

## RESULTS OF SITE ASSESSMENT AND OPTIONS IN ACCORDANCE WITH DfT LOCAL TRANSPORT NOTE 1/95 'The Assessment of Pedestrian Crossings' – Market Place, Kirkbymoorside

### Site Assessment:

#### **Location**

The inspection was carried out at the Market Place in Kirkbymoorside, from the mini-roundabout junction with Castlegate/Dale End to the north, to the junction with Howe End to the south (OS GR: 469576E 486698N to 469743E 486456N). The road running through the Market Place is a two-lane single carriageway, 7.0 metres wide at High Market Place, increasing to 10.1 metres at the Memorial Hall. There is a small roundabout/island where Church Street and West End meet the Market Place, and here the carriageway widens considerably.

The road slopes downhill along its entire length from north to south, 71m above sea level at Dale End to 59m above sea level at the Howe End junction.

Footways run along both sides of the carriageway, of varying width, typically 2.4 to 4.4m wide.

A 30MPH speed limit is in force all along the Market Place. The side roads are also subject to a 30MPH limit.

#### **Highway Facilities**

A system of lighting is present, although this can only be considered to be footway lighting. This lighting would need to be upgraded to make it suitable for a pedestrian crossing, of whatever type. The road surface is in a good condition, with some fretting of the surface and patching. There are centre-line road markings along the whole length of the survey area.

Parking, taxi and disabled bay markings are present along the eastern side of the carriageway to the north of Church Street, and car parking is allowed on the cobbled areas to both sides. Kerb-side parking is allowed between Church Street and Howe End.

There is a bus stop with lay-bay immediately to the south Howe End. A telephone kiosk and post box are situated outside the Post Office.

## **Visibility**

The road through the Market Place is relatively straight from the north to the junction with Howe End, and so forward visibility is good. There is a mild bend at this junction, after which the road is again straight along Piercy End and towards the A170.

Although vehicles park on either side of the road, this does not affect forward visibility for motorists, however pedestrians who wish to cross may have to walk out between parked cars to see if the road is clear.

## **Complexity**

There are four minor road junctions, a number of accesses to private premises, and an access to a car park within the survey area.

There is no existing pedestrian crossing facility other than an un-controlled crossing point, with dropped kerbs and buff-coloured tactile paving close to the Post Office. Similar tactile paving is in place in the footways where they meet the side road junctions.

Road markings are used extensively at the junctions and along the main thoroughfare to guide motorists.

## **Crossing Traffic**

During the time of the survey, a small number of pedestrians crossed the road. Waiting time to cross was no more than 30 seconds, however this depended upon acceptable gaps in the vehicle flow becoming available. A formal pedestrian count covering a number of hours would need to be carried out to determine if greater numbers of pedestrians cross the road at certain times of the day. It is assumed that the busiest time for pedestrian crossing movements is on market days and at school times, which includes those who travel by bus and therefore use the bus stop.

It was observed that pedestrians crossed the road at various locations all along the Market Place: there appeared to be no one particular position which was used extensively.

## **Vehicles**

There was a steady flow of vehicles travelling along the Market Place during the time of the survey, the majority being cars and light goods vehicles, however a few heavy goods vehicles did travel between the A170 and Dale End. The speed of vehicles was well below the 30MPH speed limit at the time of the survey (mid-morning). A classified vehicle count and speed survey has not been carried out.

## **Road Collisions**

Between 01/01/2009 and 28/02/2014 there have been no collisions in the survey area that have resulted in personal injury to pedestrians. One pedestrian was injured in 2011 at the bus stop in Piercy End when he fell off the steps of the bus.

### Option Assessment:

There are options with regard to the provision of a pedestrian crossing facility. These are:

#### **Do Nothing**

Unless there are times of the day when there is a continuous flow of pedestrians crossing the road within the survey area, it is difficult to justify the installation of any form of facility over and above what is there at present. This can only be determined by a formal pedestrian count, however it is thought that as pedestrian crossing movements are relatively low, do not follow a particular desire-line, and because waiting times are not excessive, that a controlled crossing is not currently needed.

#### **Refuge Island**

Should a refuge island be introduced to create an un-controlled crossing facility, a minimum road width of 9 metres would be required. This space is available in parts of the survey area, but it would result in the loss of on-street parking space. An island would have a traffic-calming effect.

To cater for partially sighted pedestrians and to better define the walking route, tactile paving would have to be introduced in both footways and on the island. Kerb re-alignment would be required, and bollards would need to be positioned on the island.

The cost to install a refuge with associated tactile paving and bollards, together with some resurfacing and amendments to the road markings, would be approximately £10,000.

## **Zebra Crossing**

A zebra crossing is only suitable on roads with a speed limit of 30MPH and under, and where vehicle flows are no more than moderate. Where gaps in vehicle flow are few, and waiting times long because pedestrians feel it may be hazardous to step into the road, then a Zebra crossing is unsuitable. Primarily due to the low number of pedestrians, and because waiting times to cross are not excessive, the provision of a zebra crossing is not recommended.

Also, for such a facility to be introduced, the street lighting would have to be upgraded, beacons and tactile paving would have to be introduced, and new road markings would have to be laid. The zig-zag markings associated with a zebra crossing would mean that vehicles could not stop in the vicinity of the crossing, and so a number of parking places would be lost. The cost to introduce a zebra crossing is approximately £18,000.

## **Signal-controlled Crossing**

This would be in the form of a puffin crossing. Signal-control is used where there are higher vehicle speeds; there is a high proportion of vulnerable pedestrians, and where vehicle flows are high and pedestrians have difficulty asserting precedence.

Caution should be exercised where pedestrian flows are generally light, or light for long periods of the day, as at this location. Motorists who become accustomed to not being stopped at the crossing may begin to ignore its existence, with dangerous consequences.

A signal-controlled crossing has to be positioned at least 20 metres away from a side road junction, so that motorists entering the main road have time and space to see and react to the signals. This limits where such a facility could be positioned within the survey area.

Again, the street lighting would need to be improved, and the associated zig-zag markings would prevent vehicles parking or stopping on the approaches to the crossing. The cost to introduce a puffin crossing is approximately £40,000. There would be an operating cost of approximately £1,500 per year to maintain this type of crossing.

## **Signal-controlled Crossings within a Signal-controlled Junction**

There is not enough demand from vehicles using the side roads, nor a collision history, to warrant the introduction of a signal-controlled junction at this location.

Conclusions:

Unless a classified count of pedestrian crossing movements can prove otherwise, it is difficult to justify the need for a zebra or signal-controlled crossing. A refuge island may be the most suitable facility, however as there is no discernible pedestrian desire line, it is difficult to state where this facility could be positioned to ensure that it is used by a majority of those who wish to cross the road. Indeed, a single refuge would not serve all pedestrian movements.