

Technical Note – Traffic Issues in Harston

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60571087

Plan Group

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Revision History

| Revision | Revision date | Details | Authorised | Name | Position |
|----------|---------------|---------------------------------------|------------|----------------|-----------|
| Rev 1 | 14/09/2023 | Revised following client comments | SOC | Sean O'Connell | Associate |
| Rev 2 | 04/10/2023 | Minor edits following client comments | SOC | Sean O'Connell | Associate |

1. Introduction

- 1.1 AECOM has been appointed through the Locality-led Department for Levelling Up, Housing and Communities neighbourhood planning technical support programme to undertake a review of the parking issues by the surgery in Harston and to identify potential solutions to issues within the village which could be included in the Harston Neighbourhood Plan. The work has been carried out on behalf of the Harston Neighbourhood Plan Group (HNPG).
- 1.2 This Technical Note focusses on two particular issues:
 - On-street parking on Church Street and the impact of the expansion of Harston Surgery; and
 - Congestion that occurs at Harston & Newton Community Primary School during school drop-off and pick-up periods.
- 1.3 The assessment of current issues on Church Street and the Primary School are based on information provided by HNPG on a joint site visit. Assumptions regarding parking, etc., have not been verified by independent surveys, and therefore the mitigation options discussed are based on a qualitative assessment of the existing situation.

2. Church Street

On-street Parking

2.1 Church Street is a single carriageway road, subject to a 30mph speed limit and, within the village, has street lighting. It serves residential properties on both sides of the road. Harston Surgery is also located on the south side of Church Street, approximately 200m west of the junction with the A10. The immediate area is shown in Figure 2-1 below.

Figure 2-1 Site Location

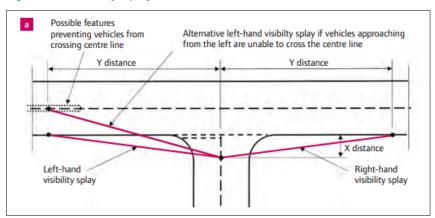


- 2.2 Cars regularly park on the south side of Church Street in the vicinity of the Surgery. This is understood to be a combination of residents, Surgery staff and Surgery visitors. The Surgery includes a pharmacy and serves six other nearby villages as well as Harston, and therefore the majority of visitors to the Surgery are likely to travel by car. It is understood that the Surgery is being extended which may result in the loss of some car parking on site, which will further add to the on-street parking pressures on Church Street.
- 2.3 The on-street parking reduces long sections of Church Street to a single lane with limited gaps to allow vehicles to wait. This limits forward visibility and causes congestion and safety issues as vehicles try to pass each other. There are no weight restrictions on Church Street and northbound traffic on the A10 is directed to Church Street to access local industrial estates. Church Street is used by HGV traffic travelling to/from the industrial estate at Button End and also Haslingfield to the north-west of Harston.
- 2.4 Approximately 20m to the east of the Surgery there is a narrow access road running north from Church Street. It provides pedestrian and vehicle access to approximately 10 houses and also access to a pumping station at its northern end which is serviced by commercial tanker lorries. The access road is referred to as 'The Footpath'.
- 2.5 The Footpath is located immediately to the east of residential properties, which results in very limited visibility to the west for vehicles exiting onto Church Street. To the east of The Footpath is an area of open land with several trees. It is understood that the land adjacent to The Footpath is currently being used for parking by Surgery staff as a temporary measure while building work is being undertaken at the Surgery.
- 2.6 To the west of the properties served by The Footpath is a narrow public footpath that runs from Church Street to Button End, also known as The Footpath.

Parking on The Footpath

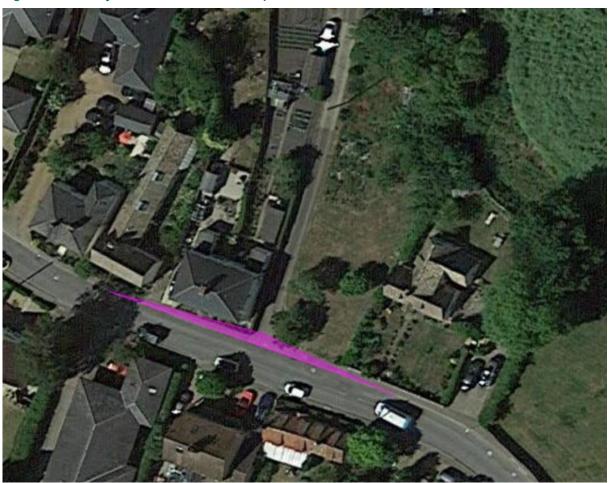
- 2.7 One option that has been suggested by HNPG to alleviate on-street parking issues on Church Street would be to provide formal parking on The Footpath, possibly allocated to Surgery staff.
- 2.8 Visibility requirements at junctions and accesses are set out in the DfT document 'Manual for Streets'. Vehicles exiting the side road need to be able to see vehicles approaching from either direction on the major road. Visibility is measured from a distance back along the minor road (the 'X distance'), and along the nearside kerbline of the major road (the 'Y distance'). This is illustrated below (extract from Manual for Streets; DfT, 2007) in Figure 2-2.

Figure 2-2 Visibility Splays at Junctions



- 2.9 The standard X distance is 2.4m, but this can be reduced to 2m in 'very lightly-trafficked and slow speed situations'. Given the constraints in this location and the likely reduction in vehicle speeds caused by on-street parking, a set back of 2m is considered appropriate in this case.
- 2.10 The Y distance is determined by the speed limit or, if known, the 85th percentile speed of traffic on the major road. The speed limit on Church Street is 30mph, for which the Y distance is 43m. It is understood that a speed limit reduction to 20mph on Church Street has been proposed, and for 20mph the Y distance would be 25m.
- 2.11 To illustrate the existing visibility constraints at the Church Street/The Footpath junction, visibility splays are shown below in Figure 2-3 for 20mph (2m x 25m).

Figure 2-3 Visibility at Church Street/The Footpath Junction



- 2.12 As already noted, visibility to the right is blocked by the fence/hedge on the western side, severely restricting visibility of approaching vehicles and pedestrians. Although this is an existing access, it is considered very unlikely that the highway authority would support additional parking on The Footpath if it was to be accessed via this junction, as it would result in intensification of use of what is a sub-standard access.
- 2.13 The issues presented by the current accessway entrance could be addressed by creating a new access further east. This is illustrated below in Figure 2-4, which also shows the visibility splays for a 20mph design speed.





- 2.14 In this arrangement, the vehicular access is re-located approximately centrally between the property boundaries on either side, maximising the visibility available in both directions. The new section of access road would tie-in to the existing approximately 40m to the north. The 'redundant' section of access road could then be used for pedestrian/cycle access only from Church Street up to the tie-in point, after which it would remain as a shared surface used by vehicles and pedestrians.
- 2.15 Figure 2-4 illustrates visibility is still constrained in both directions. However, there would be a significant improvement in the visibility to the west, creating a safer junction arrangement overall. If this option was to be considered in more detail it would be necessary to commission a topographical survey of the area to assess visibility more accurately.
- 2.16 Whilst the re-location of the access in Figure 2-4 would not provide standard-compliant visibility for the existing speed limit of 30mph, this option does provide a substantial improvement over the existing arrangement and therefore this betterment may be considered favourably by the highway authority.
- 2.17 Re-locating the access in this way would allow additional parking to be provided, as illustrated in Figure 2-5 below.

Figure 2-5 Additional Parking Bays



- 2.18 Figure 2-5 illustrates that approximately nine car parking spaces could be provided on the land east of The Footpath. It may be possible to retain some of the existing trees, but this could only be determined with a more detailed review of the layout, based on a topographical survey. The new parking spaces would require surfacing to make them usable all year round, possibly using a geotextile grid to reduce the visual impact.
- 2.19 Whilst parking on The Footpath would alleviate some pressure on parking along Church Streets, the following caveats apply:
 - · Agreement on use of the land for parking with the land owner;
 - The additional parking may not fully alleviate parking issues on Church Road a parking survey would be
 required to determine this, also taking into consideration the expansion of the Surgery and the associated
 increase in parking demand;
 - If the spaces were to be reserved for Surgery staff then enforcement of this may be an issue, as well as the issue of allocating use of this land to a private business.

Parking Restrictions

- 2.20 Another alternative that could be considered is parking restrictions along Church Road in the vicinity of the Surgery, in the form of single or double yellow lines. Single yellow lines restrict parking at certain times of day, and double yellow lines restrict parking at all times. The restrictions would have to be on both sides of the road to be effective.
- 2.21 Whilst single or double yellow lines could be used to create more gaps in the on-street parking and make passing easier, it would also create a number of issues:

- Any restrictions along Church Road would inconvenience residents, particularly those without sufficient driveway parking;
- Enforcement would be difficult given the location, and therefore may not be supported by the highway authority for this reason;
- Parking may simply be displaced further along Church Road, creating a similar issue just outside the restricted parking area.
- 2.22 The introduction of any parking restrictions would require a Traffic Regulation Order (TRO), which involves a set legal process the highway authority must follow. A statutory consultation is required, including local interest groups and residents, and any objections received would have to be considered before a decision on implementation is made.

3. Harston & Newton Community Primary School

Parking on Station Road

3.1 Harston & Newton Community Primary School and its location on Station Road is shown in Figure 3-1.

Figure 3-1 Site Location



- 3.2 There are double yellow lines and/or 'School Keep Clear' zig-zag markings along both sides of Station Road running from close to its junction with the A10 to approximately 40m east of the school access; this restricts parking at all times. It is intended to create a safe zone around the school access by not allowing parked vehicles to obscure visibility.
- 3.3 No parent drop-off/pick-up parking is provided within the school grounds, and therefore parents park on the north side of Station Road for this purpose. Staff can park within the school grounds, either in the car park or on the grass verge just inside the school access.
- 3.4 It is understood that some parents stop or park within the restricted areas, due to congestion at school opening and closing times, the lack of parking available and lack of enforcement of the existing restrictions.
- 3.5 There is a bus stop to the east of the school access which does not serve any regular bus routes and is only used for occasional school trips.

Enforcement

- 3.6 The existing restrictions appear reasonable and consistent with similar situations at other schools. Having reviewed the existing conditions, no changes to road markings are considered appropriate. Formal marking of parking bays along the north side of Station Road, to the east of the bus stop, could be used to ensure parents park efficiently, however this would not seem appropriate to the semi-rural nature of the road and given that the issues only occur for short periods twice a day on school days.
- 3.7 Removal of the redundant bus stop markings would create space for 2 or 3 additional cars to park along Station Road. This would require a TRO which would have to follow the procedure outlined above, and any objections would have to be considered before a decision could be made.
- 3.8 If further measures are considered necessary, these could include:
 - Additional enforcement, either formally via the local authority / Police who could occasionally attend the school during drop-off or pick-up times; or informally through school staff being present at the school entrance;
 - Additional signage to reinforce the existing restrictions and emphasise that the restrictions are enforceable
 and there to protect the school pupils. These could be standard road signage or could be informal signs
 designed by the school pupils; and
 - Monitoring via the temporary use of cameras at irregular intervals.

4. Summary and Conclusions

Church Street

- 4.1 At present, there is a deficiency in car parking available for staff and visitors at Harston Surgery. There is a vacant area of land opposite the surgery which could be developed to provide additional car parking.
- 4.2 The current access to this area is poorly located due to a building obscuring visibility at the junction with Church Street. Moving the access eastwards can provide improved sight distance and there is potential to fit approximately nine car parks on the existing grassed area.
- 4.3 Developing these car parking spaces would reduce the size of the green area and a more detailed review of the site is required to determine ultimate feasibility.
- 4.4 Parking restrictions could be used to address the issue but this may result in issues including inconveniencing local residents and enforcement difficulties.

Harston & Newton Community Primary School

- 4.5 It is understood that some parents stop or park within the restricted areas on Station Road.
- 4.6 The existing restrictions appear reasonable and consistent with similar situations at other schools. Having reviewed the existing conditions, no changes are considered necessary.
- 4.7 If further measures are desired, these could include removal of the existing bus stop marking (subject to approval of a TRO), additional enforcement, additional signage or traffic monitoring.