12 March 2023 1772/ER NRB Consulting Engineers Ltd 1st Floor Apollo Building Dundrum Road Dundrum Dublin 14

South Dublin County Council, C/O Daniel Devine 222 Templeogue Rd Dublin 6W D6WFW13

Sent by Email Only

Dear Sir/Madam

222 TEMPLEOGUE ROAD ROAD - TRAFFIC/ROADS - SAFETY ISSUES

NRB Consulting Engineers are specialist Traffic/Transportation & Roads Engineers, and do not offer advice in other areas of Consulting Engineering. This response has been prepared in full directly by Eoin Reynolds, a Chartered Engineer with over 30 years experience in the area of Traffic/Roads.

Following our site visit to the property at 222 Templeogue Road (D6WFW13) and review of the information provided to us, we have set out below our response to the SDCC Order and provided a recommendation in terms of remediation to address the safety issues raised.

There are 2 primary issues that affect the safety of pedestrians/cyclists and vehicular traffic at a single domestic residence of this nature. These are;

- 1. Sightline & Stopping Sight Distance (SSD) Available, and
- 2. Pedestrian Intervisibility for exiting traffic from the property.

1. Sightline & SSD

Being a private driveway serving a single residential dwelling, for a lightly trafficked access of this nature **The Department of Transports Design Manual for Urban Roads & Streets (DMURS)** requires a sightline of 2.0 m ("X" Distance) x 49m ("Y" Distance on a Bus Route) for a simple priority junction of this nature, where the design speed is 50kph.

The sightline 'X' distance for traffic exiting the property is measured from the nearside running edge of the roadway. In this case, as the footpath exceeds 2m in width, the required sightline is achievable.

The safe Stopping Sight Distance (SSD) required for approaching traffic on Templeogue Road is also 49m, consistent with the sightline 'Y' distance. This is also achieved on the approach to the vehicular access.

We therefore conclude that the vehicular access is safe in terms of both the sightline and SSD on Templeogue Rd, in terms of best practice and DMURS requirements.

2. Pedestrian Intervisibility

In terms of the adequacy and safety of the driveway for approaching pedestrians & any accompanied young cyclists on the footpath, we have reviewed the design in terms of the National TII Roads Design Guidance, "Geometric Design of Junctions" (DNGEO-03060).



With respect to driveways, we include below as *Figure 1* the relevant extract (paragraph 5.6.3.7) in terms of the appropriate design to provide visibility to pedestrians on a footpath.

5.6.3.7 Direct Access Crossing a Footway

Where an emerging vehicle crosses a footway at a lightly used direct access - for example from the driveway of a single dwelling — pedestrians may not have sufficient warning of its approach where there is no clearly formed differentiation in the level between the footway and the vehicle crossing point. Under these conditions, the designer shall provide visibility envelopes to the back of the footway, 2m on either side of the centre of the access, from 2m back from the back edge of the footway along the centreline of the access as shown in Figure 5.17. The driver's eye height shall be taken as 1.05m and the object height at the back of footway shall be taken as 0.6m to make clear the presence of a small child.

Carriageway

Footway

Object Height 0.6 m

Eye Height 1.05 m

Figure 5.17 Visibility at Back of Footway Crossing

Figure 1 - Extract TII Design Guidance

In terms of these National Roads TII Design requirements it would be necessary to make some adjustments to the eastern (Templeogue Village Side) boundary walls at the driveway, as illustrated in the annotated image below.





Conclusion

We believe that the Driveway is safe in terms of Sightline and SSD on Templeogue Road, meeting the appropriate required Design Standards.

However, the eastern portion of the boundary walls (Templeogue village side) need to be adjusted in height to 1.05m in order provide the required pedestrian intervisibility for vehicles exiting in forward gear.

Please do not hesitate to contact the undersigned if you have any queries in relation to this matter.

Yours sincerely,

Eoin Reynolds Chartered Engineer

Em Regulds

Director 087 2996390

