



Design and Access Statement

June 2021

Working together with



Document Control Sheet

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Document updated June 2021 by Richard Shelton at KCC to incorporate

- the revised design of the A29/A291 junction,
- give clarity on the navigation of the Great Stour
- update the planning position on the 'Land at Sturry' and 'Land at Broad Oak Farm' developments

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1 Introduction

Delivering the strategic infrastructure of the A28 Sturry Link Road (SLR) has been identified in Canterbury City Council's (CCC) Canterbury District Local Plan (Adopted 2017) for the plan period of 2011 to 2031. This is in recognition of the need to support the level and distribution of development being proposed in the Plan, with new home allocations of around 16,000 that in turn would strengthen and broaden the local labour supply, encourage new job creation and the development of new and innovative industries.

The Plan acknowledges and accepts that the A28 suffers from congestion due to high levels of traffic and the operation of the level crossing at Sturry and that new development will create additional traffic in the area. The effects of this additional traffic are required to be improved and mitigated in part by the SLR that will provide an alternative to using the level crossing with a new bridge over the railway line together with other associated improvements along the A28 corridor.

Promoters of the strategic housing allocation of Land at Sturry and Broad Oak have been preparing Master Plan proposals for several years. Throughout this time the concept of a new strategic highway has been part of these proposals, including a new connection with the A28 to the west of Sturry.

In June 2017, an outline application for a mixed-use development comprising 700 houses, primary school, medical hub, community building, car park and associated amenity space was submitted to CCC to examine proposals for the southern part of the strategic allocation known as Land at Sturry (Application Ref: CA/17/01383). In addition, the submission included a detailed application for the construction of part

of the SLR that lies to the north of the railway line within the allocated land site, including a local road from the SLR to Shalloak Road. The Land at Sturry original planning application was refused permission at the Planning Committee meeting in November 2020. A new planning application was submitted for up to 630 dwellings (CA/20/02862). The development for the land at Sturry received planning consent in March 2021. Also, in March 2021 Land at Broad Oak Farm (CA/18/00868) for 456 dwellings, which forms the northern part of the allocated site, received planning consent.

The above applications alone will not however secure delivery of the SLR therefore the SLR is also dependent on Kent County Council (KCC) securing and carrying out construction of the north-south section of the scheme, bridging over the railway, the Great Stour River and connecting to the A28 to the west of Sturry along with associated on-line improvements. Although the east-west elements of the scheme are to be delivered by the promoters of the Land at Sturry Development, it is intended that KCC will adopt this infrastructure at a later stage.

KCC's fourth Local Transport Plan (LTP4) for the Canterbury area, covering the period 2016 to 2031, identifies delivery of the SLR as a priority. As such, KCC were considered best placed to ensure timely delivery of the southerly link section and had already secured £5.9m of SELEP funding towards the SLR.

KCC accordingly appointed Amey to prepare a Regulation 3¹ detailed planning application (this application) for the north-south, southerly link, section of the scheme.

¹ Town and Country Planning General Regulations 1992 (SI No.1492)

To provide for greater context and continuity of the KCC proposals, for instance, cycleway and road lighting provisions, this Design and Access Statement (DAS) sets out to describe the design principles for the full route of the SLR, explaining how these principles have dictated or guided the highway design elements and features.

Where details described herein fall outside the Application Site, they may be subject to change depending on the outcome of the detailed design of the Land at Sturry consent.

The basis for developing the SLR proposals presented in this DAS draws on previous work carried out by the promoters of Land at Sturry and Broad Oak, and CCC, who have continued to engage and assist KCC & Amey throughout this latest scheme development stage. It is therefore noted that the details given in this DAS that fall outside the Application Site, reasonably reflect those submitted as part of the promoters of the Land at Sturry development.

Key stakeholders including Environment Agency, Natural England, Network Rail and CCC have also continued to fully engage with the scheme development through establishing their requirements incorporated into the scheme design as appropriate.

2 The Application Site

Scheme Location Plan

The SLR is located approximately 3km to the north-east of Canterbury, Kent, to the west of the village of Sturry.

The proposed scheme comprises a new east-west route to the north of the Canterbury to Ramsgate railway commencing from the A291 Sturry Hill in the east, (which will be built as part of the Land at Sturry development) leading to a southerly link to cross over the railway and the Great Stour and its flood plain to join the A28 Sturry Road in the south (the Application Site). The scheme also provides a direct link north of the railway to Shalloak Road in the west (which will be built as part of the Land at Sturry development).

Alterations proposed to the existing A28/A291 junction just north of the Sturry level crossing and road widening of Shalloak Road in the west form an integral part of the proposals. **This application therefore relates to the land associated with the southerly link of the SLR, widening of Shalloak Road and the alterations to the A28/A291 junction.**

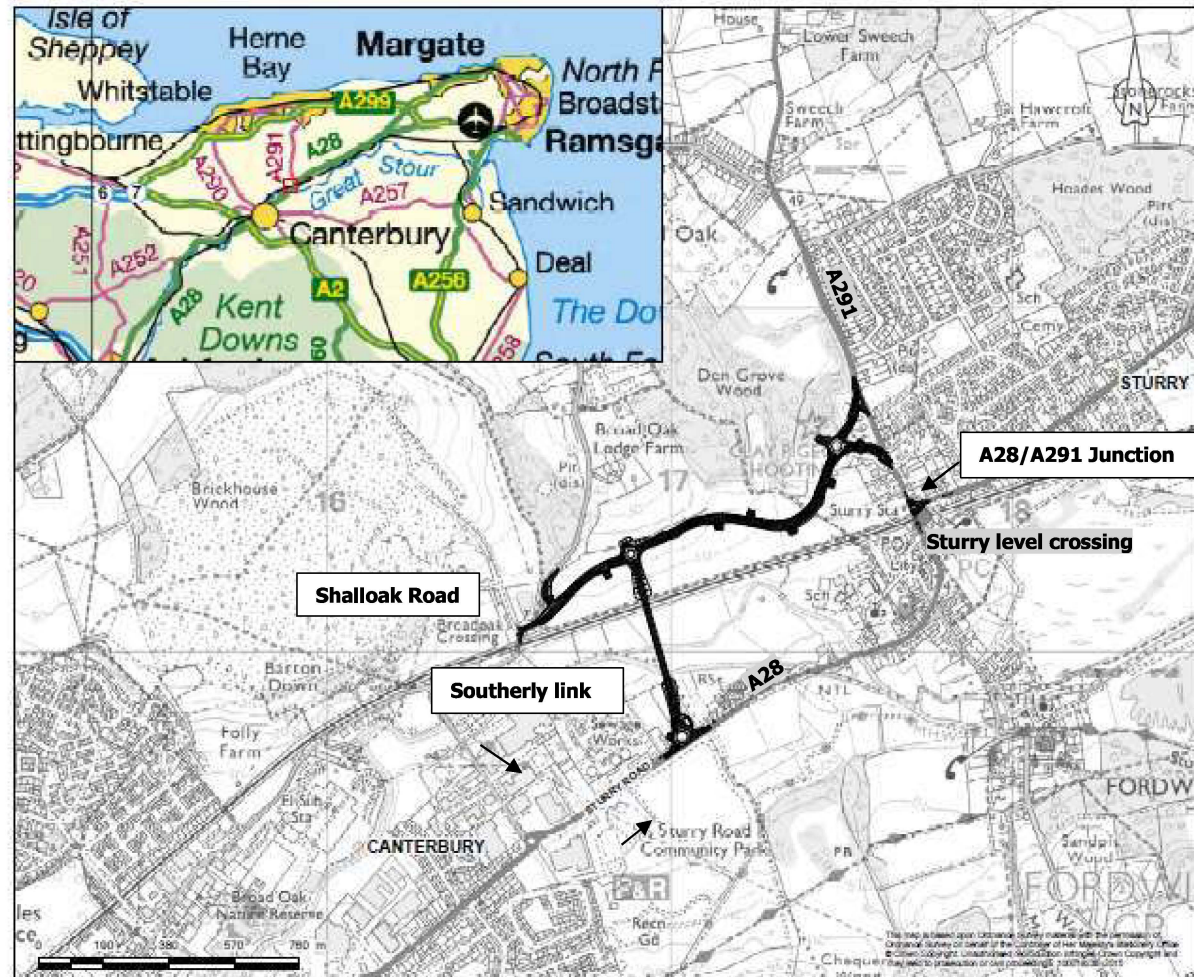


Figure 1 - Sturry Link Road Location

Site Location Plan

The application relates specifically to the areas contained by the **red** line boundary identified in Figure 2. It includes all land necessary to carry out the proposed part of the SLR to be constructed by KCC and associated on line improvements.

The **green** line identifies the SLR corridor that will be developed as part of the Land at Sturry development (CA/20/02862)

The **blue** line identifies areas of highway land where associated improvements to the existing road network will be required to support the SLR provision and its successful integration into the local environment.

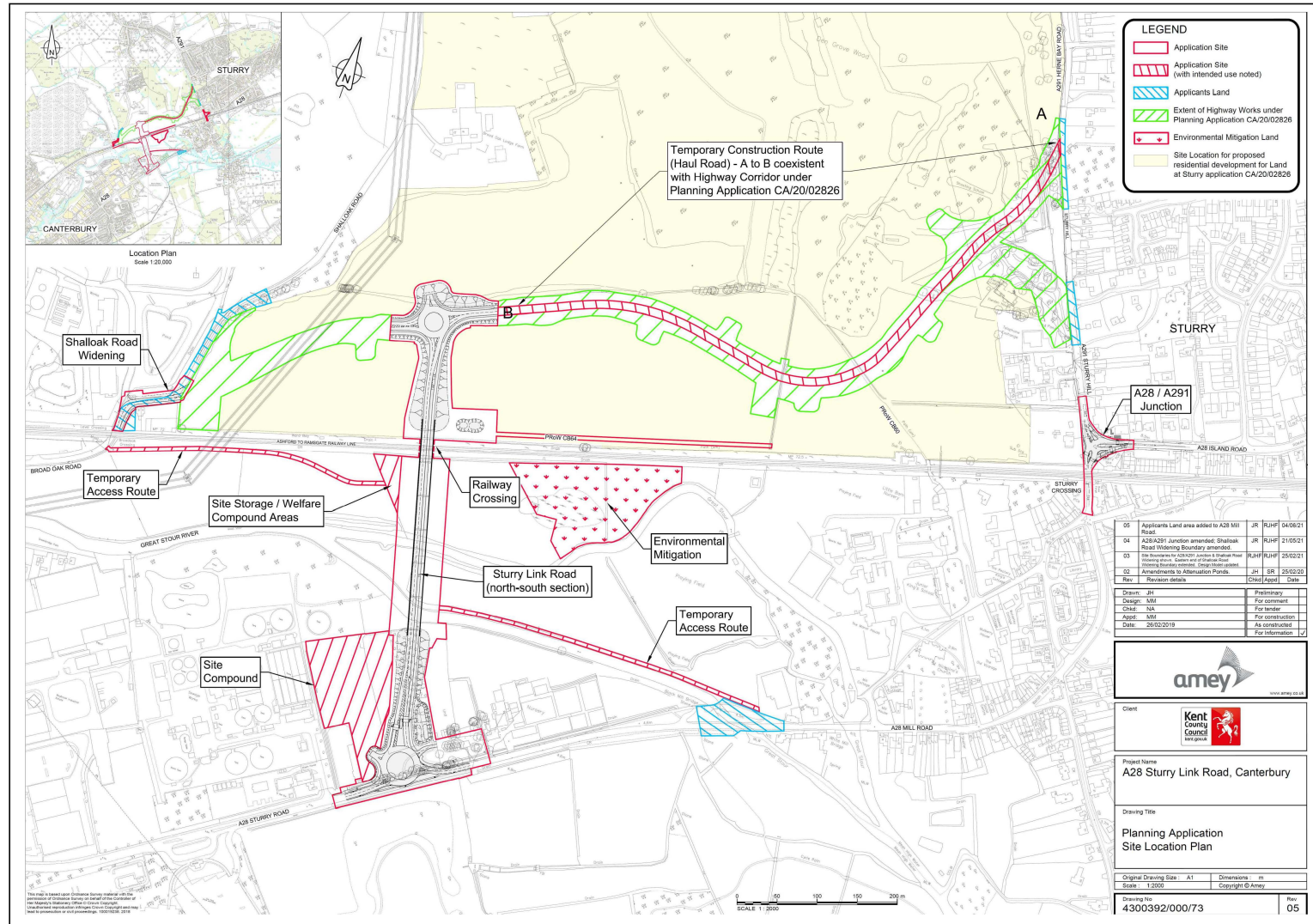


Figure 2 – Extent of application site (Site Location Plan 4300392/000/73 submitted with application)

3 Local Plan Context

The requirement for the SLR scheme in the Canterbury district emerges from the Canterbury District Local Plan (Adopted 2017).

Policy T14 refers and states quote;

'The Council will seek to implement a Sturry Relief Road as identified on the Proposals Map. Any development proposals that might prejudice this route will be resisted.'

Figure 3 below is an extract from the Proposals Map (2017), identifying the safeguarded area for the SLR.

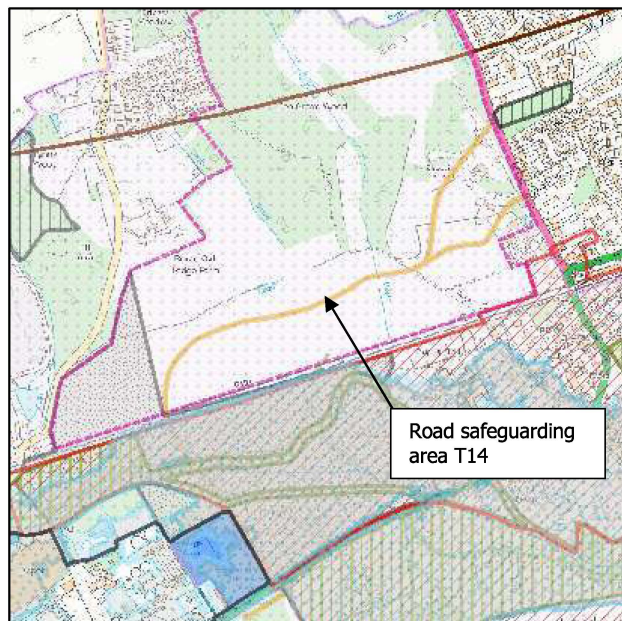


Figure 3 – Extract from Proposals Map

The application CA/17/01383 for the strategic allocation for Land at Sturry was submitted in June 2017. This was refused however a subsequent similar application for up to 630 dwellings (CA/20/02826) was granted in March 2021. The Illustrative Master Plan proposal submitted with the approved application is shown in Figure 4, identifying the route corridor of the SLR including the southerly link over the railway to join the A28 Sturry Road in the south. As can be seen, the route north of the railway is broadly consistent with the Proposals Map.

These Master Plan proposals have, in part, guided the form of proposals for this application that are the subject of this DAS.



Figure 4 – Illustrative Master Plan, Land at Sturry - Dec 2020

4 The Existing Site Context



Figure 5: Aerial photograph with scheme superimposed

Site Details

The land through which the scheme passes is essentially open countryside bounded: in the east by the A291 Sturry Hill, which is the main traffic route to Herne Bay; to the south by the A28, to the west by industrial and retail premises and to the north by agricultural land and woodland.

Central to the site, and slightly elevated on embankment, is the Canterbury to Ramsgate railway line that runs in a west-east direction.

To the north of the railway is the southern slope of the Stour Valley that gently rises to the north towards the village of Broad Oak, whilst to the south, is the low-lying land forming the floodplain of the Great Stour through which two branches of the river flows.

Existing land use north of the railway line is currently a mixture of arable farming and rough grassland. Den Grove Wood Ancient Woodland lie to the north and two Public Rights of Way cross the site, PROW CB64 & CB60.

To the south of the railway, land is characterised by pasture fields, playing fields associated with the King's School and private land plots, all within the floodplain of the Great Stour.

The location of environmentally significant sites within the vicinity of the scheme are shown in Figure 6 overleaf and include:

- Den Grove Wood Ancient Woodland
- West Blean and Thornden Woods Site of Special Scientific Interest (SSSI)
- Listed Buildings within Sturry and Fordwich
- Sturry Conservation Area,
- Stodmarsh SSSI, Ramsar
- Special Protection Area (SPA)
- Special Area of Conservation (SAC) and National Nature Reserve (NNR)
- AS27 Great Stour, Ashford to Fordwich Local Wildlife Site (LWS)
- A former landfill site south of the A28, now used as a community park.



View looking north across the River Great Stour (foreground), railway line (central) and the southern slope of the Stour Valley and ancient woodland (background)



View looking southwest across the Stour floodplain where the SLR will bridge over the railway

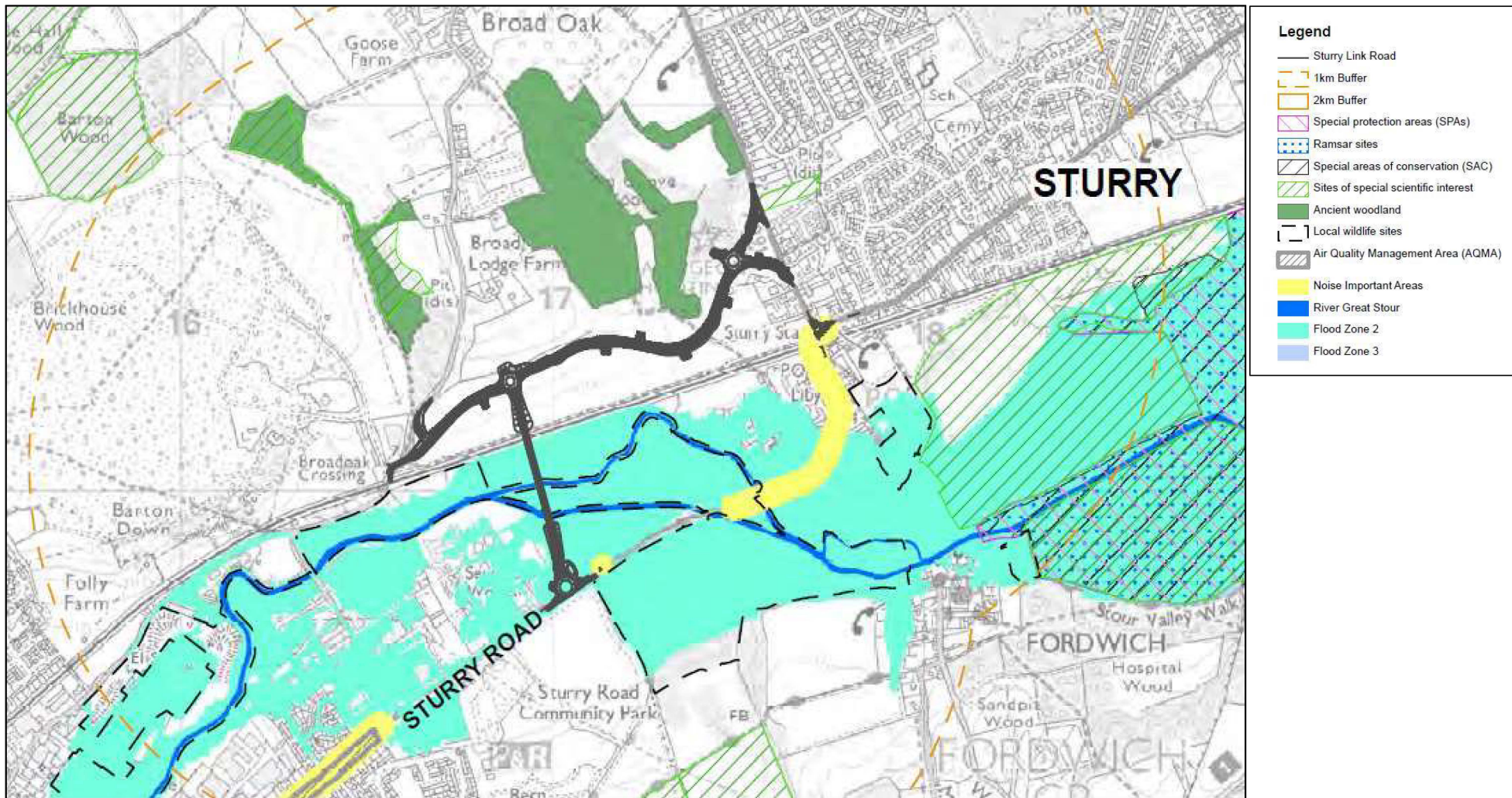


Figure 6: Environmentally significant sites

Ground Conditions

Ground conditions locally comprise superficial Alluvium, head and river gravels overlying bedrock of the Thanet Formation in the south with a thin band of overlying Lambeth Group and Harwich Formation to the north.

Further north, but unlikely to be encountered, lies the edge of the London Clay Formation.

The Alluvium is classified as a secondary undifferentiated aquifer and the river gravels a secondary A aquifer which is formed from permeable layers capable of supporting water supplies at a local rather than strategic scale. The underlying Thanet Formation is designated a secondary A aquifer. The site lies outside any source protection zones for potable water supply.

Groundwater is anticipated to be shallow in the south, becoming deeper to the north as the ground rises away from the Great Stour.

Contamination risks to the site are judged to be low given the lack of significant sources within the scheme boundary and low sensitivity highway development. At the southern end of the scheme where the SLR joins the A28, the adjacent historical landfill site to the south poses a high risk.

Local Road Network

The A28 is a principal road corridor between Canterbury and Thanet that also serves residents and businesses to the north east of Canterbury and Sturry. At Sturry, the A291 Sturry Hill provides a north-south link to Herne Bay and the A299 Thanet Way.

Through Sturry the A28 is particularly difficult and can become heavily congested at times because of the level crossing of the Canterbury – Thanet railway line and the unconventional layout of the

A28/A291 junction that heavily restricts free movement for right turning traffic. See Figure 7.



Figure 7: Existing A28/A291 Junction and Sturry Level Crossing

Sturry Level Crossing

The level crossing lies in the top ten highest vehicle flows crossing a level crossing in the Network Rail National database. On average, there are two trains per hour in each direction along the Canterbury to Ramsgate railway with level crossing activations of up to 5 minutes in length associated with adjacent Sturry Railway Station with inevitable interruption to traffic and intermittent queuing through the centre of the community throughout the day, particularly during peak times. On average, surveys have recorded that the barriers are down for a total of 4 hours per 24-hour period.

Of note is the occurrence of longer trains stopping at Sturry station that overhang the level crossing and therefore cause a longer barrier down time.

To identify the current crossing usage a nine-day census was carried out at the level crossing between 11th March 2017 and 19th March 2017, between the hours of 00:00 and 24:00. Table 1 summarises the results from the survey. Whilst this information is now dated there has been no changes to highway network so remains relevant.

| Table 1: Summary of Results from Nine-Day Census | | |
|--|--------------------------|--------|
| Road Vehicle Frequency | Busiest Day | 21,816 |
| | Busiest 15-minute period | 500 |
| | Average Weekday | 21,380 |
| Pedestrian Frequency | Busiest Day | 815 |
| | Busiest 15-minute period | 52 |
| | Average Weekday | 735 |
| Train Frequency | Busiest Day | 96 |
| | Average Weekday | 95 |
| | Saturday | 81 |
| | Sunday | 71 |

A nine-day video 'Blocking Back and Barrier Activity Survey' was also undertaken at the level crossing during October 2017. This was to assess the current risk associated with the station layout and record any 'Blocking Back' incidents of vehicles stopping on the crossing as well as examine any incidents of note, e.g. unusual occurrences or misuse of the crossing.

One of the main observations was footage of 14 instances of ambulances being held up for a prolonged period due to the barrier being down. Overall, this totalled almost 18 minutes over the course of the nine days, and on average each incident meant an ambulance was held up for roughly 1 minute 15 seconds. The most extreme case was when an ambulance was held up by the barrier being down for approximately 4 minutes. This is an ongoing safety concern.

Reviewing blocking back data through the nine days showed recurring causes of incidents. These causes were as follows:

- General traffic congestion (North)
- General traffic congestion (South)
- A291 traffic flow – caused either by vehicles travelling south on the A28 and turning right onto the A291, or by vehicles turning out of the A291 and joining the A28.
- Bus stop use – caused by buses stopping at the A291 bus stop.
- Pedestrians – caused by pedestrians crossing the road.
- Ambulances – caused by emergency vehicles passing traffic.
- Carpark Use – caused by vehicles either entering or leaving the carpark opposite the railway station.
- U-Turning vehicles

Over the course of the nine-day period, blocking backs of repeated causes totalled 01:38:32 incident time.

Incident data relating to the level crossing showed a relatively high level of incidents for this type of crossing (Manually Controlled Barriers). There are several recorded incidents of barriers being struck and vehicles crossing whilst lights are flashing or on.