borne freight facilities from other development at locations where a demand exists or is expected to exist;*
- *Promoting the use of rail and water borne freight facilities by supporting the development of appropriate infrastructure;*
- *Supporting improvements to facilitate sustainable freight movements, including the rail hub at London Gateway, the South West Thurrock Railhead and improving access to the ports;*
- *Facilitating the provision of 24-hour lorry parks at Tilbury Port, London Gateway and West Thurrock. Subject to compliance with other policies in this plan, other lorry parks will be considered in locations where demand can be shown to exist, which are located away from residential areas and have good access to the Strategic Road Network;"*

4.3.8 It is also identified in Policy CSTP17 that the Council will support the logistics and port sectors by working as part of a Freight Quality Partnership and with other relevant partners to:

- *"Maximise modal shift opportunities;*
- *Ensure freight traffic keeps to the most suitable routes as defined in TC's Road Network Hierarchy;*
- *Promote the use of less polluting vehicles; and*
- *Reduce the adverse impact of congestion caused by freight on the A13, A1089 and A1306*."

Thurrock Transport Strategy 2013 – 2026

4.3.9 The Thurrock Transport Strategy describes Thurrock Council's transport strategy for the period 2013 to 2026, setting out the aims, objectives and policies for delivering transport improvements in Thurrock. As such, the document comprises the strategy element of the third Local Transport Plan (LTP3) for Thurrock. Thurrock's Transport Strategy Vision aims to create a transport system for Thurrock that:

- is fully inclusive, meeting the social needs of residents;
- is integrated to provide seamless multi-modal journeys;
- is accessible for everyone, safe and attractive to use;
- delivers sustainable community regeneration and growth; and
- reflects the exceptional circumstances of Thurrock as an international centre for logistics and commercial development.

4.3.10 The plan seeks to promote capacity improvements on the Strategic Road Network, with priority for freight routes to key strategic economic hubs.

Thurrock Council – Parking Strategy and Policies (2016-2021)

4.3.11 The Thurrock Parking Strategy outlines the policies and strategies over the five years from 2016-2021.

4.3.12 It is identified that Thurrock Council will:

"Work in close partnership with the ports, freight operators and Essex Police to ensure that freight movements can be accommodated with minimum disruption to residents."

Essex County Council Development Management Policies (February 2011)

4.3.13 The Essex County Council Development Management Policies outlines the key transport policies for Essex County Council. In terms of Transport Assessments Policy DM13 states that the highway authority will require:

"A Transport Assessment (TA) to accompany a planning application in accordance with the thresholds set out in Appendix B, or where the Highway Authority deems it to be necessary."

4.3.14 In relation to HGV movements, Policy DM19 states:

"The Highway Authority will protect the safety and efficiency of the highway network by ensuring that any proposals which generate a significant number of heavy goods vehicle movements:

- *Are located in close proximity to Strategic Routes / Main Distributors and / or Secondary Distributors;*
- *Are connected to Strategic Routes / Main Distributors and / or Secondary Distributors via short sections of other roads;*
- *Will where appropriate require the developer to submit and agree with the Highway Authority a routing management plan in relation to heavy goods vehicle movements."*

4.3.15 The requirements for the management of construction traffic are set out in Policy DM20:

"The Highway Authority will protect the safety and efficiency of the highway network by ensuring that:

- *Any temporary construction access and / or haul road will be agreed with the Highway Authority prior to commencement of development;*
- *A Construction Traffic Management Plan is submitted and agreed with the Highway Authority prior to commencement of development;*
- *Details of parking and turning for all construction traffic within the development site are submitted and agreed with the Highway Authority prior to commencement of development;*
- *Details of wheel cleaning facilities within the development site are submitted and agreed with the Highway Authority prior to commencement of development.*

4.4 Policy Consideration

4.4.1 It is considered that the proposals are generally in accordance with policies relating to transport and highways at the national and local levels since the site is well located in respect to the strategic freight network.

5. Future Year Traffic Flows and Other Developments

5.1 Future Assessment Year

5.1.1 Vehicles movements when the plant is operational will be irregular and low. When the site is decommissioned, the process will require its removal from site which will generate associated vehicle movements, including HGV movements. Since there is no further use for the materials, such materials can be removed in bulk after demolition without the care that is taken during construction. This means that larger payloads can be achieved and the traffic flows associated with decommissioning are lower than those during its construction. This TA, as part of the PEIR, is therefore considering the impact of the site during the construction phase.

5.1.2 The peak construction period typically occurs in earlier phases of construction works and therefore an assessment year of 2021 has been adopted. Consequently, for assessment purposes, the traffic flows on the adjacent highway network have been estimated for a future year of 2021.

5.2 Traffic Growth Rates

5.2.1 A future year baseline scenario of 2021 has been created by applying traffic growth rates to the observed traffic flows set out in Section 2 and then adding in the traffic flows of 'committed developments', i.e. developments that have planning consent but are not yet generating traffic on the network.

5.2.2 Before adding in any committed development traffic flows, growth rates have been applied to the observed traffic flows set out in Section 2 using the DfT software TEMPRO (version 7.2) to create base 2021 traffic flows. The TEMPRO software presents the output of the DfT's National Trip End Model which forms part of the National Transport Model (NTM). The DfT's Webtag guidance Unit 3.15.2 advises the use of NTM in preference to the National Road Traffic Forecasts (NRTF) as the NTM data is based on a more up-to-date model.

5.2.3 It should be noted that growth rates include allowances for background traffic growth as well as development growth and, in some instances, the application of growth rates and the addition of traffic flows from committed developments and cumulative developments (i.e. emerging developments that do not yet have planning consent) can result in double counting of traffic flows.

5.2.4 In this instance, given that a 2021 baseline year is being developed, any such effect of double counting is likely to be low and so no adjustments to the growth rates have been made.

5.2.5 The TEMPRO growth rates obtained are listed in Table 5.1.

Table 5.1: TEMPRO Growth Rates.

	Road Type		
Base Year	**Trunk**	**Principal**	**Minor**
2010	-	-	1.1989
2013 to 2021 Daily	-	-	1.212
2014 to 2021 Daily	1.1312	1.1199	-
2015 to 2021 Daily	1.1109	-	-
2016 to 2021 Daily	1.0898	-	-
2017 to 2021 Daily		1.6452	1.0661
2018 to 2021 Daily	1.0549		

5.2.6 These growth rates have been applied to the observed traffic flows to create 2021 base traffic flows (prior to the inclusion of committed development traffic flows). The 2021 growthed traffic flows are shown in Table 5.2.

Table 5.2: 2021 Growthed Traffic Flows.

Road Link ID	Road Link / Description	Data	24 Hour AADT	
			Observed	2021 Growthed
1	A13 between M25 junction 30 and A126	Total	105742	119612
		HGV	11686	13219
2	A13 between A126 and A1012	Total	87145	98575
		HGV	11066	12517
3	A13 between A1089 and A1012	Total	92240	102469
		HGV	10988	12207
4	A1089 between Marshfoot Road roundabout and A13	Total	26691	28157
		HGV	7047	7435

Road Link ID	Road Link / Description	Data	24 Hour AADT	
			Observed	2021 Growthed
5	Marshfoot Road between, A1089 slip road and Marshfoot Road junction	Total	5277	5617
		HGV	285	303
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	Total	10589	11272
		HGV	334	356
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	Total	7743	8243
		HGV	194	207
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	Total	7743	8243
		HGV	194	207
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	Total	10794	12088
		HGV	195	218
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	Total	2000	2000
		HGV	0	0
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	Total	977	1041
		HGV	190	202
12	Turnpike Lane, between Gun Hill Road and Linford Road	Total	2000	2000
		HGV	0	0
13	Linford Road, between Turnpike Lane and Muckingford Road	Total	4905	5500
		HGV	50	56
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	Total	8348	10008
		HGV	362	434
15	A13, between Orsett Cock roundabout and A1089	Total	86272	94020
		HGV	8142	8873

5.3 Committed Developments

5.3.1 The transport effects of the proposed development with other schemes that are consented or for which planning permissions are currently being sought, have been be assessed where appropriate.

5.3.2 An assessment of 'committed' developments in the local area that have gained permission has been undertaken to determine whether they are operational, or when they are likely to be operational within the timescales of construction for the site. This is to form a view of whether the traffic generated by the developments will already be present in the observed traffic flows, or whether they should be added as committed developments within the Future Baseline 2021 traffic flows and assessments.

5.3.3 The committed developments which have been included in the Future Baseline 2021 traffic flows are outlined in Table 5.3 with details below.

Table 5.3: Committed Developments.

Site Number	Site Name	Application number	Status	Submitted / Decision Date	Status	Traffic Flows
1	Trafalgar House, Thames Industrial Estate	18/00664/CONDC	Approved	2013 / 2015	Currently under construction	Operational traffic flows included within committed flows.
2	Pulverised Fuel Ash Extraction, Ashfields Site	18/00458/FUL	Approved	2018 / 2018	Not Built	Operational traffic flows included within committed flows.

Trafalgar House, Thames Industrial Estate

5.3.4 The proposal was for the redevelopment of an area of previously developed land towards the southern boundary of the Thames Industrial Estate, to provide 50 dwellings together with an associated financial commitment towards the repair, upkeep and stewardship of surrounding former factory building. It was also proposed for improved access arrangements and the creation of an area of public open space along the site frontage.

5.3.5 The estimated traffic flows generated by the development along the highway network have been taken from the Transport Assessment that was prepared in support of its planning application. This provided flows of 18 two-way trips in the AM peak hour and 20 two-way trips in the PM peak hour based on 50 dwellings. The 24-hour AADT of the site has been estimated from the PM peak hour two-way traffic flow.

5.3.6 The assignment of the traffic flows on the local network was also taken from the Transport Assessment, the traffic flows along links where the assignment was not accounted for in the Transport Assessment have been estimated.

Pulverised Fuel Ash Extraction, Ashfields Site

5.3.7 The proposal was for the construction of a temporary load out and storage area and access to Station Road to enable the removal of Pulverised Fuel Ash.

5.3.8 The estimated traffic flows generated by the development along the highway network have been taken from the Transport Statement that was prepared in support of its planning application. This provided 24-hour flows of 60 two-way HGV movements.

5.3.9 The assignment of the traffic flows upon the local highway network has been taken from the Transport Statement, where the assignment on links was not provided the traffic flow distribution has been estimated.

Review of Other Committed Developments

5.3.10 Other committed developments (which have planning consent) in the vicinity of the site have been reviewed in order to ascertain as to whether their development traffic flows should be included as part of the baseline.

5.3.11 A summary of this review is included in Table 5.4.

Table 5.4: Review of Committed Developments.

Site Number	Site Name	Application number	Submitted / Decision Date	Status	Reason Not Assessed
3	St Georges Church of England School	GR/17/674 (KCC/GR/0165/2017)	2017 / 2017	Built	The application does not predict traffic to be generated onto the local highway links being assessed for the Thurrock Flexible Generation Plant.
4	Tarmac Orsett Quarry	15/00649	2015 / 2016	Assumed Operational	The application sets out that the proposals would generate only a minimal amount of traffic and does not undertake any assessments itself due to that.
5	Land West of Butts Lane	10/50235/TTGOUT	2010 / 2012	Built	The application development is built out during the periods of observed traffic flows on the local highway links being assessed for the Thurrock Flexible Generation Plant and thus application traffic flows already substantially included on the local highway network.
6	Land Part Of Marsh Farm Sewage Treatment Plant	17/00977/FUL	2017 / 2018	Assumed Operational	Application stated to have no material effect on the highway network.
7	Former Cargill Plant	11/50361/TTGETL	2011 / 2012	Assumed Operational	Application planning permission extended to 2014. The proposals are built out during the periods of observed traffic flows on the local highway links being assessed for the Thurrock Flexible Generation Plant and thus application traffic flows already substantially included on the local highway network.
8	Tilbury B Power Station	16/00186/DMI	2016 / 2016	Demolition in progress	Demolition traffic flows not included in the Application. Traffic flows on the local highway links being assessed for the Thurrock Flexible Generation Plant therefore assumed to be negligible in the context of existing traffic flows.

Site Number	Site Name	Application number	Submitted / Decision Date	Status	Reason Not Assessed
9	Purfleet Commercial Park	18/00897/SCR	2018 / 2018	In progress	No development traffic flow information provided by Application. Traffic flows on the local highway links being assessed for the Thurrock Flexible Generation Plant therefore assumed to be negligible.
10	Segro Logistics Park	18/00847/SCR	2018 / 2018	In progress	No development traffic flow information provided by Application. Traffic flows on the local highway links being assessed for the Thurrock Flexible Generation Plant therefore assumed to be negligible.
11	Land at Coldharbour Road	20141214	2014 / 2018	Not built	The application does not predict traffic to be generated onto the local highway links being assessed for the Thurrock Flexible Generation Plant.

5.4 2021 Baseline Traffic Flows

5.4.1 The committed development traffic flows attached at Annex G have been added to the 2021 growthed traffic flows to form the resultant 2021 baseline traffic flows. The 2021 growthed traffic flows are shown against the 2021 baseline traffic flows in Table 5.5.

Table 5.5: 2021 Baseline Traffic Flows.

Road Link ID	Road Link / Description	Data	24 Hour AADT	
			2021 Growthed	2021 Baseline
1	A13 between M25 junction 30 and A126	Total	119612	119672
		HGV	13219	13264
2	A13 between A126 and A1012	Total	98575	98635
		HGV	12517	12562
3	A13 between A1089 and A1012	Total	102469	102529
		HGV	12207	12252
4	A1089 between Marshfoot Road roundabout and A13	Total	28157	28210
		HGV	7435	7480
5	Marshfoot Road between, A1089 slip road and Marshfoot Road junction	Total	5617	5629
		HGV	303	303
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	Total	11272	11284
		HGV	356	356
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	Total	8243	8266
		HGV	207	207
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	Total	8243	8266
		HGV	207	207
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	Total	12088	12088
		HGV	218	218
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	Total	2000	2000
		HGV	0	0
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	Total	1041	1101
		HGV	202	262
12	Turnpike Lane, between Gun Hill Road and Linford Road	Total	2000	2000
		HGV	0	0
13	Linford Road, between Turnpike Lane and Muckingford Road	Total	5500	5570
		HGV	56	56
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	Total	10008	10032
		HGV	434	434
15	A13, between Orsett Cock roundabout and A1089	Total	94020	94043
		HGV	8873	8888

5.5 Cumulative Development Sites

5.5.1 The following developments have been included in the cumulative assessment:

- 16/01232/OUT - Proposed development of 1000 dwellings on land for development, Muckingford Road, Linford, Essex; and
- 16/00412/OUT - Proposed development of 203 dwellings on Star Industrial Estate, Linford Road, Chadwell St Mary, Essex; and;
- 15/00379/OUT - Proposed development of 43 dwellings on land between 39 and 41 St John's Road and to the south of St Johns Road, Chadwell St Mary, Essex and;
- TR030003 – Tilbury 2 – a new port facility at the site of Tilbury B Power Station, East Tilbury, Essex.

5.5.2 The development traffic flows have been taken from the relevant Transport Assessment / planning application. Where traffic flows have not been assigned, or not assigned to the whole of the network being assessed in this study area, professional judgement has been used to assign them to the network.

5.5.3 The cumulative development traffic flows are attached at Annex H.

Review of Other Cumulative Developments

5.5.4 Other cumulative developments in the vicinity of the site have been reviewed in order to ascertain as to whether their development traffic flows should be included as part of the cumulative assessment.

5.5.5 Application 16/01475/SCR for an Environmental Impact Assessment (EIA) screening opinion for Gothards Field has not been included in the Thurrock Flexible Generation Plant transport impact assessment as no development traffic flow information or build out timescales have been provided. This is similar for applications 18/00140/SCO, 17/00349/SCR, 17/00223/SCR which are for EIA scoping or screening opinions. These developments are considered too premature to be delivered within the 2021 assessment year being adopted by this application and therefore have not been considered as part of the cumulative assessment.

5.5.6 The Tilbury Energy Centre (TEC) power station (EN010089) to the south and Lower Thames Crossing (LTC) motorway and link road (TR010032) to the east and north are both at EIA scoping stage (Tier 2). These developments are considered too premature to be delivered within the 2021 assessment year being adopted by this application and therefore have not been considered as part of the cumulative assessment.

6. Trip Generation, Distribution and Mode Share

6.1 Construction Phase

Trip Generation

6.1.1 Construction vehicle movements are set out in Section 3.

6.1.2 During construction, it is estimated there will be an average of 80 staff on site with a peak of up to 120 staff on site.

6.1.3 It is estimated that construction of the site will generate an average of 10 HGV deliveries per day (average of 20 HGV movements per day) throughout the construction period. This could peak at 20 to 30 HGV deliveries per day (40 to 60 HGV movements per day). This includes all associated construction activities including all deliveries (including AILs) and all removal of material / waste etc.

Mode Share

6.1.4 To estimate the likely mode of transport that construction workers would use to travel to and from the site, the 2011 Census Method of travel to Work (2001 specification) by industry data has been analysed for the construction industry, for the country of England, as shown in Table 6.1. The data for England have been used opposed to the Thurrock Authority Area to give a higher sample of different accessibilities and construction practices adopted by differing construction contractors across the country.

Table 6.1: Mode Share (2011 Census Data).

Mode	% Mode Share
Car Driver	75%
Car Passenger	9%
Bus	3%
Train	7%
Pedal Cycle	2%
Walk	3%
Other	1%
Total	100%

6.1.5 As can be seen in Table 6.1, the Census data predict that 75% of staff will arrive via car, 9% would arrive as a car passenger, 2% would arrive by bicycle, 3% would arrive on foot and 7% would arrive by train.

6.1.6 The 2011 Census data as shown in Table 6.1 have been applied to the level of construction staff to predict the level of vehicle trip generation for the site.

6.1.7 Therefore, it is estimated there would be an average of 60 construction staff arriving and departing via car per day. At the construction peak, it is estimated there will be up to 90 construction staff arriving and departing via car per day.

Temporal Distribution

6.1.8 Construction activities will be undertaken during normal construction working hours of 08:00 and 18:00 on weekdays and 08:00 to 13:00 on Saturdays.

6.1.9 Construction HGV movements will be generated throughout the day and will be typically spread fairly equally in terms of hourly movements. Although there may be occasional peaks of construction HGV movements at various times of the day, these will be balanced by subsequent troughs and balance out on different days to being typically evenly spread. Therefore, an average day will see a fairly equal spread of construction HGV movements across the working day. HGV movements on a weekday will be between 08:00 and 18:00 and on a Saturday, between 08:00 and 13:00.

6.1.10 It is common for construction works to have mobilisation periods when some construction staff are on site up to one hour before and after for mobilisation. For the purposes of assessment, construction staff would typically arrive between 06:00 and 08:00, and depart between 18:00 and 20:00 on a weekday. On a Saturday, construction staff would typically arrive between 06:00 and 08:00 and depart between 13:00 and 15:00.

6.1.11 Based upon the calculations set out above, a breakdown of the average construction traffic flows and the peak construction traffic flows are shown in Table 6.2 and Table 6.3 respectively.

Table 6.2: Average Construction Traffic Generation.

Time Begin	Weekday						Saturday					
	Arrivals		Departures		Two Way		Arrivals		Departures		Two Way	
	Cars	HGVs	Cars	HGVs	Cars	HGVs	Cars	HGVs	Cars	HGVs	Cars	HGVs
06:00	30				30		30				30	

Time Begin	Weekday						Saturday					
	Arrivals		Departures		Two Way		Arrivals		Departures		Two Way	
	Cars	HGVs	Cars	HGVs	Cars	HGVs	Cars	HGVs	Cars	HGVs	Cars	HGVs
07:00	30				30		30				30	
08:00		1		1		2		1		1		2
09:00		1		1		2		1		1		2
10:00		1		1		2		1		1		2
11:00		1		1		2		1		1		2
12:00		1		1		2		1		1		2
13:00		1		1		2			30		30	2
14:00		1		1		2			30		30	
15:00		1		1		2						
16:00		1		1		2						
17:00		1		1		2						
18:00			30		30							
19:00			30		30							
Total	60	10	60	10	120	20	60	5	60	5	120	10

Table 6.3: Peak Construction Traffic Generation.

Time Begin	5 Day Average						Saturday					
	Arrivals		Departures		Two Way		Arrivals		Departures		Two Way	
	Cars	HGVs	Cars	HGVs	Cars	HGVs	Cars	HGVs	Cars	HGVs	Cars	HGVs
06:00	45				45		45				45	
07:00	45				45		45				45	
08:00		3		3		6		3		3		6
09:00		3		3		6		3		3		6
10:00		3		3		6		3		3		6
11:00		3		3		6		3		3		6
12:00		3		3		6		3		3		6
13:00		3		3		6					45	
14:00		3		3		6					45	
15:00		3		3		6						
16:00		3		3		6						
17:00		3		3		6						
18:00			45		45							
19:00			45		45							
Total	90	30	90	30	180	60	90	15	90	15	180	30

Trip Distribution and Assignment

6.1.12 The movement of construction HGVs and their route to the site will either be through access option A or option B as detailed in Section 3.

6.1.13 The construction traffic has been assigned to the highway links for both option A and option B to ensure that both access options are assessed. All traffic has been assigned along the A13 to the M25 Junction 30. The resultant average and peak construction 24-hour AADT traffic flows on each link are shown in Table 6.4.

Table 6.4: Assignment of Average and Peak Construction Traffic.

Road Link ID	Road Link / Description	Data	24 Hour AADT	
			Average Construction	Peak Construction
1	A13 between M25 junction 30 and A126	Total	141	241
		HGV	20	60
2	A13 between A126 and A1012	Total	141	241
		HGV	20	50
3	A13 between A1089 and A1012	Total	141	241
		HGV	20	60

Road Link ID	Road Link / Description	Data	24 Hour AADT	
			Average Construction	Peak Construction
4	A1089 between Marshfoot Road roundabout and A13	Total	141	241
		HGV	20	60
5	Marshfoot Road between, A1089 slip road and Marshfoot Road junction	Total	70	120
		HGV	10	30
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	Total	70	120
		HGV	10	30
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	Total	141	241
		HGV	20	60
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	Total	141	241
		HGV	20	60
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	Total	141	241
		HGV	20	60
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	Total	141	241
		HGV	20	60
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	Total	141	241
		HGV	20	60
12	Turnpike Lane, between Gun Hill Road and Linford Road	Total	141	241
		HGV	20	60
13	Linford Road, between Turnpike Lane and Muckingford Road	Total	141	241
		HGV	20	60
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	Total	141	241
		HGV	20	60
15	A13, between Orsett Cock roundabout and A1089	Total	141	241
		HGV	20	60

6.1.14 These traffic flows have been added to the 2021 baseline traffic flows to create the following scenarios:

- 2021 baseline plus average construction traffic flows (Table 6.5);
- 2021 baseline plus peak construction traffic flows (Table 6.5);
- 2021 baseline plus average construction traffic flows plus cumulative traffic flows (Table 8.1); and
- 2021 baseline plus peak construction traffic flows plus cumulative traffic flows (Table 8.1).

Table 6.5: 2021 Baseline Average + Construction Traffic + Peak Construction Traffic.

Road Link ID	Road Link / Description	Data	2021 Baseline + Average Construction	2021 Baseline + Peak Construction
1	A13 between M25 junction 30 and A126	Total	119813	119913
		HGV	13284	13324
2	A13 between A126 and A1012	Total	98776	98876
		HGV	12582	12622
3	A13 between A1089 and A1012	Total	102670	102770
		HGV	12272	12312
4	A1089 between Marshfoot Road roundabout and A13	Total	28351	28451
		HGV	7500	7540
5	Marshfoot Road between, A1089 slip road and Marshfoot Road junction	Total	5699	5750
		HGV	313	333
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	Total	11354	11404
		HGV	366	386
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	Total	8407	8507
		HGV	227	267
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	Total	8407	8507
		HGV	227	267
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	Total	12229	12329
		HGV	238	278
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	Total	2141	2241
		HGV	20	60
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	Total	1242	1342
		HGV	282	322

Road Link ID	Road Link / Description	Data	2021 Baseline + Average Construction	2021 Baseline + Peak Construction
12	Turnpike Lane, between Gun Hill Road and Linford Road	Total	2141	2241
		HGV	20	60
13	Linford Road, between Turnpike Lane and Muckingford Road	Total	5711	5811
		HGV	76	116
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	Total	10173	10273
		HGV	454	494
15	A13, between Orsett Cock roundabout and A1089	Total	94184	94284
		HGV	8908	8948

6.2 Operational Phase

6.2.1 Vehicle movements when the plant is operational are set out in Volume 2, Chapter 2: Project Description of the PEIR. In summary, they will be irregular and low, thus, these impacts have been scoped out of the assessment.

6.3 Decommissioning Phase

6.3.1 When the site is decommissioned, the process will require its removal from site which will generate associated vehicle movements, including HGV movements. Since there is no further use for the materials, such materials can be removed in bulk after demolition without the care that is taken during construction. This means that larger payloads can be achieved, and the traffic flows associated with decommissioning are lower than those during its construction.

6.3.2 Thus, the assessment for the construction phase is deemed to cover that for the decommissioning phase.

7. Transport Assessment

7.1.1 As set out above, this TA assesses the effects of the construction traffic flows generated by the plant.

7.2 Impact Upon Highway Capacity

7.2.1 To consider the effects of the traffic generated by the construction of the plant an assessment of traffic flow increases has been undertaken against the 2021 baseline traffic flows.

7.2.2 These assessments have been undertaken for the average and peak construction traffic flows to enable an understanding of the effects throughout the construction phase to be identified.

7.2.3 The average and peak construction traffic flows have been assessed against the 2021 baseline traffic flows within Table 7.1.

Table 7.1: 2021 Baseline plus Average Construction Traffic Flows and 2021 Baseline plus Peak Construction Traffic Flows.

Road Link ID	Road Link / Description	Data	2021 Baseline	Average Construction		Peak Construction	
				24 hr AADT	% Impact	24 hr AADT	% Impact
1	A13 between M25 junction 30 and A126	Total	119672	141	0.12%	241	0.20%
		HGV	13264	20	0.15%	60	0.45%
2	A13 between A126 and A1012	Total	98635	141	0.14%	241	0.24%
		HGV	12562	20	0.16%	50	0.48%
3	A13 between A1089 and A1012	Total	102529	141	0.14%	241	0.24%
		HGV	12252	20	0.16%	60	0.49%
4	A1089 between Marshfoot Road roundabout and A13	Total	28210	141	0.50%	241	0.85%
		HGV	7480	20	0.27%	60	0.80%
5	Marshfoot Road between, A1089 slip road and Marshfoot Road junction	Total	5629	70	1.25%	120	2.14%
		HGV	303	10	3.30%	30	9.89%
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	Total	11284	70	0.62%	120	1.07%
		HGV	356	10	2.81%	30	8.44%
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	Total	8266	141	1.71%	241	2.92%
		HGV	207	20	9.68%	60	29.05%
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	Total	8266	141	1.71%	241	2.92%
		HGV	207	20	9.68%	60	29.05%
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	Total	12088	141	1.17%	241	1.99%
		HGV	218	20	9.16%	60	27.47%
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	Total	2000	141	7.05%	241	12.05%
		HGV	0	20	0%	60	0%
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	Total	1101	141	12.80%	241	21.89%
		HGV	262	20	7.63%	60	22.89%
12	Turnpike Lane, between Gun Hill Road and Linford Road	Total	2000	141	7.05%	241	12.05%
		HGV	0	20	0%	60	0%
13	Linford Road, between Turnpike Lane and Muckingford Road	Total	5570	141	2.53%	241	4.33%
		HGV	56	20	35.63%	60	106.89%
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	Total	10032	141	1.41%	241	2.40%
		HGV	434	20	4.61%	60	13.82%

Road Link ID	Road Link / Description	Data	2021 Baseline	Average Construction		Peak Construction	
				24 hr AADT	% Impact	24 hr AADT	% Impact
15	A13, between Orsett Cock roundabout and A1089	Total	94043	141	0.15%	241	0.26%
		HGV	8888	20	0.23%	60	0.68%

7.2.4 As can be seen from Table 7.1, the temporary daily increases on the majority of links are small. On the A13 between the M25 junction 30 and A126, the temporary daily increases are less than one-quarter of a percent for both the average construction traffic and the peak construction traffic. Such temporary increases are negligible and would not be noticeable to other drivers. A similar conclusion can be drawn for traffic through the M25 junction 30 and on the M25 north and south of the A13.

7.2.5 For route option A, the temporary daily increases on the A1089 would be half a percent for the average construction traffic and just over three-quarters of a percent for the peak construction traffic. There are no junctions on the A1089 south of the A13 and such temporary increases are negligible and would not be noticeable to other drivers.

7.2.6 For route option A, the temporary daily increases on Marshfoot Road and St Chads Road would be between 0.6% and 1.7% for the average construction traffic and between 1.1% and 2.9% for the peak construction traffic. Such temporary increases are negligible and would not be noticeable to other drivers.

7.2.7 For route option B, the temporary increase on Brentwood Road would be 1.4% for the average construction traffic and 2.4% for the peak construction traffic. Such temporary increases are negligible and would not be noticeable to other drivers.

7.2.8 Traffic flows on Turnpike Road (route option B) are far lower than on Brentwood Road and there are no highway capacity concerns. The temporary increase on Turnpike Road would be 7% for the average construction traffic and 12% for the peak construction traffic. These temporary increases are due to the low base traffic flows along Turnpike Road. These temporary increases would retain traffic flows along Turnpike Road at a low level and would not create congestion.

7.2.9 Similar temporary increases are expected along Gun Hill, Coopers Shaw Hill and Station Road and this is also due to the low traffic flows along them. The temporary increases would retain traffic flows along Gun Hill, Coopers Shaw Hill and Station Road at a low level and would not create congestion.

7.2.10 During the weekday peak hour periods (08:00 to 09:00 and 17:00 to 18:00), when background traffic flows are at their highest and most sensitive to change, it would only be construction HGV movements being generated to and from the site.

7.2.11 This equates to one HGV movement per hour during the average construction traffic flows and three HGV movements per hour during the peak construction traffic flows. Such a level of temporary movement is negligible and would not be noticeable to other drivers.

7.2.12 Indeed, a common threshold for vehicle movements which require assessment is 30 vehicle movements per hour; this stems from guidance set out in Guidance on Transport Assessment, published by the DfT and the Communities and Local Government in 2007. Although this guidance document has been withdrawn, a like-for-like document has not been published and many professionals in the industry use this quantum as a threshold upon which to undertake assessment.

7.2.13 One to three HGV movements per hour is significantly under this threshold and it is concluded that the temporary construction traffic would not create or materially impact upon any congestion that may occur during the weekday peak hours or any other hours during the day.

7.3 Impact Upon Road Safety

7.3.1 Section 2 contains an analysis of PIA data and concludes that there does not appear to be anything in relation to the existing highway layout or geometries that contribute to a road safety concern.

7.3.2 The construction staff movements would be no different to other car movements along the highway network and there is nothing to suggest that they would create a road safety issue.

7.3.3 There are already HGV movements along the majority of the highway network and there is nothing to suggest that the construction HGVs would create a road safety issue. There are some sections of road where the DCO Provisions would temporarily lift a 7.5 tonne weight restriction to enable access to the site, however, the retention of other 7.5 tonne weight restrictions would mean that through routes are not created and thus it would only be the construction HGVs that are introduced to these roads. The construction HGVs would be under strict instruction and guidelines when travelling along the local road network and road safety issues are not predicted to result.

7.3.4 It is considered that the construction traffic would not create in any road safety issues that would result in an unacceptable impact on highway safety (NPPF test).

7.4 Impact upon Sustainable Modes of Transport

7.4.1 Sustainable modes of transport relates to the movement of construction staff. During the periods when construction staff will arrive and depart on site, the footways, cycleways, bus services and train services in the vicinity of the site generally have available capacity.

7.4.2 The construction staff are not predicted to be at a level that will impact upon the capacity of these modes of transport.

7.4.3 It is considered that the proposed development would not impact upon sustainable modes of transport.

7.5 Summary

7.5.1 The above assessments demonstrate that both the average and peak construction traffic flows would not result in any noticeable increases along the local road network and would not create or materially impact upon any congestion that may occur during the weekday peak hours or any other hours during the day. It should also be borne in mind that these increases would all be temporary.

7.5.2 It is therefore concluded that the average and the peak construction traffic flows would not result in a 'severe' impact (NPPF test) along the local road network.

8. Cumulative Assessments

8.1.1 As set out in Section 5, a number of sites have been identified to be assessed alongside the proposed plant to understand the cumulative impact of development on the highway network.

8.1.2 The cumulative development traffic flows with average and peak construction traffic flows have been assessed against the 2021 baseline traffic flows within Table 8.1.

Table 8.1: 2021 Baseline + Average Construction Traffic and Peak Construction Traffic with Cumulative.

Road Link ID	Road Link / Description	Data	2021 Baseline	Average Construction + Cumulative		Peak Construction + Cumulative	
				24 hr AADT	% Impact	24 hr AADT	% Impact
1	A13 between M25 junction 30 and A126	Total	119672	2979	2.49%	3079	2.57%
		HGV	13264	1794	13.52%	1834	13.83%
2	A13 between A126 and A1012	Total	98635	2979	3.02%	3079	3.12%
		HGV	12562	1794	14.28%	1834	14.60%
3	A13 between A1089 and A1012	Total	102529	2979	2.91%	3079	3.00%
		HGV	12252	1794	14.64%	1834	14.97%
4	A1089 between Marshfoot Road roundabout and A13	Total	28210	3161	11.20%	3261	11.56%
		HGV	7480	2385	31.89%	2425	32.42%
5	Marshfoot Road between, A1089 slip road and Marshfoot Road junction	Total	5629	470	8.35%	520	9.24%
		HGV	303	10	3.30%	30	9.89%
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	Total	11284	470	4.17%	520	4.61%
		HGV	356	10	2.81%	30	8.44%
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	Total	8266	940	11.38%	1040	12.59%
		HGV	207	20	9.68%	60	29.05%
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	Total	8266	940	11.38%	1040	12.59%
		HGV	207	20	9.68%	60	29.05%
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	Total	12088	208	1.72%	308	2.55%
		HGV	218	20	9.16%	60	27.47%
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	Total	2000	141	7.05%	241	12.05%
		HGV	0	20	0%	60	0%
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	Total	1101	141	12.80%	241	21.89%
		HGV	262	20	7.63%	60	22.89%
12	Turnpike Lane, between Gun Hill Road and Linford Road	Total	2000	141	7.05%	241	12.05%
		HGV	0	20	0%	60	0%
13	Linford Road, between Turnpike Lane and Muckingford Road	Total	5570	1532	27.51%	1632	29.31%
		HGV	56	20	35.63%	60	106.89%
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	Total	10032	1089	10.86%	1189	11.85%
		HGV	434	20	4.61%	60	13.82%

Road Link ID	Road Link / Description	Data	2021 Baseline	Average Construction + Cumulative		Peak Construction + Cumulative	
				24 hr AADT	% Impact	24 hr AADT	% Impact
15	A13, between Orsett Cock roundabout and A1089	Total	94043	1561	1.66%	1661	1.775
		HGV	8888	611	6.88%	651	7.33%

8.1.3 As can be expected, the cumulative increases in traffic along the highway links within the study area are higher than those created by the construction traffic generated by the Thurrock Flexible Generation Plant.

8.1.4 Of particular note in this assessment is the minor change in the percentage increase from the average construction traffic flows with cumulative development to the peak construction traffic flows with cumulative development. This gives a perspective to the effect of the plant within the cumulative development traffic flows given that the peak construction traffic flows are double the average construction traffic flows.

8.1.5 Indeed, on the A1089, the average construction traffic flows form only 4.2% of the total cumulative traffic flows whilst the peak construction traffic flows form only 7.3%. On Marshfoot Road, the average construction traffic flows form only 13% of the total cumulative traffic flows whilst the peak construction traffic flows form only 23%. For both, the other cumulative traffic flows are long term traffic flows generated by built development, whereas the construction traffic flows generated by the plant are temporary during the construction period only.

8.1.6 As set out in Table 7.1, on the A13 between the M25 junction 30 and A126, the temporary daily increases by the construction traffic alone are less than one-quarter of a percent for both the average construction traffic and the peak construction traffic. Under the cumulative development scenario, the increases are 2.5% for the average construction traffic and 2.6% for the peak construction traffic.

8.1.7 The same is predicted on the A1089 for route option A, where the temporary daily increases on are predicted at half a percent for the average construction traffic and just over three-quarters of a percent for the peak construction traffic. Under the cumulative development scenario, the increases are 11.2% for the average construction traffic and 11.6% for the peak construction traffic.

8.1.8 It is clear that the cumulative increase predicted on the trunk road is created by the other developments in the surrounding areas, all of which generate permanent traffic flows which are far higher than the temporary traffic flows predicted by the plant.

8.1.9 The temporary increases in traffic along the trunk road network generated by the plant are considered negligible and would not be noticeable to other drivers. In this context, if the cumulative developments create a material impact, then such an impact would not be worsened by any noticeable amount by the traffic generated by the plant.

8.1.10 This is confirmed by the change in the increase from the average to the peak construction flows. For example, on the A13 between the M25 junction 30 and A126, the effect of doubling the construction traffic flows generated by the plant (i.e. from the average to the peak construction traffic flows) is to change the cumulative increase from 2.5% to 2.6%.

8.1.11 It is evident that if the cumulative developments were to create a material impact along the trunk road, then such an impact would not be worsened by any noticeable amount by the traffic generated by the plant.

8.1.12 This is also the case for the cumulative traffic flows along Marshfoot Road where similar low changes from the average construction traffic flows to peak construction traffic flows result. It is also evident that if the cumulative developments create a material impact along Marshfoot Road, then such an impact would not be worsened by any noticeable amount by the traffic generated by the plant.

8.1.13 For other parts of the highway network along route options A and B, traffic flows are low and the cumulative traffic flows would not create any congestion.

9. Summary and Conclusions

9.1.1 This Transport Assessment assesses the transport impact of the construction phase of the Thurrock Flexible Generation Plant. The report has been prepared as an Appendix to the Traffic and Transport Chapter of the PEIR.

9.1.2 The site is located immediately to the north of the existing Tilbury Substation within Thurrock, Essex.

9.1.3 During construction, it is estimated there would be an average of 80 staff on site per day and a peak of up to 120 staff on site per day. An average of 10 HGV deliveries per day (average of 20 HGV movements per day) is predicted with a peak of 20 to 30 HGV deliveries per day (40 to 60 HGV movements per day).

9.1.4 For construction access, the intention is to develop a temporary access road (option A) but if there is any insurmountable issue with that option then a fall back option (option B) will be progressed. Option A is the A13, the A1089, Marshfoot Road, St Chads Road, the haul road and Gun Hill to Station Road. Option B is to come from the A13 Orsett Cock roundabout, Brentwood Road, High House Lane, Muckingford Road, Turnpike Lane and Gun Hill to Station Road.

9.1.5 Vehicles movements when the plant is operational will be irregular and low, thus, these impacts have been scoped out of the assessment.

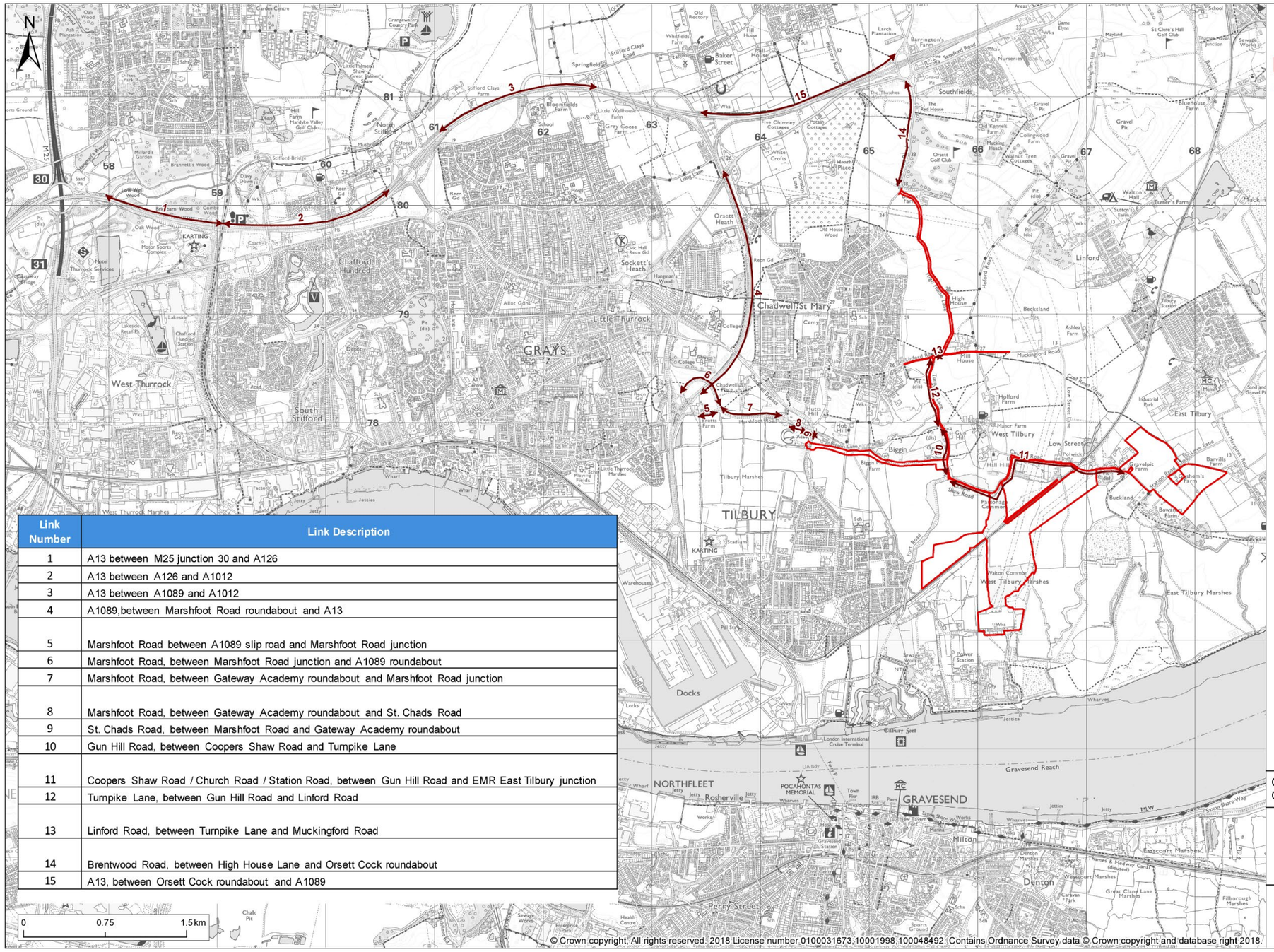
9.1.6 When the site is decommissioned, the process will require its removal from site which will generate associated vehicle movements, including HGV movements. Since there is no further use for the materials, such materials can be removed in bulk after demolition without the care that is taken during construction. This means that larger payloads can be achieved and the traffic flows associated with decommissioning are lower than those during its construction. Thus the assessment for the construction phase is deemed to cover that for the decommissioning phase.

9.1.7 An assessment of the construction traffic flows against 2021 baseline traffic flows demonstrate changes that would not be noticeable to other drivers and would not create or add to any existing levels of congestion.

9.1.8 An assessment of the cumulative construction traffic flows with other emerging developments against 2021 baseline traffic flows produced the same conclusion.

9.1.9 It was thus concluded that the construction traffic flows would not result in a ‘severe’ residual cumulative impact on the road network or an unacceptable impact on highway safety (NPPF test) along the local road network.

9.1.10 It is therefore considered that there are no transport or highways reasons for not permitting the development.



Link Number	Link Description
1	A13 between M25 junction 30 and A126
2	A13 between A126 and A1012
3	A13 between A1089 and A1012
4	A1089,between Marshfoot Road roundabout and A13
5	Marshfoot Road between A1089 slip road and Marshfoot Road junction
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction
12	Turnpike Lane, between Gun Hill Road and Linford Road
13	Linford Road, between Turnpike Lane and Muckingford Road
14	Brentwood Road, between High House Lane and Orsett Cock roundabout
15	A13, between Orsett Cock roundabout and A1089

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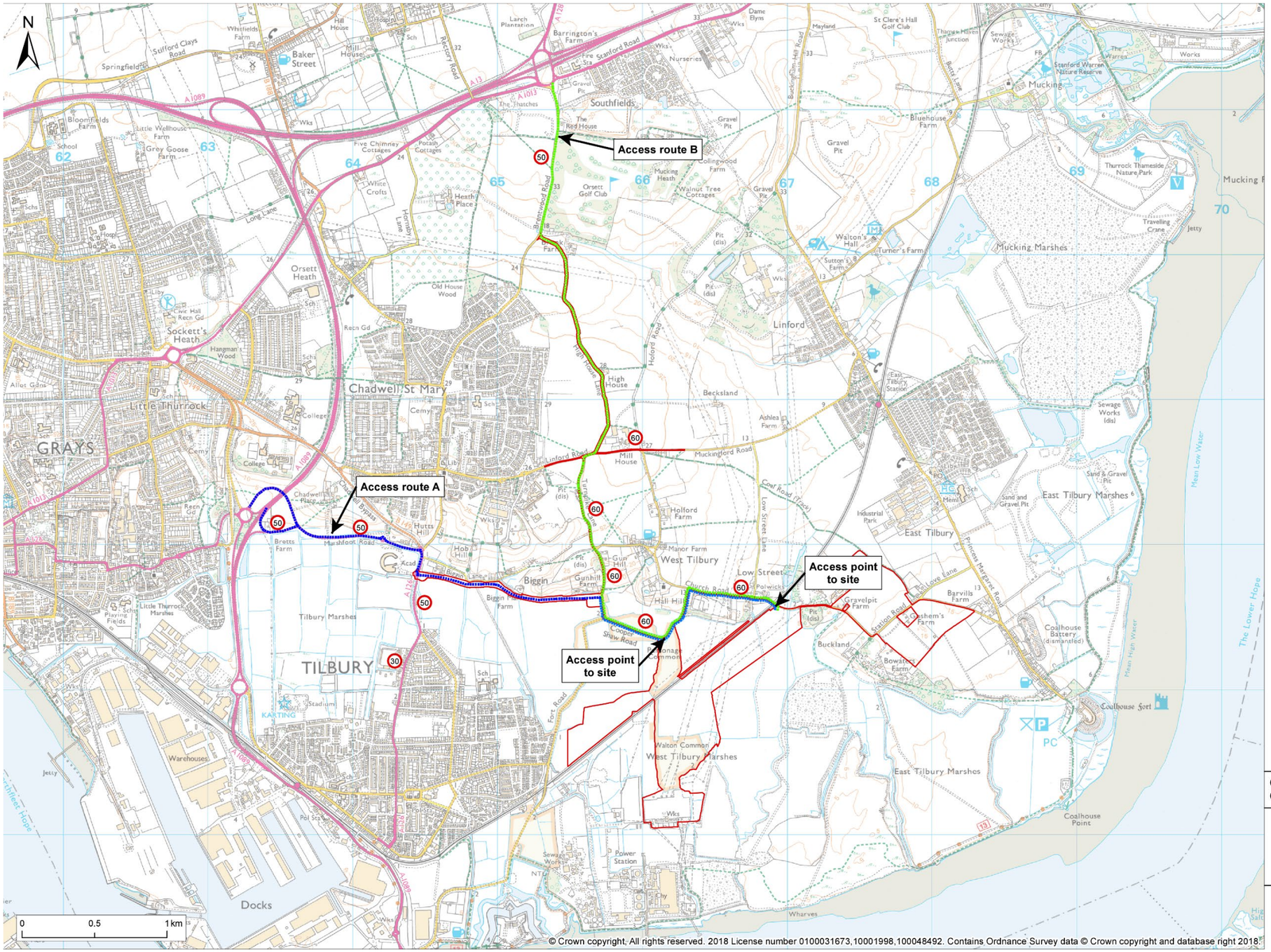
Checked by: RT Doc no: 10872-0061-03

Thurrock Flexible Generation Plant
Link Locations

Figure 9.1: Link Locations.



Legend

- Development boundary
- Access route A
- Access route B
- Speed limit (mph)

Created by: MS	Scale: A3@ 1:30,000	Date: 01/10/2018
Checked by: CD	Doc no: 10872-0074-01	

Thurrock Flexible Generation Plant
Route Access Options

Figure 9.2:Route Access Plan.

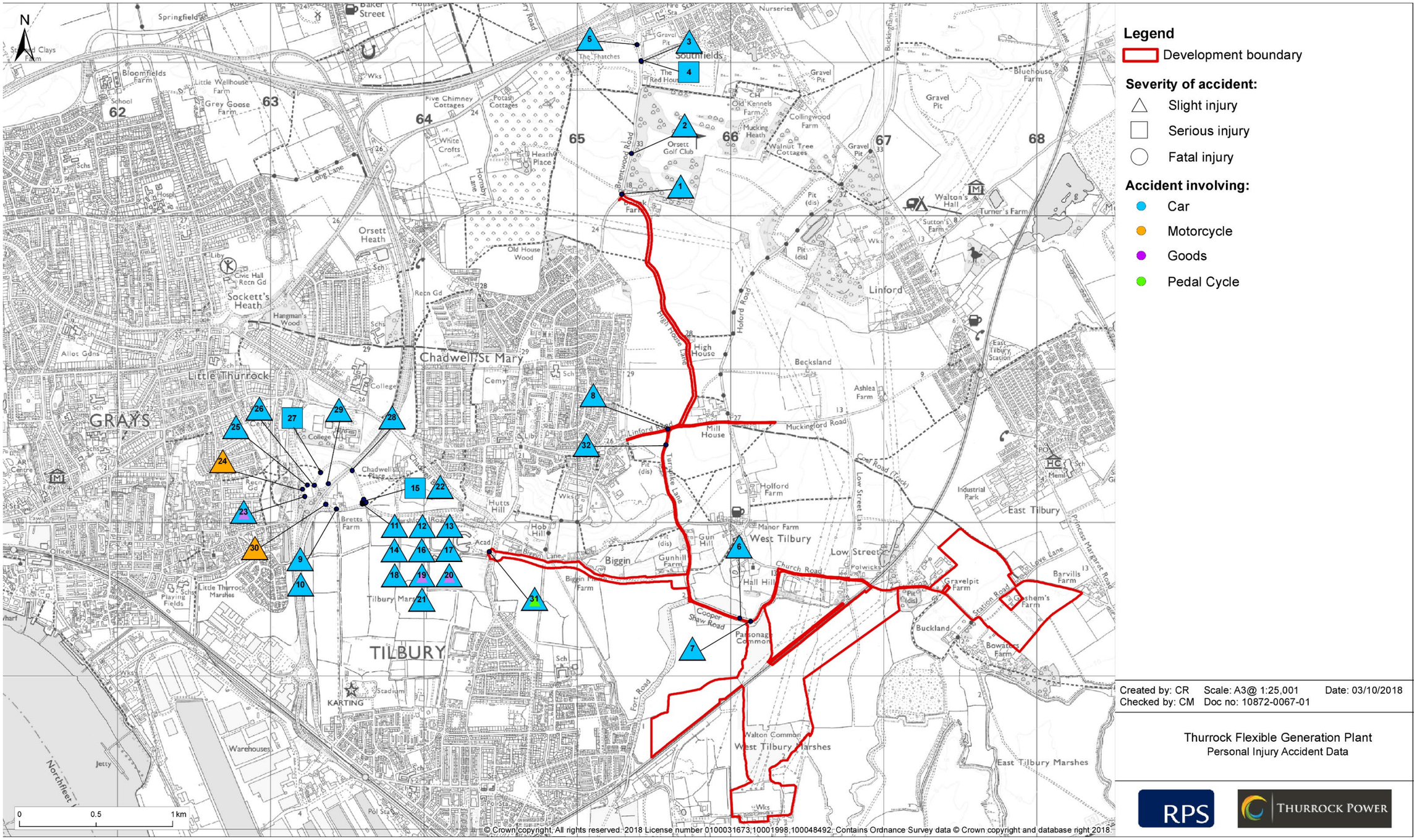


Figure 9.3: Personal Injury Accidents.

10. References

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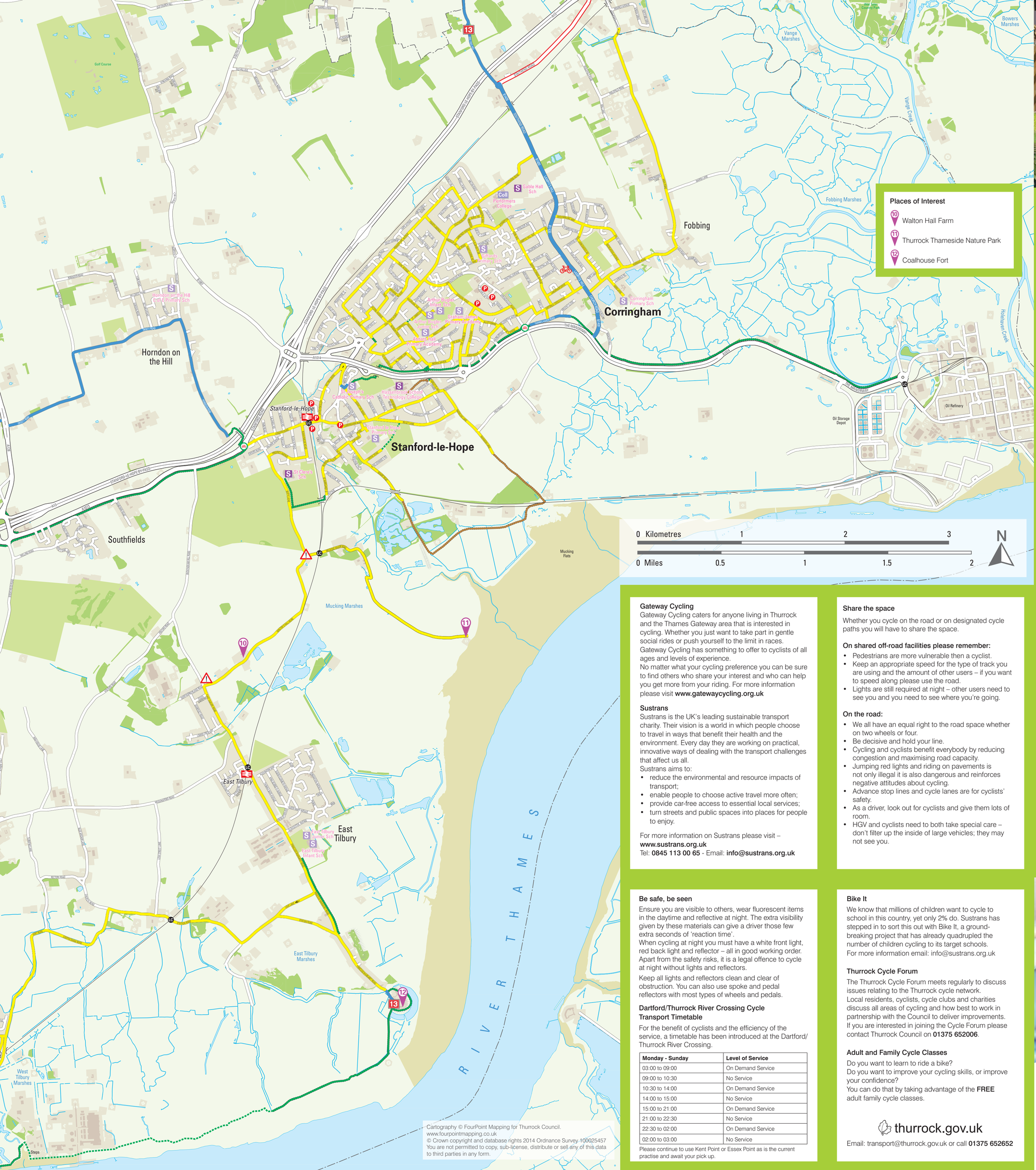
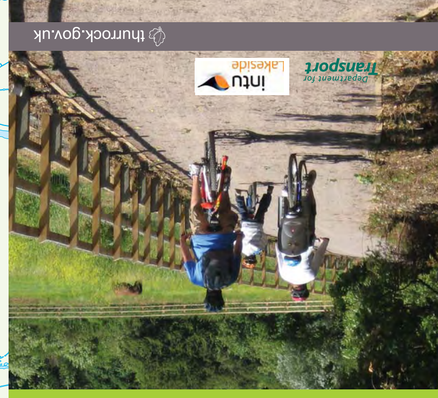
Annex A Thurrock Cycle Routes

Cranham
West Horndon Industrial Est
Trading Est
Trading Est
Clay Tye Wood
Playing Field
Frank's Wood
M25
North Ockendon
Bulphan
Bulphan C of E Voluntary Controlled Primary Sch
Orsett Fen
Orsett Park
Orsett
Orsett C of E Primary
Grange Waters Country Park
Benyon Primary Sch
Ockendon
South Ockendon
Thurrock Academy
Beacon Hill Academy
Bonnygate Primary Sch
Dilkes Academy
Shaw Primary Academy
Holy Cross Catholic Primary Sch
Somers Heath Primary Sch
Ash Plantation
White Post Wood
Golf Course
Kennington Park Country Park
Kennington's Primary Academy
Ormiston Park Academy
Wennington
Aveley
Aveley Primary Sch
Brannett's Wood
Golf Course
William Edwards Sch
Stifford Clays Primary Sch
North Stifford
Demesne Primary Sch
Orsett Heath
Treetops Sch
Chadwell St Mary
Tudor Court Primary Sch
Chafford Hundred
Lakeside
Warren Primary Sch
Hathaway Academy
Little Thurrock
Little Thurrock Primary Sch
Woodside Academy
Coll South Essex College
Herringham Primary Academy
Chadwell St Mary Primary Sch
Coll Palmers College
Sports Grds
Aveley Marshes
Watt's Wood
St Cleres Primary Academy
Purfleet
Beacon Hill
Purfleet
Collection point for transport over bridge
West Thurrock
West Thurrock Academy
Harris Primary Academy
South Stifford
Depot
Grays
St Thomas of Canterbury Catholic Primary Sch
Grays Convent High Sch
Quarry Hill Academy
Belmont Castle Academy
Coll Thurrock Learning Campus
Coll Thurrock Adult Community College
Thameside Primary Sch
Playing Field
Gateway Primary Free Sch
The Gateway Academy
Tilbury
Manor Primary Sch
Tilbury Town
Woodlands Primary Academy
St Mary's Catholic Primary Sch
West Tilbury Marshes
Docks
Steps
Ferry to Gravesend
West Thurrock Marshes
Swanscombe Marshes
RIVER THAMES
Long Reach
Dartford Tunnel (toll)
NO CYCLING
Local links and links to villages (traffic volumes may vary according to time of day)
Signed cycle route
On-road cycle lane
Traffic-free route
Bridleway (surfaces may vary)
Walk your bike section
National Cycle Network Route numbers
Railway with station
Pedestrian crossing
Toucan crossing
Bike shop
Primary school
Secondary school
Special school
College
Take care
Cycle parking
Place of interest (named and numbered)
Level crossing
Borough boundary
Ferry
One way

Places of Interest
1 Rainham Marshes R.S.P.B. Nature Reserve
2 High House Production Park
3 Grays Beach Riverside Park
4 Tilbury to Gravesend Ferry
5 Tilbury Fort
6 Chafford Gorges Nature Park
7 intu Lakeside
8 Davy Down Country Park
9 Belhus Woods Country Park
0 Kilometres 1 2 3
0 Miles 0.5 1 1.5 2
N





Thurrock Cycle Map

Travel Thurrock

Cycle Shops in Thurrock

Thurrock Cycle Centre, 55 Southend Rd, Grays	01375 379221
The Bike Shop,10 Clarence Road, Grays	01375 372679
Corringham Cycles, 47 Lampits Hill, Corringham	01375 644067
Halfords Superstore, West Thurrock Way, West Thurrock	01708 862980
Evans Cycles Lakeside Retail Park, West Thurrock	01708 804988
Decathlon Tunnel Retail Park, Lakeside	01708 895650

Council Contacts

Highways	01375 413866
Road Safety Manager & Bike It	01375 413369
Public Rights of Way	01375 373949

Other Useful Contacts

www.thurrock.gov.uk/travel	
Thurrock Cycle Forum and Map	01375 652006
Basildon District Council - www.basildon.gov.uk	01268 533333
Gravesham Borough Council - www.gravesham.gov.uk	01474 337000
London Borough of Havering - www.havering.gov.uk	01708 432804
QE2 Bridge Crossing	01322 221603
Gateway Cycling - www.gatewaycycling.org.uk	
Thurrock Council - www.thurrock.gov.uk	01375 652652
Sustrans Rangers - sustrans.thurrock@yahoo.co.uk	
Bike Week - www.bikeweek.org.uk	
Lakeside Shopping Centre - www.intu.co.uk/lakeside	
Tilbury Ferry	07973 390124

Scan this code with your smart phone to go to **www.thurrock.gov.uk/travel**

Gateway Cycling

Gateway Cycling caters for anyone living in Thurrock and the Thames Gateway area that is interested in cycling. Whether you just want to take part in gentle social rides or push yourself to the limit in races. Gateway Cycling has something to offer to cyclists of all ages and levels of experience.
No matter what your cycling preference you can be sure to find others who share your interest and who can help you get more from your riding. For more information please visit **www.gatewaycycling.org.uk**

Sustrans

Sustrans is the UK's leading sustainable transport charity. Their vision is a world in which people choose to travel in ways that benefit their health and the environment. Every day they are working on practical, innovative ways of dealing with the transport challenges that affect us all.
Sustrans aims to:

- reduce the environmental and resource impacts of transport;
- enable people to choose active travel more often;
- provide car-free access to essential local services;
- turn streets and public spaces into places for people to enjoy.

For more information on Sustrans please visit – **www.sustrans.org.uk**
Tel: **0845 113 00 65** - Email: **info@sustrans.org.uk**

Share the space

Whether you cycle on the road or on designated cycle paths you will have to share the space.

On shared off-road facilities please remember:

- Pedestrians are more vulnerable then a cyclist.
- Keep an appropriate speed for the type of track you are using and the amount of other users – if you want to speed along please use the road.
- Lights are still required at night – other users need to see you and you need to see where you're going.

On the road:

- We all have an equal right to the road space whether on two wheels or four.
- Be decisive and hold your line.
- Cycling and cyclists benefit everybody by reducing congestion and maximising road capacity.
- Jumping red lights and riding on pavements is not only illegal it is also dangerous and reinforces negative attitudes about cycling.
- Advance stop lines and cycle lanes are for cyclists' safety.
- As a driver, look out for cyclists and give them lots of room.
- HGV and cyclists need to both take special care – don't filter up the inside of large vehicles; they may not see you.

Common road signs and markings that you may come across when out cycling.

No entry (for all vehicles including cycles)

Motor vehicles prohibited (cycles permitted)

No cycling

Segregated route

Route for use by pedal cycles only

Shared route for cyclists and pedestrian together

With-flow cycle lane ahead

Cycle lane

Cycle route

End of cycle route

Cyclists dismount

Direction sign showing recommended route

Cycle parking

Cycle route forming part of the National Cycle Network

Be safe, be seen

Ensure you are visible to others, wear fluorescent items in the daytime and reflective at night. The extra visibility given by these materials can give a driver those few extra seconds of 'reaction time'.
When cycling at night you must have a white front light, red back light and reflector – all in good working order. Apart from the safety risks, it is a legal offence to cycle at night without lights and reflectors.

Keep all lights and reflectors clean and clear of obstruction. You can also use spoke and pedal reflectors with most types of wheels and pedals.

Dartford/Thurrock River Crossing Cycle Transport Timetable

For the benefit of cyclists and the efficiency of the service, a timetable has been introduced at the Dartford/Thurrock River Crossing.

Monday - Sunday	Level of Service
03:00 to 09:00	On Demand Service
09:00 to 10:30	No Service
10:30 to 14:00	On Demand Service
14:00 to 15:00	No Service
15:00 to 21:00	On Demand Service
21:00 to 22:30	No Service
22:30 to 02:00	On Demand Service
02:00 to 03:00	No Service

Please continue to use Kent Point or Essex Point as is the current practise and await your pick up.

Bike It

We know that millions of children want to cycle to school in this country, yet only 2% do. Sustrans has stepped in to sort this out with Bike It, a ground-breaking project that has already quadrupled the number of children cycling to its target schools.
For more information email: info@sustrans.org.uk

Thurrock Cycle Forum

The Thurrock Cycle Forum meets regularly to discuss issues relating to the Thurrock cycle network.
Local residents, cyclists, cycle clubs and charities discuss all areas of cycling and how best to work in partnership with the Council to deliver improvements.
If you are interested in joining the Cycle Forum please contact Thurrock Council on **01375 652006**.

Adult and Family Cycle Classes

Do you want to learn to ride a bike?
Do you want to improve your cycling skills, or improve your confidence?
You can do that by taking advantage of the **FREE** adult family cycle classes.

thurrock.gov.uk

Email: transport@thurrock.gov.uk or call **01375 652652**

Annex B Thurrock Bus Routes

Thurrock bus routes

thurrock.gov.uk/travel

to Romford via Harold Wood

to Romford via Hornchurch

269 Brentwood

Great Warley

St. Mary's Lane

Upminster Station

Corbets Tey

North Ockendon

347

Ockendon Station

to Hornchurch

Elm Park

Daiglen Drive

Ockendon Academy

Darenth Lane

Belhus *Derwent Parade*

11 22 22A

Aveley *Usk Road*

Aveley *The Village*

12

Aveley *High Street*

Belhus *Foyle Drive*

Rainham

Wennington

Mill Road

Stifford Road

South Road

Stifford Hill

North Stifford *Dog & Partridge*

Stifford Clays Road

Kingsman Drive

Stifford Clays *Crammavill Street*

Pilgrims Lane

Love Lane

Lakeside Bus Station

22 22A 33 44

66 73 73A 83

88 100 201

370 372 X80

London Road (Aveley)

Thurrock FC

11

Arterial Road *Harvester*

Long Lane

Thurrock Community Hospital

Blackshots Lane

Jesmond Road

Treacle Mine

Blackshots Leisure Centre

Uplands Estate

Thurrock Services *for Lakeside Retail Park*

Arterial Road *Sainsbury's*

New Tank Hill Road *RSPB*

Garrison Estate

Chafford Hundred Station

Elizabeth Road

Hathaway Academy

Hathaway Road

Harris Academy

Chafford Hundred *Drake Road*

Lenthall Avenue

Hogg Lane

11 Purfleet Station

IKEA *for Lakeside Retail Park*

West Thurrock Way

London Road *The Ship*

Royal Opera House

Motherwell Way

Grays Station

Palmers Avenue

22A 66

East Thurrock Road

Broadway

Chadwell Road

Palmers College/ South Essex College

River View

Stonehouse Corner

London Road *The Rabbits*

London Road *Red Lion*

Grays Bus Station

22 22A 33 44

66 73 73A 83

88 100 200 201

265 269 374

Dartford Crossing M25

Crossways

Stone Crossing Station

Greenhithe Station

X80 **Bluewater Shopping Centre**

RIVER THAMES

to Brentwood

265 **West Horndon Station**

Bulphan Motel

Bulphan Church

565 **Recreation Ground**

Baker Street

Orsett Hospital

Horndon-on-the Hill

South Hill

Orsett Cock

Rookery Corner

Butts Lane

Heath Road

66 83 Chadwell St. Mary, Longhouse Road, Defoe Parade

King Edward Drive

Socketts Heath *The Oak*

Cross Keys

Waterson Road

Linford Road

Gateway Academy

West Tilbury

St. Chad's Road

Feenan Highway

Tilbury *ASDA*

99

Tilbury Town Station

22A 73 73A Tilbury Civic Square

The Ship

Coalhouse Fort

Fort Road *for Tilbury Fort*

Port of Tilbury

Tilbury Town Station

London International Cruise Terminal

99 **Tilbury Landing Stage**

Gravesend

to Billericay and Chelmsford

11 100 200 201 374

Basildon Bus Station

Laindon

Basildon *Hospital*

Vange *Five Bells*

Lampits Hill

Greathouse Chase

Corringham *Leisure Centre*

Homesteads *Southend Road*

Corringham *Social Club*

Marsh Lane

Abbotts Drive

Corringham Town Centre

Digby Road

Stanford-le-Hope *Town Centre*

Hassenbrook Academy

Stanford-le-Hope Station

Walton's Hall Road

East Tilbury Station

East Tilbury *Coronation Avenue*

Key

11	99
11 School journeys only..	100
12	200, 201
22, 22A	201 Sundays only
22A Sundays only	265
33	269
44	347
66	370
73, 73A	372
73A Sundays only	374
83	565
88	X80

Railway and Station

Tilbury-Gravesend Ferry Service

Produced by FWT 19.3.15 www.fwt.co.uk

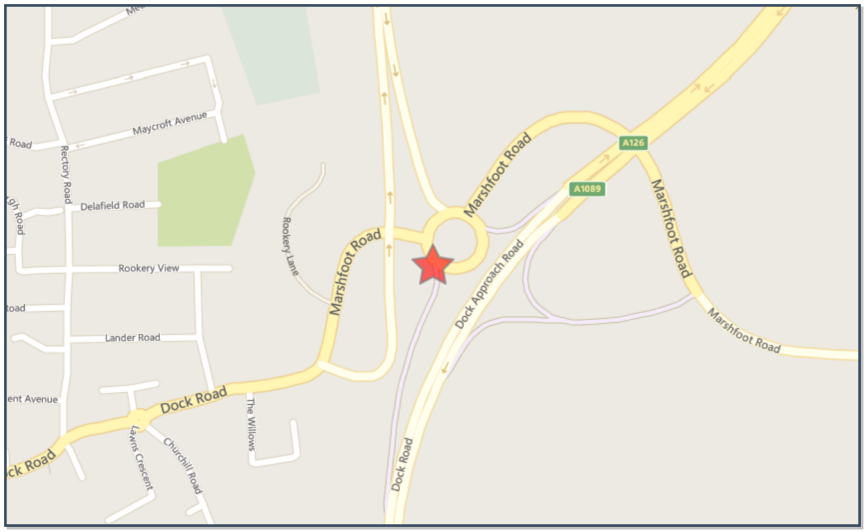
thurrock.gov.uk

Annex C Crashmap Reports

crashmap.co.uk

Crash Date:	Monday, April 22, 2013	**Time of Crash:**	1:25:00 PM	**Crash Reference:**	**201342I107404**

Highest Injury Severity:	Slight	**Road Number:**	A1089	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	3
Local Authority:	Thurrock			**OS Grid Reference:**	563226 178169
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Goods vehicle 7.5 tonnes mgw and over	3	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Journey as part of work	None	None
2	Goods vehicle 7.5 tonnes mgw and over	3	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Journey as part of work	None	None
3	Car (excluding private hire)	13	Male	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

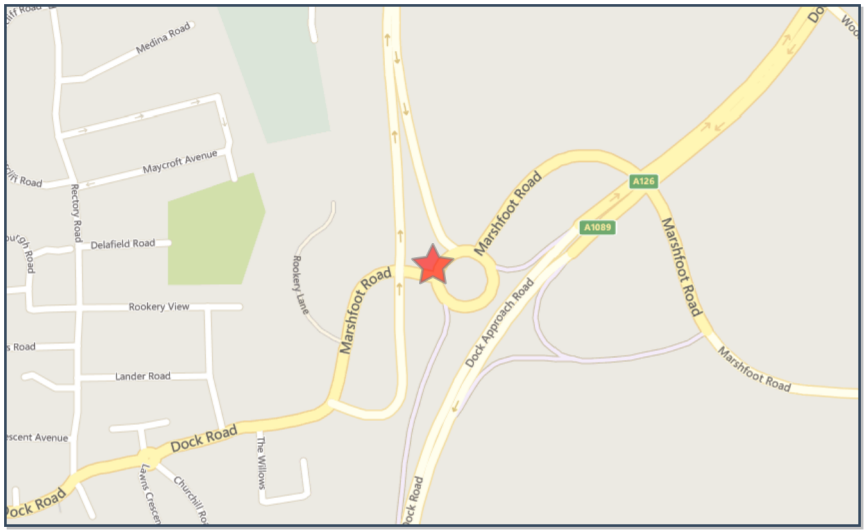
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Monday, October 03, 2016	**Time of Crash:**	6:39:00 AM	**Crash Reference:**	**2016420111611**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	1
Local Authority:	Thurrock			**OS Grid Reference:**	563211 178216
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

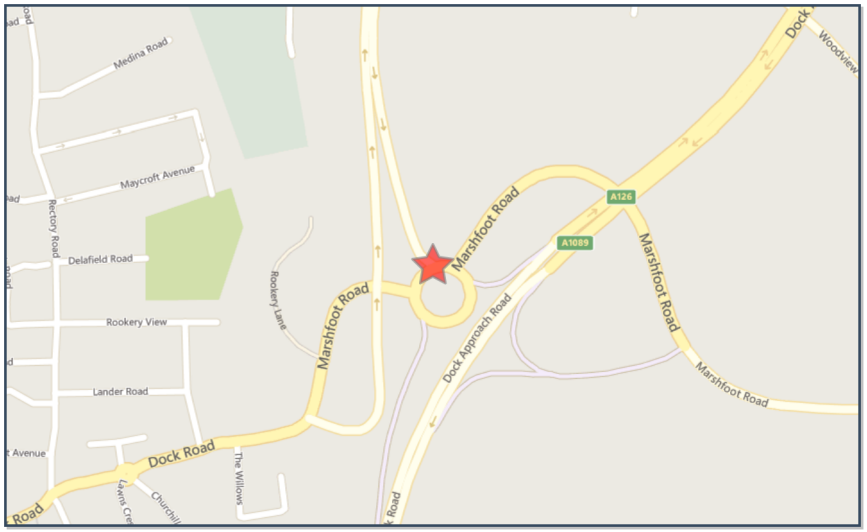
Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Motorcycle over 500cc	5	Male	26 - 35	Vehicle is slowing down or stopping	Front	Commuting to/from work	None	Road sign/Traffic signal

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Wednesday, September 14, 2016	**Time of Crash:**	2:25:00 PM	**Crash Reference:**	**2016420106191**
Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	1
Local Authority:	Thurrock			**OS Grid Reference:**	563243 178243
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	70				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

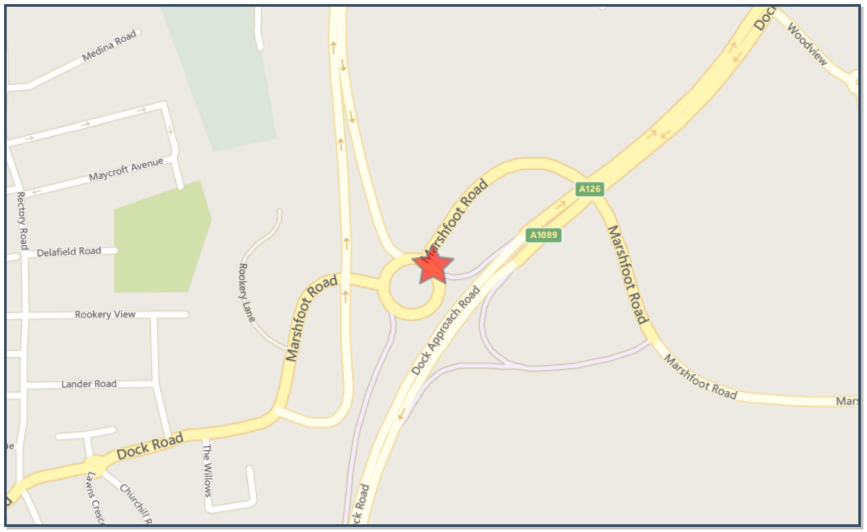
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Friday, July 18, 2014	**Time of Crash:**	5:39:00 PM	**Crash Reference:**	**201442I233807**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563288 178241
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	8	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)	11	Female	46 - 55	Vehicle is waiting to proceed normally but is held up	Back	Other	None	None

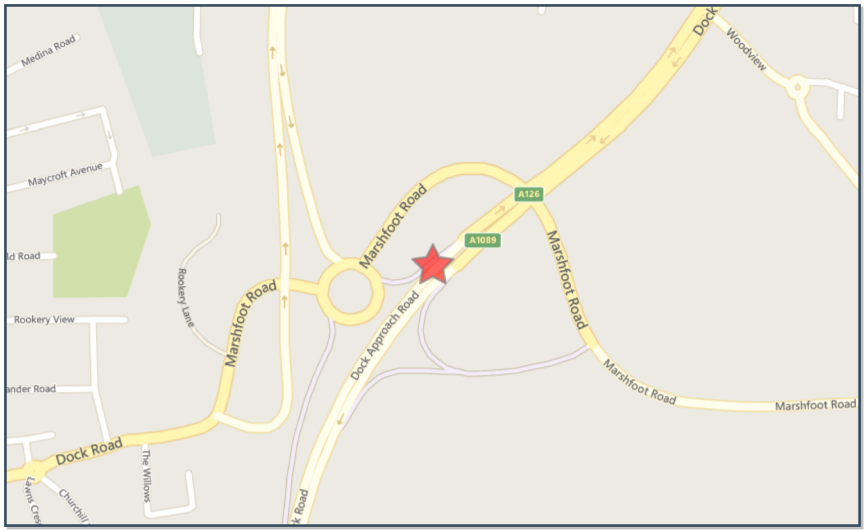
Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other

crashmap.co.uk

Crash Date:	Tuesday, March 12, 2013	**Time of Crash:**	9:00:00 AM	**Crash Reference:**	**201342I065203**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	1
Local Authority:	Thurrock			**OS Grid Reference:**	563379 178251
Weather Description:	Other				
Road Surface Description:	Snow				
Speed Limit:	70				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Slip road				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Dual carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	10	Female	36 - 45	Vehicle proceeding normally along the carriageway, on a left hand bend	Back	Journey as part of work	None	Lamp post

Casualties

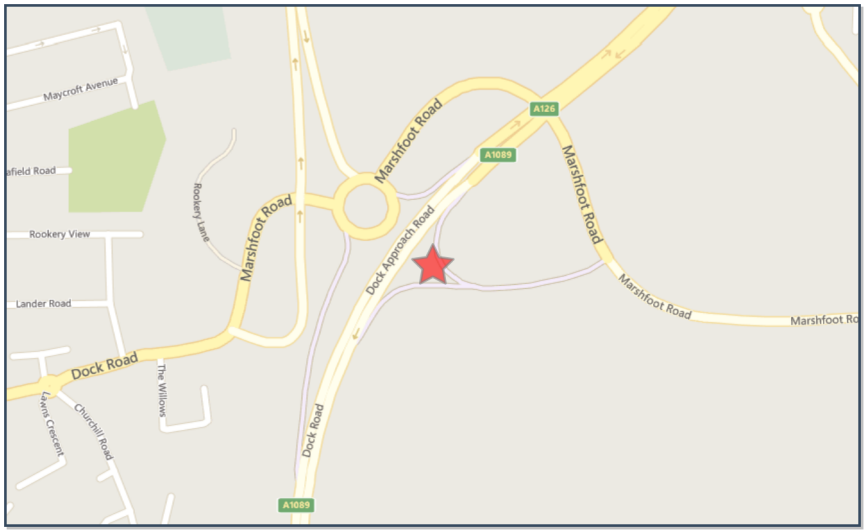
Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	36 - 45	Unknown or other	Unknown or other

crashmap.co.uk

2017 data is provisional and is subject to change

Crash Date:	Wednesday, August 02, 2017	**Time of Crash:**	9:00:00 AM	**Crash Reference:**	**2017420206746**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	1
Local Authority:	Thurrock			**OS Grid Reference:**	563362 178117
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Slip road				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

2017 data is provisional and is subject to change

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Motorcycle over 500cc	-1	Male	45-54	Vehicle proceeding normally along the carriageway, on a left hand bend	Unknown	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	45-54	Unknown or other	Unknown or other

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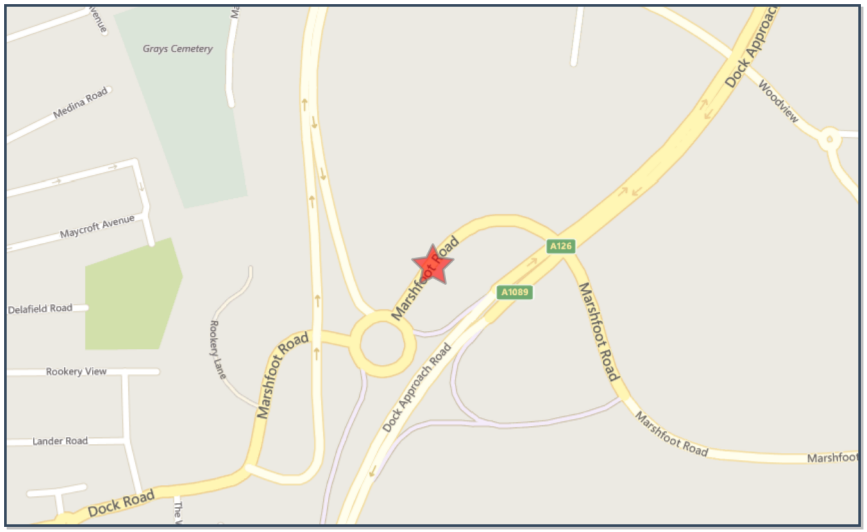
Crash Date:	Wednesday, October 15, 2014	**Time of Crash:**	9:20:00 PM	**Crash Reference:**	**201442I343710**

Highest Injury Severity:	Serious	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	1
Local Authority:	Thurrock			**OS Grid Reference:**	563328 178326
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	50				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	17	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Other	None	Lamp post

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Male	46 - 55	Unknown or other	Unknown or other

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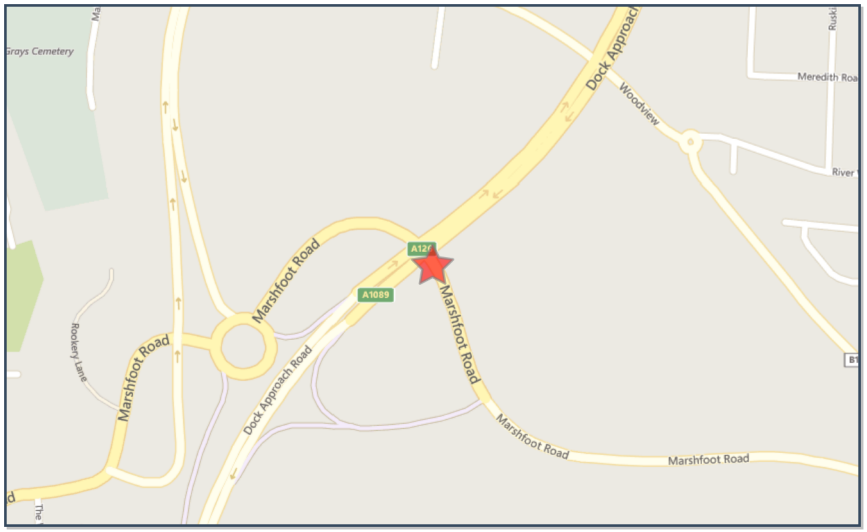
Crash Date:	Wednesday, April 09, 2014	**Time of Crash:**	2:30:00 PM	**Crash Reference:**	**201442I113304**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	2
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563536 178337
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	Unknown	Vehicle proceeding normally along the carriageway, not on a bend	Back	Other	None	None
2	Car (excluding private hire)	13	Male	56 - 65	Vehicle is slowing down or stopping	Did not impact	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other
2	2	Slight	Vehicle or pillion passenger	Male	56 - 65	Unknown or other	Unknown or other

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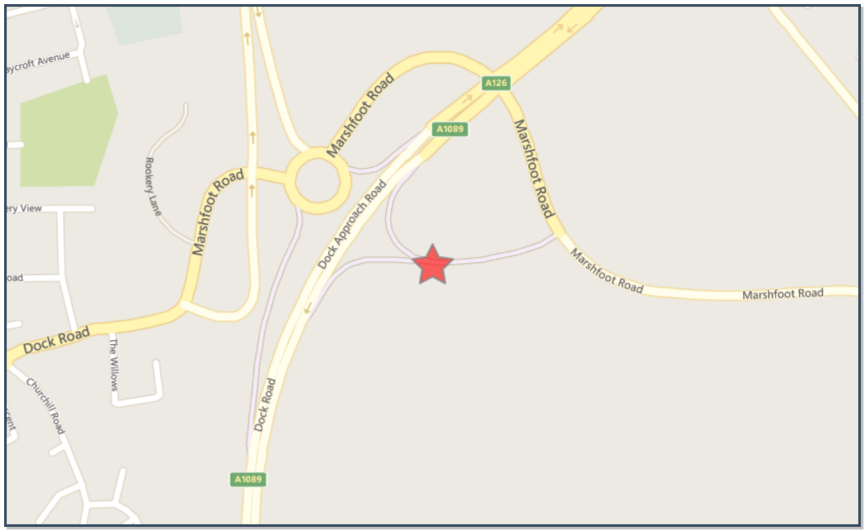
Crash Date:	Friday, July 12, 2013	**Time of Crash:**	5:25:00 PM	**Crash Reference:**	**201342I198407**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	2
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563433 178087
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Slip road				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Slip Road				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	13	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)	14	Male	21 - 25	Vehicle is in the act of turning right	Offside	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other
2	2	Slight	Driver or rider	Male	21 - 25	Unknown or other	Unknown or other

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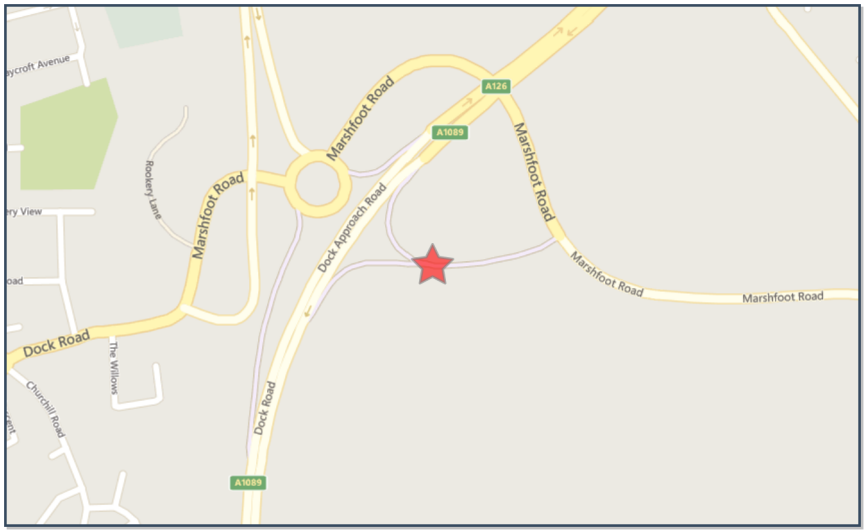
Crash Date:	Friday, September 18, 2015	**Time of Crash:**	3:40:00 PM	**Crash Reference:**	**201542I292709**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563435 178087
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Slip road				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	3	Female	Unknown	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None
2	Car (excluding private hire)	8	Female	16 - 20	Vehicle is waiting to turn left	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	16 - 20	Unknown or other	Unknown or other

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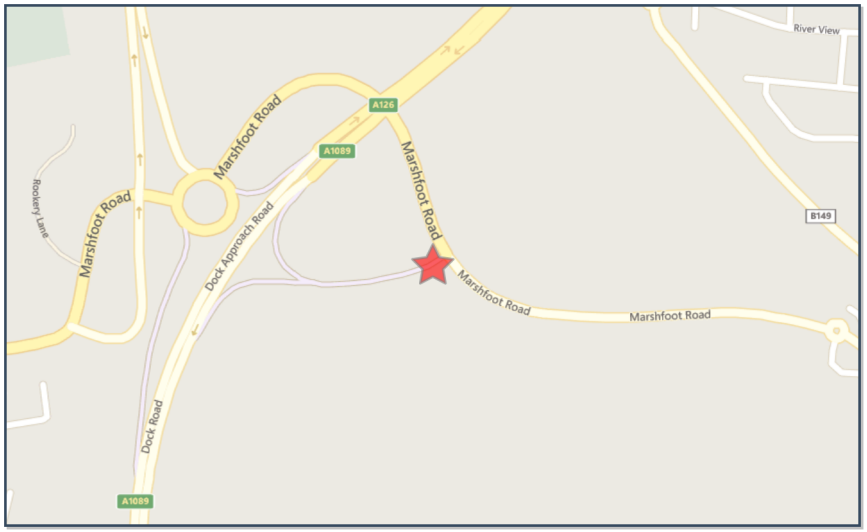
Crash Date:	Friday, March 27, 2015	**Time of Crash:**	6:10:00 PM	**Crash Reference:**	**201542I094803**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563602 178119
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	14	Male	36 - 45	Vehicle is in the act of turning right	Front	Other	None	None
2	Car (excluding private hire)	-1	Female	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	36 - 45	Unknown or other	Unknown or other

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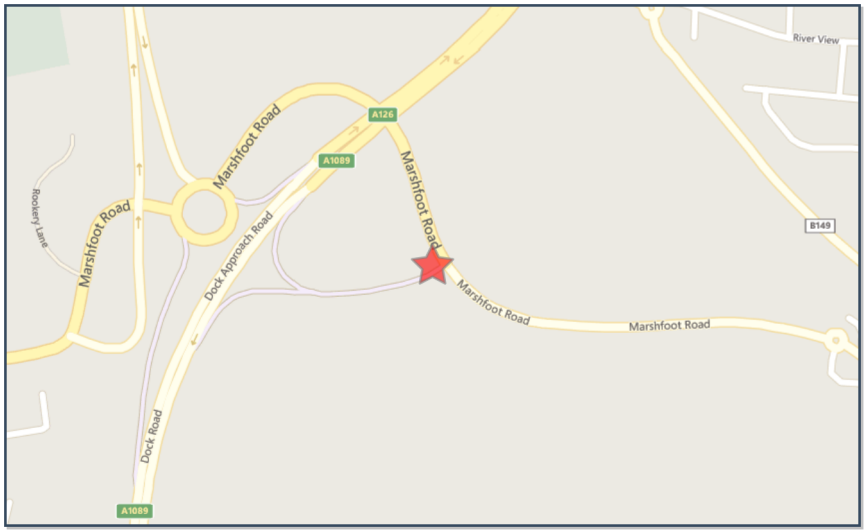
Crash Date:	Sunday, November 06, 2016	**Time of Crash:**	2:50:00 PM	**Crash Reference:**	**2016420123214**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563602 178130
Weather Description:	Fine without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	6	Male	46 - 55	Vehicle is in the act of turning right	Offside	Other	None	None
2	Car (excluding private hire)	10	Male	46 - 55	Vehicle proceeding normally along the carriageway, on a right hand bend	Nearside	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Vehicle or pillion passenger	Male	0 - 5	Unknown or other	Unknown or other

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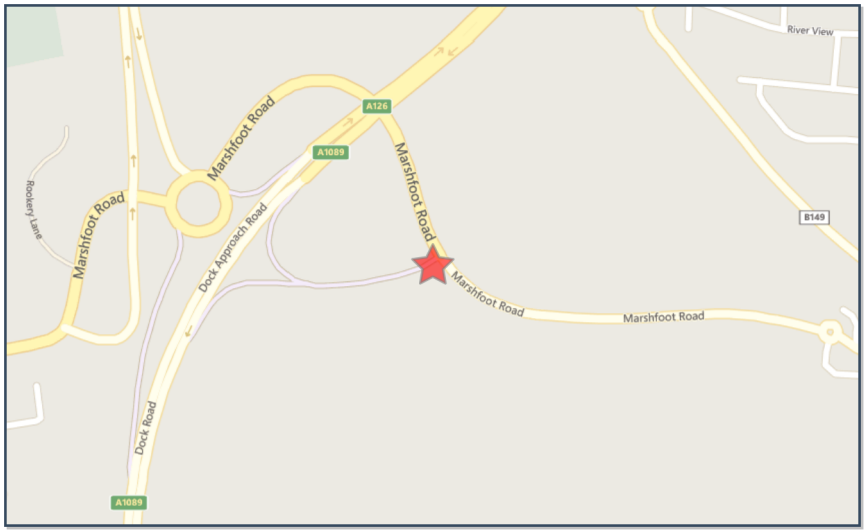
Crash Date:	Sunday, July 27, 2014	**Time of Crash:**	2:30:00 PM	**Crash Reference:**	**201442I258607**

Highest Injury Severity:	Slight	**Road Number:**	A1089	**Number of Casualties:**	2
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563609 178128
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Slip road				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Slip Road				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	16 - 20	Vehicle is waiting to turn left	Front	Other	None	None
2	Car (excluding private hire)	14	Male	26 - 35	Vehicle is waiting to turn left	Back	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other
2	2	Slight	Vehicle or pillion passenger	Female	26 - 35	Unknown or other	Unknown or other

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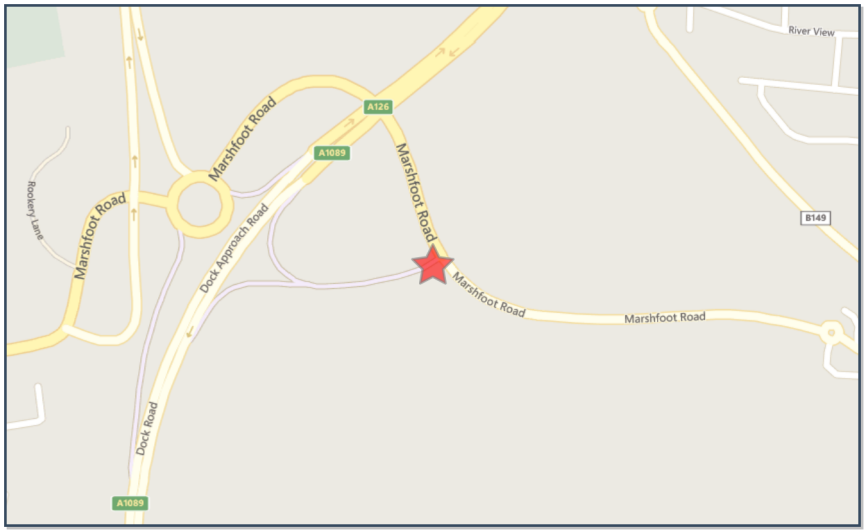
Crash Date:	Monday, August 29, 2016	**Time of Crash:**	10:40:00 PM	**Crash Reference:**	**2016420099805**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563610 178124
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	1	Male	26 - 35	Vehicle is moving off	Offside	Other	None	None
2	Car (excluding private hire)	10	Male	26 - 35	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other

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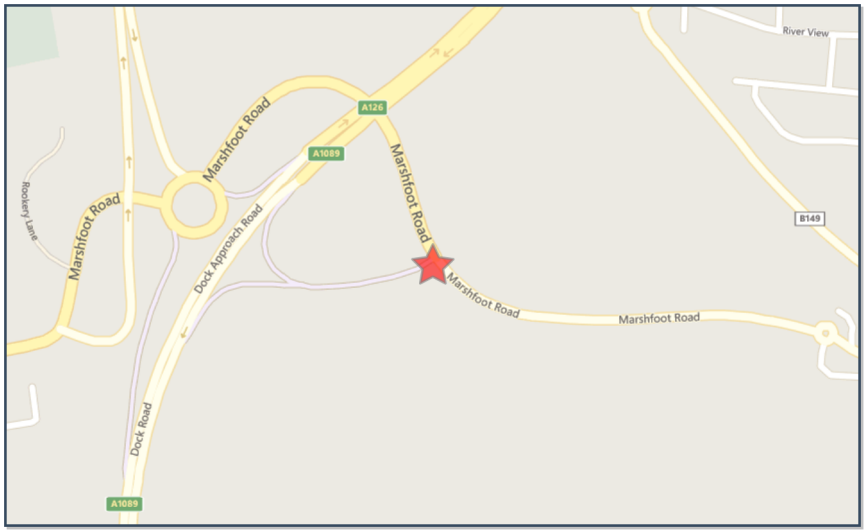
Crash Date:	Monday, August 18, 2014	**Time of Crash:**	2:37:00 PM	**Crash Reference:**	**201442I269308**

Highest Injury Severity:	Serious	**Road Number:**	A126	**Number of Casualties:**	2
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563616 178130
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	12	Female	21 - 25	Vehicle is in the act of turning right	Offside	Taking pupil to/from school	None	None
2	Taxi/Private hire car	5	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Serious	Driver or rider	Female	21 - 25	Unknown or other	Unknown or other
2	2	Slight	Vehicle or pillion passenger	Female	46 - 55	Unknown or other	Unknown or other

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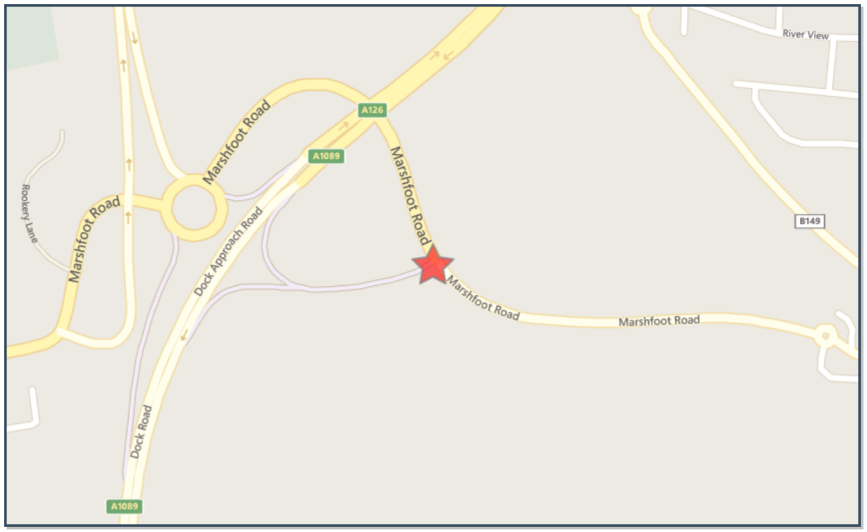
Crash Date:	Saturday, January 28, 2017	**Time of Crash:**	1:45:00 PM	**Crash Reference:**	**2017420150169**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563618 178127
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

2017 data is provisional and is subject to change

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	25-34	Vehicle is in the act of turning right	Unknown	Other	None	None
2	Car (excluding private hire)	-1	Female	25-34	Vehicle proceeding normally along the carriageway, on a right hand bend	Unknown	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Vehicle or pillion passenger	Male	25-34	Unknown or other	Unknown or other

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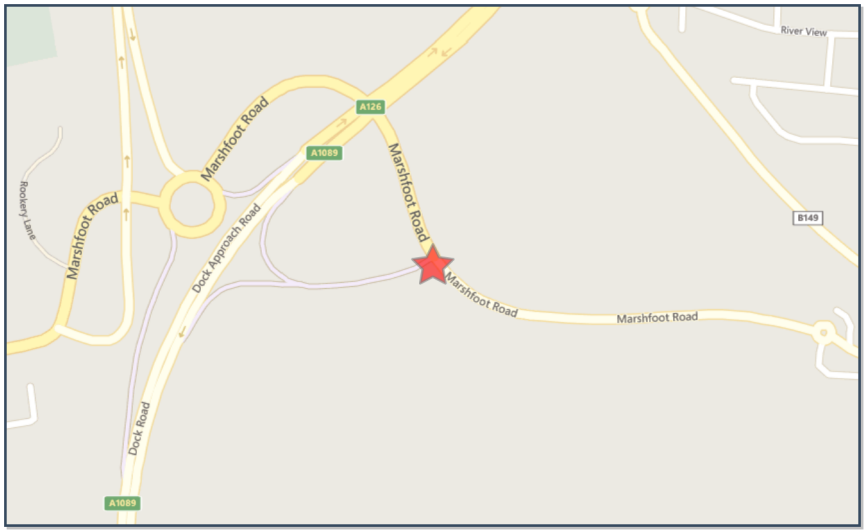
Crash Date:	Monday, November 14, 2016	**Time of Crash:**	3:09:00 PM	**Crash Reference:**	**2016420126232**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563621 178127
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	Central refuge - no other controls				
Road Type:	One way street				
Junction Control:	Not Applicable				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	1	Female	21 - 25	Vehicle is waiting to turn right	Front	Other	None	None
2	Car (excluding private hire)	5	Male	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Journey as part of work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	21 - 25	Unknown or other	Unknown or other

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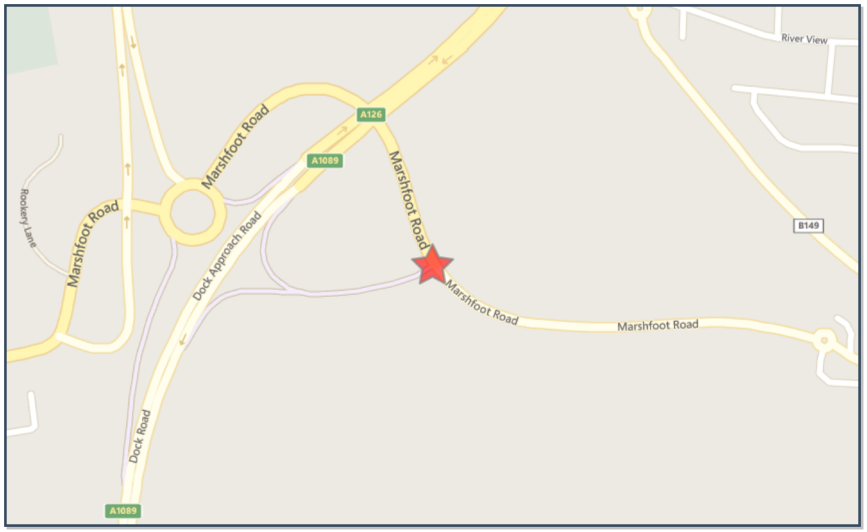
Crash Date:	Thursday, May 12, 2016	**Time of Crash:**	7:07:00 AM	**Crash Reference:**	**2016420065952**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	2
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563619 178130
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	16	Male	26 - 35	Vehicle is in the act of turning right	Front	Commuting to/from work	None	None
2	Car (excluding private hire)	-1	Male	46 - 55	Vehicle proceeding normally along the carriageway, on a right hand bend	Nearside	Commuting to/from work	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other
1	2	Slight	Vehicle or pillion passenger	Male	21 - 25	Unknown or other	Unknown or other

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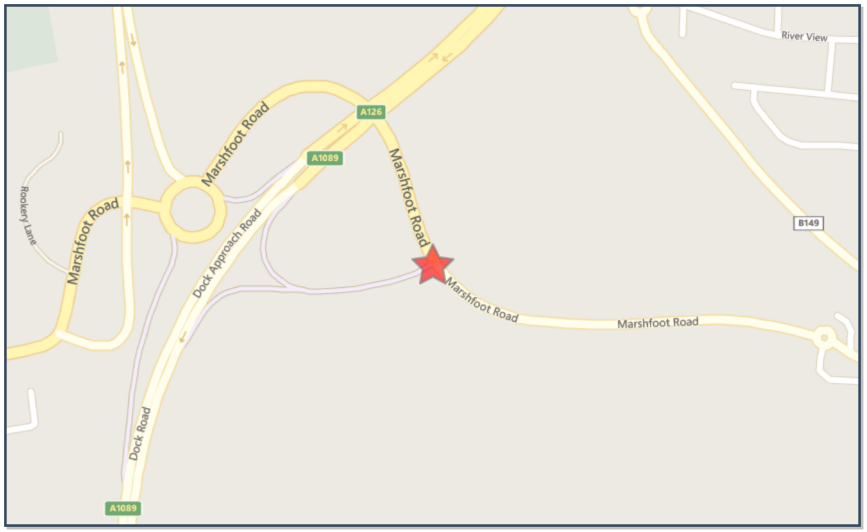
Crash Date:	Monday, February 23, 2015	**Time of Crash:**	12:39:00 PM	**Crash Reference:**	**201542I075502**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563620 178130
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Good vehicles of unknown weight	-1	Male	26 - 35	Vehicle is waiting to turn right	Front	Journey as part of work	None	None
2	Car (excluding private hire)	7	Male	26 - 35	Vehicle is slowing down or stopping	Nearside	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Vehicle or pillion passenger	Male	26 - 35	Unknown or other	Unknown or other

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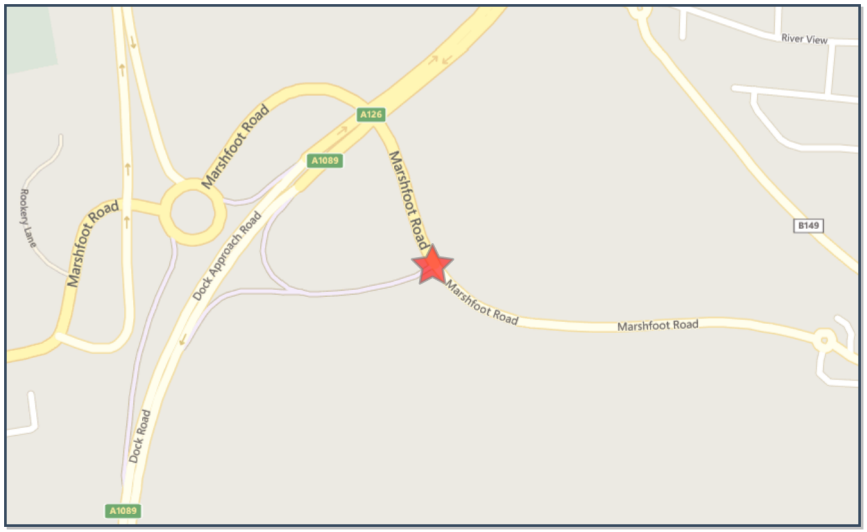
Crash Date:	Tuesday, September 20, 2016	**Time of Crash:**	3:48:00 PM	**Crash Reference:**	**2016420107870**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563619 178132
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Van or goods vehicle 3.5 tonnes mgw and under	5	Male	36 - 45	Vehicle is in the act of turning right	Offside	Commuting to/from work	None	None
2	Car (excluding private hire)	5	Female	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	16 - 20	Unknown or other	Unknown or other

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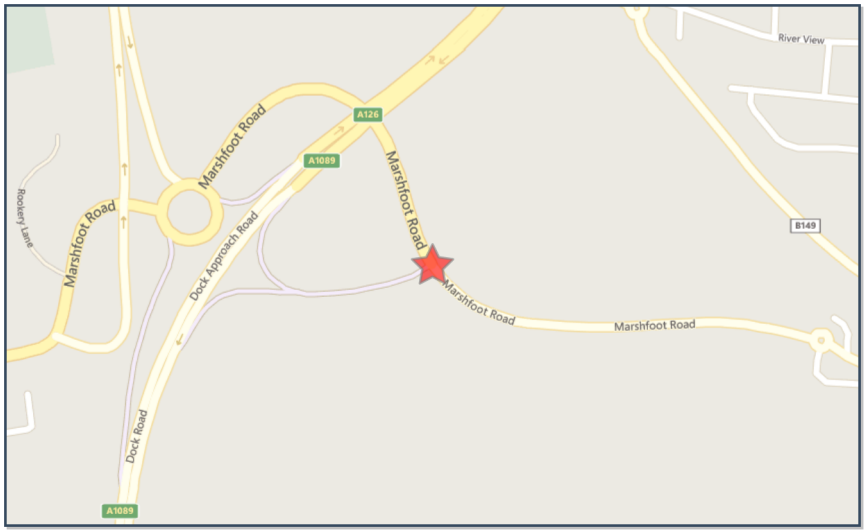
Crash Date:	Wednesday, September 21, 2016	**Time of Crash:**	5:27:00 PM	**Crash Reference:**	**2016420108075**
Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563624 178131
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	8	Female	56 - 65	Vehicle is in the act of turning right	Front	Other	None	None
2	Car (excluding private hire)	13	Female	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	36 - 45	Unknown or other	Unknown or other

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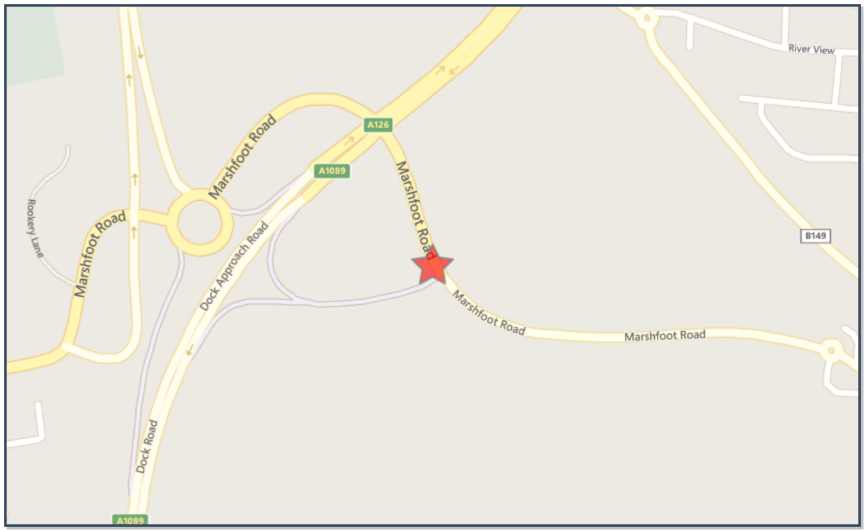
Crash Date:	Monday, July 13, 2015	**Time of Crash:**	9:45:00 AM	**Crash Reference:**	**201542I233207**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	563609 178149
Weather Description:	Raining without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Slip road				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Slip Road				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Taxi/Private hire car	4	Male	Unknown	Vehicle proceeding normally along the carriageway, on a right hand bend	Back	Journey as part of work	None	None
2	Car (excluding private hire)	4	Female	46 - 55	Vehicle is slowing down or stopping	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other

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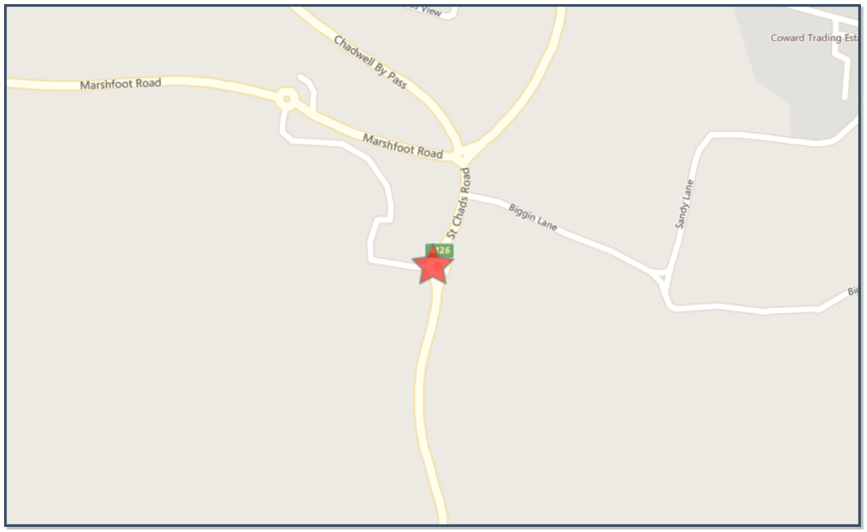
Crash Date:	Monday, February 24, 2014	**Time of Crash:**	12:30:00 PM	**Crash Reference:**	**201442I062902**

Highest Injury Severity:	Slight	**Road Number:**	A126	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	564430 177808
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	30				
Light Conditions:	Darkness: street lights present but unlit				
Carriageway Hazards:	None				
Junction Detail:	Roundabout				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Roundabout				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	11	Female	Unknown	Vehicle proceeding normally along the carriageway, not on a bend	Did not impact	Other	None	None
2	Pedal cycle	-1	Female	36 - 45	Vehicle proceeding normally along the carriageway, not on a bend	Did not impact	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	36 - 45	Unknown or other	Unknown or other

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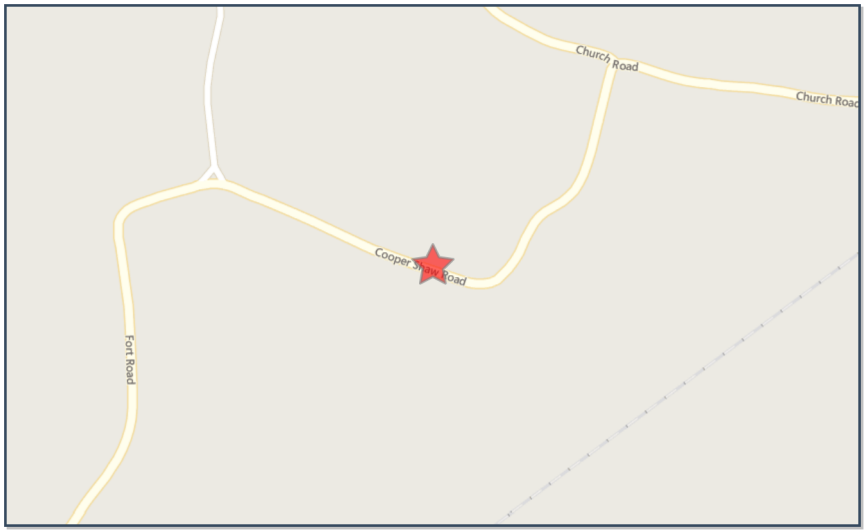
Crash Date:	Monday, August 15, 2016	**Time of Crash:**	5:19:00 PM	**Crash Reference:**	**2016420095791**

Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	4
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	566063 177375
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Unknown	Unknown	Vehicle proceeding normally along the carriageway, on a right hand bend	Did not impact	Other	None	None
2	Car (excluding private hire)	1	Female	16 - 20	Vehicle proceeding normally along the carriageway, on a left hand bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Female	16 - 20	Unknown or other	Unknown or other
2	2	Slight	Vehicle or pillion passenger	Female	16 - 20	Unknown or other	Unknown or other
2	3	Slight	Vehicle or pillion passenger	Male	16 - 20	Unknown or other	Unknown or other
2	4	Slight	Vehicle or pillion passenger	Female	16 - 20	Unknown or other	Unknown or other

For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

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Crash Date:	Sunday, September 22, 2013	**Time of Crash:**	8:50:00 PM	**Crash Reference:**	**201342I289409**

Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	2
Highway Authority:	Thurrock			**Number of Vehicles:**	1
Local Authority:	Thurrock			**OS Grid Reference:**	566132 177353
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				

For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	13	Male	26 - 35	Vehicle proceeding normally along the carriageway, on a right hand bend	Did not impact	Other	None	Entered ditch

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	26 - 35	Unknown or other	Unknown or other
1	2	Slight	Vehicle or pillion passenger	Female	16 - 20	Unknown or other	Unknown or other

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Crash Date:	Friday, August 16, 2013	**Time of Crash:**	6:10:00 PM	**Crash Reference:**	**201342I240108**

Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	1
Local Authority:	Thurrock			**OS Grid Reference:**	565580 178505
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	60				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				

For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Nearside	Commuting to/from work	None	Telegraph pole/Electricity pole

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other

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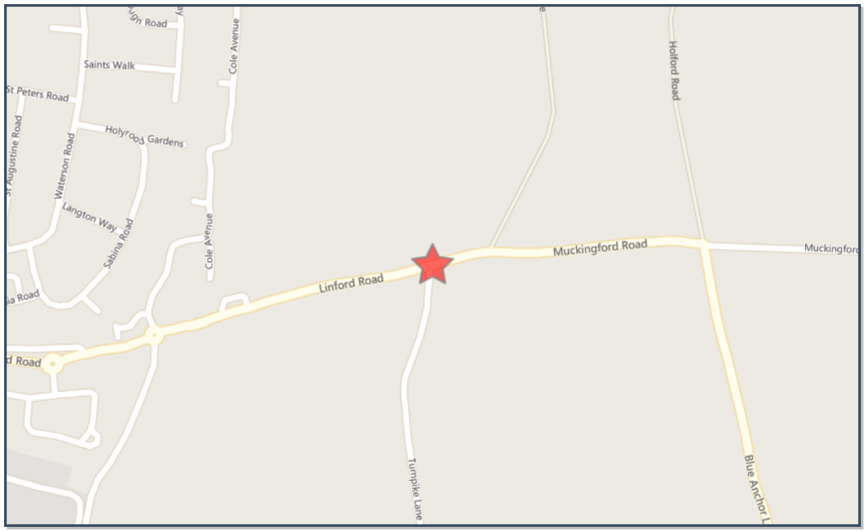
Crash Date:	Sunday, August 02, 2015	**Time of Crash:**	7:05:00 AM	**Crash Reference:**	**201542I243608**

Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	2
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	565594 178609
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Male	16 - 20	Vehicle is moving off	Did not impact	Other	None	None
2	Car (excluding private hire)	13	Male	16 - 20	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	Entered ditch

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	16 - 20	Unknown or other	Unknown or other
1	2	Slight	Vehicle or pillion passenger	Male	16 - 20	Unknown or other	Unknown or other

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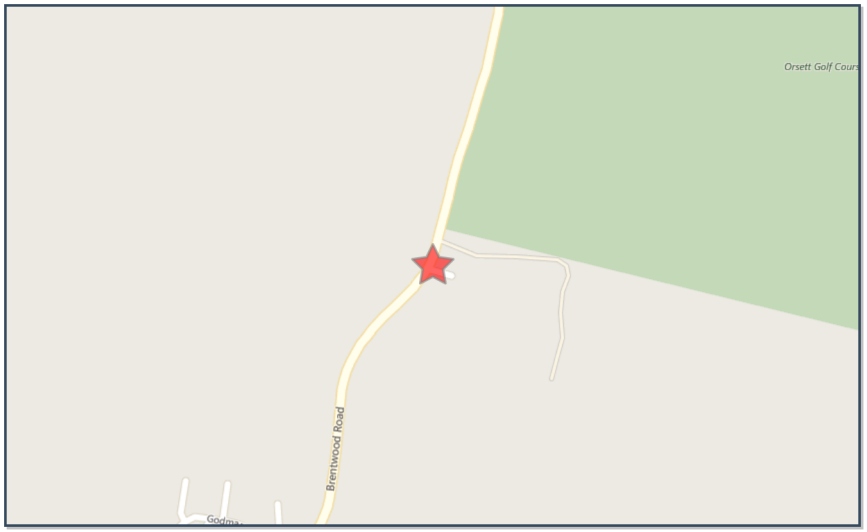
Crash Date:	Wednesday, December 10, 2014	**Time of Crash:**	6:20:00 PM	**Crash Reference:**	**201442I428512**
Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	1
Local Authority:	Thurrock			**OS Grid Reference:**	565293 180139
Weather Description:	Fine without high winds				
Road Surface Description:	Wet or Damp				
Speed Limit:	40				
Light Conditions:	Darkness: no street lighting				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	13	Female	26 - 35	Vehicle proceeding normally along the carriageway, on a left hand bend	Did not impact	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other

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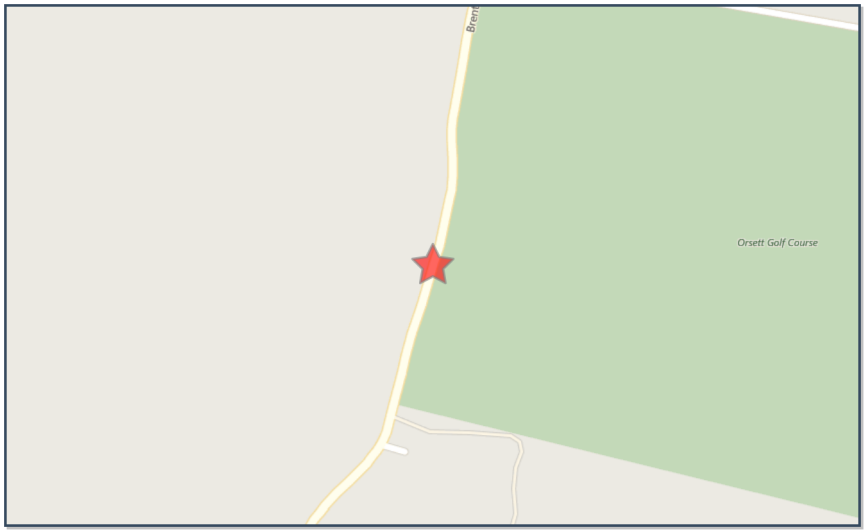
Crash Date:	Sunday, August 11, 2013	**Time of Crash:**	8:00:00 PM	**Crash Reference:**	**201342I267608**

Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	2
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	565356 180403
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	Not at or within 20 metres of junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Not Applicable				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Unknown	Unknown	Vehicle proceeding normally along the carriageway, on a left hand bend	Offside	Other	None	None
2	Car (excluding private hire)	3	Male	56 - 65	Vehicle proceeding normally along the carriageway, not on a bend	Offside	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
2	1	Slight	Driver or rider	Male	56 - 65	Unknown or other	Unknown or other
2	2	Slight	Vehicle or pillion passenger	Female	46 - 55	Unknown or other	Unknown or other

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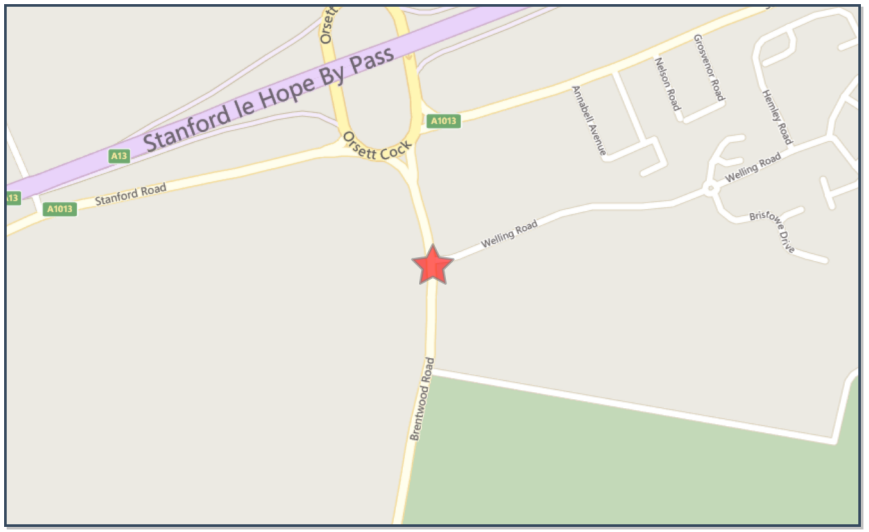
Crash Date:	Thursday, November 12, 2015	**Time of Crash:**	5:52:00 PM	**Crash Reference:**	**2015420032143**

Highest Injury Severity:	Slight	**Road Number:**	A128	**Number of Casualties:**	1
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	565422 181005
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	4	Female	46 - 55	Vehicle is in the act of turning left	Offside	Other	None	None
2	Car (excluding private hire)	11	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	46 - 55	Unknown or other	Unknown or other

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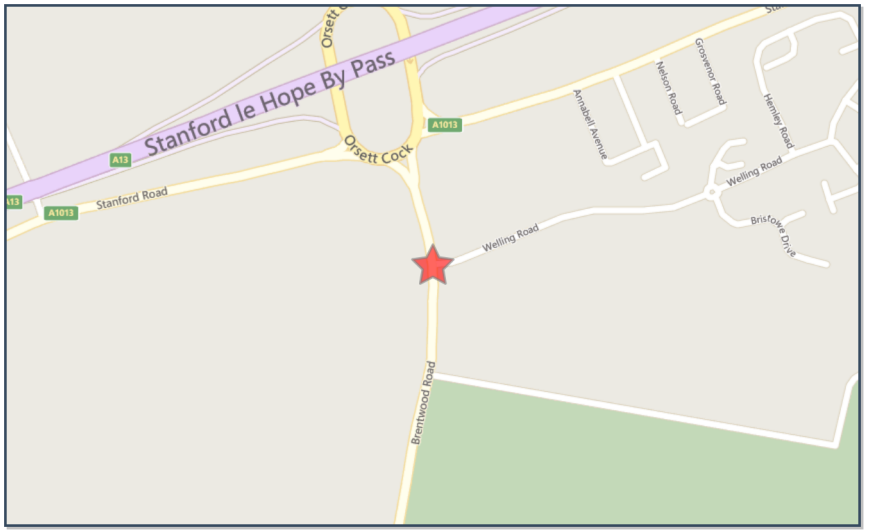
Crash Date:	Monday, March 02, 2015	**Time of Crash:**	3:16:00 PM	**Crash Reference:**	**201542I065703**

Highest Injury Severity:	Serious	**Road Number:**	U0	**Number of Casualties:**	3
Highway Authority:	Thurrock			**Number of Vehicles:**	3
Local Authority:	Thurrock			**OS Grid Reference:**	565420 181010
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	50				
Light Conditions:	Daylight: regardless of presence of streetlights				
Carriageway Hazards:	None				
Junction Detail:	T or staggered junction				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	-1	Female	26 - 35	Vehicle is moving off	Front	Other	None	None
2	Car (excluding private hire)	-1	Male	46 - 55	Vehicle proceeding normally along the carriageway, not on a bend	Front	Commuting to/from work	None	None
3	Car (excluding private hire)	8	Male	66 - 75	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Female	26 - 35	Unknown or other	Unknown or other
3	2	Slight	Driver or rider	Male	66 - 75	Unknown or other	Unknown or other
3	3	Serious	Vehicle or pillion passenger	Female	66 - 75	Unknown or other	Unknown or other

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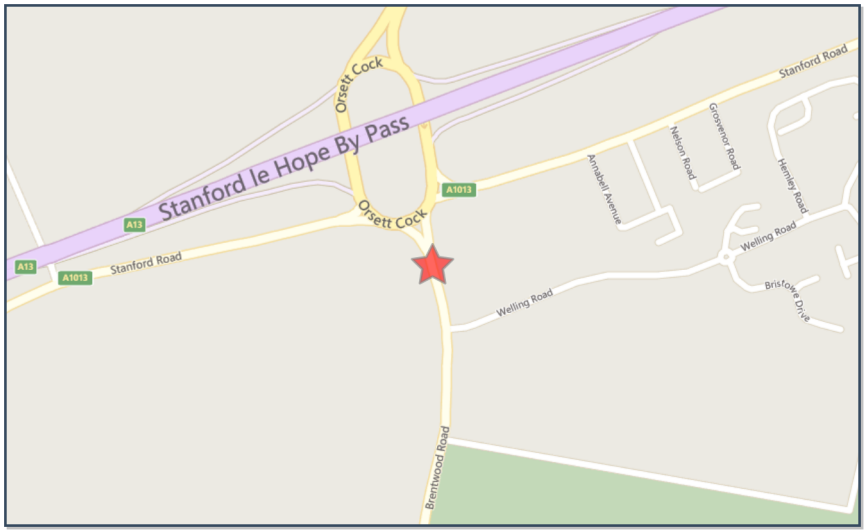
Crash Date:	Saturday, February 22, 2014	**Time of Crash:**	9:00:00 PM	**Crash Reference:**	**201442I058402**

Highest Injury Severity:	Slight	**Road Number:**	U0	**Number of Casualties:**	2
Highway Authority:	Thurrock			**Number of Vehicles:**	2
Local Authority:	Thurrock			**OS Grid Reference:**	565393 181112
Weather Description:	Fine without high winds				
Road Surface Description:	Dry				
Speed Limit:	40				
Light Conditions:	Darkness: street lights present and lit				
Carriageway Hazards:	None				
Junction Detail:	Using private drive or entrance				
Junction Pedestrian Crossing:	No physical crossing facility within 50 metres				
Road Type:	Single carriageway				
Junction Control:	Give way or uncontrolled				



For more information about the data please visit: *www.crashmap.co.uk/home/aboutthedata* and *www.crashmap.co.uk/home/definitions*

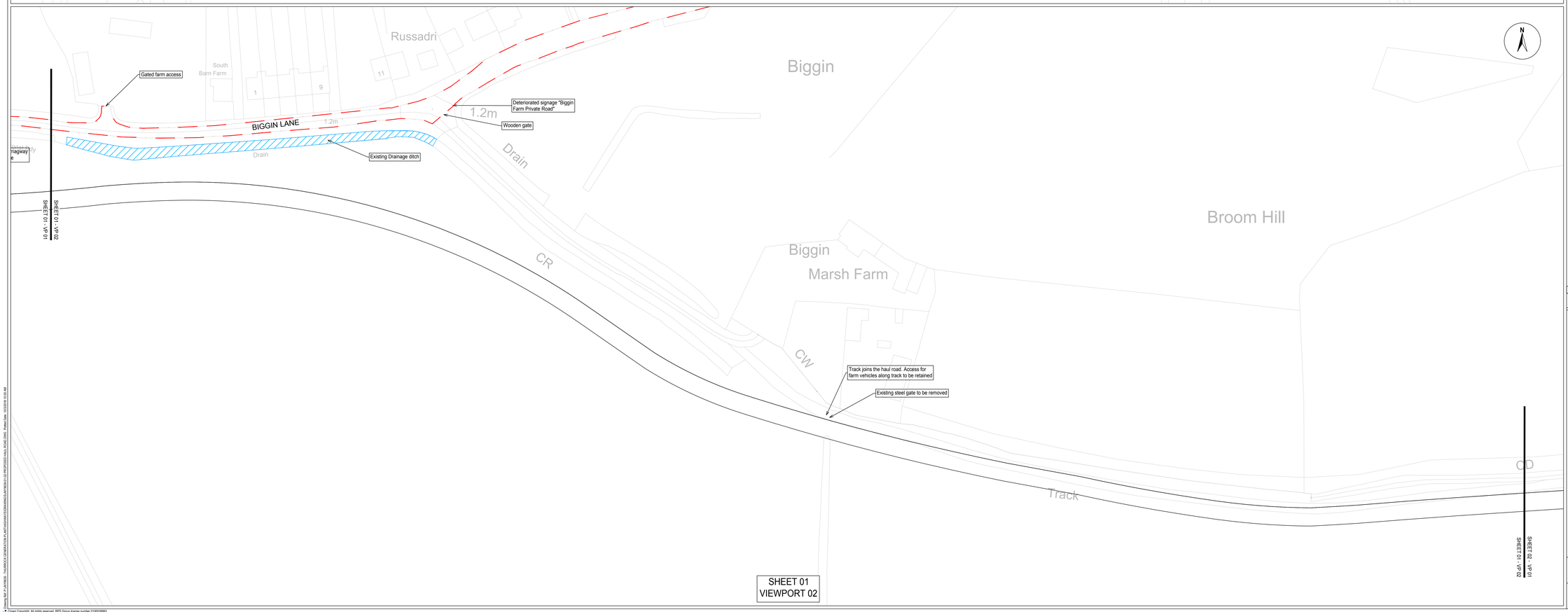
Vehicles involved

Vehicle Ref	Vehicle Type	Vehicle Age	Driver Gender	Driver Age Band	Vehicle Maneouvre	First Point of Impact	Journey Purpose	Hit Object - On Carriageway	Hit Object - Off Carriageway
1	Car (excluding private hire)	5	Male	21 - 25	Vehicle is in the act of turning right	Front	Other	None	None
2	Car (excluding private hire)	11	Male	21 - 25	Vehicle proceeding normally along the carriageway, not on a bend	Front	Other	None	None

Casualties

Vehicle Ref	Casualty Ref	Injury Severity	Casualty Class	Gender	Age Band	Pedestrian Location	Pedestrian Movement
1	1	Slight	Driver or rider	Male	21 - 25	Unknown or other	Unknown or other
2	2	Slight	Vehicle or pillion passenger	Female	26 - 35	Unknown or other	Unknown or other

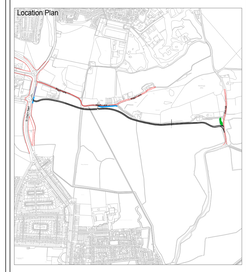
Annex D Haul Road Concept Drawing



NOTES

1. This drawing has been prepared in accordance with the scope of RPS's appointment with its client and is subject to the terms and conditions of that appointment. RPS accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used. DO NOT SCALE.

Location Plan



Key:

Proposed haul road alignment

Highway Boundary

Rev	Description	Date	Initial	Checked

RPS

140 London Wall
London, EC2Y 5DN

T: +44(0)20 7280 3300 E: transport@rpsgroup.com

Client Thurrock Power Ltd

Project Thurrock Generation Plan

Title Proposed Haul Road
Sheet 1 of 2

Status	Drawn By	Checked by
Preliminary	HN	
Project Number	Scale @ A0	Date Created
JNY9639	1:500	07.09.18

Drawing Number JNY9639-01

Rev

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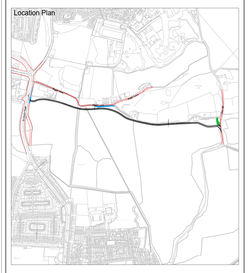
2. If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used. DO NOT SCALE.

Location Plan



Key:

Proposed haul road alignment

Highway Boundary

Rev	Description	Date	Initial	Checked

RPS

140 London Wall
London, EC2Y 5DN

T: +44(0)20 7280 3300 E: transport@rpsgroup.com

Client Thurrock Power Ltd

Project Thurrock Generation Plan

Title Proposed Haul Road
Sheet 2 of 2

Status	Drawn By	Checked by
Preliminary	HN	
Project Number	Scale @ A0	Date Created
JNY9639	1:500	07.09.18

Drawing Number
JNY9639-02

Rev

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Annex E Highway Officer comments

David Archibald

From: Ford, Matthew <MFord@thurrock.gov.uk>
Sent: 10 September 2018 11:04
To: David Archibald
Subject: [EXT] RE: Thurrock Flexible Generating Plant: Temporary Haul Road

David,

This is acceptable.

Regards,

Matthew Ford BSc (Hons) AMIHE I Principal Engineer I Transport Development I Place
thurrock.gov.uk **I** transportdevelopment@thurrock.gov.uk
Thurrock Council, Civic Offices, New Road, Grays, Essex RM17 6SL

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From: David Archibald [mailto:david.archibald@rpsgroup.com]
Sent: 10 September 2018 10:43
To: Ford, Matthew
Subject: Thurrock Flexible Generating Plant: Temporary Haul Road

Hi Matt, I hope you're well. Following our meeting on 8th August regarding the above and providing a haul road between Gun Hill and St Chads Road, we have been reviewing access and have visited the site and we are now looking at preparing a design for a temporary haul road along the alignment as shown on the attached sketch plan.

The advice from planners is that the haul road should not be designed or constructed in such a way that it could later become adopted so as not to prejudice anything emerging from the Local Plan. The haul road would therefore be designed and constructed as a temporary haul road only. There would be issues associated with such a haul road using parts of the public highway, therefore, we do not propose to utilise any part of Biggin Lane and its alignment will be to the south of that. Given its temporary nature, we propose it would be constructed and designed in that manner with gates from the public highway, utilising traffic management where necessary etc.

Thought we should give you a heads up and please feel free to offer any initial comments you may have etc.

Regards,

David Archibald
Director (Transport & Engineering)
RPS
20 Western Avenue, Milton Park,
Abingdon, Oxfordshire, OX14 4SH.
United Kingdom

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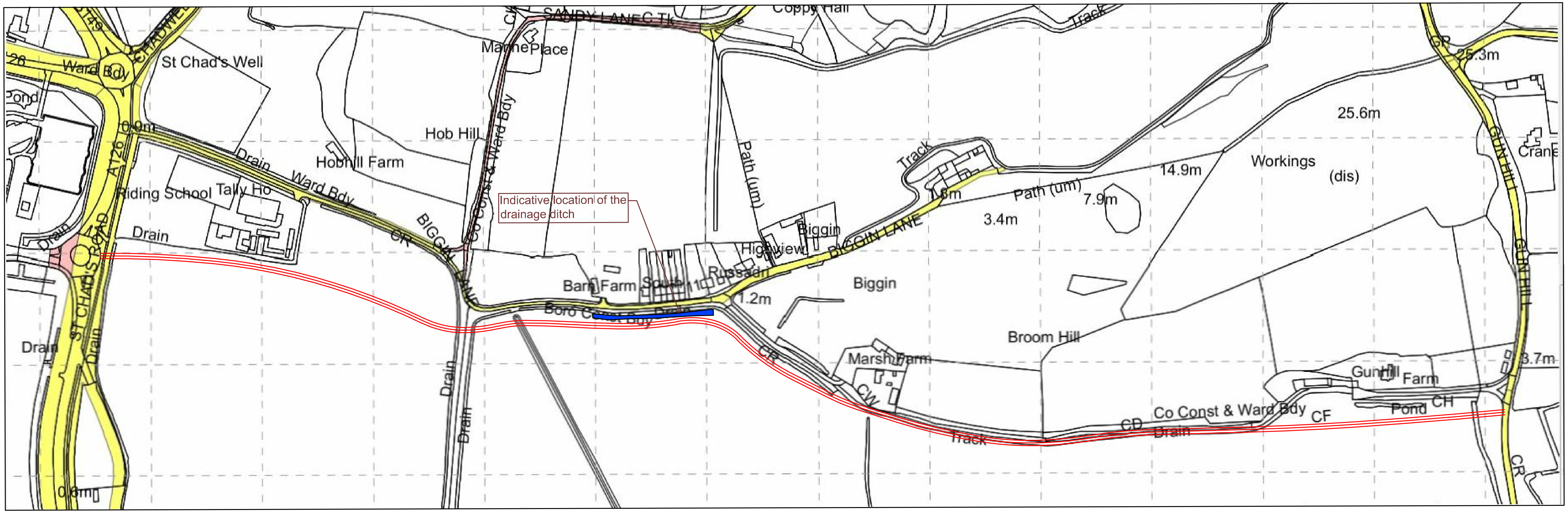
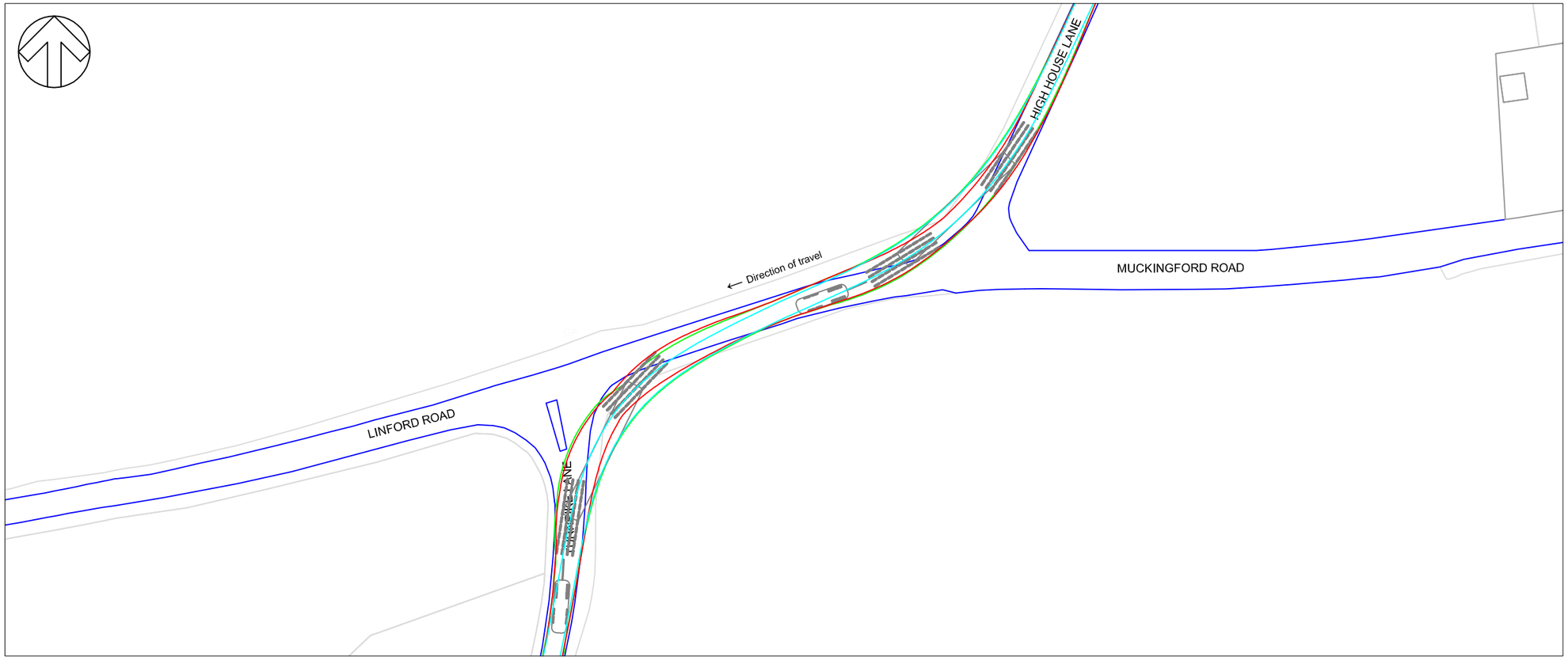
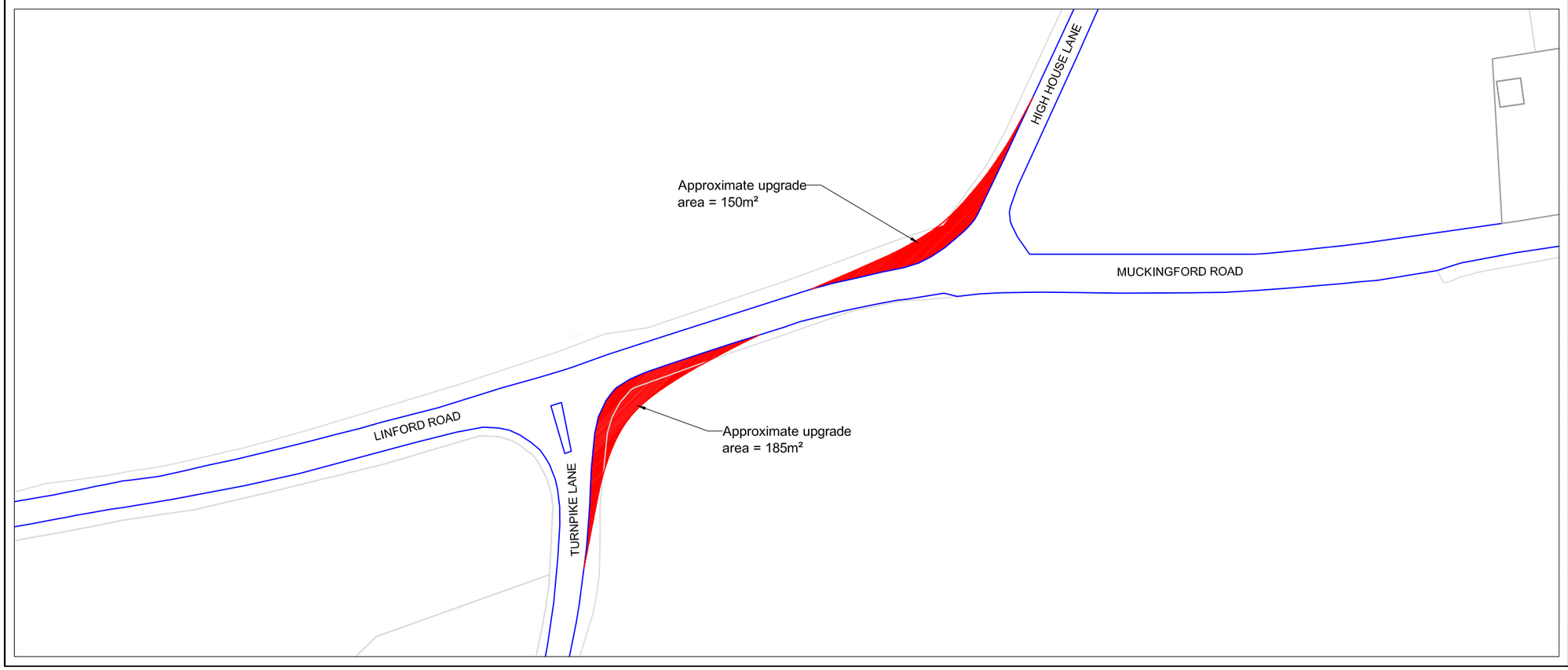
F +44 (0) 1235 834 698
M +44 (0) 7525 908 827
E david.archibald@rpsgroup.com
W www.rpsgroup.com



Indicative location of the drainage ditch
St Chad's Well
Ward Bdy
Pond
Hob Hill
Hobhill Farm
Riding School
Tally Ho
Drain
A126
ST CHAD'S ROAD
BIGGIN LANE
SANDY LANE
Co Const & Ward Bdy
Path (um)
Track
Biggin
Highview
Russadn
Barn Farm
South
Boro Const Bdy
1.2m
Broom Hill
Marsh Farm
Workings
(dis)
25.6m
14.9m
7.9m
3.4m
25.3m
GUN HILL
Gun Hill Farm
Pond
Co Const & Ward Bdy
Drain
Track

Annex F AIL Vehicle Swept Path Analysis





Legal:
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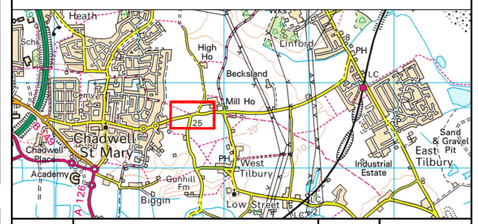
Key:

- Sweep line of wheel tracks
- Sweep line of body
- Sweep line of load
- Edge of existing road
- Road upgrade required

Notes:

* Swept path analysis based on a ALE Trojan 8870 Truck with ALE AL100 girder frame trailer.
* Load based on Transformer with dimensions 9.4m (length) x 3.4m (width)
* Swept path analysis based on OS Mastermap Data.
* Further detailed investigations are required to confirm the findings of this analysis.
* Height and weight limits along the proposed route should be assessed.



Rev	Description	By/Ch	Date
A	Initial drawing issue	CG/ER	01-11-17

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IFS Doc No. : **1155997**	IFS Activity: **3018.301805**
Drawn: **CG** / Checked: **ER** / Approved: **SB**	
Scale: **1:1000 @ A3**	Date: **01-11-2017**

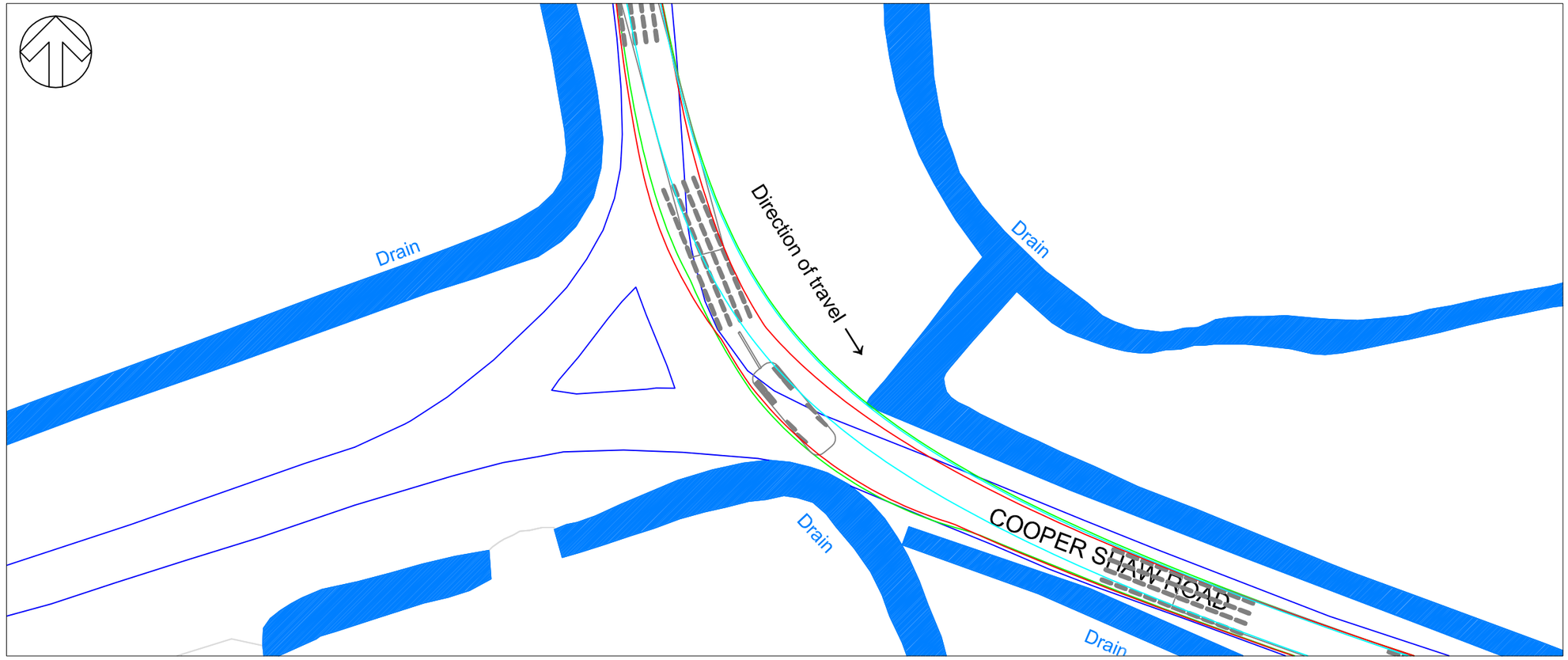
Client: **Stratera Energy Limited**

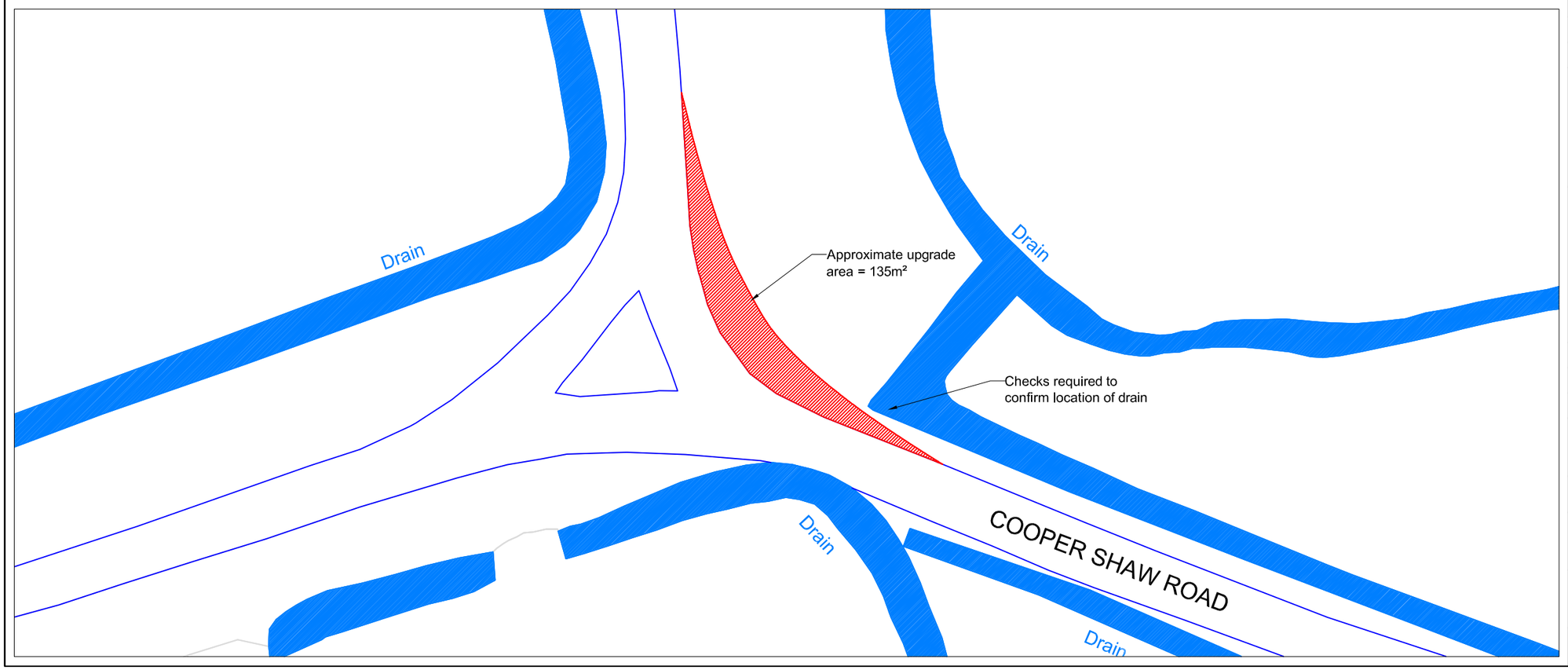
Status: **APPROVED**

Project: **Thurrock Power, Tilbury**

Drawing Title: **Transformer Swept Path Analysis - Area 2**

Drawing No. **12393_100_101** | Revision **A**





Legal:
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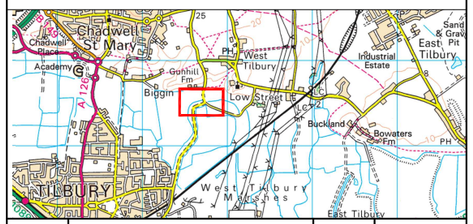
Key:

- Sweep line of wheel tracks
- Sweep line of body
- Sweep line of load
- Edge of existing road
- Road upgrade required

Notes:

* Swept path analysis based on a ALE Trojan 8870 Truck with ALE AL100 girder frame trailer.
* Load based on Transformer with dimensions 9.4m (length) x 3.4m (width)
* Swept path analysis based on OS Mastermap Data.
* Further detailed investigations are required to confirm the findings of this analysis.
* Height and weight limits along the proposed route should be assessed.



Rev	Description	By/Ch	Date
A	Initial drawing issue	CG/ER	01-11-17

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IFS Doc No. : **1155998**		IFS Activity: **3018.301805**
Drawn: **CG**	Checked: **ER**	Approved: **SB**
Scale: **1:500 @ A3**		Date: **01-11-2017**

Client: **Stratera Energy Limited**

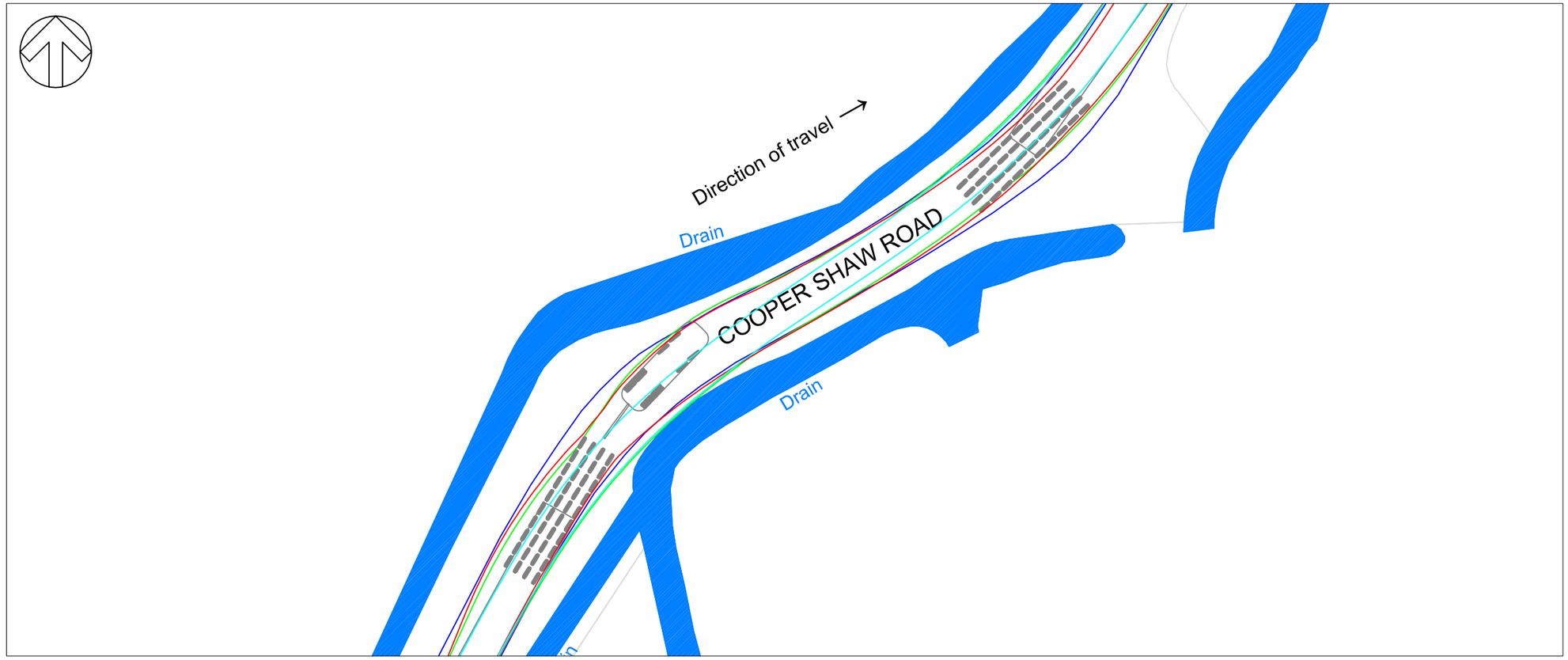
Status: **APPROVED**

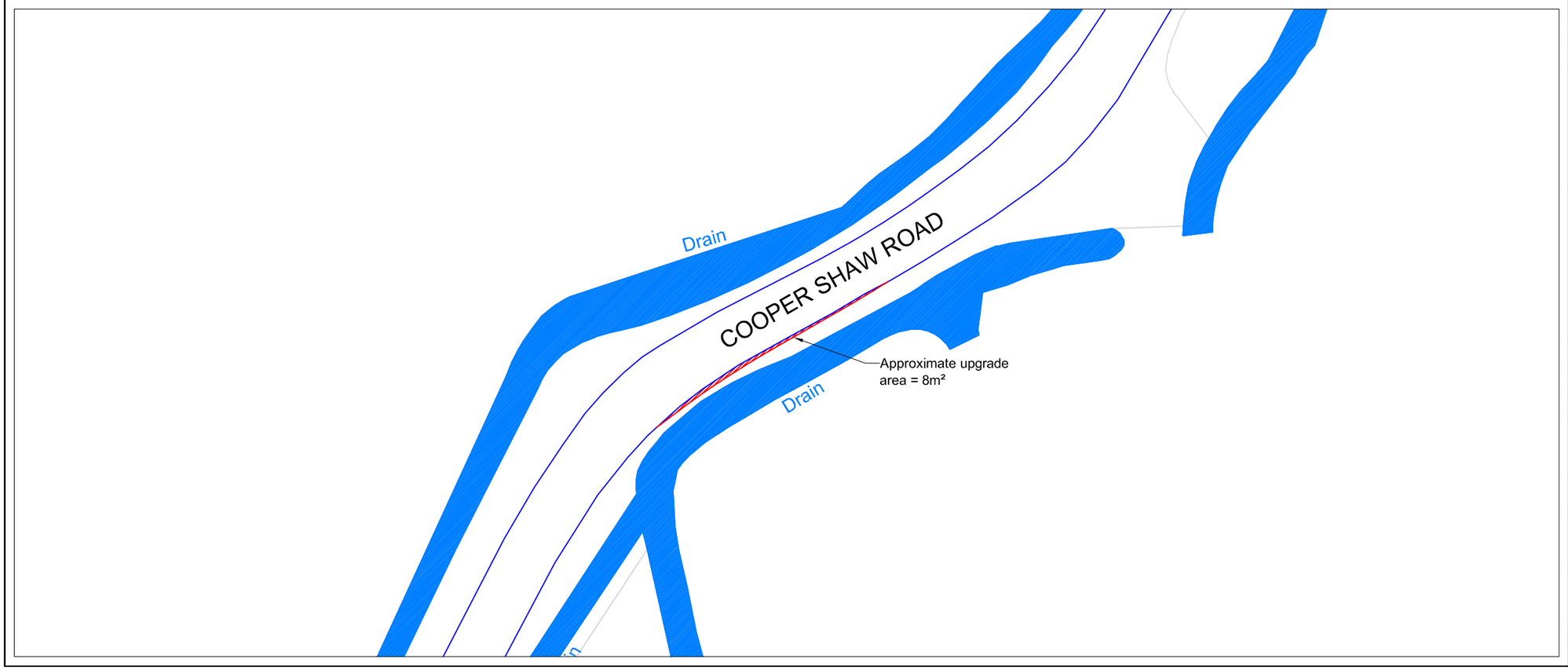
Project: **Thurrock Power, Tilbury**

Drawing Title: **Transformer Swept Path Analysis - Area 3**

Drawing No. **12393_100_102**

Revision **A**





Legal:
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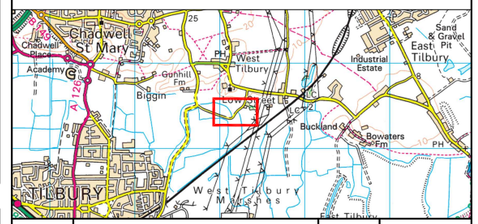
Key:

- Sweep line of wheel tracks
- Sweep line of body
- Sweep line of load
- Edge of existing road
- Road upgrade required

Notes:

* Swept path analysis based on a ALE Trojan 8870 Truck with ALE AL100 girder frame trailer.
* Load based on Transformer with dimensions 9.4m (length) x 3.4m (width)
* Swept path analysis based on OS Mastermap Data.
* Further detailed investigations are required to confirm the findings of this analysis.
* Height and weight limits along the proposed route should be assessed.



Rev	Description	By/Ch	Date
A	Initial drawing issue	CG/ER	01-11-17

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Drawn: **CG**	Checked: **ER**	Approved: **SB**
Scale: **1:500 @ A3**		Date: **01-11-2017**

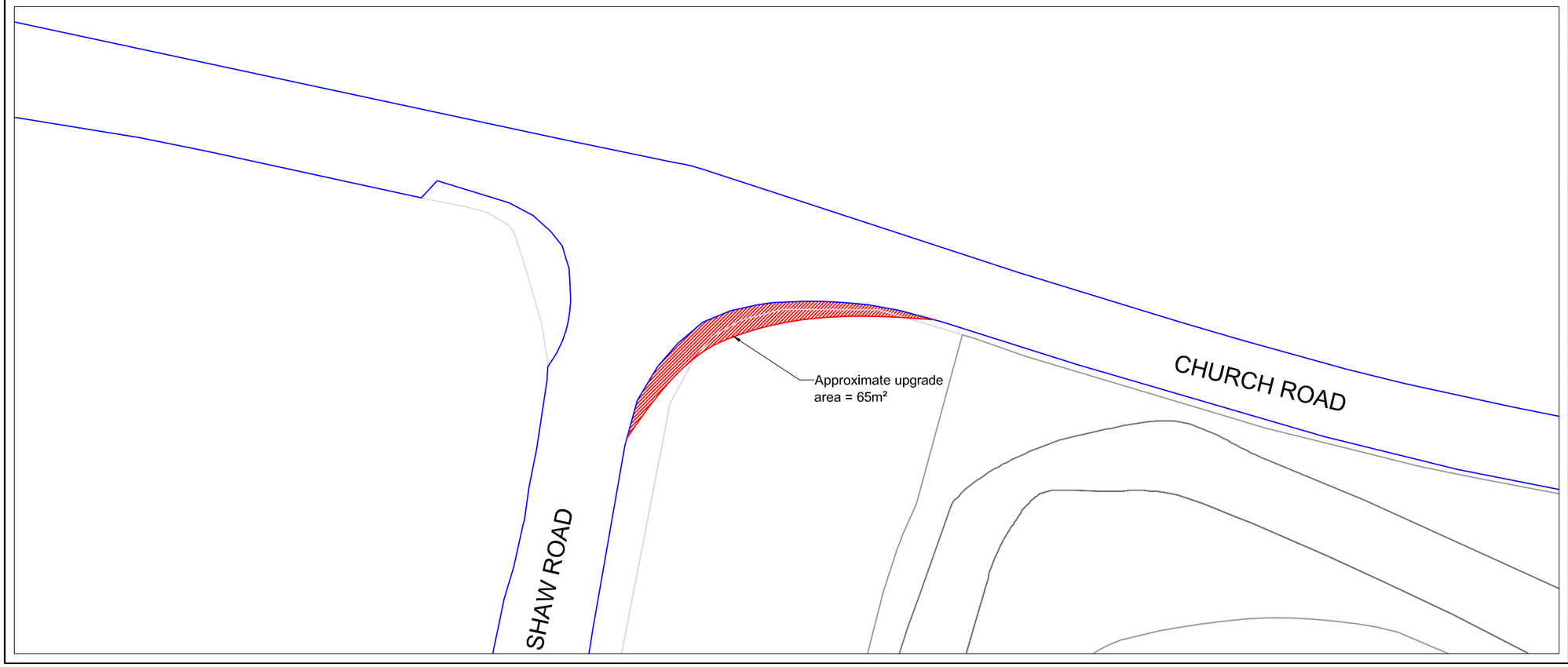
Client: **Stratera Energy Limited**

Status: **APPROVED**

Project: **Thurrock Power, Tilbury**

Drawing Title: **Transformer Swept Path Analysis - Area 4**

Drawing No. **12393_100_103** | Revision **A**



Legal:
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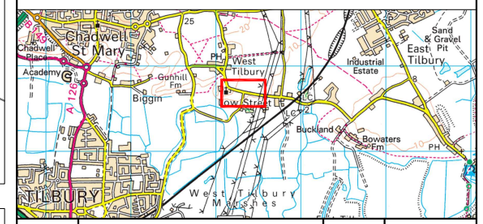
Key:

- Sweep line of wheel tracks
- Sweep line of body
- Sweep line of load
- Edge of existing road
- Road upgrade required

Notes:

* Swept path analysis based on a ALE Trojan 8870 Truck with ALE AL100 girder frame trailer.
* Load based on Transformer with dimensions 9.4m (length) x 3.4m (width)
* Swept path analysis based on OS Mastermap Data.
* Further detailed investigations are required to confirm the findings of this analysis.
* Height and weight limits along the proposed route should be assessed.



Rev	Description	By/Ch	Date
A	Initial drawing issue	CG/ER	01-11-17

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IFS Doc No. : **1156000**		IFS Activity: **3018.301805**
Drawn: **CG**	Checked: **ER**	Approved: **SB**
Scale: **1:500 @ A3**		Date: **01-11-2017**

Client: **Stratera Energy Limited**

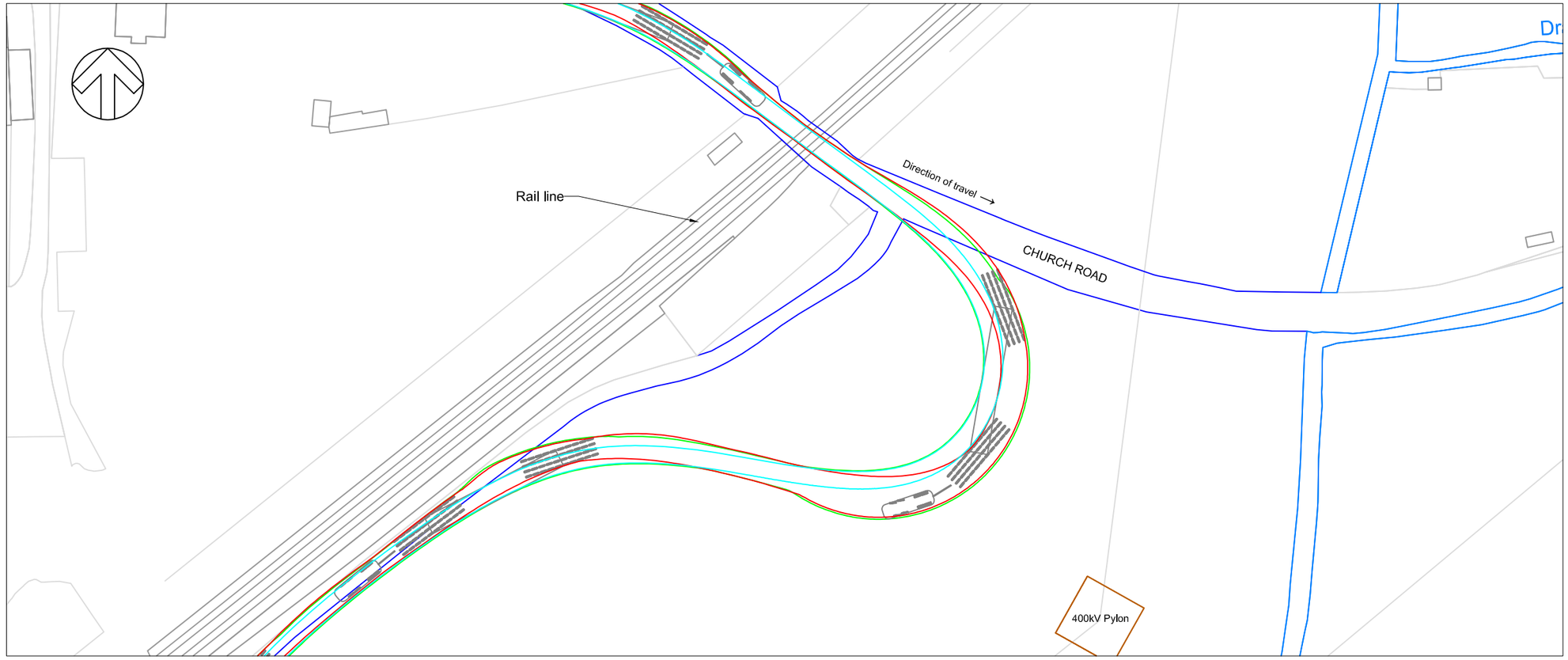
Status: **APPROVED**

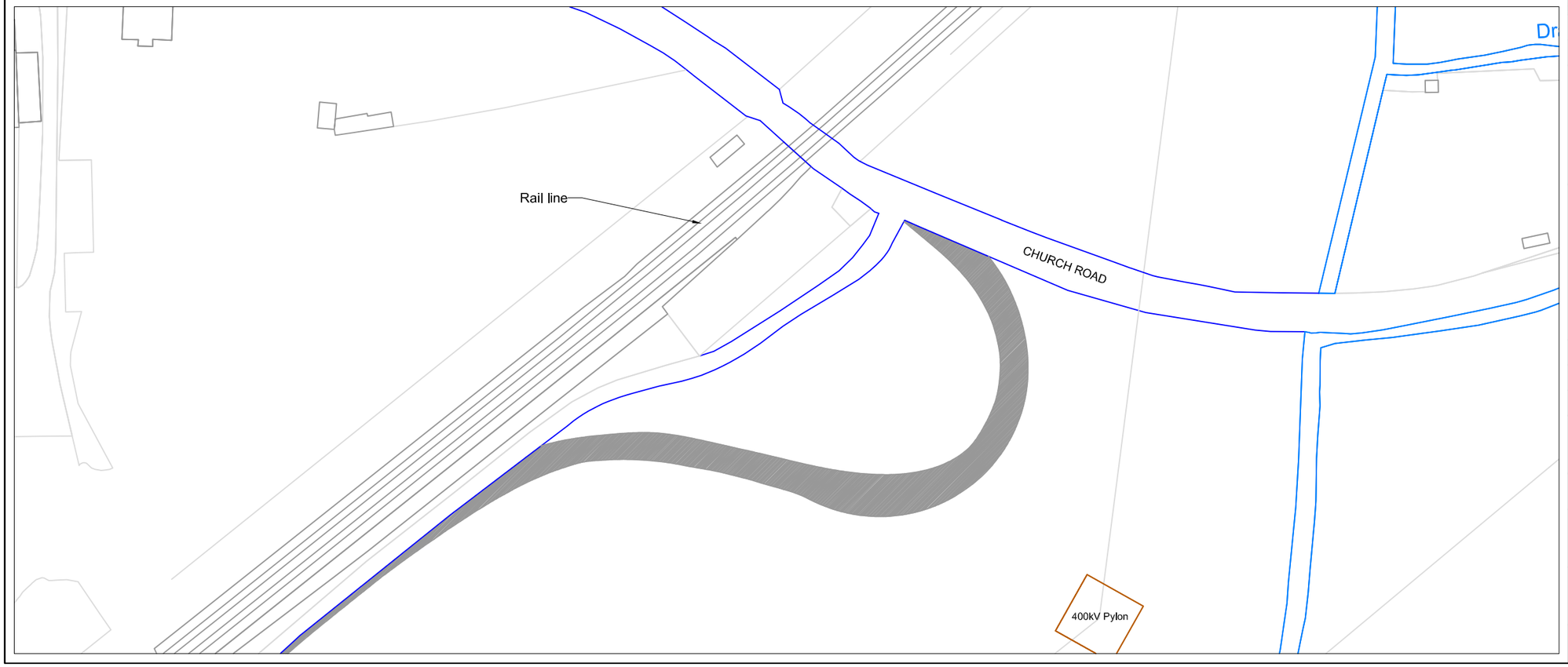
Project: **Thurrock Power, Tilbury**

Drawing Title: **Transformer Swept Path Analysis - Area 5**

Drawing No. **12393_100_104**

Revision **A**





Legal:
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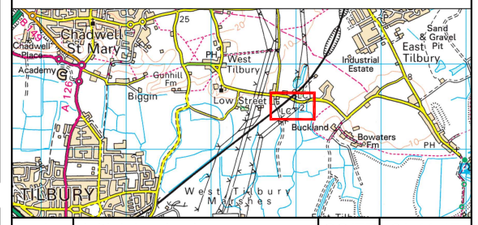
Key:

- Sweep line of wheel tracks
- Sweep line of body
- Sweep line of load
- Edge of existing road
- New access track

Notes:

* Swept path analysis based on a ALE Trojan 8870 Truck with ALE AL100 girder frame trailer.
* Load based on Transformer with dimensions 9.4m (length) x 3.4m (width)
* Swept path analysis based on OS Mastermap Data.
* Further detailed investigations are required to confirm the findings of this analysis.
* Height and weight limits along the proposed route should be assessed.



Rev	Description	By/Ch	Date
A	Initial drawing issue	CG/ER	01-11-17

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IFS Doc No. : **1156001**	IFS Activity: **3018.301805**	
Drawn: **CG**	Checked: **ER**	Approved: **SB**
Scale: **1:1000 @ A3**	Date: **01-11-2017**	

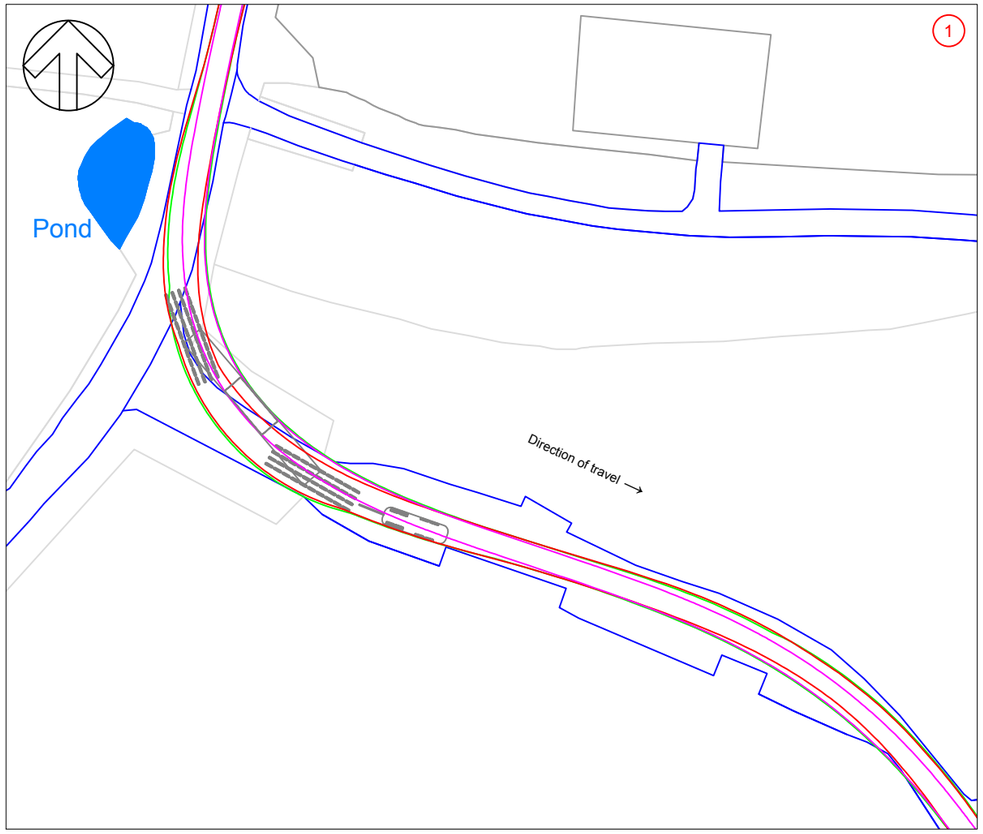
Client: **Stratera Energy Limited**

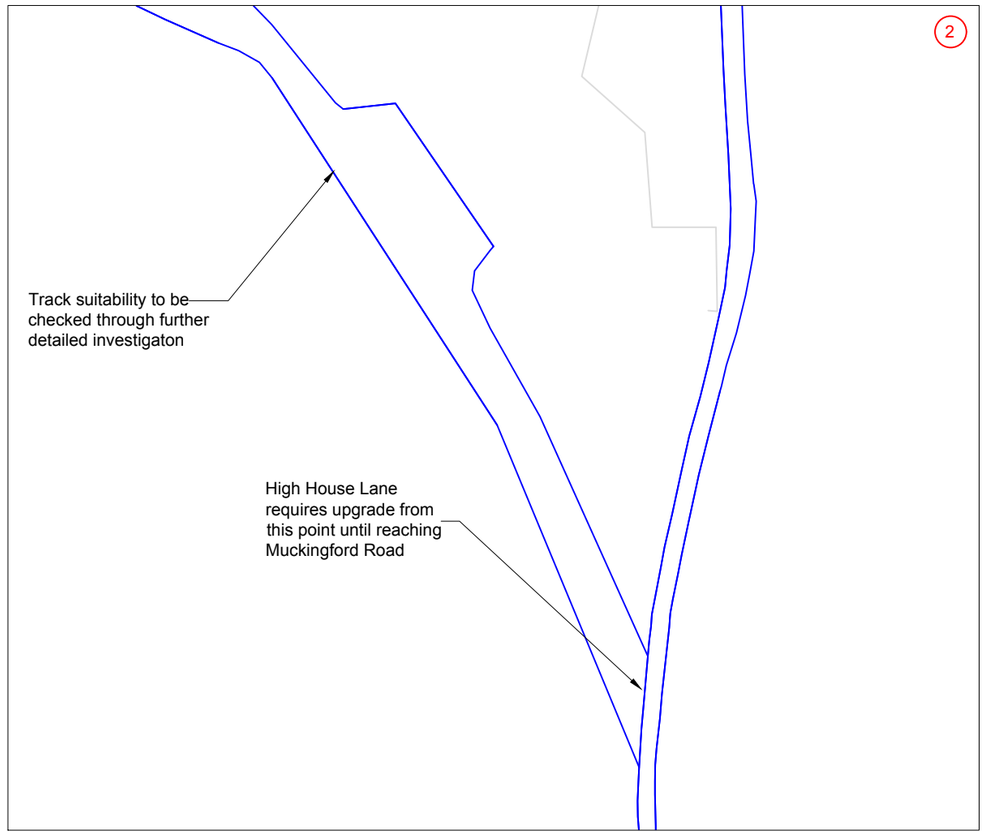
Status: **APPROVED**

Project: **Thurrock Power, Tilbury**

Drawing Title: **Transformer Swept Path Analysis - Area 6**

Drawing No. **12393_100_105** Revision **A**





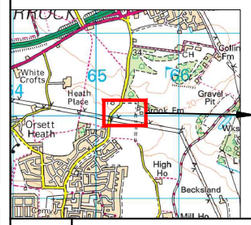
Legal:
Natural Power Consultants Ltd take no responsibility for the accuracy of data provided by third parties.

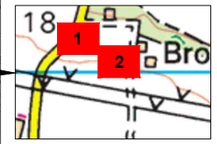
Key:

- Sweep line of wheel tracks
- Sweep line of body
- Sweep line of load
- Edge of existing road
- Road upgrade required

Notes:

* Swept path analysis based on a ALE Trojan 8870 Truck with ALE AL100 girder frame trailer.
* Load based on Transformer with dimensions 9.4m (length) x 3.4m (width)
* Swept path analysis based on OS Mastermap Data.
* Further detailed investigations are required to confirm the findings of this analysis.
* Height and weight limits along the proposed route should be assessed.





Rev	Description	By/Ch	Date
A	Initial drawing issue	JT/CG	03-11-17

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IFS Doc No. : **1156185**		IFS Activity: **3018.301805**
Drawn: **JT**	Checked: **CG**	Approved: **CG**
Scale: **1:1000 @ A3**		Date: **03-11-2017**

Client: **Stratera Energy Limited**

Status: **APPROVED**

Project: **Thurrock Power, Tilbury**

Drawing Title: **Transformer Swept Path Analysis - Area 7**

Drawing No. **12393_100_106**

Revision **A**

Annex G Committed Development Flows

Road in ID	Road in Description	Data	ommitted Development Traffic Flow
			hr AADT
1	A13 between M25 junction 30 and A126	Total	61
		HV	45
2	A13 between A126 and A1012	Total	61
		HV	45
3	A13 between A1089 and A1012	Total	61
		HV	45
4	A1089,between Marshfoot Road roundabout and A13	Total	53
		HV	45
5	Marshfoot Road between A1089 slip road and Marshfoot Road junction	Total	12
		HV	
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	Total	12
		HV	
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	Total	23
		HV	
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	Total	23
		HV	
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	Total	
		HV	
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	Total	
		HV	
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	Total	60
		HV	60
12	Turnpike Lane, between Gun Hill Road and Linford Road	Total	
		HV	
13	Linford Road, between Turnpike Lane and Muckingford Road	Total	70
		HV	
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	Total	23
		HV	
15	A13, between Orsett Cock roundabout and A1089	Total	23
		HV	15

Annex H Cumulative Development Traffic Flows

Road in ID	Road in Description	Data	umulative Development Traffic Flow
			hr AADT
1	A13 between M25 junction 30 and A126	Total	2838
		HV	1774
2	A13 between A126 and A1012	Total	2838
		HV	1774
3	A13 between A1089 and A1012	Total	2838
		HV	1774
4	A1089,between Marshfoot Road roundabout and A13	Total	3020
		HV	2365
5	Marshfoot Road between A1089 slip road and Marshfoot Road junction	Total	400
		HV	
6	Marshfoot Road, between Marshfoot Road junction and A1089 roundabout	Total	400
		HV	
7	Marshfoot Road, between Gateway Academy roundabout and Marshfoot Road junction	Total	800
		HV	
8	Marshfoot Road, between Gateway Academy roundabout and St. Chads Road	Total	800
		HV	
9	St. Chads Road, between Marshfoot Road and Gateway Academy roundabout	Total	67
		HV	
10	Gun Hill Road, between Coopers Shaw Road and Turnpike Lane	Total	
		HV	
11	Coopers Shaw Road / Church Road / Station Road, between Gun Hill Road and EMR East Tilbury junction	Total	
		HV	
12	Turnpike Lane, between Gun Hill Road and Linford Road	Total	
		HV	
13	Linford Road, between Turnpike Lane and Muckingford Road	Total	1392
		HV	
14	Brentwood Road, between High House Lane and Orsett Cock roundabout	Total	948
		HV	
15	A13, between Orsett Cock roundabout and A1089	Total	1420
		HV	591