



Appendix 1

Technical Note

Highways Review

Project	Land North of Elm Lane, Minster	Job No	1000007836
Subject	Highways Review	Issue	02
Prepared by	Rob Franklin	Date	01/07/22
Approved by	Ben Meekings	Date	01/07/22

Introduction

- 1.1 Swale Borough Council (SBC) commissioned Project Centre (PCL) to provide a Technical Note (TN) reviewing highway matters relating to:
- Outline application for proposed residential development for up to 44no. dwellings with vehicle and pedestrian access off Drake Avenue (Access only being sought).
- 1.2 It is understood that a Transport Statement (TS) was submitted in support of the application in May 2021, for up to 44 dwellings, with access onto Drake Avenue.
- 1.3 Kent County Council (KCC) Highways Team has also reviewed highways matters relating to the outline application, which are discussed below.
- 1.4 By way of summary:
- We consider the development proposal to be acceptable in relation to highway matters for the following reasons:
 - The proposed access has been shown to operate sufficiently and accommodate refuse vehicles when accessing and egressing the site.
 - Visibility splays at the site access are sufficient, noting splays of 2.4m x 43m in both directions on Drake Avenue, as per the requirements for 30mph roads.



- As per KCC Highway comments, some waiting restrictions may be required to secure refuse turning movements, which may require existing parking to be relocated. This would be developed as part of the Reserved Matters application.
 - Traffic generation of the site is anticipated to be low, with 23 two-way vehicle trips in the AM and PM peaks.
 - All reserved matters are acknowledged to be addressed as part of the Reserved Matters application.
- In line with KCC Highways advice, we support their decision that mitigating the impact on Barton Hill Drive and Minster Road as part of this application, through public transport contributions to make better use of bus services in the area.
- The planning conditions outlined by KCC Highways in this report, should also be secured.
- In relation to National Planning Policy Framework (NPPF), we do not believe that there is valid reason to prevent or refuse this planning application on highway grounds.

KCC Highways Review Comments

2.1 As noted, KCC Highways Team has provided commentary in relation to highways matters, which are summarised below. We have therefore taken into consideration the points raised by KCC as part of our review.

KCC Response Dated 13/08/21

- Trip Generation
 - KCC were satisfied with the submitted TRICS trip rates and considered these to be robust and compliant with the site location.
 - Trip rates were provided for multi modal transport methods, noting 44 dwellings would generate 23 vehicle movements in both AM and PM peaks.



- Trip Distribution
 - Further clarification was requested in relation to providing traffic flow diagrams, notably how distribution patterns had been derived from the Census data and route planning software.
 - KCC noted that there were some discrepancies of traffic flows at junctions.
 - Junction modelling was requested to account for 3 identified planning applications in the locality for unallocated sites, to determine the cumulative impact of all three developments over the projected Local Plan growth.
- Access Proposals
 - New access road is noted to be provided in accordance with Kent Design Guide principles.
 - However, the junction was proposed to have 4.5m radii instead of the suggested 6m. Tracking for 11.4m refuse vehicle was requested.
 - Visibility plans on surveyed base map were also requested.
- Parking Provision
 - Parking was acknowledged to be addressed at the reserved matters stage.

[KCC Response Dated 17/01/22](#)

- Swept path plans were submitted and noted that the proposed access geometry would be sufficient for refuse vehicles.
- Junction radii was increased to 5m, and access width retained at 5.5m which was deemed sufficient to allow 2 HGVs to pass.
- The requested traffic analysis information and visibility assessment was deemed to be still outstanding.

[KCC Response Dated 17/05/22](#)

- Assessment of the highway network had flagged up that the junction of Barton Hill Drive with Minster Road would already be operating over capacity by the end of the local plan period without the development.
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Further work was requested to assess the cumulative impact that the 3 current applications in the locality of Elm Lane would have.

- Improvements to the junction have been investigated to consider the level of network performance that could be gained. This work has been concluded and demonstrates that the capacity of the junction would not be increased enough to address the Local Plan period background growth alone without a major upgrade or other significant changes to the wider highway network.
 - The level of impact at that junction from the proposed developments around Elm Lane and Nelson Avenue would not warrant the cost of the likely intervention required.
 - KCC consider the impact on Barton Hill Drive/Minster Road from this application can be addressed through public transport contributions to make better use of bus services in the area. Consequently, the Highway Authority will request a contribution of £1,200 per dwelling to be used on providing access to bus services for residents.
 - KCC noted the proposed access onto Drake Avenue shown on drawing 66200254-SWE-ZZ-XX-DR-TP-0001 Revision P02 is agreed, having been tracked for the largest size refuse vehicle.
 - The swept path analysis does indicate that some waiting restrictions may be required to secure turning movements, if necessary, noting that it may be possible to provide some replacement parking along the proposed access road when considering any Reserved Matters application.
 - KCC were satisfied with the visibility assessment submitted, noting appropriate sightlines for the junction can be achieved and provided within the existing highway boundary.
 - KCC noted the following requirements be secured by planning condition or obligation to be fully satisfied with the application:
 - Submission of a Construction Management Plan before the commencement of any development on site.
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- Provision and permanent retention of vehicle parking spaces in accordance with details to be submitted to and approved by the Local Planning Authority prior to the use of the site commencing.
 - All Electric Vehicle chargers provided for homeowners in residential developments must be provided to Mode 3 standard (providing up to 7kw) and SMART (enabling Wifi connection).
 - Provision and permanent retention of secure, covered cycle parking facilities prior to the use of the site commencing in accordance with details to be submitted to and approved by the Local Planning Authority.
 - Completion and maintenance of the access shown on the submitted plans prior to the use of the site commencing.
 - Gradient of the access to be no steeper than 1 in 10 for the first 1.5 metres from the highway boundary and no steeper than 1 in 8 thereafter.
 - The proposed roads, footways, footpaths, verges, junctions, street lighting, sewers, drains, retaining walls, service routes, surface water outfall, vehicle overhang margins, embankments, visibility splays, accesses, carriageway gradients, driveway gradients, car parking and street furniture to be laid out and constructed in accordance with details to be submitted to and approved by the Local Planning Authority.
 - Completion of the following works between a dwelling and the adopted highway prior to first occupation of the dwelling:
 - Footways and/or footpaths, with the exception of the wearing course;
 - Carriageways, with the exception of the wearing course but including a turning facility, highway drainage, visibility splays, street lighting, street nameplates and highway structures (if any).
 - Application for a Traffic Regulation Order associated with waiting restrictions on Drake Avenue.
 - Financial contribution of £1,200 per dwelling towards bus travel.
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PCL Review

- 3.1 Our review of the TS provided by Sweco is discussed below.
Development Proposals & Access
- 3.2 As per Section 3.1 of the TS, we understand that property No.67 Drake Avenue is to be demolished to provide an access road serving the development proposal.
- 3.3 As per SWECO Drawing Reference: 66200254, the proposed site access is to provide the following:
- 5.5m wide carriageway,
 - 5m junction radii, and
 - 1.8m footpath widths at the site access point.
- 3.4 It is noted that we have not reviewed any drawing files at the time of this review (PDF copies only provided) and cannot confirm these geometries.
- 3.5 With that said, in line with KCC Highways comments, we agree that the access road design at its junction with Drake Avenue is sufficient to accommodate anticipated refuse vehicle movements.
- 3.6 11.4m refuse vehicle tracking has been provided, showing right turn in and left turn out swept paths at the proposed access, which show sufficient manoeuvring space. It is noted that left turn in and right turn out movements have not been provided as part of the tracking assessment.
- 3.7 As per Drawing Reference: 66200254, visibility splays of 2.4m x 43m in both directions have been provided on Drake Avenue. We acknowledge that these splays are compliant with Manual for Streets (MfS) requirements for 30mph roads.
- 3.8 In line with KCC Highways comments identified above, it does appear some waiting restrictions may be required to secure refuse turning movements, which may require existing parking to be relocated, potentially along the proposed access road or elsewhere on Drake Avenue. This would be developed as part of the Reserved Matters application.
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Parking

- 3.9 We acknowledge that the details of proposed parking provisions are to be determined as part of the Reserved Matters application.
- 3.10 We note that parking provisions should be provided in line with SBC 2020 parking standards documents, not 2019 as outlined in the TS.
- 3.11 Proposed parking provision should also be in line with the conditions outlined by KCC.

Trip Generation & Distribution

- 3.12 We have reviewed the trip generation and distribution of the development proposal.
- 3.13 In relation to trip generation, we consider the TRICS site selection to be acceptable, noting comparable sites, within the last 10 years, have been selected as part of the assessment.
- 3.14 Based on a development yield of 44 dwellings, we note that the site is to generate around 51 and 47, two-way people trips in the AM and PM peaks, respectively. This includes 23 two-way vehicle trips in both peak periods, which is considered low.
- 3.15 The methodology of applying MSOA 004 Travel to Work Census data, is considered acceptable, as provided in Appendix I of the TS.
- 3.16 We also acknowledge the distribution of traffic on the network as per the traffic flow diagrams provided in Appendix J of the TS and consider these acceptable.

Construction Traffic

- 3.17 As per the TS, a Construction Traffic Management Plan (CTMP) will be provided once planning permission has been granted and should be secured through a Section 106 agreement.
- 3.18 As per the KCC highways advice above, the CTMP is to be secured as part of a planning condition, prior to works commencing on site.
- 3.19 We consider this approach to be suitable to determine the impacts of construction vehicles on the network and identify any required mitigation.



Traffic Modelling and Impacts

- 3.20 Having reviewed the correspondence submitted on the SBC planning portal, it is acknowledged that traffic modelling was undertaken (as part of planning reference: 21/502256/OUT), to determine the cumulative impact of neighbouring planning applications in the locality of Elm Lane, notably at the junction of Barton Hill Drive and Minster Road.
- 3.21 As per KCC Highway correspondence (highlighted above), KCC note:
- Improvements to the junction have been investigated to consider the level of network performance that could be gained. This work has been concluded and demonstrates that the capacity of the junction would not be increased enough to address the Local Plan period background growth alone without a major upgrade or other significant changes to the wider highway network.
 - The level of impact at that junction from the proposed developments around Elm Lane and Nelson Avenue would not warrant the cost of the likely intervention required.
- 3.22 It has been brought to our attention that the following planning applications are to be cumulatively assessed further as part of modelling for the Local Plan, especially on the A249 and A2500:
- 20/504408/OUT Land West of Elm Lane Minster-on-sea - 100 units,
 - 21/502256/OUT Land Northeast of Nelson Avenue – 64 units on eastern edge of Minster Ridge,
 - 22/502086/OUT Land to The East of Scocles Road – 650 units.
- 3.23 The vehicle trip generation for each of the identified developments, including the planning application in review, is shown in



3.24 Table 7.

Table 1: Comparison of Local Application Vehicle Trip Generation

Application Site	Development Yield	Two – Way Vehicle Trips (AM)	Two -Way Vehicle Trips (PM)
21/503124/OUT (This application)	44 Dwellings	23	23
21/502256/OUT	64 Dwellings	34	31
20/504408/OUT	100 Dwellings	94	87
22/502086/OUT	650 Dwellings	340	337

- 3.25 As shown, the planning application in review is anticipated to generate the fewest vehicle trips (23 two-way trips in AM and PM peaks) when compared to the other identified neighbouring developments.
- 3.26 As mentioned, KCC Highways note that the level of impact at that junction from the proposed developments around Elm Lane and Nelson Avenue would not warrant the cost of the likely intervention required and it is considered that this development, out of the ones identified, would have the least impact.
- 3.27 Dependent on the outcome of the other identified planning applications, it is considered that a cumulative assessment on the network would be beneficial, especially at key road junctions, to inform the cumulative impact as and when they are considered.
- 3.28 Nonetheless, the advice from KCC Highways is supported in relation to mitigating the impact on Barton Hill Drive and Minster Road as part of this application, through public transport contributions to make better use of bus services in the area.
- Policy**
- 3.29 It is understood that a full assessment of the site in relation to national and local planning policy will be undertaken as part of the Reserved Matters application.



- 3.30 SBC have provided commentary in relation to local planning policy, noting:
- While the site is not an allocation, the Council cannot demonstrate it has a five-year supply of housing land.
 - As a result, the application of the 'tilted balance' kicks in. Given the above, there are no policy objections to the proposals.
 - However, the site is in a sensitive location and detailed proposals should be landscape led to address development impacts in this location, noting this could impact on the number of units that would be most appropriate.
 - Also of significance is the need to ensure that any proposals integrate well with the surrounding areas to ensure good connectivity between the sites.
- 3.31 It is therefore considered that the development proposal should take into consideration the points raised above as part of the Reserved Matters application, should planning approval be granted.
- 3.32 In relation to national policy, it is considered that the proposal complies with paragraph 110 of NPPF, that being:
- Appropriate opportunities to promote sustainable transport modes can be – or have been – taken up, given the type of development and its location;
 - Existing bus services are accessible within a reasonable walking distance of the site and have been shown by the applicant to have some use by future residents in the peak periods.
 - Contributions to enhance existing services, as requested by KCC, will help promote use of sustainable transport modes when traveling to and from the site.
 - Safe and suitable access to the site can be achieved for all users;
 - Access to the site is considered suitable for the reasons identified throughout this TN.
 - The design of streets, parking areas, other transport elements and the content of associated standards reflects current national guidance,
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including the National Design Guide and the National Model Design Code 46; and

- Design of internal street and parking areas will be developed as part of the Reserved Matters application.
 - 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.
 - Contributions requested by KCC are considered suitable to mitigate the identified capacity issues at the junction of Barton Hill Drive and Minster Road.
- 3.33 As per paragraph 111 of NPPF:
- 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 would be severe.

- 3.34 Based on the information provided, we do not believe that there is valid reason to prevent or refuse this planning application on highway grounds. The proposed access design is sufficient and the identified road network impacts can be mitigated through contributions requested by KCC.

Conclusions

- 4.1 To summarise:
- We consider the development proposal to be acceptable in relation to highway matters for the following reasons:
 - The proposed access has been shown to operate sufficiently and accommodate refuse vehicles when accessing and egressing the site.
 - Visibility splays at the site access have been shown as sufficient, noting splays of 2.4m x 43m in both directions on Drake Avenue, as per the requirements for 30mph roads.

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- As per KCC Highway comments, some waiting restrictions may be required to secure refuse turning movements, which may require existing parking to be relocated. This would be developed as part of the Reserved Matters application.
 - Traffic generation of the site is anticipated to be low, with 23 two-way vehicle trips in the AM and PM peaks.
 - All reserved matters are acknowledged to be addressed as part of the Reserved Matters application.
- In line with KCC Highway advice, we support that mitigating the impact on Barton Hill Drive and Minster Road as part of this application, can be achieved through public transport contributions to make better use of bus services in the area.
- The planning conditions outlined by KCC Highways in this report, should also be secured.
- In relation to NPPF, we do not believe that there is valid reason to prevent or refuse this planning application on highway grounds.