## Traffic



## 2 Introduction and background

2.1 Making improvements to the centre of Shaftesbury has been discussed for over 20 years. The main need is to resolve conflicts between pedestrians and traffic in the historic network of streets. Various proposals have been put forward over the years including single flow traffic solutions and pedestrianisation but none has secured sufficient funding or political support to be implemented.
2.2 Four years ago public consultation was undertaken and three proposals were preferred in descending order:
a. The implementation of a one-way system;
b. Pedestrianisation;
c. A two-way, 20 mph zone with traffic calming.

The exercise identified a wide range of issues and concerns which have informed subsequent work.
2.3 The present initiative started in May 2004 when a Working Group was formed, comprising the main relevant stakeholders. They include:

- Shaftesbury Civic Society
- Shaftesbury Disbility Action Group
- Shaftesbury Town Council
- Shaftesbury District Taskforce
- Dorset County Council
- Bleke Street area residents
- St James area residents
- Bimport area residents
- Tourism Association
2.4 Working closely with Steve Howard, Team Leader for Traffic Management at Dorset District Council, this group decided to develop a scheme focusing on Enhancement of the town centre. The following six aims were agreed:
a. Retain the nature of the market town;
b. Dissuade vehicles from using the town centre and reduce traffic speeds
c. Make the town centre more pedestrian friendly - an improved pedestrian environment;



## 3 Study brief

3.1 The brief set for this study is:
'To make an assessment of the original plan drawn up by the working group and DCC Highways Department as to;
a. whether the plan fulfils the brief/criteria as agreed by the local community;
b. whether the plan is technically sound with regard to safety and current standards of accessibility;
c. in addition the consultant is asked to suggest other options or alternatives, in principle, if the assessment suggests that amendments are necessary.'
3.2 Four days work has been allocated for the study, three by community planning specialists Nick Wates Associates and one by Alan Baxter \& Associates, an urban design, transport and engineering practice.

4.3 Review of additional documents supplied during the visit and afterwards:
a. Results of the Consultation Exercise on Proposals for the Town Centre Enhancement of Shaftesbury, Dr Mark Redmond, c2001.
b. Road Safety Audit Stage 1. Shaftesbury Town Centre Speed Management, Audit No. 39/04
c. Plan resulting from Safety Audit (Drawing NoDC2363/15/1/A)
4.4 Discussion with colleagues at AB\&A and NWA
4.5 Supply draft report to Jo Rose for comment on accuracy, etc
4.6 Amend and supply final report.

## 5 Existing situation

The existing conditions in the High Street can be summarised as:
5.1 Two-way traffic, including buses and HGVs, uses High Street. Speeds are low due to constraints of parked cars and narrow carriageway effectively turning it into a single carriageway in places.
5.2 Pedestrian footways are very narrow and do not accommodate pushchairs or two pedestrians passing in places - this results in users stepping off the pavements into the carriageway.
5.3 There is a weekly market with six stalls in front of the town hall.
5.4 Awareness of historic features - such as Gold Hill and Abbey Walk - from the High Street are very poor.
5.5 Indiscriminate waiting, parking and unloading occurs along the entire length of High Street, in both designated bays and on double yellow lines. A number of these vehicles display disability passes.
5.6 Poor levels of car parking surveillance results in few fines for those illegally/badly parked or waiting.
5.7 Distorted priority junctions at Angel and Commons junctions allow for indiscriminate vehicle waiting (sometimes three cars deep at Commons) and U-turns, resulting in a visually unsatisfactory and pedestrian unfriendly environment.
5.8 The zebra crossing at the East end of High Street is not directly on a pedestrian desire line and pedestrians cross along the entire length of High Street not just at the crossings.
5.9 The three town centre car parks are located on Angel Lane, behind Tescos (accessed from the A14) and Somerfields (accessed from Bell Street and Bleke Street). All are in easy walking distance of the High Street but are perceived to be too far away. A new parking area is planned to the rear of Tesco with access from the bypass.

i. Reduce waiting and unloading in narrowest parts of High Street and at the Commons.
j. Maintain a bus route along High Street.
k. Provide two bus stops with waiting bays in each direction
I. Improve signage and increase legibility of town for tourists.
6.3 This is a very demanding brief, especially given the historic street widths and character. To a certain extent the tension between vehicle accessibility and pedestrian movement will remain in any proposal.
6.4 The Working Group's Proposal largely fulfils items $\mathrm{a}-\mathrm{j}$ of the above brief, but the importance of resolving more of the detail - particularly in terms of pedestrian safety, clarifying designated parking bays and management, materials and street furniture - should not be underestimated at this stage. Also a number of technical points need to be taken into consideration.

## 7 Technical assessment

## Angel Lane

7.1 The parking bays on Angel Lane create a pinch point of around 5 m . This would allow a car and HGV to pass one another but not two HGVs. This pinch point would in some way create a gateway feature for vehicles coming from the north. The pinch point may result in northbound vehicles waiting to let through southbound vehicles. Northbound vehicles would be waiting at the position of the uncontrolled pedestrian crossing and this is not ideal.
7.2 The parking bays on the west side of Angel Lane would interfere with the visibility splay for vehicles turning out of the High Street although visibility to southbound vehicles would be adequate.
7.3 The parking bays on the east side of Angel Lane would reduce the visibility splay for vehicles turning out of Coppice Street to around 16 m . This is below the standard that would normally be expected but this is unlikely to be an issue given the speed of vehicles. DCC do not seem to have an issue with this.

## Shared Surface

7.4 The conventional approach to defining pedestrian and vehicular areas on shared surfaces is to use bollards. Slim bollards ( 100 mm dia) could be used on the footway/carriageway edge although this would reduce the footway width and with no set back, the bollards would be vulnerable to damage. Without the bollards the shared surface could be considered unsafe particularly where the carriageway width is less than 4.8 m . There would be a tendency for vehicles to use the footway area to ease passing manoeuvres.

## Mustons Lane

### 7.5 Mustons Lane has sub-standard visibility splays although this is a function of existing building positions.

## Parking bays

7.6 The length of parking bays immediately to the west of the shared surface would need to be reduced in length by one bay to prevent waiting westbound vehicle blocking the pedestrian crossing.

## Bus stops

7.7 The longitudinal distance between the bus stop cages is 6 m . When both stops are in use cars would be the only vehicles able to pass between the buses. The bus stop cages are 12 m in length and can therefore accommodate only one bus. Is this sufficient? This seems to be less than the current provision.

## Shared surface outside Town Hall

7.8 Swept path analysis would be required to demonstrate that the 6.5 m carriageway width is sufficient for HGVs/buses to negotiate this curve without conflicts with oncoming vehicles.
7.9 Depending on vehicle and pedestrian flows the crossing outside the Town Hall may need to be controlled (e.g. zebra or pelican).

The Common/Bell Street
7.10 Depending on the occupancy of parking bays, the visibility to vehicles turning out of Bell Street could be as low as 15 m . This is below the standard that would normally be expected but this is unlikely to be an issue given the speed of vehicles on the High Street.
7.11 It is less than ideal to have parking bays in the mouth of a junction. It appears that there are bays there currently and therefore it would difficult to argue that these are unsafe and should be removed. The presence of these bays prevents a pedestrian crossing facility being provided on the desire line north-south along the High Street. The design shows the pedestrian crossing some 18 m into Bell Street.

## 8 Other options and alternatives: Design

The following should be considered:
8.1 Review and illustrate the scheme within the overall movement hierarchy for the town to help clarify the arguments for rejecting one-way / pedestrianisation options.
8.2 Consider the phasing of the work both in terms of funding and evolving priorities. For example, will the available funds achieve the highest quality throughout the scheme or are they better concentrated in certain areas? Is there an aspiration to create a street that is entirely shared surface in the long term? Might the on-street car parking be reduced or removed entirely at a later date and how can this be best managed?
8.3 Generally, given the complexity of the brief and existing constraints, the scheme needs to consider detailed design issues in more depth. It is very hard to sign up to the principle of some of the ideas in the plan without understanding how it could work in practice. Detailed layouts, materials and street furniture will help to resolve issues as well as signage and management/enforcement strategies.
8.4 The aspiration to create a market square in front of the town hall does not read clearly. Use the area of raised shared surface carriageway to actually illustrate a square in plan and tie it together as a place. Show that vehicle tracking for HGV/bus movement can be accommodated at the corner and consider in detail how designated areas for market stalls (perhaps on both sides of the square) and setting down for the town hall can be provided without creating ideal conditions for unofficial parking and waiting.
8.5 Where an area of raised shared surface is proposed in the eastern end of the High Street consider issues of pedestrian refuge and safety. It might be suitable to formalise the current shuttle/priority working system, created by the informal parking of cars on the street. This effectively reduces the carriageway to a single lane so that traffic has to pull out round.
8.6 For example, one approach would be to create pedestrian crossing points or designated disabled/loading bays in the same locations as these informal priority pinch points. It is likely that this approach would require a 40 m section to the west of Mustons Lane to be priority working with no parking or loading at any time. Kerbs with a nominal 25 mm upstand could be used throughout to de-mark pedestrian vehicular areas without using bollards.
8.7 An alternative would be to make the High Street, or part of the High Street, one-way, hence removing the problem of passing manoeuvres.
8.8 Consider various drainage details for the proposed areas of shared surface, for example, channels or gulleys incorporating the existing kerb and storm water drainage system.
8.9 The existing traffic management issue of preventing haphazard car parking in the High Street needs to be carefully controlled and the use of designated bays would help identify where parking is allowed. These bays need to be defined by physical constraints, either bollards or kerbs.
8.10 Maintain a single bus bay in each direction on the High Street and suggest alternative locations for bus and coach waiting and pickup points.
8.11 Consider removing all parking from the Commons junction in order to discourage double parking and U-turns. The increased pavement widths on the corner would provide an opportunity to reinforce the historic character of the Commons and explore the siting of sculpture, seating, planting and water features.
8.12 Alternatively, the parking bays in the mouth of the junction could be de-marked by the use of a different surface (eg sets with a kerb edging) or through raised surfacing by about 25 mm .right up to the line of Angel Lane would move the crossing point much more onto the desire line north-south along Angel Lane.
8.13 Review the proposed north-south priority at Angel junction, as this will remove traffic from the High Street rather than encourage it. Use signage to improve awareness of the Angel Hill car park instead. Consider extending the proposed raised shared surface across Angel junction to create a raised table - this would further reduce speeds, give more time for decision making and maintain the dominant movement route down the High Street rather than up Angel Hill.
8.14 If a north-south desire line is wanted then it is suggested that the entry treatment to the eastern end of the High Street is moved right up to the junction line with Angel Lane.

