Woodford Movement Study

Final

On behalf of Woodford Neighbourhood Forum
Document Control Sheet

Project Name: Woodford Movement Study
Project Ref: 34358
Report Title: Pedestrian and Cyclist Environment Report - Draft
Doc Ref: 34358.5501.001
Date: November 2015

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prepared by:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Richard Reed / James</td>
<td>Various</td>
<td>JM</td>
<td>17.11.15</td>
</tr>
<tr>
<td>MacPherson</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reviewed by:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>James MacPherson</td>
<td>Associate</td>
<td>JM</td>
<td>17.11.15</td>
</tr>
<tr>
<td>Approved by:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>James MacPherson</td>
<td>Associate</td>
<td>JM</td>
<td>17.11.15</td>
</tr>
</tbody>
</table>

For and on behalf of Peter Brett Associates LLP

Revision | Date | Description       | Prepared | Reviewed | Approved |
----------|------|-------------------|----------|----------|----------|
A         | 02.12.15 | Client Comments | RR       | JM       | JM       |

Peter Brett Associates LLP disclaims any responsibility to the Client and others in respect of any matters outside the scope of this report. This report has been prepared with reasonable skill, care and diligence within the terms of the Contract with the Client and generally in accordance with the appropriate ACE Agreement and taking account of the manpower, resources, investigations and testing devoted to it by agreement with the Client. This report is confidential to the Client and Peter Brett Associates LLP accepts no responsibility of whatsoever nature to third parties to whom this report or any part thereof is made known. Any such party relies upon the report at their own risk.

© Peter Brett Associates LLP 2015
Contents

1 Introduction ................................................................................................................................. 1  
  1.1 Objectives of Study ........................................................................................................ 1  
  1.2 Scope of report .................................................................................................................. 1  

2 Transport and Movement Now ................................................................................................... 3  
  2.1 Introduction .................................................................................................................... 3  
  2.2 Woodford Neighbourhood Plan Consultation Feedback ............................................... 5  
  2.3 Existing Pedestrian and Cyclist Environment .................................................................. 6  
  2.4 Existing Traffic Flows ..................................................................................................... 15  
  2.5 Personal Injury Collisions ............................................................................................. 17  
  2.6 Summary ..................................................................................................................... 18  

3 Transport and Movement in the Future .................................................................................. 22  
  3.1 Introduction .................................................................................................................. 22  
  3.2 A6 to Manchester Airport Relief Road (Relief Road) .................................................. 22  
  3.3 Woodford Aerodrome .................................................................................................. 24  
  3.4 Future Traffic Flows ..................................................................................................... 25  
  3.5 Impact on Pedestrian and Cyclist Environment .......................................................... 32  

4 Potential Additional Improvements ......................................................................................... 34  
  4.1 Introduction .................................................................................................................. 34  

5 Summary and Conclusions ...................................................................................................... 40  
  5.1 Summary ..................................................................................................................... 40  

Figures

Figure 1.1 – Geographical scope of the Movement Study ............................................................. 2  
Figure 2.1 – Key Roads / Routes in the Study Area ..................................................................... 4  
Figure 2.2 – Existing Public Rights of Way in the Study Area and Immediate Vicinity .......... 5  
Figure 2.3 – Narrow Footway on Woodford Road .................................................................. 7  
Figure 2.4 – Traffic Islands on Woodford Road ....................................................................... 8  
Figure 2.5 – Refuge Island, Chester Road (A5102) at Chester Road / Woodford Road Roundabout ... 9  
Figure 2.6 – Cyclist on Chester Road ..................................................................................... 11  
Figure 2.7 – Jenny Lane Road Surface .................................................................................... 12  
Figure 2.8 – Bridle Road Footway Condition ......................................................................... 14  
Figure 2.9 – 2012 Weekday Morning Peak Hour Flows .......................................................... 15  
Figure 2.10 – 2012 Evening Peak Hour Flows ...................................................................... 16  
Figure 2.11 – Collision Data for WNF Study Area (2010 to 2014) ........................................... 18  
Figure 2.12 – Summary Plan of Existing Pedestrian and Cyclist Environment Issues .......... 19  
Figure 3.1 – Indicative Route of A6 to Manchester Airport Relief Road ................................... 22  
Figure 3.2 – Impact of the Relief Road in Woodford during the Weekday Morning Peak Hour .... 26  
Figure 3.3 – Impact of the Relief Road in Woodford during the Weekday Evening Peak Hour ... 27  
Figure 3.4 – Woodford Aerodrome Development Traffic, Weekday Morning Peak Hour ....... 28  
Figure 3.5 – Woodford Aerodrome Development Traffic, Weekday Evening Peak Hour ...... 28  
Figure 3.6 – Change in Traffic Flows between 2012 and 2028, Weekday Morning Peak Hour .. 29  
Figure 3.7 – Change in Traffic Flows between 2012 and 2028, Weekday Evening Peak Hour .. 30  
Figure 4.1 – Geographical location of potential improvements .............................................. 34
Tables
Table 2.1 – 2012 Weekday Morning and Evening Peak Hour Survey Flows ................................. 17
Table 2.2 – Summary Table of Existing Pedestrian and Cyclist Environment Issues...................... 20
Table 3.1 – Change in Traffic Flows between 2012 and 2028, Weekday Morning Peak Hour .......... 31
Table 3.2 – Change in Traffic Flows between 2012 and 2028, Weekday Evening Peak Hour ........... 32
Table 4.1 – Summary of Potential Additional Pedestrian and Cyclist Environment Improvements..... 35

Appendices
Appendix A  Relief Road Improvement Drawings
Appendix B  Woodford Aerodrome Chester Road Improvement Drawings
1 Introduction

1.1 Objectives of Study

1.1.1 Peter Brett Associates LLP (PBA) has been commissioned by the Woodford Neighbourhood Forum (WNF) to provide advice with regard to potential measures to be implemented that could improve the pedestrian and cycling environment in Woodford. The specific focus of this study will consider the following:

- The existing conditions for pedestrians and cyclists in Woodford village;
- The impact of the Woodford Aerodrome development and A6 to Manchester Airport Relief Road (hereafter referred to as Relief Road) on movements and infrastructure in the village; and
- Potential measures, over and above those which will be delivered by the Aerodrome and Relief Road schemes, to improve pedestrian and cyclist movements in Woodford.

1.1.2 WNF intend to use this report as the basis for discussions with Stockport Metropolitan Borough Council (SMBC) regarding the pedestrian and cycling environment in Woodford. SMBC are the local highway authority for this area.

1.2 Scope of report

1.2.1 This document is intended to be a “non-technical” report, providing high-level advice to the WNF and summarising the transport and movement issues in the village; it does not provide detailed design and analysis of specific potential interventions. The report has been informed by a site visit, which was conducted in September 2015, to assess the existing conditions and operation of the local area for pedestrians and cyclists, and to provide insight into potential solutions. PBA has utilised data and information available in the public domain to prepare this report, including the Transport Assessment submitted in support of the Woodford Aerodrome development (also produced by PBA).

1.2.2 The report has been split into five sections including this introduction, and can be summarised as follows:

- **Section Two: Transport and movement now.** This section focuses on the existing conditions in the village;
- **Section Three: Transport and movement in the future.** This section considers the impact of the Woodford Aerodrome development and Relief Road schemes, including the pedestrian and cycle improvements that will be delivered by these;
- **Section Four: Potential additional walking and cycling improvements.** Over and above those already being delivered by the Woodford Aerodrome and Relief Road schemes, this section provides high level suggestions of where additional improvements may be able to be made to the pedestrian and cycling environment;
- **Section Five: Summary and Conclusions.** The fifth and final section provides the summary and conclusions of this report.

1.2.3 The geographical scope of this study has been based upon the Woodford Neighbourhood Area, which is shown in Figure 1.1 below for information.
Figure 1.1 – Geographical scope of the Movement Study

Reproduced from Ordnance Survey 1:1,250 mapping with the permission of the controller of Her Majesty’s stationery Office. Crown Copyright. Stockport Metropolitan Borough. Council LA100019571. Unauthorised reproduction infringes crown copyright and may lead to prosecution or civil proceedings.
2 Transport and Movement Now

2.1 Introduction

2.1.1 This section provides details on the existing pedestrian and cyclist environment along key routes in the study area, together with current traffic flows and the location and frequency of personal injury collisions (hereafter referred to as collisions). Consultation feedback provided by residents of the WNF in response to a neighbourhood questionnaire has also been summarised.

2.1.2 The information set out in this section is based upon PBA’s extensive knowledge of the study area and the site visit undertaken in September 2015. Existing publicly available information from the planning application for the Woodford Aerodrome development and from Transport for Greater Manchester’s (TfGM) traffic accident database has been used where appropriate.

2.1.3 The key public highway routes in the study area, and which have been considered in the remainder of this report, are listed below for ease of reference and are shown graphically in Figure 2.1.

- A5102 Woodford Road;
- A5102 Chester Road;
- A5149 Chester Road;
- Moor Lane;
- Jenny Lane;
- Church Lane;
- Blossoms Lane;
- Old Hall Lane; and
- Bridle Road.
2.1.4 The key routes referenced above also link into a network of Public Rights of Way [PRoW] in the vicinity of Woodford village, shown below in Figure 2.2 for information. Whilst it is outside the scope of this report to consider these routes in full, the interaction between the public highway and these PRoW’s is considered where appropriate.
2.2 Woodford Neighbourhood Plan Consultation Feedback

2.2.1 The Woodford Neighbourhood Forum conducted a questionnaire on the 10th September 2014 on their Neighbourhood Plan, and received comments from local residents on a number of issues in the local area. With regard to the pedestrian environment in the village, the following issues and ideas were raised in response to this questionnaire:

- Traffic speeds endanger pedestrians, especially on Church Lane;
- Central traffic islands help but can take up to five minutes when crossing Chester Road and Woodford Road;
- More pedestrian crossings should be provided; and
- Public footpaths should be improved and made wider.

2.2.2 With regard to cycling, the following issues and ideas were raised:

- Dedicated on-road cycle lanes should be provided;
- Grass verges could be replaced with cycle tracks (PBA has assumed that this is referring to off-road, segregated cycle lanes);
- Traffic speeds endanger cyclists and need enforcement; and
- Roads need to be better maintained.
2.2.3 The above comments have been noted alongside our own on-site observations and local knowledge, in considering potential pedestrian and cycle measures in Section Four of this report.

2.3 Existing Pedestrian and Cyclist Environment

2.3.1 A brief review of the existing environment along the key routes and locations in Woodford village is provided below. Photographs from the site visit undertaken by PBA are also included to demonstrate any issues observed where appropriate.

**A5102 Woodford Road**

**Pedestrian Environment**

2.3.2 Woodford Road runs in a north – south direction and is located on the north-eastern edge of the village. Woodford Road provides the most direct route between Woodford and Bramhall, and also to Queensgate Primary School which is the nearest existing primary school to Woodford village (although it should be noted that a primary school will be delivered in Woodford in the future as part of the Woodford Aerodrome development detailed in the next section).

2.3.3 Footways are present on both sides of Woodford Road, which is subject to a 30 miles per hour [mph] speed limit for vehicles, and street lighting is also provided on both sides of the carriageway. Whilst the footways are in a relatively good condition for pedestrian use, it was noted from our site visit that these are narrow in places and pedestrians passing each other may not be able to do so without stepping into the vehicular carriageway. This is with particular reference to the western footway opposite the entrance for Moorend Golf Course, with the adjacent vegetation appearing overgrown and adding to the issue, as shown in the photograph (Figure 2.3) below. Narrow footways such as this may deter pedestrian movements along Woodford Road.
2.3.4 Also on the western side of Woodford Road, it was noted that there were no dropped kerbs on the footway on the southern side of the junction with Jenny Lane, and those on the northern side did not have tactile paving. This may also act as a further deterrent for pedestrian usage of this route, particularly for users with pushchairs or prams, and for wheelchair users. Given the narrow footways that continue round onto Jenny Lane, however, it is noted that there is limited space within the public highway to implement footway improvements in this location.

2.3.5 Further to the north on Woodford Road, the footway on the western side does widen into a shared footway / cycleway at the A555 roundabout. Dropped kerb crossings, with tactile paving, are provided for pedestrians wanting to continue north towards Bramhall, however this is not a controlled crossing point in the form of signals or a Zebra Crossing. This junction will, however, be remodelled as part of the forthcoming relief road (further details of which are in the following section) and pedestrian / cyclist improvements will be delivered then.

2.3.6 In terms of points for pedestrians to cross Woodford Road itself, the only formal crossing is located to the north of the A555 roundabout near to Queensgate Primary School and is in the form of a Zebra Crossing. To the south of the A555 roundabout, there are only informal crossing opportunities for pedestrians to cross and we have noted the feedback from the WNF regarding difficulties in crossing the Woodford Road carriageway due to volumes of traffic. At numerous points along the carriageway, there are five traffic islands in the central hatched area, which house “street furniture” such as signage and lighting columns and an example is shown in Figure 2.4 below. These do not appear to be formal central refuge islands for pedestrians based on their size and the street furniture which they contain, however it is noted that three are aligned with dropped kerbs on the adjacent footways (one located near the Jenny Lane bus stops, one near PRoW 11HGB and the other approximately 150 metres north...
of the Woodford Road / Chester Road Roundabout). Based on the widths of the carriageway and hatching in some areas of Woodford Road there may be opportunities to either improve these to fully cater for pedestrian movements, or introduce some form of new central refuges at appropriate desire lines (subject to further detailed design and analysis considerations).

Figure 2.4 – Traffic Islands on Woodford Road

Cyclist Environment

2.3.7 There are no on-road cycle lanes provided along Woodford Road, and whilst feedback from the WNF has suggested that traffic volumes may discourage cyclists from using this route, the carriageway surface appeared well maintained at the time of our site visit and should not act as a deterrent from this perspective. As detailed previously, at the roundabout with the A555, the western footway of Woodford Road does widen into a shared footway / cycleway which can be utilised by cyclists.

Woodford Road / Chester Road Roundabout

Pedestrian Environment

2.3.8 At the southern end of Woodford Road, a roundabout junction is formed with Chester Road. To the west of this junction, Chester Road forms the A5102, whilst to the east of the junction Chester Road forms the A5149.

2.3.9 Footways are provided for pedestrians on all sides of this junction, however the crossing provisions vary in form and quality on each arm. On the Woodford Road arm of the junction, dropped kerbs are provided on the eastern side (albeit without tactile paving), however no dropped kerbs are provided on the western side to tie in with this pedestrian desire line. A pedestrian refuge island is provided in the centre of the carriageway, however the condition of the surface is relatively poor and again does not comprise of tactile paving.

2.3.10 On the western Chester Road arm of the junction (the A5102), dropped kerbs and tactile paving is provided on both sides of the carriageway to allow pedestrians to cross at the roundabout, together with a refuge island and tactile paving in the centre of the carriageway.
The condition of the crossing is again in relatively poor condition, however, and the traffic bollard nearest to the roundabout appears to have been removed (See Figure 2.5 below). On the eastern Chester Road arm (the A5149), dropped kerbs on both sides of the carriageway and a refuge island are again provided, but do not have tactile paving.

Figure 2.5 – Refuge Island, Chester Road (A5102) at Chester Road / Woodford Road Roundabout

2.3.11 Immediately to the south of the roundabout, access is provided to the PRoW footpath (3HGB) running in a north-south direction parallel to Bridle Road. At the time of the site visit, this appeared relatively narrow and overgrown with vegetation, however, and it is unclear as to how well this route is used by pedestrians. The signage to this footpath from the public highway was also not clear and obvious.

Cyclist Environment

2.3.12 No formal cyclist provision in terms of cycle lanes is provided on the approaches to this junction, or on the roundabout itself. Notwithstanding this, the carriageway is relatively wide at this point and the surface condition well maintained.

A5102 Chester Road / Wilmslow Road

Pedestrian Environment

2.3.13 Chester Road to the west of its junction with Woodford Road is the A5102 as previously mentioned, and passes along the frontage of Woodford Aerodrome, Nottcutts Garden Centre and the other main village amenities. As such this section of Chester Road forms a major route through the village for pedestrians. The section of Chester Road up to its junction with Moor Lane is subject to a 30 mph speed limit for vehicles, with this increasing to 40 mph beyond this to the west.

2.3.14 There are footways on both sides of this road, with the footway on the northern side separated from the road by a wide grass verge in the vicinity of the garden centre, forming a safe and segregated environment for pedestrians. Wide grass verges are also present in-between the footway and carriageway on many sections of the northern footway to the west of the garden centre, particularly to the west of Moor Lane.

2.3.15 Adjacent to Woodford Aerodrome, there have been recent highway works taking place in relation to the residential development coming forward for that site and these were observed
at the time of our site visit. Whilst there was inevitable disruption as a result of this, significant enhancements to the pedestrian environment will be delivered to the Chester Road frontage as part of this development and these are discussed further in the next section.

2.3.16 There are no formal or informal crossing facilities provided along the section of Chester Road between its junctions with Moor Lane and Woodford Road, despite this being the location for the main village amenities. There are dropped kerbs located at the entrances to driveways of private houses, however these do not align with those on the opposite side of the carriageway to provide convenient crossing points in keeping with pedestrian desire lines. A dropped kerb crossing, with tactile paving and refuge island, is provided on Chester Road adjacent to its junction with Old Hall Lane.

2.3.17 At the junction of Chester Road and Moor Lane, it was also observed that the dropped kerb crossings on either side of the junction do not align, making it difficult to cross in this location. There is a further dropped kerb crossing, with tactile paving, slightly further to the north of the junction on Moor Lane, however this does not tie in with the desire line for pedestrians crossing at this junction and may not be well utilised.

2.3.18 To the west of Church Lane, the A5102 Chester Road becomes the A5102 Wilmslow Road, providing connectivity to Wilmslow and toward Alderley Edge. Wilmslow Road has a footway on the southern frontage of the carriageway, which is in a reasonable condition. Approximately 300m to the west of the junction with Church Lane, the footway continues on the northern frontage of the carriageway, although no pedestrian crossing facility is provided to assist pedestrians. The footway on the northern frontage is also in reasonable condition and provides access to the PRoW 5HGB, which connects Wilmslow Road with Church Lane.

Cycling Environment

2.3.19 There are no on-road or off-road cycle lanes currently provided along Chester Road, however the width of the Chester Road carriageway and 30 mph speeds in the main section of the village does not provide any obvious deterrent to cycling on-road. It is noted from the WNF questionnaire feedback that general volumes of traffic, particularly of heavy goods vehicles, and speeds of traffic may discourage less confident cyclists along Chester Road. A number of on-road cyclists were observed during our site visit, however, with vehicles able to pass these safely and no issues observed. It was noted that the entry to the Woodford Road / Chester Road Roundabout did have a number of potholes and an uneven road surface, however, which would be hazardous to cyclists.

A5149 Chester Road

Pedestrian Environment

2.3.20 There is only a short section of the Chester Road carriageway to the east of the Woodford Road / Chester Road roundabout that lies within the WNF area and therefore the scope of this study. The wider route, however, provides pedestrian access towards Poynton, including the rail station, and footways are present on both sides of the road in the study area and appear in good condition. The section of Chester Road within the study area is subject to a 30 mph speed limit for vehicles, and the footways on the northern side are separated from the carriageway by a wide grass verge. Street lighting is only provided along the southern footway in this area.

2.3.21 To allow pedestrians to safely cross Chester Road, there is a pedestrian island to the east of the junction with Bridle Road. This is in good condition, with dropped kerbs and tactile paving. It should be noted that the general dimensions of this island appear similar to the islands on Woodford Road, and also contain similar street furniture, however this has been designed to specifically facilitate pedestrian crossing movements whereas the others on Woodford Road do not appear to have this primary objective.
Cycling Environment

2.3.22 Chester Road to the east of the Woodford Road / Chester Road Roundabout again does not have any on-road or off-road cycle lanes, however the width of the carriageway and 30 mph speeds along this section does not provide any obvious deterrent to cycling on-road.

2.3.23 Cyclists were observed utilising this route during our site visit, with a number of cyclists using the wide road to cycle comfortably and vehicles able to pass cyclists safely as shown in Figure 2.6 below. The feedback from the WNF questionnaire has been noted, however, regarding the potential introduction of cycle lanes in the wide grass verges. Such improvements have been considered in relation to the Woodford Aerodrome development, and are referenced in the following section.

Figure 2.6 – Cyclist on Chester Road

Moor Lane

Pedestrian Environment

2.3.24 Moor Lane runs in a north – south direction through the village, parallel to Woodford Road, and is subject to a 30 mph speed limit for vehicles. It offers an alternative, quieter route to Woodford Road for vulnerable road users such as pedestrians and cyclists. Good quality and street lit footways are located on both sides of the road, with the exception of a section on the eastern side between Jenny Lane and the PRoW 11HGB (which connects through to Woodford Road) which does not have a footway.

2.3.25 Further to the north, Moor Lane turns into Hall Moss Lane. Footways are again provided on both sides of the carriageway, except for the southern side between Church Lane and Blossoms Lane, and then the northern side between Blossoms Lane and near to where Hall Moss Lane passes over the A555.

2.3.26 On the southern side of Moor Lane and to the west of Jenny Lane, a connection is provided to PRoW 9HGB. The quality of the signage to notify walkers of this route from Moor Lane is
poor, however, and the route could easily be missed. PRoW 9HGB connects from Moor Lane through to Church Lane.

**Cycling Environment**

2.3.27 There are no on-road or off-road cycle lanes present on Moor Lane, however a number of cyclists were observed cycling along this route on road during the site visit. Whilst the majority of the carriageway appeared to be in good condition and wide enough to safely accommodate on-road cyclists, there were some areas where potholes and maintenance issues could cause potential hazards for cyclists.

**Jenny Lane**

**Pedestrian Environment**

2.3.28 Jenny Lane runs broadly in an east – west direction, connecting Moor Lane and Jenny Lane, and is subject to a 30 mph speed limit for vehicles. A good quality footway runs on the northern side of the carriageway along its full length, and is a reasonable width and has street lighting. There is also a good quality footway on the southern side of Jenny Lane, however this does not run continuously through to Woodford Road, stopping approximately 150 metres short of this. Traffic levels along Jenny Lane were observed as being low during the site visit, providing a quiet pedestrian environment.

**Cycling Environment**

2.3.29 There are no on-road or off-road cycle lanes on Jenny Lane, however traffic flows were observed as being low during our site visit and the route is considered to be conducive to cycling. Notwithstanding this, however, the road surface was in a poorly maintained condition in areas, particularly on its eastern section, and could present a hazard to cyclists. An example of the poor road surface condition is shown in Figure 2.7 below.

**Figure 2.7 – Jenny Lane Road Surface**
Church Lane

Pedestrian Environment

2.3.30 Church Lane connects Chester Road to the south with Moor Lane to the north, and is subject to a 30 mph speed limit for vehicles. This is a relatively “rural” route in nature, with a row of residential properties at its southern end and some also located at its northern end near to Moor Lane.

2.3.31 At its southern end, there is a footway for a short length on its eastern side that continues round from Chester Road. Once this stops, there is no footway for approximately 75 metres until the row of houses on the western side, where this then continues along the frontage of the houses. Any residents of these houses wishing to walk to and from the village, therefore have to walk on the road for this section. It is worth noting that the footway on the eastern frontage of Church Lane, approaching its junction with the A5102 Chester Road / Wilmslow Road, is narrow and in poor condition, which could result in safe access issues for those in wheelchairs, and for parents with prams.

2.3.32 At its northern end near to Moor Lane, there are no footways to either side of the carriageway despite there being a number of residential properties in this vicinity. Whilst PBA has not had access to highway boundary data for this study, there appears to be little or no highway land available to introduce any level of footway provision due to the narrow carriageway and adjacent private properties.

Cycling Environment

2.3.33 There are no on-road or off-road cycle lanes present on Church Lane, however the lightly trafficked nature of the route means that it is relatively conducive to cycling. Indeed, a number of cyclists were observed utilising Church Lane during our site visit. Some vehicles travelling the route also appeared to be exceeding the 30 mph speed limit during the site visit, however it should be noted that specific speeds were not recorded as part of this study. Some general maintenance issues with potholes along this route were observed during our site visit, and these could present a hazard to cyclists.

Blossoms Lane

Pedestrian Environment

2.3.34 Blossoms Lane connects Hall Moss Lane / Moor Lane with Church Lane, and provides access to a limited number of properties. It is a relatively rural route, with no footways present on either side of the road and is not conducive to walking trips, other than providing access to PRoW 28CG, 11CG and 4HGB. A section of Blossoms Lane branches off to the west providing private access to a number of farms, and does not provide a through route for general traffic.

Cycling Environment

2.3.35 There are no on-road or off-road cycle lanes present on Blossoms Lane, although a number of on-road cyclists were observed during the site visit. Some general maintenance issues with potholes along this route were observed during our site visit, and these could present a hazard to cyclists.

Old Hall Lane

Pedestrian Environment
2.3.36 Old Hall Lane runs in a southerly direction from its junction with the A5102 Chester Road. There are no footways on either side of the carriageway on Old Hall Lane, however this route provides access to some residential properties, Avro Golf Club and PRoW 1HGB, 2HGB and 106HGB.

**Cycling Environment**

2.3.37 There are no on-road or off-road cycle lanes on Old Hall Lane. Whilst the road is narrow and rural in nature, the road surface appeared in relatively good condition during our site visit and had low levels of traffic. Cyclists were not observed using this route during our site visit, however there does not appear to be any obvious deterrent to them doing so.

**Bridle Road**

**Pedestrian Environment**

2.3.38 Bridle Road runs in a north-south direction, and is accessed from Chester Road to the east of the Woodford Road / Chester Road roundabout. It provides access to a number of residential properties, and has a footway on the western side of the road separated from the carriageway by a grass verge for much of its length. There is no footway along the eastern side of the road.

2.3.39 The surface of the footway in some locations along Bridle Road is in relatively poor condition, with the example shown in Figure 2.8 below adjacent to a residential driveway access. The photo also demonstrates that some vehicles tend to park along Bridle Road with wheels mounted on the footway, reducing the width available for pedestrians.

*Figure 2.8 – Bridle Road Footway Condition*

**Cycling Environment**
2.3.40 There are no on-road or off-road cycle lanes present on Bridle Road, however the carriageway surface was in good condition and would provide a quiet cycling environment given the low levels of traffic.

2.4 Existing Traffic Flows

2.4.1 Having considered the physical environment of the pedestrian and cycle routes through the village of Woodford, and having touched upon observations of traffic levels where appropriate along these routes based on our site visit, details of specific traffic flows are presented below for information. Traffic surveys on key routes through the village were undertaken in 2012 as part of the Woodford Aerodrome development planning application and the data associated with these is publicly available from the Stockport Council Planning Portal. This is the latest publicly available peak hour traffic flow data and is still considered to provide a good guide as to traffic flow movements now. Note, however, that data is not available for all of the routes considered in this study.

2.4.2 The 2012 weekday morning peak hour survey flows, stated as being between 07:45 and 08:45, and those in the weekday evening peak hour between 17:00 and 18:00 are presented in Figures 2.9 and 2.10 below. This shows total vehicle movements. A more detailed breakdown is provided in Table 2.1, demonstrating specific car and heavy goods vehicle movements that comprise the total flows.

Figure 2.9 – 2012 Weekday Morning Peak Hour Flows

Source: PBA Woodford Aerodrome Transport Assessment, 2012
Figure 2.10 – 2012 Evening Peak Hour Flows

Source: PBA Woodford Aerodrome Transport Assessment, 2012
### Table 2.1 – 2012 Weekday Morning and Evening Peak Hour Survey Flows

<table>
<thead>
<tr>
<th>Road</th>
<th>Direction</th>
<th>Weekday Morning</th>
<th>Weekday Evening</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Cars</td>
<td>HGVs</td>
</tr>
<tr>
<td>A5102 Chester Road (west of Moor Lane)</td>
<td>Eastbound</td>
<td>834</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>889</td>
<td>14</td>
</tr>
<tr>
<td>Moor Lane</td>
<td>Northbound</td>
<td>259</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>221</td>
<td>5</td>
</tr>
<tr>
<td>A5102 Chester Road (east of Moor Lane)</td>
<td>Eastbound</td>
<td>696</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>805</td>
<td>12</td>
</tr>
<tr>
<td>A5149 Chester Road</td>
<td>Eastbound</td>
<td>754</td>
<td>28</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>1167</td>
<td>25</td>
</tr>
<tr>
<td>A5102 Woodford Road (south of A555)</td>
<td>Northbound</td>
<td>1162</td>
<td>34</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>892</td>
<td>30</td>
</tr>
<tr>
<td>Jenny Lane</td>
<td>Eastbound</td>
<td>25</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>46</td>
<td>3</td>
</tr>
<tr>
<td>A555</td>
<td>Eastbound</td>
<td>768</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>1386</td>
<td>20</td>
</tr>
<tr>
<td>A5102 Woodford Road (north of A555)</td>
<td>Northbound</td>
<td>770</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>1087</td>
<td>9</td>
</tr>
</tbody>
</table>

Source: PBA Woodford Aerodrome Transport Assessment, 2012

2.4.3 As would be expected, the flows presented above indicate that the busiest routes through the village are Woodford Road, Chester Road and the A555. Moor Lane has much lower traffic flows as a north – south route compared to Woodford Road, whilst the flows using Jenny Lane between Moor Lane and Woodford Road are very low and in keeping with PBA observations on site.

2.5 Personal Injury Collisions

2.5.1 Given that the focus of this study is on the pedestrian and cyclist environment, consideration has also been given to safety by analysing the publically available records from the TfGM road accident database. The most recent five years of collision data between 2010 and 2014 has been summarised in Figure 2.3 below for the study area. Note that collisions are defined as “slight”, “serious” or “fatal”, defined by the TfGM database as follows:

- “A slight accident is any accident where one or more people received a slight injury as a result of that accident and no-one received a fatal or serious injury”;

J:\34000 to 34999\34358 Woodford Neighbourhood Forum\5501 Transport\Reps-Tech Notes\Final Report\Woodford Movement Study Final 02.12.15.docx
“A serious accident is any accident where one or more people received a serious injury as a result of that accident and no-one received a fatal injury”; and

“A fatal accident is any accident where one or more people received a fatal injury as a result of that accident”.

Figure 2.11 – Collision Data for WNF Study Area (2010 to 2014)

2.5.2 As can be seen from Figure 2.11, there have been 14 slight collisions and 2 serious collisions between 2010 and 2014, with no fatal collisions. The two serious collisions occurred at the junction of Moor Lane and Jenny Lane, and to the south of the roundabout between the A5102 Woodford Road and A555 roundabout; both of these occurred in 2010 and resulted in one casualty, although no further information about the accident or how it occurred is provided in the publically available data.

2.5.3 Given the geographical spread and low occurrence of collisions during the most recent five year period available, it is considered that there are no highway safety issues in the WNF study area that should give cause for concern in relation to pedestrians and cyclists.

2.6 Summary

2.6.1 Taking the information presented in this section into consideration, a summary of the existing pedestrian and cyclist environment issues in Woodford has been provided in Figure 2.12 and Table 2.2 below for further consideration. Note that the plan in Figure 2.12 is cross-referenced with Table 2.2.
Figure 2.12 – Summary Plan of Existing Pedestrian and Cyclist Environment Issues
### Table 2.2 – Summary Table of Existing Pedestrian and Cyclist Environment Issues

<table>
<thead>
<tr>
<th>Location</th>
<th>Issue</th>
<th>Map Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodford Road</td>
<td>Footways narrow in places, causing pedestrians to step into the carriageway. Overgrown vegetation appears to be the primary issue.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Dropped kerbs are not provided on the southern side of the junction with Jenny Lane.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Shared footway / cycleway on the approach to the A555, however no controlled crossing is provided across this busy road.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Poor crossing opportunities across Woodford Road. Numerous traffic islands are provided, however they do not appear to be designed for safe and effective pedestrian use due to the presence of street furniture narrowing the space available and dropped kerbs are not provided in some cases.</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>It is noted that Woodford Road is a busy route through the village and no cycle lanes are provided, however the carriageway surface appeared in good condition, there no safety issues based on the collision data and there is therefore no obvious deterrent to use of this route as a cyclist (other than Moor Lane offers a quieter and potentially preferable north-south alternative route)</td>
<td>5</td>
</tr>
<tr>
<td>Woodford Road / Chester Road Roundabout</td>
<td>Dropped kerbs are not provided on the western side of Woodford Road at this roundabout to tie in with the refuge island.</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Dropped kerbs and refuge islands on all arms are in a relatively poor condition, and do not have tactile paving (with the exception of Chester Road to the west of the roundabout).</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>Access to PRoW 3HGB from this roundabout is unclear and the footpath appears overgrown with vegetation.</td>
<td>8</td>
</tr>
<tr>
<td>A5102 Chester Road</td>
<td>There are no formal or unformal crossing points provided for pedestrians near to the main village amenities.</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>At the junction of Chester Road / Moor Lane, the dropped kerbs on each side of the road do not align and make crossing difficult for pedestrians. Further dropped kerbs / tactile paving are provided to the north of this but do not tie in with pedestrian desire lines.</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>No apparent safety issues for cyclists have been observed by PBA during our site visit, however the WNF comments have been noted about general traffic and heavy goods vehicle levels. The condition of the carriageway surface on the approach to the Woodford Road / Chester Road roundabout was poor in places, however, and could be a hazard to cyclists.</td>
<td>11</td>
</tr>
<tr>
<td>A5149 Chester Road</td>
<td>Pedestrian environment appears to be good, and suitable crossings are provided near to Bridle Road.</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>No obvious deterrents to cycling in this location, and</td>
<td>13</td>
</tr>
<tr>
<td>Route</td>
<td>Observations</td>
<td></td>
</tr>
<tr>
<td>------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Moor Lane / Hall Moss Lane</td>
<td>This route offers an alternative quieter north-south route for pedestrians and cyclists. No apparent issues with the quality of pedestrian environment with continuous footways provided in most locations.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>The signage to PRoW 9HGB near to Jenny Lane is poor and could be missed by walkers.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Whilst this offers a quieter route for cyclists to Woodford Road, the condition of the carriageway surface was poor in some locations and could cause hazards.</td>
<td></td>
</tr>
<tr>
<td>Jenny Lane</td>
<td>Provides an overall good quality, quiet pedestrian environment.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Traffic flows are low, and therefore provides a quiet route for cyclists. There are some surface maintenance issues, however, that could cause a hazard for cyclists.</td>
<td></td>
</tr>
<tr>
<td>Church Lane</td>
<td>There is a gap in the footway provision for approximately 75 metres at the southern end of Church Lane, leaving the residential properties on the western side of the road unconnected with the village amenities unless pedestrians walk in the carriageway.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This is a rural road, with cyclists observed to use it during PBA’s site visit. Some vehicles appeared to exceed the 30mph speed limit during the site visit, however speeds were not formally recorded as part of this study.</td>
<td></td>
</tr>
<tr>
<td>Blossoms Lane</td>
<td>This is a rural road, with only a few properties located along it and does not provide any footways (and with no real opportunity to do so in the future). The route provides access to PRoW 28CG, 11CG and 4HGB.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cyclists were observed using this route. It was noted that there were some surface maintenance issues that could present a hazard to cyclists.</td>
<td></td>
</tr>
<tr>
<td>Old Hall Lane</td>
<td>Footways are not provided along this road, which only provides access to a small number of properties, Avro Golf Club and PRoW 1HGB, 2HGB and 106HGB.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cyclists were not observed using this route, however there are no apparent deterrents to them using this quiet road.</td>
<td></td>
</tr>
<tr>
<td>Bridle Road</td>
<td>A footway is provided on the western side, which is in a poor condition in places. Vehicles also park with their wheels mounted on this footway, reducing the available width for pedestrians. No footway is provided on the eastern side.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No cyclists were observed during the site visit along this route, however the carriageway surface appeared in good condition and offers a quiet route to cyclists, which will connect with the Aerodrome development in the future.</td>
<td></td>
</tr>
</tbody>
</table>
3 Transport and Movement in the Future

3.1 Introduction

3.1.1 Having considered the existing conditions in the previous section, this section now details how the completion of the Woodford Aerodrome development and Relief Road will affect the pedestrian and cycling environment in the study area in the future. This is both in terms of the improvements which they will respectively deliver and the changes in traffic flows that they are estimated to result in. The details provided are from the publicly available documents submitted in support of the respective planning applications.

3.2 A6 to Manchester Airport Relief Road (Relief Road)

3.2.1 The Relief Road will provide a new dual carriageway connection from the A6 near Hazel Grove to Manchester Airport, providing east-west connectivity across South Manchester and Cheshire East and forms part of the South-East Manchester Multi-Modal Strategy (SEMMMS). The Relief Road will form an extension of the existing 4km section of the A555, continuing eastwards through its existing junction with Woodford Road. The scheme is currently under construction and is due to open in 2017. The indicative route of the Relief Road is shown in Figure 3.1 below for information.

Figure 3.1 – Indicative Route of A6 to Manchester Airport Relief Road
3.2.2 As part of the Relief Road scheme, the following will be delivered in the WNF area (or immediately adjacent to it)\(^1\):

**Relief Road Footway / Cycleway**

- A segregated footpath and cycleway adjacent to the full length of carriageway of the Relief Road, which will be able to be accessed from Woodford Road and the A5149 Chester Road, via the Oil Terminal junction as detailed below. This will provide a good quality dedicated cycle route to a number of destinations for residents of Woodford, notably the large employment area at Manchester Airport (including the new Airport City development) and retail and employment opportunities at Handforth Dean.

**Woodford Road / A555 Junction**

- The existing roundabout will be replaced by a signalised junction, with the Relief Road passing under Woodford Road in a “grade-separated” arrangement. West facing slip roads will be provided between Woodford Road and the Relief Road at this junction, allowing movements to and from the west. Movements to and from the east will not be facilitated at this junction, however connectivity to and from the east will be provided at the nearby Oil Terminal junction (further details of which are below);

- A shared footway / cycleway, 3 metres in width, will be provided on the eastern and western sides of Woodford Road over the Relief Road, improving connectivity between Woodford and Bramhall and providing access to the Relief Road footway / cycleway referenced previously; and

- Toucan Crossing facilities will also be provided at this new signalised junction, providing controlled crossing points for pedestrians and cyclists.

**Oil Terminal Junction and Links to A5149 Chester Road**

- Whilst just outside of the WNF study area, the Relief Road scheme will also deliver a new signalised gyratory at Bramhall Oil Terminal and a signalised connection to the A5149 Chester Road;

- The gyratory arrangement will include Toucan Crossing facilities for pedestrians and cyclists on the eastern approach and exit arms of the Relief Road, together with the Bramhall Oil Terminal approach on the northern side of the junction. The crossings will tie-in with the parallel footway / cycleway running on the northern side of the Relief Road;

- The link road junction from the Oil Terminal Junction to the A5149 will also be signalised, and will provide signalised Toucan crossing facilities on the southern and eastern sides of the junction for pedestrians and cyclists. This will provide safe connections for these users from Chester Road towards the Oil Terminal junction, and the footway / cycleway running parallel to the Relief Road.

3.2.3 As summarised above, therefore, the Relief Road scheme will deliver a number of infrastructure improvements for pedestrians and cyclists in the Woodford area, which should help to promote safe walking and cycling opportunities in the village and for onward connections to neighbouring areas. Aside from these specific improvements, the Relief Road will also significantly reduce the flow of existing vehicles through Woodford and the surrounding local roads, making the pedestrian and cyclist environment quieter and easier to use. Further details of the future traffic flow impacts are provided later in this section.

\(^1\) Information taken from Relief Road Planning Application documents and plans, with further details available online at [http://www.semmms.info/](http://www.semmms.info/)
3.2.4 Plans of the junction designs referenced above are included in Appendix A for information. These have been downloaded from the SEMMMS website and are the latest available in the public domain.

3.3 Woodford Aerodrome

3.3.1 The Woodford Aerodrome development has now commenced on site, with the demolition of the buildings on the northern frontage. Once fully built out, the site will comprise of the following:

- 920 residential dwellings;
- An extra care facility;
- Approximately 8,361 sq.m of commercial floor space;
- A public house;
- 5 shop units, comprising approximately 1,000 sq.m of retail floor space; and
- A primary school.

3.3.2 The planning application documents supporting the development outlined that the overall aim of the masterplan for the site is to maximise walking and cycling accessibility, and connections to Woodford and the wider area. A number of pedestrian and cycle access points will be provided across the site, to connect into the existing footpaths and bridleways, some of which have been inaccessible due to the perimeter fence of the Aerodrome.

3.3.3 As part of the development, a series of off-site enhancements to the pedestrian and cycling environment will also be provided in Woodford. The details of these still need to be finalised through the detailed design process and agreed with SMBC, however these will broadly include:

- A new high quality surface to the Chester Road frontage of the Aerodrome site in order to announce the arrival to, and define the centre of Woodford. The intention of this is to create an attractive, high quality pedestrian environment, and encourage slower traffic speeds. This Chester Road treatment scheme will be in place between Moor Lane and the Woodford Road / Chester Road roundabout;
- As part of this, gateway entrance features will be installed adjacent to Moor Lane and the Woodford Road / Chester Road roundabouts as part of the entrance features to the village;
- New informal crossings will also be introduced adjacent to Moor Lane and the Woodford Road / Chester Road roundabouts as part of the entrance features to the village;
- Further informal crossings will be provided along Chester Road adjacent to the eastern and western entrances to the Woodford Aerodrome site. A 3 metre cycle lane will also be formed from the eastern access into the site;
- A pedestrian and cycle access will also be provided from the eastern edge of the site directly onto the southern end of Bridle Road, which as noted earlier in this report is a quiet residential street suitable for walking and cycling;
- The Woodford Aerodrome developers have made a planning contribution towards improving cycling connections along Chester Road from the Woodford Road / Chester Road roundabout towards Poynton (including the provision of cycle lanes);
The Woodford Aerodrome developers have also made a planning contribution towards traffic calming measures along Moor Lane to reduce traffic speeds and to make it more conducive for cycling. Gateway features and regular pinch points (with cycle by-pass lanes) will be provided along Moor Lane from its junction with Chester Road to slow traffic along its length and provide a more cycle and pedestrian-friendly environment; and

The Woodford Aerodrome developers have made a planning contribution towards upgrading a series of PRoW footpaths in and around the WNF study area. These include 99HGB, 101HGB, 16CG and 13HGB in the study area, together with 14HGB, 14(a)HGB, 15HGB, 16HGB, 107HGB and FP70 that lie just outside of the WNF study area.

3.3.4 Taking the above into consideration, it can be seen that significant off-site improvements will be delivered as part of the Woodford Aerodrome development that will improve the pedestrian and cycle environment, and many these will address some of the existing issues outlined in the previous section.

3.3.5 The Chester Road enhancement plans approved as part of the planning application are included in Appendix B for information, together with the indicative drawing from the submitted Transport Assessment for measures on Moor Lane.

3.4 Future Traffic Flows

3.4.1 Having considered the various measures which will be introduced by the Relief Road and the Woodford Aerodrome development earlier in this section, the impact of these respective schemes on traffic flows in the village is summarised below.

Impact of Relief Road

3.4.2 The traffic impact of the Relief Road was modelled as part of the planning application for this road scheme, and was also summarised in the Woodford Aerodrome Transport Assessment produced by PBA. Figure 3.2 and 3.3 below shows the roads in the study area and how existing traffic flows will be affected by the introduction of the Relief Road.

3.4.3 The below figures demonstrate that the Relief Road will significantly reduce existing traffic flows on Woodford Road in both directions by approximately 50%, and will also reduce flows on Chester Road to the east of the Woodford Road / Chester Road roundabout in both directions by over 50%. Further reductions can also be seen for eastbound traffic on Chester Road past Woodford Aerodrome, and demonstrates the benefits that the Relief Road will bring to the village in terms of traffic levels. Increases are inevitably shown on the A555 due to the continuation of the new Relief Road to the east.
Figure 3.2 – Impact of the Relief Road in Woodford during the Weekday Morning Peak Hour

Source: A6 to Manchester Airport Relief Road Strategic Modelling, Atkins / SMBC
3.4.4 The estimated traffic flows associated with the Woodford Aerodrome development once fully built out are shown in Figures 3.4 and 3.5 below. This information has been replicated from the PBA Transport Assessment produced in support of the Woodford Aerodrome development, and is shown as total vehicles. The distribution of traffic flows on the highway network is with the Relief Road scheme in place, given that this will be open in 2017 well before the completion of the Woodford Aerodrome development.
Figure 3.4 – Woodford Aerodrome Development Traffic, Weekday Morning Peak Hour

Figure 3.5 – Woodford Aerodrome Development Traffic, Weekday Evening Peak Hour
Overall Future Year Changes

3.4.5 Taking the above into consideration, the change in overall estimated traffic flows in Woodford in the future are compared below to the existing flows recorded in 2012. The future year data is for the year 2028 based on information from the Woodford Aerodrome Transport Assessment, and accounts for the full Aerodrome development, general background traffic growth and the impact of the Relief Road. The flows are again shown in total vehicles. The change in flows is shown graphically in Figures 3.6 and 3.7 for the weekday morning and evening peak hours, whilst the 2012 and 2028 flows are also set out in Table 3.1 and 3.2 for information.

3.4.6 It should be noted that the future year flows have been compared to the 2012 flows to provide the WNF with an understanding of the estimated changes against traffic levels that residents have been used to in recent years with the Aerodrome operating at limited capacity. The WNF will be aware that in planning terms the Aerodrome could have been reused at a higher level of operation under its existing planning consent however, and if compared to this, the differences shown below would be lower.

Figure 3.6 – Change in Traffic Flows between 2012 and 2028, Weekday Morning Peak Hour
Figure 3.7 – Change in Traffic Flows between 2012 and 2028, Weekday Evening Peak Hour
### Table 3.1 – Change in Traffic Flows between 2012 and 2028, Weekday Morning Peak Hour

<table>
<thead>
<tr>
<th>Map Reference</th>
<th>Road</th>
<th>2012 AM Total Flows</th>
<th>2028 AM Total Flows</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5102 Chester Road (west of Moor Lane)</td>
<td>Eastbound</td>
<td>852</td>
<td>773</td>
<td>79</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>903</td>
<td>1084</td>
<td>-181</td>
</tr>
<tr>
<td>A5102 Chester Road (east of Moor Lane)</td>
<td>Eastbound</td>
<td>715</td>
<td>1105</td>
<td>-390</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>817</td>
<td>1111</td>
<td>-294</td>
</tr>
<tr>
<td>A5149 Chester Road</td>
<td>Eastbound</td>
<td>782</td>
<td>456</td>
<td>326</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>1192</td>
<td>665</td>
<td>527</td>
</tr>
<tr>
<td>A5102 Woodford Road (south of A555)</td>
<td>Northbound</td>
<td>1196</td>
<td>996</td>
<td>200</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>922</td>
<td>927</td>
<td>-5</td>
</tr>
<tr>
<td>Jenny Lane</td>
<td>Eastbound</td>
<td>25</td>
<td>183</td>
<td>-158</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>49</td>
<td>12</td>
<td>37</td>
</tr>
<tr>
<td>A555</td>
<td>Eastbound</td>
<td>1406</td>
<td>1104</td>
<td>302</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>799</td>
<td>652</td>
<td>147</td>
</tr>
<tr>
<td>A5102 (north of A555)</td>
<td>Northbound</td>
<td>794</td>
<td>1145</td>
<td>-351</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>1096</td>
<td>1241</td>
<td>-145</td>
</tr>
</tbody>
</table>
### Table 3.2 - Change in Traffic Flows between 2012 and 2028, Weekday Evening Peak Hour

<table>
<thead>
<tr>
<th>Map Reference</th>
<th>Road</th>
<th>2012 AM Total Flows</th>
<th>2028 AM Total Flows</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>A5102 Chester Road (west of Moor Lane)</td>
<td>Eastbound</td>
<td>1051</td>
<td>826</td>
<td>225</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>612</td>
<td>766</td>
<td>-154</td>
</tr>
<tr>
<td>A5102 Chester Road (east of Moor Lane)</td>
<td>Eastbound</td>
<td>929</td>
<td>1006</td>
<td>-77</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>477</td>
<td>978</td>
<td>-501</td>
</tr>
<tr>
<td>A5149 Chester Road</td>
<td>Eastbound</td>
<td>1419</td>
<td>923</td>
<td>496</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>761</td>
<td>608</td>
<td>153</td>
</tr>
<tr>
<td>A5102 Woodford Road (south of A555)</td>
<td>Northbound</td>
<td>827</td>
<td>598</td>
<td>229</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>990</td>
<td>713</td>
<td>277</td>
</tr>
<tr>
<td>Jenny Lane</td>
<td>Eastbound</td>
<td>42</td>
<td>167</td>
<td>-125</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>55</td>
<td>20</td>
<td>35</td>
</tr>
<tr>
<td>A555</td>
<td>Eastbound</td>
<td>805</td>
<td>567</td>
<td>238</td>
</tr>
<tr>
<td></td>
<td>Westbound</td>
<td>1213</td>
<td>1471</td>
<td>-258</td>
</tr>
<tr>
<td>A5102 (north of A555)</td>
<td>Northbound</td>
<td>969</td>
<td>1378</td>
<td>-409</td>
</tr>
<tr>
<td></td>
<td>Southbound</td>
<td>710</td>
<td>855</td>
<td>-145</td>
</tr>
</tbody>
</table>

### 3.5 Impact on Pedestrian and Cyclist Environment

3.5.1 The traffic flow analysis shown above highlights that even with general traffic growth in the future and with the full Woodford Aerodrome in place, there will still be significant reductions in volumes of traffic on key routes through Woodford following the implementation of the Relief Road. Coupled with the infrastructure improvements which will be delivered by the Relief Road and Woodford Aerodrome schemes, this will therefore naturally improve the pedestrian and cyclist environment and encourage more walking and cycling trips in the village.

Particular points to note are:

- The reduction in future traffic levels along the A5102 Woodford Road will encourage increased use of this route by pedestrians and cyclists, particularly when coupled with the Relief Road improvements for these users. The adjacent Moor Lane traffic calming will further promote north-south pedestrian and cycle movements as an alternative to Woodford Road;

- The reduction in traffic along the A5149 Chester Road will further assist pedestrian and cyclist movements in this area. As detailed, future improvements to cycle infrastructure on the A5149 Chester Road will also be delivered by SMBC; and
 Whilst future year flows along the A5102 Chester Road in the vicinity of Woodford Aerodrome will be higher than 2012 levels once the Aerodrome development is fully built out, significant improvements to the pedestrian and cyclist environment will be delivered by the scheme as detailed and will help to address the existing issues referenced in Section Two of this report.
4 Potential Additional Improvements

4.1 Introduction

4.1.1 Having considered the transport and movement in Woodford now and in the future, Table 4.1 of this section sets out potential measures to address any issues raised and is cross referenced to Figure 4.1 to highlight the locations on a plan. This has been set out in the same structure as Table 2.2, so that measures directly correspond to those issues. The table below details where planned improvements associated with the Relief Road or Woodford Aerodrome will already be addressing any of the issues. The purpose of this process is to allow WNF to discuss potential additional improvements to the pedestrian and walking environment in Woodford with SMBC. It should be noted that all of the below are high level considerations, and any potential additional measures referenced would need to be subject to further detailed analysis and design considerations to determine their feasibility and deliverability.

Figure 4.1 – Geographical location of potential improvements
### Table 4.1 – Summary of Potential Additional Pedestrian and Cyclist Environment Improvements

<table>
<thead>
<tr>
<th>Location</th>
<th>Issue</th>
<th>Potential Additional Measure</th>
<th>Map Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Woodford Road</td>
<td>Footways narrow in places, causing pedestrians to step into the carriageway. Overgrown vegetation appears to be the primary issue.</td>
<td>Better maintenance of vegetation to best utilise existing available footway. Further detailed information on available road widths and highway boundary data would be required to see if widening of footways is feasible or deliverable.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Dropped kerbs are not provided on the southern side of the junction with Jenny Lane.</td>
<td>Provision of dropped kerbs and tactile paving.</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Shared footway / cycleway on the approach to the A555, however no controlled crossing is provided across this busy road.</td>
<td>Controlled crossings and footway / cycleway improvements to be delivered by Relief Road scheme.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Poor crossing opportunities across Woodford Road. Numerous traffic islands are provided, however they do not appear to be designed for safe and effective pedestrian use due to the presence of street furniture narrowing the space available and dropped kerbs are not provided in some cases.</td>
<td>A controlled crossing will be provided across Woodford Road as part of the new signalised Relief Road junction with the A555. Based on the widths of the carriageway and hatching in some areas of Woodford Road there may be opportunities to improve existing traffic islands to fully cater for pedestrian movements, or introduce some form of new central refuges at appropriate desire lines.</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>It is noted that Woodford Road is a busy route through the village and no cycle lanes are provided, however the carriageway surface appeared in good condition, there no safety issues based on the collision data and there is therefore no obvious deterrent to use of this route as a cyclist (other than Moor Lane offers a quieter and potentially preferable north-south alternative route)</td>
<td>The Relief Road will provide significant reductions in traffic flows on Woodford Road, including reducing heavy goods vehicle movements. This will make this a quieter and more appealing route for cyclists, who will also have the opportunity of using Moor Lane as an alternative with its associated traffic calming measures. The limited available highway land on Woodford Road means that the introduction of formal cycle lanes is unlikely to be feasible, but the reduction in flows and the Relief Road cycle</td>
<td>5</td>
</tr>
<tr>
<td>Woodford Road / Chester Road Roundabout</td>
<td>Infrastructure improvements near to the A555 junction will still bring a significant improvement.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropped kerbs are not provided on the western side of Woodford Road at this roundabout to tie in with the refuge island.</td>
<td>Provision of dropped kerbs and tactile paving.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dropped kerbs and refuge islands on all arms are in a relatively poor condition, and do not have tactile paving (with the exception of Chester Road to the west of the roundabout).</td>
<td>Improvements will be made to the A5102 Chester Road arm of this junction as part of the enhancements delivered by the Woodford Aerodrome development. This will include a gateway feature at this point, and an improved crossing point with central refuge. Potential improvements to the dropped kerbs, tactile paving and refuges could be introduced by SMBC to the other arms of this junction that are not covered by the Aerodrome scheme.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to PRoW 3HGB from this roundabout is unclear and the footpath appears overgrown with vegetation.</td>
<td>Improved signage could be provided, together with better maintenance of vegetation.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>There are no formal or unformal crossing points provided for pedestrians near to the main village amenities.</td>
<td>This will be addressed by the environmental enhancements delivered by the Woodford Aerodrome development, which will introduce a number of informal crossing points along this section of Chester Road.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>At the junction of Chester Road / Moor Lane, the dropped kerbs on each side of the road do not align and make crossing difficult for pedestrians. Further dropped kerbs / tactile paving are provided to the north of this but do not tie in with pedestrian desire lines.</td>
<td>Provision of dropped kerbs and tactile paving on appropriate desire lines.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>No apparent safety issues for cyclists have been observed by PBA during our site visit, however the WNF comments have been noted about general traffic and heavy goods vehicle levels. The condition of the carriageway surface on the</td>
<td>This will be addressed by the environmental enhancements delivered by the Woodford Aerodrome development, which will introduce an improved road surface along Chester Road and gateway entrance features to slow traffic speeds. Heavy</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### Woodford Movement Study

#### Approach to the Woodford Road / Chester Road Roundabout

- **Note:** The approach to the Woodford Road / Chester Road roundabout was poor in places, however, and could be a hazard to cyclists.
- **Note:** Goods vehicle movements are also likely to be reduced along this section of Chester Road following the implementation of the Relief Road.
- **Note:** To the west of Moor Lane, the village is less “built up” and additional traffic calming measures may be less effective in these locations. Formal cycle lanes could be introduced, however detailed analysis would be required to see whether this is necessary and would effectively tie in with (and compliment) the enhancements to be delivered by the Aerodrome development to the east of Moor Lane. Confirmation of the available highway land would also be required.

#### Pedestrian Environment

- **Note:** Pedestrian environment appears to be good, and suitable crossings are provided near to Bridle Road.
- **Note:** No measures considered necessary.

#### A5149 Chester Road

- **Note:** No obvious deterrents to cycling in this location, and cyclists were observed by PBA to safely be using this route.
- **Note:** The WNF comments are noted, however, about the potential use of grass verges for cycle lanes.
- **Note:** SMBC will be delivering future cycle infrastructure enhancements along this section of Chester Road, using contributions from the developers of the Woodford Aerodrome development. This could include off-road cycle lanes in the grass verges, however a final scheme is yet to be determined.

#### Moor Lane / Hall Moss Lane

- **Note:** This route offers an alternative quieter north-south route for pedestrians and cyclists. No apparent issues with the quality of pedestrian environment with continuous footways provided in most locations.
- **Note:** The signage to PRoW 9HGB near to Jenny Lane is poor and could be missed by walkers.
- **Note:** Whilst this offers a quieter route for cyclists to Woodford Road, the condition of the carriageway surface was poor in some locations and could cause hazards.
- **Note:** Improved signage could be provided. General maintenance to carriageway required in areas. Discussions with SMBC could take place to see if this could be delivered ahead of the Moor Lane traffic calming scheme.

#### Jenny Lane

- **Note:** Provides an overall good
- **Note:** No measures considered

---

<table>
<thead>
<tr>
<th>Location</th>
<th>Observation</th>
<th>Measures</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approach to the Woodford Road / Chester Road Roundabout</td>
<td>Approach to the Woodford Road / Chester Road roundabout was poor in places, however, and could be a hazard to cyclists.</td>
<td>Goods vehicle movements are also likely to be reduced along this section of Chester Road following the implementation of the Relief Road. To the west of Moor Lane, the village is less “built up” and additional traffic calming measures may be less effective in these locations. Formal cycle lanes could be introduced, however detailed analysis would be required to see whether this is necessary and would effectively tie in with (and compliment) the enhancements to be delivered by the Aerodrome development to the east of Moor Lane. Confirmation of the available highway land would also be required.</td>
<td>12</td>
</tr>
<tr>
<td>Pedestrian Environment</td>
<td>Pedestrian environment appears to be good, and suitable crossings are provided near to Bridle Road.</td>
<td>No measures considered necessary.</td>
<td>13</td>
</tr>
<tr>
<td>A5149 Chester Road</td>
<td>No obvious deterrents to cycling in this location, and cyclists were observed by PBA to safely be using this route. The WNF comments are noted, however, about the potential use of grass verges for cycle lanes.</td>
<td>SMBC will be delivering future cycle infrastructure enhancements along this section of Chester Road, using contributions from the developers of the Woodford Aerodrome development. This could include off-road cycle lanes in the grass verges, however a final scheme is yet to be determined.</td>
<td>14</td>
</tr>
<tr>
<td>Moor Lane / Hall Moss Lane</td>
<td>This route offers an alternative quieter north-south route for pedestrians and cyclists. No apparent issues with the quality of pedestrian environment with continuous footways provided in most locations.</td>
<td>No measures considered necessary to footway provision.</td>
<td>15</td>
</tr>
<tr>
<td>Jenny Lane</td>
<td>Provides an overall good</td>
<td>No measures considered</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>17</td>
</tr>
<tr>
<td>Location</td>
<td>Observations</td>
<td>Notes</td>
<td></td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>Church Lane</strong></td>
<td>There is a gap in the footway provision for approximately 75 metres at the southern end of Church Lane, leaving the residential properties on the western side of the road unconnected with the village amenities unless pedestrians walk in the carriageway.</td>
<td>Detailed consideration of available highway land and the frequency / demand of pedestrian movements is required to see whether additional footway provision is feasible, deliverable and necessary.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>This is a rural road, with cyclists observed to use it during PBA’s site visit. Some vehicles appeared to exceed the 30mph speed limit during the site visit, however speeds were not formally recorded as part of this study.</td>
<td>Route is relatively lightly trafficked and so measures, if any, need to be proportionate. Speeds would need to be recorded to confirm if there is a specific issue, so that measures could be considered (such as additional signage). Discussions with SMBC could occur to see whether a section of Church Lane could be considered for “Quiet Lane” status with the appropriate signage put in place. The appropriateness of this would require further consideration, however, from a policy, design, user and traffic flow perspective.</td>
<td></td>
</tr>
<tr>
<td><strong>Blossoms Lane</strong></td>
<td>This is a rural road, with only a few properties located along it and does not provide any footways (and with no real opportunity to do so in the future). The route provides access to PRoW 28CG, 11CG and 4HGB.</td>
<td>No physical measures considered necessary or feasible within highway land. Discussions with SMBC could occur, however, to see whether Blossoms Lane could be considered for “Quiet Lane” status with the appropriate signage put in place. The appropriateness of this would require further consideration, however, from a policy, design, user and traffic flow perspective.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cyclists were observed using</td>
<td>General maintenance to carriageway required in areas.</td>
<td></td>
</tr>
<tr>
<td>Route</td>
<td>Observations</td>
<td>Measures Considered</td>
<td></td>
</tr>
<tr>
<td>---------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>---------------------------------------------</td>
<td></td>
</tr>
<tr>
<td>Old Hall Lane</td>
<td>Footways are not provided along this road, which only provides access to a small number of properties, Avro Golf Club and PRoW 1HGB, 2HGB and 106HGB.</td>
<td>No measures considered necessary or feasible within highway land.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Cyclists were not observed using this route, however there are no apparent deterrents to them using this quiet road.</td>
<td>No measures considered necessary.</td>
<td></td>
</tr>
<tr>
<td>Bridle Road</td>
<td>A footway is provided on the western side, which is in a poor condition in places. Vehicles also park with their wheels mounted on this footway, reducing the available width for pedestrians. No footway is provided on the eastern side.</td>
<td>General maintenance required to the footway in areas. The carriageway is of sufficient width along Bridle Road for vehicles not to have to park with their wheels mounted on the footway. Unfortunately there is little that can be done enforcement wise by the Council, however the WNF could be the appropriate body to encourage residents / visitors not to do this.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No cyclists were observed during the site visit along this route, however the carriageway surface appeared in good condition and offers a quiet route to cyclists, which will connect with the Aerodrome development in the future.</td>
<td>No measures considered necessary.</td>
<td></td>
</tr>
</tbody>
</table>
5 Summary and Conclusions

5.1 Summary

5.1.1 This report has considered the pedestrian and cycling environment in Woodford on behalf of the WNF, with a view to considering potential measures to improve this and to form the basis on which they can undertake discussions with SMBC.

5.1.2 In order to inform the above, therefore, PBA has presented an analysis of the existing environment in the village, including traffic levels and recorded collision data, together with an analysis of how this will change in the future following the delivery of the A6 to Manchester Airport Relief Road and the Woodford Aerodrome development. These future considerations have been in terms of changes in traffic flows, and the infrastructure improvements which they will deliver. Many of the existing issues raised in the report will be improved or dealt with by these schemes, and so any additional measures would need to be complimentary to these.

5.1.3 Taking the above into consideration, this report has shown that:

- Overall PBA would view the existing pedestrian and cycling environment in Woodford to be generally of a good quality that should not deter people from making trips on foot or by bicycle. There is also not considered to be any highway safety issues in the Woodford village area, based on recorded collision data;

- There are, however, a number of localised existing issues for pedestrians such as poor crossing opportunities (particularly on Woodford Road and Chester Road), a lack of footway provision and a lack of dropped kerbs / tactile paving on key desire lines. In addition, there are some general maintenance issues that could easily be addressed, such as footway repairs;

- With regard to the cycling environment, the WNF raised existing traffic levels and speeds as a concern, however a number of cyclists were observed safely using key routes through the village. There may be opportunities to introduce formal cycle lanes in some areas, however further detailed analysis would be required to determine the need, feasibility and deliverability of these, and to ensure that they tie in with (and compliment) enhancements to be delivered by the Aerodrome development. Most of the existing issues observed, however, were in relation to maintenance issues, where poor carriageway surfaces could cause a hazard to cyclists;

- When the Relief Road is opened in 2017, considerable improvements to the pedestrian and cycle infrastructure will be delivered for residents of Woodford. These include signalised crossing facilities at the new Woodford Road / A555, Oil Terminal and A5149 Chester Road junctions, together with a shared footway / cycleway running parallel to the Relief Road;

- The Relief Road will also result in significant reductions in existing traffic flows in the village, particularly along Woodford Road and Chester Road. It will also help to remove strategic heavy goods vehicle movements from the roads in the village. These reductions will provide quieter routes and therefore help to improve the environment for pedestrians and cyclists. Traffic flows in the future will also still be lower on many key routes through the village even with the full Aerodrome development built out; and

- The Woodford Aerodrome development will deliver a number of benefits to pedestrians and cyclists in the village. This will include environmental enhancements, gateway features and crossing opportunities along Chester Road, whilst contributions have also been made by the developer of the scheme towards delivering traffic calming measures
along Moor Lane and cycle infrastructure improvements on Chester Road towards Poynton.

5.1.4 Taking the above into consideration, it is considered that the reduction in traffic flows that will be brought by the Relief Road, together with the improvements to be delivered by this scheme and the Woodford Aerodrome development, will help to address many of the existing issues observed by PBA. Over and above this, there are a series of smaller interventions which could be considered by SMBC to further enhance the environment for pedestrians and cyclists, some of which are related to maintenance. PBA would be happy to assist the WNF in any further discussions with SMBC around these matters.
Appendix A  Relief Road Improvement Drawings
Appendix B  Woodford Aerodrome Chester Road Improvement Drawings