

**Ward Committee Scheme 06/07
Report to Fishergate Ward Committee**

Your Reference:- FS- Our Reference:- 0609904 Date:- 31st July 2006
06-01

Broadway Shops – Parking and Pedestrian Access

1.0 Brief

- 1.1 To investigate a suggested layout for more defined and improved parking and pedestrian provision outside the shops on Broadway.

2.0 Existing highway layout and traffic conditions outside the shops on Broadway

- 2.1 The existing layout is shown on the attached plan no. TS/WC/FS-01-06/0609904/001.
- 2.2 The forecourt area immediately in front of the shops at the local centre on Broadway is in the ownership of the local shops, and does not form part of the public highway. As a result, this area does not have any positive indication of which portions of the forecourt are for pedestrian use, and which sections are for vehicular use. Also, as the forecourt area is in the ownership of the shops, shop goods, advertising hoardings bollards (protecting the cash machine) and trolley stacking area are also present there.
- 2.3 This unusual situation results in the current unsatisfactory conditions occurring on site, as indicated on the photographs below:-



Haphazard parking effectively blocking the forecourt area for pedestrians



Parking and merchandise on the forecourt area

- 2.4 At present, vehicles ride up on to the forecourt area and park in a haphazard fashion there, with pedestrians having to thread their way around the parked vehicles, and occasionally having to take evasive action when vehicles ride up unexpectedly on to the forecourt area.
- 2.5 The lack of defined areas for pedestrians and vehicles on this forecourt is at the root of this problem, and poses particular difficulties for visually- impaired pedestrians, those in wheelchairs, and others pushing prams/ buggies.

3.0 Accident History

- 3.1 The injury accident history has been checked for the past three years. This indicates that there have been no injury accidents recorded at the site.
- 3.2 The difficulties for pedestrians and the haphazard parking arrangement at the above site are not, therefore, giving rise to injury accidents at this location. The arrangements are potentially hazardous, however, and may give rise at some stage to pedestrian injury accidents there.

4.0 Evaluation of the suggested options for overcoming these problems

- 4.1 As a result of the problems being experienced by pedestrians at the site, a suggestion has been made to create a more systematic layout for parking and pedestrian areas at this location.
- 4.2 The suggested arrangement is shown on the attached sketch at Appendix 1 (Councillor D'Agorne's sketch) which is an attempt to create an echelon parking area for vehicles and defined areas for pedestrians.
- 4.3 The feasibility of creating a layout based on this suggestion has been investigated, including an assessment of options for arranging parking bays at various angles to the access road. Unfortunately, none of these options appears to offer a practicable solution, as explained below.

4.4 As a general comment, all options which involve 90-degree or echelon parking necessarily require vehicles reversing on the forecourt out of the spaces into the service road, with associated problems for pedestrians (who may be unfamiliar with echelon parking layouts) crossing from the central island. There may also be the need for physical barriers to prevent echelon-parked vehicles overhanging or encroaching on pedestrian areas of the forecourt.

4.5 Presently, vehicular access to some of the shops has to be achieved in competition with the current informal and haphazard parking arrangements. With more formal parking arrangements, whatever shape that they take, servicing of these shops will still have to be considered, and will possibly have to be managed by the shops.

4.6 The possible options for echelon parking are:-

1. 90-degree parking

- The average width of the forecourt has been measured as 6.10m. Allowing 1.80m for a minimum width of pedestrian provision adjacent to the shop fronts, this leaves approximately 4.30m to accommodate the vehicular parking provision. However, the standard length of a parking bay is 4.80m, which is the distance needed to accommodate most cars and small vans. Hence there is insufficient forecourt space to accommodate 90-degree parking bays if 1.80m were reserved for pedestrian provision.
- Also, to enable vehicles to manoeuvre squarely into a 90-degree parking bay, a manoeuvring width of 6.00m is required. At present, the access road from which vehicles would be manoeuvring is 3.10m. This means vehicles could not manoeuvre into the parking spaces without running up on to central island, or entering the bays at an angle. The attached plan no. TS/WC/FS-01-06/0609904/002 illustrates the 90-degree situation on site, together with the swept paths necessary to access the parking bays squarely.
- Given the constraints of the narrowness of the access road, the drawing shows that this is not practicable without having very wide parking bays. Even then, vehicles have got to park at an angle which tends towards an echelon parking arrangement. Furthermore, to accommodate right-angled bays, and to prevent them overhanging the narrow access road, the footway width adjacent to the shops would have to be reduced to 1.30metres. A footway of this width would not be able to accommodate two wheelchairs or two pushchairs passing one another. The footway width would also be further reduced outside the Co-op, as there are bollards protecting the cash machine, and an area for shopping trolley storage.
- The combination of the limited depth of the forecourt area and the lack of manoeuvring width in the access lane mean that 90-degree parking is not a feasible option for this location.

2. 60-degree parking

- Inclining the parking bays at a 60-degree angle reduces the manoeuvring width required to turn squarely into the parking bay to 4.20m. This still exceeds the available width of the access road of 3.10m, which means that the parking bays would have to be made wider than normal to enable cars to access them.
- However, a more fundamental problem is that the inclined length of the parking bays (top corner to bottom corner dimension of the bay) increases the effective space requirement

on the forecourt to 5.40m, which, again, significantly exceeds the 4.30m available. This means that the end of larger cars would still stick out and obstruct the access road.

- The combination of the limited width of the forecourt area and the lack of manoeuvring width in the access lane mean that 60-degree parking is not a feasible option for this location.

3. *45-degree parking*

- Inclining the parking bays at a 45-degree angle reduces the manoeuvring width to turn squarely into the parking bay to 3.60m. This still exceeds the available width of the access road of 3.10m and means that wider than normal bays would be needed. The attached plan no. TS/WC/FS-01-06/0609904/003 illustrates the 45-degree situation on site, together with the swept paths necessary to access the parking bays. The inclined length of the parking bays, however, increases the space requirement on the forecourt to 5.10m, which, again, significantly exceeds the 4.30m available. This means that vehicles would stick out into the access road if the required 1.80m footway is to be achieved.
- The combination of the limited width of the forecourt area and the lack of manoeuvring width in the access lane mean that 45-degree parking is not a feasible option for this location.

4. *Parking at less than 45 degrees.*

- By reducing the angle of the echelon parking further, say to 30 degrees or less, it may be feasible to accommodate some degree of echelon parking. However, the capacity benefits over simply parking parallel to the road are minimal, and the drawbacks of echelon parking still remain (principally that vehicles are constrained to reverse out into the access road, with poor rearward visibility and the associated difficulties for pedestrians crossing from the central island). With parallel parking, the layout is well known and well understood by motorists and pedestrians alike, and vehicles can drive in and out of the parking bay area in forward gear, and servicing to the shops could be accomplished from the parking bay.

5.0 **Favoured option – parallel parking lay-by.**

- 5.1 The favoured option to provide more adequately defined pedestrian areas and clearly defined customer parking is shown on drg. no. TS/WC/FS-01-06/0609904/004. This option, as explained above will provide a 2.40m wide parking lay-by immediately adjacent to the existing service road.
- 5.2 The reduced width of forecourt of 3.70m will comfortably accommodate a pedestrian route of 1.80m minimum width, leaving 1.90m width to accommodate shop owners' merchandise and a relocated post box.
- 5.3 The proposed arrangement provides a more standardised layout, which drivers and pedestrians alike should be more familiar with, and which will obviate the current undesirable conflicts between pedestrians and manoeuvring vehicles on the forecourt.
- 5.4 Currently, the service road is two-way. With a road of restricted width of 3.10m, this is undesirable, and it is suggested that, if the improvement scheme is approved and proceeds, a

Traffic Regulation Order (TRO) is implemented to convert this service road into a one-way route, permitting traffic to proceed along it in a westerly direction only.

5.5 There are a number of difficulties with the scheme, however:-

- It would provide parking for fewer vehicles than are currently catered for with the existing haphazard arrangements. If the lay-by were implemented, the existing vehicular accesses to some of the shops would be severely restricted by parked vehicles.
- As the scheme is on land which is not part of the highway, formal agreement from the fronting shop owners would be a fundamental requirement before any scheme could proceed. Furthermore, if CYC undertakes any improvement works in this area, the area could then become an ongoing maintenance commitment for the Authority. Before any such works are carried out, therefore, it would be necessary to obtain a written agreement with the shop owners over the responsibility for future maintenance of the forecourt area.
- Although currently, most of the access road is unadopted, it is still feasible to place a one-way TRO on it. However, signing will be required, which will have to be illuminated. The costs of the necessary TRO and signing would be of the order of £3,000.

5.6 The drawing of the proposed scheme is in outline only at this stage. Detailed design will only be commenced after formal agreement on points raised in paragraph 5.5 above have been obtained.

6.0 Cost Estimates

- 6.1 The estimated cost of the scheme is of the order of £15,000 - £20,000, including the costs of implementing the TRO for making the service road one-way westbound.
- 6.2 Currently no funding is available within the CYC highway budgets to undertake this work. Significant improvement works have also only recently been completed at this location, which improve pedestrian crossing facilities and access to the bus stop on the island in front of the shops.

7.0 Conclusions

- 7.1 The current undefined layout of the forecourt in front of the Broadway shops gives rise to undesirable conflicts between vehicles parking there in a random fashion and pedestrians attempting to access the shops.
- 7.2 A check of the accident history has revealed that there have been no injury accidents recorded at the site. The arrangements are potentially hazardous, however, and may give rise at some stage to pedestrian injury accidents there.
- 7.3 A scheme based on echelon parking has been investigated, and has been shown not to be feasible due to lack of available space on the forecourt.
- 7.4 A scheme of parallel parking, including the construction of a formal parking lay-bay adjacent to the service road is feasible, and could be accommodated, leaving adequate

forecourt space for a 1.80m wide pedestrian route and a width of 1.90m to allow for shop owners' merchandise and advertising signs.

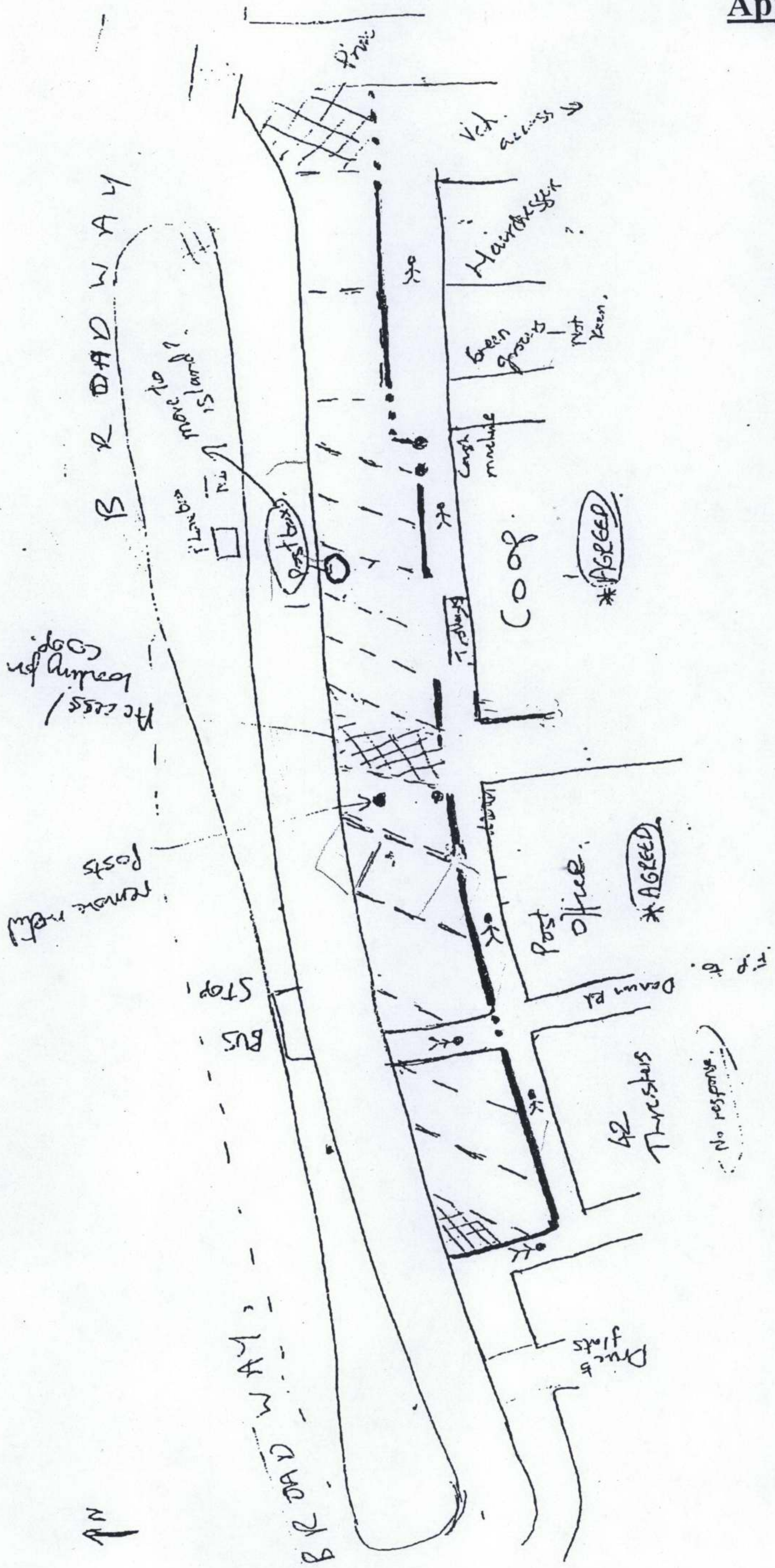
- 7.5 The implementation of a TRO to make the service road one-way westbound would also be desirable as part of any improvement scheme.

8.0 Recommendation

- 8.1 That the scheme shown in drg. no. TS/WC/FS-01-06/0609904/004 is recommended for consideration by the Ward Committee. As the scheme is on land which is not part of the highway, formal agreement from the fronting shop owners would be a fundamental requirement before any scheme could proceed.
- 8.2 The forecourt area is not part of the adopted highway. If CYC undertakes any improvement works in this area, the area will then become an ongoing maintenance commitment for the Authority. Before any such works are carried out, therefore, a written agreement with the shop owners over the responsibility for future maintenance of the forecourt area would have to be obtained.
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Appendix 1

UNIVERSITY SHOPS
SAFETY MARKINGS



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Andy D'Agnone May '06.