

**REPORT INTO
PEDESTRIAN SAFETY CONCERNS**

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**In vicinity of Antrobus Road
and its access passageways to
Mossy Bank and Boldmere Spinney**

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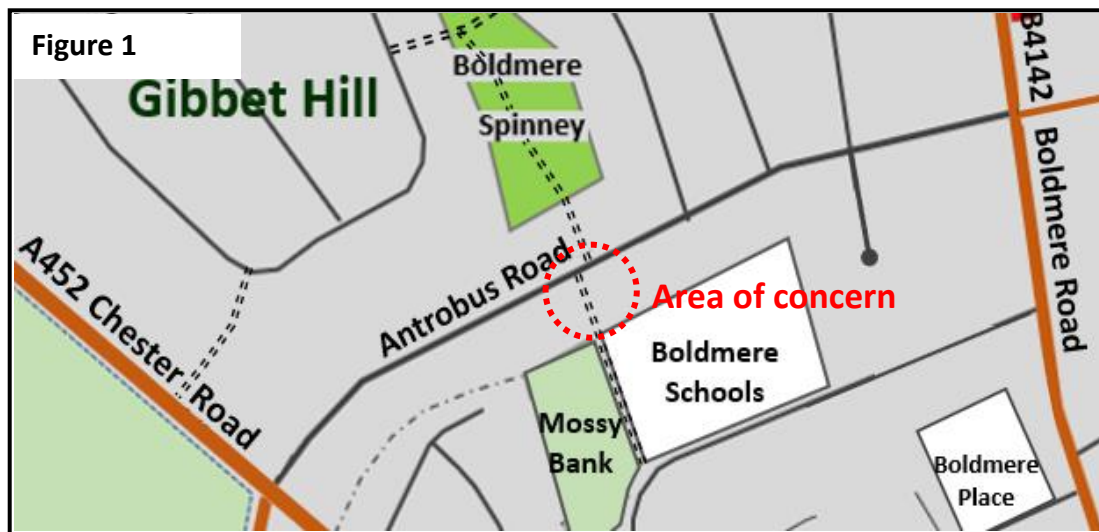
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Section 1: Setting the Scene

- 1.1 This is an informal study into the potential risks to; and the well-being of; pedestrians, as they cross Antrobus Road between the access passageways to Boldmere Spinney and Mossy Bank. Concern was initially raised because of perceived difficulties and hazards experienced by pedestrians crossing Antrobus Road, primarily those with children at the start and end of the school day. Following an initial review of pedestrian interactions, further related safety concerns are raised, all in the area identified in Figure 1.



- 1.2 The issues range from those related to “safer schools,” “making streets safer,” and enhancing opportunities to encourage “walking.” The aim is to promote a positive contribution to “road harm reduction” and “encourage active travel”... by implementing measures to reduce speeds of traffic; making it easier to cross streets; enhance pedestrian facilities; and contribute towards creating an overall safer and more welcoming / relaxing environment.
- 1.3 The report outlines the perceived issues in sections 2 through to 6. Two different sets of interventions are considered in sections 7 and 8, followed by the “Discussion, Conclusions and Recommendations” section 9. It is written to bring the concerns to the attention of the highway authorities, to initiate discussion to determine whether they are deemed valid, and whether mitigations are needed. For example, if a particular aspect was deemed “unsafe,” it is believed it would be incumbent on BCC Highways to mitigate that aspect, to avoid a future incident causing injury and the Council being found culpable.
- 1.4 For the purpose reporting; the concerns raised are considered as three distinct issues as follows:
- The passageway from Mossy Bank;
 - Antrobus Road footway on the Mossy Bank side (approximately from the Mossy Bank passageway to opposite the Boldmere Spinney passageway);
 - Crossing Antrobus Road.

Section 2: Antrobus Road

2.1 An overview of Antrobus Road, and the housing developments around it, would help place the concerns in context. Antrobus Road and the roads and housing to either side were all constructed in the early part of the 1930's. Antrobus Road's main role would have been to act as the residential road providing access into the new housing served by Oakwood Road, Ivy Road, Heathlands Road, and Heathlands Crescent... from Chester Road in one direction and Boldmere Road in the other. For a residential road, it is considered wide... at around 8-metres, and at the time of construction would have been very lightly trafficked.

2.2 The road commences at a signal-controlled cross-road junction with A452 Chester Road and Court Lane, with an on-demand pedestrian phase. From this junction, the road climbs uphill for about 200 metres, before crossing over a ridge of higher ground (from Gibbet Hill to the north). The brow of the ridge looking towards Boldmere Road is seen in Figure 2.



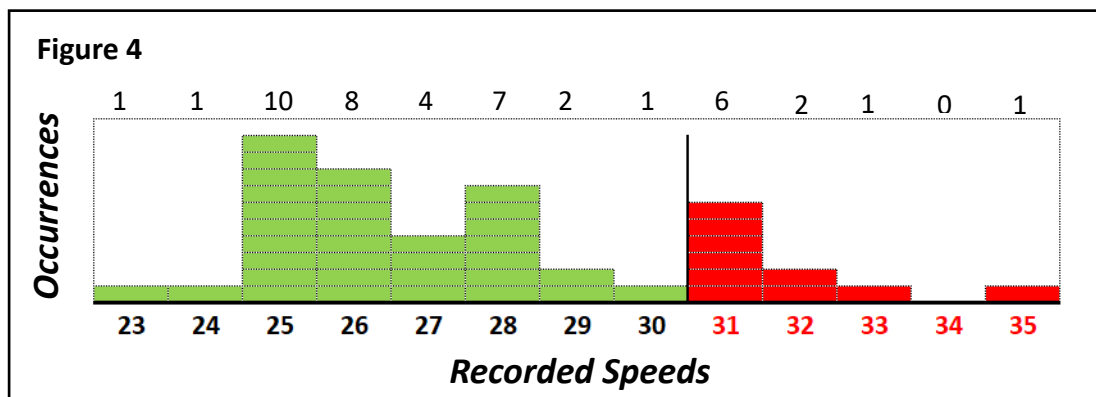
2.3 From this brow, Antrobus Road runs downhill, towards the crossing point area of concern, before continuing onwards, towards B1412 Boldmere Road. Figure 3 is a view backwards from the crossing point, towards the brow of the ridge, (the coloured surfacing just visible).



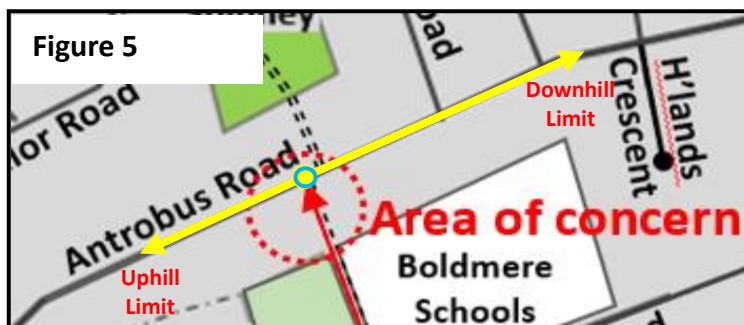
It is from this direction, most concerns about speeding traffic are raised. There are reports of pedestrians intimidated by the free-running downhill speeds of traffic.

2.4 On the downhill approach, to this crossing area, an already installed speed detector is used to support a short assessment of traffic speeds. This speed detector flashes up vehicle speeds as they appear over the brow until just short of the indicator itself. For simplicity, this assessment was based on "maximum" free-flow traffic speeds as indicated by the detector... as a rough and ready means of identifying whether the "speeding" perception is justified. In most cases, vehicular speeds reduced on the approach to the detector and it is accepted, by using only the "maximum," speed values will be over-exaggerated.

- 2.5 Despite any over-exaggeration, the results illustrated in Figure 4 illustrate how, overall, the speed detector is doing its job. It shows thirty-four, out of forty-four recorded peak speeds at or below the 30mph speed limit (taken over two 20-minute periods). Of the remaining ten, all but the two fastest drivers went on to moderate their speed down to, or below, the speed limit. On this basis, there is little evidence to justify any major concerns with non-compliance of the 30mph speed limit and some confidence a 20mph limit could see speeds drop further.



- 2.6 A non-speed-related reason for a misconception of speeding may be the result of the limited time pedestrians have, to see approaching downhill vehicles. When looking from the crossing point, the view of downhill approaching traffic is limited by the brow of the ridge, whilst the view of approaching uphill traffic extends significantly further, with vehicles visible from beyond the Ivy Road Junction as illustrated in Figure 5.



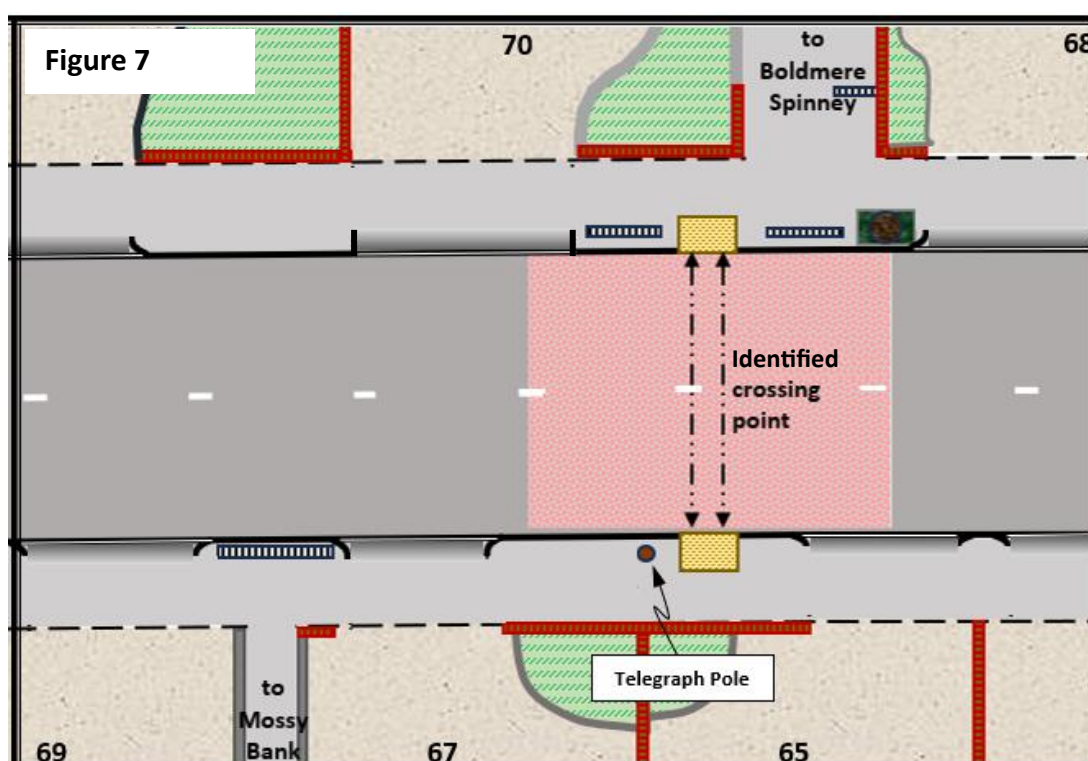
Thus, when downhill vehicles become visible, they appear far nearer to pedestrians wishing to cross than vehicles coming from the opposite direction. This closer proximity may explain the uncalled-for perception of significant speeding above the 30mph speed limit.

- 2.7 Reaching the far end of Antrobus Road, we have the priority B1412 Boldmere Road cross-road junction (with Highbridge Road). A pedestrian island has been installed on the-relatively flat approach to Boldmere Road as shown in Figure 6 (with Highbridge Road in the distance).



2.8 The Antrobus Road area of interest lies well away from either end-point, between the staggered access passageways from Boldmere Spinney and Mossy Bank. These lie midway between the top of the ridge and Oakwood Road. The only pedestrian to the Boldmere Schools along the full length of Antrobus, between Boldmere Road to Chester Road, is the Mossy Bank Passageway. This is particularly relevant as the Boldmere Schools have a significant catchment area on the opposite “Boldmere Spinney” side, leading to significant pedestrian activity across Antrobus Road.

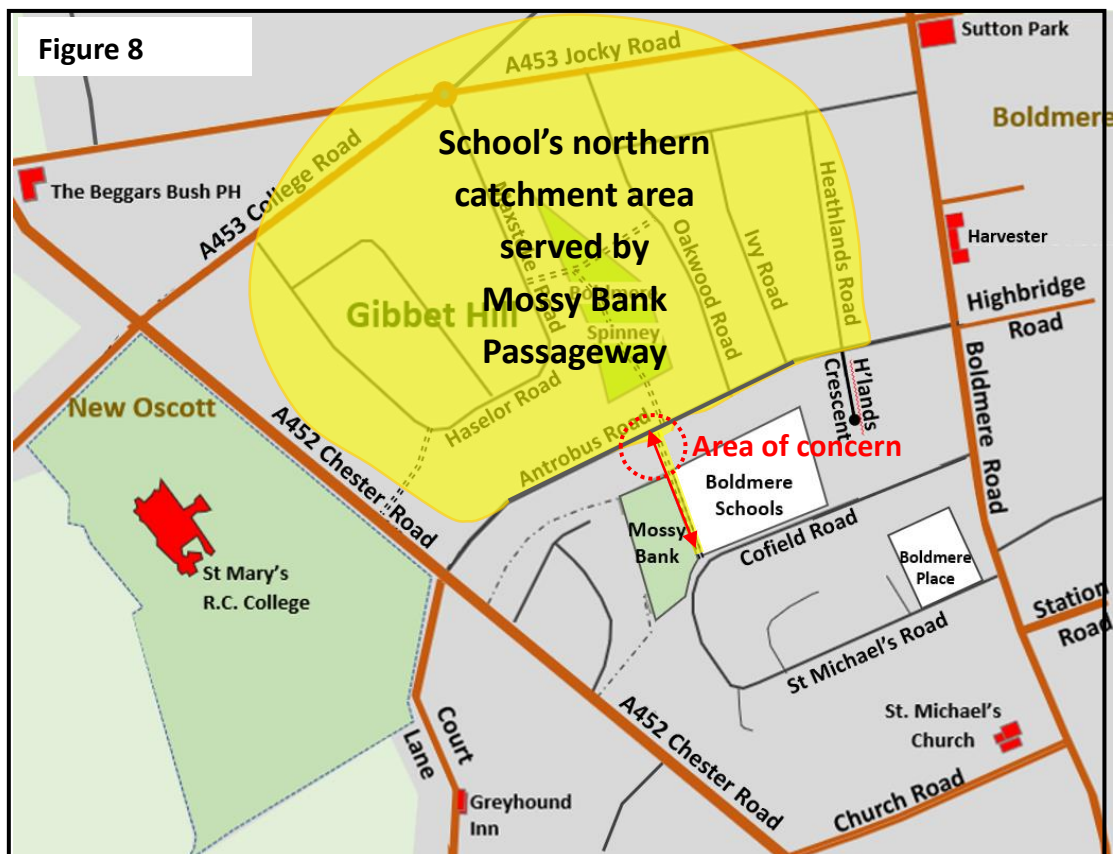
2.9 Antrobus Road at this location has road signs, amber warning lights and carriageway wording (“School Zone” and “Slow” to be precise). Figure 7 shows that apart from dropped kerbs and some rather worn coloured carriageway surfacing, there are no physical provisions to assist pedestrians crossing this wide road (see Annex A for an extended plan).



2.10 It is not claimed traffic levels along this section of Antrobus Road are particularly high, but they are likely to be higher during the morning peak, when pedestrian crossing movements are also high. There is, as far as we are aware, no history of personal injury accidents occurring at this crossing point. The concern is all about how, over time, the levels of provision for vehicles and for pedestrians has become heavily biased in favour of the former, to the detriment of the latter... with this imbalance presenting an increased risk to pedestrians.

Section 3: Pedestrian Movements

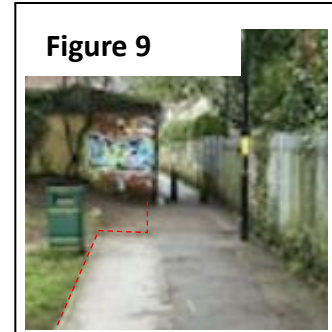
- 3.1 The catalyst for this review was all about the challenges faced by school children and accompanying adults walking to and from Boldmere Schools... from the northern part of the school catchment area, indicated in Figure 8. This school-run involves crossing Antrobus Road from the Boldmere Spinney side to reach the Mossy Bank passageway. Figure 8 illustrates how the continuous line of housing alongside Antrobus Road acts as a barrier between the catchment area and the schools... and concentrates pedestrian crossing activity into a very small area.



- 3.2 The after-school-run is generally more intense, as those travelling to school generally have staggered arrival times, while those leaving school generally do so all at once, especially in cold, wet, and dark conditions (owing to a desire to get home quickly). The following "walk-through" of issues therefore commences at Cofield Road School Exit and ends at the Antrobus Road crossing point. The various sections combine to form a major pedestrian access to and from the Boldmere Schools and the specific areas of concern are now considered in turn in the following sections:
- S4 - Passageway from Mossy Bank
 - S5 - Antrobus Road Footway
 - S6 - Designated Pedestrian Crossing Facility

Section 4: Hazard Identification - Mossy Bank Passageway

4.1 The approach to the passageway consists of circa 200-metre-long, c3.0-metre-wide footpath, with an open aspect to Mossy Bank and a high fence along the school boundary. This wide footpath physically narrows on the immediate approach to the passageway, but pedestrians ignore the lack of asphalt surfacing and simply walk on the adjacent ground, now devoid of grass (see Figure 9).



4.2 Entry to the passageway from Mossy Bank is problematic with an immediate halving of width, compounded by the presence of two concrete bollards, no doubt placed there for valid reasons, which further constrict its entry width.

The 1.6-metre-wide passageway is around 60-metre-long and run between the high garden fences of Antrobus Road houses.

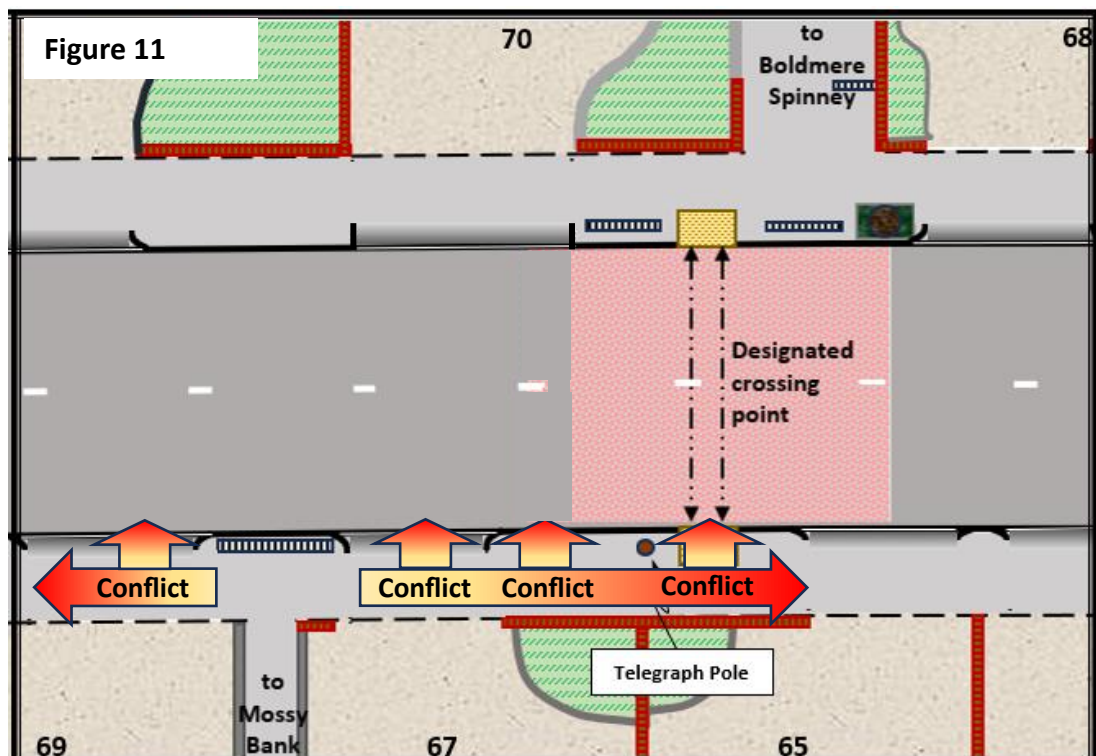
4.3 This passageway is particularly narrow in relation to its length and, despite the presence of a street light part way down, it is particularly unattractive and oppressive to users at any time. Recognising its physical constraints cannot be changed, the challenge is to ensure the best and safest use is made of what is available. A further two concrete bollards are positioned at the end of the 60-metre passageway, adjacent to the Antrobus Road footway (see Figure 10). In a similar fashion to those at the Mossy Bank end, these bollards restrict the width available to pedestrians.



- 4.4 When entering the passageway from Mossy Bank, the reduced width squeezes those walking through closer together and, let us not forget, this includes a sizeable number of young children. This “crowding” can reach very uncomfortable levels, in effect becoming a crush, especially in cold and wet weather, when children are less likely to be allowed to play on Mossy Bank. In extreme circumstances, pedestrians simply end up shuffling along the passageway, carried along with the flow and being jostled all the way... which can be scary, as can the potential hazards caused by the presence of concrete bollards obstructing egress to Antrobus Road.
- 4.5 The two bollards at Antrobus Road not only obstruct pedestrian flow, but represent a clear and unnecessary danger to those using the passageway during the after-school-peak. Pedestrians at the rear can only have very limited knowledge of what is happening ahead of them and in the event of a child falling over, could lead to injury as those in front of the incident are jostled forward. Even though it is for BCC to decide whether the benefits of either set of bollards, outweigh their disbenefits, there appears to be a strong case to remove these “exit” bollards, especially at Antrobus Road.
- 4.6 The fact no accidents have occurred, as far as we know, should not detract from the potential for the bollards to cause an entirely avoidable accident and injury, nor the duty of care BCC has to its residents. However, there is a potential “Catch 22” dilemma. Simply removing the Antrobus Road bollards would allow people to exit faster, placing increased strain and exacerbating existing conflicts on the Antrobus Road footway, considered next.

Section 5: Hazard Identification - Antrobus Road Footway

- 5.1 It is important to place the passageway egress onto Antrobus Road into context, as it is the only route to a large part of the school catchment area. There is a strong case for considering this egress the equivalent of having a school gate placed directly onto Antrobus Road. Pupils exiting the school gate face a narrow, 20-mph, one-way residential road, with traffic generally at a standstill. At Antrobus Road, they exit onto a constricted footway alongside a wide and significantly busier 30-mph two-way road. THIS RAISES THE QUESTION: when viewed from this perspective, are BCC happy with the level of provision provided at this location (equivalent to a school gate) on this wide free-flowing Antrobus Road?
- 5.2 A pedestrian barrier exists opposite the Mossy Bank passageway exit and, while an essential facility, it constrains an already small area, where multiple and conflicting movements take place. As pedestrians leave the confines of the passageway, they face choices: some turn left up Antrobus Road; some turn right down Antrobus Road; but the many, who wish to cross the road, are forced to make last-minute decision to move to the left or the right of the barrier to cross the road, depending on, for example, who is already waiting to cross.



- 5.3 Figure 11, illustrates how, at peak pedestrian flows, those turning left or right can be obstructed and forced to squeeze past others waiting to cross the road (with their buggies etc.). Those waiting to cross are, themselves, buffeted, as pedestrians pass behind them and live traffic passes in front of them. The ensuing melee should be a real cause for concern as it constitutes a further hazard to pedestrians.

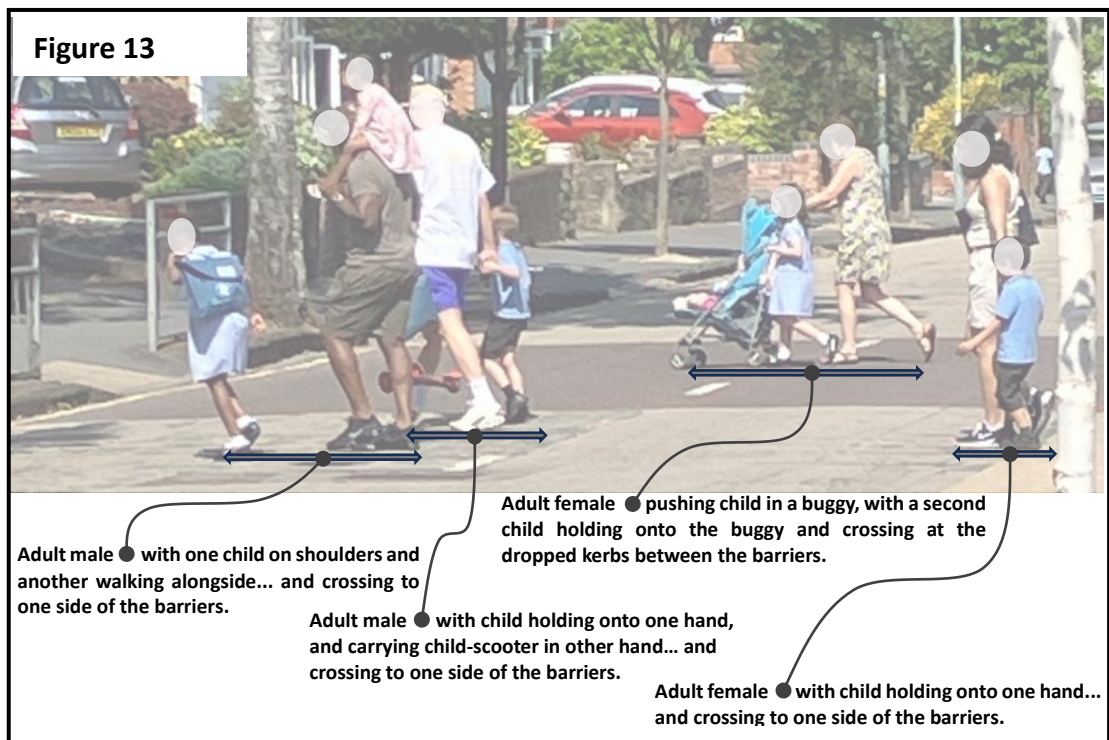
Section 6: Hazard Identification – Antrobus Road Crossing

- 6.1 The dropped kerbs and coloured carriageway surfacing indicating the Antrobus Road crossing-point (between Mossy Bank and Boldmere Spinney) have already been shown in Figure 9. This provision is supplemented by: “SCHOOL ZONE” and “SLOW” road markings; a speed indicator on the downhill approach (from Chester Road); and school children crossing signs to either side with amber lights.
- 6.2 What is not immediately apparent from any plan, is the driver-view when approaching this crossing point, especially driving downhill from Chester Road. As shown in Figure 12, the downhill section of Antrobus Road has a line of trees, lamp posts and sign posts adjacent to the carriageway edge, all combining to obscure pedestrians waiting to cross and distract drivers. The safety barriers at the ends of the two passageways are not prominent and the presence of parked vehicles during school pick-up times further complicates the view drivers have. The free-flowing nature of the traffic also does little to encourage drivers to pay any heed to the needs of pedestrians.



- 6.3 The significant concern is about the balance of physical provision for drivers and pedestrians, in terms of road width, visibility and alignment. This is too heavily biased in favour of drivers, to the serious detriment of pedestrians, who are attempting to cross the road. The type of pedestrian movements is also very important, as they tend to arrive in groups, with some carrying or pushing items such as child buggies, scooters, or bikes. Also, while the after-school flow of pedestrians is more intense, higher morning traffic flows result in there being fewer crossing opportunities and leads to a build-up of children and adults waiting to cross the road. Thus, different issues and challenges arise at different times of the day.

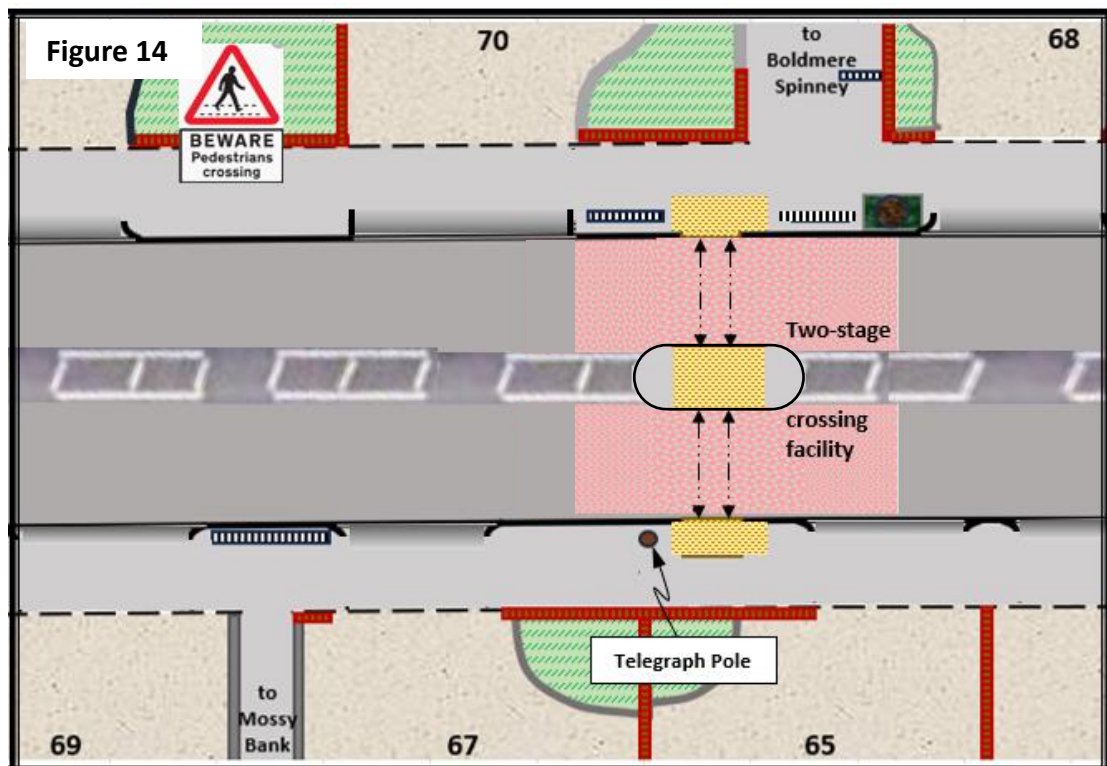
6.4 In the busier after-school peak; once exiting the Mossy Bank passageway, those waiting to cross Antrobus Road are faced with the daunting task of shepherding children across an 8-metre-wide road between gaps in traffic, after having been forced to find a place adjacent to the kerb in competition with other families also wishing to cross at the same time. This is illustrated in Figure 13, a photograph taken during the June 2024 hot weather just before the main body of children with their accompanying adults arrived to cross the road at the end of the school day.



6.5 Figure 13 clearly illustrates that what is taking place is not a sequence of crossings by individual pedestrians, but multiple crossings by groups of pedestrians... taking place at the same time and spread out along a section of road. Some issues are identified; as we have a mix of adults with children holding on (or not), a buggy, a child-scooter being carried and one instance of a piggy-back... and this was before it got busy. This pattern of behaviour will dictate what could be deemed practicable and workable interventions.

Section 7: Central Pedestrian Island Option

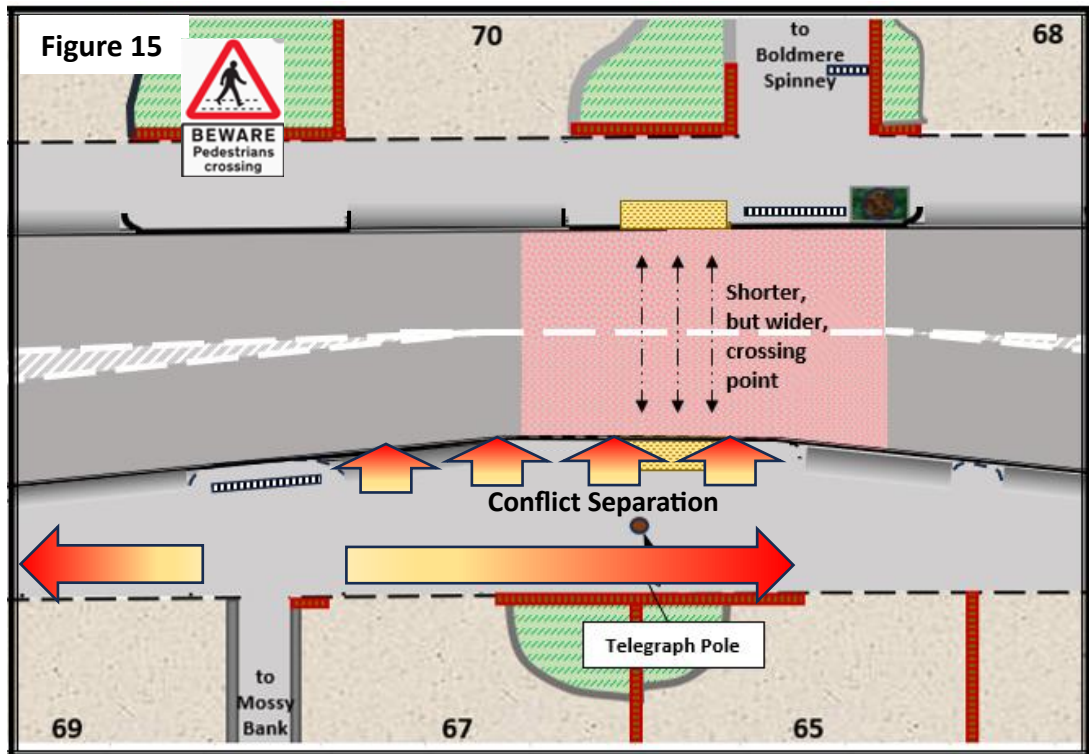
- 7.1 This is the first of two options considered for addressing pedestrian safety concerns. Both are based on the provision of a permanent 20mph zone from the Chester Road side of the ridge, to beyond the Oakwood Road junction, in conjunction with significant central white line hatching, to effectively reduce the carriageway width on the approach to the crossing point. Additional signing may also be necessary, depending on the options (shown indicatively on the option plans, bearing no relation to precise signs, nor their location).
- 7.2 The first intervention is to introduce a central pedestrian island (similar to that already existing on the Antrobus Road approach to Boldmere Road). The idea behind a central island layout shown in Figure 14, is to allow pedestrians to cross the road in two stages (layout shown more extensively in Annex B).



- 7.3 A central island would need to be wider and longer than shown here to accommodate multiple family groups arriving at the same time. This is simply not possible and, if a lesser facility were to be introduced (as shown here), there is a real risk it would be ignored, with people forced to cross the full width of this 8-metre-wide road in a single movement.
- 7.4 Not only would a central pedestrian island of insufficient dimensions do nothing to address safety concerns of those crossing Antrobus Road, it could provide an additional obstacle and make the current situation worse. It would also contribute nothing to resolving concerns about the Mossy Bank passageway or its outflow onto the footway. On this gloomy note we consider the second intervention.

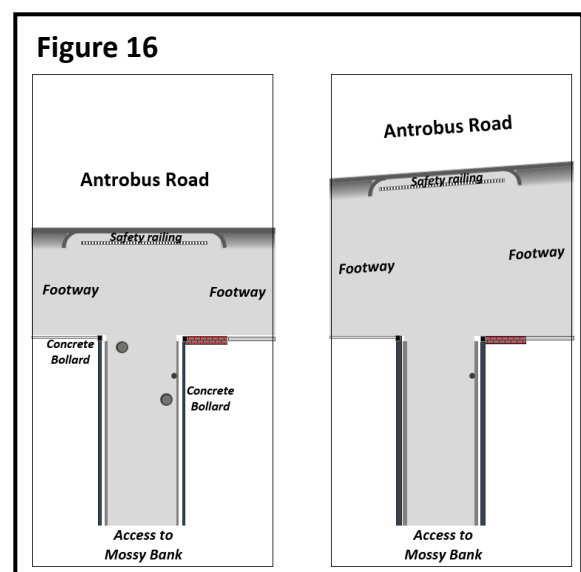
Section 8: Localised Road Narrowing Option

- 8.1 This option proposes a localised road narrowing, to reduce the distance pedestrians need to travel when crossing the road. The layout shown here has the uphill pavement of Antrobus Road (the Mossy Bank side) being gently widened, as illustrated in Figure 15 and, more extensively, at Annex C.



- 8.2 Pedestrians, as they do now, would cross Antrobus Road in one movement. However, the option would represent a significant improvement over current conditions: with speeds limited to 20 mph and a significantly reduced road-width having to be crossed (by some 20-25%). There would be potential to widen the dropped-kerb crossing facility and the option would be further enhanced by relocating the telegraph pole to one side of the footway.

- 8.3 In addition to facilitating easier crossing of Antrobus Road, this option goes a long way to resolving footway congestion issues at the Mossy Bank passageway egress. Figure 16 illustrates “before” and “after” scenarios, showing the extent and manner the Antrobus Road footway could be improved by localised road narrowing. The wider footpath would not only ease egress from the passageway, it would provide standing room for those waiting to cross the road, to do so without being jostled by those attempting to pass.



- 8.4 This is the one solution that may address all the concerns and not just those about crossing Antrobus Road. To complete this assessment, “before” and a possible “after” layouts are illustrated by Figure 17.



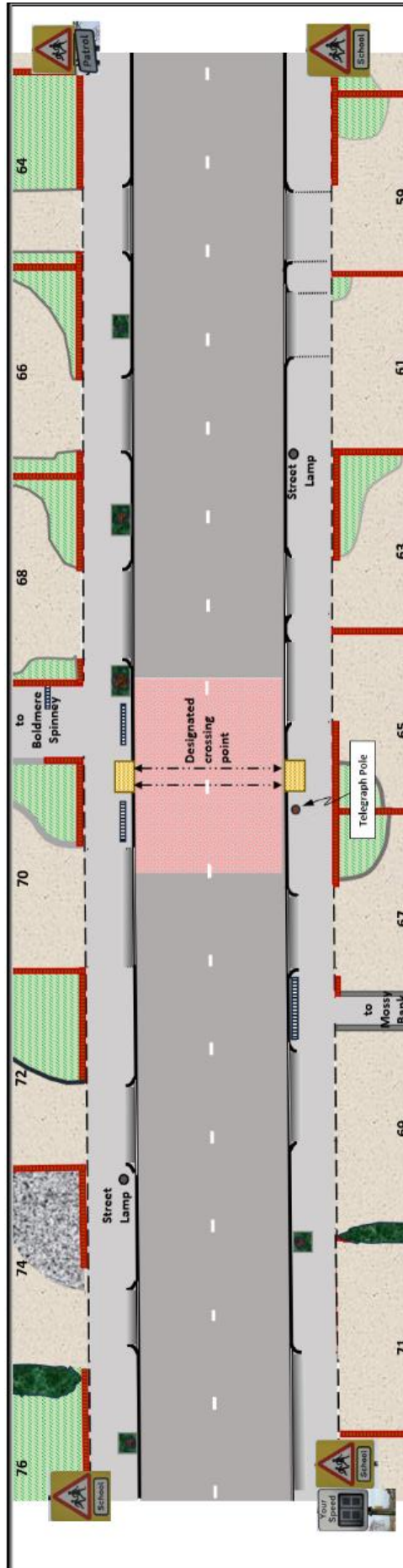
- 8.5 The layout shown above represents the minimum narrowing to benefit all pedestrian activity. However, if it were deemed necessary to **maximise the area of pavement** opposite the entrance to the Mossy Bank passageway, the road narrowing could be extended uphill as illustrated by the layout shown in **Annex C(i)** (an alternative to Annex C). Such a layout would maximise the benefit for those pedestrians exiting the passageway under pressure, whilst adding little in the way of extra burden to motorists.

Section 9: Discussion, Conclusions and Recommendations

- 9.1 This all started by considering issues ranging from those related to *“safer schools”*, *“making streets safer”*, and enhancing opportunities to encourage *“walking”*. The aim is to promote a positive contribution to *“road harm reduction”* and *“encourage active travel”*... by implementing measures to reduce speeds of traffic; making it easier to cross streets; enhance pedestrian facilities; and contribute towards creating an overall safer and more welcoming / relaxing environment.
- 9.2 *“Safer schools”* becomes a key factor once the pressure on pupils travelling to and from school through the Mossy Bank passageway are considered. This is as far from a welcoming and relaxing environment as one could get and its exit onto the Antrobus Road footway is fraught with multiple conflicts and dangers. Because this is the only means of readily accessing a significant part of the school catchment areas by foot, the recommendation is it should be treated as a *“remote”* school access, as if was an access direct from the school gates.
- 9.3 It is believed turning a blind eye is no longer an acceptable course of action when a reasonable and effective option is available as proposed. The same applies to the request to assist those wishing to cross Antrobus Road to be able to do in a *“safer,” “easier”* way than at present. Key is the imposition of a speed limit in the vicinity of the crossing area and additional signage to support a road narrowing option.
- 9.4 This started as an informal report to engender discussion on the issues and potential outcomes and that philosophy still applies. What we have here are multiple layers of issues that combine to produce an unsatisfactory an unnecessarily hazardous situation that has gone under the radar for far too long. It is only through luck, more than judgement, that an unfortunate incident has not taken place. However, now the issues have been raised, it is believed there needs to be open and meaningful discussions about how the imbalance between vehicular and pedestrian facilities can be changed.
- 9.5 The focus so far, has very much been on the impact on school children and their accompanying adults, but these facilities are used by a much wider part of the community. For example, dog walkers regular walk between Boldmere Spinney and Mossey Bank to make use of the two very different areas. Boldmere Spinney attracts visitors from all directions, including those who cross Antrobus Road. All would benefit from any improvement in the facilities and conditions at this location.

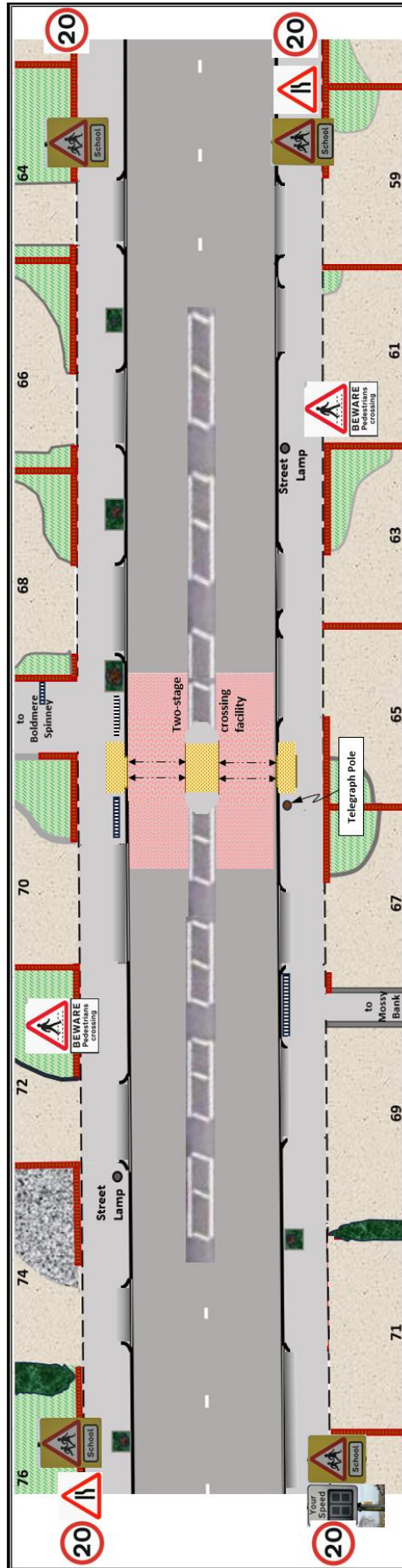
ANNEX A:

Existing Layout



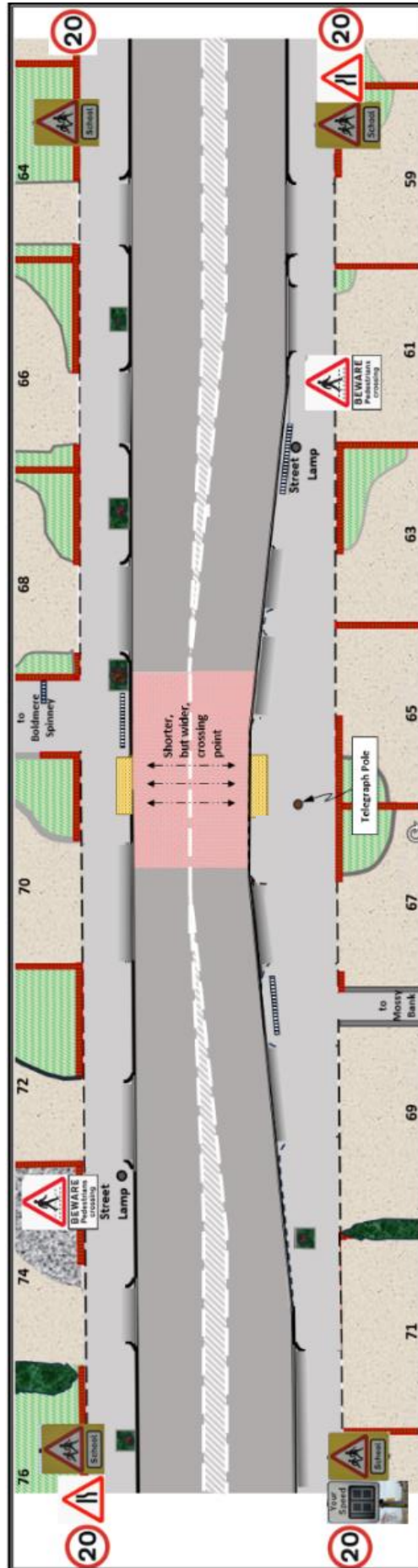
ANNEX B:

Central
Island
Option



ANNEX C:

Localised
Road Narrowing
Option - minimum



ANNEX C (i):

Localised
Road Narrowing
Option – MAXIMISED

