

Traffic Report - Proposed New Dwelling

1 Valley Lane, Wherstead

Prepared: Ian Booth – Consultant Engineer

Date: 2nd April 2021

1 Introduction

- 1.1 This traffic statement supports outline planning application reference DC/20/04318 for the erection of an extension and sub-division of an existing dwelling known as 1 Valley Lane in Wherstead.
- 1.2 This report looks at the existing road conditions, accident records and visibility distances possible from the access for the proposed new dwelling.
- 1.3 The CrashMap UK Accident record site was interrogated for details of injury accidents in the vicinity of the proposed access on the 17th March 2021. Since 2010 there have been no injury accidents recorded along this section of Valley Lane and this demonstrates that there are no highway safety issues with this existing length of road.

2 Proposed access arrangements

- 2.1 The site is located within the 60-mph speed limit and Valley Lane is a no through road and is a narrow country lane with passing places. This is in keeping with most rural roads around the county of Suffolk. The proposal is to sub-divide an existing dwelling and construct a new shared access for the existing and new dwelling. Appendix 1 shows an outline of the proposed development site.
- 2.2 As part of this development the existing sub-standard access on the east corner of the site will be removed. The existing access does not meet the current design standards in terms of visibility for a 60-mph speed limit and the following visibility measurements were recorded on site:
 - Looking west – 5m
 - Looking east – 5m
- 2.3 This section of Valley Lane has a road width of 3.1m with verges on both sides of the road. The highway verge fronting the development is 1.6m wide where the new access is proposed to the front of an 0.8m wide hedge wide and the verge opposite is 1.7m wide.
- 2.4 Forward visibility along this section of Valley Lane is excellent and vehicles can see over 200m across the development access.
- 2.5 The centre of the proposed new access is to be positioned 10m to the east of the existing building and the visibility achievable on site for the proposed access has been measured looking in both directions. The visibility distances were measured from the centre of the proposed access from a 2.0m setback from the edge of the road and were measured as follows along the centre of the carriageway:
 - Looking west: 70m +
 - Looking east: 70m +
- 2.6 The boundary of Valley Lane cottages is fronted by a hedge of varying height. As part of this work the hedge will be removed where required to provide the necessary visibility splays. Where practicable the hedge will be reduced in height to 600mm so that some of this established hedge is retained.
- 2.7 In previous discussions with the Local Planning Authority the Development Management Engineer at Suffolk County Council in his letter dated 22nd October 2020 requested additional speed survey information if any relaxation of visibility splay distances were to be considered.

- 2.8 As part of this consultation the method of assessing the visibility requirements was using the Design Manual for Roads and Bridges (DMRB)
- 2.9 In order to support the application and request from Suffolk County Council an automated loop was placed across Valley Lane for one week from the 9th March 2021. The results of the traffic survey between 06.00 -22.00 hours are shown in Appendix 2.
- 2.10 The 85-percentile speed of the vehicles recorded was 31.5 mph, much less than the 60-mph national speed limit in place. The average speed of vehicles was recorded at 24.6 mph which again is extremely low.
- 2.11 In the DMRB, the table below gives typical sight distances related to vehicle speeds:

| | | | | | |
|--|-----|-----|-----|----|----|
| Design Speed kph | 100 | 85 | 70 | 60 | 50 |
| Desirable minimum stopping site distance m | 215 | 160 | 120 | 90 | 70 |
| One Step below minimum m | 160 | 120 | 90 | 70 | 50 |

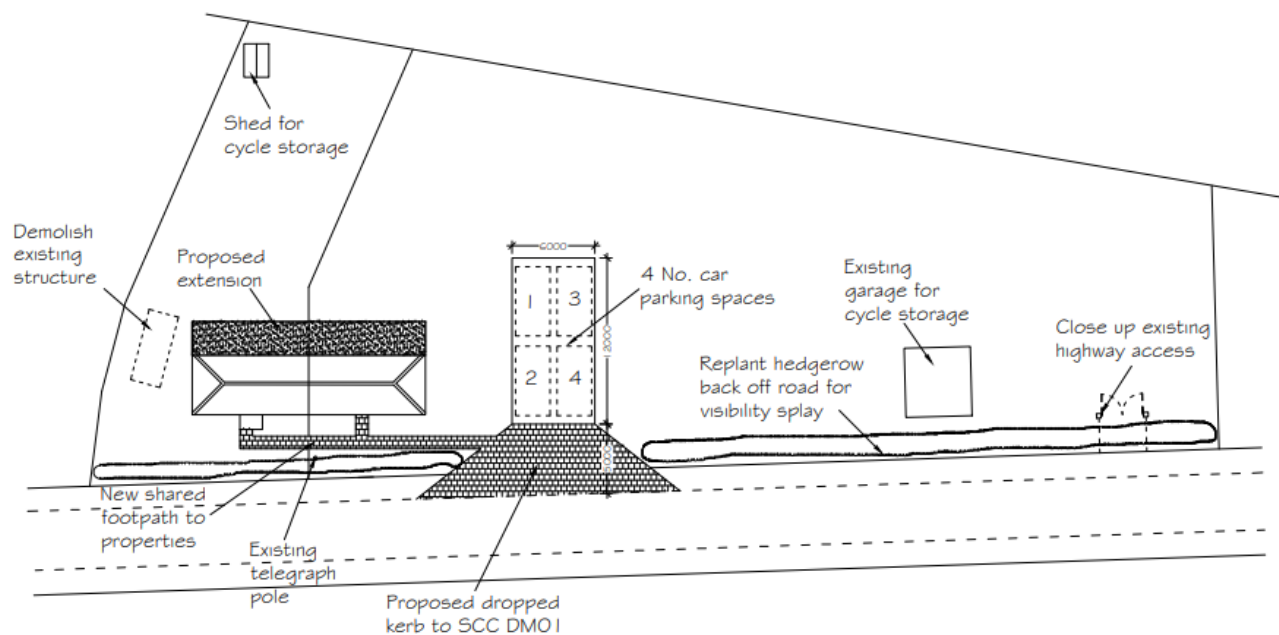
- 2.12 The 85-percentile speed recorded by the traffic survey was 31.5 mph which equates to 50.7 kph. From the table above 70m sight splay distances are required in each direction for 50kph roads.
- 2.13 Relaxation of standards are permitted within the DMRB and are related to the safety aspects and environmental benefits for users of the road. The following factors are considered when assessing a site for relaxation of standards:
- Proximity of other junctions
 - Subject to momentarily visibility impairment only
 - Only affects a small proportion of the traffic
 - On straight forward geometry readily understandable to drivers
 - On a road with no frontage accesses in the area
 - Where traffic speeds would be reduced locally due to adjacent road geometry or speed limits
- 2.14 From the list of factors above several apply to this location and the new vehicular access along Valley Lane. It is considered that a relaxation of standards related to the "x" setback distance to be reduced to 2.0m at this location is reasonable in view of the excellent accident record and exceptionally low vehicle flows and speeds.
- 2.15 These visibility distances can be achieved on site within the applicant's land ownership and highway verge to provide a safe access for all road users along Valley Lane in Wherstead.

3 Summary and Conclusions

- 3.1 The visibility splays that are achievable for the proposed access meet the requirements laid down in the Design Manual for Roads and Bridges. In addition to this the existing sub-standard vehicular access will be removed as part of this project giving additional highway safety benefit for all users of this road.
- 3.2 The CrashMap UK Accident record site was interrogated on the 17th March 2021 and no injury accidents have been recorded since 2010. This further demonstrates that there are no highway safety issues with this existing length of road.

- 3.3 Traffic flows in this area are extremely low and vehicle speeds are around 30-mph. The proposed intensification of the new dwelling will have none or little effect on traffic movements in this location and Valley Lane has sufficient capacity to cater for this small increase in traffic.
- 3.4 In view of the above, my conclusion is that the proposed development will have no detrimental effect on road safety for either users of the new vehicular access or the public highway at this location. Consequently, I would expect the Highway Authority to support this proposal accordingly.
- 3.5 The report demonstrates that there is sufficient inter-visibility between approaching and emerging vehicles and that there is no additional unacceptable highways risk and there is added highway safety benefit with the removal of the existing sub-standard access.
- 3.6 It is considered that this Traffic Report can be used to support the outline planning application reference DC/20/04318 for the erection of a new extension and sub-division of the existing dwelling at 1 Valley Lane, Wherstead.

Appendix 1 – Outline Scheme Plan



SITE PLAN 1:500

Appendix 2: Traffic survey results

Loop placed across Valley Lane.

| Day / Date | Traffic flow | Av speed Mph | 85 Percentile Speed mph |
|----------------------|--------------|--------------|-------------------------|
| Tuesday 9/3 | 125 | 24.6 | 31.9 |
| Wednesday 10/3 | 120 | 24.3 | 30.6 |
| Thursday 11/3 | 120 | 26.4 | 32.5 |
| Friday 12/3 | 117 | 27.0 | 33.5 |
| Saturday 13/3 | 81 | 24.1 | 30.7 |
| Sunday 14/3 | 54 | 20.4 | 27.5 |
| Monday 15/3 | 149 | 23.0 | 30.5 |
| Average for the week | | 24.6 | 31.5 |

