5

Key Projects

5.1 Introduction

The previous chapter set out the redevelopment aspirations for the study area through a series of high-level strategies. This chapter begins to develop some of these aspirations into a series of key public realm and infrastructure projects that we believe are fundamental to achieving the overall vision for the area.

The study area contains a large number of potential development sites and it is difficult to predict the timing and scope of all future development. The projects therefore identify a number of key proposals to guide contributions and investment (both private and public) within the area.

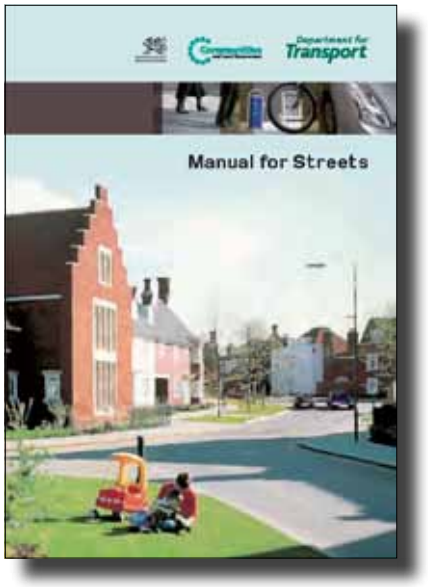
All of the key projects within this chapter focus on the public realm and are intended to contribute to the process of seeking new ways of reconciling traffic, pedestrians and cyclists and principally improve the quality of the area.

Policy and practice relating to street design is changing rapidly. The Government's *Manual for Streets* (2007) emphasises the value of streets as places, and that people - not cars - must come first. More recently CABE's briefing paper *'Civilised Streets'* (2008) explores the principles of shared space and calls for a fresh approach to street design so that our streets become more 'civilised' inclusive places where people can walk, cycle, play, talk and enjoy more easily. The application of standard highway solutions, especially within residential streets, is increasingly coming under question. Although relatively few in number, established precedents do exist in the UK where conventional traffic highway solutions have been replaced by more simpler and integrated solutions, for example; Kensington High Street (London), New Road (Brighton), Ashford Ring Road and Poundbury (Dorchester). In addition, less radical precedents also exist within some historic town centres such as Shrewsbury High Street (Shropshire), Julian Road (Bath) and Bury St Edmunds. Whilst every street is unique and the context of the Eastern Gate different, existing precedents are helpful in exploring options and generating ideas for improving the public realm within the study area.

At this stage, the proposals shown on the following pages are illustrative and will inevitably require further work. However, they are intended to stimulate ideas and debate about how we can make better use of space and create streets and spaces that are more civilised and inclusive.

The key projects offered in this chapter are identified in Figure 62 and in summary include:

1. Remodelling Elizabeth Way Roundabout
2. Newmarket Road/East Road
3. St Matthew's Junction
4. Coldham's Lane Junction
5. New Street and Harvest Way



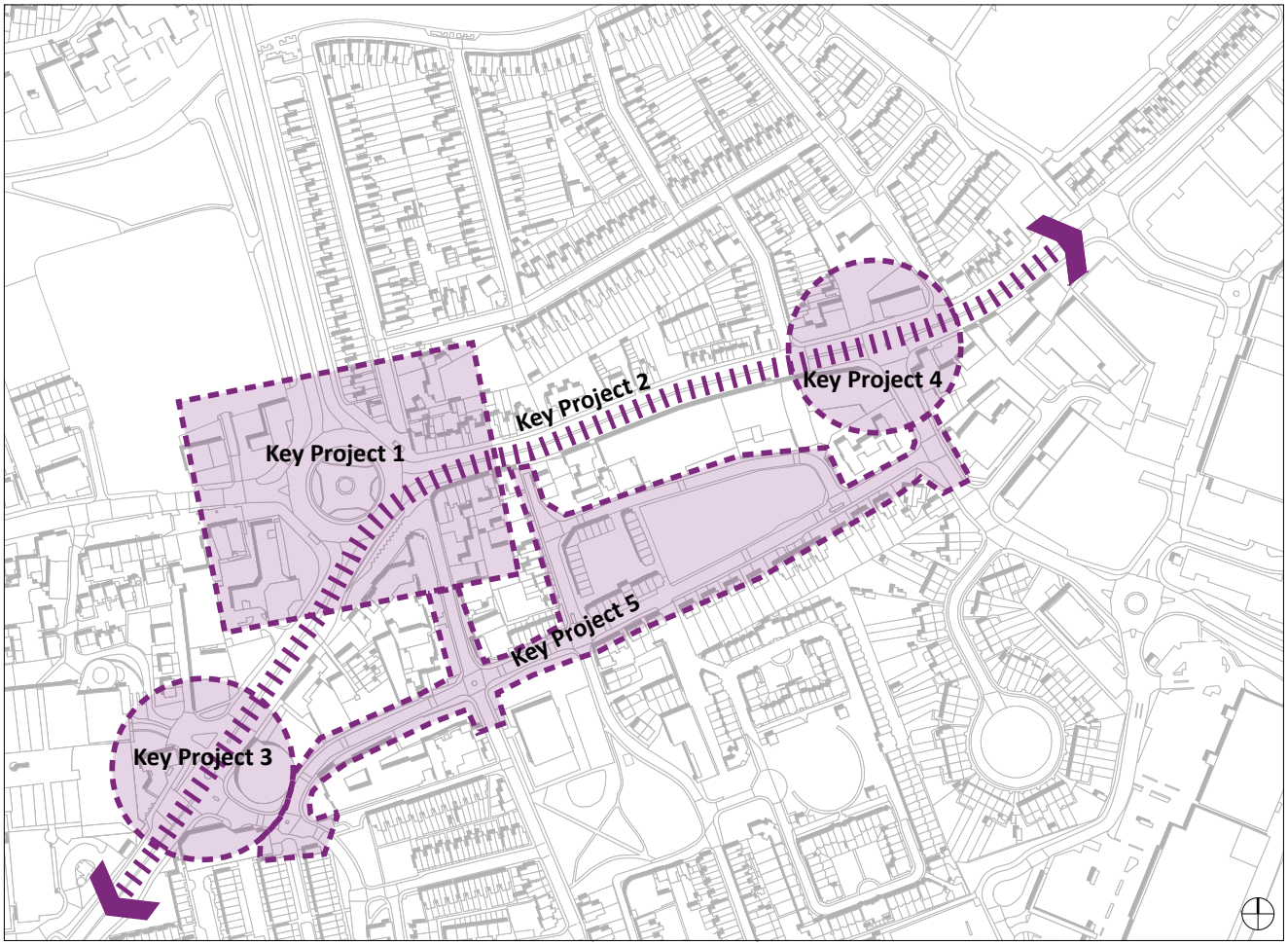


Figure 62: Locations of key projects

5.2 PROJECT 1 - Remodelling Elizabeth Way Roundabout

Newmarket Road and the Elizabeth Way roundabout form a disappointing gateway into the City. Elizabeth Way roundabout – a legacy of the 1970s - and application of 'standard' highway solutions along Newmarket Road have eroded the qualities of place, and severed neighbouring communities. This is an area of the city where car is most definitely king! The consequence? A townscape that is fragmented, ill defined, incoherent, and an environment that is extremely hostile for pedestrians and cyclists.

This first key project, aims to rectify this situation. A number of options are shown on the following pages, all of which involve completely filling in the subways, and replacing the roundabout with a signalised junction, to allow convenient pedestrian and cycle movement above ground and ultimately help to overcome the barrier effect of this junction and Newmarket Road. Many major UK cities are now taking this approach - Nottingham provides a useful model for such an approach (refer to Figures 67, 68, 69 & 70 on page 59).

Three options have been developed for Project 1, which all aim to deliver the following:

- *Emphasise place over vehicle movement* – through the use of tighter geometry and radii, which will not only help to reduce the approach speeds at the junction, but will also help to reclaim large areas of underused space (further detail below).
- *Create a more comfortable and simplified pedestrian experience* – by creating more generous pavements, introducing street trees, removing pedestrian guardrails, and introducing direct and wide crossings as close to the intersections as possible.
- *Promote reduced lane widths* – to shorten crossing distances for pedestrians.
- *Help to prioritise cyclists at junction*s – the replacement of the roundabout, and inclusion of crossing points which respond to key desire lines, will improve the environment for cyclists. However all approaches to the junction have been designed to include advance stop lines for cyclists.
- *Reclaim areas of additional public space* – to create a new urban space at the south eastern corner. This will also improve the setting of the Rose and Crown (Building of Local Interest) and provide the opportunity for 'spill out' space, activating the street.
- *Create new/ improved potential development sites* – which provides the opportunity to mend the street frontage, repair corners and create a gateway that is clearly defined and enclosed by built form.
- *Re-establish an historic route and restore direct visual links between communities* - by introducing a 5 metre wide, direct pedestrian/cycle crossing between Occupation Road and Abbey Road.
- *Promote the de-cluttering of the urban environment* – Traffic volumes at this junction make signals unavoidable. However a number of measures can be employed to reduce their visual impact by:
  1. minimising the number of signal heads at the junction;
  2. Integrating signal heads into the design of lighting columns;
  3. integrating cycle routes with pedestrian crossing points; and
  4. avoiding the use of pedestrian guardrails where ever possible.

Of all three options outlined on the following pages, Option 1 is the preferred approach, as it will best deliver all of the above, and all of the relevant aspirations outlined in the previous chapter.

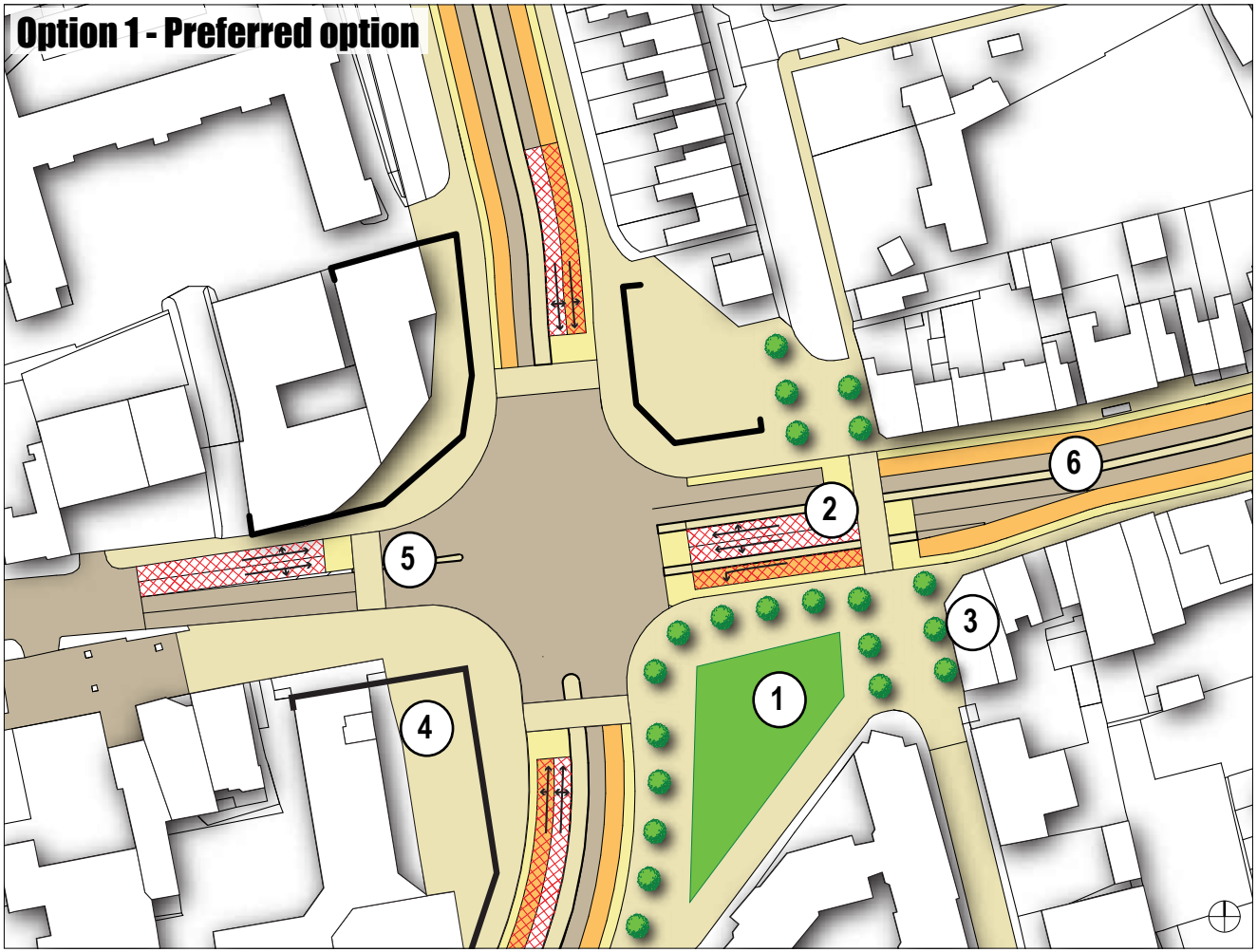


Figure 63: Remodeling Elizabeth Way roundabout option 1

1 New public urban space strengthens gateway into the city, improves the setting of the Rose and Crown (BLI) and forms new public space.

2 5m wide direct pedestrian/cycle crossing re-establishes historic link. Trees frame/emphasise visual link.

3 Opportunity for spill out space to enliven and activate the edge.

4 Opportunity for new landmark building to create identity and strengthen gateway into the city. (refer to scale and massing strategy).

5 Wide, direct crossings, located close to intersections, pick up on pedestrian desire lines.

6 Explore the removal of existing pedestrian guardrailing as part of a wider design for the whole streetscape and allow informal crossings.

Opportunity for street trees to help humanise and soften the environment.

Potential development sites - opportunity to strengthen place through built form (frontage lines are indicative only)

10 car queuing capacity at signal heads (30m)

Bus Lane/bus priority

Cycle lane and advanced stop lines for cyclists

Detailed street design elements:

- 10 car queuing capacity at junction (30m).
- Cycle lanes along the length of Elizabeth Way, Newmarket Road and East Road to be a minimum width of 1.5m and 2m where possible.
- Advanced stop lines for cyclists on all approaches.
- 10m tracking radius on all corners of the junction to allow use by heavy goods vehicles.
- All carriageways lanes are 3m wide to allow heavy goods vehicles to pass one another.
- Bus lanes 3.1m wide.

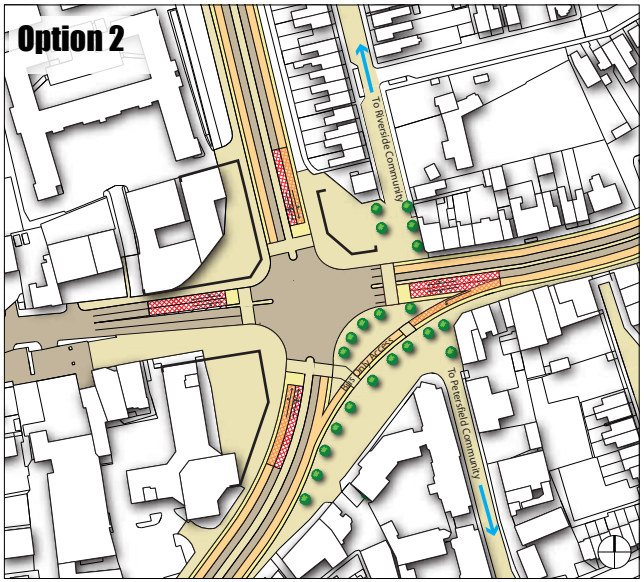


Figure 64: Remodeling Elizabeth Way roundabout option 2

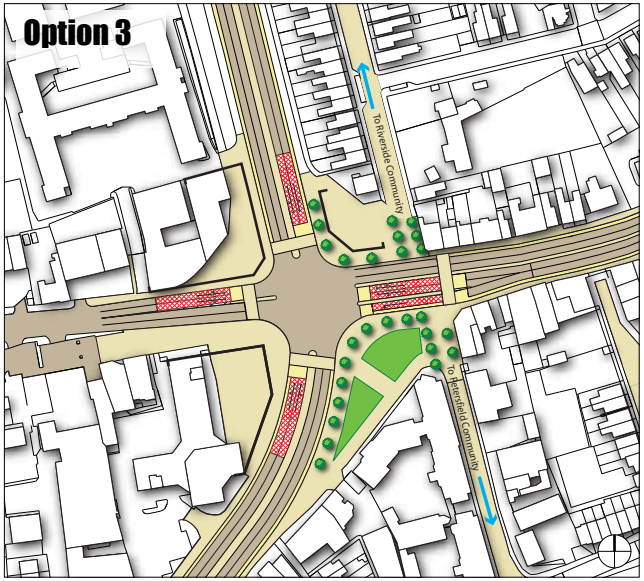


Figure 65: Remodeling Elizabeth Way roundabout option 3

Option 2 - detailed street design elements include:

- Bus only access is provided for vehicles turning left from Newmarket road onto East Road.
- 10 car queuing capacity at junctions (30m).
- Cycle lanes along the length of Elizabeth Way, Newmarket Road and East Road to be a minimum width of 1.5m and 2m where possible.
- Advanced stop lines for cyclists at all approaches.
- 5 metre wide crossings close to intersections.
- 10m tracking radius on all corners of the junction to allow use by heavy goods vehicles
- All carriageways lanes are 3m wide to allow heavy goods vehicles to pass one another.
- Bus lanes 3.1m wide.

Option 3: detailed street design elements include:

- 10 car queuing capacity (30m) at junctions.
- Cycle lanes along the length of Elizabeth Way, Newmarket Road and East Road to be a minimum width of 1.5m and 2m where possible.
- Advanced stop lines for cyclists at all approaches.
- 10m tracking radius on all corners of the junction to allow use by Heavy goods vehicles
- All carriageways lanes are 3m wide to allow a heavy goods vehicles to pass one another

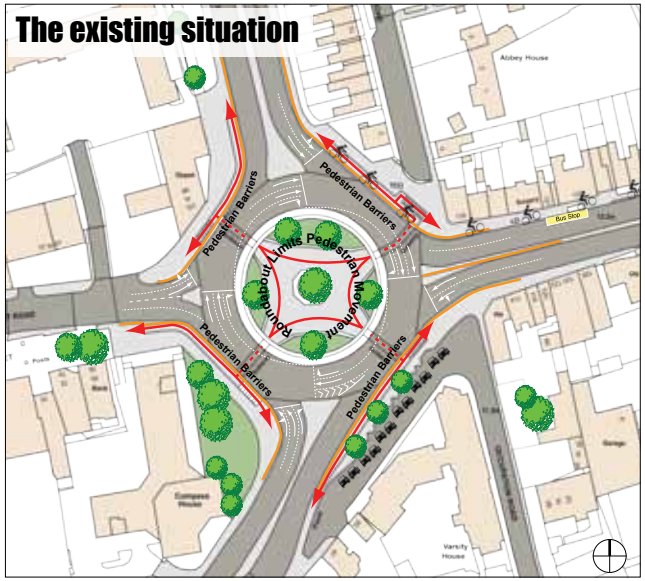
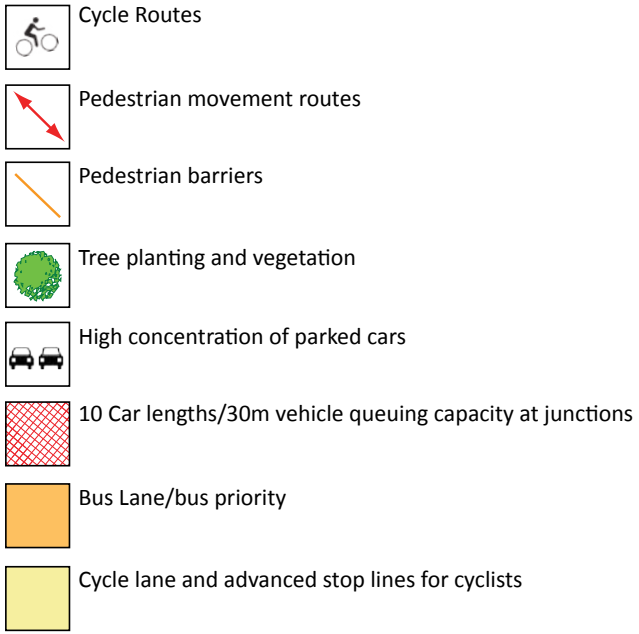


Figure 66: Existing arrangement of Elizabeth Way roundabout



Where has this been achieved elsewhere? ... Maid Marion Way, Nottingham

Figure 67 - The roundabout before - completely dominated the environment (Top left)
Figure 68 - Filling in the subways with concrete (Bottom left)
Figure 69 - The roundabout after - signalised junctions (Top right)
Figure 70 - Inclusion of wide pedestrian crossings has restored visual and psychological link (Bottom right)

A more radical approach?...Continental style 'open' junctions

Figure 71 (top) and 72 (bottom) Elwick Square, Ashford Ring Road .

5.3 PROJECT 2 - Newmarket Road /East Road

Newmarket Road forms one of the key approaches into the City. Whilst parts of Newmarket Road have great historic interest (such as the Grade 1 listed Leper Chapel and remnants of Barnwell Priory, including the Grade 2 listed church of St Andrew-the-Less), the history is masked behind the heavy traffic, signs, signals and markings. The combination of poor, modern, infill development and the application of 'standard' highway solutions has gradually eroded the qualities of the route.

Newmarket Road lacks an overall vision for its improvement. The Eastern Corridor Area Transport Plan (ECATP), identifies new transport infrastructure requirements and is very much 'movement' focussed. In contrast, the City Council's emerging 'suburbs and approaches' study for Newmarket Road will provide an assessment of 'local distinctiveness' and, is very much 'place' focussed.

A strategy for Newmarket Road, which brings together aspirations for both 'movement' and 'place' is needed. It is not within the scope of this document to provide the details of any such strategy. However, it is envisaged that as this visioning document is tested and the ideas/aspirations refined through collaboration with stakeholders, that a feasible strategy for improvements to Newmarket Road will emerge.

Current traffic volumes severely limit options for radical change. However it is possible to identify a number of principles that could guide discussions regarding future proposals, which could help break down the barrier effect of both Newmarket Road and East Road.

1. **Low cost, short term measures** – Explore the possibility of removing existing pedestrian guardrailing, in particular from central median strips and pedestrian crossings, to create an open and accessible central reserve. Please refer to text on page 61 for further information.
2. **'Greening' streets** – Introducing street trees along Newmarket Road and East Road is a key aspiration of this visioning document. Under the current highway configuration, space is tight and introducing street trees along the western end of Newmarket Road would be difficult. However, a number of schemes for Newmarket Road and East Road are identified within the 2006 ECATP (Newmarket Road Bus Priority, Newmarket Road Cycle Improvements, Inner Ring Road Improvements to East Road), which will require substantial reconfigurations to the highway. These schemes should be considered collectively as they present a significant opportunity to develop a co-ordinated strategy for introducing trees along the western end of Newmarket Road and eastern end of East Road.
3. **Add new schemes to ECATP** - Subject to further testing with key technical stakeholders, Projects 1, 3 and 4 suggested within this document, could be identified within the Eastern Corridor Area Transport Plan as schemes to be funded by ECATP contributions.
4. **Collaborative working** – Re-establishing a sense of place and arrival along this key route into the city and breaking down the barrier effect of Newmarket Road requires a willingness from all stakeholders to explore options which break the conventional approaches. Collaborative working between all the professional disciplines associated with highway engineering and urban design is essential in order to combine good placemaking principles and the desire to keep standard measures associated with the highway to a minimum.

Pedestrian guardrailing

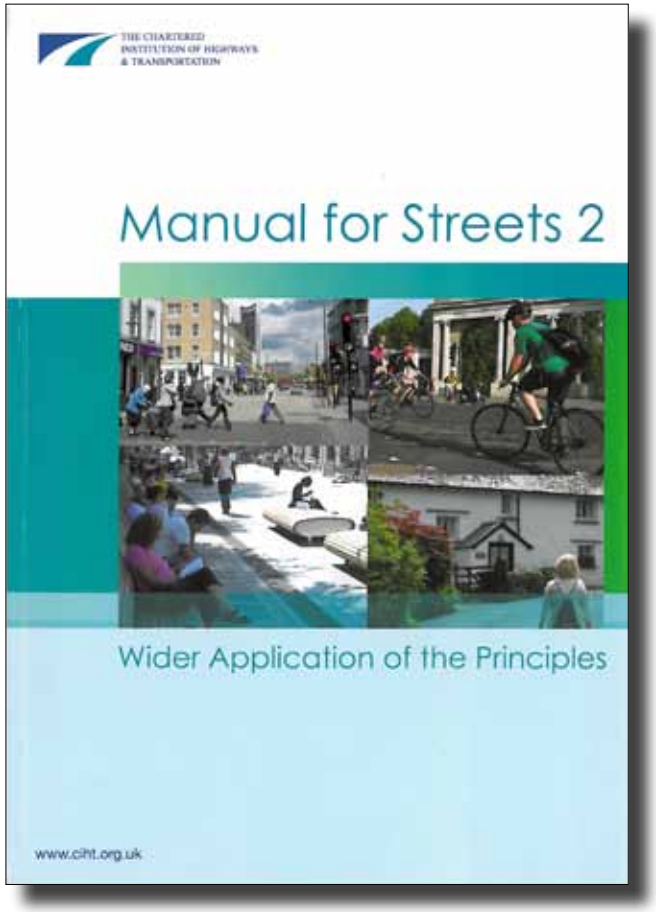
Pedestrian guardrailing is a very intrusive element. It restricts pedestrian movement, often forcing people to walk further away from their desire lines; can reduce the amount of useable footway; degrades the quality of the public realm; and there is also *"evidence that it can increase traffic speeds and present an increased risk to cyclists, who can be crushed against vehicles"* (Manual for Streets 2, para 12.4.2, page 87).

In the case of Elizabeth Way roundabout, Newmarket Road and East Road, despite guardrailing there is a great deal of non-compliance by pedestrians (and cyclists) who still choose to take the shortest path, putting themselves at greater risk. The genuine effectiveness of this guardrailing is therefore questionable.

This Visioning Document identifies potential areas of existing guardrailing that could be removed (refer to Chapter 4 - Strategies for Change). However, it must be noted that this document is not advocating that this is undertaken in isolation - the removal of existing guardrailing should only be considered when part of a wider design for the whole streetscape to better incorporate pedestrian and cycle desire lines. Furthermore Manual for Streets 2: Wider application of the principles (MfS2), provides evidence based best practice guidance regarding the use, effectiveness and removal of existing guardrailing. Section 12.4 in particular outlines a process that authorities should follow when considering the removal of existing guardrailing. Due regard should therefore be given to the best practice guidance as set out in MfS2.

Figure 73 - Crossings have been redesigned with the removal of guardrails (Kensington High Street, London)

Figure 74 (above) and 75(below) guardrails restrict pedestrian movement, forcing people to walk further from their desire lines

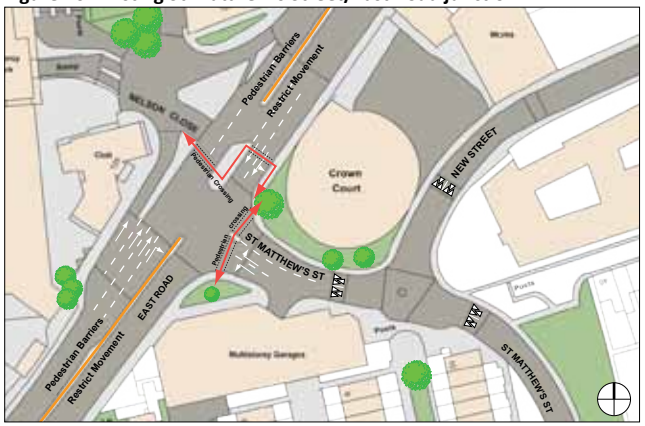


5.4 PROJECTS 3 & 4 - Remodelling traffic dominated junctions

Two traffic dominated junctions sit at either end of the study area; one at the corner of the Crown Court and the other at the corner of Newmarket Road/Coldham's Lane. The latter junction in particular, was highlighted by the majority of local residents at the public meeting (November 2009) as being particularly hostile for pedestrians and cyclists.

Projects 3 and 4 on the following pages offer suggestions for remodelling these two junctions. Both key projects aim to simplify and rationalise the layouts of the two junctions so that the environment for pedestrians and cyclists is improved.

Figure 76: Existing St Matthew's Street/East Road junction



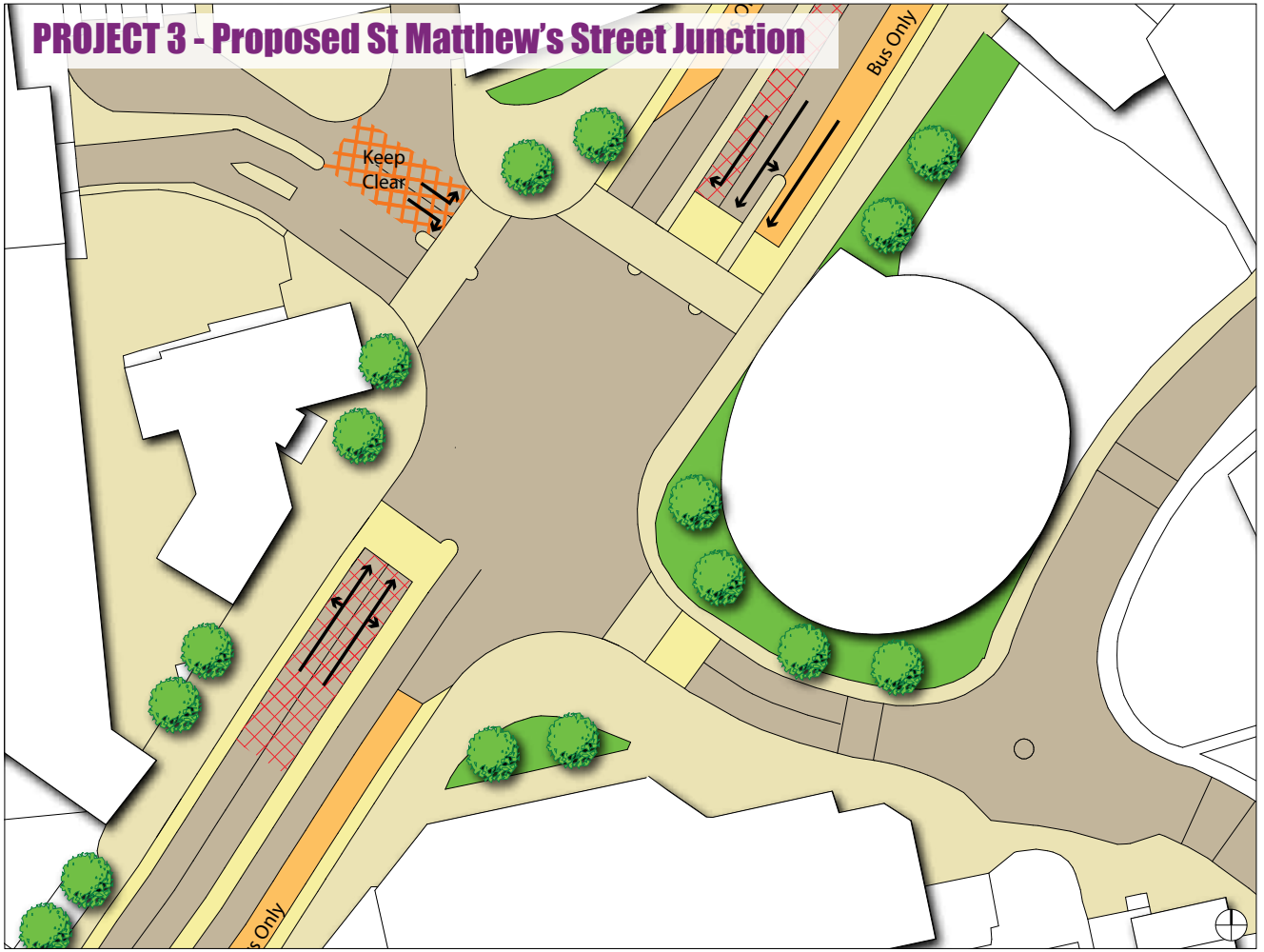


Figure 77: Project 3 Proposed St Matthew's Street Junction

Project 3 - Detailed design elements:

- 10 car capacity at junctions (30m).
- 1.5m wide cycle lanes (minimum) and 2m wide where possible, along the length of East Road.
- 10m tracking radius on all junctions allows access for HGV's.
- All carriageways lanes are 3m wide to allow HGV's to pass one another.
- Bus lanes 3.1m wide.
- Tightening of the junction allows for increased areas of public realm.
- Explore possibility of achieving a direct crossing from the Grafton Centre to New Street.

PROJECT 4 - Coldham's Lane Junction

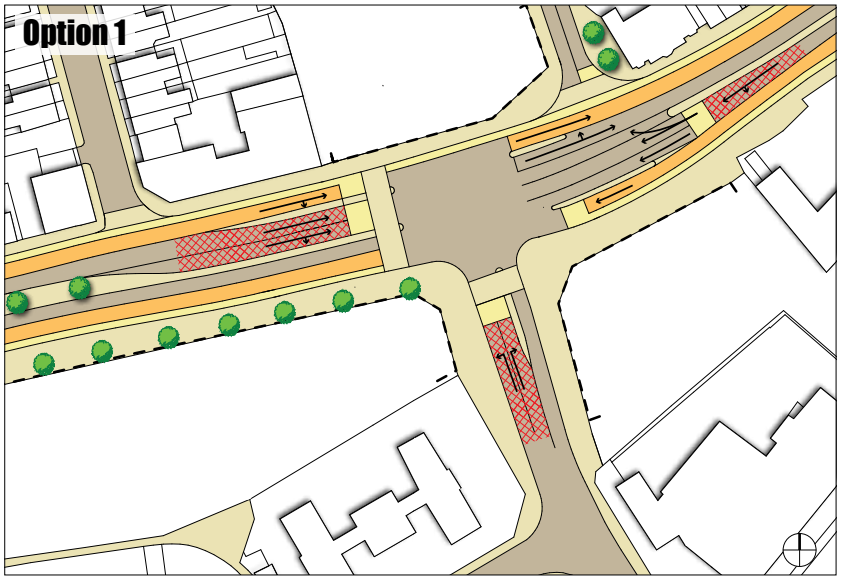
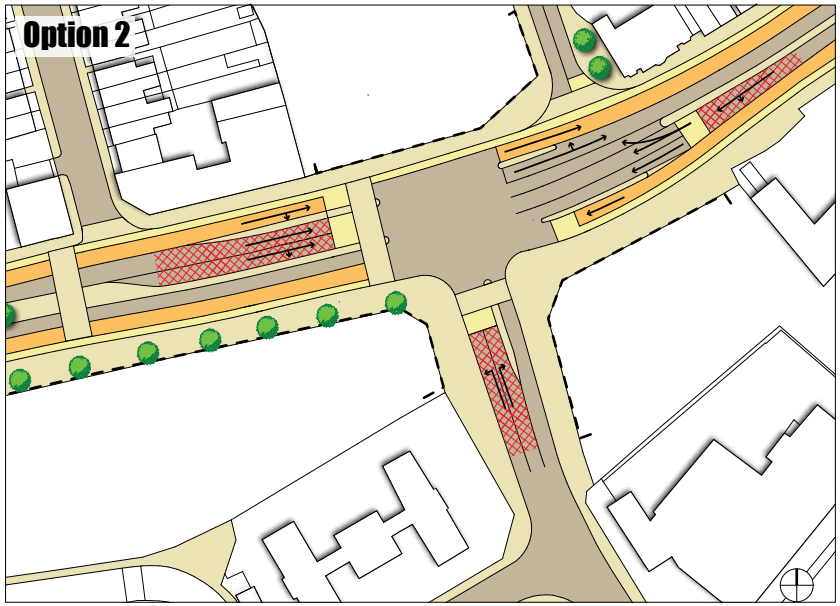


Figure 78: Project 4, Option 1

Figure 79: Project 4, Option 2



10 Car lengths/30m vehicle queuing capacity at junctions

Bus Lane/bus priority

Cycle lane and advanced stop lines for cyclists

Detailed street design elements:

Option 1:

- Simplified pedestrian experience - Wide direct crossings located close to intersections.
- 10 car queuing capacity at junctions (30m).
- Cycle lanes along Newmarket Road to be a minimum width of 1.5m and 2m where possible.
- 10m tracking radius on all junction corners.
- All carriageways lanes are 3m wide to allow heavy goods vehicles (HGV's) to pass one another.
- Bus lanes 3.1m wide along the length of Newmarket Road.
- Tightening of the junction geometry allows for greater areas of public realm.
- Space for additional planting.

Option 2:

- All detailed street design elements as above, with the exception of an additional pedestrian/cycle crossing providing a more direct link from Harvest Way to Godesdone Road.

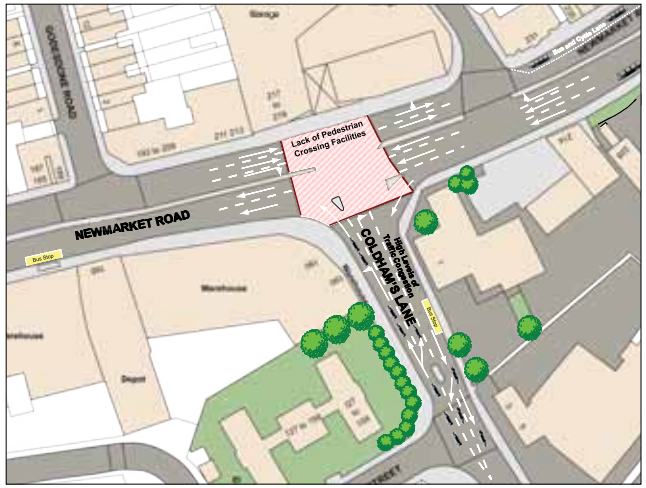


Figure 80: Existing vehicle movements

5.5 PROJECT 5 - New Street and Harvest Way

For many residents living south of Newmarket Road, the streets of New Street and Harvest Way operate as their front door or gateway into their community. Various conventional traffic highway measures introduced in the past, such as speed bumps and one way traffic management, have had limited success. The environment is cluttered with signage and dominated by cars, the street surface defaced by conventional highway markings, and the speed bumps achieve little other than present a challenge for drivers to speed between.

Project 5 aims to improve the gateways into the neighbourhood south of Newmarket Road and ultimately offer a fresh approach to creating civilised and inclusive streets. The principles underpinning our recommendations on the adjacent plan include the following.

Emphasising and improving gateways

A combination of design elements are proposed at either end of New Street to emphasise the transition from the higher speed contexts of East Road and Newmarket Road into the slower speed, more residential context of Petersfield. These include:

- employing a consistent material across the junction.
- Introducing street trees/landscaping at the entry points to emphasise a change in scale.
- Reinforcing the transition point through reducing the visual widths of the street and employing a change in colour and texture of the paving material.
- An absence of road markings, including centre lines.

Placemaking at junctions

Circular designs are suggested at intersections to help create a sequence of distinct spaces along New Street, which emphasise and celebrate key routes and spaces, such as the allotments. Where space permits, trees could be used to frame and strengthen the space or even act as a focalpoint. A consistent material across the entire space is proposed and stone setts could be used to emphasise the circular design. It is essential that highway markings, that give priority to one line of movement, are avoided. Placemaking at intersections will break down the linearity and dominance of the highway, raise drivers awareness of their context and encourage lower speeds.

Designing for 20mph - reducing the carriageway

The street should be designed so as to achieve a target speed of below 20mph. Fundamental to this is reducing the actual width of the carriageway (kerb to kerb). A width of less than 5.5m is suggested, which allows for pavement widths to be increased. However achieving lower speeds also requires a reduction in the visual width of the carriageway. The use of a double kerb detail (refer to figures 91 and 92) and the inclusion of street trees can further narrow the perceived width of the carriageway.

Reintroducing two way traffic flows

One way streets do not help to create legible environments. Therefore the two way traffic flow along New Street and Harvest way should be reinstated. Simplifying movement could reduce the need for signage, intrusive road markings and street clutter.

Informal street crossings

These areas of paving are designed to encourage informal street crossing, help break down the linearity of the street and emphasise key routes, desire lines and other important contextual features.

Low kerbs

The use of low kerbs are suggested as they provide tactile guidance, can be easier for people with limited mobility, and can reduce the need for frequent changes in height.

A simple and robust palette of materials

The colour and texture of street surfacing can play a significant role in changing peoples perception of a place. A combination of no (or very minimal) road markings and simple, robust materials are suggested to change the image and perception of the street and contribute to creating lower speeds.

On New Street itself, a combination of well laid asphalt, with block sets to define circular designs and informal crossings could be used, which would serve to break down the linearity of the highway. Parallel double kerbs are an effective way of visually narrowing the carriageway.

Figure 81: New Street and Harvest Way streetscape improvements

On street parking as an integral component of the streetscape

It is envisaged that on street parking is defined through a change in material/texture from the carriageway so spaces 'read' as part of the public realm. Street trees are proposed to enclose and mark spaces as well as help prevent parking up on the footway. Refer to figure 86 for on street parking dimensions.

Humanise, rationalise and simplify the street furniture

Rationalising and simplifying street furniture is key to creating civilised and inclusive streets. Therefore integrating street furniture that is capable of incorporating other signs is encouraged. (Refer to figure 90) The location of street furniture can also discourage pavement parking. Lower street lighting, which is more 'human' scale than 'HGV' scale can make the environment feel more comfortable.

Figure 82: The existing situation... Vehicles and 'conventional' highway measures dominate and detract from the townscape.
(View looking west along New Street towards Abbey Street/Abbey Walk junction)

Figure 83: The existing situation... Uninterrupted views, wide carriageway widths and narrow footways, reinforce vehicle dominance.
(View looking west along New Street towards Harvest Way junction)

Figure 84: *A possible solution?* Streets are places too! - Reduced carriageway widths allows for wider footways; trees soften and humanise the street; and the absence of road markings help to emphasise place and people over vehicle movements.
(Artist impression of Project 5: proposed improvements along New Street/Harvest Way)

Figure 85: *A possible solution?* Placemaking at intersections - circular design at junction with Harvest Way celebrates the allotments and existing 'pocket park'. Trees located within the 'apparent' highway frame the space and encourage drivers to slow down.
(Artist impression of Project 5: proposed improvements along New Street/Harvest Way)

On Street Parking Arrangement

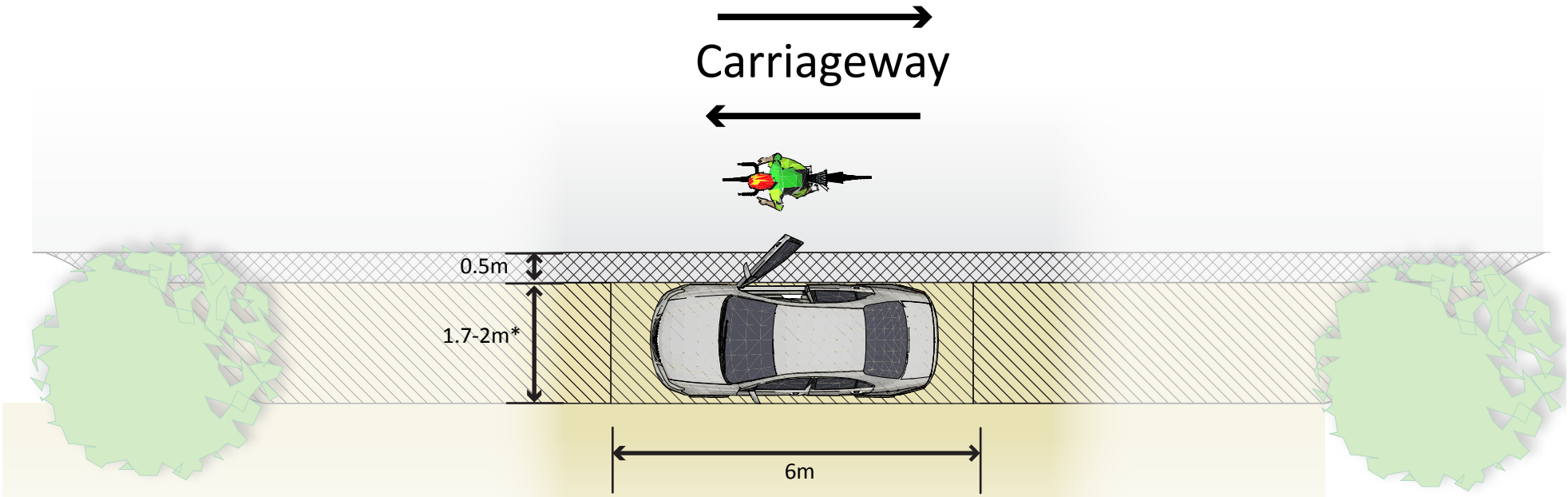


Figure 86: On Street Parking Arrangement

Vehicle parking area.

Additional 0.5m buffer strip to allow car door to open without obstructing cyclists using the carriageway.

*1.7 -2m wide parking bay if located against kerb. 2.8m width required where parking bay is located against a wall in order to allow additional turning space for vehicles.

Figure 87


Figure 88


Figure 89


Figure 90


Figure 91

Figure 92

Figure 93

Figure 94

Key to photo examples (from far left):

Figure 87: Informal pedestrian crossing emphasising a key desire line (Shrewsbury High Street, Shropshire).

Figure 88: Shared surface street with integrated on street car parking (Waterstone Park, Greenhithe, Kent).

Figure 89: Tree located within the street interupts (but does not block) forward visibility, encouraging drivers to slow down (Park Central Zone 1, Birmingham)

Figure 90: Lower signs help reduce street clutter (Ashford, Kent).

Figure 91 and 92: Parallel double kerbs visually narrow the carriageway (Ashford, Kent).

Figure 93 - Placemaking at intersections to promote lower speeds - note the simplified streetscape and absence of road markings (Julian Road, Bath).

Figure 94 - On street car parking defined through a change in material and texture (Bury St Edmunds, Suffolk).