Land at Rose Farm, Istead Rise, Gravesham, Kent

Transport Assessment

GS/TV/AH/35213
November 2025

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1 INTRODUCTION

1.1 OVERVIEW

1.1.1 DHA has been commissioned by Esquire Developments Ltd to provide transport planning advice in relation to the proposed residential development on Land at Rose Farm, Istead Rise, Gravesham, Kent. The description of development is as follows:-

> *"Outline planning application for the demolition of 64 Downs Road and erection of up to 154No. residential dwellings (including affordable housing), with all matters reserved except for access. Creation of a new access from Downs Road."*

1.1.2 This Transport Assessment (TA) has been produced in accordance with the Planning Practice Guidance (2014) and Department for Transport (DfT) Circular 01/2022. Following this introduction, the TA is structured as follows:-

- Section 2 summarises the existing transport conditions local to the site;
- Section 3 sets out the development proposals;
- Section 4 provides an assessment of compliance with applicable transport planning policy;
- Section 5 looks at the forecast vehicular trip generation, distribution and assignment of the proposals;
- Section 6 presents the anticipated transport impacts; and
- Section 7 provides a summary and conclusion.

1.1.3 The scope and methodology of this TA has been the subject of formal pre-application engagement with Kent County Council Highways & Transportation (KCC H&T) and National Highways (NH) as the Local and Strategic Highway Authorities. The associated correspondence is included at **Appendix A.**

1.2 VISION OF THE DEVELOPMENT

1.2.1 With reference to DfT Circular 01/2022, the vision of the development is to provide a sustainable extension to Istead Rise located within close proximity to everyday services, facilities and public transport nodes within nearby villages of New Ash Green, Hartley, Longfield and Meopham, and Gravesend to the north. This is to ensure their ongoing viability and to promote and enable non-car accessibility and social inclusion among future residents.

1.2.2 The internal site layout, which will be designed to accord with Manual for Streets, Local Transport Note 1/20 and Kent Design Guide principles to encourage low vehicle speeds, direct, overlooked and pleasant pedestrian and cycle routes.

1.2.3 Primary pedestrian access to the site will be achieved via the vehicular access, with 2.0m wide footways installed on both sides.

1.2.4 The site benefits from nearby access to local facilities at the nearby shopping parade 650m from the pedestrian access off Long Walk, including a Co-op food store, a convenience store, pharmacy, dry cleaners, restaurant, take-away restaurant and butcher shop. Istead Rise Primary School is located directly to the east of the site.

1.2.5 Bus stops are located approximately 20m northeast of the site on Downs Road (less than one minute walk). Another set of bus stops are located on Istead Rise approximately 600m northeast of the site and provide access to further destinations. Meopham Railway Station is located approximately 2.4km south of the site, accessible in a 4-minute drive or a 13-minute bus journey (including an 8-minute walk to the Lewis Road bus stops). The station is operated by Southeastern and provides services to destinations including London Victoria, Ramsgate and Dover Priory at a frequency of six trains per hour in all directions.

1.2.6 The applicant expects to proportionately contribute to the 308-bus service, sustaining and enhancing public transport provision in the local area. Contribution discussions are ongoing at the time of writing.

1.2.7 Secure cycle parking will be provided for every dwelling, together with 'active' Electric Vehicle (EV) charging facilities in line with the Building Regulations Part S. This will ensure that active and sustainable transport is a realistic option for many everyday journeys.

1.2.8 An interim Travel Plan has been submitted alongside this TA. The final TP will be circulated to future residents of the development and will contain initiatives and incentives to increase their uptake of sustainable travel modes.

1.2.9 To reflect the delivery of this vision, it is proposed that a five percent mode shift reduction target is set in relation to the baseline vehicular trip generation forecast for the development.

2 EXISTING TRANSPORT CONDITIONS

2.1 EXISTING SITE

2.1.1 The site is located within the village of Istead Rise in Gravesham, Kent. The location of the site in a local context is shown in Figure 2-1 below.

FIGURE 2-1: SITE LOCATION (COURTESY OF GOOGLE MAPS)

2.1.2 The site largely comprises open farmland to the rear of the existing residential properties fronting Downs Road. The site is bound to the west and south by further open farmland, with Istead Rise Primary School located to the east.

2.2 LOCAL HIGHWAY NETWORK

2.2.1 Downs Road takes a general north-west to south-east alignment and is subject to a 30mph speed restriction within the site vicinity. Downs Road is approximately 6.5m wide, with on-street parking along its length, illustrated in Figure 2-2 overleaf.

FIGURE 2-2: DOWNS ROAD IN THE SITE VICINITY (LOOKING SOUTH-EAST)

2.2.2 To the north-west of the site, Downs Road provides a connection with Broad Ditch Road which continues west to a priority junction with New Barn Road. The nearby villages of New Barn and Hartley are accessible by routing south on New Barn Road. Routing north on New Barn Road provides a link to Northfleet via the junction between the A2 and Hall Road.

2.2.3 Downs Road provides access to Upper Avenue / Istead Rise as well as Arcadia / Lewis Road, both of which connect with the A227 Wrotham Road to the east. The A227 provides a route to Gravesend via the A227's junction with the A2 to the north. The A2 provides a connection through Dartford and onwards to London to the west. To the east, the A2 provides a connection with the M2 at Junction 1, which provides a direct route through the Medway Towns and onwards to Faversham.

2.2.4 The A227 Wrotham Road provides a direct connection through the villages of Meopham, Culverstone Green and Vigo before connecting with the A20 at a three-armed roundabout approximately 10km south of the site. The A20 connects with the M20 at Junction 2 approximately 500m to the west. The A20 also connects with the M26 at Junction 2a, circa 1.9km from the roundabout with the A227.

2.2.5 It is evident that the site enjoys ready access to a range of local and regional destinations via the primary and strategic route networks.

2.3 WALKING AND CYCLING INFRASTRUCTURE

2.3.1 Downs Road is provided approximately 2.0m wide footways on both sides of the carriageway, which will connect directly into the site. The footways provide a route to local bus stops within the village and the local shopping parade on Upper Avenue. The existing footway can be seen in Figure 2-2 above.

2.3.2 The site location on the edge of Istead Rise village is afforded with a good level of pedestrian accessibility, with direct access into the village centre.

2.3.3 There are a number of Public Rights of Way (PRoW) in close proximity to the site, shown in Figure 2-3 below, in which purple lines represent Footpaths, green lines represent Bridleways and blue lines represent restricted byways.

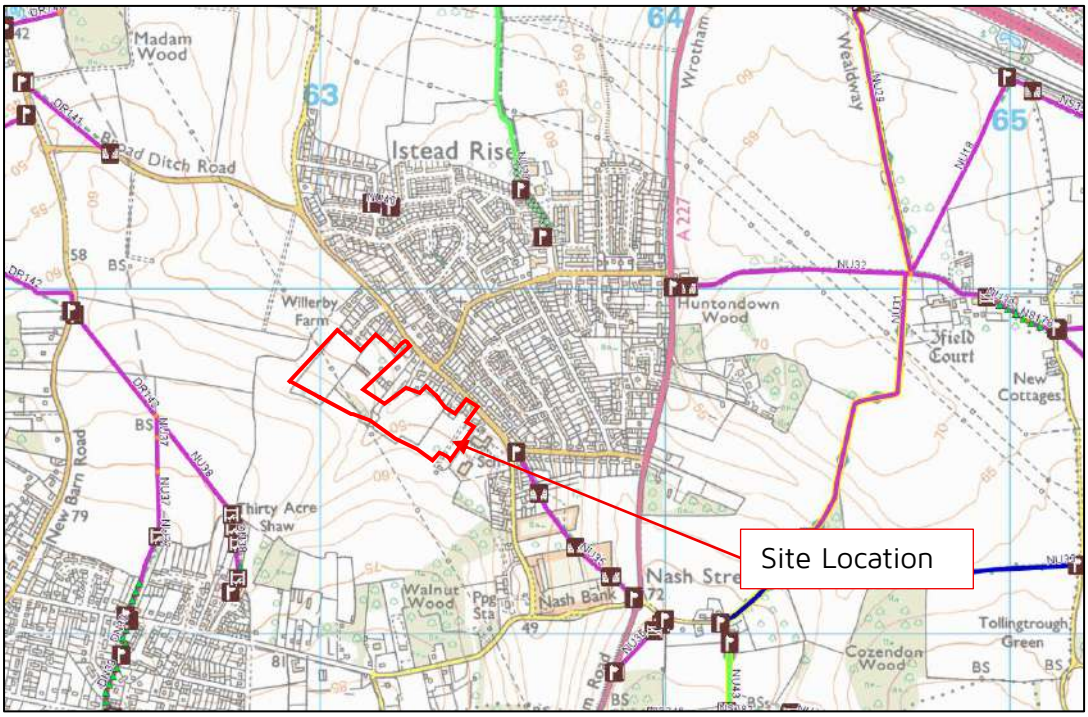


FIGURE 2-3: LOCAL PROW NETWORK (COURTESY OF KCC)

2.3.4 PRoW NU35 provides a route between Arcadia Road in Istead Rise village and the A227 Wrotham Road at its priority crossroads between Nash Bank / Nash Street.

2.3.5 There is no dedicated cycle infrastructure within the immediate site vicinity in Istead Rise village, which is representative of the site's rural location. However many local roads within Istead Rise village are suitable for on-carriageway cycling in view of their generally low-speed and lightly trafficked residential nature.

2.3.6 National Cycle Route (NCR) 177 is located 2.5km north of the site in Gravesend and routes between Strood to the east and Ebbsfleet to the west where it connects with NCR 1. This can be seen in Figure 2-4 below shown in red.

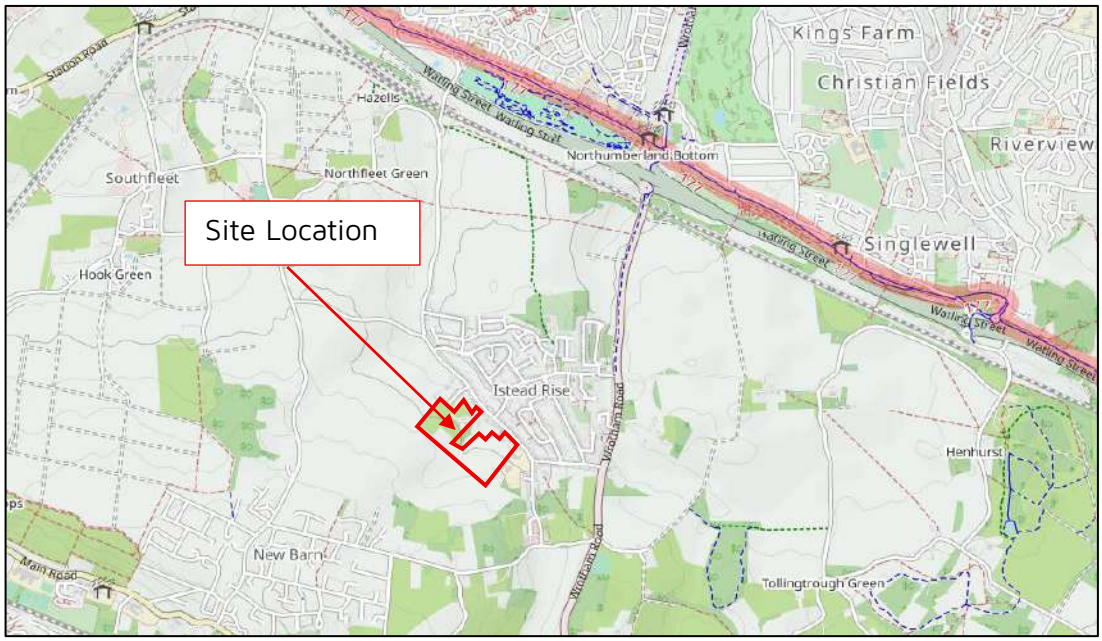


FIGURE 2-4: LOCAL CYCLING NETWORK (COURTESY OF OPENCYCLEMAP)

2.3.7 Figure 2-4 also illustrates local cycle routes in blue. This illustrates a route on the A227 Wrotham Road from its junction with Istead Rise, providing a direct cycle route north into Gravesend – this link is shown in Figure 2-5 overleaf.

FIGURE 2-5: LOCAL CYCLE ROUTE A227 WROTHAM ROAD (COURTESY OF GOOGLE MAPS)

Local Cycling and Walking Infrastructure Plan (LCWIP) for Gravesham (2022)

2.3.8 Gravesham Borough Council's LCWIP is a document summarising key proposals to develop local cycling and walking networks in the district.

2.3.9 The LCWIP identifies that Istead Rise is a rural settlement within a 20-minute cycle of Gravesend centre. Figure 2-4 demonstrates there is continuous cycleway provision between the site and Gravesend, enabling cycling as a realistic mode of travel for residents within Istead Rise.

2.4 PUBLIC TRANSPORT INFRASTRUCTURE

2.4.1 There are a number of bus stops within the vicinity of the site; these can be seen below in Figure 2-6.

FIGURE 2-6: LOCAL BUS STOPS IN THE SITE VICINITY (COURTESY OF GOOGLE MAPS)

2.4.2 There are a number of sets of bus stops located along Downs Road, all providing access to the 308 service which routes between Gravesend and Sevenoaks. The northbound "Primary School" bus stop is located 20m from the site access on Downs Road with the southbound stop located on Arcadia Road 200m from the site access as demonstrated in Figure 2-7 and Figure 2-8 overleaf. The northbound stop is equipped with a flag, pole and road markings and the southbound stop is equipped with a flag and pole with timetable information.

FIGURE 2-7: PRIMARY SCHOOL NORTHBOUND STOP (COURTESY OF GOOGLE MAPS)

FIGURE 2-8: PRIMARY SCHOOL SOUTHBOUND STOP (COURTESY OF GOOGLE MAPS)

2.4.3 The "Upper Avenue" northbound and southbound stops located approximately 150m north-west of the existing site access on Downs Road are both provided with timetable information via flag and pole as demonstrated in Figure 2-9 below.

FIGURE 2-9: "UPPER AVENUE" BUS STOPS (COURTESY OF GOOGLE MAPS)

2.4.4 The "Longwalk" northbound and southbound stops, located approximately 400m north-west of the site access are both provided with timetable information via flag and pole as demonstrated in Figure 2-10 below.

FIGURE 2-10: "LONGWALK" BUS STOPS (COURTESY OF GOOGLE MAPS)

2.4.5 Further bus stops are located at the shopping parade in the village centre approximately 600m from the site access, providing access to services to Gravesend, Sevenoaks, Wrotham and Rochester. These stops are provided to a high standard, with the eastbound stop provided with a shelter and seating, and both stops provided with a flag and pole with timetable information and take the form of layby arrangements. The stops are demonstrated within Figure 2-11 below.

FIGURE 2-11: ISTEAD RISE SHOPPING PARADE BUS STOPS (COURTESY OF GOOGLE MAPS)

2.4.6 Table 2-1 overleaf lists the services which are accessible from the bus stops in Istead Rise village, along with their frequencies.

SERVICE NO.	ROUTE	WEEKDAY SERVICE FREQUENCY	SATURDAY SERVICE FREQUENCY	SUNDAY SERVICE FREQUENCY
All Stops				
308	Gravesend - Meopham - Sevenoaks	Southbound to Sevenoaks via Meopham Station 7 services (06:57, 09:26. 10:56, 12:26, 14:16, 16:56, 17:56). Northbound to Gravesend 7 services (10:16, 11:41, 13:11, 14:41, 16:45, 17:43, 18:43)	Examples below from Shopping Parade, other stops similar times. Southbound - 09:26, 10:56, 12:26, 14:26, 15:56, 17:56 Northbound - 08:43, 10:11, 11:41, 13:11, 15:11, 16:43, 18:43.	N/A
Istead Rise Shopping Parade				
223	Gravesend - Weald of Kent School	School Service	N/A	N/A
306	Gravesend - Meopham - Vigo	School Service	N/A	N/A
416	Meopham – Gravesend - Meopham Secondary School	School Service	N/A	N/A
418 R/W	New Ash Green - Meopham - Wrotham School	School Service	N/A	N/A
695	Istead Rise - Meopham - Cobham - Rochester	School Service	N/A	N/A
M1	Kings Farm - Gravesend - Istead Rise - Meopham	School Service	N/A	N/A
VIGO1	Vigo - Meopham - Gravesend Boys' Grammar School	School Service	N/A	N/A

TABLE 2-1: BUS SERVICES AVAILABLE FROM STOPS IN ISTEAD RISE

2.4.8 A plan of the local bus routes within the vicinity of the site is included within Figure 2-12 below and **Appendix B.**

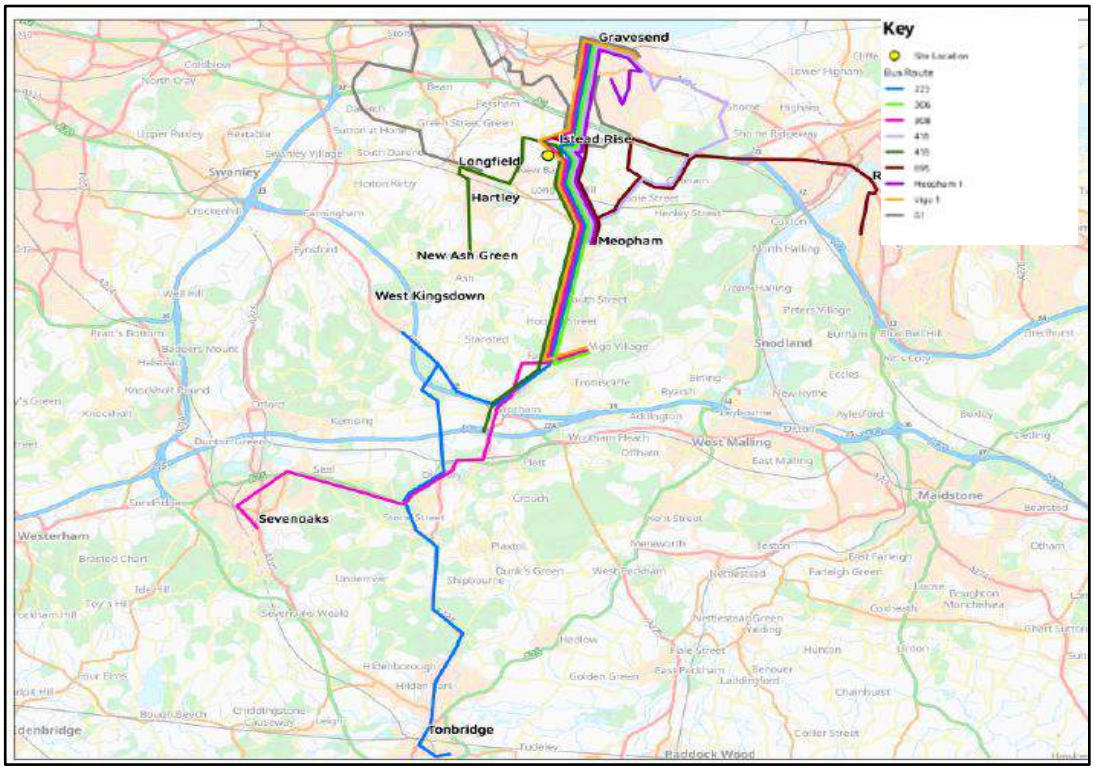


FIGURE 2-12: LOCAL BUS ROUTE MAP

2.4.9 Meopham Rail Station is approximately 2.4km south of the site, accessible in a 4-minute drive or a 13-minute bus journey (including 8-minutes of walking to the stops of Lewis Road). The station has 167 vehicle parking spaces (including 6 disabled spaces), plus 20 secure and covered cycle parking spaces. The station is operated by Southeastern and provides services to destinations including London Victoria, Ramsgate and Dover Priory at a frequency of six trains per hour in all directions.

2.4.10 Ebbsfleet Rail Station is located 7.2km from the site, accessible via the cycle infrastructure shown in Figure 2-4 in an approximate 24-minute cycle. Ebbsfleet International Rail Station is also accessible in an 8-minute car journey or a 40-minute bus journey via the 308 and E fastrack services. In addition to the rail services provided at Meopham, high-speed services are available every 15 minutes to London St Pancras International via Stratford International; an approximate 20-minute journey time. The station is operated by Southeastern and has approximately 5000 parking spaces, 84 of which are disabled spaces, with secure cycle parking for 44 cycles.

2.5 SITE ACCESSIBILITY

2.5.1 Istead Rise provides a number of everyday services and facilities within a short walking and cycling distance of the site. The site is afforded with a good level of pedestrian connectivity which links into the centre of Istead Rise and its shopping parade. It is noted that the gradient of Istead Rise road and route to the village shopping parade is steep and likely to exceed 1 in 12, affecting the ability of those potential future residents with mobility issues to access the village centre. This point will be addressed in further detail later within this TA.

2.5.2 Table 2-2 below lists a selection of these services, along with their approximate distances and walking times from the proposed site access.

FACILITY / SERVICE	WALK DISTANCE	WALK TIME
Bus Stops (Downs Road)	20m	<1 minute
Istead Primary School / Kiddiecare Kindergarten / Young Risers Pre-School	50m	<1 minute
St Barnabus Church	400m	7 minutes
Shopping Parade (Co-op food store, a convenience store, pharmacy, dry cleaners, restaurant, take-away restaurant and butcher shop)	600m	9 minutes
Hairdresser	600m	9 Minutes
Istead Rise Dental Clinic	600m	9 minutes
Community Centre	900m	13 minutes

TABLE 2-2: FACILITIES AND SERVICES LOCAL TO PROPOSAL SITE

2.5.3 Plans demonstrating the facilities and services within walking and cycling distance of the site is included at Figure 2-13 and Figure 2-14 and **Appendix C.**

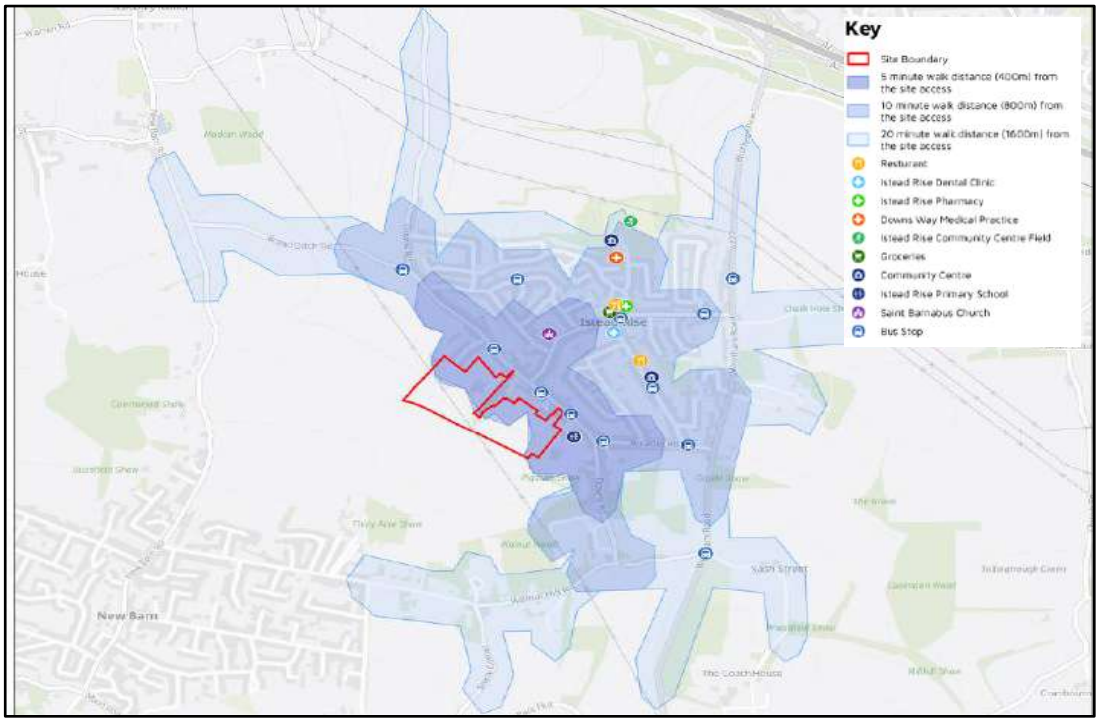


FIGURE 2-13: FACILITIES AND SERVICES WITHIN WALKING DISTANCE OF THE SITE

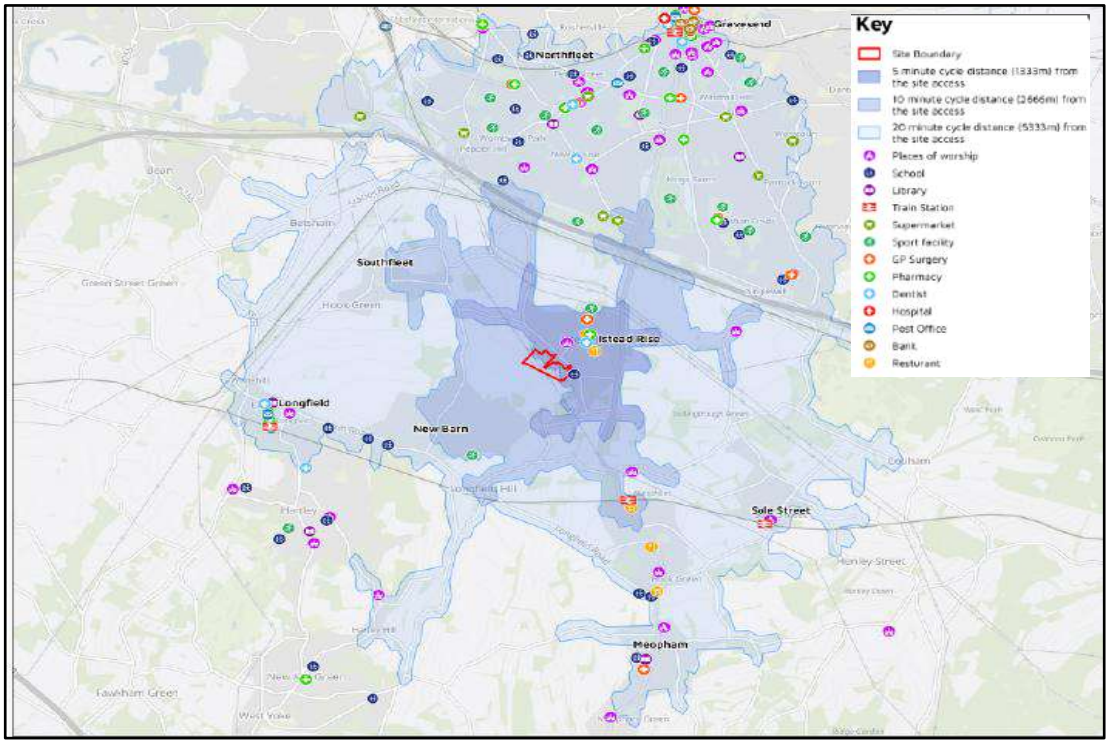


FIGURE 2-14: FACILITIES AND SERVICES WITHIN CYCLING DISTANCE OF THE SITE

2.5.4 The walk times provided above are based on a walk speed of 80m per minute; a figure which is widely used to estimate walk times. It aims to provide a typical average value that estimates it takes five minutes to walk 400m, ten minutes to walk 800m and so on.

2.5.5 The clearest national guidance on acceptable walking distances is provided in the Chartered Institution of Highways and Transportation (CIHT) 'Providing Journeys on Foot' (2000), which is routinely quoted in Transport Assessments and appeal decisions and is summarised in Table 2-3 overleaf. The local services and facilities listed in Table 2-2 are located within the 2km (or 25-minute) preferred maximum distance for commuting, school and sightseeing purposes.

	TOWN CENTRES (M)	COMMUTING / SCHOOL / SIGHT-SEEING (M)	ELSEWHERE (M)
Desirable	200	500	400
Acceptable	400	1,000	800
Preferred Maximum	800	2,000	1,200

TABLE 2-3: CIHT SUGGESTED ACCEPTABLE WALKING DISTANCES

2.5.6 A wider range of services and facilities are available in Gravesend, approximately 6km north of the site and accessible in a 15-minute bus journey via the 308 service. Services and facilities include but are not limited to - shops, supermarkets, doctors surgeries, schools, employment opportunities and leisure centres.

2.6 ACCESSIBILITY AUDIT

2.6.1 KCC H&T have requested within their pre-application advice that an audit is undertaken to detail the routes to / from the site to key destinations, stating the following:-

> *"A detailed walking and cycling audit to key facilities should be undertaken for inclusion in the Transport Assessment to identify any existing issues and propose improvements where required. The assessment should include a plan showing the most direct routes for pedestrians and cyclists, and be supported by photographic evidence.*

2.6.2 KCC H&T state within the pre-application advice that routes used by pedestrians and cyclists should be direct, well connected, well lit, attractive and overlooked and they have concern that whilst this may be achievable on the site itself, the routes to / from local facilities may not provide sufficient infrastructure to support the development.

2.6.3 This section therefore documents the quality of the pedestrian, cycle and public transport infrastructure in the site vicinity. The audit covers the principal walking and cycling routes between the site and the key facilities identified in Table 2-2 above. The routes have been assessed as per the below and are mapped in Figure 2-15 below.

1) Downs Road – between junctions with Upper Avenue and Arcadia Road (Green arrows below);

2) Arcadia Road – between junctions with Downs Road and A227 Wrotham Road (Purple arrows below);

3) Lewis Road – between junctions with Arcadia Road and Upper Avenue (Blue arrows below); and

4) Upper Avenue / Istead Rise – between junctions with Downs Road and A227 Wrotham Road (Red arrows below).

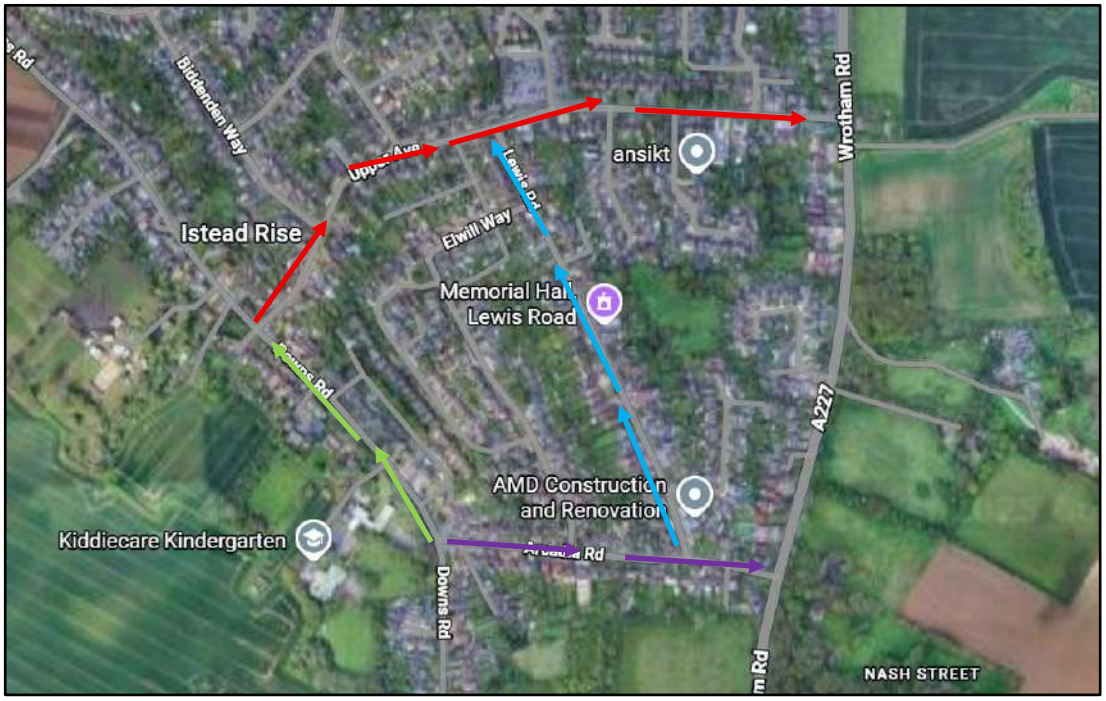


FIGURE 2-15: AUDIT ROUTES (COURTESY OF GOOGLE MAPS)

2.6.4 A site visit was undertaken on the 5th November 2025 for this audit with the findings summarised in this section. The routes have been assessed using the Department for Transport (DfT) Walking Route Audit Tool (WRAT) and LTN 1/20 guidance which accord with the audit guidelines set out in the latest Kent County Council Transport Assessment and Travel Plan Guidance (2025). All images within this section (unless stated otherwise) were collected on the site visit on the 5th November 2025.

2.6.5 As noted by WRAT guidance, a score of 70% should normally be regarded as the minimum level of provision suitable for a walking route. Where less than this is achieved, improvements should be considered.

Downs Road

2.6.6 Downs Road is provided with footways on either side of the carriageway as highlighted in Figure 2-2 above. The existing footways are maintained to a good standard, with surfaces generally well-kept and uncracked. The pedestrian routes along Downs Road are overlooked by residential properties, with frequent street-lighting present throughout.

2.6.7 Footway widths vary dependent on the northern / southern sides of the carriageway but at a maximum are 3.0m in width narrowing to 2.0m for the majority of their length on both sides; no evidence of any pinch points were recorded. The footway on Downs Road can be seen in Figure 2-16 below.

FIGURE 2-16: DOWNS ROAD EXISTING FOOTWAY

2.6.8 The footways follow the desire line as they are adjacent to the carriageway, with crossing of the road easy, direct and comfortable without delay given the nature of Downs Road as a low traffic environment. However, given the presence of the Primary School, it is likely that traffic levels will be increased during the brief school peak periods.

2.6.9 It is noted that there is no formal crossing point over Downs Road in proximity of Upper Avenue (which routes to the existing shopping parade) although given the nature of the environment, crossing is likely to occur along the length of the road. An uncontrolled pedestrian crossing equipped with dropped kerbs and tactile paving is located in proximity to the Primary School, facilitating pedestrian school traffic and those looking to access bus stops on Arcadia Road. This can be seen in Figure 2-17 below.

FIGURE 2-17: UNCONTROLLED CROSSING OF DOWNS ROAD (COURTESY OF GOOGLE MAPS)

2.6.10 As demonstrated within Figure 2-7 to Figure 2-10 above, there are a number of bus stops located along the length of Downs Road. No shelter or seating is available at the bus stops, with no raised kerbs present either.

2.6.11 There is no formal cycle infrastructure in the vicinity of the site, with users expected to cycle on-carriageway. This is reflective of the residential environment.

2.6.12 Reflecting on the information presented above, Downs Road provides an attractive, direct and safe route for pedestrians.

2.6.13 The full details of the above assessment in the context of WRAT are included at **Appendix C.** Overall the route scored 71%, with comfort and coherence in relation to the presence of uncontrolled crossing points areas where improvement could be found.

Arcadia Road

2.6.14 Arcadia Road is provided with footways on either side of the carriageway, approximately 2.0m wide along its length, shown in Figure 2-18 overleaf.

FIGURE 2-18: ARCADIA ROAD

2.6.15 The existing footways are maintained to a good standard, with surfaces generally well-kept and uncracked. The pedestrian routes along Arcadia Road are well overlooked by residential properties, with frequent street-lighting present throughout.

2.6.16 The footways follow the desire line as they are adjacent to the carriageway, with crossing of the road easy, direct and comfortable without delay given the nature of Downs Road as a low traffic environment. There are no formal crossing points to reach the opposite side of the carriageway along its length, however this is typical of a residential street of this nature.

2.6.17 The site visit undertaken on the 5th November 2025 was undertaken during the AM morning school peak hour, where footway parking was present on the southern end of Arcadia Road, as demonstrated in Figure 2-19 overleaf. This parking creates brief pinch points on both sides of the carriageway, resulting in some deviation from the desire line, where a 'give and take' arrangement between users is likely.

FIGURE 2-19: EXISTING FOOTWAY PARKING ON ARCADIA ROAD

2.6.18 Uncontrolled crossings with dropped kerbs and tactile paving are present on side-road junctions including Castlefields and Lewis Road, as shown in Figure 2-20 and Figure 2-21 overleaf.

FIGURE 2-20: UNCONTROLLED CROSSING OF CASTLEFIELDS

FIGURE 2-21: UNCONTROLLED CROSSING OF LEWIS ROAD

2.6.19 The gradient of Arcadia Road is steep and likely to exceed 1 in 12, affecting attractiveness in relation to comfort for users of an older age or with mobility issues. This can be seen in Figure 2-22 below.

FIGURE 2-22: ARCADIA ROAD GRADIENT

2.6.20 A number of bus stops are located on Arcadia Road, including a northbound stop with a flag and pole is at its southern end near the Primary School - this can be seen in Figure 2-19. A further set of stops are located close to Arcadia Road's junction with Lewis Road; both stops are provided with a flag and pole, with the southbound stop also provided with timetable information and a shelter with seating in good condition. This can be seen in Figure 2-23 overleaf.

FIGURE 2-23: BUS STOPS ON ARCADIA ROAD

2.6.21 The full details of the above assessment in the context of WRAT are included at **Appendix D.** Overall the route scored 74%, with Arcadia Road noted to provide a direct, well-overlooked and safe route with good quality footways. The gradient of the road and presence of footway parking are known factors that impact the comfort and attractiveness of the route.

Lewis Road

2.6.22 Lewis Road is provided with footways on either side of the carriageway, measuring approximately 2.0m in width along its length as shown in Figure 2-24 overleaf.

FIGURE 2-24: LEWIS ROAD FOOTWAY

2.6.23 The existing footways are maintained to a good standard, with surfaces generally well-kept and uncracked. The pedestrian routes along Lewis Road are well overlooked by residential properties, with frequent street-lighting present throughout.

2.6.24 The footways follow the desire line as they are adjacent to the carriageway, with crossing of the road easy, direct and comfortable without delay given the nature of Lewis Road as a low traffic environment. There are no formal crossing points to reach the opposite side of the carriageway along its length, however this is typical of a residential street of this nature.

2.6.25 On-street parking is present along the length of the road on either side of the carriageway, which acts as traffic calming along Lewis Road. Uncontrolled crossing points of side road junctions are present, including at Edgehill Gardens and Elwill Way as shown in Figure 2-25 and Figure 2-26 overleaf.

FIGURE 2-25: UNCONTROLLED CROSSING OF EDGEHILL GARDENS

FIGURE 2-26: UNCONTROLLED CROSSING OF ELWILL WAY

2.6.26 Bus stops are located on Lewis Road equipped with a flag and pole, and can be seen in Figure 2-27 below.

FIGURE 2-27: BUS STOPS ON LEWIS ROAD

2.6.27 The full details of the above assessment in the context of WRAT are included at **Appendix D.** Overall the route scored 82%, with Arcadia Road noted to provide a direct, well-overlooked, attractive and safe route with good quality footways.

Upper Avenue

2.6.28 Upper Avenue is provided with footways on either side of the carriageway, measuring approximately 2.0m in width along its length, shown in Figure 2-28 overleaf.

FIGURE 2-28: UPPER AVENUE

2.6.29 The footways are maintained to a good standard, with surfaces generally well-kept and uncracked. The pedestrian routes along Upper Avenue are well overlooked by residential properties, with frequent street-lighting present throughout. The footways follow the desire line as they are adjacent to the carriageway, with crossing of the road easy, direct and comfortable without delay given the nature of Upper Avenue as a low traffic environment. An uncontrolled crossing of Upper Avenue is located in proximity to the shopping parade and bus stops, equipped with dropped kerbs and tactile paving as demonstrated in Figure 2-29 overleaf.

FIGURE 2-29: UNCONTROLLED CROSSING OF UPPER AVENUE

2.6.30 On-street parking is present along the length of the road on either side of the carriageway, which acts as traffic calming. Uncontrolled crossing points of side road junctions are present, including that with Biddenden Way, Flowerhill Way, The Drove Way, Haven Close and Brookside Close, a number of which are shown in Figure 2-30 and Figure 2-31 overleaf.

FIGURE 2-30: UNCONTROLLED CROSSING OF BIDDENDEN WAY

FIGURE 2-31: UNCONTROLLED CROSSING OF FLOWERHILL WAY

2.6.31 The gradient of Upper Avenue is steep and likely to exceed 1 in 12 in places, affecting attractiveness in relation to comfort for users of an older age or with mobility issues.

2.6.32 Bus stops are located at the shopping parade within the centre of Upper Avenue, both of which take the form of lay-by arrangements. The eastbound stop is provided with a shelter and seating which is in good condition, with a flag and pole with timetable information, whilst the westbound stop is provided with a flag and pole with timetable information. These stops can be seen in Figure 2-32 below and Figure 2-33 overleaf.

FIGURE 2-32: EASTBOUND STOP UPPER AVENUE (COURTESY OF GOOGLE MAPS)

FIGURE 2-33: SHOPPING PARADE WESTBOUND BUS STOP

2.6.33 The full details of the above assessment in the context of WRAT are included at **Appendix D.** Overall the route scored 74%, with Upper Avenue noted to provide a direct, well-overlooked and safe route with good quality footways. The gradient of the road is likely to impact the comfort and attractiveness of the route however.

Summary

2.6.34 Overall, the site location is considered suitably accessible, with a number of everyday amenities and facilities accessible within a short walking / cycling distance. The existing pedestrian infrastructure in Istead Rise is provided to good standard, with routes generally wide, direct, easy to navigate and well-overlooked. Using the WRAT criteria, all routes achieved in excess of 70%, highlighting the suitability of these routes.

2.6.35 Given the nature of Istead Village, on-carriageway cycling is considered appropriate with formal infrastructure located on the A227 Wrotham Road providing a direct continuous connection into Gravesend. Some areas for improvements on the various routes have been identified within the above, relating to the gradient of Upper Avenue and Arcadia Road, existing facilities at bus stops and presence of formal crossing points. These existing issues are

considered and addressed through the development proposals in the following section of this report.

2.7 HIGHWAY SAFETY

2.7.1 The latest five years of Personal Injury Collision (PIC) data for the period up to 30th June 2025 has been obtained from KCC for the local highway network covering the Istead Rise village for the plot in Figure 2-34 below.

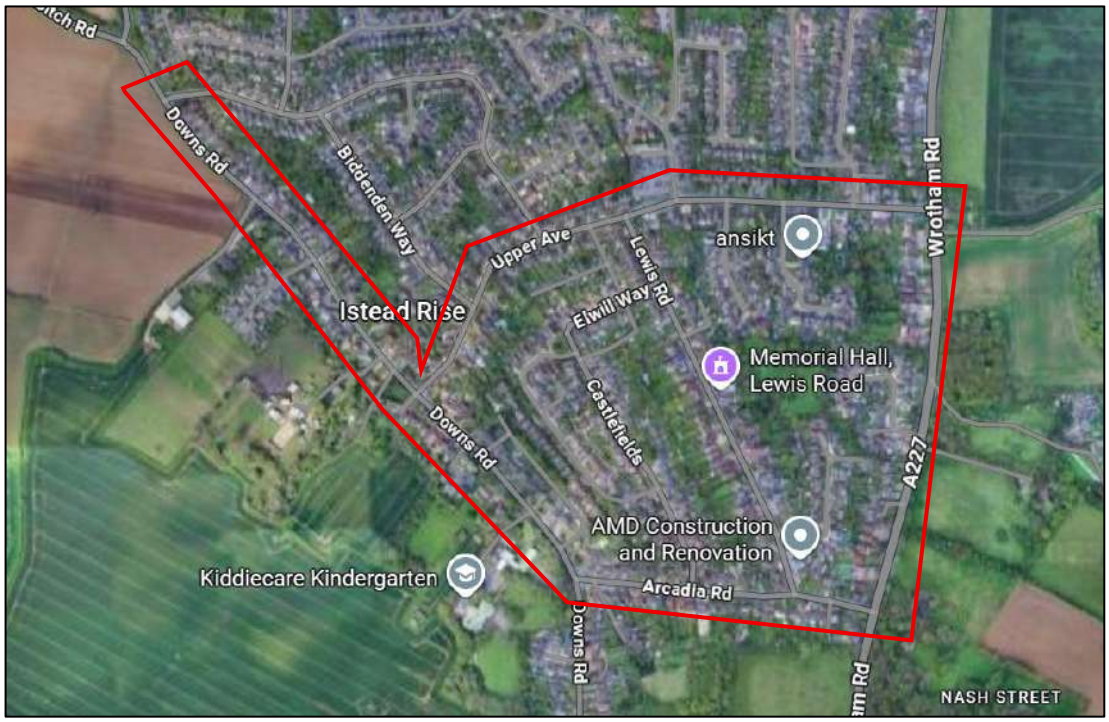


FIGURE 2-34: PIC PLOT (COURTESY OF GOOGLE MAPS)

2.7.2 Six incidents were recorded during this period, five of which were classified as 'slight' in severity and one as 'serious'. The PIC plot and associated report is included at **Appendix E.**

2.7.3 The 'serious' incident occurred on Downs Road at its junction with Flowerhill Way in light and dry conditions when a speeding car lost control, mounted the pavement and collided with a pedestrian.

2.7.4 One further 'slight' incident occurred on Downs Road in light and dry conditions. The incident occurred when a car mounted a verge to give right of way and flipped onto its roof. One 'slight' incident occurred on Upper Avenue in light and dry conditions when a driver over the prescribed limit of alcohol has collided with a parked car.

2.7.5 One 'slight' incident occurred on the A227 Wrotham Roads junction with Arcadia Road in light and dry conditions when a car has pulled out of Arcadia Road into the path of an oncoming motorcyclist.

2.7.6 The two remaining 'slight' incidents occurred at the A227 Wrotham Road junction with Istead Rise. The first incident occurred in light and wet conditions when a car was travelling along the A227 Wrotham Road northbound when it has veered onto the other side of the road and collided with a tree, which was noted to have been a medical episode. The second incident occurred in light and dry conditions when a car travelling north on the A227 Wrotham Road has collided with a vehicle that had turned left out of Istead Rise and failed to look correctly when doing so.

2.7.7 In view of the number, nature and location of the incidents recorded, which were all influenced by human error rather than any inherent fault with the highway layout or condition, it is not considered that the proposed development would materially exacerbate the local highway safety record.

3 DEVELOPMENT PROPOSALS

3.1 OVERVIEW

3.1.1 The proposed development comprises the construction of up to 154 residential dwellings, which will comprise a 50 / 50 split between affordable and private housing given the sites grey belt nature. The description of development is as follows:-

> *"Outline planning application for the demolition of 64 Downs Road and erection of up to 154No. residential dwellings (including affordable housing), with all matters reserved except for access. Creation of a new access from Downs Road."*

3.1.2 A summary of the indicative accommodation schedule is provided in Table 3-1 below.

Unit Type	Private	Affordable
1-bed FOG / Apartment	-	20
2-bed house	10	32
3-bed house	29	25
4-bed house	33	-
5-bed house	5	-
Total	**77**	**77**

TABLE 3-1: INDICATIVE DEVELOPMENT ACCOMMODATION SCHEDULE

3.1.3 The indicative site layout plan is included within Figure 3-1 overleaf and **Appendix F**.

FIGURE 3-1: PROPOSED SITE LAYOUT

3.2 ACCESS

3.2.1 It is proposed that primary vehicular access to the site will be achieved via an enhancement to the existing access that serves Nos. 64, 68 and 70 Downs Road, to form a priority junction onto Downs Road. The existing site access can be seen in Figure 3-2 overleaf.

FIGURE 3-2: SITE ACCESS ON DOWNS ROAD

3.2.2 No. 64 will be demolished as part of the development proposals, with a 5.5m site access road located in its place.

3.2.3 No. 68 has the benefit of right of access to their land along their property boundary that abuts the current access track. Access to No. 68 will be located 15m along the proposed site access road via a vehicle crossover, with access retained across a grass verge alongside their property boundary to ensure continuing right of access.

3.2.4 Access to No. 70 will also be taken from the vehicle crossover set to serve No.68, linking to a vehicle track to the rear of the property, maintaining access. Access to the site has been designed to ensure that the neighbouring properties will continue to enjoy their access rights.

3.2.5 Downs Road is subject to a 30mph speed restriction in the vicinity of the site. To inform the access design, an Automatic Traffic Count (ATC) was undertaken on Downs Road in proximity to the proposed site access for the seven-day period commencing 8th March 2025. This recorded 85th percentile speeds of 34.6mph northbound and 31.9mph southbound. The full ATC data is included at **Appendix G**.

3.2.6 In accordance with Manual for Streets (MfS) guidance, the calculated stopping sight distances for the surveyed 85th percentile speeds – based on a standard driver reaction time of 1.5 seconds and a deceleration rate of 4.41m^2 – correspond to visibility splay requirements of 52.7m northbound and 46.8m southbound, which have been demonstrated on the Stage 1 access design included at **Appendix H.** The associated swept path analysis is also included at **Appendix H.**

3.2.7 An emergency access will be provided for the site via Long Walk, measuring 3.7m wide and installed with a collapsible bollard. This will also be a shared pedestrian / cycle access.

3.2.8 Primary pedestrian access to the site will be achievable via the vehicular access. A 2.0m wide footway will be installed on both sides of the access, tying into the existing provision on Downs Road. An uncontrolled pedestrian crossing with a dropped kerb and tactile paving will be provided at the site access junction to enable pedestrians to cross. A further pedestrian access into the site will be provided via the existing path between no. 30 and 34 Downs Road as shown in the site layout above at Figure 3-1 and **Appendix F.**

KCC H&T Access Comments and Responses

3.2.9 KCC H&T raised comments within their pre-application advice regarding the proposed access arrangements.

3.2.10 KCC comment that buses may block visibility of oncoming vehicles trying to overtake the bus. It is contended that bus stops near access junctions a common occurrence, and that given the modest traffic levels and speeds, the frequency of buses, and as buses are stationary for a limited amount of time, this is not considered to be a concern.

3.2.11 KCC H&T query whether the location of the access in proximity to existing driveways on Downs Road complies with applicable KCC guidance. There is no KCC Guidance restricting the location of access points in proximity to existing driveways.

3.2.12 The proposed access design includes double yellow lines to protect the visibility splays and ensure the necessary vehicles can access and egress the site. KCC H&T have requested an assessment of the impact this would have on displacing existing parking.

3.2.13 The site visit on 5th November 2025 revealed there is significant available on-street parking along Downs Road. The double yellow lines proposed opposite the site access will result in the loss of approximately four on-street spaces – this loss can be easily accommodated elsewhere on Downs Road. It is also noted that the double yellow lines proposed either side of the access on the southern side of Downs Road would replace existing single yellow line restrictions, and is therefore unlikely to have a significant impact.

3.3 OFF-SITE ENHANCEMENTS

3.3.1 Following the accessibility audit in Section 2.6 and pre-application correspondence with KCC H&T, a number of enhancements are proposed and are set out within this section, in accordance with the developments transport vision and ensuring future residents will have a genuine choice of mode of transport.

3.3.2 Bus stops located within the vicinity of the site that will serve future residents include "Longwalk", "Upper Avenue" and the "Primary School" stops. Raised kerbs will be provided at all these stops, with a bus shelter also provided at the Downs Road southbound stop, provided with seating.

3.3.3 Downs Road is subject to a 30mph speed restriction within the vicinity of the site, though average vehicle speeds slightly exceed this limit, as demonstrated by the ATC survey. Given Downs Road is a bus route, it is not considered that any physical traffic calming will be feasible or appropriate. There is existing red surfacing located outside of the site access and within the vicinity of the school, as demonstrated within Figure 3-3 below. Given the red surfacing has faded and is dated, it is proposed to be resurfaced.

FIGURE 3-3: EXISTING RED SURFACING (COURTESY OF GOOGLE MAPS)

3.3.4 It is proposed to install an uncontrolled pedestrian crossing point on Downs Road in proximity to the proposed site access to enable pedestrians to cross. An uncontrolled pedestrian crossing point will also be installed at the pedestrian access opposite Plot 137 Downs Road. This will support access to the shopping parade in Istead Rise and ensure direct pedestrian access for users of all ranges of mobility / accessibility needs.

3.3.5 As evidenced within Section 2, the site is surrounded by a good level of existing pedestrian infrastructure, with easy to navigate direct routes throughout the village. Street lighting is consistent throughout the village with all streets well overlooked by residential properties providing a safe and attractive environment. Uncontrolled crossing points are consistent throughout the village and across side road junctions, providing safe and efficient access for all.

Public Transport Improvement Strategy

3.3.6 Gravesham Borough Council (GBC) are yet to adopt their draft Local Plan – there is therefore no wider public transport strategy for the area. Given this, KCC H&T have requested that a public transport strategy be formed with other emerging sites in the area within their pre-application advice.

3.3.7 KCC H&T have facilitated discussion with another forthcoming site in the area and discussions have taken place surrounding the potential for a joint strategy. At the same time as these discussions were taking place, KCC's Public Transport Team issued a *"Public Transport Note: Developments in Istead Rise and Meopham Kent County Council Public Transport Team."* This note, included at **Appendix I**, summarises current public transport provision in the area and sets out cost estimates for service improvements, enabling sites coming forward to contribute together to secure the public transport improvements.

3.3.8 In accordance with the Public Transport Note, the applicant is willing to proportionately contribute to the sustaining / enhancing of the 308 service and discussions are ongoing at the time of writing to agree a suitable and proportionate contribution.

3.3.9 It is recognised that the service does not operate in the weekday morning peak hour and that improvements to this period specifically would help enable future residents (and existing residents on the route) to commute to work via the bus, to Gravesend to the north, Sevenoaks to the south, and to Meopham Rail Station.

3.3.10 As identified in Section 2.6, the gradients of Upper Avenue and Arcadia Road may be a challenge for residents of an older age or with mobility issues to walk. It is noted that the 308 bus service provides an alternative option for residents to access the shopping parade in the village centre, avoiding having to negotiate the steep gradients – this would be further supported by any proposed increased service frequency.

3.3.11 Correspondence is ongoing with KCC H&T and the KCC Public Transport Team to re-route some other existing bus services from Lewis Road to Downs Road, to benefit existing and future residents with mobility restrictions. Downs Road is more central to Istead Rise village and would be a closer route for more residents, especially when the additional residents associated with the proposals are accounted for. While this would result in the existing stop on Lewis Road losing some services, it is a short distance and a relatively level walk to the alternative nearest stops; the shopping parade bus stops on Upper Avenue are located

approximately 350m north of the Lewis Road stops, with further stops on Arcadia Road located approximately 300m to the south.

3.3.12 The improvements outlined within this section build on the good level of existing infrastructure to ensure routes used by pedestrians and cyclists to local facilities are sufficient to support the development. Improvements to pedestrian and public transport infrastructure will ensure that future residents of the development will have a genuine choice of travel from the site and will not be dependent on the use of the private vehicle. In accordance with the pre-application advice received, evidence has clearly been provided that sustainable access outside of the site can be achieved.

3.4 ROAD SAFETY AUDIT

3.4.1 An independent Stage 1 Road Safety Audit of the proposed vehicular and pedestrian access designs was completed by Road Safety Answers Ltd in November 2025 and is included at **Appendix J**. The RSA raised five points, which have been addressed via a Designer's Response. A summary is provided in Table 3-2 below.

Point Raised	Recommendation	Designer's Response
Location: A – The development access junction with Downs Road (Dwg. 35213-H-01 Rev. P3). **Summary:** Risk of side impact collisions if visibility to the south-east from the access is obstructed by a parked vehicle. Double yellow lines are proposed around, and opposite, the access junction. To the south-east of the south-eastern shoulder of the junction, the double yellow lines do not extend to the bus stop clearway, allowing a vehicle, such as a van, to park there and obstruct visibility from the access. This will increase the risk of side impact collisions between vehicles leaving the access and vehicles approaching from the south-east.	The proposed double yellow lines should extend south-eastwards to meet the bus stop clearway at the north-westbound bus stop.	**Agreed.** The proposed double yellow lines have been extended to the bus stop on revised drawing 35213-H-01 Rev P4.
Location: B – The uncontrolled pedestrian crossing outside number 169 Downs Road (Dwg. 35213-H-01 Rev. P3).	The double yellow line restrictions at the development access should extend to a point, on both sides of the road, to the	**Agreed.** The proposed double yellow parking restrictions have been

Summary: Risk of pedestrian/vehicle collisions due to parked vehicles. The proposed double yellow line restrictions do not reach the location of this crossing point. The auditors observed cars parked along the northeast side of Downs Road outside nos. 167 and 169 (phot 1). These vehicles would obstruct the crossing and increase the risk of pedestrian/vehicle collisions if pedestrians try to walk between the park vehicles to cross the road.	north-west of the proposed uncontrolled pedestrian crossing.	extended to the north of the proposed pedestrian crossing on the revised drawing 35213-H-01 Rev P4.
Location: C – Just north-west of the development access – south-west side of Downs Road (Dwg. 35213-H-01 Rev. P3). **Summary:** Risk of side impact collisions if visibility to the north-west from the access is obstructed by vegetation. Vegetation currently overhangs the top of the retaining wall (phot 2). If allowed to grow out across the footway, this vegetation will obstruct visibility to the north-west from the development access, increasing the risk of side impact collisions between vehicles turning out of the access and vehicles approaching from the north-west.	Vegetation overhanging the retaining wall, within the visibility splay, should be removed altogether.	**Agreed.** The vegetation overhanging the wall will be removed altogether.
Location: D – The non-motorised users' (NMUs) access onto Downs Road, opposite no.137 (Dwg. 22628B/10). **Summary:** Risk of cycle/vehicle, and cycle/pedestrian collisions This non-motorised user access from the development is relatively wide for its nearest 40m to Downs Road (photo 3), and is relatively steep down	If cyclists are to use this access onto Downs Road, staggered barriers should be installed just beyond the back of the footway of Downs Road to slow cyclists as they enter the highway, with appropriate warning pacing on the footway, either side of the access.	**Agreed.** This is a 1.5m wide footpath that is to be used by pedestrians only. Cyclists from the site will be expected to use the carriageways and can enter/exit the site via the site access, or alternatively the emergency access

towards Downs Road over its last 10m, allowing cyclists to travel at speed onto Downs Road. If they are allowed to do so, their likelihood of overshooting onto Downs Road increases the risk of collisions with padding vehicles. Visibility to pedestrians walking past the access will also be obstructed by the adjacent high walls and bushes, increasing the risk of cycle/pedestrian collisions.		which leads onto Long Walk to the north.
Location: E – The Non-Motorised Users' (NMUs) access onto Downs Road, opposite 137 (Dwg. 22628B/10). **Summary:** Risk of pedestrian trips and falls on the full height kerb. Pedestrians wishing to access the south eastbound bus stop outside no.157 Downs Road will need to cross Downs Road, probably where the NMU access exits the development. A they do so, they will encounter a full height kerb on the north-east side of Downs Road, increasing their risk of trips and falls.	At the NMU access onto Downs Road, outside no.137, an uncontrolled pedestrian crossing, with dropped kerbs and tactile paving should be introduced.	**Agreed.** A pedestrian crossing has been demonstrated in this location on drawing 35213-H-02.

TABLE 3-2: RSA AND DESIGNER'S RESPONSE SUMMARY

3.4.2 It is noted that all RSA points and requirements have been addressed and the proposed vehicular and pedestrian access designs can therefore be considered safe and suitable.

3.5 PARKING

3.5.1 The application will be submitted in outline and therefore parking will be subject to a separate future Reserved Matters Application. The adopted parking standards for sites located within Gravesham are the Kent and Medway Structure Plan: Supplementary Planning Guidance 4 (SPG4) (2006). It is noted however that KCC have recently adopted the Kent County Council Parking Standards (2025), which they assess sites against.

3.5.2 Vehicle parking will be provided in accordance with both the latest KCC standards and in accordance with SPG4.

- One-bedroom houses will be provided with one allocated space;
- Two / three-bedroom dwellings will be provided with two allocated spaces; and
- Four / five-bedroom dwellings will be provided with three allocated spaces.
- Visitor parking will be provided at a ratio of 0.2 spaces per dwelling.

3.5.3 Resident cycle parking will be provided at a rate of one space per bedroom. Communal cycle parking will also be provided at a proportion of the total dwellings as requested by KCC H&T within their pre-application advice. .

3.5.4 Each dwelling will be provided with an 'active' Electric Vehicle (EV) charging point in line with Part S of the Building Regulations.

3.6 CONSTRUCTION TRAFFIC MANAGEMENT

3.6.1 Site offices and welfare facilities will be located on the construction site. Wheel washing equipment will be provided as necessary for construction phases. Access to the construction site will be secured and operated in accordance with current health and safety legislation. Delivery and construction HGV traffic will be accommodated on the construction site, with no requirement for waiting on the public highway. In particular, daily movements of goods vehicles will be timed to avoid peak traffic times.

3.6.2 Third-party suppliers and contractors visiting the site will be made aware of the construction access and routeing arrangements at the start of the project. Site management will ensure compliance with the construction access arrangements.

4 TRANSPORT PLANNING POLICY

4.1 NATIONAL PLANNING POLICY FRAMEWORK (NPPF, 2024)

4.1.1 The NPPF sets out the Government's planning policies for England and how these should be applied. It provides a framework within which locally prepared plans for housing and other developments can be produced. The NPPF is a material consideration in planning decisions.

4.1.2 At the heart of the NPPF is a presumption in favour of sustainable development. This is reflected in Section 9 of the document where it is noted that significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes.

4.1.3 The NPPF states at Paragraph 110 that: *"Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes. This can help to reduce congestion and emissions, and improve air quality and public health. However, opportunities to maximise sustainable transport solutions will vary between urban and rural areas, and this should be taken into account in both plan-making and decision-making."*

4.1.4 The Framework further advises at Paragraph 115 that in assessing sites, it should be ensured that:-

> *"Sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location;*
>
> *Safe and suitable access to the site can be achieved for all users;*
>
> *The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code; and*
>
> *Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach."*

4.1.5 Paragraph 116 states that: *"Development should only be prevented or refused on highways grounds if there would be an unacceptable impact on highway safety, or the residual cumulative impacts on the road network, following mitigation, would be severe, taking into account all reasonable future scenarios."*

4.1.6 Paragraph 117 then goes on to note that applications for development should:-

a) *"Give priority first to pedestrian and cycle movements, both within the scheme and with neighbouring areas; and second – so far as possible – to facilitating access to high quality public transport, with layouts that maximise the catchment area for bus or other public transport services, and appropriate facilities that encourage public transport use;*

b) *Address the needs of people with disabilities and reduced mobility in relation to all modes of transport;*

c) *Create places that are safe, secure and attractive – which minimise the scope for conflicts between pedestrians, cyclists and vehicles, avoid unnecessary street clutter, and respond to local character and design standards;*

d) *Allow for the efficient delivery of goods, and access by service and emergency vehicles; and*

e) *Be designed to enable charging of plug-in and other ultra-low emission vehicles in safe, accessible and convenient locations."*

4.1.7 Paragraph 118 states that: "*All developments that will generate significant amounts of movement should be required to provide a travel plan, and the application should be supported by a vision-led transport statement or transport assessment so that the likely impacts of the proposal can be assessed and monitored."*

4.1.8 Paragraph 148 states that *"Where it is necessary to release Green Belt land for development, plans should give priority to previously developed land, then consider grey belt which is not previously developed, and then other Green Belt locations. However, when drawing up or reviewing Green Belt boundaries, the need to promote sustainable patterns of development should determine whether a site's location is appropriate with particular reference to paragraphs 110 and 115 of this Framework. Strategic policy-making authorities should consider the consequences for sustainable development of channelling development towards urban areas inside the Green Belt boundary, towards towns and villages inset within the Green Belt or towards locations beyond the outer Green Belt boundary."*

4.1.9 Paragraph 155 states that *"The development of homes, commercial and other development in the Green Belt should also not be regarded as inappropriate where all the following apply:*

a) *The development would utilise grey belt land and would not fundamentally undermine the purposes (taken together) of the remaining Green Belt across the area of the plan;*

b) *There is a demonstrable unmet need for the type of development proposed;*

c) The development would be in a sustainable location, with particular reference to paragraphs 110 and 115 of this Framework; and

d) Where applicable the development proposed meets the 'Golden Rules' requirements set out in paragraphs 156-157 below."

4.2 PLANNING PRACTICE GUIDANCE (PPG)

4.2.1 The PPG was established in 2014 as a supporting resource in conjunction with the NPPF, which is also a material consideration in determining planning applications. With respect to transport, the PPG includes a section titled *'Travel Plans, Transport Assessments and Statements'*. This provides general guidance on the process of producing these documents.

4.2.2 With regard to the purpose of a Transport Assessment or Statement it is noted that:-

"The Transport Assessment or Transport Statement may propose mitigation measures where these are necessary to avoid unacceptable or "severe" impacts. Travel Plans can play an effective role in taking forward those mitigation measures which relate to on-going occupation and operation of the development."

4.3 DEPARTMENT FOR TRANSPORT (DFT) CIRCULAR 01/2022 – THE STRATEGIC NETWORK AND THE DELIVERY OF SUSTAINABLE DEVELOPMENT (2022)

4.3.1 DfT Circular 01/2022 states at Paragraph 11 that National Highways will:-

"...act in a manner which conforms to the principles of sustainable development. In this context the company's licence agreement defines sustainable development as encouraging economic growth while protecting the environment and improving safety and quality of life for current and future generations. Alongside this, the company has an important role to play in the drive towards zero emission transport through its commitment to net zero maintenance and construction emissions by 2040 and net zero road user emissions by 2050, and its role as a statutory consultee in the planning system."

4.3.2 The Circular further advises at Paragraph 12 that:-

"New development should be facilitating a reduction in the need to travel by private car and focused on locations that are or can be made sustainable. Developments in the right places and served by the right sustainable infrastructure delivered alongside or ahead of occupancy must be a key consideration when planning for growth in all local authority areas."

"Development should be promoted at locations that are or can be made sustainable, that allow for uptake of sustainable transport modes and support wider social and health objectives, and which support existing business sectors as well as enabling new growth.

4.3.3 In relation to Transport Assessments, the Circular states at Paragraph 48 that:-

"Where a Transport Assessment is required, this should start with a vision of what the development is seeking to achieve and then test a set of scenarios to determine the optimum design and transport infrastructure to realise this vision. Where such development has not been identified in an up-to-date development plan (or an emerging plan that is at an advanced stage), developers should demonstrate that the development would be located in an area of high accessibility by sustainable transport modes and would not create a significant constraint to the delivery of any planned improvements to the transport network or allocated sites."

4.4 LOCAL TRANSPORT PLAN 5 (LTP5) STRIKING THE BALANCE (2024 – 2037)

4.4.1 The Local Transport Plan 5 (LTP5) was prepared by KCC and adopted in December 2024 and runs from 2024 to 2037. The plan sets the overall strategy and direction for the full transport mix for the coming years.

4.4.2 The Plan includes details on how the County Council will meet its transport ambition for Kent, which is:-

"We want to improve the health, wellbeing, and economic prosperity of lives in Kent by delivering a safe, reliable, efficient and affordable transport network across the county and as an international gateway. We will plan for growth in Kent in a way that enables us to combat climate change and preserve Kent's environment.

We will do this by delivering emission-free travel by getting effective dedicated infrastructure to electrify vehicles, increase public transport use and make walking and cycling attractive. This will be enabled by maintaining our highway network and delivering our Vision Zero road safety strategy. These priorities will ensure our networks are future-proof, resilient and meet user needs."

4.4.3 This ambition will be realised through a number of targeted, overarching policies which will aim to deliver specific outcomes for the county. Those applicable to the development proposals are:-

"***Outcome 1:*** *The condition of our managed transport network is brought up to satisfactory levels, helping to maintain safe and accessible travel and trade*

Policy A): Achieve the funding necessary to deliver a sustained fall in the value of the backlog of maintenance work over the life of our Local Transport Plan.

Outcome 2: *Deliver our Vision Zero road safety strategy through all the work we do.*

Policy A): Achieve a fall over time in the volume of people killed or very seriously injured on KCC's managed road network, working towards the trajectory set by Vision Zero for 2050."

*"**Outcome 5**: Deliver a transport network that is quick to recover from disruptions and future-proofed for growth and innovation, aiming for an infrastructure-first approach to reduce the risk of highways and public transport congestion due to development*

Policy A): Strengthen delivery of our Network Management Duty to deliver the expeditious movement of traffic by using our new moving traffic enforcement powers and modernising the provision of on-street parking enforcement.

Policy B): Reduce the amount of forecast future congestion and crowding on highways and public transport that is associated with demand from development by securing funding and delivery of our Local Transport Plan.

Policy C): The prospects for the future of transport increase across the whole county, with new innovations in transport services having a clear pathway to trial or delivery in Kent."

*"**Outcome 7**: Road-side air quality improves as decarbonisation of travel accelerates, contributing towards the pursuit of carbon budget targets and net zero in 2050.*

Policy A): Reduce the volume of carbon dioxide equivalent emissions entering the atmosphere associated with surface transport activity on the KCC managed highway network by an amount greater than our forecast "business as usual" scenario. This means achieving a greater fall than those currently forecast of 9% by 2027, 19% by 2032 and 29% by 2037.

Policy B): No area in Kent is left behind by the revolution in electric motoring, with charging infrastructure deployed close to residential areas, to reduce barriers to adoption.

Policy C): Proposals are clearly evidenced in terms of their contribution to providing lower emissions from transport in Air Quality Management Areas in the county.

Outcome 8: *Better health and wellbeing*

Policy A): We will aim to obtain further funding to deliver the outcomes of our Bus Service Improvement Plan (or its successor) beyond its current horizon of 2024/25. We will ensure that our Local Transport Plan proposals are clearly evidenced in terms of their contribution towards achieving our Bus Service Improvement Plan.

Policy B): We will identify and support industry delivery of priority railway stations for accessibility improvements and route improvements to reduce journey times and improve reliability.

Outcome 9: *Health, air quality, public transport use, congestion and the prosperity of Kent's high streets and communities will be improved by supporting increasing numbers of people to use a growing network of dedicated walking and cycling routes.*

Policy A): We will aim to deliver walking and cycling improvements at prioritised locations in Kent to increase activity levels and support Kent's diverse economy, presented in a Kent Cycling and Walking Infrastructure Plan..″

4.4.4 Within a section dedicated to 'Development Management Principles" LTP5 sets out a number of county-wide strategic aims:-

"To ensure Local Planning Authorities and developers work effectively with KCC to effectively design development and local transport so as to reduce its pressure on the existing road network and embed sustainable travel from the start.

To implement an infrastructure-first approach to secure initial improvements to the whole transport system to reduce pressure on the road network.

To recognise the uncertainty in how occupants of new developments will travel by assessing a range of outcomes and ensuring the right mitigations are implemented in response to observed impacts.″

4.4.5 In order to achieve the above aims, KCC have stated that they will, with district planning authorities, deliver a 'decide and provide' approach to plan and site development. In line with the aim to strike the balance between modes, and with the recognition that car use remains by far the most popular mode of transport in the county, KCC hope that this approach will help support a greater choice of transport modes, to help reduce pressure on the existing network, whilst also addressing impacts that do require mitigation.

4.4.6 KCC aims in delivering a 'decide and provide' approach to recognise uncertainty in travel behaviour, by assessing a range of outcomes and ensuring the right mitigations are implemented.

4.5 GRAVESHAM LOCAL PLAN CORE STRATEGY (2014)

4.5.1 The Core Strategy was adopted by Gravesham Borough Council (GBC) in September 2014 and is the Council's principal document within its Local Plan, setting out the main planning policy objectives for the Borough up to 2028.

4.5.2 With regard to transport, Strategic Objective 7 is to:-

> *"Enhance the Borough's public transport network to serve existing and new neighbourhoods and communities in Gravesend, Northfleet and Ebbsfleet."*

4.5.3 Paragraph 2.6.4 states the following in relation to the location of new development:-

> *"In view of these challenges and opportunities, there will be a need to ensure that:*
>
> - *new development is mixed use, is located in areas with best access to services and facilities which minimise the need to travel, particularly by car and minimises impacts on the road network;*
> - *support is given to alternatives to car based transport such as improved bus, train, cycling, walking and river transport provision and improved transport hubs in Gravesend town centre and at Ebbsfleet."*

4.5.4 Paragraph 4.2.8 states the following:-

> *"The Core Strategy acknowledges that as development opportunities within the existing urban area and settlements inset from the Green Belt become more limited, some development may be required on land in the rural area before the end of the plan period to meet the Borough's housing needs and sustain rural communities. The Green Belt has therefore been identified as a broad location for future growth and its boundaries will be subject to a review."*

4.5.5 Paragraph 5.3.35 states the following in relation to car parking:-

> *"The Council will require applicable new developments to prepare and adopt Transport Assessments and Travel Plans using Kent County Council's guidance "Transport Assessments and Travel Plans, October 2008." It will also require developments to take into account current car parking standards. These will be refined taking into account the availability of alternative*

4.5.6 Policy CS11 states the following:-

"New developments should mitigate their impact on the highway and public transport networks as required. As appropriate, transport assessments and travel plans should be provided and implemented to ensure the delivery of travel choice and sustainable opportunities for travel…

Sufficient parking in new development will be provided in accordance with adopted standards which will reflect the availability of alternative means of transport and accessibility to services and facilities…

The Council will seek improvements to walking and cycling facilities and networks in the Borough including provision in new development as appropriate…"

4.6 GRAVESHAM LOCAL PLAN FIRST REVIEW (SAVED POLICIES) (1994)

4.6.1 Although the adopted Core Strategy replaces a number of the policies contained within the Local Plan (First Review), those which were 'saved' by the Secretary of State will remain applicable in the determination of planning applications.

4.6.2 Policies T1 to T3 are in accordance with general policy outlined by the Local Highway Authority with respect to the use of the highway network. These are set out as follows:-

*"**Policy T1**: The Local Planning and Highway Authorities will consider the impact on the transport system and on the environment of traffic generated by new development and will wish to ensure that all proposed developments are adequately served by the highway network identified on the Proposals Map.*

***Policy T2**: The Local Planning and Highway Authorities will seek to channel all traffic travelling through Gravesham on to the primary road network and to channel traffic between and within residential, industrial and principal business districts of the Borough onto the district distributors.*

***Policy T3**: The Local Planning and Highway Authorities will not normally permit any proposed development that generates significant volumes of commercial vehicle traffic, if it is not well related to the primary and district distributor network."*

4.6.3 In addition, **Policy T5** relates to the formation or intensified use of an access to the main highway network as identified on the Proposals Map, stating that this would not usually be permitted unless it can be demonstrated that there would be no safety implications and that the access is designed to a suitable standard which is acceptable to the Local Planning and Highway Authorities.

4.6.4 **Policy T9** requires new residential development to comply with the Kent Design Guide and the vehicle parking standards, and in appropriate circumstances the Borough Council will encourage the use of traffic calming measures. Furthermore,

Policy P3 requires provision for vehicle parking to be made within the development site.

4.7 PARKING POLICY

Kent and Medway Structure Plan: Supplementary Planning Guidance 4 (SPG4)

4.7.1 GBC's adopted parking policy is taken from the Kent and Medway Structure Plan: Supplementary Planning Guidance 4 (SPG4). This outlines the maximum parking standards required for new residential developments based on dwelling size, which are as follows:-

- 1-bedroom units – **1 space per dwelling**;
- 2- and 3-bedroom units – **2 spaces per dwelling; and**
- 4+ bedroom units **– 3 spaces per dwelling.**

4.7.2 The standards note that for "1-bedroom dwellings the parking will usually be provided as communal spaces. For other dwelling sizes part or all of the parking can be provided on a communal basis."

4.7.3 SPG4 also sets out cycle parking standards, which are one space per bedroom for houses.

Kent County Council Parking Standards (2025)

4.7.4 As mentioned within the previous section, KCC H&T have noted that although GBC use SPG4 as their adopted standards, they will be assessing sites against the recently adopted Kent County Council Parking Standards (2025). The applicable standards for developments in rural locations are as follows:-

- 1 & 2 bed houses: **2 spaces per unit, allocation of 1 space per unit possible**;
- 3 bed houses: **2 spaces per unit, allocation of one or both spaces possible**;
- 4+ bed houses: **3 spaces per unit, allocation of both spaces possible.**
- Visitor parking: 0.2 spaces per unit.

Electric Vehicle Charging

4.7.5 Approved Document S of The Building Regulations outlines the infrastructure required for the charging of EVs. Requirement S1 outlines the guidance for the erection of new residential buildings:-

> *"(1) A new residential building with associated parking must have access to electric vehicle charge points as provided for in paragraph (2).*
>
> *(2) The number of associated parking spaces which have access to electric vehicle charge points must be—*
>
> *(a) the total number of associated parking spaces, where there are fewer associated parking spaces than there are dwellings contained in the residential building; or*
>
> *(b) the number of associated parking spaces that is equal to the total number of dwellings contained in the residential building, where there are the same number of associated parking spaces as, or more associated parking spaces than, there are dwellings."*

4.8 POLICY COMPLIANCE SUMMARY

4.8.1 The proposed development is seen to comply with all relevant national and local transport planning policies. The site enjoys good access to the primary and strategic highway network and is located within a reasonable walking distance of a range of services, facilities and public transport nodes, providing residents and visitors with realistic opportunities for non-car travel, in accordance with Paragraphs 110, 115, 148 and 155 of the NPPF. Sustainable travel will be further encouraged by the proposed enhancements to surrounding pedestrian and public transport infrastructure and the future Travel Plan, a draft version of which has been submitted alongside this Transport Assessment.

4.8.2 The Gravesham Core Strategy recognises that development within the Green Belt may be required in rural areas to help meet housing needs. In accordance with Paragraph 2.6.4 of the Core Strategy, residents of the development will be provided with the opportunity to utilise alternatives to car-based travel such as walking, cycling, rail and bus.

4.8.3 The application is to be submitted in outline and therefore parking will be subject to a separate future Reserved Matters Application. Parking will comply with the adopted parking standards.

4.8.4 The development's compliance with the key applicable NPPF policies is further outlined in Table 4-1 below and overleaf.

NATIONAL PLANNING POLICY FRAMEWORK: KEY POLICY COMPLIANCE	
Paragraph	**Compliance**
110	
"Significant development should be focused on locations which are or can be made sustainable, through limiting the need to travel and offering a genuine choice of transport modes…"	The site has been demonstrated to be sustainably located within a reasonable walking distance of a range of services, facilities and public transport nodes, offering future residents and visitors a genuine choice of sustainable transport modes. This will be further encouraged through the implementation of a Travel Plan and the proposed improvements to surrounding pedestrian and public transport infrastructure. The applicant is also proposing to proportionately contribute to the enhancement of bus services in Istead Rise, ensuring a genuine choice of transport modes.
115	
"Sustainable transport modes are prioritised taking account of the vision for the site, the type of development and its location."	In accordance with the vision for the site, the proposals will deliver a sustainable extension to Istead Rise. The site will connect with the good level of pedestrian infrastructure within the site vicinity. The location of the site ensures everyday services, facilities and public transport nodes are within walking distance. The development proposals will also provide enhancements to pedestrian and public transport infrastructure.
"Safe and suitable access to the site can be achieved for all users."	The proposed vehicular access has been demonstrated to be safe and suitable for future users. It has been designed in accordance with the applicable Manual for Streets guidance with all points raised within the independent Stage 1 Road Safety Audit addressed.
"The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance, including the National Design Guide and the National Model Design Code."	Design matters relating to street hierarchy and parking will be the subject of a future Reserved Matters application. A policy-compliant level of parking will be provided, and it is confirmed that the site will be designed in accordance with the applicable local and national design guidance.
Any significant impacts from the development on the transport network (in terms of capacity and congestion), or on highway safety, can be cost effectively mitigated to an acceptable degree through a vision-led approach	It is demonstrated within the following section that the development will have a negligible impact on the operation of the transport network in relation to capacity and congestion. Analysis of the most recent five-years' worth of PIC data within the site vicinity further demonstrates that the site would not materially exacerbate the local highway safety record. The vision-led approach taken to the design of this development will further reduce its impact on the transport network through the proactive encouragement of sustainable transport modes.

148	
"Where it is necessary to release Green Belt land for development, plans should give priority to previously developed land, then consider grey belt which is not previously developed, and then other Green Belt locations. However, when drawing up or reviewing Green Belt boundaries, the need to promote sustainable patterns of development should determine whether a site's location is appropriate with particular reference to paragraphs 110 and 115 of this Framework. Strategic policy-making authorities should."	The site has been demonstrated to be appropriate for development given its compliance with Paragraphs 110 and 115.
155	
"The development would be in a sustainable location, with particular reference to paragraphs 110 and 115 of this Framework"	As above, the site has been demonstrated to be sustainably located in accordance with Paragraphs 110 and 115 and therefore in compliance with applicable transport policy within Paragraph 155.

TABLE 4-1: NPPF KEY POLICY COMPLIANCE

5 TRIP GENERATION AND DISTRIBUTION

5.1 OVERVIEW

5.1.1 This section outlines the methodology employed to calculate the likely vehicle trip generation of the proposed development.

5.2 PROPOSED DEVELOPMENT VEHICLE TRIP GENERATION

5.2.1 The potential vehicular trip generation of the proposed development has been forecast with reference to the national TRICS trip rate database. Although the development proposals will compromise a 50 / 50 split between affordable and private housing, all dwellings have been assessed against the TRICS category '03 – RESIDENTIAL, A – HOUSES PRIVATELY OWNED' to provide a robust assessment.

5.2.2 Survey sites in England, Scotland and Wales (excluding Greater London) in *'Suburban Area'* and *'Edge of Town'* locations have been considered, with the local population criteria being refined to reflect the location of the site. Surveys undertaken during Covid-19 travel restrictions have been excluded.

5.2.3 The resulting average TRICS trip rates are shown in Table 5-1 below, with the full TRICS output reports included at **Appendix K**.

PERIOD	ARRIVALS	DEPARTURES	TOTAL
AM Peak (0800-0900)	0.142	0.35	0.492
PM Peak (1700-1800)	0.338	0.165	0.503
Daily (0700-1900)	2.295	2.268	4.563

TABLE 5-1: TRICS TRIP RATES – HOUSES PRIVATELY OWNED (TRIPS / DWELLING)

5.2.4 These trip rates have subsequently been factored by the number of dwellings proposed to provide the forecast vehicle trip generation in Table 5-2 below. Please note that any inconsistencies are the result of rounding in MS Excel.

PERIOD	ARRIVALS	DEPARTURES	TOTAL
AM Peak (0800-0900)	21	63	84
PM Peak (1700-1800)	54	28	82
Daily (0700-1900)	360	370	730

TABLE 5-2: FORECAST DEVELOPMENT TRIP GENERATION (154 DWELLINGS)

5.2.5 The proposed development has the potential to generate approximately 84 two-way vehicle movements in the weekday AM peak hour and 82 two-way

movements in the PM peak hour. Across the 12-hour daily period, the proposals will generate approximately 730 two-way vehicle movements, equating to an additional 61 vehicle trips per hour, on average - or approximately one vehicle movement every minute.

5.2.6 In line with the vision of the development, the location of the site and the measures set out in Section 3 and the supporting draft Travel Plan, a five percent reduction to the total development vehicular trip generation forecast has been applied. The results of this reduction are shown in Table 5-3 below. Please note that any inaccuracies are a result of rounding in MS Excel.

PERIOD	ARRIVALS	DEPARTURES	TOTAL
AM Peak (0800-0900)	20	59	80
PM Peak (1700-1800)	51	27	78
Daily (0700-1900)	342	352	694

TABLE 5-3: TOTAL DEVELOPMENT TRIP GENERATION (FIVE PER CENT MODE SHIFT REDUCTION)

5.2.7 The above demonstrates that the development has the potential to generate approximately 80 two-way vehicle movements during the weekday AM peak hour and 78 movements during the PM peak hour, with 694 movements predicted across the 12-hour working day (07:00 – 19:00). This equates to approximately 58 movements per hour, on average.

5.3 TRIP DISTRIBUTION AND ASSIGNMENT

5.3.1 A vehicular trip distribution and assignment exercise has been completed using *'Location of usual residence and place of work by method of travel to work'* data from the 2011 Census for Middle-Layer Super Output Area (MSOA) *'Gravesham 012'* in which the site is located. The full trip distribution assessment is included at **Appendix L**, including the raw census data.

5.3.2 Whilst equivalent data from the 2021 Census has been released, this was obtained during the Covid-19 pandemic when travel demand was supressed. The 2011 data has therefore been used in the interest of robustness.

5.3.3 On this basis, the total vehicular trip generation set out in Table 5-3 has been distributed and assigned to the local highway network on the basis of typical peak period journey times from the Google real-time journey planner, as summarised in Table 5-4 overleaf. Figures of the percentage distributions overleaf within **Appendix M.**

5.3.4 Images demonstrating how the Google real-time journey planner was used to determine the trip assignment to various locations are included at **Appendix N.**

The typical traffic filter was utilised in the peak hours to ensure a robust representation of daily traffic.

5.3.5 When accessing the A227, future residents of the site will have the option of routing via either Upper Avenue / Istead Rise (north of site access) or Arcadia Road / Lewis Road (south of site access). This route choice has been reflected in the trip distribution exercise, where it has been assumed that even proportions of trips will route north and south out of the site access when accessing the A227 Wrotham Road.

JUNCTION	PERCENTAGE DISTRIBUTION	AM PEAK HOUR MOVEMENTS	PM PEAK HOUR MOVEMENTS
Site Access			
Site Access to Downs Road (N)	55%	44	42
Site Access to Downs Road (S)	45%	36	35
Downs Road / Arcadia Road			
Downs Road to Arcadia Road (E)	45%	36	35
Downs Road to Downs Road (S)	0%	0	0
Lewis Road / A227 Wrotham Road			
Lewis Road to A227 Wrotham Road (N)	35%	28	27
Lewis Road to A227 Wrotham Road (S)	11%	9	8
Downs Road / Upper Avenue			
Downs Road to Upper Avenue (E)	31%	25	24
Downs Road to Downs Road (N)	0%	18	18
Istead Rise / A227 Wrotham Road			
Istead Rise to A227 Wrotham Road (N)	29%	23	23
Istead Rise to A227 Wrotham Road (S)	2%	2	2
Broad Ditch Road / New Barn Road			
Broad Ditch Road to New Barn Road (S)	6%	5	5
Broad Ditch Road to New Barn Road (N)	17%	14	13

A2 / Hall Road Junction			
Broad Ditch Road to A2 (W)	5%	4	4
Broad Ditch Road to Hall Road (N)	9%	7	7
Hall Road to A2 (E)	0%	0	0
A227 / A2 Junction			
A227 to A2 (W)	40%	32	31
A227 to A227	5%	4	4
A227 to A2 (E)	17%	14	13
A227 / A20 Junction			
A227 to A20 (E)	4%	3	3
A227 to A20 (W)	1%	1	1
A20 / A227 / M20 Junction			
A20 to M20	0%	0	0
A20 to A20	3%	2	2
A20 to A227	1%	1	1

TABLE 5-4: VEHICLE TRIP DISTRIBUTION

Impact on the Strategic Road Network

5.3.6 In relation to the strategic road network, it is evident that the development proposals will have a negligible impact on the A2 / Hall Road junction, the A227 / A20 junction and the A20 / A227 / M20 junction, having an impact of a maximum of 11 trips on any of these three junctions in a peak hour. National Highways have agreed with the above and concluded that further detailed assessments of these junctions are not required, as per the pre-application correspondence included at **Appendix A**.

5.3.7 As shown in Table 5-4, approximately 62% of vehicle movements associated with the development are projected to travel through the A227 / A2 junction, equating to 43 movements in the AM peak hour and 46 in the PM peak hour.

5.3.8 Pre-application correspondence with National Highways has highlighted a concern that the A227 / A2 junction has slow moving traffic on the A2 westbound off slip during the peak hours that may be impacted by development. National Highways therefore requested a junction capacity assessment of the A2 / A227 Wrotham Road junction, which is detailed further in the following section.

6 TRANSPORT IMPACTS

6.1 OVERVIEW

6.1.1 This section of the TA summarises the highway capacity impacts on the local and strategic highway network anticipated from the proposed development.

Assessment Scope

Suitability of Utilising a Network Model

6.1.2 Discussions have been held with KCC H&T regarding the suitability of utilising a network traffic model (such as the Kent Transport Mode (KTM) or the Gravesham Transport Model (GTM)) for trip distribution.

6.1.3 KCC H&T have raised concerns that:-

> *"The site was not included in the Gravesham Core Strategy, which is the currently adopted Local Plan, and therefore the impact on the wider network has not been assessed and approved. It also needs to be considered in line with other emerging sites. Traffic modelling should therefore be undertaken using the KTM (or the closely associated Gravesham Transport Model (GTM)), then, using the outputs, be followed by local junction modelling for junctions which are likely to be over capacity in the 'with development' scenario."*

6.1.4 However, the KCC Transport Assessment and Travel Plan Guidance (2025) states the following:-

> *"For larger developments (typically those over 200 units / 2000 sqm and larger sites not allocated in the Local Plan), use of the strategic Kent Transport Model is likely to be required, supported by more detailed local junction modelling."*

6.1.5 Network modelling is an extensive task that requires a high level of resourcing, cost and lengthy timeframes – hence KCC guidance recommends it is used only for those most major applications which are expected to have the greatest impact.

6.1.6 On balance, it is concluded that the use of a network model for trip distribution is not commensurate with the size, scale and impact of the development proposals. The trip distribution assessment in this TA provides a robust assessment of the site's impact on the local and strategic network. Given the limited number of available routes for traffic to distribute across, it is not considered there would be significantly different conclusions were network modelling undertaken. It is also important to note that National Highways, as per **Appendix A,** have raised no concern to date with the nature of the trip distribution assessment.

Committed and Further Future Development

6.1.7 One of the other reasons KCC H&T have requested the use of KTM is in order to consider the cumulative impact of forthcoming development in the surrounding Gravesham area. It is worth highlighting that these sites are not yet consented, are not allocated, and some discussed with KCC H&T have not been publicly submitted for planning. It is appreciated that KCC H&T desire an approach that considers the potential for this future speculative development, however these sites do not hold planning 'weight' in terms of their impact as they are not committed.

6.1.8 Whilst the speculative future development was requested, KCC did not identify any committed development schemes that required inclusion within the modelling.

6.1.9 Notwithstanding, in order to provide a robust assessment approach, the modelling set out below provides an additional sensitivity test to account for potential further development.

6.1.10 The assumption-based sensitivity modelling has been undertaken for the Istead Rise junctions that interact with the A227 (and therefore will be impacted by a cumulative assessment). This enables an assessment of a combined cumulative impact on these junctions, eliminating the need for the use of the KTM

6.1.11 It is also highlighted that the other emerging sites in the area are not allocated within the local plan, and are therefore considered within the KTM.

Junction Assessment Scope

6.1.12 Per the trip distribution assessment, most vehicle trips will route north via the A227 and then disperse onto the strategic network. Internal junctions within Istead Rise are likely not to be impacted by surrounding committed / emerging development - therefore the key junctions to be impacted by a cumulative KTM assessment are the Istead Rise and Arcadia Road priority junctions with the A227 Wrotham Road, which have been assessed via local junction capacity assessments within this section.

6.1.13 National Highways have accepted our methodology for assessing the A2 / A227 junction to the north via local junction modelling rather than a strategic model.

A2 / A227 Wrotham Road Junction Modelling

6.1.14 It has been agreed with National Highways as per **Appendix A** that the assessment of the A2 / A227 Wrotham Road junction will be undertaken in accordance with the methodology undertaken for the development proposals at the Former Tollgate Hotel (Reference: 20240856), which assessed the existing layout and a proposed mitigation scheme. It has been agreed to replicate the methodology in the following aspects:-

- Use of Manual Classified Count and queue survey data undertaken in associated with the Former Tollgate Hotel;
- Refer to roundabout geometry information / dimensions from ARCADY reports for the assessment of the existing layout on planning portal; and
- We may refer to the LinSig modelling on the planning portal for the mitigation scheme, but this should be taken as a reference model only which we should modify as we see fit to accurately represent the proposed scheme.

6.2 SCOPE OF ASSESSMENT AND EXISTING NETWORK TRAFFIC FLOWS

6.2.1 The results of the above trip distribution and assignment exercise have been utilised to assess the impact of the proposed development on the operation of the local highway network.

6.2.2 The following junctions have been assessed:-

(1) Site access junction with Downs Road;

(2) Downs Road / Arcadia Road priority junction;

(3) Downs Road / Upper Avenue priority junction;

(4) Lewis Road / A227 Wrotham Road priority junction;

(5) Istead Rise / A227 Wrotham Road priority junction; and

(6) A2 / A227 Wrotham Road roundabout junction.

6.2.3 The above numbered junctions are included in Figure 6-1 overleaf.

FIGURE 6-1: ASSESSED JUNCTIONS (COURTESY OF GOOGLE MAPS)

6.2.4 The following assessment scenarios have been considered:-

- 2025 Base (existing situation);
- 2030 'Do Nothing' (background traffic growth and committed developments but excluding the proposed development);
- 2030 'Do Minimum' (as per the 'Do Nothing' scenario, plus the proposed development);
- 2030 'Sensitivity Test' (as per the 'Do Minimum' scenario, plus an increase in development on the A227 to account for forthcoming development in the surrounding area).

6.2.5 To assess the site access junction, data has been utilised from the ATC undertaken on the week commencing 8th March 2025 (**Appendix G**). To ensure a robust assessment, the highest recorded vehicle movements in each peak hour have been utilised for the purpose of the assessment.

6.2.6 Manual Classified Count (MCC) and queue length surveys were undertaken at the above junctions (excluding the site access and A2 / A227 junctions) by K&M Traffic Surveys during the weekday peak periods of 07:00–10:00 and 16:00–19:00 on

Tuesday 14th October 2025. The full survey data is included at **Appendix O.** Survey data for the A2 / A227 Wrotham Road junction was obtained from Figure 46 within the Transport Assessment Addendum submitted in support of the Former Tollgate Hotel development (Reference: 20240856), dated 24th October 2024.

6.2.7 The surveyed traffic movements were converted into Passenger Car Units (PCUs) based on the conversion factors in Table 6-1 below to produce the baseline 2025 traffic flows for the study network.

Vehicle Type	PCU Factor
Car	1.0
Bus	2.0
HGV	2.3
Motorcycle	0.4
Pedal Cycle	0.2

TABLE 6-1: PCU CONVERSION FACTORS

6.2.8 No applicable committed developments were identified by KCC in the surrounding area to account for within the assessment. For the assessment of the A2 / A227 Wrotham Road junction, the committed development flows were re-utilised from the assessment of the former Tollgate Hotel.

6.2.9 TEMPro v.8.0 has been used to growth the 2025 data to 2030 future assessment year traffic flows. The growth factors are shown in Table 6-2 and the associated traffic flows are included at **Appendix P**. The parameters used for all growth factors are outlined below:-

- Data selections – Trip Ends by time period;
- Scenario – Core;
- Base year 2025, Future Year 2030;
- Trip end selection – Car Driver;
- Trip end by time period selection – Weekday AM and PM, Origin Destination; and
- Road Type – Trunk (A2), A Road (A227), or Minor (Istead Rise Village).

6.2.10 As confirmed within the TEMPro v 8.0 release notes, the 'Core' scenario is the best representation of future travel behaviour and has therefore been applied to this assessment.

Road Type	AM Peak	PM Peak
Trunk	1.062595216	1.062802158
A Road	1.044258713	1.043990887
Minor	1.044514108	1.044246216

TABLE 6-2: TRAFFIC GROWTH FACTORS – 2025 - 2030

6.3 PERCENTAGE IMPACT ASSESSMENT

6.3.1 The '2030 Do Minimum' scenario has been produced by adding the proposed development traffic flows to the '2030 Do Nothing' scenario and is detailed at **Appendix P**. The results of this assessment are summarised in Table 6-3 to Table 6-8 below.

Period	2030 Do Nothing	2030 Do Minimum	Net Movements	% Impact
0800-0900	205	285	80	39%
1700-1800	92	170	78	84%

TABLE 6-3: SITE ACCESS JUNCTION PERCENTAGE IMPACT

Period	2030 Do Nothing	2030 Do Minimum	Net Movements	% Impact
0800-0900	178	208	30	17%
1700-1800	101	120	19	18%

TABLE 6-4: DOWNS ROAD / ARCADIA ROAD PRIORITY JUNCTION PERCENTAGE IMPACT

Period	2030 Do Nothing	2030 Do Minimum	Net Movements	% Impact
0800-0900	290	340	50	17%
1700-1800	228	287	59	26%

TABLE 6-5: DOWNS ROAD / UPPER AVENUE PRIORITY JUNCTION PERCENTAGE IMPACT

Period	2030 Do Nothing	2030 Do Minimum	Net Movements	% Impact
0800-0900	1288	1317	29	2%
1700-1800	1223	1240	18	1%

TABLE 6-6:LEWIS ROAD / A227 WROTHAM ROAD PRIORITY JUNCTION PERCENTAGE IMPACT

Period	2030 Do Nothing	2030 Do Minimum	Net Movements	% Impact
0800-0900	1613	1664	51	3%
1700-1800	1497	1547	50	3%

TABLE 6-7:ISTEAD RISE / A227 WROTHAM ROAD PRIORITY JUNCTION PERCENTAGE IMPACT

Period	2030 Do Nothing	2030 Do Minimum	Net Movements	% Impact
0800-0900	6419	6,490	72	1%
1700-1800	6,833	6910	77	1%

TABLE 6-8: A2 / A227 WROTHAM ROAD JUNCTION PERCENTAGE IMPACT

6.4 JUNCTION CAPACITY ASSESSMENT

6.4.1 Junctions 10 (ARCADY and PICADY) software has been used to undertake the capacity assessments of the non-signalised junctions (all junctions excluding the proposed mitigation scheme at the A227 / A2 junction). ARCADY and PICADY provide two main measures of junction capacity and operation; the Ratio of Flow to Capacity (RFC) and queue length.

6.4.2 The RFC provides the primary measure of junction performance and is reported for each entry arm. An RFC of 0.85 or lower indicates that the specific arm of the junction is operating within capacity, an RFC of between 0.85 and 1.0 indicates that the arm is operating over its practical capacity and an RFC of 1.0 indicates that traffic demand exceeds theoretical capacity.

Site Access Junction

6.4.3 The PICADY results for the site access junction are summarised in Table 6-9 below, with the full data outputs included at **Appendix Q.** Results are provided only for the 'Do Minimum' scenario as the junction does not exist in the 'Base' or 'Do Nothing' scenarios.

	2030 Do Minimum			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Site Access	0.13	0.2	0.06	0.1
Downs Road	0.03	0.1	0.08	0.1
Ave delay (s/pcu)	2.28		3.07	

TABLE 6-9: SITE ACCESS JUNCTION - PICADY SUMMARY

6.4.4 The junction is seen to operate well within practical capacity in all assessed scenarios, with the impact of the proposed development shown to be negligible.

Downs Road / Arcadia Road Priority Junction

6.4.5 The PICADY results for the Downs Road / Arcadia Road priority junction are summarised in Table 6-10 below, with the full data outputs included at **Appendix Q.**

	2025 Base			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Downs Road	0.04	0.0	0.01	0.0
Arcadia Road	0.12	0.2	0.07	0.1
Ave delay (s/pcu)	3.71		3.18	
	2030 Do Nothing			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Downs Road	0.04	0.0	0.01	0.0
Arcadia Road	0.13	0.2	0.08	0.1
Ave delay (s/pcu)	3.73		3.47	
	2030 Do Minimum			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Downs Road	0.04	0.0	0.01	0.0
Arcadia Road	0.13	0.2	0.08	0.1
Ave delay (s/pcu)	3.34		3.23	

TABLE 6-10: DOWNS ROAD / ARCADIA ROAD - PICADY SUMMARY

6.4.6 The junction is seen to operate well within practical capacity in all assessed scenarios, with the impact of the proposed development shown to be negligible.

Downs Road / Upper Avenue Road Priority Junction

6.4.7 The PICADY results for the Downs Road / Upper Avenue priority junction are summarised below, with the full data outputs included at **Appendix Q.**

	2025 Base			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Downs Road	0.05	0.1	0.03	0.0
Upper Avenue	0.21	0.3	0.20	0.3
Ave delay (s/pcu)	4.22		4.60	

	2030 Do Nothing			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Downs Road	0.05	0.1	0.03	0.0
Upper Avenue	0.22	0.3	0.21	0.3
Ave delay (s/pcu)	4.24		4.66	
	2030 Do Minimum			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Downs Road	0.09	0.1	0.05	0.1
Upper Avenue	0.25	0.4	0.27	0.4
Ave delay (s/pcu)	4.55		5.24	

TABLE 6-11: DOWNS ROAD / ARCADIA ROAD - PICADY SUMMARY

Lewis Road / A227 Wrotham Road Priority Junction

6.4.8 The PICADY results for the Lewis Road / A227 Wrotham Road priority junction are summarised below, with the full data outputs included at **Appendix Q.**

6.4.9 As one of the two key junctions into Istead Rise village from the A227, a sensitivity test has been undertaken. This is as a result of pre-application correspondence with KCC H&T and to address the request to use KTM and consider potential surrounding forthcoming sites.

6.4.10 This sensitivity test involves assigning the trip generation associated with 1000 additional dwellings to the A227. The 1000 additional units sensitivity test is intended to consider the potential forthcoming future development in the surrounding area, and all are assumed to be located to the south of Istead Rise on the A227, and to travel past the two Istead Rise junctions in their routing.

6.4.11 As these trips are assigned only on the A227, only the two A227 junctions have been assessed.

6.4.12 Please note there are no plans for additional development to this scale – the '1000 unit' figure has been selected for robust indicative assessment purposes only. However, KCC H&T have highlighted there are a number of other non-committed

developments along the A227 corridor that they request consideration of in our assessment (though it is noted they are not allocated, nor consented).

6.4.13 KCC H&T have not outlined any committed developments to consider, and these non-committed schemes along the A227 corridor may never come forward. However this 1000-unit assessment has been provided to attempt to provide a robust assessment and alleviate KCC H&T pre-application concerns.

6.4.14 The trip impact associated with the 1000 additional dwellings has been calculated by factoring the trip rates in the previous section and adding the associated arrivals and departures onto the A227 past the two Istead Rise junctions.

	2025 Base			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Lewis Road	0.43	0.8	0.28	0.4
A227 Wrotham Road	0.09	0.1	0.05	0.1
Ave delay (s/pcu)	2.47		1.37	
	2030 Do Nothing			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Lewis Road	0.46	0.9	0.30	0.5
A227 Wrotham Road	0.10	0.1	0.05	0.1
Ave delay (s/pcu)	2.69		1.45	
	2030 Do Minimum			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Lewis Road	0.54	1.2	0.34	0.6
A227 Wrotham Road	0.10	0.1	0.05	0.1
Ave delay (s/pcu)	3.46		1.65	
	2030 Sensitivity Test (1000 Units)			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Lewis Road	0.86	4.9	0.64	1.8
A227 Wrotham Road	0.12	0.1	0.06	0.1
Ave delay (s/pcu)	9.91		3.18	

TABLE 6-12: LEWIS ROAD / A227 WROTHAM ROAD - PICADY SUMMARY

6.4.15 The junction is seen to operate well within practical capacity within the Base, Do Nothing and Do Minimum scenarios, with the impact of the proposed development shown to be negligible.

6.4.16 The junction continues to largely operate within capacity with the addition of the traffic associated with 1000 residential units along the A227. On Lewis Road in the AM peak, the model reports an RFC of 0.86, closely reflecting the optimal operating capacity of 0.85 RFC. This demonstrates that even in a future scenario

with a significantly increased level of traffic well above the currently proposed development, this junction operates well within capacity.

Istead Rise / A227 Wrotham Road Priority Junction

6.4.17 The PICADY results for the Istead Rise / A227 Wrotham Road junction are summarised in Table 6-9 below, with the full data outputs included at **Appendix Q**.

6.4.18 Please note that a sensitivity test has been undertaken as per the previous section.

	2025 Base			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Istead Rise	0.60	1.6	0.46	0.9
A227 Wrotham Road	0.36	0.6	0.47	1.0
Ave delay (s/pcu)	4.73		4.38	
	2030 Do Nothing			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Istead Rise	0.63	1.8	0.49	1.1
A227 Wrotham Road	0.38	0.7	0.50	1.1
Ave delay (s/pcu)	5.22		4.74	
	2030 Do Minimum			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Istead Rise	0.70	2.4	0.52	1.2
A227 Wrotham Road	0.42	0.8	0.57	1.5
Ave delay (s/pcu)	6.55		5.55	
	2030 Sensitivity Test (1000 additional units)			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Istead Rise	1.18	26.4	1.07	14.1
A227 Wrotham Road	0.55	1.4	0.67	2.5
Ave delay (s/pcu)	39.29		22.19	

TABLE 6-13: ISTEAD RISE / A227 WROTHAM ROAD - PICADY SUMMARY

6.4.19 The junction is seen to operate well within practical capacity within the Base, Do Nothing and Do Minimum scenarios, with the impact of the proposed development shown to be negligible.

6.4.20 The Istead Rise arm of the junction operates slightly over theoretical capacity with the addition of 1000 residential units within the peaks. Given that the exceedance is marginal and the robustness of considering an additional 1000 units, this is

considered to sufficiently consider the potential addition of surrounding development and illustrates the suitability of the junction to accommodate this.

6.4.21 In a future scenario with this increased development, traffic would likely distribute between junctions as satnavs and local behaviour adjusts to a better equilibrium. This is evident given the high level of spare capacity available at the Lewis Road junction for traffic to reroute to. Other mitigating factors include the fact that peak periods will spread as travel behaviours adjust, and significant modal shift can be expected as all future developments would be expected to make some contributions towards improved sustainable transport offering in the local area.

6.4.22 It is further highlighted that the sensitivity test conducted above is illustrative of a highly robust scenario with a level of development that is not projected or allocated to come forward, but has been produced to demonstrate to KCC H&T that there is a significant level of spare capacity within the junctions that would be impacted by this development. Indeed, this is demonstrated by the fact that the junctions with the A227 achieve a maximum RFC of just 0.70 when the proposals are accounted for.

A227 Wrotham Road / A2 Junction

Existing Layout

6.4.23 The ARCADY results for the A227 Wrotham Road / A2 existing arrangement are summarised in Table 6-14 overleaf, with the full data outputs included at **Appendix Q**.

6.4.24 The roundabout geometry has been obtained from the Technical Note produced on 18th March 2025 in support of the proposals at the Former Tollgate Hotel (Reference: 20240856).

6.4.25 The westbound off-slip has been calibrated to a 60 PCU queue as per the pre-application request made by National Highways (included at **Appendix A**) - however a site visit undertaken on Wednesday 5th November at approximately 09:00 revealed very limited queuing on this off-slip. It is also worth noting that whilst helpful to aim to achieve a more 'realistic' picture of junction operation, there are a number of known concerns with calibrating against queue data, including the variation in queues day-to-day and within survey periods, influences of other factors on the ground, and varying methodologies for measuring queue length. A capacity adjustment of 57% was applied to the westbound off-slip to get to as close to the 60 PCU requested queue as possible.

	2025 Base			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Southern Roundabout				
Westbound Off Slip	1.17	61.4	34.4	1.07
A227 South	0.60	1.6	1.4	0.55
A227 N	0.52	1.2	1.2	0.52
Ave delay (s/pcu)	76.77		45.33	
Northern Roundabout				
A227 S	0.44	0.9	0.9	0.44
Eastbound Off Slip	0.34	0.6	1.8	0.62
A227 N	0.81	4.5	4.6	0.81
Tollgate Hotel	0.00	0.0	0.0	0.00
Ave delay (s/pcu)	6.51		6.90	
	2030 Do Nothing			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Southern Roundabout				
Westbound Off Slip	1.48	166.8	1.36	118.2
A227 South	0.68	2.3	0.61	1.7
A227 N	0.61	1.7	0.59	1.6
Ave delay (s/pcu)	232.93		162.91	
Northern Roundabout				
A227 S	0.49	1.0	0.50	1.1
Eastbound Off Slip	0.43	0.8	0.80	4.2
A227 N	0.95	15.2	0.96	16.7
Tollgate Hotel	0.16	0.2	0.20	0.3
Ave delay (s/pcu)	16.88		18.67	
	2030 Do Minimum			
	AM Peak		PM Peak	
	RFC	Q	RFC	Q
Southern Roundabout				
Westbound Off Slip	1.49	173.1	1.37	118.7
A227 South	0.71	2.6	0.63	1.8
A227 N	0.61	1.7	0.60	1.6
Ave delay (s/pcu)	238.75		162.06	
Northern Roundabout				
A227 S	0.49	1.1	0.50	1.1
Eastbound Off Slip	0.43	0.8	0.77	3.7
A227 N	0.96	16.6	0.95	14.2
Tollgate Hotel	0.16	0.2	0.19	0.2
Ave delay (s/pcu)	18.12		16.38	

TABLE 6-14: A227 WROTHAM ROAD / A2 JUNCTION – EXISTING ARRANGEMENT- ARCADY SUMMARY

6.4.26 With the calibrated data, the westbound off-slip operates over theoretical capacity in all assessed scenarios, with the impact of the development proposals in the 'Do Minimum' scenario to be negligible. It is also noted that together with the impact of the committed development flows, the A227 north arm on the northern roundabout exceeds practical capacity. However it is demonstrated above that the impact of the development proposals would be negligible.

Proposed Signalised Layout

6.4.27 In accordance with ongoing correspondence with National Highways, a proposed mitigation scheme at the junction has also been modelled in accordance with that undertaken for the Former Tollgate Hotel application.

6.4.28 A committed mitigation scheme associated with Land at Coldharbour Road (Reference: 20141214) has been approved. The scheme comprises the partial signalisation at the A227 Wrotham Road / A2 westbound off-slip roundabout, together with converting the south roundabout layout to a 'teardrop' roundabout.

6.4.29 The assessment has been modelled using industry-standard LinSig software. The outputs of LinSig include the Degree of Saturation (DoS), the Mean Maximum Queue (MMQ) and the Practical Reserve Capacity (PRC) units of measure. The DoS (in percent) is a ratio of demand to capacity for each traffic phase, with a value of 90 percent indicating that an arm is operating at practical capacity. The PRC is calculated from the maximum percentage DoS and is a measure of how much additional traffic could pass through the junction before it reaches full capacity. The MMQ provides an indication of how the overall junction performance may affect adjacent junctions on the highway network.

6.4.30 The LinSig model included within Appendix M of the Transport Technical Note submitted on March 18, 2025, in support of the proposals at Former Tollgate Hotel (Reference: 20240856) has been replicated to produce a model for assessment. This includes information surrounding stage sequencing, intergreen timings, the phase diagram, the lane input data and the give-way lane input data.

6.4.31 Table 6-15 overleaf summarises the performance of the junction in the assessed scenarios. The full LinSig report is included at **Appendix Q.**

Scenario	Link	AM Peak		PM Peak	
		DoS %	MMQ	DoS %	MMQ
2030 Base	Southern Roundabout				
	A227 N Ahead lane	48.9%	4.5	68.0%	7.4
	A227 N Right Turn lane	77.8%	9.0	56.7%	5.1
	A2 Westbound Off Slip	76.9%	5.6	70.8%	4.7
	A227 South	58.1%	1.8	52.5%	1.6
	PRC	15.7		27.1	
	Average delay (s/pcu)	10.32		8.88	
2030 Do Nothing	Southern Roundabout				
	A227 N Ahead lane	47.6%	4.4	72.6%	8.1
	A227 N Right Turn lane	86.4%	12.0	68.4%	6.9
	A2 Westbound Off Slip	86.4%	7.5	72.7%	5.2
	A227 South	63.5%	2.2	40.7%	1.0
	PRC	4.1		23.8	
	Average delay (s/pcu)	13.97		10.07	
2030 Do Minimum	Southern Roundabout				
	A227 N Ahead lane	48.5%	4.5	75%	8.5
	A227 N Right Turn lane	86.4%	12.0	68.4%	6.9
	A2 Westbound Off Slip	86.9%	7.6	73.7%	5.3
	A227 South	66.4%	2.4	57.7%	1.8
	PRC	3.6		20.0	
	Average delay (s/pcu)	14.28		10.85	

TABLE 6-15: A227 / A2 JUNCTION – PROPOSED ARRANGEMENT- LINSIG SUMMARY

6.4.32 In all assessed scenarios the junction operates within practical capacity, demonstrating the positive impact of the mitigation scheme.

6.4.33 With the addition of the development proposals in the 'Do Minimum' scenario, the DoS increases by 0.5% in the AM peak and 1% in the PM peak for the westbound off-slip, demonstrating that the proposals will have a negligible impact on the operation of this junction.

7 SUMMARY AND CONCLUSION

7.1.1 This Transport Assessment has been prepared on behalf of Esquire Developments Ltd in support of the outline planning application for the development of 154 dwellings on to Land at Rose Farm, in Istead Rise, Gravesham, Kent.

7.1.2 The proposed development complies with all relevant national and local transport planning policies. The site enjoys good access to the local highway network and is sustainably located for a rural location, with good connections to existing pedestrian infrastructure and public transport nodes, as well as to everyday facilities and services within Istead Rise, in accordance with Paragraphs 110, 115, 148 and 155 of the National Planning Policy Framework (NPPF).

7.1.3 The development will be supported by an Interim Travel Plan, which will promote sustainable travel behaviour amongst future residents. The scheme also will make substantial improvements to local pedestrian infrastructure and contribute to a long-term strategy for bus improvement in the local area.

7.1.4 Vehicle and cycle parking will be provided in accordance with the applicable standards.

7.1.5 A review of the latest five-year Personal Injury Collision data for the local highway network confirms that the proposed development should not have any material adverse impacts.

7.1.6 The proposed site access design has been prepared with reference to the applicable highway standards and has been subject to an independent Stage 1 Road Safety Audit, in which all outstanding issues have been addressed.

7.1.7 The proposed development is projected to generate a maximum of 694 vehicle movements over the 12-hour weekday period (07:00-19:00), including 80 in the AM peak hour and 78 in the PM peak hour. Overall, this would equate to approximately just under one movement every minute on average, which would not have a significant or 'severe' residual impact on the operation of the local highway network with reference to Paragraph 116 of the NPPF.

7.1.8 The trip distribution exercise identifies the majority (62%) of traffic would travel north on the A227 towards the A2 and Gravesend. The impact on rural highways to the west and south of the site are expected to be minor to negligible.

7.1.9 Junction capacity assessments have been completed for the local and strategic network, which demonstrates that the impact of the development on the operation of the local highway network would not be 'severe' with reference to Paragraph 116 of the NPPF. As such, there should be no sound transport-based objections to the planning application.

7.1.10 Given the above, it is concluded that there should be no sound transport-based objections to the planning application.

APPENDIX
A

Highways and Transportation
Kroner House
Eurogate Business Park
Ashford
TN24 8XU
Tel: 03000 418181
Date: 12 June 2025
Our Ref: AC

Non LPA

Application - PAP/2025/16
Location - Rose Farm, Istead Rise, Downs Road, Gravesham
Proposal - Outline planning application for the construction of up to 160 residential dwellings with the proposed access arrangements applied for in detail. Access to be achieved via an enhanced access point off Downs Road

Thank you for providing information relating to pre-application proposals for a development at Rose Farm, Isted Rise. This response follows a review of the Scoping Note referenced GS/TV/35213 and a site visit undertaken by a KCC highways officer on 02.06.25.

The Site
The existing site is located to the west of Downs Road (an existing residential area) in Isted Rise and is currently formed of open farmland.

Proposal and Vision
The proposal is for approximately 160 residential dwellings (50% affordable) and an application is likely to be submitted with all matters reserved except for access.

The vision to promote a sustainable site, enabling non-car accessibility and social inclusion, is welcomed. However, the site is located in rural Gravesham and whilst the site itself may be able to provide sustainable infrastructure, KCC isvery concerned about whether sustainable access outside of the site, can be achieved. Overcoming this issue should form a key part of the Transport Assessment.

The proposal includes a 5% modal shift from the baseline vehicular trips, however, this must be supported by realistic measures that can achieve this shift in this location.

Policy
The planning policy documents set out in section six are generally acceptable. However, please note that NPPF was updated in 2024 and KCC's Local Transport Plan 4 was superseded in 2024 by Local Transport Plan 5.

The GBC 'Local Cycling & Walking Infrastructure Plan' (LCWIP) and KCC LCWIP should be reviewed.

It is noted that the site is not allocated in the GBC Core Strategy and whilst it may have been

referred to in the Reg 18 Local Plan consultation (site GBS-L), the Core Strategy remains adopted policy.

Accessibility by Sustainable Modes
Meopham train station is located approximately 2.5km from the site boundary, which equates to a 35 min walk and is above the 'acceptable' commuting distance set out by CIHT (and is only part of the commute). This is concerning. The Transport Assessment should consider whether the route and gradient are suitable for pedestrians and cyclists and whether there are sufficient peak and off peak bus services that serve the station. Consideration should also be given as to whether people are likely to use Ebbsfleet Station for the high speed line to St Pancras and how this is accessed.

The site is within acceptable walking distance of bus stops. However, none of the stops have a shelter or seating and the footways are relatively narrow to be able to support an increase in waiting passengers. The proposal to explore the potential to provide a shelter for the northbound bus stop to the south of the access is welcomed (though this should not restrict visibility to the access). Highway boundary information can be obtained from highwaydefinitionsearches@kent.gov.uk.

Paragraphs 9.1.8 and 9.1.9 of the Scoping Note state that "Further bus stops are located at the shopping parade in the village centre, providing access to frequent services to Gravesend, Sevenoaks, Wrotham and Rochester, and are likely to be frequently used by future residents of the site" and that residents will access these stops via Upper Avenue, where a dropped kerb will be provided. However, Upper Avenue is incredibly steep and is unlikely to be suitable for a number of residents, particularly those with mobility issues and also during the winter when the footway and carriageway may be slippery. It is unlikely that the gradient of Upper Avenue meets the maximum gradients set out in the Kent Design Guide and this should be confirmed.

No information has been provided regarding bus service provision and this is required. There is concern that existing services are not frequent enough and may not serve appropriate destinations to be considered suitable to serve the new development. Where the existing services are not currently suitable, improvements must be proposed.

Ideally, a public transport strategy would be formed with other emerging sites in the area. KCC are happy to facilitate an introduction to relevant consultants if that would be of interest.

It would be useful to understand where the major employment centres are in relation to the site, and how access to them can be achieved by sustainable modes.

Whilst Downs Road has footways on either side of the carriageway, a number of vehicles were observed to be parking on the footway during the site visit, significantly reducing its width. Overhanging vegetation from private dwellings further reduced the width.

The distance to local day to day facilities should be set out and should include such places as (but not limited to) bus stops, train station, (large) supermarket, primary and secondary schools, GP, leisure facilities, parcel drop offs etc.

Routes used by pedestrians and cyclists should be direct, well connected, well lit, attractive and overlooked. There is concern that whilst this may be achievable on the site itself, the routes to / from local facilities do not provide sufficient infrastructure to support the development.

A detailed walking and cycling audit to key facilities should be undertaken for inclusion in the

Transport Assessment to identify any existing issues and propose improvements where required. The assessment should include a plan showing the most direct routes for pedestrians and cyclists, and be supported by photographic evidence. Things to be highlighted and considered as part of this assessment are as follows (but not limited to):

- Severed links / lack of footways;
- Severed links / lack of cycleway (and where there is a lack of cycle routes, whether it is considered suitable to cycle on carriageway for all users including children accessing schools, and considering the number of HGVs that use the A227);
- Any landscaping strips or other physical structures separating the footway / cycleway and carriageway;
- Lack of dropped kerbs and tactile paving;
- Whether secure cycle parking is provided at destinations (e.g local shops, train station);
- Narrow footways (including those narrowed by vehicles);
- Barriers for cycles, prams, wheelchairs, mobility scooters;
- Flooding or ponding;
- Damage to, and inappropriate surfacing ;
- Lack of street lighting;
- Overhanging or encroaching vegetation that needs to be cut back;
- Identification of routes that are not safe or are not likely to feel safe;
- Whether people were observed crossing in inappropriate areas /having difficulty crossing / travelling along routes;
- Routes with stepped access only;
- Gradients that may reduce the attractiveness of walking and / or cycling;
- Vehicles parked on the footways; and
- Any perceived speeding issues which may result in a reduction in walking and cycling.

Whilst the application will be Outline, the Transport Assessment will need to set out the principles of what will be delivered on site to encourage use by sustainable modes. This could include things such as mobility hubs, high quality cycle parking facilities (one per bedroom), segregated cycle routes in line with LTN 1/20, 2m footways. A number of commitments would also be required to further encourage sustainable travel.

There are no Public Rights of Way (PROW) within the boundary of the site. However, it is recommended that contact is made with the KCC PROW team to discuss any impacts on local routes. Please use the following address: westprow@kent.gov.uk.

Collision Data
The proposed study area for the collision assessment is acceptable. Data can be obtained from crashdata@kent.gov.uk.

Parking
Parking provision is proposed to be in line with SPG4, which is the currently adopted parking standards in Gravesham. Please note, KCC's Parking Standards were updated earlier this year and it is suggested that you liaise with Gravesham Borough Council to determine if they will be adopting these standards prior to the submission of the Application.

The proposal to comply with Part S of the Building regulations is noted.

Whilst the application will be Outline, the principles of sustainable development will be required to be set out. Cycle parking should be provided to a high standard, with high quality shelters and be located within appropriate places that promotes this use. Cyclists should not be made to dismount until they reach the parking area. Communal cycle parking should include a

proportion (approx. 5%) of spaces designed for adapted bikes, which require 1.5m width between stands for dismounting. If private parking is to be provided in garages, these should be large enough to wheel a bike past a parked car. If it is to be provided in a store in the garden, an appropriate route should be provided to the highway; residents should not be made to carry bikes through the house.

Access Proposals
The vehicle access proposals are shown on drawing H-01 Rev P1 in Appendix C. The principle of a priority junction access and is acceptable, subject to further detail and modelling. However, there is concern about the location of the access as:

a) a stationary bus would block visibility to oncoming vehicles who may be trying to overtake it,
b) it is located close existing driveways and it is unclear whether the distance between them meets KCC guidance;
c) the proposal to include double yellow lines at the access would displace existing on street parking and the impact needs to be considered.

Further, the Kent Design Guide states “Where non-priority roads, including all feeder roads, serve more than 100 dwellings, the junction with the priority roads must be at an angle of 90 [degrees] and be straight for a length of at least twice the kerb radius”. This does not look to have been achieved.

The issues above will need to be addressed.

The access slopes down towards Downs Road. The site access plan should set out the proposed gradient so this can be checked against the standards in the Kent Design Guide.

For the submission, please ensure the plan shows the extents of the highway boundary & land ownership, any infrastructure that would need to be relocated (e.g signs) or provided (e.g. bus shelter) and all of the required dimensions (e.g. radius). Any departures from standard should be highlighted on the plan and justification given in the text.

The inclusion of an emergency access is welcome. This needs to be shown on a scaled plan with appropriate dimensions and visibility splays. The Scoping Note states this can provide general use for pedestrians. This should also include cyclists to increase permeability, with consideration given to how cyclists access and egress the carriageway (e.g. dropped kerb and cycle symbol to make it clear this is not an uncontrolled crossing).

The visibility splays shown on the access plan are acceptable, subject to the information above. Visibility splays are also required for any new or affected pedestrian and cycle crossings / access points and any physical barriers to the splay (e.g. trees, parked cars) should be highlighted.

A Stage One Road Safety Audit & Designers Response will be required for the site access points and any other changes to the highway.

Vehicle tracking for an 11.3m refuse vehicle has been provided in Appendix C. This is acceptable.

At 9.1.7 the Scoping Note recognises there is a speeding issue within the vicinity of the site, but states “Given the nature of Downs Road as a bus route, it is not considered that any physical traffic calming will be feasible or appropriate” and instead proposes to refresh the existing ‘slow’ markings. Whilst some measures can be detrimental to buses (and therefore

should be avoided), other measures can be used on bus routes and this issue should be explored further. Local bus operators should be consulted on proposed measures to ensure the routes remain viable and efficient. Measures such as road narrowing must be accompanied by evidence (e.g. traffic flows) demonstrating the impact on vehicles.

Trip Generation
The TRICS assessment shows that the development is predicted to generate a total of 75 two-way trips in the AM peak and 85 two-way trips during the PM peak. Whilst this number of trips is in the general area of what would be expected, they are slightly low. Some of the sites selected are very urban and whilst no public transport information has been provided for this site, it is questioned whether it is as good as the TRICS sites. There is also quite a big variation in trip rates across the selection. Further justification is required for use of these sites.

Table 3 shows the trip generation above but with a 5% reduction applied. However, this is not acceptable at this time as no measures (other than the possibility of a bus shelter) have been set out to demonstrate this is realistic or achievable, or that the TRICS sites do not already benefit from the proposed measures.

Traffic distribution has been based on the 2011 Census data. However, patterns may have changed post Covid and therefore the Transport Assessment should include a comparison between the 2011 and 2021 datasets (and/or other evidence) to support any assumptions. The distribution is, however, likely to be undertaken by the Kent Transport Model (KTM), which is referenced below.

Junction Capacity Assessment
The site was not included in the Gravesham Core Strategy, which is the currently adopted Local Plan, and therefore the impact on the wider network has not been assessed and approved. It also needs to be considered in line with other emerging sites.

Traffic modelling should therefore be undertaken using the KTM (or the closely associated Gravesham Transport Model (GTM)), then, using the outputs, be followed by local junction modelling for junctions which are likely to be over capacity in the 'with development' scenario. Further details regarding use of the Kent Transport Model / Gravesham Transport Model can be found here:
https://www.kent.gov.uk/environment-waste-and-planning/planning-and-land/kent-strategic-model-service.

The site access junction should be assessed for capacity regardless, using appropriate modelling software.

Please include turning movement diagrams for each modelled scenario and the diagrams showing the geometry of the junctions used in the local junction models.

Traffic surveys are likely to be required to enhance the KTM / GTM and for local junction modelling. The extent of this study area can be determined during scoping for the KTM / GTM. Counts should be undertaken in a neutral period e.g. outside of the school holidays. It may be beneficial to discuss this with landowners of other sites in the area that may come forward; KCC are happy to facilitate contact if this would be helpful.

Travel Plan
A Travel Plan will be required for the Application. The Travel Plan should incorporate realistic measures that will reduce private car use and encourage sustainable modes in this type of rural location. Common measures that have been secured on other sites in Gravesham include

a car club (with one year's free membership for residents and £50 driving credit to encourage take up), parcel lockers, bike hire and one year's free bus travel.

Conclusion
The site is located within a rural area and KCC has significant concerns regarding its sustainability. A key focus of the Transport Assessment should be to overcome these concerns.

It is important to note that Local Planning Authority (LPA) permission does not convey any approval to carry out works on or affecting the public highway.

Any changes to or affecting the public highway in Kent require the formal agreement of the Highway Authority, Kent County Council (KCC), and it should not be assumed that this will be a given because LPA planning permission has been granted.

For this reason, anyone considering works which may affect the public highway, including any highway-owned street furniture or landscape assets such as grass, shrubs and trees, is advised to engage with KCC Highways and Transportation at an early stage in the design process.

Across the county there are pieces of land next to private homes and gardens and near the highway that do not look like roads or pavements but are actually part of the public highway.

Some of this highway land is owned by Kent County Council whilst some is owned by third party owners. Irrespective of the ownership, this land may have 'highway rights' over the topsoil.

Works on private land may also affect the public highway. These include works to cellars, to retaining walls which support the highway or land above the highway, and to balconies, signs or other structures which project over the highway. Such works also require the approval of the Highway Authority.

Kent County Council has now introduced a pre-application advice service in addition to a full formal technical approval process for new or altered highway assets, with the aim of improving future maintainability. Further details are available on our website below:

https://www.kent.gov.uk/roads-and-travel/highway-permits-and-licences/highways-permissions-and-technical-guidance.

This process applies to all development works affecting the public highway other than applications for vehicle crossings, which are covered by a separate approval process. Further details on this are available on our website below:

https://www.kent.gov.uk/roads-and-travel/highway-permits-and-licences/apply-for-a-dropped-kerb/dropped-kerb-contractor-information

Once planning approval for any development has been granted by the LPA, it is the responsibility of the applicant to ensure that before development commences, all necessary highway approvals and consents have been obtained, and that the limits of the highway boundary have been clearly established, since failure to do so may result in enforcement action being taken by the Highway Authority.

The applicant must also ensure that the details shown on the approved plans agree in every aspect with those approved under the relevant legislation and common law. It is therefore important for the applicant to contact KCC Highways and Transportation to progress this aspect of the works prior to commencement on site.

Further guidance for applicants, including information about how to clarify the highway boundary and links to application forms for vehicular crossings and other highway matters, may be found on Kent County Council's website: https://www.kent.gov.uk/roads-and-travel/highway-permits-and-licences/highways-permissions-and-technical-guidance. Alternatively, KCC Highways and Transportation may be contacted by telephone: 03000 418181.

Yours faithfully

Director of Highways & Transportation

*This is a statutory technical response on behalf of KCC as Highway Authority. If you wish to make representations in relation to highways matters associated with the planning application under consideration, please make these directly to the Planning Authority.

Advice Note 01

Spatial Planning Framework Commission

Job number:	K605		
Job title:	Land at Rose Farm, Instead Rise		
LPA name:	Gravesham Borough Council	**LPA Ref:**	N/A
To:	Nigel de Wit	**cc:**	
Topic:	Review of Transport Scoping Note		

	Prepared:	**Checked/Approved**
Name:	Alex Freeman	Derek Jones
Date:	19/05/2025	20/05/2025

Throughout this response any **ACTION POINTS** for the applicant are shown as **bold underlined**.

Introduction

Overview

1 National Highways have been approached by DHA (the applicant's transport consultant) with information in relation to a planning application regarding a proposed development on land at Rose Farm in Instead Rise, Gravesham, DA13 9JE.

2 The Local Planning Authority (LPA) is Gravesham Borough Council (GBC) and the Local Highway Authority (LHA) is Kent County Council (KCC).

3 The site is not allocated in either the adopted Gravesham Local Plan Core Strategy and Local Plam (2014), or the draft Local Development Scheme 2025 - 2026.

4 DHA have submitted a Transport Scoping Note (TA) dated May 2025 (Ref: GS/V35213) outlining the approach taken towards the assessment of the proposals, which is the subject of JSJV's review in this Advice Note (AN).

5 Jacobs SYSTRA Joint Venture (JSJV) understands that National Highways has not previously been consulted in regard to this site.

Site Location

6 The development site is located on the western edge of the village of Istead Rise, bound by the rear of properties access from Downs Road. The site current comprises open farmland.

7 The site location is shown in Figure 1 below.

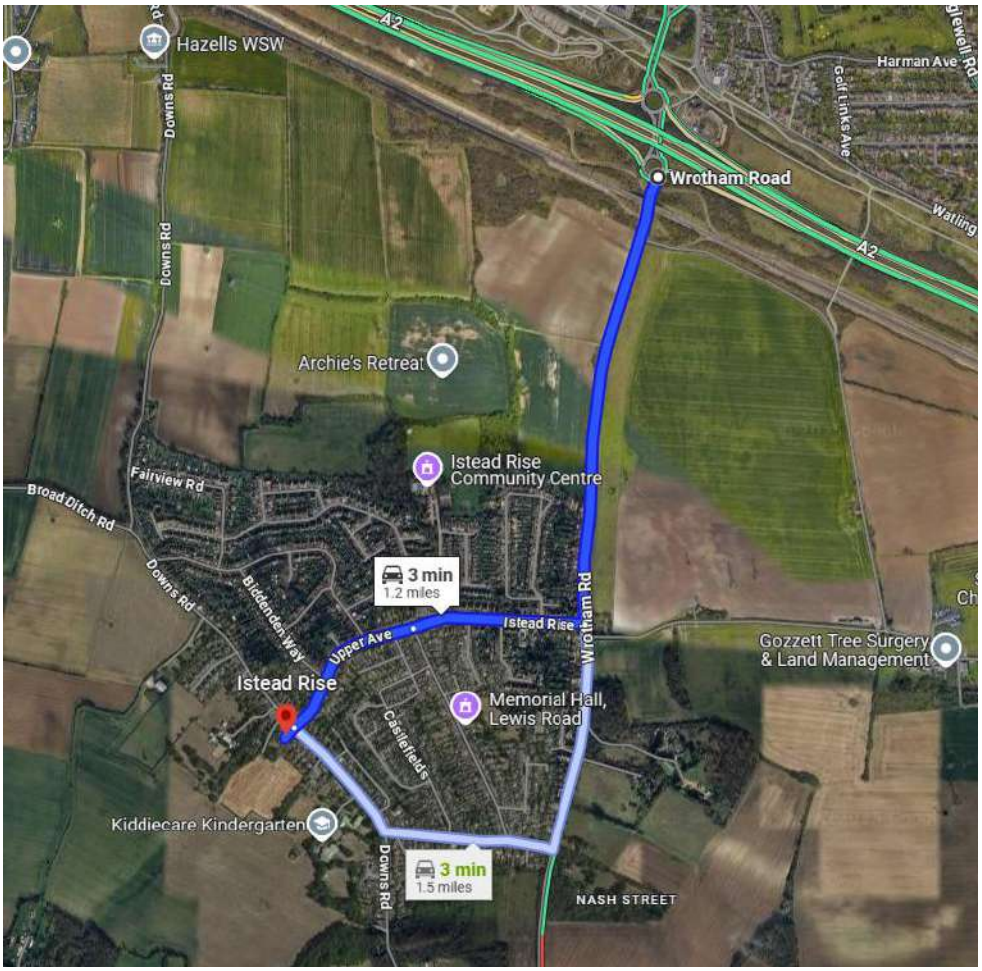
Figure 1 – Site Location Plan

FIGURE 1: SITE LOCATION (COURTESY OF GOOGLE MAPS)

Source: DHA TSN

8 The site is located 1.3 miles driving distance, equating to 3 minutes driving time during the AM peak, from the A227 junction with the A2; this takes the form of a grade-separated dumbbell arrangement. Junction 5, as shown in Figure 2.

Figure 2 – Route between Site and A2/A227 Junction



Source: Google Maps

9 The typical traffic conditions from Google Maps shown in **Figure 3** indicate that A2/A227 Wrotham Road junction experiences significant queueing during both the AM and PM peak hours associated with traffic travelling west on the A2 and exiting at A227 Wrotham Road.

Figure 3 : Typical Traffic Conditions

Wednesday 08:00

Wednesday 17:00

Source: Google Maps

10 The A2 / A227 Wrotham Road junction is subject to a committed mitigation scheme associated with planning application GR20141214 (Land at Coldharbour Road). The committed mitigation scheme comprises partial signalisation at the A227 Wrotham Road / A2 westbound off-slip roundabout, together with converting the south roundabout layout to a 'teardrop' roundabout.

Review

Development Proposals

11 The current development proposals are for the potential construction of a up to 160 dwellings on land to the west of Istead Rise. It is anticipated that half of the dwellings (up to 80) will be affordable and half will be privately owned.

Development Vision

12 The DHA TSN contains reference to Department for Transport (DfT) Circular 01/2022. A brief vision statement is provided, alongside a short overview of the supporting measures, including the commitment to implement a Travel Plan.

13 **There is a need for the Travel Plan to provide details of the measures which are proposed to achieve the proposed 5% reduction in vehicle trips.**

Trip Generation

14 The TSN outlines proposed trip rates and generation as extracted from TRICS – these have been extracted from the TSN and shown in Table 1 and Table 2 below:

Table 1: DHA Proposed Trip Rates

PERIOD	ARRIVALS	DEPARTURES	TOTAL
Houses Privately Owned (trips/dwelling)			
AM Peak (0800-0900)	0.14	0.353	0.493
PM Peak (1700-1800)	0.341	0.164	0.505
Daily (0700-1900)	2.267	2.248	4.515
Affordable / Local Authority Houses (trips/dwelling)			
AM Peak (0800-0900)	0.18	0.266	0.446
PM Peak (1700-1800)	0.293	0.261	0.554
Daily (0700-1900)	2.209	2.204	4.413

TABLE 1: TRICS TRIP RATES

15 JSJV have undertaken an independent review of the trip rates and these are each concluded to be acceptable as pre-vision trip rates.

Table 2: DHA Proposed Trip Generation – Pre Vision

PERIOD	ARRIVALS	DEPARTURES	TOTAL
Houses Privately Owned (80 dwellings)			
AM Peak (0800-0900)	11	28	39
PM Peak (1700-1800)	27	13	40
Daily (0700-1900)	181	180	361
Affordable / Local Authority Houses (80 dwellings)			
AM Peak (0800-0900)	14	21	36
PM Peak (1700-1800)	23	21	44
Daily (0700-1900)	177	176	353
Total Trip Generation (160 dwellings)			
AM Peak (0800-0900)	26	50	75
PM Peak (1700-1800)	51	34	85
Daily (0700-1900)	358	356	714

TABLE 2: TRIP GENERATION – RESIDENTIAL TRIP GENERATION (160 DWELLINGS)

16 The TSN has proposed a 5% reduction in vehicular trips associated with modal shift as a result of measures to achieve the development vision. With Vision trip generation is has been extracted from the TSN and is shown in Table 3 below. This means that the development is anticipated to generate 71 trips in the AM peak, and 80 in the PM Peak.

Table 3: DHA Proposed Trip Generation – With Vision

PERIOD	ARRIVALS	DEPARTURES	TOTAL
AM Peak (0800-0900)	24	47	71
PM Peak (1700-1800)	48	32	80
Daily (0700-1900)	340	338	679

TABLE 3: TOTAL DEVELOPMENT TRIP GENERATION (FIVE PER CENT MODE SHIFT REDUCTION)

Trip Distribution & Assignment

17 The TSN outlines the proposed approach to the trip distribution assessment. DHA have used 'Location of usual residence and place of work by method of travel to work' data from the 2011 Census for Middle-Layer Super Output Area (MSOA) 'Gravesham 012'. The assessment has taken the areas within the districts South East region, and the MSOAs of Medway, Tonbridge and Malling, Sevenoaks, Gravesham and Dartford. This approach is accepted.

18 Table 4 in the TSN outlines the proposed percentage distribution and resultant AM and PM peak hour movements at junctions near the site, including A2 / Hall Road Junction and A227 / A2 Junction. It is noted that the potential impact at A227 / A2 Junction is of greater concern when assessing this potential application due to its closer proximity to the development site.

19 The proposed percentage distribution and resultant trips at the A2/A227 junction has been extracted from the TSN and shown in Table 2.

Table 2 – Anticipated Trip Proportion and Totals at A2/A227 Junction

ROUTE	A227 TO A2 (W)	A227 TO A227	A227 TO A2 (E)	TOTAL
PERCENTAGE DISTRIBUTION	40%	5%	17%	62%
Weekday AM Peak 08:00-09:00	29	4	12	45
Weekday PM Peak 17:00-18:00	32	4	14	53

20 The TSN (as shown in Table 2) demonstrates, the proposed development is likely to result in some 45 trips in the morning peak and 53 trips in the morning peak using the A2/A227 junction.

21 The methodology of the distribution and assignment has been reviewed by JSJV and is considered to be appropriate for further assessment of the development.

Junction Assessment

22 **Following review of the impact on the SRN, it is concluded that there is a requirement for junction assessment to be undertaken at the A2 / A227 Wrotham Road junction, comprising the north and south dumbbell roundabouts.**

23 **There is a requirement for existing traffic flow data and existing queue data to be collected at the A2 / A227 Wrotham Road junction. Particular care should be taken to ensure that the queue survey observes the end of the queue on the A2 westbound off-slip which is currently understood to extend onto the A2 mainline during peak periods.**

24 **The queue survey should ensure that vehicles moving slowly as a result of the junction are recorded as a queue. Video files should be submitted and summary tables should be provided within the Transport Assessment which document the average queue within each 15-minute time period on each arm.**

25 **The 2025 base models are required to be calibrated and validated against the highest 15-minutre average queue on each arm in each assessment period. The 'direct intercept' should be adjusted to ensure acceptable calibration / validation, typically with separate AM and PM models.**

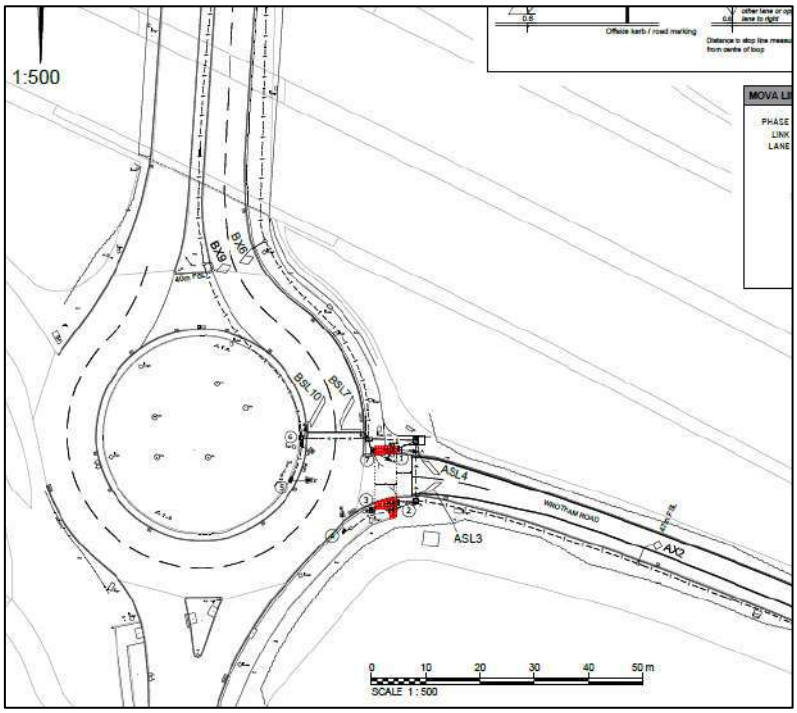
26 **In accordance with the requirements of DfT Circular 01/2022 there is a requirement for assessment to be undertaken at the end of the adopted Local Plan, which is 2028. The LPA should be contacted to seek advice on the committed development to include within the assessment and this should be provided to National Highways for review.**

27 **Background traffic growth should be forecast using TEMPro version 8.1 'core' scenario and 'alternative assumptions' should be applied where any committed development is located both within the adopted Local Plan and within the specific MSOA where the development is located. In such a situation, the specific alternative assumption details should be clearly documented.**

28 The assessment at 2028 should be undertaken both without and with the committed highway mitigation scheme.

29 The committed mitigation scheme, as included in the traffic signals approval drawing provided by National Highways, is shown in **Figure 4**. This demonstrates the northern circulatory carriageway is closed and traffic travelling south does not give way prior to the traffic signals.

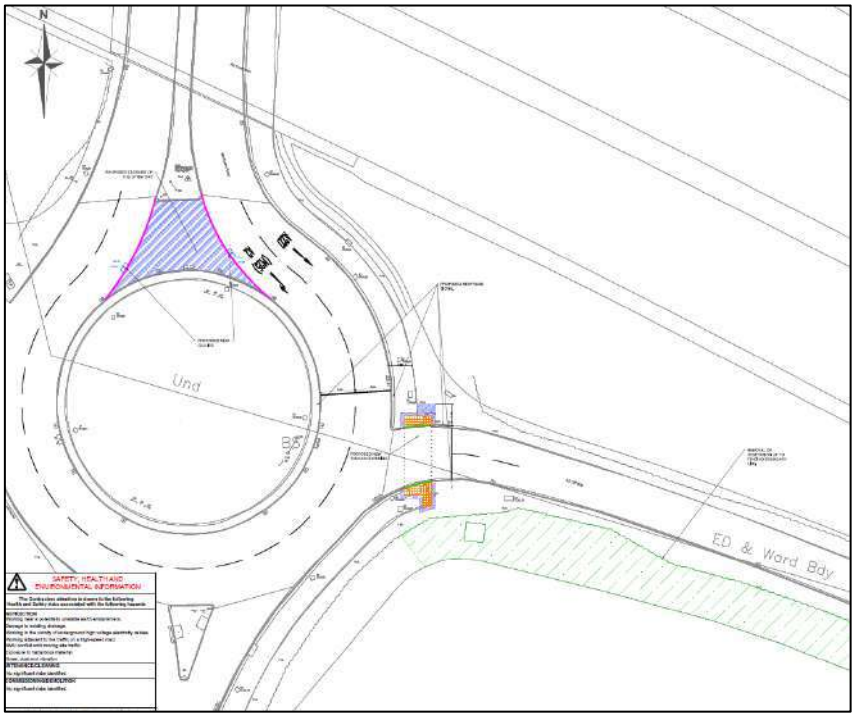
Figure 4 : Committed Mitigation Scheme – Traffic Signals Approval Drawing



Source: Drawing number 684437CH-JAC-A2-HGN-DR-1200-001 Rev P01 (Jacobs, August 2020)

30 We also acknowledge that the two drawings provided by National Highways appear to have inconsistencies, in particular the flare length on the A2 westbound off-slip. It is apparent from the general arrangement plan shown in **Figure 5** that the flare length on the A2 westbound off-slip is significantly longer than shown in the traffic signals approval drawing. **This is in the process of being clarified with National Highways, however at this stage we suggest assuming a flare length of 5 passenger car units (PCU) for the A2 westbound off-slip as the flare length of 3 PCU shown in Figure 3 results in understood to result in poor junction performance.**

Figure 5 : Committed Mitigation Scheme – General Arrangement Plan



Source: Drawing number HE601722-AONE-HGN-A2_A227_WROT-DR-C-0001 Rev P01 (A-one+, 9 October 2020), August 2020)

31 We note that Former Tollgate Hotel, Gravesend (planning application 20240856) has recently undertaken assessment of this junction and details are available on the planning portal.

Collision Analysis

32 **In accordance with the above junction assessment scope, there is a requirement for collision analysis to be undertaken at the A2 / A227 Wrothan Road junction, including the slip lanes.**

Travel Plan

33 The TSN notes that a Travel Plan will be prepared to promote the uptake of sustainable transport modes amongst residents.

34 **The Travel Plan should identify those measures which are proposed to be implemented to achieve the aims of the vision.**

Construction Traffic Management Plan

35 At the appropriate stage of the planning process, we suggest that National Highways recommend a suitable planning condition in relation to the preparation, agreement, and adherence to a Construction Traffic Management Plan (CTMP).

Conclusion

Further Information Required – Ideally at the Pre-Application Stage

Tom Valek

From: Nigel De Wit <Nigel.DeWit@nationalhighways.co.uk>
Sent: 01 July 2025 16:30
To: Tom Valek
Cc: Planning SE; southeast_hespa; PHILP Alan
Subject: #25297 - NH/25/11133 - Pre Application: Rose Farm, Istead Rise DA13 9JE – Transport Scoping Note - NH response 01/07/25

Your ref: Pre Application: Rose Farm, Istead Rise DA13 9JE – Transport Scoping Note

Our ref: #25297

Dear Tom,

Thank you for your email of 26 June 2025 sharing additional information in support of the above referenced pre-application proposal.

Please find below our responses in green.

> Dear Nigel,
>
> Thank you for issuing your pre-application comments in relation to the development proposals at Rose Farm and for confirming the trip generation and distribution data presented is acceptable. Noted on the requirement for a Travel Plan, we will provide a draft Travel Plan in support of the planning submission.
>
> We are happy to undertake a junction capacity assessment of the A2 / A227 roundabout junction given the sites impact and are looking to discuss the methodology surrounding the capacity assessment. We appreciate you pointing us in the direction for the application at the Former Tollgate Hotel (20240856), which was supported by survey and queue data of the junction.
>
> It is understood that as part of the Tollgate Hotel proposals, modelling has been undertaken for the existing layout and proposed mitigation scheme as requested within your pre-application advice for the proposals at Rose Farm. To stay consistent with modelling undertaken in support of the proposals at the Tollgate Hotel, we intend to replicate the methodology used for the associated junction modelling. Please see below our scope for the assessments of the existing layout and proposed mitigation scheme on this basis:-
>
> - Use of MCC turning movement and queue data collected and appended to associated reports;
>
> Yes, existing traffic flow data and queue data is required to be collected as noted in our Advice Note 01 (AN01); the raw data should be appended to the Transport Assessment (TA)
>
> Are you able to confirm that you are happy with us using the MCC turning movement and queue data collected and included within the application at Tollgate hotel.
>
> Yes, we confirm it is acceptable to refer to the MCC turning counts and queue surveys undertaken in association with Tollgate Hotel as this is located on the planning portal.

We would highlight that we did have concerns with the queue data which was presented as the survey did not capture the back on queue, however the south roundabout model calibration was undertaken using Google Maps queue data for the A2 westbound off-slip which showed a queue of 60 PCUs during each peak.

- Use of roundabout geometry information / dimensions from ARCADY reports for the assessment of the existing layout;
  We note the latest Tollgate Hotel Junctions modelling included on the planning portal is in the Technical Note dated 18 March 2025. We provided a number of comments on this modelling. The finalised modelling which was approved in association with Tollgate Hotel is noted to not be on the planning portal. Therefore, a CAD drawing should be provided to demonstrate the Junctions geometric inputs.
  Noted, are you able to send over the finalised modelling to assist with our exercise?
  No, unfortunately we are not able to provide that. We are content if you refer to the work on the planning portal and then we will comment accordingly. Alternatively, you could approach the consultant for Tollgate Hotel, to obtain the latest modelling, however this may or may not be successful.

- Use signal design of proposed signal improvement provided National Highways and produce a LinSig model for the proposed signalisation scheme. We will utilise the associated LinSig report from the Former Tollgate Hotel application to help form the basis of our LinSig model.
  We note AN01 contains details of the committed traffic signal scheme. We note the latest Tollgate Hotel LinSig modelling included on the planning portal is in the Technical Note dated 18 March 2025. We provided a number of comments on this modelling. The finalised modelling which was approved in association with Tollgate Hotel is noted to not be on the planning portal. Therefore, while you may refer to the LinSig modelling on the planning portal, this should be taken as a reference model only which you should modify as you see fit to accurately represent the proposed scheme.
  Noted, as above, if the finalised modelling could be sent over to assist with our assessment that would be much appreciate. If there is any further detail you could send regarding the proposed signal improvement to help inform our LinSig model that would be great.
  Please see above comments with regard to publicly available information and approaching the Tollgate Hotel consultant.

Please could you inform us of the acceptability of the above. Happy to discuss.

Should you or any others have any queries regarding our response, please contact us via planningse@nationalhighways.co.uk.

Kind regards,

Nigel De Wit MRTPI, Spatial Planner
South East Region, Operations Directorate
National Highways

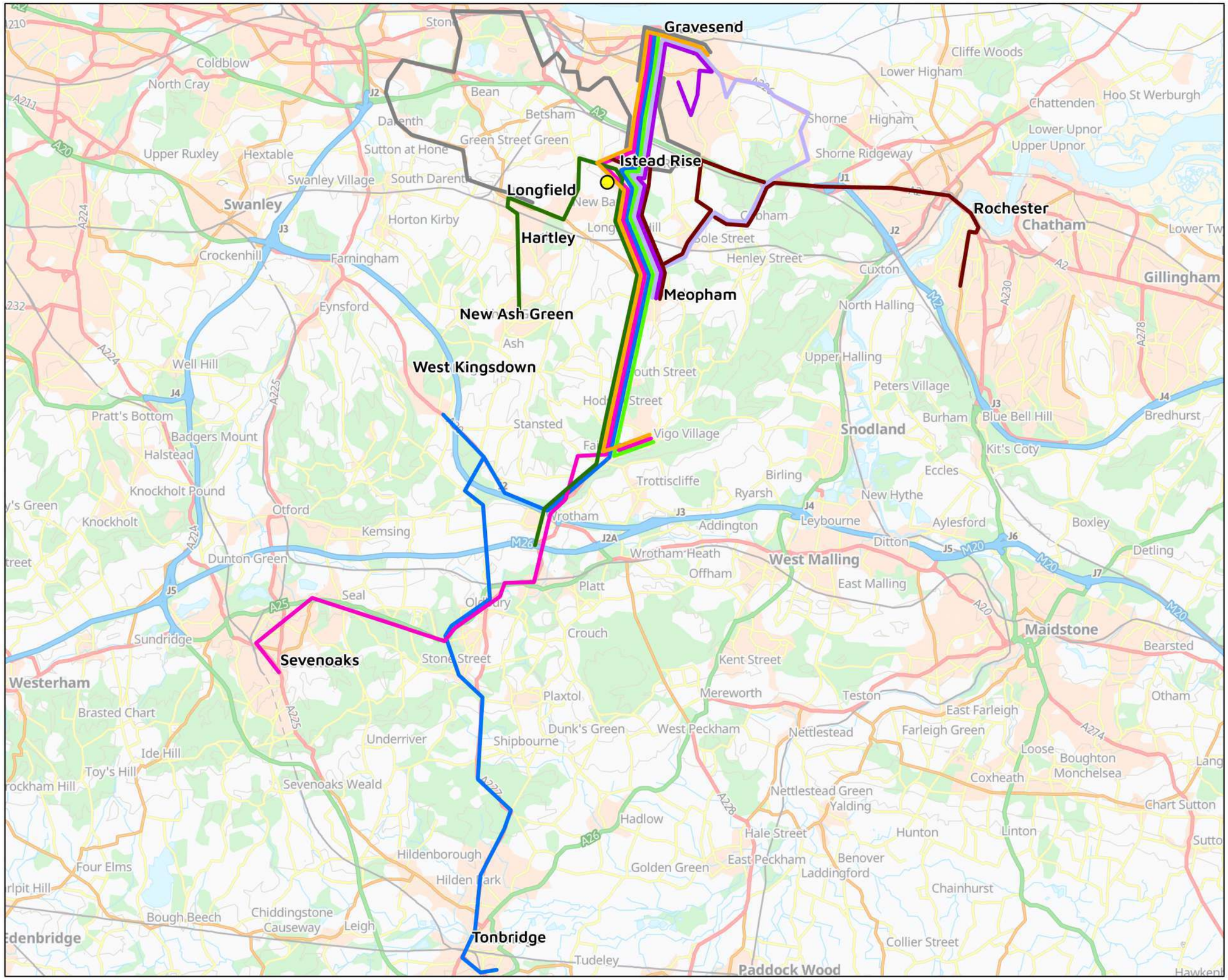
Office: 0300 470 7688
Mobile: 07751 730 517
Web: www.nationalhighways.co.uk

For information about our engagement with the planning system please visit https://nationalhighways.co.uk/our-roads/planning-and-the-strategic-road-network-in-england/

National Highways Limited | General enquiries: 0300 123 5000 |National Traffic Operations Centre, 3 Ridgeway, Quinton Business Park, Birmingham B32 1AF |
https://nationalhighways.co.uk | info@nationalhighways.co.uk

Registered in England and Wales no 9346363 | Registered Office: Bridge House, 1 Walnut Tree Close, Guildford, Surrey GU1 4LZ

APPENDIX
B



Key

- Site Location

Bus Route

- 223
- 306
- 308
- 416
- 418
- 695
- Meopham 1
- Vigo 1
- G1

0 3.5 7 14 Kilometers

TITLE
Bus Route Map

CLIENT
Esquire Developments Ltd

PROJECT
Rose Farm, Istead Rise

SCALE AT A3	DATE	JOB NO.	DRWG NO.
1:115,000	**Nov 2025**	**35213**	**G-04**

Eclipse House, Eclipse Park, Sittingbourne Road
Maidstone, Kent ME14 3EN

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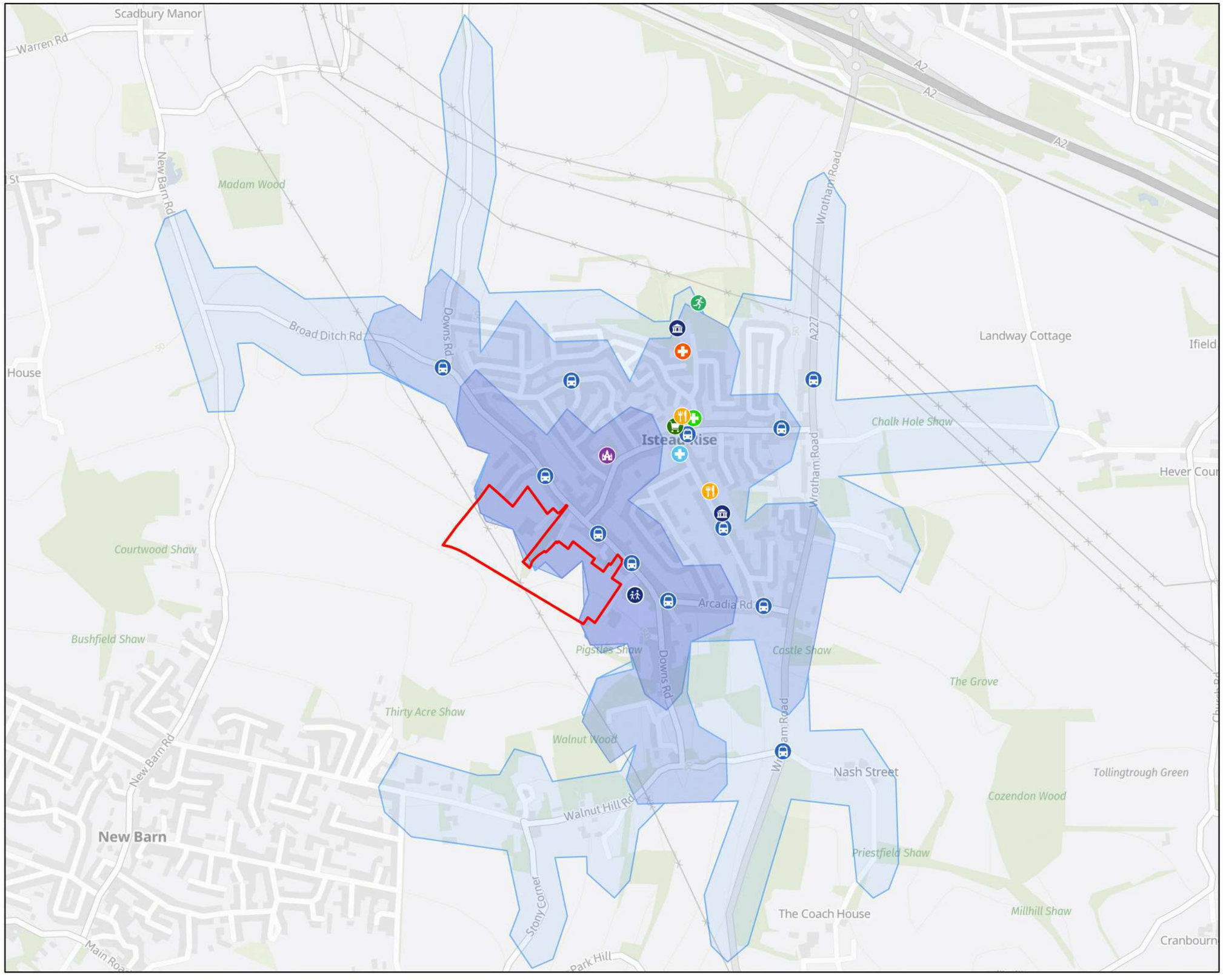
w: www.dhaplanning.co.uk

APPENDIX
C



Key

- Site Boundary
- 5 minute walk distance (400m) from the site access
- 10 minute walk distance (800m) from the site access
- 20 minute walk distance (1600m) from the site access
- Resturant
- Istead Rise Dental Clinic
- Istead Rise Pharmacy
- Downs Way Medical Practice
- Istead Rise Community Centre Field
- Groceries
- Community Centre
- Istead Rise Primary School
- Saint Barnabus Church
- Bus Stop

0 0.38 0.75 1.5 Kilometers

TITLE

Facilities Within Walking Distance From The Site Access

CLIENT

Esquire Developments Ltd

PROJECT

Rose Farm, Istead Rise

SCALE AT A3	DATE	JOB NO.	DRWG NO.
1:11,000	**Nov 2025**	**35213**	**G-01**

Eclipse House, Eclipse Park, Sittingbourne Road
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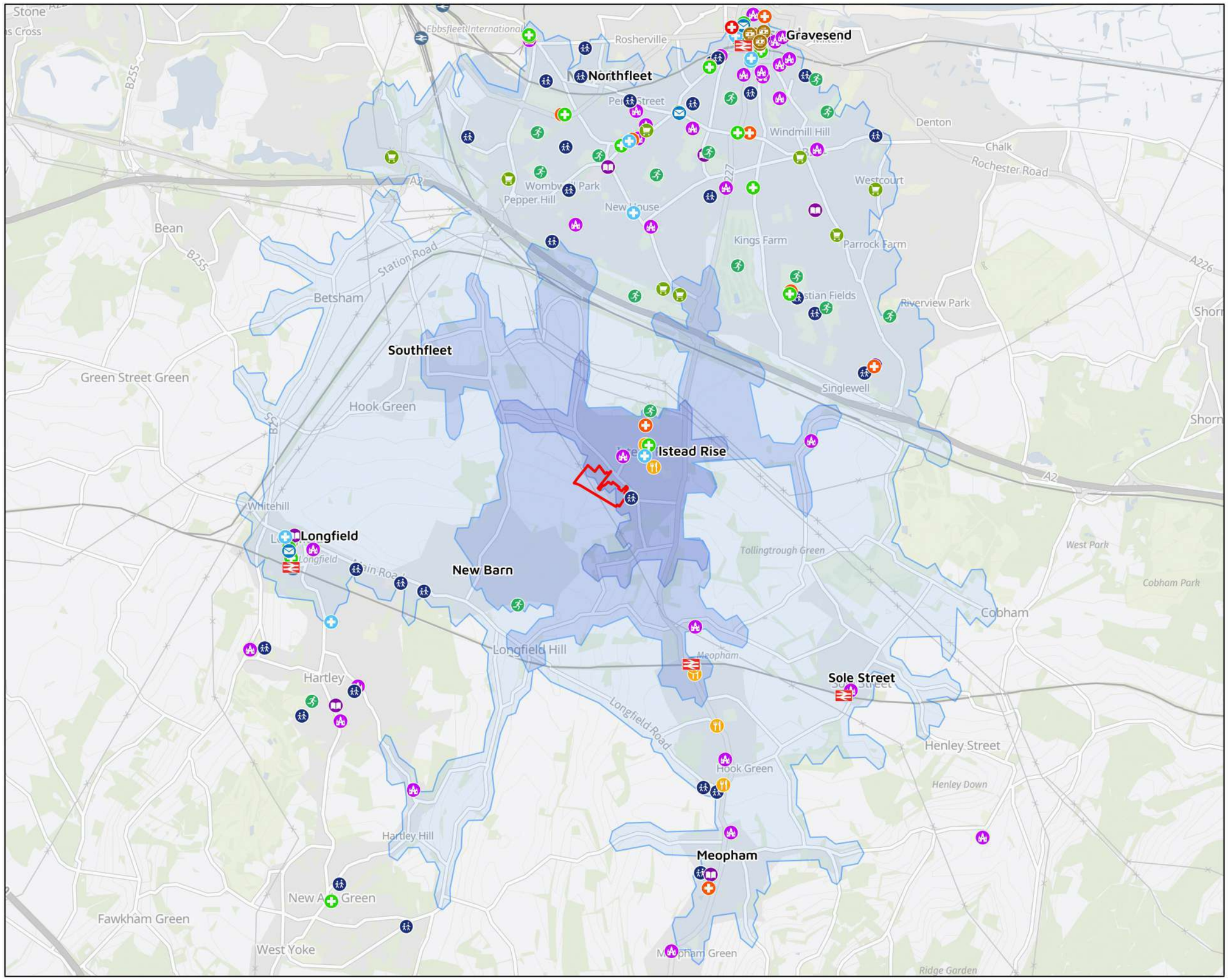

Key

- Site Boundary
- 5 minute cycle distance (1333m) from the site access
- 10 minute cycle distance (2666m) from the site access
- 20 minute cycle distance (5333m) from the site access
- Places of worship
- School
- Library
- Train Station
- Supermarket
- Sport facility
- GP Surgery
- Pharmacy
- Dentist
- Hospital
- Post Office
- Bank
- Resturant

TITLE

Facilities Within Cycling Distance From The Site Access

CLIENT

Esquire Developments Ltd

PROJECT

Rose Farm, Istead Rise

SCALE AT A3	DATE	JOB NO.	DRWG NO.
1:37,000	**Nov 2025**	**35213**	**G-02**

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APPENDIX
D

Local Cycling and Walking Infrastructure Plans

Walking Route Audit Tool

Overview

The primary function of the Walking Route Audit Tool (WRAT) is to assess the current condition and suitability of a walking route. The WRAT is intended to be used during or following a site visit and provides a means of ensuring that all of the factors are considered.

Walking Route Audit Tool Criteria

The WRAT uses a range of criteria to assess how well a route meets the core design outcomes, with scoring ranging from 2, being the highest, to 0, being the lowest.

The criteria are:
- attractiveness
- comfort
- directness
- safety
- coherence

How to use the RST

The WRAT requires the auditor to score the route against the following criteria:

0 for poor provision (RED)
1 for provision which is adequate but should be improved if possible (AMBER)
2 for good quality provision (GREEN)

A score of 70% (i.e. a score of 28 out of a potential 40 points) should normally be regarded as a minimum level of provision overall. Routes which score less than this, and factors which are scored as zero should be used to identify where improvements are required. As the scoring is sometimes qualitative the tool also allows the auditor to add comments explaining their score allocation. The actions column allows auditors to record solutions to any of the issues identified on the route e.g. removing redundant street clutter to improve its attractiveness.

Summary

General information regarding the route can be entered at the bottom of the tool.

Further Information

LCWIP Guidance (Annex C) provides further information about the WRAT.

Acknowledgement

The WRAT was developed by Local Transport Projects Ltd. as part of the Active Travel Wales Guidance.

Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool

Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Score	Comments	Actions
1. ATTRACTIVENESS - maintenance	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.			
2. ATTRACTIVENESS - fear of crime	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).			
3. ATTRACTIVENESS - traffic noise and pollution	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise			
4. ATTRACTIVENESS - other	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards					
ATTRACTIVENESS				**0**		
5. COMFORT - condition	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.			
6. COMFORT - footway width	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.			
7. COMFORT - width on staggered crossings/ pedestrian islands/refuges	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.			
8. COMFORT - footway parking	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.			
9. COMFORT - gradient	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).			
10.COMFORT - other	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces					
COMFORT				**0**		
11.DIRECTNESS - footway provision	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.			
12.DIRECTNESS - location of crossings in relation to desire lines	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.			
13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).			
14.DIRECTNESS - impact of controlled crossings on journey time	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.			
15. DIRECTNESS - green man time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.			
16.DIRECTNESS - other	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.					
DIRECTNESS				**0**		
17.SAFETY - traffic volume	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.			
18.SAFETY - traffic speed	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.			
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.			
SAFETY				**0**		
20. COHERENCE - dropped kerbs and tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.			
COHERENCE				**0**		
			Total Score	**0**		

ROUTE SUMMARY

Route Name	
Length	
Name of Assessor(s)	
Date of Assessment	

Criterion	Performance Scores
Attractiveness	0
Comfort	0
Directness	0
Safety	0
Coherence	0
Total	0

Comments	
Actions	

Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool

Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Critical	Score	Comments	Actions
1. ATTRACTIVENESS - maintenance	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.		**1**	Footways in generally good condition with no significant issues noted.	
2. ATTRACTIVENESS - fear of crime	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).		**2**	No evidence of vandalism and lots of natural surveillance with dwellings fronting Downs Road. Frequent street lighting also evident.	
3. ATTRACTIVENESS - traffic noise and pollution	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise		**1**	School location on Downs Road causing higher levels of traffic during school peak hour. Intermittant traffic at other times.	
4. ATTRACTIVENESS - other	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards				**1**	Footway is wide on the northern side, bollards near junction with Arcadia Road protecting pedestrians. Footways of sufficient width on either side with no noticable pinch points. Refuse bins present on collection day could impact attractiveness.	
ATTRACTIVENESS					**5**		
5. COMFORT - condition	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.		**1**	Footway are in good condition, some minor evidence of cracking / worn footway that is unlikely to result in trip hazards.	
6. COMFORT - footway width	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.		**1**	Footway width varies dependent on northern / southern sides of the carriageway. Can be as wide as 3.0m narrowing to approximately 2.0m	
7. COMFORT - width on staggered crossings/ pedestrian islands/refuges	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.		**0**	N/A	
8. COMFORT - footway parking	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.		**2**	No footway parking observed; off-street and on-street parking available within width of carriageway.	
9. COMFORT - gradient	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).		**2**	Gradient is typically level	
10.COMFORT - other	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces				**1**	None observed	
COMFORT					**7**		
11.DIRECTNESS - footway provision	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.		**2**	Footways follows desire line as they are adjacent to the carriageway	
12.DIRECTNESS - location of crossings in relation to desire lines	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.		**1**	No formal crossing point of Downs Road available to provide access to shopping parade in village on desire line. Uncontrolled crossing equipped with dropped kerb and tactile paving provided in praximity to Primary School. Also no crossing of access at Istead Rise Primary School	Uncontrolled crossing with dropped kerbs and tacile paving provided on Downs Road in proximity to junction with Upper Avenue. Uncontrolled crossing with dropped kerbs and tactile paving provided at School access
13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).		**2**	Crossing of the road is easy, direct and comfortable without delay due to low traffic environment.	
14.DIRECTNESS - impact of controlled crossings on journey time	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.		**0**	N/A	
15. DIRECTNESS - green man time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.		**0**	N/A	
16.DIRECTNESS - other	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.				**2**	Route along Downs Road clear and unrestricted, including to bus stops.	
DIRECTNESS					**7**		
17.SAFETY - traffic volume	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.		**2**	Outside of school peak hour traffic volumes on Downs Road are anticpated to be low.	ATC survey undertaken w/c 8th March highest recorded number of vehicles on a weekday 596.
18.SAFETY - traffic speed	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.		**1**	Recorded traffic speeds slightly over posted speed limit. With good standard of footways and wide carriageway pedestrians are however able to keep distance from traffic	ATC March 2025 recorded 85th percentile speeds of Mean 34.6mph of northbound and 31.9mph southbound
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.		**2**	Visibility is high due to straight alignment	
SAFETY					**5**		
20. COHERENCE - dropped kerbs and tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.		**0**	Absence of dropped kerbs and tactile paving at desire lines	As above unctontrolled crossing points provided at desire line locations
COHERENCE					**0**		
			Total Score		**24**		

ROUTE SUMMARY

Route Name	Arcadia Road
Length	330m
Name of Assessor(s)	Tom Valek
Date of Assessment	05.11.2025

Criterion	Performance Scores
Attractiveness	5
Comfort	7
Directness	7
Safety	5
Coherence	0
Total	24
Number of elements not applicable to the route	3
Total Points to be reduced	6
Maximum score (revised)	34
Percentage	71%

Comments	
Actions	

Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool

Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Critical	Score	Comments	Actions
1. ATTRACTIVENESS - maintenance	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.		**1**	Footways in generally good condition with no significant issues noted.	
2. ATTRACTIVENESS - fear of crime	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).		**2**	No evidence of vandalism and lots of natural surveillance with dwellings fronting Downs Road. Frequent street lighting also evident	
3. ATTRACTIVENESS - traffic noise and pollution	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise		**1**	School location on Downs Road causing higher levels of traffic during school peak hour. Intermittant traffic at other times	
4. ATTRACTIVENESS - other	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards				**1**	Bollards at junction with Downs Road protecting pedestrians, footways of sufficient width on either side with no noticable pinch points. Refuse bins present on collection day could impact attractiveness.	
ATTRACTIVENESS					**5**		
5. COMFORT - condition	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.		**1**	Footway are in good condition, some minor evidence of cracking / worn footway that is unlikely to result in trip hazards.	
6. COMFORT - footway width	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.		**1**	Footway width generally a consistent 2.0m on both sides of the carriageway.	
7. COMFORT - width on staggered crossings/ pedestrian islands/refuges	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.		**0**	N/A	
8. COMFORT - footway parking	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.		**1**	Intermittant footway parking observed, particularly at school peak hour at the southern end of Arcadia Road. May cause some deviation from desire line and 'give and take' between users.	
9. COMFORT - gradient	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).		**0**	Steep gradient leading up from southern end likely to be greater than 1 in 12	
10.COMFORT - other	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces				**1**	Lewis Road bus stop restricting footway width.	
COMFORT					**4**		
11.DIRECTNESS - footway provision	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.		**2**	Footways follows desire line as they are adjacent to the carriageway	
12.DIRECTNESS - location of crossings in relation to desire lines	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.		**2**	Uncontrolled crossing points equipped with dropped kerbs and tactile paving provided at side road junctions following desire lines	
13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).		**2**	adequate dropped kerb and tactile paving provision provided	
14.DIRECTNESS - impact of controlled crossings on journey time	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.		**0**	N/A	
15. DIRECTNESS - green man time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.		**0**	N/A	
16.DIRECTNESS - other	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.				**2**	Route along Arcadia Road clear and unrestricted, including to bus stops.	
DIRECTNESS					**8**		
17.SAFETY - traffic volume	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.		**2**	Given location and evidence of traffic volumes provided for Downs Road, volumes are anticipated to be low. Pedestrians can also keep distance from traffic.	
18.SAFETY - traffic speed	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.		**2**	Traffic speeds likley to be low given residential environment and presence of on-street parking.	
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.		**2**	Visibility is high due to straight alignment	
SAFETY					**6**		
20. COHERENCE - dropped kerbs and tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.		**2**	Adequate dropped kerb and tactile paving provision provided	
COHERENCE					**2**		
			Total Score		**25**		

ROUTE SUMMARY

Route Name	Arcadia Road
Length	330m
Name of Assessor(s)	Tom Valek
Date of Assessment	05.11.2025

Criterion	Performance Scores
Attractiveness	5
Comfort	4
Directness	8
Safety	6
Coherence	2
Total	25
Number of elements not applicable to the route	3
Total Points to be reduced	6
Maximum score (revised)	34
Percentage	74%

Comments	
Actions	

Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool

Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Critical	Score	Comments	Actions
1. ATTRACTIVENESS - maintenance	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.		**1**	Footways in generally good condition with no significant issues noted.	
2. ATTRACTIVENESS - fear of crime	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).		**2**	No evidence of vandalism and lots of natural surveillance with dwellings fronting Downs Road. Frequent street lighting also evident	
3. ATTRACTIVENESS - traffic noise and pollution	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise		**1**	Intermittant traffic, residential area meaning low levels of traffic expected and not a route to the school	
4. ATTRACTIVENESS - other	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards				**1**	Refuse bins present on collection day could impact attractiveness.	
ATTRACTIVENESS					**5**		
5. COMFORT - condition	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.		**1**	Footway are in good condition, some minor evidence of cracking / worn footway that is unlikely to result in trip hazards.	
6. COMFORT - footway width	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.		**1**	Footway width generally a consistent 2.0m on both sides of the carriageway.	
7. COMFORT - width on staggered crossings/ pedestrian islands/refuges	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.		**0**	N/A	
8. COMFORT - footway parking	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.		**2**	Frequent on-street parking observed however no evidence of footway parking	
9. COMFORT - gradient	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).		**2**	Gradient is typically level	
10.COMFORT - other	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces				**1**	Limited further obstructions, other than some lamp posts / telegraph poles.	
COMFORT					**7**		
11.DIRECTNESS - footway provision	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.		**2**	Footways follows desire line as they are adjacent to the carriageway	
12.DIRECTNESS - location of crossings in relation to desire lines	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.		**2**	Uncontrolled crossing points equipped with dropped kerbs and tactile paving provided at side road junctions following desire lines	
13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).		**2**	Crossing of the road is easy, direct and comfortable without delay due to low traffic environment.	
14.DIRECTNESS - impact of controlled crossings on journey time	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.		**0**	N/A	
15. DIRECTNESS - green man time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.		**0**	N/A	
16.DIRECTNESS - other	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.				**2**	Route along Lewis Road clear and unrestricted, including to bus stops.	
DIRECTNESS					**8**		
17.SAFETY - traffic volume	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.		**2**	Given location and evidence of traffic volumes provided for Downs Road, volumes are anticipated to be low. Pedestrians can also keep distance from traffic.	
18.SAFETY - traffic speed	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.		**2**	Traffic speeds likley to be low given residential environment and presence of on-street parking.	
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.		**2**	Visibility is high due to straight alignment	
SAFETY					**6**		
20. COHERENCE - dropped kerbs and tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.		**2**	Adequate dropped kerb and tactile paving provision provided at side road junctions	
COHERENCE					**2**		
			Total Score		**28**		

ROUTE SUMMARY

Route Name	Lewis Road
Length	550m
Name of Assessor(s)	Tom Valek
Date of Assessment	05.11.2025

Criterion	Performance Scores
Attractiveness	5
Comfort	7
Directness	8
Safety	6
Coherence	2
Total	28
Number of elements not applicable to the route	3
Total Points to be reduced	6
Maximum score (revised)	34
Percentage	82%

Comments	
Actions	

Local Cycling and Walking Infrastructure Plan: Walking Route Selection Tool

Walking Route Audit Tool

Audit Categories	2 (Green)	1 (Amber)	0 (Red)	Critical	Score	Comments	Actions
1. ATTRACTIVENESS - maintenance	Footways well maintained, with no significant issues noted.	Minor littering. Overgrown vegetation. Street furniture falling into minor disrepair (for example, peeling paint).	Littering and/or dog mess prevalent. Seriously overgrown vegetation, including low branches. Street furniture falling into major disrepair.		**1**	Footways in generally good condition with no significant issues noted.	
2. ATTRACTIVENESS - fear of crime	No evidence of vandalism with appropriate natural surveillance.	Minor vandalism. Lack of active frontage and natural surveillance (e.g. houses set back or back onto street).	Major or prevalent vandalism. Evidence of criminal/antisocial activity. Route is isolated, not subject to natural surveillance (including where sight lines are inadequate).		**2**	No evidence of vandalism and lots of natural surveillance with dwellings fronting Downs Road. Frequent street lighting also evident	
3. ATTRACTIVENESS - traffic noise and pollution	Traffic noise and pollution do not affect the attractiveness	Levels of traffic noise and/or pollution could be improved	Severe traffic pollution and/or severe traffic noise		**1**	School location on Downs Road causing higher levels of traffic during school peak hour. Intermittant traffic at other times	
4. ATTRACTIVENESS - other	Examples of 'other' attractiveness issues include: - Evidence that lighting is not present, or is deficient; - Temporary features affecting the attractiveness of routes (e.g. refuse sacks). - Excessive use of guardrail or bollards				**1**	Refuse bins present on collection day could impact attractiveness.	
ATTRACTIVENESS					**5**		
5. COMFORT - condition	Footways level and in good condition, with no trip hazards.	Some defects noted, typically isolated (such as trenching or patching) or minor (such as cracked, but level pavers). Defects unlikely to result in trips or difficulty for wheelchairs, prams etc. Some footway crossovers resulting in uneven surface.	Large number of footway crossovers resulting in uneven surface, subsided or fretted pavement, or significant uneven patching or trenching.		**1**	Footway are in good condition, some minor evidence of cracking / worn footway that is unlikely to result in trip hazards.	
6. COMFORT - footway width	Able to accommodate all users without 'give and take' between users or walking on roads. Footway widths generally in excess of 2m.	Footway widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Footway widths of less than 1.5m (i.e. standard wheelchair width). Limited footway width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.		**1**	Footpath a minimum approximately 1.8m on either side of the carriageway.	
7. COMFORT - width on staggered crossings/ pedestrian islands/refuges	Able to accommodate all users without 'give and take' between users or walking on roads. Widths generally in excess of 2m to accommodate wheel-chair users.	Widths of between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads.	Widths of less than 1.5m (i.e. standard wheelchair width). Limited width requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay.		**0**	N/A	
8. COMFORT - footway parking	No instances of vehicles parking on footways noted. Clearance widths generally in excess of 2m between permanent obstructions.	Clearance widths between approximately 1.5m and 2m. Occasional need for 'give and take' between users and walking on roads due to footway parking. Footway parking causes some deviation from desire lines.	Clearance widths less than 1.5m. Footway parking requires users to 'give and take' frequently, walk on roads and/or results in crowding/delay. Footway parking causes significant deviation from desire lines.		**1**	Intermittant footway parking observed. May cause some deviation from desire line and 'give and take' between users.	
9. COMFORT - gradient	There are no slopes on footway.	Slopes exist but gradients do not exceed 8 per cent (1 in 12).	Gradients exceed 8 per cent (1 in 12).		**0**	Steep gradient leading up from southern end likely to be greater than 1 in 12	
10.COMFORT - other	Examples of 'other' comfort issues include: - Temporary obstructions restricting clearance width for pedestrians (e.g. driveway gates opened into footway); - Barriers/gates restricting access; and - Bus shelters restricting clearance width. - Poorly drained footways resulting in noticeable ponding issues/slippery surfaces				**1**	Bus stop at shopping parade reducing footpath width briefly.	
COMFORT					**4**		
11.DIRECTNESS - footway provision	Footways are provided to cater for pedestrian desire lines (e.g. adjacent to road).	Footway provision could be improved to better cater for pedestrian desire lines.	Footways are not provided to cater for pedestrian desire lines.		**2**	Footways follows desire line as they are adjacent to the carriageway	
12.DIRECTNESS - location of crossings in relation to desire lines	Crossings follow desire lines.	Crossings partially diverting pedestrians away from desire lines.	Crossings deviate significantly from desire lines.		**2**	Uncontrolled crossing points equipped with dropped kerbs and tactile paving provided at side road junctions following desire lines	
13.DIRECTNESS - gaps in traffic (where no controlled crossings present or if likely to cross outside of controlled crossing)	Crossing of road easy, direct, and comfortable and without delay (< 5s average).	Crossing of road direct, but associated with some delay (up to 15s average).	Crossing of road associated indirect, or associated with significant delay (>15s average).		**2**	Crossing of the road is easy, direct and comfortable without delay due to low traffic environment.	
14.DIRECTNESS - impact of controlled crossings on journey time	Crossings are single phase pelican/puffin or zebra crossings.	Crossings are staggered but do not add significantly to journey time. Unlikely to wait >5s in pedestrian island.	Staggered crossings add significantly to journey time. Likely to wait >10s in pedestrian island.		**0**	N/A	
15. DIRECTNESS - green man time	Green man time is of sufficient length to cross comfortably.	Pedestrians would benefit from extended green man time but current time unlikely to deter users.	Green man time would not give vulnerable users sufficient time to cross comfortably.		**0**	N/A	
16.DIRECTNESS - other	Examples of 'other' directness issues include: - Routes to/from bus stops not accommodated; - Steps restricting access for all users; - Confusing layout for pedestrians creating severance issues for users.				**2**	Route along Upper Avenue clear and unrestricted, including to bus stops.	
DIRECTNESS					**8**		
17.SAFETY - traffic volume	Traffic volume low, or pedestrians can keep distance from moderate traffic volumes.	Traffic volume moderate and pedestrians in close proximity.	High traffic volume, with pedestrians unable to keep their distance from traffic.		**2**	Given location and evidence of traffic volumes provided for Downs Road, volumes are anticipated to be low. Pedestrians can also keep distance from traffic.	
18.SAFETY - traffic speed	Traffic speeds low, or pedestrians can keep distance from moderate traffic speeds.	Traffic speeds moderate and pedestrians in close proximity.	High traffic speeds, with pedestrians unable to keep their distance from traffic.		**2**	Traffic speeds likley to be low given residential environment and presence of on-street parking.	
19.SAFETY - visibility	Good visibility for all users.	Visibility could be somewhat improved but unlikely to result in collisions.	Poor visibility, likely to result in collisions.		**2**	Visibility is high due to straight alignment	
SAFETY					**6**		
20. COHERENCE - dropped kerbs and tactile paving	Adequate dropped kerb and tactile paving provision.	Dropped kerbs and tactile paving provided, albeit not to current standards.	Dropped kerbs and tactile paving absent or incorrect.		**2**	Adequate dropped kerb and tactile paving provision provided	
COHERENCE					**2**		
			Total Score		**25**		

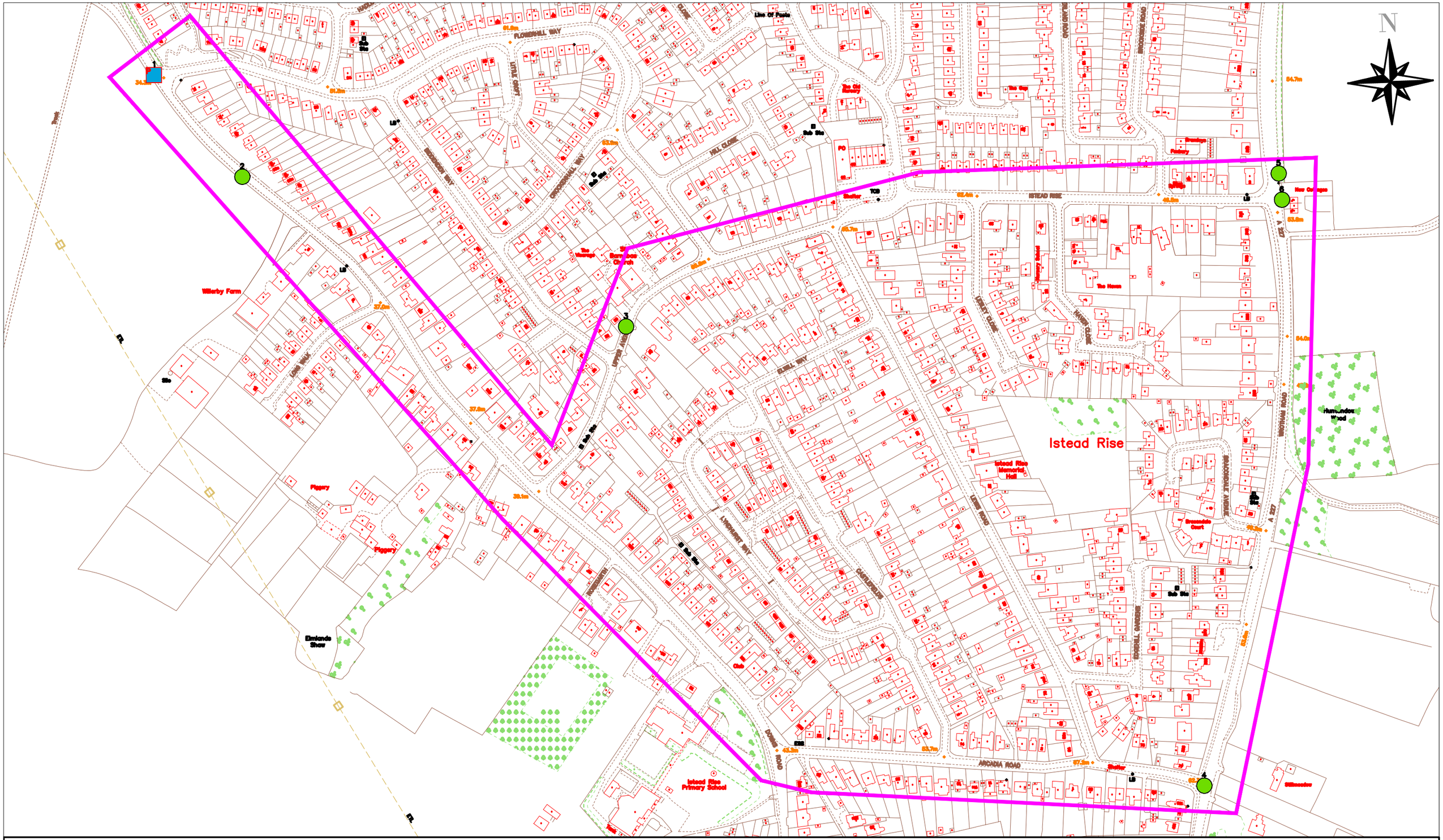
ROUTE SUMMARY

Route Name	Upper Avenue
Length	800m
Name of Assessor(s)	Tom Valek
Date of Assessment	05.11.2025

Criterion	Performance Scores
Attractiveness	5
Comfort	4
Directness	8
Safety	6
Coherence	2
Total	25
Number of elements not applicable to the route	3
Total Points to be reduced	6
Maximum score (revised)	34
Percentage	74%

Comments	
Actions	

APPENDIX
E



Date: 05-November-2025

Time: 14:02:03

Title: **Istead Rise**

Requested output:**D - Print Crash Report**

Date: 05-November-2025

Accident Date BETWEEN '01-Jul-2020' AND '30-Jun-2025'

There were 6 reported crashes resulting in injury

D-PRINT CRASH REPORT

5-Nov-2025
14:02:03

Istead Rise
Accident Date BETWEEN '01-Jul-2020' AND '30-Jun-2025'

No	Location	Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors	Involved
1	**Road No U Grid 562981E** **Section Ref 170151N**	SERIOUS	29/01/2022	7	16:30	L	Dry	Fine	SE	S.VEH	
	DOWNS RD J/W FLOWERHILL WAY, ISTEAD RISE								Gravesham		PED
	OLR: D1 was driving very fast, lost control, swerved and mounted the pavement which then struck C1 and pushed their dog 20 yards across the pavement. NO DETAILS FOR V1.						Veh1, car, NW -> SE			Casualties 1 Vehicles 1	
2	**Road No U Grid 563062E** **Section 001 Ref 170058N**	SLIGHT	20/08/2021	6	18:30	L	Dry	Fine		S.VEH	
	DOWNS ROAD, ISTEAD RISE (MAPPED TO COORDS)								Gravesham		
	V1 driving down country road. V1 occupants state an unknown vehicle flashed them to give right of way. As V1 mounted elevated grass verge to give extra room when doing this, V1 has flipped onto its roof.						Veh1, car, SE -> NW			Casualties 1 Vehicles 1	
3	**Road No U Grid 563413E** **Section 001 Ref 169921N**	SLIGHT	11/10/2022	3	14:02	L	Dry	Fine		+VE	
	UPPER AVE J/W PRIVATE DRIVE, ISTEAD RISE.								Gravesham		
	D1 was driving whilst over prescribed limit of alcohol. Drove into V2 driveway, made contact with vehicle, pushing it into next door neighbour's garden. Broken walls of V2, broken rear window screen & neighbours 4 fences damaged. D1 was the only casualty, appears to have hit their head, small cut to left eyebrow, was taken to hospital by paramedics & police after arrest.						Veh1, car, NE -> SW Veh2, car, W -> E			Casualties 1 Vehicles 2	

Key

Involved

PED	*Pedestrian*
HGV	*Heavy Goods Vehicle*
GV	*Goods Vehicle*
M/C	*Motor Cycle*
P/C	*Pedal Cycle*
PSV	*Bus/Coach*

Street Lighting

L	*Daylight*
STL	*Street Lights*
USL	*Street LIghts Unlit*
NSL	*No Street Lights*
STU	*Street Lights Unknown*

FACTORS

+VE	*Positive Breath Test*
R.TURN	*Right Turn Manoeuvre*
O/TAKE	*Overtaking Manoeuvre*
S.VEH	*Single Vehicle*

Special Conditions

ATS OUT	*Traffic Lights Not Working*
ATS DEF	*Traffic Lights Defective*
SIGNS	*Road Signs Defective or Obscurred*
RD WRKS	*Road Works*
Surface	*Road Surface Defective*

D-PRINT CRASH REPORT

5-Nov-2025
14:02:03

Istead Rise
Accident Date BETWEEN '01-Jul-2020' AND '30-Jun-2025'

No	Location	Severity	Date	Day	Time	Street Lighting	Road Surface	Weather	Pedestrian Direction	Factors	Involved
4	**Road No A227 Grid 563942E** **Section 001 Ref 169501N**	SLIGHT	08/06/2023	5	07:17	L	Dry	Fine		R.TURN	M/C
	A227 WROTHAM RD J/W ARCADIA RD, ISTEAD RISE.								Gravesham		
	R2 WAS TRAVELLING ON WROTHAM RD AND APPROACHED THE JUNCTION WHEN V1 PULLED FORWARD. BOTH V1 AND R2 ATTEMPTED TO BRAKE AND WHEN THE VEHS COLLIDED AT THE JUNCTION, R2 WENT OVER THE MOTORCYCLE AND HIT THE BONNET OF V1 BEFORE FALLING TO THE GROUND.						Veh1, car, W -> SW Veh2, m/cycle > 500cc, SW -> NE				Casualties 1 Vehicles 2
5	**Road No A227 Grid 564010E** **Section 172 Ref 170061N**	SLIGHT	18/12/2020	6	11:33	L	Wet/Damp	Rain		S.VEH	
	A227, WROTHAM RD J/W ISTEAD RISE, ISTEAD RISE								Gravesham		
	V1 WAS TRAVELLING ALONG MEOPHAM RD TOWARDS GRAVESEND WHEN THEY SUDDENLY VEERED ONTO THE OTHER SIDE OF THE ROAD AND COLLIDED WITH A TREE UP A GRASS BANK. D1'S PARTNER STATED THAT THE DRIVER SEEMED FINE, BIT DIDNT HEAR/RESPOND WHEN THEY SAID D1 WAS ON THE WRONG SIDE OF THE ROAD. D1 STATED THAT THEY DON'T REMEMBER ANYTHING PRIOR TO THE IMPACT, THIS IS BELIEVED TO BE A MEDICAL EPISODE.						Veh1, car, S -> N				Casualties 2 Vehicles 1
6	**Road No A227 Grid 564013E** **Section Ref 170037N**	SLIGHT	07/05/2022	7	14:00	L	Dry	Fine			
	A227 WROTHAM RD J/W ISTEAD RISE, ISTEAD RISE								Gravesham		
	V2 was travelling north on Wrotham Rd when V1 turned left out of Istead Rise, causing V2 to swerve around V2 and collide with the kerb. V1 did not stop at the scene.						Veh1, car, W -> N Veh2, car, S -> N				Casualties 1 Vehicles 2

Key

Involved

PED	*Pedestrian*
HGV	*Heavy Goods Vehicle*
GV	*Goods Vehicle*
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ATS OUT	*Traffic Lights Not Working*
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RD WRKS	*Road Works*
Surface	*Road Surface Defective*

APPENDIX
F

Esquire Developments

NOTES:

Do Not Scale.

Report all discrepancies, errors and omissions.

Verify all dimensions on site before commencing any work on site or preparing shop drawings.

All materials, components and workmanship are to comply with the relevant British Standards, Codes of Practice, and appropriate manufacturers recommendations that from time to time shall apply.

For all specialist work, see relevant drawings.

Rev	Date	Description

Project Title

Proposed Residential Development
Istead Rise

Drawing Description

Proposed Site Plan

Scale	Drawn by
1:1000@A1	JS
Date	Checked by
December 24	TWM

CLAGUE ARCHITECTS

62 Burgate, Canterbury
Kent CT1 2BH 01227 762060

1 Kinsbourne Court, Luton Road,
Harpenden, Hertfordshire AL5 3BL 01582 765102

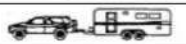
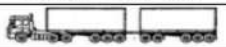
8, Disney Street
London SE1 1JF 0203 597 6112

CANTERBURY LONDON HARPENDEN

Drawing Number	Revision
22628B / 10	

Proposed Residential Development, Istead Rise

APPENDIX
G

Class		Axles	Groups	Description	Parameters	Dominant Vehicle	Aggregate
1	SV	2	1 OR 2	Short - Car, light Van	d(1)>=1.7m, d(1)<=3.2m & axles=2		Light
2	SVT	3, 4 OR 5	3	Short Towing - Trailer, Caravan, Boat, etc.	groups=3, d(1)>=2.1m, d(1)<=3.2m, d(2)>=2.1m & axles=3,4,5		
3	TB2	2	2	Two axle truck or Bus	d(1)>3.2m & axles=2		Medium
4	TB3	3	2	Three axle truck or Bus	axles=3 & groups=2		
5	T4	>3	2	Four axle truck	axles>3 & groups=2		
6	ART3	3	3	Three axle articulated vehicle or Rigid vehicle and trailer	d(1)>3.2m, axles=3 & groups=3		Heavy
7	ART4	4	>2	Four axle articulated vehicle or Rigid vehicle and trailer	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles = 4 & groups>2		
8	ART5	5	>2	Five axle articulated vehicle or Rigid vehicle and trailer	d(2)<2.1m or d(1)<2.1m or d(1)>3.2m axles = 5 & groups>2		
9	ART6	>=6	>2	Six (or more) axle articulated vehicle or Rigid vehicle and trailer	axles=6 & groups>2 or axles>6 & groups=3		
10	BD	>6	4	B-Double or Heavy truck and trailer	groups=4 & axles>6		
11	DRT	>6	5	Double road train or Heavy truck and two trailers	groups=5,6 & axles>6		
12	TRT	>6	>6	Triple road train or Heavy truck and three (or more) trailers	groups>6 & axles>6		
14	M/C	2	1 OR 2	Motorcycle	d(1)>=1.18m, d(1)<=1.7m & axles=2		Light
15	CYCLE	2	1 OR 2	Cycle	d(1)<1.18 & axles=2		

K&MTRAFFIC SURVEYS

SITE: DOWNS ROAD LOCATION: Attached to parking restriction sign

GRID REFERENCE: 51.402457, 0.348516 DIRECTION: NORTHBOUND SPEED LIMIT:30

08 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	23	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	36.6	-
0300	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	19	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	27.6	-
0600	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
0700	7	6	0	1	0	0	0	0	0	0	0	0	0	0	0	24.5	-
0800	13	10	0	2	0	0	0	0	0	0	0	0	0	0	1	31.5	39.5
0900	30	29	0	1	0	0	0	0	0	0	0	0	0	0	0	30.2	35.6
1000	30	25	0	4	0	0	0	0	0	0	0	0	0	1	0	29.4	35.6
1100	46	40	0	4	0	0	0	0	0	0	0	0	0	1	1	29.3	34.8
1200	23	22	0	0	0	1	0	0	0	0	0	0	0	0	0	33	40.7
1300	26	24	0	2	0	0	0	0	0	0	0	0	0	0	0	31.1	35.6
1400	29	25	0	1	0	0	0	0	0	0	0	0	0	2	1	31	35.7
1500	18	16	0	1	0	0	0	0	0	0	0	0	0	1	0	29.5	39.9
1600	30	25	0	1	0	0	0	0	0	0	0	0	0	3	1	28.8	35.6
1700	19	17	0	2	0	0	0	0	0	0	0	0	0	0	0	32.8	41
1800	15	14	0	1	0	0	0	0	0	0	0	0	0	0	0	26.5	34.8
1900	12	10	0	0	1	0	0	0	0	0	0	0	0	1	0	28.2	31.8
2000	7	5	0	0	1	0	0	0	0	0	0	0	0	0	1	26.5	-
2100	10	8	0	1	0	0	0	0	0	0	0	0	0	0	1	30.7	-
2200	9	9	0	0	0	0	0	0	0	0	0	0	0	0	0	32.5	-
2300	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	28.1	-
07-19	**286**	**253**	**0**	**20**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**8**	**4**	**30.1**	**35.8**
06-22	**319**	**280**	**0**	**21**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**6**	**29.9**	**35.8**
06-00	**336**	**297**	**0**	**21**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**6**	**29.9**	**35.7**
00-00	**343**	**303**	**0**	**21**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**9**	**6**	**29.8**	**35.7**

09 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16	-
0100	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	31.8	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	30.6	-
0600	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	36.7	-
0700	7	5	0	1	0	0	0	0	0	0	0	0	0	0	1	27.4	-
0800	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	33	-
0900	21	19	0	1	0	0	0	0	0	0	0	0	0	0	1	34.8	42.9
1000	38	29	0	6	0	0	0	0	0	0	0	0	0	0	3	27.8	32
1100	25	23	0	1	0	0	0	0	0	0	0	0	0	0	1	29.4	35.9
1200	25	20	0	1	0	0	0	0	0	0	0	0	0	3	1	32.6	41.6
1300	39	34	0	3	0	0	0	0	0	0	0	0	0	2	0	28.6	33.6
1400	25	19	0	3	0	0	0	0	0	0	0	0	0	1	2	31.1	38.6
1500	24	20	0	1	1	0	0	0	0	0	0	0	0	2	0	30.4	40.5
1600	22	19	0	1	0	0	0	0	0	0	0	0	0	2	0	32.5	40
1700	21	19	0	2	0	0	0	0	0	0	0	0	0	0	0	29.7	37.2
1800	14	13	0	0	0	0	0	0	0	0	0	0	0	1	0	30.4	34.2
1900	14	13	0	1	0	0	0	0	0	0	0	0	0	0	0	27.6	37.9
2000	9	8	0	0	1	0	0	0	0	0	0	0	0	0	0	26.6	-
2100	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	29.7	-
2200	3	2	0	1	0	0	0	0	0	0	0	0	0	0	0	18.5	-
2300	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	22.6	-
07-19	**269**	**228**	**0**	**20**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**9**	**30.4**	**37.2**
06-22	**298**	**255**	**0**	**21**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**9**	**30.2**	**37.1**
06-00	**304**	**260**	**0**	**22**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**9**	**30**	**37.1**
00-00	**309**	**265**	**0**	**22**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**11**	**9**	**30**	**37**

10 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	24	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12.1	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	8	7	0	1	0	0	0	0	0	0	0	0	0	0	0	28.2	-
0600	16	13	0	3	0	0	0	0	0	0	0	0	0	0	0	35.6	42.6
0700	61	54	0	7	0	0	0	0	0	0	0	0	0	0	0	31	37.5
0800	74	72	0	2	0	0	0	0	0	0	0	0	0	0	0	25.3	31.1
0900	53	52	0	1	0	0	0	0	0	0	0	0	0	0	0	27.2	32.8
1000	22	19	0	2	0	0	0	0	0	0	0	0	0	0	1	28	34.4
1100	36	28	0	6	0	0	0	0	0	0	0	0	0	0	2	26	30.2
1200	40	36	0	3	0	0	0	0	0	0	0	0	0	0	1	27.9	32.4
1300	32	26	0	2	0	0	0	0	1	0	0	0	0	1	2	25.8	35.5
1400	34	31	0	2	1	0	0	0	0	0	0	0	0	0	0	23.1	29.1
1500	78	74	0	1	1	0	0	0	0	0	0	0	0	1	1	22.8	29.3
1600	33	30	0	3	0	0	0	0	0	0	0	0	0	0	0	30	37.6
1700	24	22	0	1	0	0	0	0	0	0	0	0	0	1	0	27.7	37.7
1800	17	13	0	2	0	0	0	0	0	0	0	0	0	0	2	23.8	34.6
1900	19	19	0	0	0	0	0	0	0	0	0	0	0	0	0	30	38
2000	11	10	0	1	0	0	0	0	0	0	0	0	0	0	0	31.4	41.1
2100	4	2	0	0	1	0	0	0	0	0	0	0	0	0	1	19.5	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	**504**	**457**	**0**	**32**	**2**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**9**	**26.4**	**32.9**
06-22	**554**	**501**	**0**	**36**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**10**	**26.8**	**34**
06-00	**554**	**501**	**0**	**36**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**10**	**26.8**	**34**
00-00	**565**	**511**	**0**	**37**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**3**	**10**	**26.8**	**34**

11 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	2	1	0	0	0	1	0	0	0	0	0	0	0	0	0	19.8	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	32.8	-
0600	18	14	0	4	0	0	0	0	0	0	0	0	0	0	0	34.6	45.9
0700	53	49	0	3	1	0	0	0	0	0	0	0	0	0	0	31.4	37.4
0800	67	62	0	3	1	0	0	0	0	0	0	0	0	0	1	24.8	30.3
0900	53	49	0	4	0	0	0	0	0	0	0	0	0	0	0	27.1	32.3
1000	26	24	0	1	0	0	0	0	0	0	0	0	0	0	1	27.7	34.8
1100	28	22	0	3	0	0	0	0	0	0	0	0	1	0	2	25.4	30
1200	31	26	0	4	0	0	0	0	0	0	0	0	0	0	1	24.7	30.1
1300	38	31	0	4	1	0	1	0	0	0	0	0	0	0	1	25	33.5
1400	35	32	0	2	0	0	0	0	0	0	0	0	0	0	1	24.3	31.8
1500	64	61	0	0	1	0	1	0	0	0	0	0	0	1	0	22.5	29.3
1600	45	41	0	4	0	0	0	0	0	0	0	0	0	0	0	29.7	35.6
1700	26	24	0	2	0	0	0	0	0	0	0	0	0	0	0	29.9	35.9
1800	29	26	0	3	0	0	0	0	0	0	0	0	0	0	0	29.8	35.3
1900	15	14	0	1	0	0	0	0	0	0	0	0	0	0	0	30.5	37.7
2000	5	3	0	2	0	0	0	0	0	0	0	0	0	0	0	28.1	-
2100	11	9	0	1	0	0	0	0	0	0	0	0	0	0	1	25.9	30.9
2200	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	29	-
2300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	35.6	-
07-19	**495**	**447**	**0**	**33**	**4**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**7**	**26.6**	**33**
06-22	**544**	**487**	**0**	**41**	**4**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**8**	**27**	**33.4**
06-00	**549**	**492**	**0**	**41**	**4**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**8**	**27**	**33.5**
00-00	**558**	**500**	**0**	**41**	**4**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**1**	**1**	**8**	**27.1**	**33.6**

12 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	34.6	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	35.8	-
0600	17	14	0	3	0	0	0	0	0	0	0	0	0	0	0	36.3	42.9
0700	53	51	0	2	0	0	0	0	0	0	0	0	0	0	0	30.2	37
0800	65	62	0	3	0	0	0	0	0	0	0	0	0	0	0	26	30.6
0900	41	41	0	0	0	0	0	0	0	0	0	0	0	0	0	28.7	34.4
1000	30	25	0	5	0	0	0	0	0	0	0	0	0	0	0	25.3	30.3
1100	34	30	0	3	0	0	0	0	0	0	0	0	0	0	1	28.6	34.9
1200	27	23	0	4	0	0	0	0	0	0	0	0	0	0	0	28.6	36.6
1300	31	27	0	4	0	0	0	0	0	0	0	0	0	0	0	28.8	34.9
1400	36	33	1	2	0	0	0	0	0	0	0	0	0	0	0	25.4	30.9
1500	74	66	0	4	3	0	0	0	0	0	0	0	0	1	0	25.4	31.1
1600	33	28	0	4	0	0	0	0	0	0	0	0	0	1	0	27	32.6
1700	27	20	0	7	0	0	0	0	0	0	0	0	0	0	0	31.1	37.1
1800	28	24	0	3	0	0	0	0	0	0	0	0	0	1	0	30	37.6
1900	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	26.4	37.4
2000	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	31	-
2100	3	2	0	0	0	0	0	0	0	0	0	0	0	0	1	30.7	-
2200	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	32.1	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	**479**	**430**	**1**	**41**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**27.6**	**33.7**
06-22	**520**	**467**	**1**	**44**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**27.9**	**34.1**
06-00	**521**	**468**	**1**	**44**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**27.9**	**34.1**
00-00	**527**	**474**	**1**	**44**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**2**	**28**	**34.2**

13 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	15.1	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.4	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	27.1	-
0600	14	12	0	2	0	0	0	0	0	0	0	0	0	0	0	36.7	42.1
0700	50	44	0	5	0	0	0	0	0	0	0	0	0	0	1	30.6	37.3
0800	67	60	0	4	3	0	0	0	0	0	0	0	0	0	0	24	29.2
0900	50	47	0	2	1	0	0	0	0	0	0	0	0	0	0	28.1	32.2
1000	43	41	0	2	0	0	0	0	0	0	0	0	0	0	0	26.9	33.5
1100	18	14	0	3	0	1	0	0	0	0	0	0	0	0	0	26.8	32
1200	24	21	0	2	0	0	0	0	0	0	0	0	0	1	0	26.7	32.9
1300	34	31	0	3	0	0	0	0	0	0	0	0	0	0	0	28.1	33.3
1400	38	37	0	1	0	0	0	0	0	0	0	0	0	0	0	26	31.5
1500	57	55	0	2	0	0	0	0	0	0	0	0	0	0	0	25.4	30.8
1600	56	51	0	5	0	0	0	0	0	0	0	0	0	0	0	29.3	34.4
1700	26	23	0	2	0	0	0	0	0	0	0	0	0	0	1	28.4	34.4
1800	24	22	0	2	0	0	0	0	0	0	0	0	0	0	0	30.7	38.1
1900	13	13	0	0	0	0	0	0	0	0	0	0	0	0	0	30.4	37.8
2000	9	8	0	1	0	0	0	0	0	0	0	0	0	0	0	27.8	-
2100	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	28.1	-
2200	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	31.5	-
2300	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	28.2	-
07-19	**487**	**446**	**0**	**33**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**27.4**	**33.2**
06-22	**527**	**482**	**0**	**37**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**27.7**	**33.7**
06-00	**534**	**488**	**0**	**38**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**2**	**27.7**	**33.7**
00-00	**540**	**493**	**0**	**38**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**3**	**27.7**	**33.7**

14 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	74.1	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	27.9	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	2	1	0	0	0	0	0	0	0	0	0	0	0	0	1	26.7	-
0600	17	16	0	1	0	0	0	0	0	0	0	0	0	0	0	34.9	40
0700	30	27	0	2	1	0	0	0	0	0	0	0	0	0	0	32.7	38.2
0800	64	57	0	5	2	0	0	0	0	0	0	0	0	0	0	23.4	29.1
0900	57	51	0	4	1	0	0	0	0	0	0	0	0	0	1	26.7	31.8
1000	40	36	0	2	0	0	0	0	0	0	0	0	0	1	1	27.6	32.8
1100	31	29	0	1	0	0	0	0	0	0	0	0	0	0	1	26	30.5
1200	46	41	0	2	0	1	0	0	0	0	1	0	0	0	1	25.7	32.5
1300	29	26	0	2	0	0	0	0	0	0	0	0	0	0	1	30	35.2
1400	30	25	0	3	2	0	0	0	0	0	0	0	0	0	0	25.1	28.9
1500	87	85	0	1	0	1	0	0	0	0	0	0	0	0	0	25.1	31
1600	42	41	0	0	0	0	0	0	0	0	0	0	0	0	1	32.1	37.9
1700	33	30	0	0	1	0	0	0	0	0	0	0	0	0	2	29.7	36.4
1800	28	26	0	1	1	0	0	0	0	0	0	0	0	0	0	31.4	40.9
1900	23	21	0	1	0	0	0	0	0	0	0	0	0	1	0	31.4	40.4
2000	16	14	0	2	0	0	0	0	0	0	0	0	0	0	0	25.6	34.5
2100	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	30.9	-
2200	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	29.5	-
2300	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	28.2	-
07-19	**517**	**474**	**0**	**23**	**8**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**1**	**8**	**27.3**	**34.3**
06-22	**579**	**531**	**0**	**27**	**8**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**8**	**27.7**	**34.8**
06-00	**592**	**544**	**0**	**27**	**8**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**8**	**27.7**	**34.8**
00-00	**596**	**546**	**0**	**28**	**8**	**2**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**2**	**9**	**27.8**	**34.8**

K&MTRAFFIC SURVEYS

SITE: DOWNS ROAD LOCATION: Attached to parking restriction sign

GRID REFERENCE: 51.402457, 0.348516 DIRECTION: NORTHBOUND SPEED LIMIT:30

08 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	3	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	23	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	36.6	-
0300	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	19	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	27.6	-
0600	4	0	1	2	1	0	0	0	0	0	0	0	0	0	0	0	22.6	-
0700	7	1	2	0	2	2	0	0	0	0	0	0	0	0	0	0	24.5	-
0800	13	0	1	2	3	4	3	0	0	0	0	0	0	0	0	0	31.5	39.5
0900	30	1	2	1	12	11	2	1	0	0	0	0	0	0	0	0	30.2	35.6
1000	30	0	1	6	13	8	0	2	0	0	0	0	0	0	0	0	29.4	35.6
1100	46	0	2	7	18	14	5	0	0	0	0	0	0	0	0	0	29.3	34.8
1200	23	1	1	0	4	11	6	0	0	0	0	0	0	0	0	0	33	40.7
1300	26	0	0	2	11	10	3	0	0	0	0	0	0	0	0	0	31.1	35.6
1400	29	0	1	2	11	13	2	0	0	0	0	0	0	0	0	0	31	35.7
1500	18	1	0	4	5	5	3	0	0	0	0	0	0	0	0	0	29.5	39.9
1600	30	0	4	3	9	13	1	0	0	0	0	0	0	0	0	0	28.8	35.6
1700	19	0	0	1	7	7	3	1	0	0	0	0	0	0	0	0	32.8	41
1800	15	1	2	2	5	5	0	0	0	0	0	0	0	0	0	0	26.5	34.8
1900	12	0	1	1	8	1	1	0	0	0	0	0	0	0	0	0	28.2	31.8
2000	7	1	0	2	1	3	0	0	0	0	0	0	0	0	0	0	26.5	-
2100	10	1	0	0	4	3	1	1	0	0	0	0	0	0	0	0	30.7	-
2200	9	0	0	0	5	2	1	1	0	0	0	0	0	0	0	0	32.5	-
2300	8	0	0	2	4	2	0	0	0	0	0	0	0	0	0	0	28.1	-
07-19	**286**	**5**	**16**	**30**	**100**	**103**	**28**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**30.1**	**35.8**
06-22	**319**	**7**	**18**	**35**	**114**	**110**	**30**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29.9**	**35.8**
06-00	**336**	**7**	**18**	**37**	**123**	**114**	**31**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29.9**	**35.7**
00-00	**343**	**8**	**19**	**38**	**125**	**116**	**31**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**29.8**	**35.7**

Northbound			Southbound		
85%ile s	34.60	mph	85%ile s	31.90	mph
	55.67	kph		51.33	kph
SSD=vt+v2/2d			SSD=vt+v2/2d		
where:			where:		
v = speed (m/s)			v = speed (m/s)		
t = driver reaction time (s)			t = driver reaction time (s)		
d = decelleration (m/s2)			d = decelleration (m/s2)		
1kph=	0.2778	m/s	1kph=	0.2778	m/s
v=	15.46		v=	14.26	
t=	1.5		t=	1.5	
d=	4.41		d=	4.41	
a=	0		a=	0	
vt=	23.2		vt=	21.4	
v2=	239.1		v2=	203.3	
2(d+0.1	8.8		2(d+0.1	8.8	
SSD=	50.3	m	SSD=	44.4	m
plus 2.4	52.7	inc bonet length	plus 2.4	46.8	inc bonet length

09 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16	-
0100	2	0	0	0	0	2	0	0	0	0	0	0	0	0	0	0	31.8	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	30.6	-
0600	2	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	36.7	-
0700	7	0	2	1	0	4	0	0	0	0	0	0	0	0	0	0	27.4	-
0800	8	0	0	0	3	3	2	0	0	0	0	0	0	0	0	0	33	-
0900	21	0	1	0	5	8	5	2	0	0	0	0	0	0	0	0	34.8	42.9
1000	38	0	4	7	16	9	2	0	0	0	0	0	0	0	0	0	27.8	32
1100	25	0	2	5	6	10	1	1	0	0	0	0	0	0	0	0	29.4	35.9
1200	25	1	0	1	13	6	1	0	1	1	1	0	0	0	0	0	32.6	41.6
1300	39	0	3	6	20	9	0	1	0	0	0	0	0	0	0	0	28.6	33.6
1400	25	1	0	1	11	6	5	1	0	0	0	0	0	0	0	0	31.1	38.6
1500	24	1	1	2	8	7	5	0	0	0	0	0	0	0	0	0	30.4	40.5
1600	22	0	0	2	8	7	4	0	1	0	0	0	0	0	0	0	32.5	40
1700	21	0	2	0	11	5	3	0	0	0	0	0	0	0	0	0	29.7	37.2
1800	14	0	1	2	4	6	0	1	0	0	0	0	0	0	0	0	30.4	34.2
1900	14	1	2	3	4	2	1	0	1	0	0	0	0	0	0	0	27.6	37.9
2000	9	1	1	0	4	3	0	0	0	0	0	0	0	0	0	0	26.6	-
2100	4	0	0	1	0	3	0	0	0	0	0	0	0	0	0	0	29.7	-
2200	3	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	18.5	-
2300	3	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	22.6	-
07-19	**269**	**3**	**16**	**27**	**105**	**80**	**28**	**6**	**2**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**30.4**	**37.2**
06-22	**298**	**5**	**19**	**31**	**113**	**89**	**30**	**6**	**3**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**30.2**	**37.1**
06-00	**304**	**6**	**21**	**32**	**115**	**89**	**30**	**6**	**3**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**30**	**37.1**
00-00	**309**	**6**	**22**	**32**	**117**	**91**	**30**	**6**	**3**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**30**	**37**

10 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	24	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12.1	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	8	1	0	0	4	2	1	0	0	0	0	0	0	0	0	0	28.2	-
0600	16	0	0	0	3	7	5	1	0	0	0	0	0	0	0	0	35.6	42.6
0700	61	2	2	2	19	27	9	0	0	0	0	0	0	0	0	0	31	37.5
0800	74	2	7	23	31	8	3	0	0	0	0	0	0	0	0	0	25.3	31.1
0900	53	0	3	12	23	13	2	0	0	0	0	0	0	0	0	0	27.2	32.8
1000	22	1	2	3	6	8	2	0	0	0	0	0	0	0	0	0	28	34.4
1100	36	1	4	5	23	2	1	0	0	0	0	0	0	0	0	0	26	30.2
1200	40	2	1	9	21	6	0	0	0	0	0	1	0	0	0	0	27.9	32.4
1300	32	3	5	5	10	7	1	1	0	0	0	0	0	0	0	0	25.8	35.5
1400	34	2	4	14	11	3	0	0	0	0	0	0	0	0	0	0	23.1	29.1
1500	78	4	18	23	24	7	2	0	0	0	0	0	0	0	0	0	22.8	29.3
1600	33	0	0	7	13	8	4	1	0	0	0	0	0	0	0	0	30	37.6
1700	24	1	1	4	12	3	2	1	0	0	0	0	0	0	0	0	27.7	37.7
1800	17	2	3	3	5	3	1	0	0	0	0	0	0	0	0	0	23.8	34.6
1900	19	1	1	2	6	5	4	0	0	0	0	0	0	0	0	0	30	38
2000	11	0	1	0	5	2	3	0	0	0	0	0	0	0	0	0	31.4	41.1
2100	4	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	19.5	-
2200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	**504**	**20**	**50**	**110**	**198**	**95**	**27**	**3**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**26.4**	**32.9**
06-22	**554**	**21**	**53**	**115**	**212**	**109**	**39**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**26.8**	**34**
06-00	**554**	**21**	**53**	**115**	**212**	**109**	**39**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**26.8**	**34**
00-00	**565**	**23**	**53**	**116**	**217**	**111**	**40**	**4**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**26.8**	**34**

11 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	2	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	19.8	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	7	0	0	1	3	1	1	1	0	0	0	0	0	0	0	0	32.8	-
0600	18	0	0	2	3	8	2	3	0	0	0	0	0	0	0	0	34.6	45.9
0700	53	0	2	2	23	18	7	1	0	0	0	0	0	0	0	0	31.4	37.4
0800	67	4	5	20	30	7	0	1	0	0	0	0	0	0	0	0	24.8	30.3
0900	53	2	3	10	26	10	2	0	0	0	0	0	0	0	0	0	27.1	32.3
1000	26	0	1	7	10	7	1	0	0	0	0	0	0	0	0	0	27.7	34.8
1100	28	2	5	2	17	0	1	0	0	1	0	0	0	0	0	0	25.4	30
1200	31	1	3	11	13	2	1	0	0	0	0	0	0	0	0	0	24.7	30.1
1300	38	3	4	11	12	7	1	0	0	0	0	0	0	0	0	0	25	33.5
1400	35	2	5	9	14	4	1	0	0	0	0	0	0	0	0	0	24.3	31.8
1500	64	5	9	26	19	5	0	0	0	0	0	0	0	0	0	0	22.5	29.3
1600	45	0	1	3	23	16	2	0	0	0	0	0	0	0	0	0	29.7	35.6
1700	26	0	1	8	7	8	1	0	0	1	0	0	0	0	0	0	29.9	35.9
1800	29	0	1	4	13	9	2	0	0	0	0	0	0	0	0	0	29.8	35.3
1900	15	0	0	2	7	3	3	0	0	0	0	0	0	0	0	0	30.5	37.7
2000	5	0	0	1	4	0	0	0	0	0	0	0	0	0	0	0	28.1	-
2100	11	0	3	0	7	1	0	0	0	0	0	0	0	0	0	0	25.9	30.9
2200	4	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	29	-
2300	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	35.6	-
07-19	**495**	**19**	**40**	**113**	**207**	**93**	**19**	**2**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**26.6**	**33**
06-22	**544**	**19**	**43**	**118**	**228**	**105**	**24**	**5**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**33.4**
06-00	**549**	**19**	**43**	**119**	**230**	**107**	**24**	**5**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**27**	**33.5**
00-00	**558**	**20**	**43**	**120**	**234**	**108**	**25**	**6**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**27.1**	**33.6**

12 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	34.6	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	5	0	0	0	2	1	1	1	0	0	0	0	0	0	0	0	35.8	-
0600	17	0	0	0	3	7	5	2	0	0	0	0	0	0	0	0	36.3	42.9
0700	53	1	1	7	19	18	7	0	0	0	0	0	0	0	0	0	30.2	37
0800	65	1	2	24	31	6	1	0	0	0	0	0	0	0	0	0	26	30.6
0900	41	0	1	7	20	11	2	0	0	0	0	0	0	0	0	0	28.7	34.4
1000	30	2	1	8	17	1	1	0	0	0	0	0	0	0	0	0	25.3	30.3
1100	34	0	2	7	13	10	2	0	0	0	0	0	0	0	0	0	28.6	34.9
1200	27	0	2	5	10	7	3	0	0	0	0	0	0	0	0	0	28.6	36.6
1300	31	1	1	4	15	8	2	0	0	0	0	0	0	0	0	0	28.8	34.9
1400	36	2	2	13	14	4	0	1	0	0	0	0	0	0	0	0	25.4	30.9
1500	74	4	4	25	30	10	1	0	0	0	0	0	0	0	0	0	25.4	31.1
1600	33	0	4	7	11	11	0	0	0	0	0	0	0	0	0	0	27	32.6
1700	27	0	0	2	14	7	4	0	0	0	0	0	0	0	0	0	31.1	37.1
1800	28	0	0	6	12	6	3	1	0	0	0	0	0	0	0	0	30	37.6
1900	18	1	3	3	7	1	3	0	0	0	0	0	0	0	0	0	26.4	37.4
2000	3	0	0	0	1	2	0	0	0	0	0	0	0	0	0	0	31	-
2100	3	0	1	0	1	0	0	1	0	0	0	0	0	0	0	0	30.7	-
2200	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	32.1	-
2300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
07-19	**479**	**11**	**20**	**115**	**206**	**99**	**26**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27.6**	**33.7**
06-22	**520**	**12**	**24**	**118**	**218**	**109**	**34**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27.9**	**34.1**
06-00	**521**	**12**	**24**	**118**	**218**	**110**	**34**	**5**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27.9**	**34.1**
00-00	**527**	**12**	**24**	**118**	**220**	**112**	**35**	**6**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	**34.2**

13 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	2	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	15.1	-
0300	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	21.4	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	3	0	1	0	1	0	1	0	0	0	0	0	0	0	0	0	27.1	-
0600	14	0	0	0	1	6	7	0	0	0	0	0	0	0	0	0	36.7	42.1
0700	50	1	2	5	14	21	7	0	0	0	0	0	0	0	0	0	30.6	37.3
0800	67	3	4	28	29	3	0	0	0	0	0	0	0	0	0	0	24	29.2
0900	50	0	1	9	30	9	1	0	0	0	0	0	0	0	0	0	28.1	32.2
1000	43	1	2	10	19	11	0	0	0	0	0	0	0	0	0	0	26.9	33.5
1100	18	1	2	3	7	4	1	0	0	0	0	0	0	0	0	0	26.8	32
1200	24	1	2	4	12	4	1	0	0	0	0	0	0	0	0	0	26.7	32.9
1300	34	1	1	7	17	7	0	1	0	0	0	0	0	0	0	0	28.1	33.3
1400	38	2	1	10	18	6	1	0	0	0	0	0	0	0	0	0	26	31.5
1500	57	1	4	22	22	7	0	1	0	0	0	0	0	0	0	0	25.4	30.8
1600	56	0	2	9	27	14	4	0	0	0	0	0	0	0	0	0	29.3	34.4
1700	26	0	3	2	12	8	1	0	0	0	0	0	0	0	0	0	28.4	34.4
1800	24	0	1	3	9	6	5	0	0	0	0	0	0	0	0	0	30.7	38.1
1900	13	0	0	1	5	5	2	0	0	0	0	0	0	0	0	0	30.4	37.8
2000	9	0	2	0	4	2	0	1	0	0	0	0	0	0	0	0	27.8	-
2100	4	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	28.1	-
2200	5	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	31.5	-
2300	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	28.2	-
07-19	**487**	**11**	**25**	**112**	**216**	**100**	**21**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27.4**	**33.2**
06-22	**527**	**11**	**27**	**114**	**228**	**114**	**30**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27.7**	**33.7**
06-00	**534**	**11**	**27**	**115**	**232**	**115**	**31**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27.7**	**33.7**
00-00	**540**	**12**	**28**	**117**	**233**	**115**	**32**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27.7**	**33.7**

14 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	74.1	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	27.9	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	2	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	26.7	-
0600	17	0	0	1	2	9	4	1	0	0	0	0	0	0	0	0	34.9	40
0700	30	1	1	0	8	14	5	1	0	0	0	0	0	0	0	0	32.7	38.2
0800	64	3	8	27	19	6	1	0	0	0	0	0	0	0	0	0	23.4	29.1
0900	57	0	4	12	31	9	1	0	0	0	0	0	0	0	0	0	26.7	31.8
1000	40	0	5	7	19	7	0	2	0	0	0	0	0	0	0	0	27.6	32.8
1100	31	1	2	5	20	3	0	0	0	0	0	0	0	0	0	0	26	30.5
1200	46	3	3	12	17	10	1	0	0	0	0	0	0	0	0	0	25.7	32.5
1300	29	1	0	3	13	11	0	1	0	0	0	0	0	0	0	0	30	35.2
1400	30	0	5	7	15	3	0	0	0	0	0	0	0	0	0	0	25.1	28.9
1500	87	3	4	41	27	10	1	1	0	0	0	0	0	0	0	0	25.1	31
1600	42	1	3	3	9	17	7	1	1	0	0	0	0	0	0	0	32.1	37.9
1700	33	2	1	5	9	12	3	1	0	0	0	0	0	0	0	0	29.7	36.4
1800	28	1	4	1	9	7	4	1	0	0	0	0	0	1	0	0	31.4	40.9
1900	23	1	0	1	10	5	6	0	0	0	0	0	0	0	0	0	31.4	40.4
2000	16	2	2	0	8	2	2	0	0	0	0	0	0	0	0	0	25.6	34.5
2100	6	0	0	1	1	4	0	0	0	0	0	0	0	0	0	0	30.9	-
2200	6	0	0	0	5	1	0	0	0	0	0	0	0	0	0	0	29.5	-
2300	7	0	0	1	4	2	0	0	0	0	0	0	0	0	0	0	28.2	-
07-19	**517**	**16**	**40**	**123**	**196**	**109**	**23**	**8**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**27.3**	**34.3**
06-22	**579**	**19**	**42**	**126**	**217**	**129**	**35**	**9**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**27.7**	**34.8**
06-00	**592**	**19**	**42**	**127**	**226**	**132**	**35**	**9**	**1**	**0**	**0**	**0**	**0**	**1**	**0**	**0**	**27.7**	**34.8**
00-00	**596**	**19**	**42**	**128**	**227**	**133**	**35**	**9**	**1**	**0**	**0**	**1**	**0**	**1**	**0**	**0**	**27.8**	**34.8**

Grand Total

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
--	**3438**	**100**	**231**	**669**	**1373**	**786**	**228**	**40**	**4**	**3**	**1**	**2**	**0**	**1**	**0**	**0**	**27.9**	**34.6**

K&MTRAFFIC SURVEYS

SITE: DOWNS ROAD LOCATION: Attached to parking restriction sign

GRID REFERENCE: 51.402457, 0.348516 DIRECTION: NORTHBOUND SPEED LIMIT:30

	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Averages	
	08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	1-5.	1-7.
Hour									
0000-0100	3	1	0	0	0	0	1	0.2	0.7
0100-0200	0	2	2	0	1	0	0	0.6	0.7
0200-0300	1	0	0	0	0	2	0	0.4	0.4
0300-0400	2	0	1	2	0	1	1	1	1
0400-0500	0	0	0	0	0	0	0	0	0
0500-0600	1	2	8	7	5	3	2	5	4
0600-0700	4	2	16	18	17	14	17	16.4	12.6
0700-0800	7	7	61	53	53	50	30	49.4	37.3
0800-0900	13	8	74	67	65	67	64	67.4	51.1
0900-1000	30	21	53	53	41	50	57	50.8	43.6
1000-1100	30	38	22	26	30	43	40	32.2	32.7
1100-1200	46	25	36	28	34	18	31	29.4	31.1
1200-1300	23	25	40	31	27	24	46	33.6	30.9
1300-1400	26	39	32	38	31	34	29	32.8	32.7
1400-1500	29	25	34	35	36	38	30	34.6	32.4
1500-1600	18	24	78	64	74	57	87	72	57.4
1600-1700	30	22	33	45	33	56	42	41.8	37.3
1700-1800	19	21	24	26	27	26	33	27.2	25.1
1800-1900	15	14	17	29	28	24	28	25.2	22.1
1900-2000	12	14	19	15	18	13	23	17.6	16.3
2000-2100	7	9	11	5	3	9	16	8.8	8.6
2100-2200	10	4	4	11	3	4	6	5.6	6
2200-2300	9	3	0	4	1	5	6	3.2	4
2300-2400	8	3	0	1	0	2	7	2	3
Totals									
0700-1900	286	269	504	495	479	487	517	496.4	433.9
0600-2200	319	298	554	544	520	527	579	544.8	477.3
0600-0000	336	304	554	549	521	534	592	550	484.3
0000-0000	343	309	565	558	527	540	596	557.2	491.1
AM Peak	1100	1000	800	800	800	800	800		
	46	38	74	67	65	67	64		
PM Peak	1600	1300	1500	1500	1500	1500	1500		
	30	39	78	64	74	57	87		

K&MTRAFFIC SURVEYS

SITE: DOWNS ROAD LOCATION: Attached to parking restriction sign

GRID REFERENCE: 51.402457, 0.348516 DIRECTION: SOUTHBOUND SPEED LIMIT:30

08 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	28.3	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	28.6	-
0400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	35.8	-
0500	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	34.3	-
0600	6	5	0	1	0	0	0	0	0	0	0	0	0	0	0	25	-
0700	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	29.8	-
0800	13	9	0	3	0	0	0	0	0	0	0	0	0	0	1	26.3	33.9
0900	32	25	0	4	0	0	0	0	0	0	0	0	0	0	3	25	31.5
1000	32	27	0	3	0	0	0	0	0	0	0	0	0	1	1	26.2	34.1
1100	37	34	0	3	0	0	0	0	0	0	0	0	0	0	0	29	36.3
1200	35	31	0	3	1	0	0	0	0	0	0	0	0	0	0	28.2	35.1
1300	36	34	0	1	0	1	0	0	0	0	0	0	0	0	0	30	34.3
1400	35	30	0	3	0	0	0	0	0	0	0	0	0	2	0	27.2	32.9
1500	32	30	0	1	0	0	0	0	0	0	0	0	0	1	0	27.5	34
1600	23	21	0	1	0	0	0	0	0	0	0	0	0	1	0	30.3	37.7
1700	29	24	0	1	0	0	0	0	0	0	0	0	0	2	2	28.1	35.4
1800	16	14	0	2	0	0	0	0	0	0	0	0	0	0	0	28.7	35.8
1900	19	18	0	1	0	0	0	0	0	0	0	0	0	0	0	28.7	36.1
2000	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	28.1	-
2100	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	34.4	-
2200	8	7	0	1	0	0	0	0	0	0	0	0	0	0	0	25.4	-
2300	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	31.5	-
07-19	**326**	**285**	**0**	**25**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**7**	**27.9**	**34.1**
06-22	**371**	**328**	**0**	**27**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**7**	**28.1**	**34.3**
06-00	**384**	**340**	**0**	**28**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**7**	**28.1**	**34.2**
00-00	**391**	**347**	**0**	**28**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**7**	**7**	**28.2**	**34.4**

09 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	29	-
0100	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	26.1	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	27.8	-
0800	16	13	0	2	0	0	0	0	0	0	0	0	0	0	1	25.7	33.5
0900	21	20	0	1	0	0	0	0	0	0	0	0	0	0	0	26.8	35
1000	34	28	0	2	1	2	0	0	0	0	0	0	0	1	0	25.9	33.7
1100	43	41	0	1	0	0	0	0	0	0	0	0	0	0	1	28.4	35.7
1200	42	38	1	1	0	0	0	0	0	0	0	0	0	1	1	26.8	32.4
1300	20	17	0	2	0	0	0	0	0	0	0	0	0	1	0	31.7	40.3
1400	27	27	0	0	0	0	0	0	0	0	0	0	0	0	0	29.4	32.8
1500	28	28	0	0	0	0	0	0	0	0	0	0	0	0	0	28.2	34.3
1600	25	23	0	2	0	0	0	0	0	0	0	0	0	0	0	29	34.8
1700	19	14	0	1	0	0	0	0	0	0	0	0	0	3	1	32.2	46.4
1800	24	23	0	1	0	0	0	0	0	0	0	0	0	0	0	27.4	33
1900	16	14	0	1	0	0	0	0	0	0	0	0	0	0	1	25.6	33.8
2000	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	27.8	-
2100	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	25.8	-
2200	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	37.7	-
2300	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	24.9	-
07-19	**302**	**275**	**1**	**13**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**4**	**28.1**	**34.6**
06-22	**331**	**302**	**1**	**14**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**5**	**28**	**34.5**
06-00	**338**	**309**	**1**	**14**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**5**	**28**	**34.5**
00-00	**345**	**316**	**1**	**14**	**1**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**6**	**5**	**28**	**34.5**

10 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15.4	-
0100	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.3	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	31.6	-
0700	34	29	0	4	1	0	0	0	0	0	0	0	0	0	0	26.6	34.2
0800	112	106	0	4	2	0	0	0	0	0	0	0	0	0	0	20	26.5
0900	37	32	0	4	0	0	0	0	0	0	0	0	0	0	1	22.4	29.1
1000	25	21	0	3	0	0	0	0	0	0	0	0	0	0	1	25.8	30.3
1100	40	36	0	4	0	0	0	0	0	0	0	0	0	0	0	24.5	29.9
1200	43	40	0	3	0	0	0	0	0	0	0	0	0	0	0	25.7	31
1300	32	30	0	2	0	0	0	0	0	0	0	0	0	0	0	25.1	32.1
1400	76	73	0	2	0	0	0	0	0	0	0	0	0	0	1	21.9	28.2
1500	70	68	0	2	0	0	0	0	0	0	0	0	0	0	0	21.3	28.6
1600	55	51	0	4	0	0	0	0	0	0	0	0	0	0	0	26.3	30.5
1700	36	35	0	1	0	0	0	0	0	0	0	0	0	0	0	26.9	30.6
1800	20	17	0	3	0	0	0	0	0	0	0	0	0	0	0	28.2	36
1900	10	9	0	1	0	0	0	0	0	0	0	0	0	0	0	25.6	-
2000	8	8	0	0	0	0	0	0	0	0	0	0	0	0	0	31	-
2100	5	4	0	1	0	0	0	0	0	0	0	0	0	0	0	20.1	-
2200	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	28.6	-
2300	4	3	0	1	0	0	0	0	0	0	0	0	0	0	0	27	-
07-19	**580**	**538**	**0**	**36**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**23.5**	**29.5**
06-22	**610**	**566**	**0**	**38**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**23.7**	**30**
06-00	**615**	**570**	**0**	**39**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**23.8**	**30.1**
00-00	**617**	**572**	**0**	**39**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**23.7**	**30.1**

11 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	10.6	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	35.6	-
0600	10	7	0	3	0	0	0	0	0	0	0	0	0	0	0	28.9	-
0700	40	34	0	4	1	0	0	0	0	0	0	0	0	1	0	28.4	32.2
0800	100	95	0	5	0	0	0	0	0	0	0	0	0	0	0	21.5	28.3
0900	39	33	0	6	0	0	0	0	0	0	0	0	0	0	0	23.2	31.9
1000	23	19	0	4	0	0	0	0	0	0	0	0	0	0	0	24.1	29.7
1100	29	28	0	0	0	0	0	0	0	0	0	0	0	0	1	22.7	30.1
1200	54	49	0	4	0	0	0	0	0	0	0	0	0	1	0	23.7	31.3
1300	27	24	0	2	0	0	0	1	0	0	0	0	0	0	0	21.9	28.6
1400	72	66	0	3	1	0	1	0	0	0	0	0	0	0	1	22	28.1
1500	65	62	0	1	2	0	0	0	0	0	0	0	0	0	0	21.9	30.7
1600	47	45	0	2	0	0	0	0	0	0	0	0	0	0	0	25.5	32.1
1700	45	38	0	6	0	0	0	0	0	0	0	0	0	0	1	27.8	32.5
1800	21	20	0	1	0	0	0	0	0	0	0	0	0	0	0	27	33.4
1900	19	17	0	1	0	0	0	0	0	0	0	0	0	1	0	26.9	30.3
2000	10	9	0	1	0	0	0	0	0	0	0	0	0	0	0	25.9	-
2100	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	31.7	44.4
2200	4	4	0	0	0	0	0	0	0	0	0	0	0	0	0	27.8	-
2300	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	30.6	-
07-19	**562**	**513**	**0**	**38**	**4**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**2**	**3**	**23.7**	**30.7**
06-22	**613**	**558**	**0**	**43**	**4**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**3**	**24**	**30.8**
06-00	**619**	**564**	**0**	**43**	**4**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**3**	**24.1**	**30.9**
00-00	**623**	**568**	**0**	**43**	**4**	**0**	**1**	**1**	**0**	**0**	**0**	**0**	**0**	**3**	**3**	**24.1**	**30.9**

12 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	35	-
0200	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12.6	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	5	4	0	0	0	0	0	0	0	0	0	0	0	1	0	32.6	-
0600	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	30.3	-
0700	49	45	0	3	0	1	0	0	0	0	0	0	0	0	0	27	32.7
0800	104	100	0	2	2	0	0	0	0	0	0	0	0	0	0	20.1	27.3
0900	44	40	0	4	0	0	0	0	0	0	0	0	0	0	0	24.7	30.2
1000	37	32	0	5	0	0	0	0	0	0	0	0	0	0	0	26.3	30.7
1100	36	33	0	3	0	0	0	0	0	0	0	0	0	0	0	25.4	30.8
1200	32	29	0	2	0	0	0	0	0	0	0	0	0	1	0	25	32.9
1300	40	36	0	3	0	0	0	0	0	0	0	0	0	1	0	26.4	32.1
1400	74	72	0	1	1	0	0	0	0	0	0	0	0	0	0	24.2	29.8
1500	65	61	0	4	0	0	0	0	0	0	0	0	0	0	0	23.1	28.9
1600	45	41	0	4	0	0	0	0	0	0	0	0	0	0	0	26.8	31.7
1700	40	38	0	2	0	0	0	0	0	0	0	0	0	0	0	28.6	32
1800	37	33	0	3	0	0	0	0	0	0	0	0	0	0	1	26.6	33.9
1900	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	28.5	35.6
2000	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	30.9	-
2100	12	12	0	0	0	0	0	0	0	0	0	0	0	0	0	27	32.9
2200	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	28	-
2300	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	19.7	-
07-19	**603**	**560**	**0**	**36**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**24.7**	**30.8**
06-22	**645**	**602**	**0**	**36**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**24.9**	**31**
06-00	**649**	**606**	**0**	**36**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**	**1**	**24.9**	**31**
00-00	**656**	**612**	**0**	**36**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**25**	**31**

13 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	24.1	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	9.3	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	2	1	0	0	0	0	0	0	0	0	0	0	0	1	0	30	-
0600	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	25.4	-
0700	41	38	0	2	0	0	0	0	0	0	0	0	0	1	0	28.6	34.2
0800	109	106	0	2	1	0	0	0	0	0	0	0	0	0	0	22.1	28.3
0900	32	30	0	2	0	0	0	0	0	0	0	0	0	0	0	22.7	26.3
1000	39	32	0	6	0	0	0	0	0	0	0	0	0	0	1	25	33.6
1100	37	36	0	1	0	0	0	0	0	0	0	0	0	0	0	26	31.1
1200	58	51	0	5	0	0	0	0	0	0	0	0	0	2	0	26	30.7
1300	36	33	0	3	0	0	0	0	0	0	0	0	0	0	0	27.6	33.4
1400	80	78	0	2	0	0	0	0	0	0	0	0	0	0	0	21.9	26.8
1500	76	73	0	1	1	0	1	0	0	0	0	0	0	0	0	24.2	31
1600	59	57	0	2	0	0	0	0	0	0	0	0	0	0	0	28.3	33.3
1700	36	33	0	3	0	0	0	0	0	0	0	0	0	0	0	27.1	32.9
1800	24	24	0	0	0	0	0	0	0	0	0	0	0	0	0	26.4	35.9
1900	17	17	0	0	0	0	0	0	0	0	0	0	0	0	0	27.1	33.3
2000	10	10	0	0	0	0	0	0	0	0	0	0	0	0	0	28.7	-
2100	8	6	0	2	0	0	0	0	0	0	0	0	0	0	0	29	-
2200	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	21.4	-
2300	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	42.4	-
07-19	**627**	**591**	**0**	**29**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**24.9**	**31.4**
06-22	**665**	**627**	**0**	**31**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**25.1**	**31.4**
06-00	**669**	**631**	**0**	**31**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**3**	**1**	**25.1**	**31.5**
00-00	**673**	**634**	**0**	**31**	**2**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**4**	**1**	**25.1**	**31.5**

14 March 2025

Time [--	Total	Cls 1	Cls 2	Cls 3	Cls 4	Cls 5	Cls 6	Cls 7	Cls 8	Cls 9	Cls 10	Cls 11	Cls 12	Cls 14	Cls 15	Mean	Vpp 85
0000	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	8.8	-
0400	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	32.6	-
0500	3	3	0	0	0	0	0	0	0	0	0	0	0	0	0	34.5	-
0600	7	5	0	1	1	0	0	0	0	0	0	0	0	0	0	21.6	-
0700	28	27	0	1	0	0	0	0	0	0	0	0	0	0	0	28.1	31.6
0800	98	94	0	4	0	0	0	0	0	0	0	0	0	0	0	22.8	28.3
0900	36	32	0	4	0	0	0	0	0	0	0	0	0	0	0	23.7	29.8
1000	32	23	0	5	2	0	0	0	0	0	0	0	0	1	1	23.3	29.1
1100	44	40	0	3	0	0	0	0	0	0	0	0	0	0	1	24.9	32
1200	39	35	0	3	0	0	0	0	0	0	0	0	0	0	1	25.2	31
1300	42	36	0	5	0	1	0	0	0	0	0	0	0	0	0	25.2	32
1400	64	62	0	2	0	0	0	0	0	0	0	0	0	0	0	24	30.8
1500	65	61	1	2	0	0	0	0	0	0	0	0	0	0	1	21.3	28.4
1600	52	51	0	1	0	0	0	0	0	0	0	0	0	0	0	27.4	33.2
1700	36	34	0	2	0	0	0	0	0	0	0	0	0	0	0	27.2	32.9
1800	43	40	0	2	0	0	0	0	0	0	0	0	0	0	1	27.8	34.9
1900	27	27	0	0	0	0	0	0	0	0	0	0	0	0	0	28.9	36.9
2000	17	16	0	1	0	0	0	0	0	0	0	0	0	0	0	25.2	33.7
2100	18	17	0	1	0	0	0	0	0	0	0	0	0	0	0	31.2	38.2
2200	7	7	0	0	0	0	0	0	0	0	0	0	0	0	0	29.1	-
2300	6	6	0	0	0	0	0	0	0	0	0	0	0	0	0	31.2	-
07-19	**579**	**535**	**1**	**34**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**24.7**	**30.9**
06-22	**648**	**600**	**1**	**37**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**25**	**31.4**
06-00	**661**	**613**	**1**	**37**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**25.1**	**31.4**
00-00	**667**	**619**	**1**	**37**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**1**	**5**	**25.1**	**31.5**

K&MTRAFFIC SURVEYS

SITE: DOWNS ROAD LOCATION: Attached to parking restriction sign

GRID REFERENCE: 51.402457, 0.348516 DIRECTION: SOUTHBOUND SPEED LIMIT:30

08 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	28.3	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	28.6	-
0400	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	35.8	-
0500	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	34.3	-
0600	6	0	1	1	4	0	0	0	0	0	0	0	0	0	0	0	25	-
0700	6	0	0	2	2	1	1	0	0	0	0	0	0	0	0	0	29.8	-
0800	13	1	1	3	3	4	1	0	0	0	0	0	0	0	0	0	26.3	33.9
0900	32	3	2	7	15	5	0	0	0	0	0	0	0	0	0	0	25	31.5
1000	32	2	3	6	10	11	0	0	0	0	0	0	0	0	0	0	26.2	34.1
1100	37	0	1	7	15	12	2	0	0	0	0	0	0	0	0	0	29	36.3
1200	35	1	1	8	13	10	2	0	0	0	0	0	0	0	0	0	28.2	35.1
1300	36	1	0	5	10	18	2	0	0	0	0	0	0	0	0	0	30	34.3
1400	35	0	2	8	18	5	2	0	0	0	0	0	0	0	0	0	27.2	32.9
1500	32	0	4	6	11	9	2	0	0	0	0	0	0	0	0	0	27.5	34
1600	23	0	1	4	8	7	3	0	0	0	0	0	0	0	0	0	30.3	37.7
1700	29	2	2	3	16	2	4	0	0	0	0	0	0	0	0	0	28.1	35.4
1800	16	0	1	4	6	4	0	1	0	0	0	0	0	0	0	0	28.7	35.8
1900	19	0	1	2	11	4	0	1	0	0	0	0	0	0	0	0	28.7	36.1
2000	10	0	2	1	3	3	1	0	0	0	0	0	0	0	0	0	28.1	-
2100	10	0	0	0	3	5	0	1	1	0	0	0	0	0	0	0	34.4	-
2200	8	0	2	2	1	3	0	0	0	0	0	0	0	0	0	0	25.4	-
2300	5	0	0	0	4	0	1	0	0	0	0	0	0	0	0	0	31.5	-
07-19	**326**	**10**	**18**	**63**	**127**	**88**	**19**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**27.9**	**34.1**
06-22	**371**	**10**	**22**	**67**	**148**	**100**	**20**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**28.1**	**34.3**
06-00	**384**	**10**	**24**	**69**	**153**	**103**	**21**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**28.1**	**34.2**
00-00	**391**	**10**	**24**	**69**	**156**	**107**	**21**	**3**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**28.2**	**34.4**

09 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	5	0	1	0	2	2	0	0	0	0	0	0	0	0	0	0	29	-
0100	2	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	26.1	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0700	3	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	27.8	-
0800	16	1	3	2	7	2	1	0	0	0	0	0	0	0	0	0	25.7	33.5
0900	21	1	1	5	9	4	1	0	0	0	0	0	0	0	0	0	26.8	35
1000	34	4	1	6	16	7	0	0	0	0	0	0	0	0	0	0	25.9	33.7
1100	43	2	1	7	19	10	3	1	0	0	0	0	0	0	0	0	28.4	35.7
1200	42	1	3	8	19	11	0	0	0	0	0	0	0	0	0	0	26.8	32.4
1300	20	0	1	2	9	2	4	1	1	0	0	0	0	0	0	0	31.7	40.3
1400	27	0	0	0	20	5	2	0	0	0	0	0	0	0	0	0	29.4	32.8
1500	28	1	2	4	11	9	1	0	0	0	0	0	0	0	0	0	28.2	34.3
1600	25	0	1	3	12	6	3	0	0	0	0	0	0	0	0	0	29	34.8
1700	19	1	0	2	9	1	3	1	1	1	0	0	0	0	0	0	32.2	46.4
1800	24	0	0	12	5	6	1	0	0	0	0	0	0	0	0	0	27.4	33
1900	16	1	3	2	7	3	0	0	0	0	0	0	0	0	0	0	25.6	33.8
2000	7	0	1	1	3	1	1	0	0	0	0	0	0	0	0	0	27.8	-
2100	6	1	1	0	3	0	1	0	0	0	0	0	0	0	0	0	25.8	-
2200	3	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	37.7	-
2300	4	1	0	1	1	1	0	0	0	0	0	0	0	0	0	0	24.9	-
07-19	**302**	**11**	**13**	**51**	**139**	**63**	**19**	**3**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**28.1**	**34.6**
06-22	**331**	**13**	**18**	**54**	**152**	**67**	**21**	**3**	**2**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	**34.5**
06-00	**338**	**14**	**18**	**56**	**154**	**68**	**21**	**3**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	**34.5**
00-00	**345**	**14**	**19**	**57**	**157**	**70**	**21**	**3**	**2**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**28**	**34.5**

10 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	15.4	-
0100	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	16.3	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0600	7	0	0	1	2	2	2	0	0	0	0	0	0	0	0	0	31.6	-
0700	34	2	2	7	13	10	0	0	0	0	0	0	0	0	0	0	26.6	34.2
0800	112	13	39	34	21	4	1	0	0	0	0	0	0	0	0	0	20	26.5
0900	37	3	6	15	11	2	0	0	0	0	0	0	0	0	0	0	22.4	29.1
1000	25	0	1	8	15	1	0	0	0	0	0	0	0	0	0	0	25.8	30.3
1100	40	2	3	19	11	4	1	0	0	0	0	0	0	0	0	0	24.5	29.9
1200	43	0	3	18	16	5	0	0	0	0	1	0	0	0	0	0	25.7	31
1300	32	3	2	6	15	6	0	0	0	0	0	0	0	0	0	0	25.1	32.1
1400	76	8	11	31	23	3	0	0	0	0	0	0	0	0	0	0	21.9	28.2
1500	70	6	17	27	16	3	1	0	0	0	0	0	0	0	0	0	21.3	28.6
1600	55	1	3	12	33	5	1	0	0	0	0	0	0	0	0	0	26.3	30.5
1700	36	0	2	6	24	4	0	0	0	0	0	0	0	0	0	0	26.9	30.6
1800	20	0	0	7	7	4	2	0	0	0	0	0	0	0	0	0	28.2	36
1900	10	0	1	5	1	2	1	0	0	0	0	0	0	0	0	0	25.6	-
2000	8	0	0	1	3	3	0	1	0	0	0	0	0	0	0	0	31	-
2100	5	0	3	1	1	0	0	0	0	0	0	0	0	0	0	0	20.1	-
2200	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	28.6	-
2300	4	0	1	0	2	1	0	0	0	0	0	0	0	0	0	0	27	-
07-19	**580**	**38**	**89**	**190**	**205**	**51**	**6**	**0**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**23.5**	**29.5**
06-22	**610**	**38**	**93**	**198**	**212**	**58**	**9**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**23.7**	**30**
06-00	**615**	**38**	**94**	**198**	**215**	**59**	**9**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**23.8**	**30.1**
00-00	**617**	**38**	**96**	**198**	**215**	**59**	**9**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**23.7**	**30.1**

11 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	10.6	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	3	0	0	0	0	3	0	0	0	0	0	0	0	0	0	0	35.6	-
0600	10	0	1	2	3	3	0	1	0	0	0	0	0	0	0	0	28.9	-
0700	40	0	1	7	20	12	0	0	0	0	0	0	0	0	0	0	28.4	32.2
0800	100	9	27	32	27	4	1	0	0	0	0	0	0	0	0	0	21.5	28.3
0900	39	4	8	9	12	6	0	0	0	0	0	0	0	0	0	0	23.2	31.9
1000	23	3	1	7	10	2	0	0	0	0	0	0	0	0	0	0	24.1	29.7
1100	29	4	4	8	11	2	0	0	0	0	0	0	0	0	0	0	22.7	30.1
1200	54	3	12	15	16	6	2	0	0	0	0	0	0	0	0	0	23.7	31.3
1300	27	1	9	7	8	2	0	0	0	0	0	0	0	0	0	0	21.9	28.6
1400	72	7	14	27	18	6	0	0	0	0	0	0	0	0	0	0	22	28.1
1500	65	8	14	20	16	7	0	0	0	0	0	0	0	0	0	0	21.9	30.7
1600	47	2	1	16	20	7	1	0	0	0	0	0	0	0	0	0	25.5	32.1
1700	45	0	2	9	23	9	2	0	0	0	0	0	0	0	0	0	27.8	32.5
1800	21	1	2	2	11	4	1	0	0	0	0	0	0	0	0	0	27	33.4
1900	19	0	0	5	13	1	0	0	0	0	0	0	0	0	0	0	26.9	30.3
2000	10	0	1	2	6	1	0	0	0	0	0	0	0	0	0	0	25.9	-
2100	12	0	1	0	5	4	0	2	0	0	0	0	0	0	0	0	31.7	44.4
2200	4	0	0	1	2	1	0	0	0	0	0	0	0	0	0	0	27.8	-
2300	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	30.6	-
07-19	**562**	**42**	**95**	**159**	**192**	**67**	**7**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**23.7**	**30.7**
06-22	**613**	**42**	**98**	**168**	**219**	**76**	**7**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24**	**30.8**
06-00	**619**	**42**	**98**	**169**	**222**	**78**	**7**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24.1**	**30.9**
00-00	**623**	**43**	**98**	**169**	**222**	**81**	**7**	**3**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24.1**	**30.9**

12 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0100	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	35	-
0200	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	12.6	-
0300	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	5	0	0	0	2	2	1	0	0	0	0	0	0	0	0	0	32.6	-
0600	5	0	0	1	2	1	1	0	0	0	0	0	0	0	0	0	30.3	-
0700	49	1	2	9	28	9	0	0	0	0	0	0	0	0	0	0	27	32.7
0800	104	10	35	34	19	6	0	0	0	0	0	0	0	0	0	0	20.1	27.3
0900	44	2	4	15	18	5	0	0	0	0	0	0	0	0	0	0	24.7	30.2
1000	37	2	1	8	22	3	0	1	0	0	0	0	0	0	0	0	26.3	30.7
1100	36	0	5	9	17	5	0	0	0	0	0	0	0	0	0	0	25.4	30.8
1200	32	2	4	10	10	3	3	0	0	0	0	0	0	0	0	0	25	32.9
1300	40	1	2	11	19	7	0	0	0	0	0	0	0	0	0	0	26.4	32.1
1400	74	2	10	29	30	2	0	1	0	0	0	0	0	0	0	0	24.2	29.8
1500	65	4	9	28	17	6	1	0	0	0	0	0	0	0	0	0	23.1	28.9
1600	45	0	2	14	20	8	1	0	0	0	0	0	0	0	0	0	26.8	31.7
1700	40	1	1	8	23	4	1	1	1	0	0	0	0	0	0	0	28.6	32
1800	37	0	3	13	13	4	3	1	0	0	0	0	0	0	0	0	26.6	33.9
1900	18	0	1	4	6	6	1	0	0	0	0	0	0	0	0	0	28.5	35.6
2000	7	0	0	1	3	1	2	0	0	0	0	0	0	0	0	0	30.9	-
2100	12	0	1	3	6	1	1	0	0	0	0	0	0	0	0	0	27	32.9
2200	2	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	28	-
2300	2	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	19.7	-
07-19	**603**	**25**	**78**	**188**	**236**	**62**	**9**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24.7**	**30.8**
06-22	**645**	**25**	**80**	**197**	**253**	**71**	**14**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24.9**	**31**
06-00	**649**	**25**	**81**	**198**	**255**	**71**	**14**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24.9**	**31**
00-00	**656**	**25**	**82**	**198**	**257**	**74**	**15**	**4**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**31**

13 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	24.1	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9.3	-
0400	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0500	2	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	30	-
0600	3	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	25.4	-
0700	41	1	1	5	22	11	1	0	0	0	0	0	0	0	0	0	28.6	34.2
0800	109	2	26	47	29	4	1	0	0	0	0	0	0	0	0	0	22.1	28.3
0900	32	2	3	19	7	1	0	0	0	0	0	0	0	0	0	0	22.7	26.3
1000	39	2	4	11	15	6	1	0	0	0	0	0	0	0	0	0	25	33.6
1100	37	0	4	8	20	5	0	0	0	0	0	0	0	0	0	0	26	31.1
1200	58	0	5	16	29	8	0	0	0	0	0	0	0	0	0	0	26	30.7
1300	36	2	1	3	19	10	1	0	0	0	0	0	0	0	0	0	27.6	33.4
1400	80	7	12	40	17	3	1	0	0	0	0	0	0	0	0	0	21.9	26.8
1500	76	2	18	21	24	8	3	0	0	0	0	0	0	0	0	0	24.2	31
1600	59	1	3	9	29	15	1	1	0	0	0	0	0	0	0	0	28.3	33.3
1700	36	0	3	10	14	7	2	0	0	0	0	0	0	0	0	0	27.1	32.9
1800	24	1	3	7	4	9	0	0	0	0	0	0	0	0	0	0	26.4	35.9
1900	17	0	0	6	7	4	0	0	0	0	0	0	0	0	0	0	27.1	33.3
2000	10	0	2	2	2	2	2	0	0	0	0	0	0	0	0	0	28.7	-
2100	8	0	1	1	3	2	1	0	0	0	0	0	0	0	0	0	29	-
2200	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	21.4	-
2300	3	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	42.4	-
07-19	**627**	**20**	**83**	**196**	**229**	**87**	**11**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24.9**	**31.4**
06-22	**665**	**20**	**86**	**206**	**243**	**95**	**14**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**25.1**	**31.4**
06-00	**669**	**20**	**86**	**207**	**244**	**96**	**14**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**25.1**	**31.5**
00-00	**673**	**21**	**86**	**208**	**245**	**97**	**14**	**1**	**0**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**25.1**	**31.5**

14 March 2025

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
0000	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	17	-
0100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0200	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	-
0300	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8.8	-
0400	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	32.6	-
0500	3	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	34.5	-
0600	7	0	1	5	1	0	0	0	0	0	0	0	0	0	0	0	21.6	-
0700	28	0	0	8	12	7	1	0	0	0	0	0	0	0	0	0	28.1	31.6
0800	98	3	20	33	38	3	1	0	0	0	0	0	0	0	0	0	22.8	28.3
0900	36	1	6	14	12	3	0	0	0	0	0	0	0	0	0	0	23.7	29.8
1000	32	1	7	7	16	1	0	0	0	0	0	0	0	0	0	0	23.3	29.1
1100	44	4	5	13	15	6	0	1	0	0	0	0	0	0	0	0	24.9	32
1200	39	2	1	13	19	4	0	0	0	0	0	0	0	0	0	0	25.2	31
1300	42	3	6	6	20	6	1	0	0	0	0	0	0	0	0	0	25.2	32
1400	64	2	10	22	23	7	0	0	0	0	0	0	0	0	0	0	24	30.8
1500	65	6	19	21	13	3	2	1	0	0	0	0	0	0	0	0	21.3	28.4
1600	52	1	4	9	24	12	2	0	0	0	0	0	0	0	0	0	27.4	33.2
1700	36	1	3	5	18	9	0	0	0	0	0	0	0	0	0	0	27.2	32.9
1800	43	0	3	11	19	6	2	2	0	0	0	0	0	0	0	0	27.8	34.9
1900	27	1	2	4	10	7	2	1	0	0	0	0	0	0	0	0	28.9	36.9
2000	17	2	1	2	7	5	0	0	0	0	0	0	0	0	0	0	25.2	33.7
2100	18	0	1	2	8	4	2	0	0	1	0	0	0	0	0	0	31.2	38.2
2200	7	0	0	1	3	3	0	0	0	0	0	0	0	0	0	0	29.1	-
2300	6	0	0	1	2	2	0	1	0	0	0	0	0	0	0	0	31.2	-
07-19	**579**	**24**	**84**	**162**	**229**	**67**	**9**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**24.7**	**30.9**
06-22	**648**	**27**	**89**	**175**	**255**	**83**	**13**	**5**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**25**	**31.4**
06-00	**661**	**27**	**89**	**177**	**260**	**88**	**13**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**25.1**	**31.4**
00-00	**667**	**28**	**90**	**177**	**261**	**90**	**14**	**6**	**0**	**1**	**0**	**0**	**0**	**0**	**0**	**0**	**25.1**	**31.5**

Grand Total

Time [--	Total	Vbin 6 12	Vbin 12 19	Vbin 19 25	Vbin 25 31	Vbin 31 37	Vbin 37 43	Vbin 43 50	Vbin 50 56	Vbin 56 62	Vbin 62 68	Vbin 68 75	Vbin 75 81	Vbin 81 87	Vbin 87 93	Vbin 93 99	Mean	Vpp 85
--	**3972**	**179**	**495**	**1076**	**1513**	**578**	**101**	**21**	**4**	**3**	**2**	**0**	**0**	**0**	**0**	**0**	**25.3**	**31.9**

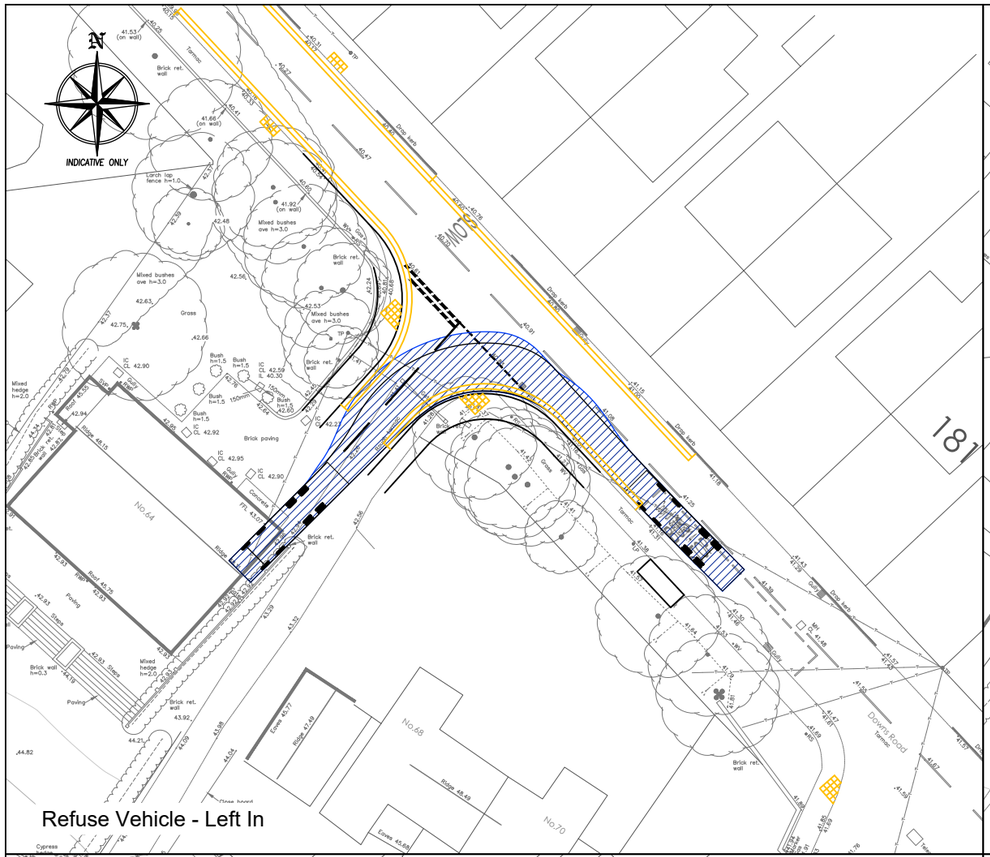
K&MTRAFFIC SURVEYS

SITE: DOWNS ROAD LOCATION: Attached to parking restriction sign

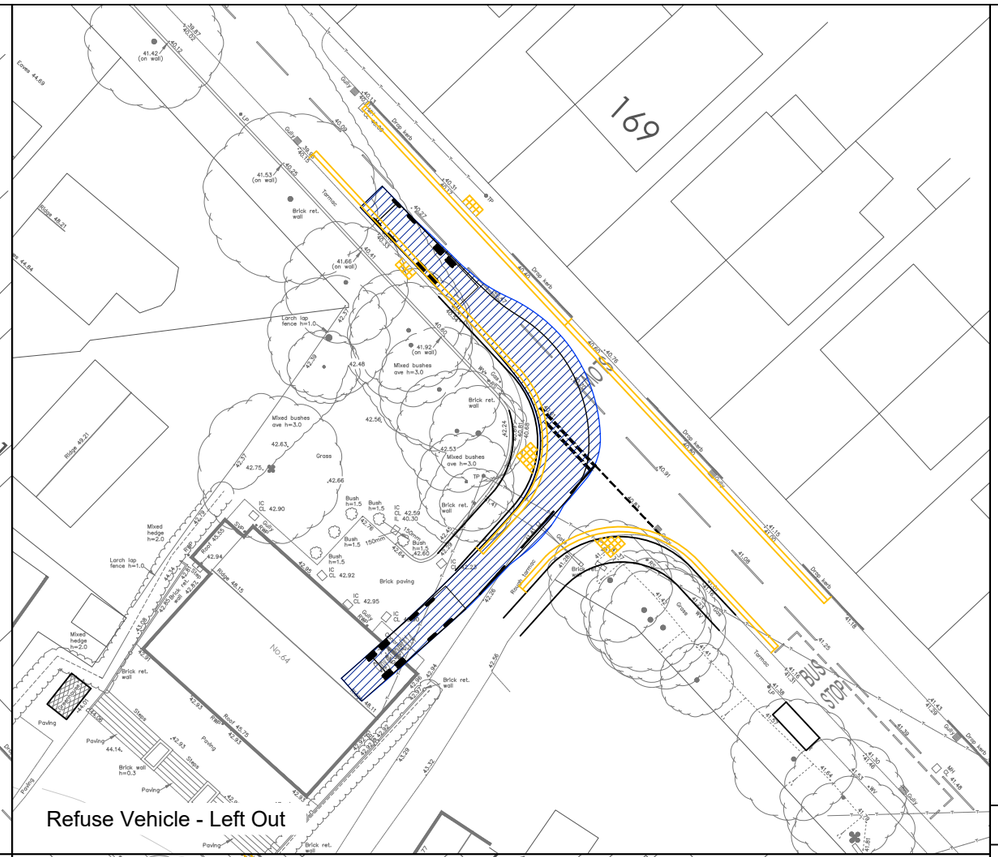
GRID REFERENCE: 51.402457, 0.348516 DIRECTION: SOUTHBOUND SPEED LIMIT:30

	Sat	Sun	Mon	Tue	Wed	Thu	Fri	Averages	
	08-Mar	09-Mar	10-Mar	11-Mar	12-Mar	13-Mar	14-Mar	1-5.	1-7.
Hour									
0000-0100	2	5	1	0	0	1	1	0.6	1.4
0100-0200	0	2	1	0	1	0	0	0.4	0.6
0200-0300	0	0	0	0	1	0	0	0.2	0.1
0300-0400	1	0	0	1	0	1	1	0.6	0.6
0400-0500	1	0	0	0	0	0	1	0.2	0.3
0500-0600	3	0	0	3	5	2	3	2.6	2.3
0600-0700	6	0	7	10	5	3	7	6.4	5.4
0700-0800	6	3	34	40	49	41	28	38.4	28.7
0800-0900	13	16	112	100	104	109	98	104.6	78.9
0900-1000	32	21	37	39	44	32	36	37.6	34.4
1000-1100	32	34	25	23	37	39	32	31.2	31.7
1100-1200	37	43	40	29	36	37	44	37.2	38
1200-1300	35	42	43	54	32	58	39	45.2	43.3
1300-1400	36	20	32	27	40	36	42	35.4	33.3
1400-1500	35	27	76	72	74	80	64	73.2	61.1
1500-1600	32	28	70	65	65	76	65	68.2	57.3
1600-1700	23	25	55	47	45	59	52	51.6	43.7
1700-1800	29	19	36	45	40	36	36	38.6	34.4
1800-1900	16	24	20	21	37	24	43	29	26.4
1900-2000	19	16	10	19	18	17	27	18.2	18
2000-2100	10	7	8	10	7	10	17	10.4	9.9
2100-2200	10	6	5	12	12	8	18	11	10.1
2200-2300	8	3	1	4	2	1	7	3	3.7
2300-2400	5	4	4	2	2	3	6	3.4	3.7
Totals									
0700-1900	326	302	580	562	603	627	579	590.2	511.3
0600-2200	371	331	610	613	645	665	648	636.2	554.7
0600-0000	384	338	615	619	649	669	661	642.6	562.1
0000-0000	391	345	617	623	656	673	667	647.2	567.4
AM Peak	1100	1100	800	800	800	800	800		
	37	43	112	100	104	109	98		
PM Peak	1300	1200	1400	1400	1400	1400	1500		
	36	42	76	72	74	80	65		

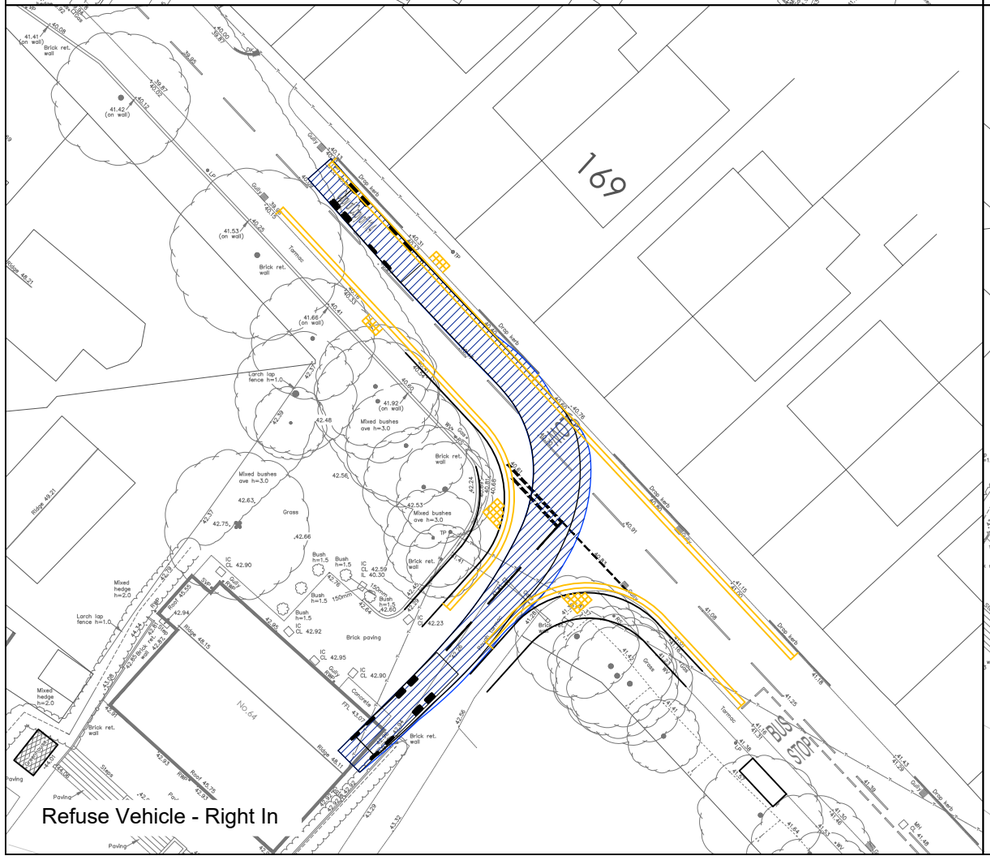
APPENDIX
H



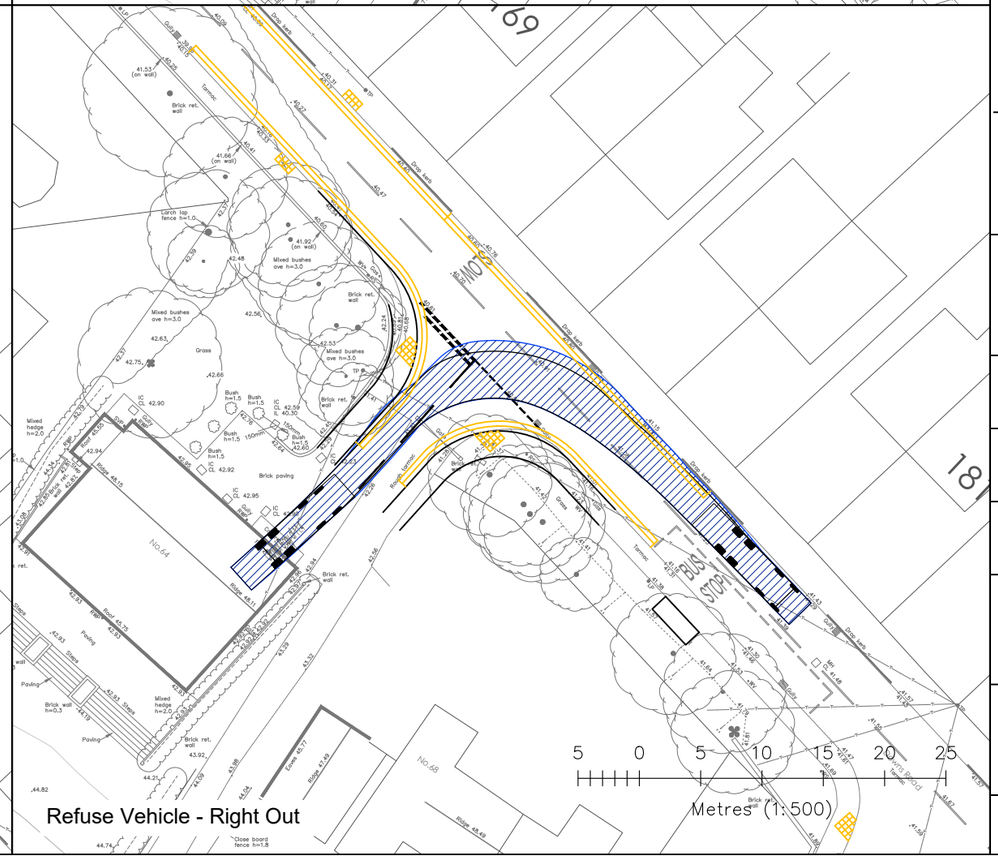
Refuse Vehicle - Left In



Refuse Vehicle - Left Out



Refuse Vehicle - Right In

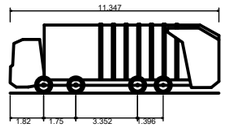


Refuse Vehicle - Right Out

ONLY SCALE FOR PLANNING PURPOSES

Notes:

- This drawing has been prepared in accordance with the scope of DHA's appointment with its client and is subject to the terms and conditions of that appointment. DHA accepts no liability for any use of this document other than by its client and only for the purposes for which it was prepared and provided.
- If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.
- Where applicable Ordnance Survey (c) Crown Copyright 2022 All rights reserved. Licence Number 100031961.
- Drawing is based on topographical survey and OS data.



11.4m Refuse Vehicle	
Overall Length	11.347m
Overall Width	2.500m
Overall Body Height	3.751m
Min Body Ground Clearance	0.304m
Track Width	2.500m
Lock to lock time	6.00s
Kerb to Kerb Turning Radius	11.330m

REV	DATE	BY	DESCRIPTION	CHK	APD
P4	18.11.25	JM	RSA Comments	CS	CS
P3	10.11.25	JM	Updated Layout	CS	CS
P2	23.10.25	JM	Updated Layout	CS	CS
P1	16.04.25	JM	First Issue	CS	CS

client

ESQUIRE DEVELOPMENTS LTD

project

ROSE FARM, ISTEAD RISE

title

VEHICLE SWEPT PATH ANALYSIS
PROPOSED ACCESS ARRANGEMENT

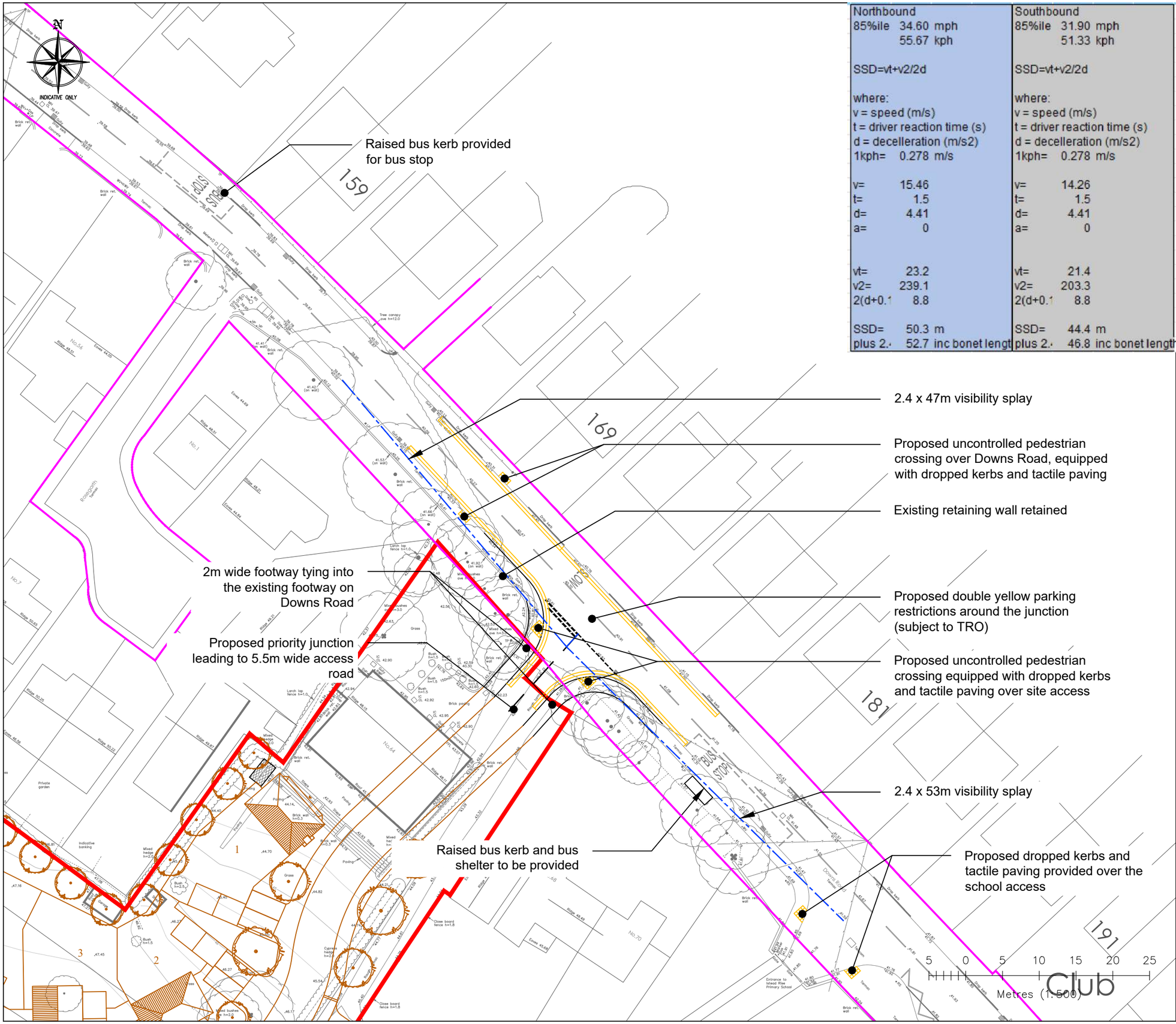
project	drwg	rev
35213	T-01	P4

Drawn	Checked	Approved	scale @ A3	date
JM	CS	CS	1:500	18.11.25

status: FOR INFORMATION — P

Eclipse House, Eclipse Park. Sittingbourne Road
Maidstone, Kent. ME14 3EN
t: 01622 776226 f: 01622 776227
e: info@dhaplanning.co.uk w: www.dhaplanning.co.uk

CAD Reference: A3



Northbound		Southbound	
85%ile	34.60 mph	85%ile	31.90 mph
	55.67 kph		51.33 kph
SSD=vt+v2/2d		SSD=vt+v2/2d	
where:		where:	
v = speed (m/s)		v = speed (m/s)	
t = driver reaction time (s)		t = driver reaction time (s)	
d = decelleration (m/s2)		d = decelleration (m/s2)	
1kph=	0.278 m/s	1kph=	0.278 m/s
v=	15.46	v=	14.26
t=	1.5	t=	1.5
d=	4.41	d=	4.41
a=	0	a=	0
vt=	23.2	vt=	21.4
v2=	239.1	v2=	203.3
2(d+0.1	8.8	2(d+0.1	8.8
SSD=	50.3 m	SSD=	44.4 m
plus 2.4	52.7 inc bonet lengt	plus 2.4	46.8 inc bonet lengt

ONLY SCALE FOR PLANNING PURPOSES

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- If received electronically it is the recipients responsibility to print to correct scale. Only written dimensions should be used.
- Where applicable Ordnance Survey (c) Crown Copyright 2022 All rights reserved. Licence Number 100031961.
- Drawing is based on topographical survey and OS data.
- A week long ATC Survey has been completed by K&M Traffic Surveys Ltd for the week commencing 8th March 2025. The survey recorded average 85th percentile speeds of 34.6mph and 31.9mph for northbound and southbound traffic respectively. The recorded 85th Percentile speeds have been used within the calculations set out within Manual for Streets 2 to inform the required visibility splay lengths.

Extent of Highway Maintained Land (courtesy of KCC Highways)

REV	DATE	BY	DESCRIPTION	CHK	APD
P4	18.11.25	JM	RSA Comments	CS	CS
P3	10.11.25	JM	Updated Layout	CS	CS
P2	23.10.25	JM	Updated Layout	CS	CS
P1	16.04.25	JM	First Issue	CS	CS

client
ESQUIRE DEVELOPMENTS LTD

project
ROSE FARM, ISTEAD RISE

title
PROPOSED ACCESS ARRANGEMENT

project	drwg	rev
35213	H-01	P4

Drawn	Checked	Approved	scale @ A3	date
JM	CS	CS	1:500	18.11.25

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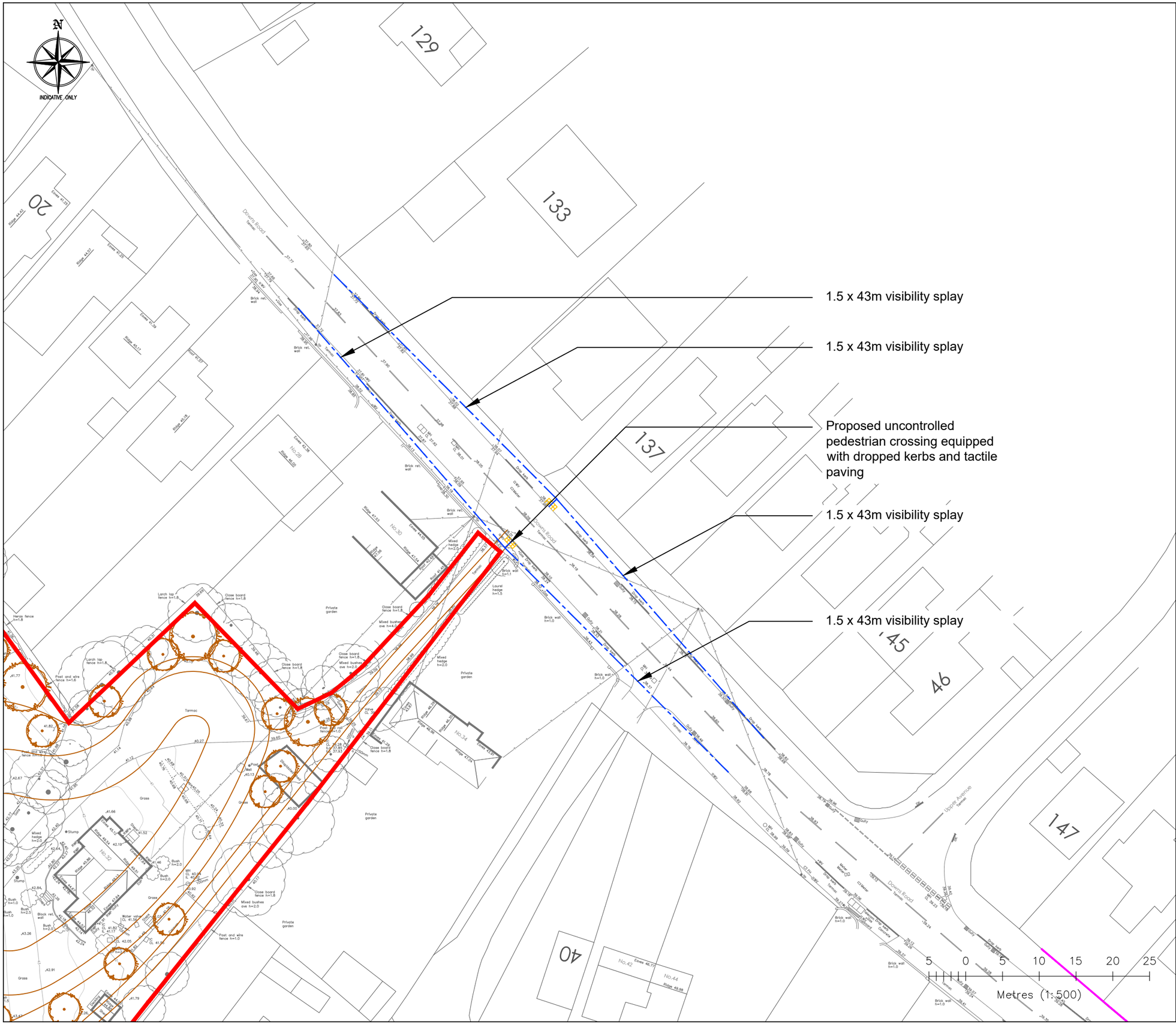

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REV	DATE	BY	DESCRIPTION	CHK	APD
P1	18.11.25	JM	First Issue	CS	CS

client
ESQUIRE DEVELOPMENTS LTD

project
ROSE FARM, ISTEAD RISE

title
PEDESTRIAN CROSSING

project	drwg	rev
35213	H-02	P1

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APPENDIX
I

Public Transport Note: Developments in Istead Rise and Meopham
Kent County Council Public Transport Team
September 2025

Background
Kent County Council (KCC) Transport and Development and Public Transport teams have been approached to comment on the public transport requirement to support forthcoming development in the Istead Rise and Meopham areas of Gravesham.

Whilst the Gravesham Local Plan Reg 19 consultation has not yet been undertaken, it is likely that a number of sites could be promoted in these areas.

In the absence of Gravesham Borough Council having the draft Local Plan adopted, it is important that any applications being submitted are not viewed in isolation but are considered in the context of there needing to be a wider public transport plan that supports the sustainable development of the area accounting for the likely scale of development and the current public transport offering.

This note summarises the current public transport provision and identifies how this would need to be secured and enhanced in order to support development in this location.

Current Public Transport Context
Meopham is a rural area located five miles south of Gravesend which would be considered the local town for the purposes of administration and amenities. It has a population of around 7,000.

In terms of education, some children attend the local (Meopham) Secondary school although there are significant flows of children to schools located in Gravesend, which is the biggest school transport draw, as well as to schools in Longfield, Wrotham and further afield. As identified below, all are catered for by existing bus services.

Meopham and Sole Street are both served by rail offering westbound trains to Swanley, Bromley and London and eastbound to the Medway Towns. From Sole Street, a change of train may be necessary at Rochester or Chatham, but from Meopham direct trains to Sittingbourne, Faversham and locations further east are available. Rail facilities are also available from Gravesend both west to Dartford and London and east to the Medway Towns and (by change of train) to locations beyond.

The principal bus services are the 306/308 and 416 as summarised below.

- 306/308 operated by Redroute (under contract to KCC): Gravesend – Istead Rise – Meopham – Vigo – Borough Green – Ightham – Sevenoaks providing 9 return journeys **Mondays to Saturdays,** 0700 (0900 on Sats) to 1800.
- 416: operated by Redroute (under contract to KCC) Meopham – Sole Street – Cobham – Shorne – Gravesend providing 4 return journeys **Mondays to Saturdays,** essentially an off peak service.

In addition to these daytime services, a range of school day only services operate in the area catering for children travelling to Meopham School and also those travelling from the area to schools in Gravesend, Rochester, Wrotham, Wilmington, Dartford and Tonbridge. It should be noted that as with the majority of school buses, these are believed to be running at full capacity and so consideration will need to be given as to how the development safeguards the provision of additional capacity needed to cater for additional demand of services at school times.

The daytime services (306/8 and 416) both require subsidy as they are not commercially sustainable based on usage and passenger fares alone. Service 306/8 requires £230k of subsidy per annum and is funded from Government Bus Grant funding which is only secure until Summer 2026. As such, the consideration of the future transport need cannot assume the continuation of existing services.

Future Network and Planning Considerations
The focus of the planning for future development in the area needs to be on:

- Securing the future of the existing 306/308 service.
- Enhancing this service in terms of frequency, duration of the day and the addition of a Sunday service.
- Provision of a road network that allows bus services to have easy access to new residential areas that are more than 400m from the existing route, primarily considering access from the Meopham end of the A227 to B260.
- Site design and layout that consider easy access routes, road widths which are suitable for buses and appropriate bus stop infrastructure all consistent with the Kent Design Guide.
- Provision for additional capacity at school times.
- In general, bus services require pump priming for a minimum of 5 years, by which time they should be commercially viable. Given the level of potential development in this area and the fact that it would be different developers who would need to contribute, the strategy for delivery would require further discussions.

The following information provides high level cost **estimates** relating to the 306 / 308, that may be useful as a starting point.

- £250k per annum is likely to sustain the existing 306/308 service.
- £150k per annum is likely to secure an additional vehicle and driver enabling a higher frequency.
- £50k per annum is likely to enable the service to operate on Sundays.
- £60k per annum is likely to enable the provision of evening services operating Mondays to Saturdays.

KCC officers are happy to review your public transport proposals through the pre-app and planning application processes.