

# **WASTE LOCAL PLAN - TRANSPORT STUDY**

## **Site Assessments**

Project Title: Waste Local Plan - Transport Study

Document Title: Site Assessments

Client Reference:

Date: 04/07/2018

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2018 Ordnance Survey 100019613

Amendment List

Iss. / Rev.	Iss. / Rev Date	Insert	
		Page	Iss. / Rev.

Filename: H:\Modelling\Project\53151092\_Wastelocalplan\02 Documents\Waste Local Plan Transport Assessment.Docx

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## 1 INTRODUCTION

### 1.1 Project background

- 1.1.1 Surrey County Council (SCC)'s Transport Studies (TS) team has been tasked with undertaking a high level Transport Assessment (TA) for the Mineral and Waste Policy Team (M&WPT) in relation to their preparation of the Surrey Waste Local Plan (SWLP)<sup>1</sup>.
- 1.1.2 The SWLP document exists to ensure that land is available so that sufficient waste management facilities can be provided to manage the amount of waste arising in Surrey, and it sets out the planning framework for the development of waste management facilities in the county until 2033.
- 1.1.3 In the draft SWLP that was published in December 2017, a shortlist of nine sites have been proposed across the county that are considered to be potentially suitable for accommodating waste management development. The assessment of these nine proposed sites will help to consolidate an evidence base for the allocation of waste sites in preparation for a Regulation 19 consultation on the SWLP later this year.
- 1.1.4 The overarching aim of this assessment is to assess the suitability of the sites proposed for allocation for waste related development in terms of transport impacts.
- 1.1.5 The M&WPT are seeking to ensure that the transport-related evidence base provided within the submission document is as robust and informative as possible. The evidence presented in this document will be used to ensure that the allocated sites are suitable for waste related activities in transport terms and to inform which types and scales of waste management facility are likely to be suitable at each allocated site. Therefore, it is envisaged that this document will be provided as supporting information both during the Regulation 19 consultation and as part of the SWLP submission.
- 1.1.6 This transport study will provide the required evidence base for all of the nine sites across the county, and as stated in the National Planning Policy Framework (NPPF)<sup>2</sup>, this will help to allocate sites and provide supporting evidence on form, scale and access where appropriate.

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<sup>1</sup> H:\Modelling\project\53151092\_WasteLocalPlan\02 Documents\ 2017-12-01 - Draft Waste Local Plan - Full Version\_v2\_Dec2017.pdf

<sup>2</sup> <https://www.gov.uk/guidance/national-planning-policy-framework/plan-making> (paragraph 157)

## 1.2 Site Assessments

1.2.1 Initially, 206 sites were identified as part of the site identification process. These were then evaluated against set criteria, and this resulted in a short list of nine sites. One of the criteria considered was 'Proximity to the Strategic Transport Network'. The details of the sieving process are outlined in the Site Identification and Evaluation report<sup>3</sup>.

1.2.2 These nine sites are shown spatially in **Appendix A** and listed in **Table 1.1** below.

Site ID	Name of Site
EL07	Former Weylands sewage treatment works, Walton-on-Thames
GU23	Land to the north east of Slyfield Industrial Estate, Guildford
MO03	Land adjoining Leatherhead Sewage Treatment Works, Randalls Road, Leatherhead
RE09D	Land to the west of Earlswood Sewage Treatment Works, Redhill
RU04C	Land adjacent to Lyne Lane Sewage Treatment Works, Chertsey
RU02C	Land adjacent to Trumps Farm, Kitsmead Lane, Longcross
SP02	Oakleaf Farm, Horton Lane, Stanwell Moor
TA10	Land at Lambs Business Park, Terra Cotta Road, South Godstone
WO09	Land at Martyrs Lane, Woking

**Table 1.1: Proposed sites from SWLP allocations**

1.2.3 The main objectives of this study are firstly to confirm whether each of the sites are suitable, in transport terms, for waste related development, and secondly, what types and scale of development are likely to be appropriate.

1.2.4 To do this, evidence has been collated to include in this transport study. This report pulls together information and data from a variety of sources and teams across SCC, specifically Transport Surveys, Transport Studies, Road Safety & Active Travel (RS&AT), M&WPT, Transport Development and Planning (TDP), and Area Highways teams.

<sup>3</sup>[https://www.surreycc.gov.uk/\\_data/assets/pdf\\_file/0010/147376/2017-11-30-Site-Identification-and-Evaluation-Report-Final-Draft-v2-Nov2017.pdf](https://www.surreycc.gov.uk/_data/assets/pdf_file/0010/147376/2017-11-30-Site-Identification-and-Evaluation-Report-Final-Draft-v2-Nov2017.pdf)

1.2.5 The following data has been collated and the data collection methodology for each evidence type is detailed in the section below. **Table 1.2** shows the data types and sources.

<b>Data type</b>	<b>Data source</b>
Site characteristics and observations	TDP and Area Highway teams
Congestion data	Department for Transport (DfT) supplied journey time data from TrafficMaster/Teletrac-Navman data from Highways Analyst
Collision data	AccsMap provided by RS&AT team
Existing vehicle flows	SCC counts and surveys
Proposed vehicle flows and facility types	M&WPT documents
Preferred vehicle routing	Desktop assessment (Transport Studies)
Nearby local developments	Local Planning Authority Local Plans
Mitigation	Area Highway team advice

**Table 1.2 Data types and sources**

### 1.3 Data collection

1.3.1 This section will go through each data type (as listed above in **Table 1.2**) to provide more details on the data collection methodology.

#### Site characteristics and observations

1.3.2 TDP, acting as the County Highway Authority (CHA), for Surrey County Council, assesses the impact of proposed development sites upon the public highway, in terms of road safety and sustainability. For the shortlisted sites within the SWLP, the CHA was asked to undertake an assessment of each location in terms of its impact upon the public highway, suitability in terms of transport and sustainability.

1.3.3 Officers undertook a site visit where an assessment was made upon: the appropriateness of the access arrangement into the site; visibility at the access; suitability of the surrounding public highway network to accommodate an intensification in the number of trips and HGV movements to the site; as well as consideration of the impact of development and requirement for further evidence to support the proposed application. In addition, the CHA also considered previous applications on the site, current operations, planning conditions imposed and any restrictions in terms of number of movements, turning or trips associated with the site (for example Vehicle Operator Licenses).

1.3.4 In addition, each of the four Area Highway Managers (AHM) were consulted on the sites in their area, based on their local knowledge/expertise. They were asked to comment on any existing issues in the vicinity of the site, the suitability of the site for potential intensification of activity and whether, as a result of associated additional vehicle movements to the site, mitigation might be required.

#### Congestion data

1.3.5 This data has been extracted from a database called Highways Analyst, which utilises congestion data provided to SCC and supplied by Trafficmaster plc/Teletrac-Navman. This is mapped to the Ordnance Survey (OS) Integrated Transport Network (ITN) in order to calculate journey time by ITN link. The data is obtained from GPS-equipped vehicles traversing the highway. Tuesday to Thursday weekday data (excluding school holidays) was collected for the school year 2015/16 (1/9/2015 to 31/8/2016). Data for the AM peak hour was collected (08:00 – 09:00).

- 1.3.6 The maps produced show the current delay (measured in seconds) on the routes, which is the additional journey time over and above free flow conditions (overnight) on the route. The small gaps in the data shown on the maps in **Appendices B - J**, are due to a lack of observations on the routes overnight.

### Collision data

- 1.3.7 Data was obtained from the RS&AT team to help better understand the collision history at each site and therefore, whether the additional vehicle movements associated with the development at the site may exacerbate existing issues.
- 1.3.8 Data was requested from 2012 to 2018 (with data available up to the end of February 2018) from STATS19, for roads in the vicinity of each of the sites. The number, severity and location of the collisions has been provided in the report for each site.

### Existing vehicle flows

- 1.3.9 Data was collated from numerous survey types, across a number of years (2009 to present day). Survey types include Manual Classified Turning Counts (MCTC), Manual Classified Counts (MCC), and Automatic Traffic Counts (ATC).
- 1.3.10 Vehicle flows were obtained for all roads (where possible) in the vicinity of the sites to help build a picture of current traffic flow conditions. Generally, Annual Average Daily Traffic (AADT) has been provided, but otherwise, 12 hour counts have been provided. Vehicle classification has also been provided as all sites will involve Heavy Goods Vehicle (HGV) movements.

### Proposed vehicle flows and facility types

- 1.3.11 To ascertain the likely vehicle flows associated with each of the facility types and scales, it was hoped that the TRICS database could be used. It is an interactive database and analysis system that comprises transport survey records of individual developments across a wide range of land use categories. It can be used for deriving standard trip rates associated with different land uses. However, there was no data available for sites other than Community Recycling Centres (CRC) to determine vehicle movements for each facility type.
- 1.3.12 As the TRICS database could not be used, data from local case studies was used instead. This data has been sourced by the M&WPT, who have provided estimates of vehicle movements associated with each facility type. The eleven facility types are shown in **Table 1.3** overleaf, along with their associated capacities for waste in tonnes per year, and the anticipated vehicle movements per day. Nine facility types were assessed (Household Waste Recycling Centres and Waste Transfer were excluded as the allocations are not intended for such development).



Facility Type	Capacity (tpa)	Vehicle Movements per weekday		
		HGV	LGV/Car	Total
Energy from Waste (large)	300,000	-	-	838
Energy from Waste (small)	50,000	-	-	140
Gasification	200,000	170	32	202
Pyrolysis	200,000	170	32	202
Household Waste Recycling Centre (CRC)	5,000	6	150	156
Waste Transfer	120,000	100	-	100
Waste Separation and recycling (MRF) (small)	70,000	80	17	97
Waste Separation and recycling (MRF) (large)	120,000	137	29	166
Windrow composting	10,000	10	6	16
In-vessel composting	50,000	50	12	62
Anaerobic digestion	50,000	50	10	60

**Table 1.3: Facility types with capacities (in tonnes per annum) and expected vehicle movements per 24hr period**

- 1.3.13 The data has been collated from numerous case studies and reports concerning facility types and expected vehicle movements. The case studies across Surrey and the South East, are from existing sites, such as Grundons in Leatherhead, Salfords rail depot near Redhill and North Quarry Road in Newhaven. The Environmental Impact Assessments (EIA) and associated TAs have been consulted from eleven case studies, and the data obtained.
- 1.3.14 Other reports were used to inform the average figures shown in **Table 1.3**, including the Surrey Waste Plan from 2008<sup>4</sup>, the SWLP 2018 Environment and Sustainability Report<sup>5</sup> and the Types of Waste Management Facility SWLP from Oct 2017<sup>6</sup>.
- 1.3.15 The figures provided are the greatest number of vehicles found for each facility type and scale based on the case studies and the reports. They represent 24hr weekday flows, and where possible the vehicles have been split into car/LGV and HGV.
- 1.3.16 The data in **Table 1.3** was taken forwards for use in the assessment, acknowledging that the data sources were robust at the time of data collection. It is recommended that the TA accompanying any application should assess these values and undertake surveys to obtain up to date data.

### Preferred vehicle routing

- 1.3.17 Identifying preferred routing between each individual site and the Strategic Road Network (SRN)<sup>7</sup> was undertaken using Geographical Information Systems (GIS) to spatially assess the sites and the SRN. The SRN consists of motorways, trunk roads and primary routes. These routes provide access to major population centres and industrial areas and cater for longer-distance movements that occur between these areas.

<sup>4</sup>[https://www.surreycc.gov.uk/\\_\\_data/assets/pdf\\_file/0018/30447/Surrey-Waste-Plan-May\\_2008minusEpages.pdf](https://www.surreycc.gov.uk/__data/assets/pdf_file/0018/30447/Surrey-Waste-Plan-May_2008minusEpages.pdf)

<sup>5</sup>[https://www.surreycc.gov.uk/\\_\\_data/assets/pdf\\_file/0010/150013/SWLP-E-and-SR-Preliminary-Draft-12-17.pdf](https://www.surreycc.gov.uk/__data/assets/pdf_file/0010/150013/SWLP-E-and-SR-Preliminary-Draft-12-17.pdf)

<sup>6</sup>[https://www.surreycc.gov.uk/\\_\\_data/assets/pdf\\_file/0010/147367/2017-10-27-Types-of-waste-mgt-facilities-explanation-note.pdf](https://www.surreycc.gov.uk/__data/assets/pdf_file/0010/147367/2017-10-27-Types-of-waste-mgt-facilities-explanation-note.pdf)

<sup>7</sup> [https://www.surreycc.gov.uk/\\_\\_data/assets/pdf\\_file/0008/36359/03-Road-Network.pdf](https://www.surreycc.gov.uk/__data/assets/pdf_file/0008/36359/03-Road-Network.pdf)

1.3.18 The Surrey SRN access corridors (as shown in **Appendix A**) were identified by looking at shortest paths from each site to junctions with access to the SRN, whilst taking into account low bridge avoidance, width restrictions, road class hierarchy and existing congestion levels. It is recognised that not all vehicles will use these routes, but they give an indication of the preferred routing for HGVs.

### Nearby local developments

1.3.19 This data has been collated from colleagues across the directorate, in TS, TDP and M&WPT.

### Mitigation

1.3.20 As stated above, Area Highway teams were consulted on this, and asked to provide input as to what, if any, mitigation would be required as a result of new or intensification of activity at each of the sites. Details of possible mitigation work that might be required is set out in each relevant site section.

## 1.4 Report structure

1.4.1 Each site has been investigated in turn, with data presented from the areas listed above to provide a transport related evidence base, with which to confirm whether each proposed site is suitable for waste related activities and provide an indication of which facilities are appropriate in transport terms.

1.4.2 In addition to the collated data provided for each site, this report also considers Policy 15 of the SWLP, which relates specifically to transport. Policy 15 implements Strategic Objective 7 which is “to keep waste movement by road to minimum practicable levels and support options for sustainable transport.” This is one of the nine Strategic Objectives were set out in the SWLP.

1.4.3 Policy 15 relates to Transport and Connectivity, and states:

*Planning permission for waste development will be granted where it can be demonstrated that:*

*i) Where practicable and economically viable, the development makes use of rail or water for the transportation of materials to and from the site; or*

*ii) Transport links are adequate to serve the development or can be improved to an appropriate standard.*

*Where the need for road transport has been demonstrated, the development has ensured that:*

*i) Waste is able to be transported using the Lorry Route Network with minimal use of local roads, unless special circumstances apply; and*

*ii) Vehicle movements associated with the development are minimised; and*

*iii) Vehicle movements associated with the development will not have an unacceptable impact on the capacity of the highway network; and*

*iv) There is safe and adequate means of access to the highway network and vehicle movements associated with the development will not have an adverse impact on the safety of the highway network; and*

*v) Satisfactory provision is made for vehicle turning and parking, manoeuvring, loading, and, where appropriate, wheel cleaning facilities.*

- 1.4.4 The M&WPT have requested that TS review the wording of Policy 15, to ensure that it covers all transport related policy issues. In addition, comments on the suitability of each proposed site in accordance with Policy 15 is also presented in each site analysis.
- 1.4.5 During the Reg 18 public consultation on the SWLP undertaken between 1st Nov 2017 and 7th Feb 2018, comments were requested on Policy 15. The M&WPT have collated all responses and the comments relating to transport are presented at the end of this report. TS have been asked to comment on and address the comments where possible. These have been included in **Appendix K**.
- 1.4.6 The same consultation on the SWLP requested comments from the public for each site and those comments specifically relating to transport are presented in **Appendix L**. As before, TS have been asked to comment on and address the comments where possible.
- 1.4.7 It should be noted that this report purely acts as an evidence base for each site, and if there is any further development of a site, it should be supported by a full Transport Assessment and Construction Transport Management Plan as recommended by the CHA. Any transport statement or assessment is likely to include an assessment of potential traffic generation associated with the proposed use, along with classified counts of existing vehicle movements along roads in the vicinity of the site. Furthermore, where appropriate, specific junctions near the proposed site could require assessment in terms of capacity using appropriate modelling techniques.

## 2 EL07: FORMER WEYLANDS SEWAGE TREATMENT WORKS, WALTON-ON-THAMES

### 2.1 Site characteristics and observations

- 2.1.1 This site, situated to the east of Molesey Road in Hersham, is the site of a former Sewage Treatment Works. It is now a scrap metal merchant yard, which is currently served by a relatively narrow road leading along the railway line adjacent to Hersham Station. The station serves the Woking to London Waterloo line. The site is adjacent to the Hersham Trading Estate and the North Weylands Industrial Estate, with access via Lyon Road. The site is also close to Hersham, residential areas of Walton-on-Thames to the northwest and Esher to the southeast.
- 2.1.2 The existing access road, onto Molesey Road, runs alongside the main northern entrance to Hersham Station. The access is wide, leaving pedestrians vulnerable when crossing, in an area adjacent to the train station where pedestrian movements are high. A number of collisions have been recorded at this location, which would be exacerbated if this was to be the access route to any new site.
- 2.1.3 Access to the site from the south entails crossing the railway via an existing bridge (the carriageway runs underneath the railway). At this point the Molesey Road becomes a single lane and is controlled by traffic lights. It is a recognised bottleneck and as such is unsuitable for HGVs; thereby additional HGV usage along this route may be restricted. The railway bridge restricts the height of vehicles to a maximum of 3.2 metres.
- 2.1.4 The site experiences significant HGV and related traffic at present. The presence of the traffic lights and bridge means vehicle speeds are relatively low and gaps in the traffic occur on a regular basis. It should also be noted that there is a Certificate of Lawful Existing Use or Development (CLEUD) that was issued in 1996 for the site, which states that the site *allows for up to 156,000 tonnes per annum (tpa), not exceeding 545 tonnes/day*<sup>8</sup>.

### 2.2 Traffic conditions

#### Current congestion

- 2.2.1 The current levels of congestion at this site are considerable, as shown by the map in **Appendix B**. As described above, the railway bridge operates shuttle working signals, meaning that there is delay of between 30 and 100 seconds as vehicles wait at the signals in the AM peak hour.
- 2.2.2 Despite high amounts of delay in close proximity to the site, there is little delay found in the residential areas of Rydens and Hersham itself. However, congestion does exist on more major routes, specifically the nearby A244 into Walton-on-Thames, the B369 Walton Road between the reservoirs and the A3050 Hurst Road, near to Hampton Court.

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<sup>8</sup> <https://mycouncil.surreycc.gov.uk/documents/s13436/Final%20Weylands%20PRC%20Report.pdf>

## Collision data

- 2.2.3 The collision history at this site shows that between 01/01/2012 and present day there have been multiple collisions along Molesey Road. Data was collated for collisions between the junction of Molesey Road and the A244 Esher Bypass, and the junction of Molesey Road and the B369 Walton Road.
- 2.2.4 Over this 6 year period, there have been 92 collisions, the majority of which are classified with "slight" casualties (81), and with 10 "serious" and 1 fatal. The collision rate in the vicinity of the Weylands site is 14.9 per annum, which is an especially high rate for one road in Surrey. There were some patterns to the collisions, with 2 bridge strikes by Hershams Station, both of which were caused by HGVs.
- 2.2.5 It should be noted that this list of collisions only records those where police officers were in attendance, and therefore, it is expected that there may have been other damage only collisions over this time period. It is also acknowledged that with increased flows (all vehicle types), collisions in the vicinity of this site may increase.

## Current and proposed flows

- 2.2.6 The current flows were taken from a count on the C153 Molesey Road. AADT was not available for this site, but a MCTC undertaken at the junction of Molesey Road and Pool Road has been used, and presented in **Table 2.1**.
- 2.2.7 The C153 Molesey Road count shows an average weekday flow of just over 10,000 vehicles over a 12 hour period. It is expected that the AADT for this site will be higher than the data presented. With the proposed facility types, the current flows are set to increase, especially with the higher capacity sites.
- 2.2.8 **Table 2.1** shows that the overall increases in flow with the proposed facility types do not exceed 10%, with the majority at or below 2%. It is thought that this is an acceptable increase in flow on this road as there are small impacts on the volume of traffic, when all types of additional vehicle are considered.
- 2.2.9 However, the HGV increases must also be considered, and these show a much larger percentage increase. The greatest is 96% (170 additional HGVs) for facilities such as gasification and pyrolysis, whilst the smallest is 6% (10 additional HGVs) for windrow composting.

Site ID/name	Road name	Yr of data	Data type	Bi-directional flow (AADT where possible)					Facility Type	All additional vehicles	% increase	Additional HGVs	% increase in HGV
				Cars	LGV	HGV	Other	Total					
EL07 Former Weylands Sewage Treatment Works, Walton- on- Thames	C153 Molesey Road	2017	MCTC	8115	1486	178	244	10023	Energy from Waste (large)	838	8%	-*	-*
									Energy from Waste (small)	140	1%	-*	-*
									Gasification	202	2%	170	96%
									Pyrolysis	202	2%	170	96%
									Waste Separation and recycling (MRF) (small)	97	1%	80	45%
									Waste Separation and recycling (MRF) (large)	166	2%	137	77%
									Windrow composting	16	0.16%	10	6%
									In-vessel composting	62	1%	50	28%
Anaerobic digestion	60	1%	50	28%									

**Table 2.1: Weylands existing and proposed flows**

\* no data was available for the HGV proportions for either facility type

## 2.3 Proposed site considerations

### Preferred vehicle routing

- 2.3.1 **Appendix B** shows the preferred vehicle routing to the SRN for the site at the former Sewage Treatments Works in Hersham. The route goes north on the C153 Molesey Road, onto the B369 Walton Road and then the A3050 Hurst Road. The route splits to either go left to the M3 or right to the A3. The M3 route goes through Walton-on-Thames and north via the A244 Fordbridge Road to the A308, and then to the M3 junction 1 with the A316. The route to the A3 turns right onto the A3050 Hurst Road, up to Hampton Court and onto the A309 Hampton Court Way/Kingston Bypass to the A3.
- 2.3.2 Due to the height and width restrictions of the railway bridge immediately to the south of the site, the preferred routing can only travel north on the C153 Molesey Road. The corridor is further constrained by the narrow and busy high streets of West and East Molesey, and the routes to the SRN are lengthy (both over 6 miles).

### Nearby local developments

- 2.3.3 There are no major developments within 1 km of the site, but there are a number that are between 1 and 3km from the site. These are outlined in the Elmbridge Core Strategy published in July 2011<sup>9</sup>, with developments proposed in Walton-on-Thames, Hersham, and East and West Molesey. Across all sites, there may be up to 1,650 dwellings being built by 2026.
- 2.3.4 It should also be noted that there were proposals for a large development just to the north of the Weylands site, called Drake Park. There were 1,024 homes proposed at this site. However, on 24<sup>th</sup> May 2018<sup>10</sup>, the Secretary of State for Housing Communities and Local Government supported Elmbridge Borough Council's decision to refuse planning permission for this site.

### Types of waste management that could take place at each site

- 2.3.5 The evidence above shows that there is some congestion in the vicinity of the site, mainly caused by the height restriction of the railway bridge, a very high collision rate, low percentage increases in vehicular trips to and from the site; and lengthy SRN access corridors.
- 2.3.6 Therefore, it is recommended medium sized facilities (with capacities between 50,000 and 120,000 tpa) could be considered at the former Weylands Sewage Treatment Works site. This includes site types such as Waste Separation and Recycling and a small Energy from Waste site.
- 2.3.7 However, it should be noted that if a suitable mitigation scheme can be accommodated at this site, ie. the height and width restrictions of the railway bridge can be removed, it is suggested that a larger facility may be accommodated at this site.

## 2.4 Mitigation requirements

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<sup>9</sup> [www.elmbridge.gov.uk/EasySiteWeb/GatewayLink.aspx?allid=736](http://www.elmbridge.gov.uk/EasySiteWeb/GatewayLink.aspx?allid=736)

<sup>10</sup> <http://www.elmbridge.gov.uk/news/outcome-of-the-drake-park-planning-inquiry/>

- 2.4.1 To improve access to the site, access to the SRN and to reduce congestion, the limiting factor, the height restricted narrow railway bridge, could be adapted. An improvement to the railway bridge on Molesey Road by Hershams Station could be to remove the height restriction, provide for two-way traffic and full sized footways. If this could be provided as part of any waste site development then this would enable very easy access to the A244 via Molesey Road. It should be noted that the cost of amending the railway bridge could be prohibitive in the context of the medium scale waste development.
- 2.4.2 Consideration should also be given to providing an alternative access arrangement via Lyon Road in the Hershams Trading Estate, and the existing access arrangement closed.
- 2.4.3 Due to the high collision rate in the vicinity, it is also imperative that some provision for pedestrian crossings is made at the entrance to the site and junction with Molesey Road by the bridge, as this is one of the main entrances to the train station.

## 2.5 Summary statement

- 2.5.1 This site on the land of the former Sewage Treatment Works at Weylands is located just off Molesey Road near to Hershams and Walton-on-Thames. The evidence above shows that there is some congestion in the immediate area around the site, by the height restricted railway bridge, but there is also congestion further afield in Walton-on-Thames in the AM peak hour. There is a very high collision rate in the vicinity of this site, and specifically multiple collisions with serious or fatal casualties.
- 2.5.2 As with all sites discussed in this report, there is proposed intensification of use at this existing site, which is likely to have a detrimental impact on the capacity of the highway network. The current and proposed flows for the site show some increases in daily vehicular trips, but they are not considered to be hugely detrimental to the highway network at this location.
- 2.5.3 There are some nearby developments that must be taken into account in the surrounding area. It should also be noted that the preferred access corridors to the SRN are relatively lengthy and involve using already congested routes. The corridors are also severely limited by the height restricted railway bridge at Hershams Station, next to the site.
- 2.5.4 Overall, it is considered that medium sized facility types (with capacities up to 120,000 tpa) could be accommodated for the site at Weylands. However, if suitable mitigation can be implemented at this site by removing all railway bridge restrictions, it is suggested that a larger facility can be accommodated at this site. This will mean much shorter and more direct access to the SRN as well as removing a pinch point on the highway network. In transport terms, the evidence shows that while this site is not yet suitable for large capacity facilities due to congestion and poor access to the SRN, it may be able to accommodate either a large or medium sized intensification of activities. The TA accompanying any application should assess whether the additional trips from this site at Weylands would have an unacceptable impact on the capacity of the highway network, in accordance with Policy 15 of the SWLP.



### **3 GU23: LAND TO THE NORTH EAST OF SLYFIELD INDUSTRIAL ESTATE, GUILDFORD**

#### **3.1 Site characteristics and observations**

3.1.1 The site to the north east of Slyfield Industrial Estate is currently served by the wide and well-established Moorfield Road/Westfield Road, which is located off the A320 Woking Road that goes between two large Surrey towns; Woking and Guildford. Existing activities on the Slyfield Industrial Estate include car sales, warehousing, self storage and timber merchants to name a few. To the south of the site there is a residential area (Slyfield Green) and to the north of the site there are open fields/floodplain.

3.1.2 There is existing HGV use associated with this site, and the junction of the A320 Woking Road and Moorfield Road is signalised with cycle lane provision. The access has dedicated right turn facility from the south and a designated left turn lane from the north. Anecdotally, traffic on the A320 Woking Road, particularly during peak times, is heavy and complaints/comments from motorists are often received.

3.1.3 It should also be noted that the A320 is part of the Surrey Priority Network (SPN). The SPN is divided into multiple levels (priority 1 being the highest) and the hierarchy defines the needs, priorities and uses of the highway network. The A320 is categorised as SPN 1 meaning that it has the highest priority and will have high flows, but also regular maintenance to ensure continuous network operation.

3.1.4 There are proposed extensions to the Slyfield Industrial Estate that have been agreed under planning application 16/P/01074, which involves the construction of an internal access road within the industrial estate between Westfield Road and Moorfield Road, including 3 roundabouts.

#### **3.2 Traffic conditions**

##### **Current congestion**

3.2.1 The current levels of congestion at this site are high in the AM peak (08:00 – 09:00), as shown on the map in **Appendix C**. There are areas of large delay (30 – 100 seconds) at the junction of the A320 Woking Road and Moorfield Road, as well as patches of delay along the length of the A320 Woking Road. On the exit lane of Jacobs Well Road onto the A320 Woking Road, there is delay of between 1.5 – 6 minutes per vehicle.

3.2.2 Notably, to the south of the site at Slyfield, there are also areas of very large delay (up to 6 minutes) on the A25 Lymead. There are also considerable amounts of delay to the north of the site, in and around Jacobs Well. This area is heavily congested in the AM peak hour, and similar conditions are experienced in the PM peak hour.

##### **Collision data**

3.2.3 The collision history at this site shows that between 01/01/2012 and present day there have been multiple collisions around the Slyfield Industrial Estate. Data was collated for collisions on the A320 Woking Road between the junction of Clay Lane and the junction of Stoughton Road. Data was also collated on Jacobs Well Road, Clay Lane and Moorfield Road.

- 3.2.4 Over this 6 year period, there have been 69 collisions, the majority (59) of which had “slight” casualties, while there were 10 “serious” collisions. The collision rate for the area surrounding the new site at Slyfield is 11.2 collisions per annum which is high.
- 3.2.5 There were a high number of collisions taking place at the junction of Clay Lane with the A320 Woking Road, especially with vehicles turning right out of Clay Lane. In addition, there have been some collisions within the industrial estate on Moorfield Road often involving pedestrians or cyclists. There have been no recorded collisions involving HGVs.
- 3.2.6 It should be noted that this list of collisions only records those where police officers were in attendance, and therefore, it is expected that there may have been other damage only collisions over this time period. It is also acknowledged that with increased flows (all vehicle types), collisions in the vicinity of this site may increase.

### **Current and proposed flows**

- 3.2.7 The current flows were taken from counts on the A320 Woking Road, C14 Clay Lane and the D51 Jacobs Well Road. The lower hierarchy roads are MCTC (12 hour counts) rather than AADT, but all data is from within the last three years. The data has been presented in **Table 3.1**.
- 3.2.8 The A320 Woking Road shows an average weekday flow of just over 15,000 vehicles per day. With the proposed facility types, the flows are set to increase, especially with the higher capacity sites. The large Energy from Waste site increases by 6% while the remaining facility types have an increase of 1% or less, which will be barely noticeable.
- 3.2.9 On the A320, there are already a high number of HGVs, so the percentage increases for the additional HGV traffic associated with the site are not as high as other sites. The highest increase is 25%, and the lowest at 1%. This data suggests that this site will be able to cope with the larger capacity sites, but further investigation into the existing capacity of the network around the site is required, as the congestion maps show considerable delay on the network. It is likely that any additional vehicular movements may have a detrimental impact.

Site ID/name	Road name	Yr of data	Data type	Bi-directional flow (AADT where possible)					Facility Type	All additional vehicles	% increase	Additional HGVs	% increase in HGV
				Cars	LGV	HGV	Other	Total					
GU23 Land to the north east of Slyfield Industrial Estate	A320 Woking Road	2016	AADT	13707	650	681	191	15229	Energy from Waste (large)	838	6%	-*	-*
									Energy from Waste (small)	140	1%	-*	-*
									Gasification	202	1%	170	25%
									Pyrolysis	202	1%	170	25%
									Waste Separation and recycling (MRF) (small)	97	1%	80	12%
									Waste Separation and recycling (MRF) (large)	166	1%	137	20%
									Windrow composting	16	0.11%	10	1%
									In-vessel composting	62	0.41%	50	7%
	Anaerobic digestion	60	0.39%	50	7%								
	C14 Clay Lane	2015	MCTC	8472	1472	126	109	10179	Weight restrictions on both roads so HGVs not expected to use this route and therefore proposed flows not compared				
D51 Jacobs Well Road	2015	MCTC	3069	646	55	99	3869						

**Table 3.1: Slyfield existing and proposed flows**

\* no data was available for the HGV proportions for either facility type

### 3.3 Proposed site considerations

#### Preferred vehicle routing

- 3.3.1 **Appendix C** shows the preferred vehicle routing to the SRN for the site at Slyfield Industrial Estate on the outskirts of Guildford. The route initially goes through the industrial estate and then south on the A320 Woking Road and down to the A3. For HGVs travelling north on the A3, the entry slip is used. For HGVs travelling south on the A3, the route continues onto the A25 Ladymead/Woodbridge Road and then onto the A3 via the entry slip.
- 3.3.2 Due to the weight restrictions on Clay Lane to the north of the site, the route is restricted to the north and as such, all HGV movements have to turn left out of the industrial estate to access the A3 to the south of the site. The route, at its maximum, is 2 miles from the SRN.
- 3.3.3 However, it should be noted that part of the Clay Lane Link has recently received planning permission (16/P/01074), with the possibility that the rest of the link road will be built, which will provide a new access between Clay Lane and the Slyfield Industrial Estate<sup>11</sup>. This will therefore enable access to the A3 northbound at the Burpham junction.

#### Nearby local developments

- 3.3.4 The most notable development in the vicinity of the site is the Slyfield Area Regeneration Project, which is comprised of plans for 1,100 dwellings and 6,500m<sup>2</sup> commercial space<sup>12</sup>. This development is just to the south of the existing industrial estate and Slyfield Green, and will involve the relocation of the existing Thames Water Sewage Treatment Works. The new site will border the River Wey<sup>13</sup>. This site is due to be delivered by 2034.
- 3.3.5 Other sites due to be delivered by 2034, and in the vicinity of the site are noted in the Guildford Borough Submission Local Plan: strategy and sites<sup>14</sup>. There is the site at Gosden Hill off Merrow Lane, with 1,700 dwellings and various developments in Guildford Town Centre itself, with upwards of 1,300 dwellings, plus office and retail space in addition.

#### Types of waste management that could take place at each site

- 3.3.6 Given that there is considerable congestion in the vicinity of the site, there is a high collision rate and there are very large proposed developments very close to the site, it is considered that there is little scope for a large facility with a high number of associated additional movements.
- 3.3.7 However, it should be noted that the additional vehicular movements associated with the different facility types are unlikely to have a large impact on the highway network as the flows on the road are already very high. In addition, the SRN access corridor is very short and gives easy access to the A3 and from there the M25.
- 3.3.8 It is therefore considered that medium sized facilities (with capacities between 50,000 and 120,000 tpa) could be accommodated at the site to the north east of

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<sup>11</sup> <https://www.guildford.gov.uk/Clay-Lane-Link>

<sup>12</sup> <https://www.enterprisem3.org.uk/content/guildford-housing-zone>

<sup>13</sup> <http://www2.guildford.gov.uk/councilmeetings/documents/s1332/Item%2006%20%20SARP%20-%20App%20%20-%20Indicative%20Plan%20of%20SARP%20layout%20on%20completion%20of%20development.pdf>

<sup>14</sup> <http://www.guildford.gov.uk/newlocalplan/CHttpHandler.ashx?id=26746&p=0>

Slyfield Industrial Estate. This includes site types such as Waste Separation and Recycling and a small Energy from Waste site.

### 3.4 Mitigation requirements

- 3.4.1 As intensification of activities at this site is likely given the allocated waste site and the SARP, junction improvements will need to be made. Improvements to the capacity of the junction of the A320 Woking Road and Moorfield Road could be beneficial, as this is a congestion hotspot.
- 3.4.2 Additionally, if built, the proposed Clay Lane Link Road would allow for another access to and from the Slyfield Industrial Estate.

### 3.5 Summary statement

- 3.5.1 This site, to the north of Guildford, is on the site of the existing Slyfield Industrial Estate, with proposed intensification of use at a new waste facility. There are high levels of congestion in the vicinity of the site, as the busy A320 Woking Road between Guildford and Woking experiences considerable delay in the AM and PM peak hours. There is also a high collision rate on the roads around the site and there are high traffic flows too.
- 3.5.2 As with all sites discussed in this report, there is proposed intensification of use at this existing site, which is likely to have a detrimental impact on the capacity of the highway network as flows are likely to increase. For certain large facility types, there are increases in HGVs of 25%. The preferred access corridor to the SRN is relatively short but does involve using the already congested routes around the A3 through Guildford. There are also large developments in the vicinity of the site including the SARP.
- 3.5.3 As such, it is considered that medium sized facility types (with capacities up to 120,000 tpa) could be accommodated for this site at Slyfield. This includes facilities such as Waste Separation and Recycling and a small Energy from Waste site. In transport terms, the evidence shows that while this site is not suitable for large capacity facilities due to high levels of congestion and nearby large developments, it may be able to accommodate a medium sized intensification of activities. It should be noted that as there are large developments in the vicinity, it is important that the TA accompanying any application should assess whether additional trips from these developments and the site at Slyfield would have an unacceptable impact on the capacity of the highway network, in accordance with Policy 15 of the SWLP.

## 4 MO03: LAND ADJOINING LEATHERHEAD SEWAGE TREATMENT WORKS, RANDALLS ROAD, LEATHERHEAD

### 4.1 Site characteristics and observations

4.1.1 The site on Randalls Road is next to the existing Sewage Treatment Works and the Household Recycling Centre. It is close to Leatherhead town centre to the southeast and roughly 4km from Stoke D'Abernon in the northwest. Adjacent to the site, Randalls Road is a 40mph peri-urban road, and it serves numerous business parks along its route towards Leatherhead town centre. There are several large residential properties in the vicinity of the site.

4.1.2 This site is currently served by a well-established and wide access from Randalls Road. This site already has an existing HGV use associated with it, and has adequate visibility in excess of 120 metres in both directions from a point 2.4 metres back from the edge of the carriageway. The access road does narrow beyond the entrance, but there are adequate passing places. The access also does not have any dedicated right turn facilities such as a ghost island and marked waiting area.

4.1.3 The current permission on site has the following restrictions (enforced by planning conditions) to protect the residential amenity of the nearby houses and to ensure that the movement of HGVs does not take place outside the current hours of operation:

*There shall be no HGV movements to or from the site, including HGV vehicles waiting on the access road to Randalls Road, except between the following times:*

- 0630 to 1900 hours Mondays to Fridays; and
- 0730 - 1300 Saturdays; and not at any times on Sundays, Bank, Public or other National Holidays with the exception of Bank Holidays falling on a Monday and the two Saturdays immediately following any Bank Holiday when the hours shall be 0730 - 1600.<sup>15</sup>

4.1.4 There has also been a small collision history at the site, so measures have been implemented to try and improve safety along the route. Specifically, improved warning signs and anti-skid surfacing have been installed.

### 4.2 Traffic conditions

#### Current congestion

4.2.1 The current levels of congestion in the AM peak hour (08:00 – 09:00) at this site are relatively low with little delay shown on the maps in **Appendix D**. This shows no or little delay on the A245 outside the site, no northbound delay on Oaklawn Road, but some southbound delay (30 – 100 seconds) on the approach to the junction with the A245 Randalls Road. This delay exists due to queues that build for vehicles waiting to turn left/right from Oaklawn Road onto the A245.

4.2.2 There is also little delay on the A244 Oxshott Road in both directions, except on the approach to the roundabout with the M25. From anecdotal evidence, in the PM peak, there are considerable queues on the eastbound approach to the M25 junction 9B roundabout.

4.2.3 It should also be noted that as this is an existing Community Recycling Centre (CRC), there will be peak visiting times at weekends and on bank holidays. It is

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<sup>15</sup> Derived from a planning application.

currently unclear what the congestion is like at these times. This should be investigated in more detail at the planning application stage.

### **Collision data**

- 4.2.4 The data shows that between 01/01/2012 and present day, there have been 26 collisions, on the A245 Woodlands Road/Randalls Road and Oaklawn Road. All collisions had a severity classification of 'slight', except three which were classified as 'serious', and one fatal collision. This was caused when a motorcycle and a car travelling in opposite directions collided. There were no collisions involving HGVs.
- 4.2.5 The collision rate in the vicinity of the existing Sewage Treatment Works on Randalls Road is 4.2 per annum. The majority of the collisions that have taken place are at the junction of the A245 Randalls Road with Oaklawn Road, especially vehicles turning right into Oaklawn Road from Randalls Road (from Leatherhead).
- 4.2.6 It should be noted that this list of collisions only records those where police officers were in attendance, and therefore, it is expected that there may have been other damage only collisions over this time period. It is also acknowledged that with increased flows (all vehicle types), collisions in the vicinity of this site may increase.

### **Current and proposed flows**

- 4.2.7 Counts for this site have been undertaken on the A245 Randalls Road and Oaklawn Road. The count on Randalls Road is from 2009 and should therefore be treated with caution. In addition, there was no vehicle classification for this site.
- 4.2.8 The data for Oaklawn Road and for Randalls Road shows that there are likely to be small impacts on the volume of traffic, when all types of additional vehicle are considered. Apart from the large Energy from Waste facility type, all others show a percentage increase of less than 5%. For Randalls Road, the percentage increases are very low as the comparative number of total vehicles over an average 24 hour period is high. Despite the high vehicle flows on this route, there is limited congestion which suggests this road is operating within its capacity.
- 4.2.9 When considering the additional HGV movements only, the percentage increases are considerable for the larger capacity sites, such as Gasification and Pyrolysis, with increases of 134%. The other facility types show that there are low percentages associated with the other sites such as 8% for Windrow composting.

Site ID/name	Road name	Yr of data	Data type	Bi-directional flow (AADT where possible)					Facility Type	All additional vehicles	% increase	Additional HGVs	% increase in HGV
				Cars	LGV	HGV	Other	Total					
MO03 Land adjoining Leatherhead Sewage Treatment works	Oaklawn Road	2015	AADT	5586	416	127	182	6310	Energy from Waste (large)	838	13%	-*	-*
									Energy from Waste (small)	140	2%	-*	-*
									Gasification	202	3%	170	134%
									Pyrolysis	202	3%	170	134%
									Waste Separation and recycling (MRF) (small)	97	2%	80	63%
									Waste Separation and recycling (MRF) (large)	166	3%	137	108%
									Windrow composting	16	0.25%	10	8%
									In-vessel composting	62	1%	50	39%
									Anaerobic digestion	60	1%	50	39%
	A245 Randalls Road	2009	AADT	No vehicle classification available	51874	Energy from Waste (large)	838	2%	-+	-+			
						Energy from Waste (small)	140	0.27%	-+	-+			
						Gasification	202	0.39%	-+	-+			
						Pyrolysis	202	0.39%	-+	-+			
						Waste Separation and recycling (MRF) (small)	97	0.19%	-+	-+			
						Waste Separation and recycling (MRF) (large)	166	0.32%	-+	-+			
						Windrow composting	16	0.03%	-+	-+			
						In-vessel composting	62	0.12%	-+	-+			
Anaerobic digestion	60	0.12%	-+	-+									

**Table 4.1: Leatherhead Sewage Treatment Works existing and proposed flows**

\* no data was available for the HGV proportions for either facility type

+ as no vehicle classification was available, it was not possible to calculate HGV changes



## 4.3 Proposed site considerations

### Preferred vehicle routing

4.3.1 **Appendix D** shows the preferred vehicle routing to the SRN for the site at Leatherhead. The route goes north on the A245 Randalls Road, Oaklawn Road and the A244 Oxshott Road to the M25 junction 9b and the A243 Leatherhead By-Pass.

4.3.2 There are some limitations to this routing, most notably the railway bridge height restriction in Leatherhead town centre. However, this route is merely 2.6km away from access to the SRN, and is therefore a very convenient site.

### Nearby local developments

4.3.3 Mole Valley are currently reviewing their Local Plan, and as such it is too early to say what development sites will come forward. It is likely this will not be known until at least June/July and even then it is not known what will be in the public arena until Mole Valley undertake any associated consultation, which is anticipated to be in the autumn at the earliest.

4.3.4 Therefore, large developments in the vicinity of the site are not known, but there have been some recent small developments off Cleeve Road. The new trips associated with this site will not be taken into account in the current flows presented in **Table 4.1**. The Farthings on the corner of Randalls Road and Cleeve Road comprises 60 detached, semi-detached and terraced houses, and 10 flats, some of which are designated as retirement/assisted living housing.

### Types of waste management that could take place at each site

4.3.5 From the evidence base, built up from looking at the site situation, current congestion, vehicle flows, collision history and the SRN access corridors, it shows that this is an advantageous site. This is especially due to its very close proximity to the SRN.

4.3.6 This indicates that any type of facility could be installed here, as the intensification of activity at the site off the A245 Randalls Road is unlikely to have a hugely detrimental impact on the surrounding network. Therefore, it is considered that sites with a high capacity (in tonnes per annum) can be accommodated, such as Energy from Waste, Gasification, Pyrolysis and Waste Separation and Recycling.

4.3.7 However, it should be noted that this assessment is based on an overview of data for the area and does not go into the detail that is required for a TA. It is therefore also recommended that if a planning application is submitted for this site, that a traffic impact assessment, and specifically junction modelling is undertaken of the junction of A245 Randalls Road and Oaklawn Road as well as others in the vicinity of the site.

## 4.4 Mitigation requirements

4.4.1 It is thought that if intensification at this site is likely, then junction improvements will need to be made at the junction of the A245 Randalls Road and Oaklawn Road. It is suggested that, if land allows, a roundabout is tested at this location.

4.4.2 In addition, it is recommended that that right turns are banned into the site so it becomes a left-in only access, with a potential queue waiting lane on the near side. It should be noted that this is subject to ensuring that HGVs can u-turn at the roundabout with the business park on Springfield Drive and suitable road widths.

Potentially, with roundabouts on either side of the development (proposed mitigation at Oaklawn Road and existing roundabout with Springfield Drive) it could be a left-in / left-out only site, which would further reduce congestion on the highway network.

#### 4.5 Summary statement

- 4.5.1 This site, on the edge of Leatherhead, is an existing Sewage Treatment Works, with proposed intensification of use. The site is in a peripheral location, but due to the close proximity of some properties, there are currently some HGV restrictions to the site. There is a small collision history in the vicinity and the congestion mapping shows that in the AM peak hour, there is little delay experienced by vehicles. The current and proposed flows for the site show some increases in daily vehicular trips, but they are not considered to be hugely detrimental to the highway network at this location. There are no large nearby developments that must be taken into account, and limited objections to the development of the site.
- 4.5.2 As such, it is considered that this site can sustain a larger capacity facility type, in part due to the existing conditions of the road network, but mainly due to the site's proximity to the SRN. The site is easily accessible from the M25 which is extremely advantageous for access. Along with all of the other transport evidence, this site has been shown to be suitable, in transport terms, for waste related development, and that it is likely to be able to accommodate a considerable intensification of use, providing suitable mitigation is implemented as suggested above.

## 5 RE09D: LAND TO THE WEST OF EARLSWOOD SEWAGE TREATMENT WORKS, REDHILL

### 5.1 Site characteristics and observations

- 5.1.1 The site on the A2044 Woodhatch Road is next to the existing Sewage Treatment Works and close to the Household Recycling Centre. It is close to Earlswood, with the larger towns of Reigate and Redhill further to the north. By the site, the A2044 Woodhatch Road is predominantly a 40mph rural road, which becomes a 30mph road through a mainly residential area.
- 5.1.2 The A2044 Woodhatch Road goes between two junctions on major routes through Surrey; the A217 and the A23, both of which are diversion routes for the SRN. To the west, the A2044 meets the A217 Dovers Green Road, at the signalised Woodhatch crossroads, which is a known congestion and collision hotspot. To the east, the A2044 meets the A23 Horley Road at a simple priority junction and again this is a notoriously congested area, especially around Three Arch Road.
- 5.1.3 It should be noted that the A217 (between Reigate and Horley) was identified by the Road Safety Foundation as being one of the top 50 A-roads in the country for the number of fatal and serious collisions per vehicle kilometre. As such, a bid to the Safer Roads Fund was submitted for a range of highway improvements to reduce the risk of collisions in the future. A DfT decision has not yet been reached over the funding.
- 5.1.4 The Sewage Treatment Works site already has an existing HGV use associated with it, and the current access has adequate visibility in excess of 120 metres in both directions from a point 2.4 metres back from the carriageway edge. The access appears to be wide enough to allow the simultaneous entry and exist of waste carrying HGVs. There are currently no HGV restrictions on entry/exit from the site.
- 5.1.5 It should also be noted that the A23 is SPN 1 meaning that it has the highest priority and will have high flows, but also regular maintenance to ensure continuous network operation. The A23 is also part of the diversion route for the M23. The A217, north of the A2044 Woodhatch Road is also SPN 1 and part of the diversion route for the M25.

### 5.2 Traffic conditions

#### Current congestion

- 5.2.1 The current levels of congestion in the AM peak hour in the vicinity of this site are considerable. The map in **Appendix E** shows that there are very large amounts of delay (up to 6 minutes) at the signalised junction of the A2044 Woodhatch Road with the A217 Dovers Green Road. This is a well-known delay hotspot area. This leads to lengthy queues on the A2044 approach to the junction, almost back to the Earlswood site.
- 5.2.2 Congestion also exists in central Reigate, and there are large queues on the approach to the M25 junction 8. Delay (between 30 and 100 seconds) is also found at the junction of the A2044 Woodhatch Road and the A23 Horley Road, and on the approach into Horley.
- 5.2.3 This description of congestion in the area matches with the anecdotal evidence of the roads in the vicinity of the site, especially at Woodhatch Crossroads, and through Reigate town centre.

## Collision data

- 5.2.4 The collision history at this site shows that between 01/01/2012 and the present day, there have been 67 collisions along the A2044 Woodhatch Road between the A217 Dovers Green Road and the A23 Horley Road (inclusive of the junctions).
- 5.2.5 There have been 63 classified as “slight” and 4 “serious”, with the majority involving cars or motorcycles. There have been no collisions recorded that involve HGVs. The collisions follow some patterns, specifically there were many that had lost control on bends in the road, and others that had collided when entering/exiting side roads on the A2044 Woodhatch Road.
- 5.2.6 The collision rate in the vicinity of the Earlswood site is 10.9 per annum. This is a high collision rate for one road in the county and should therefore be investigated further to see if there are any mitigation measures that can be introduced to reduce the collision risk.
- 5.2.7 It should be noted that this list of collisions only records those where police officers were in attendance, and therefore, it is expected that there may have been others over this time period. It is also acknowledged that with increased flows (all vehicle types), collisions in the vicinity of this site may increase.

## Current and proposed flows

- 5.2.8 The current flows were taken from counts on the A2044 Woodhatch Road and the A23 Horley Road. AADT was not available for either site, but an MCC and ANPR data has been used, and presented in **Table 5.1**.
- 5.2.9 The A2044 Woodhatch Road shows an average weekday flow of just over 8000 vehicles per day. With the proposed facility types, this is set to increase, especially with the higher capacity sites. The large Energy from Waste site increases by 10% while the remaining facility types have an increase of 2% or less, which is much more acceptable. On the A2044, there are a reasonably high number of HGVs, so the percentage increase for the additional HGVs are not as high as other sites. The highest increase is 75%, and the lowest at 4%.
- 5.2.10 For the count on the A23, it was expected that the full number of additional vehicles would not use the A23 (with the rest using the A217), so the additional flows have been applied proportionally to the existing count on the A23. An arbitrary 50% has been applied to the A23 count, which shows very low impacts on the overall additional vehicles on the network. When considering the HGV percentage increases, these do show some increases of up to 24%, but again these are relatively low.

Site ID/name	Road name	Yr of data	Data type	Bi-directional flow (AADT where possible)					Facility Type	All additional vehicles	% increase	Additional HGVs	% increase in HGV
				Cars	LGV	HGV	Other	Total					
RE09D Land to the west of Earlswood Sewage Treatment works	A2044 Woodhatch Road	2012	MCC	7048	952	227	160	8387	Energy from Waste (large)	838	10%	-*	-*
									Energy from Waste (small)	140	2%	-*	-*
									Gasification	202	2%	170	75%
									Pyrolysis	202	2%	170	75%
									Waste Separation and recycling (MRF) (small)	97	1%	80	35%
									Waste Separation and recycling (MRF) (large)	166	2%	137	60%
									Windrow composting	16	0.19%	10	4%
									In-vessel composting	62	1%	50	22%
	A23 Horley Road	2015	ANPR	14985	2020	359	355	17719	Energy from Waste (large)	419	2%	-*	-*
									Energy from Waste (small)	70	0.39%	-*	-*
									Gasification	101	1%	85	24%
									Pyrolysis	101	1%	85	24%
									Waste Separation and recycling (MRF) (small)	49	0.27%	40	11%
									Waste Separation and recycling (MRF) (large)	83	0.47%	69	19%
									Windrow composting	8	0.05%	5	1%
									In-vessel composting	31	0.17%	25	7%
Anaerobic digestion	30	0.17%	25	7%									

**Table 5.1: Earlswood Sewage Treatment Works existing and proposed flows**

\* no data was available for the HGV proportions for either facility type

### 5.3 Proposed site considerations

#### Preferred vehicle routing

- 5.3.1 The map in **Appendix E** shows the suggested SRN access corridor to the north and south of the site. Access to the north is via the A2044 Woodhatch Road, and the A217 Dovers Green Road (via the A25 through Reigate) up to the M25 junction 8. Access to the south is via the A2044 Woodhatch Road, then the A23 Horley Road/Brighton Road/Bonehurst Road/London Road, along Airport Way to the M23 junction 9.
- 5.3.2 This site has no limitations to routing as there are no height or width restrictions, but the distances to the SRN are lengthy; 6.6km to the north and 8.5km to the south.
- 5.3.3 In addition, there is a railway level crossing just to the north of the Reigate one-way system, which is currently down 4 times per hour. However, this is likely to change in the near future due to the proposed increased service frequency on the North Downs Line to 6 trains per hour. This is likely to add considerable extra delay to the network in central Reigate and beyond.
- 5.3.4 Furthermore, these suggested SRN access corridors go through large built up and residential areas, and especially in proximity to schools. This is something that should be investigated in much more detail at the planning application stage to ensure that areas near schools can be avoided where possible.
- 5.3.5 The route also goes through an Air Quality Management Area (AQMA), which encompasses the SRN access corridor through Reigate Town Centre. The AQMA<sup>16</sup> was declared in 2007 and has not yet been revoked due to the continuing issues with air quality in the town centre.
- 5.3.6 It should also be noted that both of the preferred routes, to the north and the south, travel along heavily congested routes and would exacerbate the existing congestion issues in the vicinity of the site. Again, this is something that should be investigated in detail at the planning application stage.

#### Nearby local developments

- 5.3.7 There are no major developments within 1 km of the site, but there are a number that are between 1 and 3km from the site. There are number of new and proposed developments in the vicinity of the site, some of which are to the south of the site.
- 5.3.8 The Horley North East sector (The Acres)<sup>17</sup> has been built and all 718 dwellings are now occupied. The Horley North West Sector (Westvale Park)<sup>18</sup> is currently being built, with construction due to finish in 2025 to provide over 1,500 dwellings. These two large developments will be served by a new link road between the A23 and the A217.
- 5.3.9 Other developments that are close by include the Sustainable Urban Extension East of Redhill (300 new dwellings) and the Redhill and Reigate Urban Area which is set to accommodate 1700 dwellings, 20,000m<sup>2</sup> of employment space and 22,000m<sup>2</sup> of retail space. These are both to be delivered by 2028 as part of the Reigate and

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<sup>16</sup> [https://uk-air.defra.gov.uk/aqma/details?aqma\\_ref=449](https://uk-air.defra.gov.uk/aqma/details?aqma_ref=449)

<sup>17</sup> [http://www.reigate-banstead.gov.uk/info/20326/horley/367/housing\\_in\\_horley](http://www.reigate-banstead.gov.uk/info/20326/horley/367/housing_in_horley)

<sup>18</sup> [http://www.northwesthorley.co.uk/?page\\_id=89](http://www.northwesthorley.co.uk/?page_id=89)

Banstead Core Strategy. Additionally, planning<sup>19</sup> has been approved for the new Salfords Aggregates Depot, which will have the capacity for 110,000 tpa of aggregate recycling and a 110,000 tpa waste transfer facility.

### **Types of waste management that could take place at each site**

5.3.10 Due to the high levels of congestion in the area, in particular around Reigate, the high vehicles flows on the network, the lengthy preferred access corridors to the SRN, and the high collision rate on the A2044 Woodhatch Road, it is considered that plans for smaller facilities with lower vehicle movements could be accommodated at this site. This is to ensure that the already poor transport conditions in the vicinity of the site are not exacerbated further.

5.3.11 As such, facility types with small capacities under 50,000 tpa such as windrow composting, in-vessel composting and anaerobic digestion are likely to be appropriate as the impact of their additional vehicles on the network is likely to be minimal as possible.

### **5.4 Mitigation requirements**

5.4.1 Some mitigation may be required at the existing site access (if this is being used) to ascertain if two HGVs can enter and exit at the same time. To confirm this, any transport statement or assessment must be accompanied by HGV tracking diagrams.

5.4.2 In addition, modification to the existing priority junction of the A2044 Woodhatch Road and the A23 Horley Road may be required, if this site is to be developed further. It is recommended that both a roundabout and full signalisation of the junction are tested within a planning application for the site.

### **5.5 Summary statement**

5.5.1 This existing Sewage Treatment Works site is found to the south of two major towns in Surrey; Reigate and Redhill, on the A2044 Woodhatch Road. As with all sites discussed in this report, there is proposed intensification of use, but at this location it is unclear how much can be supported. There is a vast collision history in the vicinity of the site, with a collision rate of 10.9 per annum just on the A2044. The congestion mapping and anecdotal evidence shows that the highway network around this site is extremely congested, with large amounts of delay during peak hours. The current and proposed flows for the site show some increases in daily vehicular trips, but they are not particularly high, mainly due to the high levels of flow and HGVs on the routes in the first place.

5.5.2 There are some large nearby developments, specifically to the south in Horley, that must be taken into account when considering this site for future use. In addition, the access corridors to the SRN are extensive and require routing through large built up areas.

5.5.3 It is important that the TA accompanying any application should assess the impact of these large developments in the vicinity of the site and the intensification of use at the waste site on the capacity of the highway network, in accordance with Policy 15 of the SWLP.

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<sup>19</sup> <https://www.mineralandwastepanning.co.uk/secondary-recycled-aggregate-production-approved-rail-linked-site-surrey/aggregates/article/1299055>

5.5.4 As such, it was considered that this site can only support smaller capacity facility types, with capacities under 50,000 tpa. This will ensure that the impact of additional vehicles on the network be as minimal as possible. All of the evidence presented above shows that, in transport terms, this site is likely to not be suitable for large capacity facilities, and therefore could only accommodate a small intensification of activities.



## **6 RU04C: LAND ADJACENT TO LYNE LANE SEWAGE TREATMENT WORKS, CHERTSEY**

### **6.1 Site characteristics and observations**

6.1.1 The site at Lyne Lane is right next to the current Thames Water Sewage Treatment Works and an existing Household Recycling Centre. Both of the activities at the site generate reasonable vehicle movements throughout the day. As shown in **Appendix A**, this site is just off Lyne Lane, in the vicinity of Virginia Water and Thorpe. It is also relatively close to the other proposed site at Trumps Farm on Kitsmead Lane.

6.1.2 Access to the site is good, with suitable visibilities at the site to facilitate safe access and egress of HGVs, and there is suitable geometry for HGV movements. Furthermore, as Lyne Lane is a Sewage Treatment Works, it already handles tankers on a daily basis. Lyne Lane itself is a relatively wide rural road that could potentially accommodate an increase in traffic movements.

6.1.3 The approach route to the proposed site via Hardwick Lane and Lyne Crossing Road is a national speed limit road (60mph), with a history of personal injury collisions occurring. Various measures have been implemented to try and improve safety at junctions along the route. The Lyne Lane/Lyne Crossing Road/Bridge Lane junction, in the vicinity of the site, is one of the junctions targeted for measures as a result of its safety record. Improved warning signs/road markings, anti-skid surfacing and vehicle activated signs have been installed. There are also known highway drainage problems in the area. This often means that there are small bodies of water on the carriageway which cause slowing or swerving of vehicles to avoid them.

### **6.2 Traffic conditions**

#### **Current congestion**

6.2.1 The current levels of congestion at this site are low, as this is a rural road, but with increasing proximity to Chertsey and the SRN, the congestion levels increase considerably. These patterns are shown in **Appendix F**.

6.2.2 In the AM peak hour (08:00 – 09:00), delay of between 100 and 360 seconds (6 minutes) can be seen on the approach to the junction of Hardwick Lane and Holloway Hill, almost reaching back to the junction of Almnors Road. There are often large queues on this section of road, which match the delay plotted on the routes.

6.2.3 There is less congestion observed on the A320 Guildford Road, but congestion then builds again along the A320 St Peter's Way, on the approach to the M25. Westbound flow on the A320 St Peter's Way is especially bad in the AM peak hour.

#### **Collision data**

6.2.4 The data shows that between 01/01/2012 and present day, there have been 26 collisions, on Lyne Lane and the C127 Bridge Lane/Lyne Crossing Road/Hardwick Lane.

6.2.5 All collisions had a severity classification of 'slight', except five which were classified as 'serious' and involved cars or a motorcycle. There were no collisions involving HGVs. The majority of the collisions involved cars or cars and pedal cycles/motorcycles. The collision rate in the vicinity of Lyne Lane is 4.2 per annum.

- 6.2.6 Over a third of all reported collisions took place at the junction of Lyne Lane with Lyne Crossing Road, and the cause was either loss of control at the junction or vehicles failing to give way appropriately turning in/out of Lyne Lane and colliding with vehicles on Lyne Crossing Road.
- 6.2.7 As stated above, there have been some improvements at the junction, specifically improved warning signs/road markings, anti-skid surfacing and vehicle activated signs have been installed to overcome the collision issue. These changes on-street appear to have mitigated the issue, as no collisions at this junction have occurred since August 2016.
- 6.2.8 It should be noted that this list of collisions only records those where police officers were in attendance, and therefore, it is expected that there may have been others over this time period. It is also acknowledged that with increased flows (all vehicle types), collisions in the vicinity of this site may increase.

### **Current and proposed flows**

- 6.2.9 The current flows were taken from a count (MCTC) on the C127 Lyne Crossing Road, just to the south of the site. This was the only count available in the vicinity of the site.
- 6.2.10 The data shown in **Table 6.1** shows that the additional trips associated with the proposed waste land uses, will have some impact on the flows, but the biggest increase for all vehicles is just 15% for the large Energy from Waste site.
- 6.2.11 When considering the additional HGV flows at the site, the increases are more marked. The highest are 185% and 149% increases for Gasification/Pyrolysis and a large MRF site respectively. For each of these facility types, the number of HGVs over a 24 hour period will increase from 92 to 262 and 229 respectively. As before, HGV proportions are not known for the Energy from Waste sites, but based on the capacities, it is likely that these will represent large percentage increases as well.
- 6.2.12 It should also be noted that the cumulative impact of both the Trumps Farm site and the Lyne Lane site should be considered in the TA accompanying any application, to assess whether additional trips from both sites would have an unacceptable impact on the capacity of the highway network, in accordance with Policy 15 of the SWLP.

Site ID/name	Road name	Yr of data	Data type	Bi-directional flow (AADT where possible)					Facility Type	All additional vehicles	% increase	Additional HGVs	% increase in HGV
				Cars	LGV	HGV	Other	Total					
RU04C Land adjacent to Lyne Lane Sewage Treatment works	C127 Lyne Crossing Road	2011	MCTC	4940	673	92	61	5766	Energy from Waste (large)	838	15%	-*	-*
									Energy from Waste (small)	140	2%	-*	-*
									Gasification	202	4%	170	185%
									Pyrolysis	202	4%	170	185%
									Waste Separation and recycling (MRF) (small)	97	2%	80	87%
									Waste Separation and recycling (MRF) (large)	166	3%	137	149%
									Windrow composting	16	0.28%	10	11%
									In-vessel composting	62	1%	50	54%
Anaerobic digestion	60	1%	50	54%									

**Table 6.1: Lyne Lane Sewage Treatment Works existing and proposed flows**

\* no data was available for the HGV proportions for either facility type

## 6.3 Proposed site considerations

### Preferred vehicle routing

- 6.3.1 The map in **Appendix F** shows that the suggested SRN access corridor goes south on Lyne Lane, south-eastbound on the C127 Lyne Crossing Road/Hardwick Lane to the B386 Holloway Hill, and then to the mini roundabout junction with the A320 Guildford Road, and finally onto the A320 St Peter's Way to the M25 junction 11.
- 6.3.2 This follows a similar route to that for Trumps Farm, and despite its close proximity to both the M25 and the M3, the route to the SRN is over 5.6km long. As with Trumps Farm, there is no recommended route to the north of the site due to the height restrictions on Trumpsgreen Road in Virginia Water.

### Nearby local developments

- 6.3.3 There are no major developments within 1 km of the site, but there are a number that are between 1 and 3km from the site. As per the Runnymede Draft Local Plan<sup>20</sup> that was published in 2018, there are multiple developments proposed in the vicinity of the site including those in Virginia Water (roughly 300 dwellings) and in Chertsey (roughly 1950 dwellings and 1140m<sup>2</sup> of floorspace). The developments in Chertsey are proposed at St Peter's Hospital, Bittams Lane and South Chertsey.
- 6.3.4 In addition to these developments, there is one large development in the vicinity of the site at Lyne Lane. Longcross North (to the north of the M3), which has achieved full planning permission, is comprised of 200 residential units and 80,000m<sup>2</sup> of office space. Currently, 100 residential units have been built, 50 of which are now occupied. No development of the proposed office space has taken place yet, as some of the site is still used as the film studios.
- 6.3.5 Highway improvements resulting from the development can be seen on street, whilst others will be placed on-street once the site reaches a certain occupancy. The new site access, with the roundabout on Chobham Lane is in use, whilst signalisation of the Wellington Avenue/Trumpsgreen Road junction and improvements to the roundabout with Chobham Lane/Chertsey Road/Longcross Road/Burma Road are still to be constructed.
- 6.3.6 Designated Garden Village status has been given to the land to the south of the M3, and it is expected that a planning application will be received in due course for over 1,300 dwellings<sup>21</sup> and 7,350m<sup>2</sup> of employment space. There are likely to be large highway alterations in the area to accommodate this residential site, but there are no proposals as yet.

### Types of waste management that could take place at each site

- 6.3.7 From the evidence gathered above, it is clear to see that there is congestion in the vicinity of the site, and relatively long distances to the SRN from the site. Despite this, there are few collisions at the site, and the road and current access arrangements are appropriate. Most importantly, it is likely that there will be large developments near to the site, which could have an impact on the suitability of site, but the scale of this development is not yet known.

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<sup>20</sup> <https://runnymede.gov.uk/article/15680/Runnymede-Local-Plan-Consultation-Page>

<sup>21</sup> <http://www.longcrossvillage.info/longcross-south.html>

6.3.8 It is therefore suggested that medium sized facility types (with capacities between 50,000 and 120,000 tpa) could be accommodated. This includes facilities such as Waste Separation and Recycling and a small Energy from Waste site.

#### 6.4 Mitigation requirements

6.4.1 From the congestion mapping, it is necessary that mitigation is put in place to improve the capacity of the B386 Holloway Hill junction with Hardwick Lane. Some proposals exist to implement an improvement at the Hardwick Lane/Holloway Hill junction as identified in A320 study<sup>22</sup>, but this is subject to both the adoption of the Runnymede Local Plan and the progression of the proposed Longcross South site.

#### 6.5 Summary statement

6.5.1 This existing Sewage Treatment Works site is found close to Virginia Water in the northwest and Chertsey in the east, located in a rural area just off Lyne Lane. As with all sites discussed in this report, there is proposed intensification of use at this existing site, which currently allows for good vehicular access. The congestion mapping and anecdotal evidence shows that while there is little or no congestion on the highway network around the site, 1 mile down the road at the junction of Hardwick Lane and Holloway Hill, there are large amounts of delay.

6.5.2 There is a small collision history near to this site, which appears to have been solved by the introduction of various measures to increase awareness of the junction, slow speeds and prevent skidding. The current and proposed flows for the site show large increases in daily vehicular trips, especially when considering HGV movements. It should also be noted that the preferred access corridors to the SRN are lengthy and involve using the already congested routes in the vicinity of the M25.

6.5.3 There are some large nearby developments, specifically to the west of the site at Longcross (North and South) and other developments in and around Virginia Water and Chertsey. These must be taken into account when considering this site, as some sites are in close proximity to the SRN access corridors and could have large impacts on the viability of certain facility types. It is therefore important that the TA accompanying any application should assess whether additional trips from these developments and the Lyne Lane site would have an unacceptable impact on the capacity of the highway network, in accordance with Policy 15 of the SWLP.

6.5.4 As such, it is suggested that medium sized facility types (with capacities up to 120,000 tpa) could be considered at this site. This includes facilities such as Waste Separation and Recycling and a small Energy from Waste site. In transport terms, the evidence shows that this site is not suitable for large capacity facilities, but may be able to accommodate a medium sized intensification of activities. It is also imperative that this site is considered in association with the proposed site at Trumps Farm and the other large developments.

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<sup>22</sup>H:\Modelling\project\53151092\_WasteLocalPlan\02Documents\A320\_Corridor\_Study\_Interim\_Report\_(DRAFT)\_V2.0\_WEB\_REDUCED.pdf

## **7 RU02C: LAND ADJACENT TO TRUMPS FARM, KITSMEAD LANE, LONGCROSS**

### **7.1 Site characteristics and observations**

- 7.1.1 The land adjacent to Trumps Farm off Kitsmead Lane is in close proximity to the Colliers Recycling Centre. As shown in **Appendix A**, this site is on Kitsmead Lane, near to Virginia Water and the new developing Longcross North site. Kitsmead Lane is a rural road, through a large wooded area, just to the south of the M3. The site is also close to a residential area called Trumps Green.
- 7.1.2 This site is a private landfill and recycling facility, which regularly handles large skip vehicles. Access to the site is good, with suitable visibilities to facilitate safe access and egress of HGVs. There is also currently good access to the SRN, and specifically the M25, via the B386 Longcross Road and A320 Guildford Road/St Peter's Way.
- 7.1.3 There are some known problems on Kitsmead Lane, arising specifically from vehicle speeds and vibration/noise complaints from residents in properties close to the site. Furthermore, there is an ongoing problem with vehicles overshooting the junction when approaching Longcross Road on Kitsmead Lane. Various measures have been introduced to try and address the problem (enhanced signing, road markings, hazard marker posts etc). However, personal injury collisions continue to occur at the junction.
- 7.1.4 The new site at Longcross North is in the process of being developed, with plans for a much larger second site to the south of the M3 (Longcross South). A number of associated highways measures have also been introduced in the area, but currently there is nothing directly impacting on Kitsmead Lane. The alterations are detailed in **section 7.3**.

### **7.2 Traffic conditions**

#### **Current congestion**

- 7.2.1 There is very little congestion on the roads in the vicinity of the proposed site. The majority of the roads are rural and are at the national speed limit. As shown on the map in **Appendix G**, all roads are green, with less than 15 seconds of delay recorded in the AM peak hour. From anecdotal evidence and site observations, this level of congestion is similar in the PM peak hour.
- 7.2.2 The most noticeable area of delay, which affects the access to the SRN, is found on the B386 Holloway Hill, on the approach to the mini-roundabout with the A320 Guildford Road, with delay of 30 - 100 seconds recorded. The congestion continues along the A320 St Peter's Way, on the approach to the M25. Westbound flow on the A320 St Peter's Way is especially bad in the AM peak hour.

#### **Collision data**

- 7.2.3 The data shows that between 01/01/2012 and present day, there have been 22 collisions, on Kitsmead Lane, Chobham Lane, Trumpsgreen Road (to the junction with Wellington Avenue) and the B386 Longcross Road.
- 7.2.4 All collisions had a severity classification of 'slight', except two which were classified as 'serious' and involved a motorcycle or pedal cycle. The majority of the collisions involved cars or cars and pedal cycles/motorcycles. The collision rate in the vicinity of Kitsmead Lane is 3.6 per annum.

- 7.2.5 Notably, there was a clear trend of vehicles overshooting the junction, due to poor visibility or drivers not seeing the junction. There are 8 collisions within the last 6 years that have been caused by drivers failing to see the junction and stop. There has been one collision involving an HGV over this time period, and this collision was also caused by junction overshoot.
- 7.2.6 While it is not expected that HGVs accessing the proposed site will use this junction to access the SRN, it is likely that the additional cars/LGV's using the site may use this junction. As stated previously, various measures have already been introduced to improve the visibility of the priority junction, but further mitigation is likely to be required, as this is a very high number of very similar collisions for one location.
- 7.2.7 It should be noted that this list of collisions only records those where police officers were in attendance, and therefore, it is expected that there may have been others over this time period. It is also acknowledged that with increased flows (all vehicle types), collisions in the vicinity of this site may increase.

### **Current and proposed flows**

- 7.2.8 The current flows were taken from counts on Kitsmead Lane, C10 Chobham Road and the B386 Longcross Road.
- 7.2.9 Flow increases resulting from the potential facility types have been applied to both the Kitsmead Lane and the Longcross Road count sites, as the flows from the proposed site are likely to affect each road equally. The Chobham Road flows have not had the additional vehicle flows applied as it is expected that there will be limited use of this road by HGVs to and from the site. This is shown in **Table 7.1** below.
- 7.2.10 Overall, flows are relatively low on all of the roads in the vicinity of the proposed site, and as such, the increases in vehicle movements from each of the facility types is considerable. On Kitsmead Lane, for the Energy from Waste large capacity site, there is a predicted 38% increase in flows on the route, but most notably, there are large increases in HGVs on the road. Increases of 227% and 223% are found for gasification/pyrolysis and MRF (large capacity) respectively. These increases are considerable and should be treated with caution.
- 7.2.11 Large increases in HGVs are also found on the B386 Longcross Road, with levels almost doubling for three different facilities. In contrast, the increases in flow across all vehicle types on the B386 are very small and are deemed acceptable. If additional vehicles were applied to the C10 Chobham Lane existing flows, the percentage increases would also be deemed acceptable.
- 7.2.12 However, as there is a considerable change on Kitsmead Lane, it is considered important that the TA accompanying any application should assess whether additional trips would have an unacceptable impact on the capacity of the highway network, in accordance with Policy 15 of the SWLP. In addition, the cumulative impact of additional vehicle movements for both Trumps Farm and Lyne Lane should be assessed.

Site ID/name	Road name	Yr of data	Data type	Bi-directional flow (AADT where possible)					Facility Type	All additional vehicles	% increase	Additional HGVs	% increase in HGV
				Cars	LGV	HGV	Other	Total					
RU02C Land adjacent to Trumps Farm, Kitsmead Lane	D3017 Kitsmead Lane	2017	AADT	1748	380	61	41	2230	Energy from Waste (large)	838	38%	-*	-*
									Energy from Waste (small)	140	6%	-*	-*
									Gasification	202	9%	170	277%
									Pyrolysis	202	9%	170	277%
									Waste Separation and recycling (MRF) (small)	97	4%	80	130%
									Waste Separation and recycling (MRF) (large)	166	7%	137	223%
									Windrow composting	16	0.72%	10	16%
									In-vessel composting	62	3%	50	81%
									Anaerobic digestion	60	3%	50	81%
	B386 Longcross Road	2017	AADT	6088	776	163	103	7130	Energy from Waste (large)	838	12%	-*	-*
									Energy from Waste (small)	140	2%	-*	-*
									Gasification	202	3%	170	104%
									Pyrolysis	202	3%	170	104%
									Waste Separation and recycling (MRF) (small)	97	1%	80	49%
									Waste Separation and recycling (MRF) (large)	166	2%	137	84%
									Windrow composting	16	0.22%	10	6%
									In-vessel composting	62	0.87%	50	31%
	Anaerobic digestion	60	0.84%	50	31%								
	C10 Chobham Road	2017	AADT	7154	908	254	141	8456	expect very limited use of this road by HGVs to and from the site due to width and height restrictions to the north of the site				

**Table 7.1: Trumps Farm existing and proposed flows**

\* no data was available for the HGV proportions for either facility type



## 7.3 Proposed site considerations

### Preferred vehicle routing

- 7.3.1 The mapping in **Appendix G** shows that the suggested SRN access corridor goes south along Kitsmead Lane, along B386 Longcross Road, to the mini roundabout junction with the A320 Guildford Road, and then onto the A320 St Peter's Way to the M25 junction 11.
- 7.3.2 This site is the furthest from the SRN out of the nine sites considered in the SWLP. It is 6.75km from the SRN (at the M25 junction 11).
- 7.3.3 It should be noted that there is no recommended route to the north of the site due to the height restrictions on Trumpsgreen Road in Virginia Water and the weight limit on the railway bridge into Sunningdale on the B383 Chobham Road.

### Nearby local developments

- 7.3.4 There is one major development within 1 km of this site, as discussed in **section 6**, called Longcross North. This site has achieved full planning permissions and is comprised on 200 residential units and 80,000m<sup>2</sup> of office space. Currently, 100 residential units have been built, 50 of which are now occupied. No development of the proposed office space has taken place yet, as some of the site is still used as the film studios.
- 7.3.5 Highway improvements resulting from the development can be seen on street, whilst others will be placed on-street once the site reaches a certain occupancy. The new site access, with the roundabout on Chobham Lane is in use, whilst signalisation of the Wellington Avenue/Trumpsgreen Road junction and improvements to the roundabout with Chobham Lane/Chertsey Road/Longcross Road/Burma Road are still to be constructed.
- 7.3.6 As stated for the Lyne Lane site, designated Garden Village status has been given to the land to the south of the M3, and it is expected that a planning application will be received in due course for over 1,300 dwellings<sup>18</sup> and 7,350m<sup>2</sup> of employment space. There are likely to be large highway alterations in the area to accommodate this residential site, but there are no proposals as yet.
- 7.3.7 As with Lyne Lane, there are a number of developments that are between 1 and 3km from the site. As per the Runnymede Draft Local Plan<sup>12</sup> that was published in 2018, there are multiple developments proposed in the vicinity of the site including those in Virginia Water (roughly 300 dwellings) and in Chertsey (roughly 1950 dwellings and 1140m<sup>2</sup> of floorspace). The developments in Chertsey are proposed at St Peter's Hospital, Bittams Lane and South Chertsey.

### Types of waste management that could take place at each site

- 7.3.8 From the evidence gathered above, it is clear to see that although there is little congestion in the vicinity of the site, there are large amounts of delay on the preferred SRN route, which is also a relatively long distance from the site. In addition, there are some collisions near to the site, and while the road and current access arrangements are appropriate, a reduction in collisions is required. Furthermore, there are very large developments in the vicinity of the site, at Longcross and in Chertsey South, which could have an impact on the suitability of site.

7.3.9 It is therefore suggested that small sized facility types (with capacities under 50,000 tpa) could be considered. This includes facilities such as windrow composting, in-vessel composting and anaerobic digestion. These are likely to be the most suitable as the impact of their additional vehicles on the network is likely to be minimal as possible.

#### 7.4 Mitigation requirements

7.4.1 It is suggested that to improve safety/access arrangements, a reduction in the speed limit on Kitsmead Lane may be required. This may help to reduce the number of collisions at the junction of Kitsmead Lane and Chobham Road.

7.4.2 As with the Lyne Lane site mitigation suggestions, the following should also be taken into account. Some proposals exist to implement an improvement at the Hardwick Lane/Holloway Hill junction as identified in A320 study<sup>23</sup>, but this is subject to both the adoption of the Runnymede Local Plan and the progression of the proposed Longcross South site.

7.4.3 It should also be noted that there are likely to be considerable improvements required to the highway network once the Longcross Garden Village is progressed. As yet, it is unclear which junctions will be affected but it is recommended that improvements are considered at the junction of the B386 Longcross Road and Kitsmead Lane.

#### 7.5 Summary statement

7.5.1 This site is located next to an existing private recycling centre in the vicinity of Virginia Water in the north and Chertsey in the east. The site is in a wooded rural area, to the south of the M3, off Kitsmead Lane. The report shows that there is little congestion in the immediate area around the site, but the closer to Chertsey South and St Peter's Hospital (both sites that are due to be developed with large amounts of housing), the congestion increases greatly. Large amounts of delay are experienced in the AM peak hour. There is also a small collision history near to this site, especially with the junction of Kitsmead Lane and Chobham Road that must be addressed.

7.5.2 As with all sites discussed in this report, there is proposed intensification of use at this existing site, which is likely to have a detrimental impact on the capacity of the highway network. For certain large facility types, there are increases in HGVs of over 200%. This shows that this site will be unable to sustain this type of facility.

7.5.3 It should be noted that the preferred access corridor to the SRN is lengthy and involve using the already congested routes in the vicinity of the M25. The corridor also passes close to some large nearby developments which could have a further detrimental impact on the congestion and on the viability of certain facility types. The nearest developments are to the west of the site at Longcross (North and South) and there are other developments in and around Virginia Water and Chertsey. It is important that the TA accompanying any application should assess the impact of these developments and the intensification of use at the waste site on the capacity of the highway network, in accordance with Policy 15 of the SWLP.

7.5.4 As such, it is suggested that small sized facility types (with capacities under 50,000 tpa) could be accommodated at this site. In transport terms, the evidence shows that this site is not yet suitable for large or medium capacity facilities, but may be

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<sup>23</sup>H:\Modelling\project\53151092\_WasteLocalPlan\02Documents\A320\_Corridor\_Study\_Interim\_Report\_(DRAFT)\_V2.0\_WEB\_REDUCED.pdf

able to accommodate a medium sized intensification of activities if suitable mitigation is implemented. It is also imperative that this site is considered in association with the proposed site at Lyne Lane and the other large developments in the vicinity of the site.

## 8 SP02: OAKLEAF FARM, HORTON ROAD, STANWELL MOOR

### 8.1 Site characteristics and observations

8.1.1 Oakleaf Farm is an existing waste recovery and recycling site, close to Stanwell Moor Village and Heathrow Airport. As per **Appendix A**, this site is located just off Horton Road, opposite a large garden centre. Access to the site is good, with suitable visibilities at the site to facilitate safe access and egress of HGVs, and there is suitable geometry for HGV movements.

8.1.2 At the time of writing this report, the site is subject to some restrictions on HGV movements, limiting the operation to:

- *No more than 48 overall HGV movements overnight.*
- *No more than 8 inbound HGV movements accessing the site from Stanwell Moor per hour between 07:00 – 18:00 Monday-Friday, and 07:00-13:00 Saturdays, and none outside of these times.*<sup>24</sup>

8.1.3 Whilst there are restrictions on HGV movements from the site, these restrictions have been applied in the interests of local amenity, and are not required specifically in respect of highway safety or capacity.

8.1.4 Vehicles are able to access the site via Stanwell Moor Road (A3044), which is a dual carriageway with two lanes in either direction. This is linked directly to Junction 14 of the M25 by the A3113 Airport Way.

8.1.5 It should be noted that access to the A3044 is restricted to a left-in-left-out movement, which means that access to Horton Road is from the south only, and access from Horton Road is to the north only – although the roundabout at the northern end of Stanwell Moor Road provides a U-turn facility for drivers who wish to exit Horton Road and head south.

8.1.6 There is currently good access to the M25 (to Junction 14) but access from the M25 is limited due to the turning restrictions at Horton Road, and involves a lengthy diversion via Junction 13 and the Crooked Billet roundabout. As a result, HGVs sometimes make a U-turn in Stanwell Moor village, which is periodically reported to SCC highway engineers.

### 8.2 Traffic conditions

#### Current congestion

8.2.1 The current levels of congestion at this site are set out in **Appendix H**, which show that the access (Horton Road) is generally uncongested in the AM peak hour (08:00 – 09:00), but that A3044 Stanwell Moor Road does have some congestion. This congestion is a delay of between 15 and 30 seconds above the free flow speeds recorded on the links.

8.2.2 The delay continues virtually the length of the corridor between the two reservoirs in both directions, from the B378 Park Road junction down to the Crooked Billet roundabout with the A308 and A30. The congestion data shown on the map matches with anecdotal evidence of the area, and is thought to be representative of current conditions.

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<sup>24</sup> Condition 3 planning permission SP08/0992 dated 19 November 2009