# Evidence ET-1:

# Charlotte Avenue Distance Measurements

*This document has been prepared by Elmsbrook Traffic and Parking Group (ETPG), May 2023*

*for the Appeal regarding*

LAND AT ELMSBROOK, BICESTER: PROPOSED RESIDENTIAL DEVELOPMENT

Planning Inspectorate Ref.No. APP/C3105/W/23/3315849

Cherwell District Council Application No. 21/01630/OUT

Cherwell District Council Appeal No. 23/00062/NON

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Reviewed by W Kellett FCIOB

**Executive Summary**

This document shows proof that the Appellant's proposed designs for modifications of Charlotte Avenue contain errors rendering them technically infeasible. Furthermore, removing the build-out crossings would reduce safety for pupils/pedestrians crossing the road. Photographs show the key measurements.

## 1.0 Widening scheme proposed by the Appellant for 4.1 metre width section

1.1 VTP's "Elmsbrook Spine Road Assessment, Rev A" ("4600-1100-T-073-A - Elmsbrook Spine Road Assessment.pdf") provides the diagram shown in part below in Figure 1-1; however:

1.2 The tree base overlaps, i.e. where the blue hatched area below cuts through the square boxes referred to as "Existing Tree Locations"; thus the 0.7 metre increase required is going to cut into these root areas, which are 0.5 metres from the kerb edge as shown in Figure 1-3. Therefore, the diagram is correct and if the road width is extended the trees would need to be removed. This is not allowable under the Tree Policy for Oxfordshire, Policy 11.

1.3 The 3.0m width shown lies underneath the outward spread of the trees (see Figure 1-2); this does not provide enough height for cyclists to pass under, according to DMRB CD 195; again, the trees would thus need to be removed if the road is widened, which is not allowable.

1.4 The 3.0m measurement is shown by VTP regarding their argument that 3.0m is the minimum required by CD-195 for this combined cyclist and pedestrian path – however, this is incorrect: as can be seen on Figure 1-2, the eastern border of the 3.0m shown is a fence along the front of the adjacent properties. This fence is over 600 mm tall, so the minimum combined path width according to CD-195 Table E/3.2 is increased to 3.5m. Such a width cannot be fitted between the proposed modified road edge and adjacent property boundaries.

1.5 There are also impingements on the pavement reducing its width to under 3.0 m, where the bus stop and cycle parking facilities are located, slightly further down.

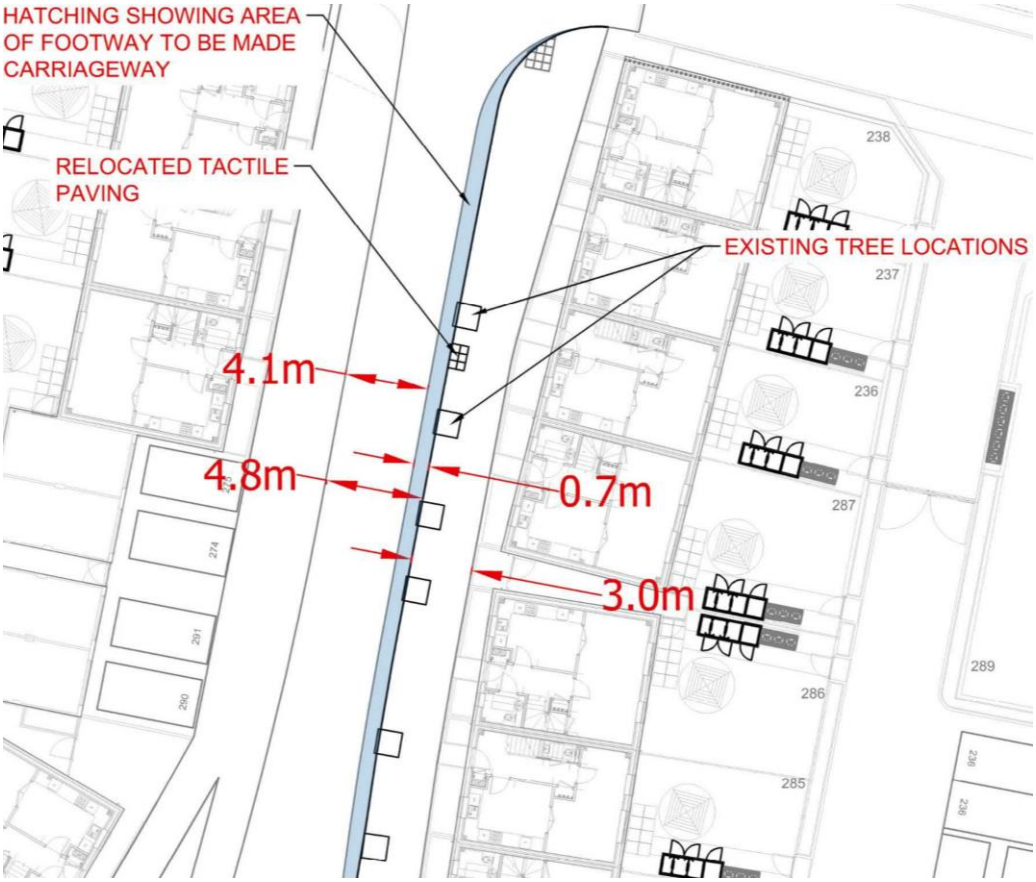


Figure 1-1: Diagram from VTP 'Spine Road Assessment' plan, showing proposed road capacity scheme modifications for this section of Charlotte Avenue, just north of Gagle Brook School.

1.6 Drain alterations to expand the road from 4.1m to 4.8m would also break the S38 Agreement Schedules 2 (SUDS) and 4 (Estate Highway Drains), because there is nothing in these clauses allowing easement for modification.

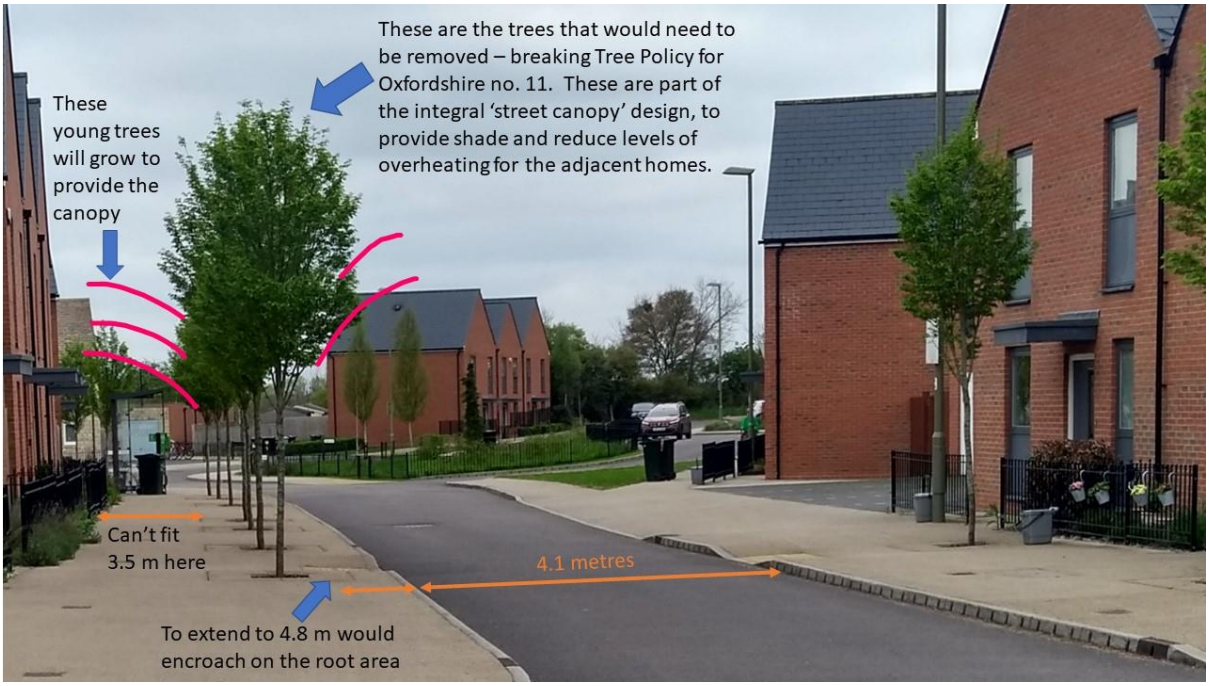


Figure 1-2: Marked up photograph of the section of Charlotte Avenue shown in Figure A-1, clearly showing (a) fencing [left side of photo], height above 0.6 m, and (b) spread of integral canopy trees

Figure 1-3: Photo of kerb to root area by 4.1 m width, measuring tape showing 0.5 metre distance

1.7 Assessments by the Appellant/their consultants also neglect to investigate the fact that the provision of the line of trees in front of the south-west facing homes on the east side of Charlotte Avenue is not just to fulfil the integral street canopy requirement: it is also to aid with **overheating** – which is a serious issue for eco-homes, due to the significant amount of insulation they have.

1.8 **Conclusions:** There is a technical error in omitting analysis that tree removal would be required (as was stated in the Officer's Report for 9 March 2023), however, this would not be allowed under the Tree Policy for Oxfordshire's Policy 11 (ref. also policies 18-20), and also ref. overheating of homes. There is a further technical error, in that the proposed combined path cannot fit. The proposed design therefore is technically flawed and not permissible.

## 2.0 Proposed Widening Scheme for one or both bridges on Charlotte Avenue

2.1 VTP's "Bridge Footway Provision, Rev A" ("4600-1100-T-029-A - Bridge Footway Provision.pdf") provides the diagram shown in part below in Figure 2-1; however, the measurements shown are both incorrect and not physically possible. This is because:

2.2 As per section A of this document: the bridge parapets are more than 600 mm tall, so DMRB CD-195 requires 3.5 metres width for a combined cycle/foot path, not 3.0 metres.

2.3 Similarly, the minimum pavement width for walking only, for this type of road, is 2.0 metres, not 1.5 metres.

2.4 The proposed design suggests 1.5 m + 5.5 m (road) + 3.0 m = 10.0 metres total width; however, both bridges on Charlotte Avenue have been constructed with between-wall distances of 9.6 metres between the top stones, and thus ~9.7 metres between the (uneven) Beckstone block walls. Example laser rangefinder measurements for each bridge are shown in Figures 2-2 and 2-4.

2.5 The minimum requirement for street width here is 4.8 metres – so the VTP diagram appears to show that this can easily be achieved (with 0.7 metres to spare); however, due to the errors on the diagram in both measurement fit and CD-195 requirements, the true available road width would be calculated as 9.7 m – 3.5 m – 2.0 m = 4.2 metres; which is 0.6 metres **below** the required minimum.

2.6 The proposed design also requires removal of the build-out road narrowings at each end of both bridges, shown in Figures 2-3 and 2-5. These are 4.0 metres between kerbs, thus well below the 4.8 metre minimum required for car/bus passage, and thus render the traffic one-way flow here. They are also accompanied by bollards. These are design features to show they are crossings for pedestrians and cyclists. The bridge shown in Figure 2-1 is next to the Phase 1 park (south of it), and further park/woodland (north of it). The other bridge is next to the Forest School entrance, and is where pupils walking to school from Phases 2, 3 and 4 would safely cross the road on their way to school (NB: this is because there is no footpath on the school side of the road further along). Removing them therefore *reduces* the safety for pupils and other pedestrians crossing at these points.

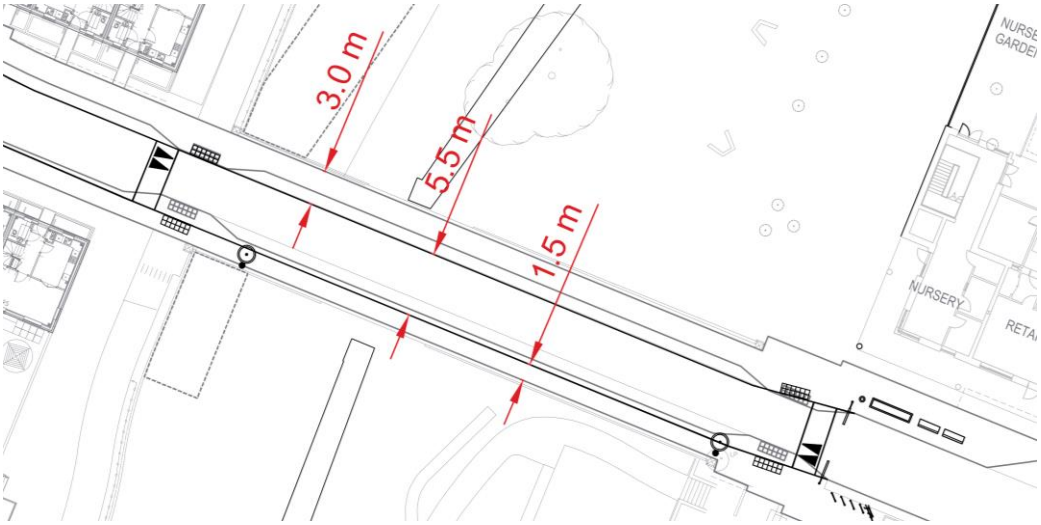


Figure 2-1: VTP diagram showing proposed modifications to the Charlotte Avenue bridge between Phase 1 and Phase 2, to the east of Gagle Brook School.


Figure 2-2: Laser measurement of mid-Phase 2 bridge: shown to be 9.614 metres between walls


Figure 2-3: Photo showing the build-out narrowings on the mid-Phase 2 Charlotte Avenue bridge to the north of Gagle Brook Primary school; children from Phases 3-4 plus the south side of Phase 2 beyond this point use these as they are the only safe crossings to the north (school) side.

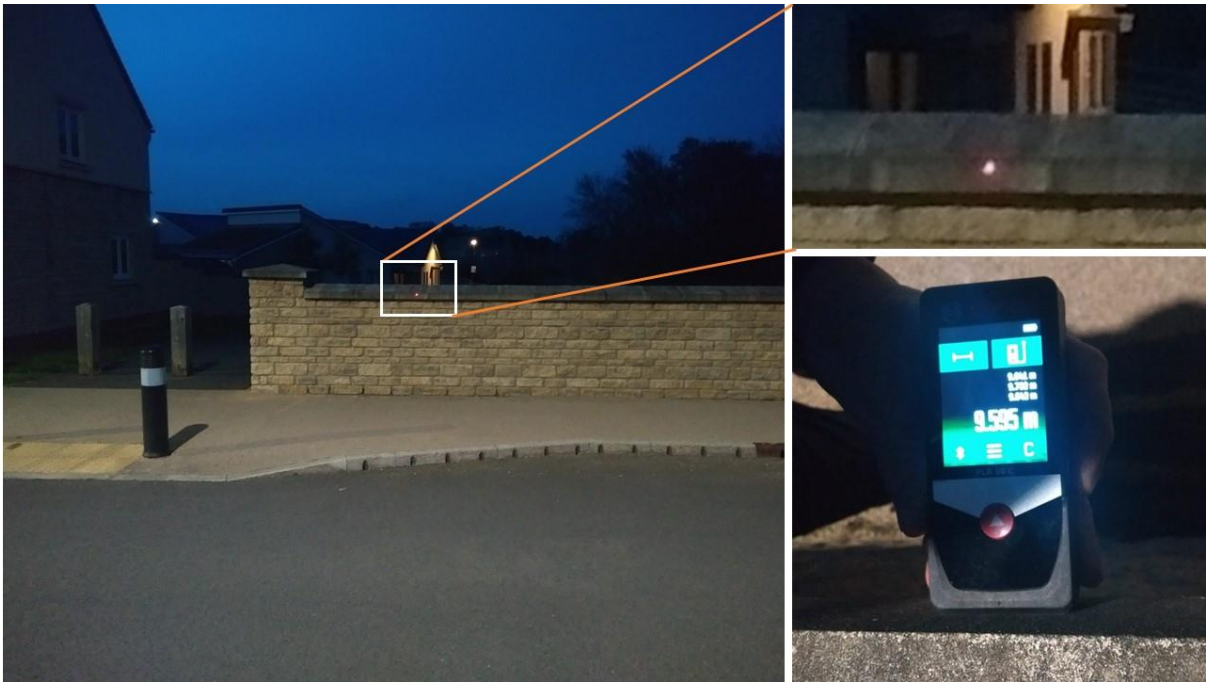


Figure 2-4: Laser measurement of Phase 1 park bridge: shown to be 9.595 metres between walls


Figure 2-5: Photo showing the build-out narrowings on the Charlotte Avenue bridge to the east of Gagle Brook Primary School, with the Community Hub (under construction) and Eco Business Centre on the left side (as viewed here, facing east), and Local Centre (not built) and Energy Centre (right).

2.7 **Conclusions:** The proposed design for modifications contains technical errors: the actual available road carriageway width would be 0.6 metres **below** the required minimum, thus the design is technically infeasible. Furthermore, removing the build-out crossings **reduces safety** for pupils/pedestrians crossing the Spine Road.