



04.01.26

Dear Mrs. Pilcher and Mr Raven,

PL/25/5939/CONDA
Discharge of Condition 5

We have written to you and Mr Raven's predecessor – Tim Thurley - on many occasions about the safety issues with the proposed mini roundabout at the Main Street/Walnut Drive junction, which were raised in the Stage 1 RSA but have not been addressed.

1. Background

- 1.1 At Outline Permission, the problems with the visibility splays on the Walnut Drive and Main Street (South) approaches were raised in the Stage 1 Road Safety Audit (RSA). Mr Thurley confirmed in his consultation of 29.03.18: -

“The RSA makes particular reference to the visibility to the right for vehicles approaching from Main Street (south) and Walnut Drive being below the design standards detailed in TD 54/07. The response from the applicant does not directly address this point.”¹

- 1.2 The RSA specifically recommended: -

*“if sufficient visibility splays cannot be achieved, measures [should be] implemented **to reduce the vehicles speeds** on the approach to the roundabout.”*

This has never been done, despite Maids Moreton Parish Council specifically requesting a speed reduction to 20mph on Main Street.

- 1.3 Instead, on 30.11.18 Mr Thurley recommended approval on the basis that: -

¹ The Applicant's provision of illuminated signage was to address the separate issue of “*lack of conspicuity of the roundabout*” which was also raised as a problem in the Stage 1 RSA.

“It is acknowledged that the recommended 9m by 25m visibility splays cannot be achieved within the adopted highway. It is however noted that TD/54/07 [now known as CD116] states that in some situations where the flows from the minor arm (Walnut Drive) are low (less than 300 vehicles per hour), which is the case here, then the 9m distance can be relaxed to 4.5m.”

Unfortunately, neither the Applicant nor Mr Thurley took the due care and attention to check that 4.5m by 25m visibility splays could in fact be achieved within the adopted highway. **There is no evidence to show that the feasibility of a relaxed visibility splay was checked at that stage.**

- 1.4 Since then, on many occasions we have drawn to your attention to the fact that the required visibility splays – even at 4.5m by 25m - still **cannot be achieved**. You have repeatedly told us that the technical feasibility of the roundabout would be reviewed at a later stage and any safety concerns we raised over the proposed visibility splays would not be considered in detail until then.

**WE ARE NOW AT THIS ‘LATER’ STAGE AND
IT IS TIME TO ADDRESS THESE CONCERNS.**

- 1.5 We refer you to Highways Regulations **CD116** (previously known as ‘TD/54/07’) and attach extracts from these Regulations with the relevant sections highlighted for Mrs Pilcher’s ease of reference (see Appendix I). Mr Raven will, of course, be familiar with these safety standards but those copied in this letter will see they are easily accessible to the layman.

2. Walnut Drive non-compliance with CD116

- 2.1 On the Walnut Drive approach to the roundabout, there must be a clear visibility splay of 25m to the right (the **D** distance). As you know, the measure is ordinarily taken 9m back from the give-way line (the **F** distance), but we appreciate that the allowed relaxation of the **F** distance from 9m to 4.5m has been agreed in this instance.

However, there is **no provision** for a relaxation of the visibility splay itself – the **D** distance. This must remain at 25m, and it is clearly stated in CD116 that:

*“‘D’ is measured from **the centre of the offside approach lane** to the nearside carriageway edge of the arm to the right.”*

- 2.2 The visibility splay on the Walnut Drive approach has been compromised by the Applicant (see Appendix II, Diagram 1a) in two ways: -
- DWH has surreptitiously reduced the **F** distance to **3.68m**, despite being labelled as 4.5m. The Applicant has submitted a scaled drawing so it is easy to measure. Now this has been drawn to your attention we trust **you will now verify this** for yourselves using the fully scaled, geometrically correct CAD data; and
 - DWH has shifted the visibility splay to the centre of the passenger side on Walnut Drive, instead of taking it from the centre of the offside approach (ie the driver’s side).
- 2.3 When measured correctly from the centre of the offside approach lane (the driver’s side) and with the correct **F** distance of 4.5m, the visibility splay (the **D** distance) on the Walnut Drive approach is in

fact only **17.97m** (Appendix II, Diagram 1b), which falls **over 7m below** accepted safety standards and would be **a major hazard** to other road users.

- 2.4 This unregulated reduction to the visibility splay itself is particularly dangerous given the astonishing compromise to the Stopping Sight Distance on the approach from Main Street (North) to the right (see 4.1 & 4.2 below), and the substandard visibility splay on the Main Street (South) (see 3.1 below). Now we have drawn this to your attention, you need to make a full justification for this considerable deviation from the regulations publicly available, together with a safety risk assessment (DMRB GG101, paras 2.12 & 2.15).

3. Main Street (South) non-compliance with CD116

- 3.1 The visibility splay (the **D** distance) from Main Street (South) has also been arbitrarily reduced from 25m to **20m** (marked up by the Applicant in Appendix II, Diagram 1a). Whilst the **F** distance can be reduced from 9m to 4.5m, there is **no authority** to reduce the visibility splay itself (the **D** distance) to **20m**, nor is there any road safety study to underpin this compromise. No justification of this reduction by the Applicant or Buckinghamshire Highways has been provided, and no safety risk assessment has been carried out.
- 3.2 You will recall that Main Street South has no pavement, so pedestrians are obliged to share the carriageway with motor vehicles. Safety on this stretch of highway must not be compromised further.

4. Main Street (North) non-compliance with CD116

- 4.1 The required distance to the Give Way line from which oncoming vehicles will be able to see any road user entering the roundabout (the Stopping Sight Distance or **SSD**) is 50m. However, on the Main Street (North) approach the **SSD** is only **30.36m** (see Diagram 2a). This is 20m less than the minimum acceptable distance required by CD116. There is no authority or safety risk assessment to justify measuring the **SSD** from the roundabout sign.
- 4.2 In any event, the **SSD** measured from the roundabout sign is only ‘annotated’ as being 50m. It is not fully shown on the drawing provided by the Applicant. As you cannot see the point of origin, there is no way to check that it is, in fact, 50m. You will need to request a new drawing showing the whole **SSD**, particularly given the proposed departure from CD116.

5. Conclusion

- 5.1 To put these figures into context, it is worth noting that standard visibility splays and stopping distances are designed to allow sufficient perception-reaction time for drivers to brake and decelerate to avoid a collision. For a vehicle travelling at 30 mph, increasing the perception-reaction time by 1 second increases the vehicle’s required stopping distance by 10 metres. At 40 mph, the increase in stopping distance is 18 metres. For a cyclist or a pedestrian (who will be sharing the carriageway as there is no pavement provided), this will be the difference between a serious injury and a fatality.
- 5.2 Given the clarity and significance of the safety issues set out in this letter, Buckinghamshire Council cannot claim that Council officers (Highways, Legal or Planning) were unaware of this departure from the safety standards set out in CD116. On this proposed mini-roundabout: -

- i. The visibility splay for cars approaching on Walnut Drive is only **17.97m**;
- ii. The visibility splay for cars approaching on Main Street (South) is only **20m**; and
- iii. The Stopping Sight Distance for cars approaching down Main Street (North) is only **30.36m**.
with the apparent 50m from the mini-roundabout sign being unverified.

5.3 **You have the facts in front of you in plain English**, and you now have an obligation to publicly acknowledge that the design is non-compliant and provide a full justification together with a safety risk assessment in accordance with DMRB GG104 for these substantial deviations from safety standards.

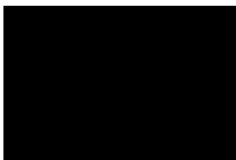
5.4 It is not good enough to say the roundabout was ‘approved in principle’ at outline stage to justify pushing on with a substandard design in a pedestrian area at this late stage in the planning process. And it is certainly not good enough to sign this proposal off arbitrarily without full consideration of all the safety implications, and a justification for any deviations from the accepted safety standards together with a safety risk assessment.

YOU WOULD BE PUTTING LIVES AT RISK

5.5 As the Stage 1 RSA is well over 5 years old, both for the roundabout and all the other highways works, we trust you will require this is updated, and these issues are fully disclosed as part of the updated Stage 1 RSA process. We hope recommendations are made and implemented according to the outcome of the Stage 1 RSA *before* you discharge Condition 5 and certainly before you progress this development any further.

We look forward to hearing your response in full.

Yours sincerely,



Mrs K Pryke

(on behalf of the Maids Moreton and Foscote Action Group)

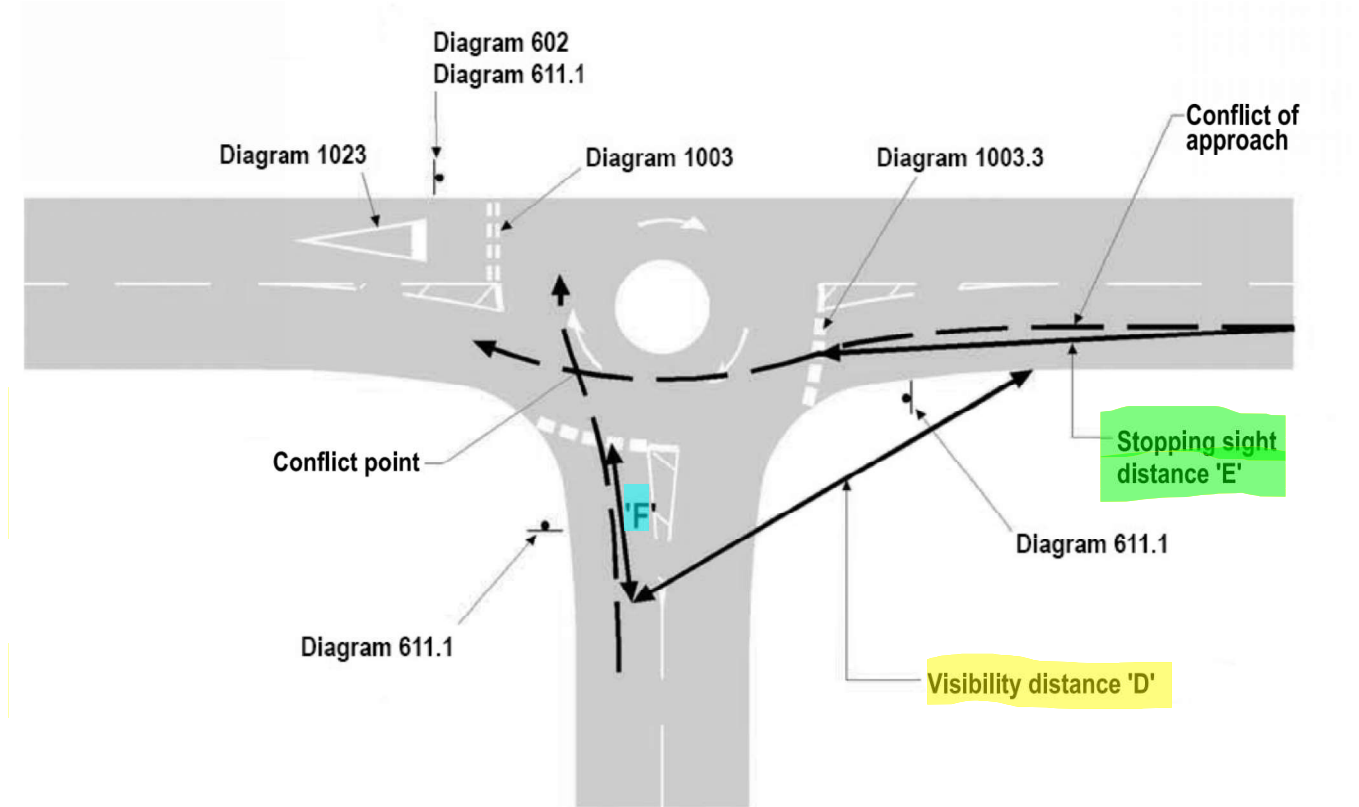
Cc: Leader of the Council
Cllr Anja Schaefer
Cllr Robin Stuchbury
Cllr Ade Osibogun
Maids Moreton Parish Council
Foscote Parish Meeting

APPENDIX I **CD116: Geometric Design of Roundabouts**

EXTRACTED FROM: CHAPTER 5 - Design of Mini-Roundabouts

(highlights added – green for 'E' distance, blue for 'F' distance, yellow for 'D' distance)

Figure 5.21



Visibility distance 'D'

Table 5.21 Minimum visibility distance to the right

85 th percentile speed of arm to the right (mph)	'D' distance (metres)	
	For a gap acceptance time of two seconds	For a gap acceptance time of three seconds
35	40	55
30	35	50
25	25	40

NOTE 1: 'D' is measured from the centre of the offside approach lane to the nearside carriageway edge of the arm to the right.

Stopping sight distance 'E'

5.23 The SSD on the approach to a mini-roundabout (illustrated as 'E' in Figure 5.21) shall be provided in accordance with Table 5.23.

Table 5.23 Minimum SSD on approach to a mini-roundabout

85th percentile speed (mph)	Minimum 'E' distance (metre)
35	80
30	70
25	50

5.24 The SSD on the approach to a mini-roundabout shall be provided within the whole of an envelope between eye heights of 1.05 metres and 2.0 metres at the centre of the path of an approaching vehicle to object heights of 0.26 metres to 2.0 metres at the give way line.

'F' distance

5.25 The minimum 'F' distance in Figure 5.21 shall be 9.0 metres, except in the following circumstances:where the 9.0 metres cannot be achieved, the 'F' distance on an arm can be reduced to 4.5 metres, providing that the maximum peak hour entry flow on the arm is less than 300 veh/hr.

APPENDIX II

Diagram 1a

The visibility splay 'D' from Walnut Drive is **incorrectly** measured from the centre of the passenger side of the Walnut Drive carriageway instead of the centre of the off-side approach lane (ie the driver's side), **3.68m** from the give-way line instead of 4.5m.

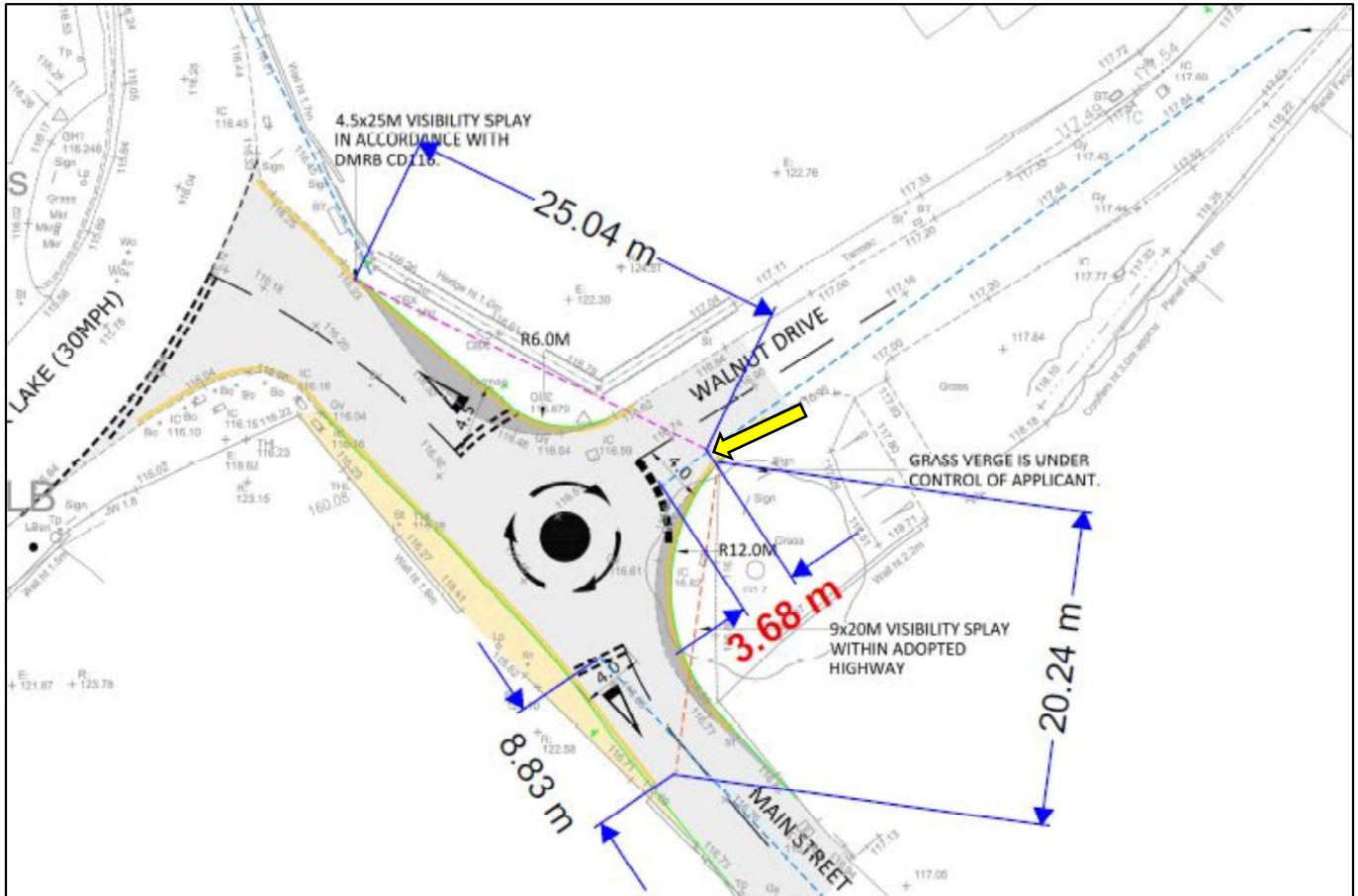


Diagram 1b

*When the visibility splay 'D' is **correctly** measured from the centre of the off-side approach lane, 4.5m from the give way line, the visibility splay is only **17.97m**.*

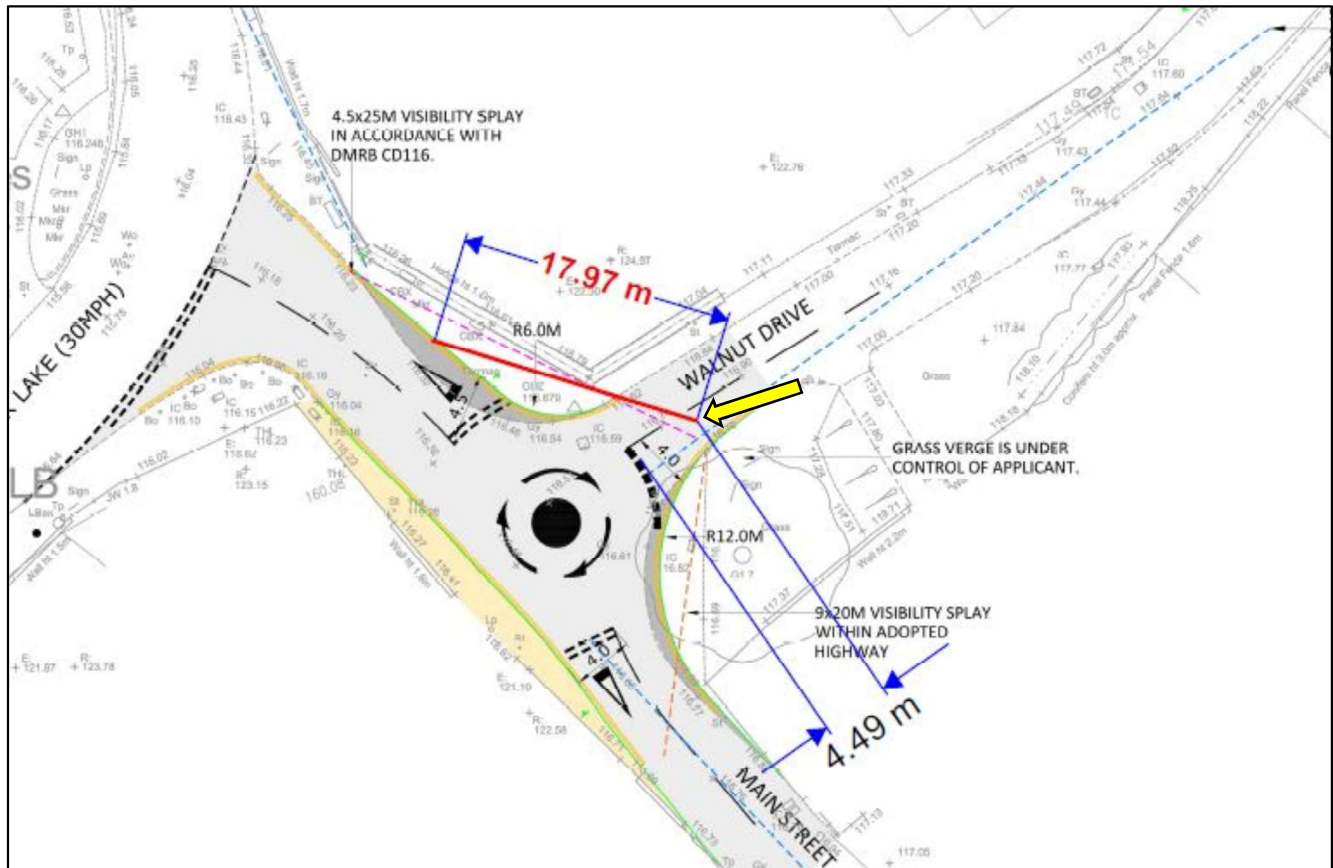


Diagram 2a

When correctly measured to **the give way line**, instead of mini-roundabout sign, in order to avoid non-highway land, the SSD 'E' is reduced to **30.35m** for vehicles approaching from Akeley/Towcester.

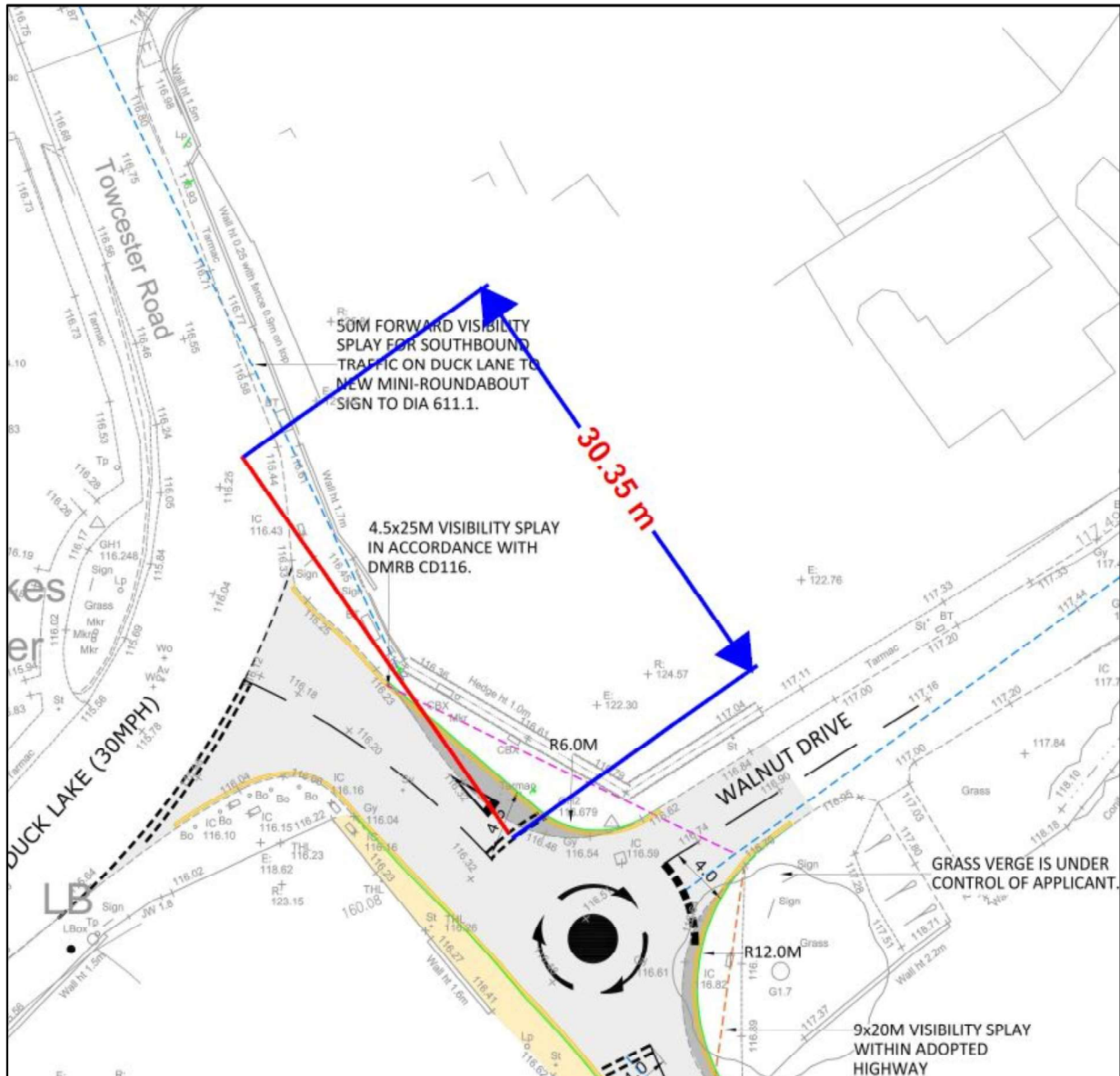


Diagram 2b

The 50m SSD from the mini-roundabout sign is asserted by way of annotation on the drawings provided. The full distance is not visible, so it cannot be verified as correct.

