

APPENDIX 5: BRANDON and BRETTFORD NDP

INFRASTRUCTURE: HIGHWAYS AND TRAFFIC ASPIRATIONS

Introduction

Appendix 5 is a supplement to section 10 'INFRASTRUCTURE' in the Brandon and Bretford 'NDP Main Document', which outlines infrastructure issues linked to strategic policy objectives. Section 10 in the main report deals with policies related to highway, traffic and road safety issues. Drainage, flood zones and digital communication are also included in section 10 but are not detailed in this Appendix 5.

The Brandon and Bretford NDP has been prepared by members of the NDP Steering Group, formed by the Brandon and Bretford Parish Council. Appendix 5 is produced with the additional purpose of identifying highways and traffic concerns and related pedestrian movements within the parish raised by residents in previous studies and meetings and from responses to the more recent Questionnaire circulated in December 2016 to all parish residents and businesses. These issues are examined in some detail in this Appendix and appropriate ameliorative measures are put forward in order to address highway, road traffic and pedestrian movements and to maintain the present environmental and rural character of the parish.

The remedial measures presented below represent aspirations and proposals that would offer solutions to remedy current and potential concerns that need to be addressed within the parish. They cannot yet be considered as committed works until funding and implementation is agreed by Highways England, Local Highway authority, Warwickshire C.C. or Rugby B.C. However, it is important that such issues within the Parish are identified and that suitable ameliorative measures are proposed for future consideration when funds become available.

A more comprehensive 'Transport Appraisal' Study Report was commissioned separately by the Parish Council using consultants 'PTB Planning Ltd'. The consultants prepared a detailed study and appraisal of Highway and Traffic issues based on actual site surveys and analysis of relevant statistics. These were based on recent and historical data covering: traffic speeds, traffic counts, vehicle mix (LGV, HGV, Coach, Bus, Car, m/c), accidents and other 'specific conditions' (including weather, time periods and annual economic factors). A full copy of the Consultant's Report' is presented in Appendix 4 of the NDP Main Document.

The results of the Consultant's 'Transport Appraisal Study Report' recommends a considerable number of highway and traffic improvements. that are contiguous with and give equal support to many of the concerns, aspirations and remedial measures put forward in this Appendix 5.

A detailed analysis (with tables and drawings) can be found in Section 6 of the Consultant's Study Report (Appendix 4). A brief summary of the main recommendations is given below:

- A428 section between Binley Woods and Brandon: (i) reduced 30mph speed limit (TRO); (ii) vehicle activated sign (VAS) installation
- Brandon Main Street and Avondale Road: (i) reduced 20mph speeds, (ii) various road calming measures and markings to narrow carriageways
- Gyratory System at the Royal Oak: (i) changes to road layout (ii) new road markings, (iii) relocation of 30mph TRO in Brandon Lane approach.
- A428 between Brandon and Bretford: (i) bend widening, (ii) reduced 40mph speed (TRO), (iii) VAS installations
- A 428 approach and exit to Bretford- main village: (i) relocation of new 40mph sign westward, (ii) relocation of 30mph sign eastward. (However, no improvements have been proposed for the co-joined A428 and B4455 (Fosse Way) within the main village).

The consultant has also recommended that, following publication of the NDP Document, the Parish Council begin discussions with the Local Planning Authority and make representation to the Local Highway Authority (LHA) for appropriate funding to deliver improvements as a result of the local plan proposals. Also, for any future development not supported in the NHDP, a section 278 Agreement be made with the developer, or a section 106 agreement with the LHA, to design and implement the above recommended works using an agreed cost mechanism.

Overview

The parish is threaded by the A428 which briefly converges and shares carriageway with the B4455 (Fosse Way) within Bretford main village. This, and all roads and street systems in the rural parish, have seen increases in traffic volume as a result of the general national increase in vehicle ownership, and has also been compounded by disruptive major civil engineering work at the (A46/A45) Toll-bar Island, which lasted almost four years.

As a result, 'refugee' traffic has found an alternative route along the A428 through the parish. Since opening of the new Toll-bar road configuration in early 2017 there been some easing of volumes but overall traffic, particularly HGV's, is significantly higher than it was in 2013.

Road System and Traffic Loads

Traffic volumes, speed, noise and resulting hazards are a major concern to parishioners. Road systems within the parish are stressed at peak times and uncomfortable at off-peak times as lighter flows mean higher average speeds. Any improvements have evolved piecemeal with no major road restructuring or extra capacity added in half a century. During that time traffic volumes, sizes and axle loads have increased by massive factors (from 13 million vehicles in 1970 to almost 40 million today). Despite provisions to meet the increase in total UK trunk and motorway road mileage, no extra capacity has been provided anywhere in the parish.

Implications for Development

Responses received from previous surveys and the recent Questionnaire circulated to all parish residents and businesses showed that increased traffic, speeds and volumes through the parish are a major concern, thereby highlighting evidence of the need for effective improvements. Any proposed developments would also add to concerns and has to be considered in the context of meeting increased capacity. Previous proposals to provide bypasses for both Brandon and Bretford villages have not materialised. Consequently, any future development would not be supported unless it adequately addresses the necessary improvements required.

Macro Measures

The existing classification of the A428 through the Parish is not fit for purpose and creates double standards with national criteria. In order to protect infrastructure, residents and the overall rural character of the parish and its villages, any measures that reduce speeds and overall volumes of traffic, particularly HGVs, are to be welcomed. These would include:

- (1) Taking the opportunity to revise direction signs during and following the restructuring of the roundabout at the junction of A428/A46 that would divert Rugby-bound traffic away from the A428 through the parish and direct it to (i) the A45 southbound approach into Rugby, via the Toll Bar Junction, and (ii) use the M6 southbound approach into Rugby, via the A46/M6 Ansty Junction. *(The A45/A445 junction at Ryton-Wolston roundabout is an example of what is achievable by re-directing Leamington bound traffic away from the A425 through Ryton village via the A46 instead)*
- (2) Introducing reduced speed limits and lower HGV weight limits on all sections of the A428 through the parish and within Brandon and Bretford villages

Considerations for five separate parish zones

NB: (For clarity, an asterisk * is shown for those items under 'Remedial Measures' in each of the Zones below that are not specifically mentioned in the Consultant's Report. All other items without an asterisk indicate those 'Remedial Measures' that concur in principle with similar recommendations put forward in the Consultant's Report).

ZONE 1: (A428 'Brandon on the Hill') Binley Woods Boundary to Brandon)

This section is designated 40mph and sweeps in a curve of gentle radius from the boundary with Binley Woods (30mph) to Brandon (30mph). Most houses are located to NW side of the road with a few close to carriageway, whilst others are set comfortably away from the carriageway with their own service road, culs de sac, or side road, providing good access and sight lines onto the A428. Traffic noise is minimised by distance and sight lines are extended and adequate to enable pedestrians/residents to cross the road safely.

However, vehicles travelling downhill (south-east) on this relatively short 40mph section tend to overshoot the 30mph limit into Brandon village before reaching the right turn (without dedicated right turn lane) into Brandon Main Street at the village green. Surveys by WCC Highways (confirmed by Village Speed Aware team) indicate that a very high proportion of this traffic fails to moderate adequately and that average speeds are around 35mph at 100 metres inside the 30mph limit boundary.

This un-moderated speed, combined with very poor sightlines, caused by the bends and rises in the road, create severe problems for pedestrians at this section. There is a substantial amount of housing on the north-east side of the A428 and the elderly, mothers with children and others attempting to cross have all reported difficulties. It is recognised that there are problems for pedestrians crossing. However, traffic movements are difficult and straight-through vehicles have to pull up sharply behind right turn vehicles blocking the road ahead whilst waiting for north-bound vehicles (heading for Binley Woods) to pass, resulting in a number of minor 'shunt' accidents. This would not be a safe place to simply install a pedestrian crossing and it is hoped that reducing the speed limit will help pedestrians.

Remedial Measures

- Reduce speed limit to 30mph on the existing 40mph section between Binley Woods and Brandon (*This would reduce residual vehicle speed coming into Brandon and improve reaction times for both vehicles and pedestrians at the village green area and at the turn into Main Street*).

ZONE 2: (A428/Main Street Turn into Brandon Village)

There have been a significant number of traffic events in this section in recent years. A high proportion of vehicles travelling south from Binley Woods into Brandon leave the A428 at the right turn triangular junction into Main Street to travel west through the village. As they accelerate across the junction between gaps in the northbound uphill traffic they frequently mount the narrow pavement strip on the north-east side.

These access problems into Main Street are compounded by frequent near misses from fast-moving westbound traffic on the other side of the triangular junction also accelerating uphill after navigating the tight bends at the bottom of the village from Bretford or out of Avondale Road. This accelerating traffic is also a serious noise pollutant at peak times.

The sight lines and speeds also make accessing the road at peak times very difficult for drivers and pedestrians leaving properties on the northern side of the A428 and in Main Street. Due to this accelerating and merging traffic at the junction, there have been several impacts recorded to domestic boundaries and buildings, mostly minor. However, on one occasion, a devastating high speed strike to a listed thatched, timber-frame, seventeenth century cottage caused severe damage, necessitating extensive structural repair.

Remedial Measures

- Narrow junction slip-roads into Main Street from A428 with the use of road markings.

ZONE 3: (Brandon Main Village, South-West of the A428)

The residential street system comprises a one-way, anticlockwise circle of Main Street and Avondale Road which connects with the A428 in two places to form a rough circle.

Residents on the one-way system in Main Street complain about the lack of adequate and sufficient pavements. Traffic passes dangerously close to property frontages (as close as 80cm) and often travel at excessive speeds, where short sight lines combined with high speeds can make accessing the road from properties and other side roads hazardous. Recent traffic surveys measured most traffic travelling at around the limit of 30mph, and there is little technical offending. However, these speeds are wholly inappropriate for the local character and the environment of the street and there is strong support for it to be reduced to a 20mph zone.

Avondale Road forms a parallel part of the traffic one-way anti-clockwise system with Main Street and has existing planters installed to narrow the road with the purpose of reducing traffic speeds.

However, there is a clear sight line between the planters and vehicles still tend to drive through at 30mph or more. Speed bumps are not recommended but there is scope for avoiding a direct drive line using other planting/landscaping solutions

The lower village near The Royal Oak public house forms a triangular rotation system with one side 'one-way' westward into Brandon Lane and the other two sides 'to and from' Brandon Lane and Wolston (under the railway bridge) and heading eastward towards Bretford.

The triangular road system near The Royal Oak has some unique problems. Traffic entering the system eastwards from Brandon Lane enters a 30mph zone within 20 metres of a sharp left-hander in front of the Royal Oak where pedestrians cross back and forth to the car park located in the middle of the triangle. Historically there is a record of high speed impacts from cars failing to take the bend. (In the autumn of 2016, a speeding car ploughed through the hedge onto the car park demolishing a lighting installation). There are no 'Give Way' signs and the junction is 'blind' both ways due to the car park high hedges creating an effective screen.

There are regular near misses as traffic leaves this one-way road westbound. Also, a high proportion of cars ignore the 'No Entry' signs to avoid using the other two sides of the triangle. In November 2017, a stolen vehicle careered down this road demolishing the garden of a property and burst into flames under the Railway Bridge creating substantial damage.

Remedial Measures

- Alter/narrow road shape to control the speed of traffic entering Main Street from A428.
- Paint margins or install kerbs to create more pavement and less road in Main Street.
- Create 20 mph zone through the one-way road system (Main Street and Avondale Road)
- Create soft landscaping and apply other measures to slow speeds on Avondale Road.
- Relocate the 30 mph speed limit zone further back along Brandon Lane (westward) and reduce the speed limit to 50mph along the complete length of Brandon Lane to the A45.
- Improve highway and traffic flow system at triangular section opposite The Royal Oak.

ZONE 4: (A428 Brandon Village to Bretford Village)

This narrow and substandard 50mph section of the A428, presents many problems. Travelling on the A428 Brandon Road eastwards towards Rugby from Brandon, there are three close consecutive 90 degree blind bends that are impossible to negotiate at 50mph.

Proceeding eastward, the road narrows and enters a number of obtuse left and right bends where the sightlines are poor and the rise and fall of the road creates a series of very short horizons.

Most of the road edge is not kerbed on both sides and is contiguous with unattended hedge growth. With little or no verges, the road width is effectively restricted and surface standing water collects here. Passing oncoming commercial vehicles, coaches and HGV's is a particular hazard.

On the run in to Bretford village the road straightens and both east and west bound traffic speeds rise in excess of 50mph, especially when overtaking. Residents of properties on the north side find it very difficult and hazardous to access their driveways or enter the highway due to high traffic speeds, heavy volumes and sudden overtaking vehicles, which occurs at all times of the day.

However, there is a marked disparity between this and the A428 section continuing south from Bretford. The A428 through the 'Lawfords' and into Rugby is an almost continuous 40 mph zone. There are longer sight lines and wider, much better engineered roads. Properties are set well back from the main road, with some sections even separated by parallel service roads.

Also, the sections of the A428 from Brandon to Binley-Woods is a 40mph zone and from Binley Woods to the A46, a 30mph zone. This inexplicable change between Brandon and Bretford creates double standards and explains why so many drivers speed-up when presented with a 50mph zone! These comparative and confusing double standards are not in keeping with traffic speed controls appropriate to national road conditions and classification standards.

The zone is devoid of pedestrian footpaths between the villages. There is only a very narrow 0.45 metre wide footpath between the last residential property on the north side of Brandon Road and the main Bretford village. This ends abruptly opposite another footpath on the south side of the road at the electric sub-station. The north footpath has little or no verge between it and the road. Pedestrians are at risk from stumbling and inadvertently falling into the path of vehicles passing just inches away. Due to its close proximity to the hedge, there is no opportunity to improve the width of the north-side footpath.

The footpath across the road on the south side is relatively protected by trees on a wide verge away from the road traffic and leads to the A428/B4455 road junction in the main village. Crossing here, from one side to the other, is very dangerous since it is within the existing 50mph speed limit. A pedestrian crossing would improve pedestrian safety but the low number of pedestrians would not meet the criteria.

Remedial Measures

In the absence of a Brandon village by-pass, there are relatively simple and cost effective measures that could be applied to the A428 through Zone 4 to improve the situation.

- From A428 out of Brandon eastward:- Lower the existing 50mph speed limit to 40mph and then to 30mph at a point (a) 100 metres west of the Bretford residential properties on north-side of Brandon Road prior to the main village.
- Leaving Bretford main village westward:- Replace 50mph sign with 30mph reminder signs and install 40mph sign 100 metres west of properties on the north side of the road (at point (a) above)
- Place 'no overtaking' signs at intermediate locations along A428 between Brandon and Bretford with appropriate road markings. Remove confusing 50mph sign opposite the 20mph warning sign at last bend into Brandon. *
- Create pedestrian footway leaving Brandon village to link with Bridleway BR78 *

ZONE 5: (Bretford Village A428 AND B4455 and A428/B4455 Junctions)

The A428 (Brandon Lane) co-joins the B4455 (Fosse Way) at the main village some 200 meters north of the single carriageway bridge over the River Avon. Traffic runs north and east towards Brinklow, and south and west, via the traffic lights controlled bridge, towards Rugby and the A45. In the other direction, traffic travelling north, east and west from Rugby and the A45 converge at Wolston Turn to cross over the bridge and through the main village.

The bridge restriction creates a major problem both inside and outside the village caused by queuing traffic waiting at the traffic lights from all directions, particularly at peak times. Queues often extend beyond the 'Queens Head' Pub on the B4455 towards Brinklow. This meets with the other queue at the A428/B4455 junction stretching westwards along the A428 towards Brandon, sometimes well beyond the outer Bretford north-side properties, particularly when the route is used as a traffic diversion as a result of Motorway accidents.

Consequently, the existing single lane carriageway on the old stone bridge over the River Avon is having to cope with vastly increased volumes of general traffic and pounding HGV vehicles well beyond its original purpose and design structure and foundation. Regular flooding and resultant river bank erosion and debris attrition has given rise to structural safety concerns that need to be addressed at the earliest opportunity.

Proposals to create a by-pass were mooted many decades ago in order to protect Brandon and Bretford villages, but have not been pursued. More than ever, there is now a need to ameliorate the dangers and harmful effects to residents and property from HGV's and all queuing traffic through Bretford village. Also, the inadequacy of the single carriageway bridge is now critical in terms of congestion, pollution and delays that bring economic loss to both local and regional businesses and commuters. Therefore, strong support is given in the NDP for the provision of all and any additional measures to reduce and divert traffic away from the village.

Rather than carrying out a major reconstruction of the old bridge to take all traffic, there would be considerable merit in undergoing necessary repairs and applying a weight restriction on HGV's. Any savings could be used towards providing a new 2-lane bypass and river bridge for a new section of the B4455 east of the village, with a new roundabout at Kings Newnham Lane and new roundabout at the Wolston Turn, south of the village.

Access to the only bus stop near Bretford village is located another 200 metres south of the Bretford Bridge. Although there is a raised pavement and railings for part of the footpath south of the Bridge, there is no such protection for pedestrians who cross over the bridge by an unprotected, narrow footway alongside traffic. It is a dangerous undertaking for pedestrians crossing in both directions. The Bridge is also used frequently by cycle clubs, local horse riding and walking groups who have no option to but to use the bridge to access bridle paths located within Bretford and towards Brandon and elsewhere in the Parish.

Therefore, in the interests of both pedestrian and road traffic safety, the NDP would support the construction of a separate, protected 1.8 meter wide pedestrian and cycle way (with segregated markings) across the River Avon, immediately west of the old bridge. This would link to the inadequate existing elevated path, which should be simultaneously upgraded (resurfaced) and protected (widened and fenced) along its entire length between the bridge and the bus-stop located south of the village at the A428/B4455 junction.

Remedial Measures

- Carry out inspection of the old bridge; implement all 'necessary' structural repairs to foundations, walls and carriageway; and ban all HGV's.
- Construct a new two-lane carriageway and river bridge section of the Fosse Way (B4455) east of the village between Kings Newnham Lane and the Wolston Turn. *
- Build segregated pedestrian river bridge alongside existing old road bridge (similar to pedestrian bridge at Brandon-Wolston boundary) and upgrade existing footpath. *