

HAMPSHIRE COUNTY COUNCIL

Decision Report

| | |
|------------------------|---|
| Decision Maker: | Executive Member for Economy, Transport and Environment |
| Date: | 5 November 2013 |
| Title: | Project Appraisal: A27 Western Way Bus Gate Fareham |
| Reference: | 5294 |
| Report From: | Director of Economy, Transport and Environment |

Contact name: Louise Berridge

Tel: 01962 826986

Email: louise.berridge@hants.gov.uk

1. Executive Summary

1.1. The purpose of this paper is to seek approval for the construction of a new Bus Gate providing direct access onto the A27 Western Way from Western Road, in Fareham, for *Eclipse* Bus Rapid Transit (BRT) services, at an estimated cost of £249,000.

Scheme Outline

1.2. The objective of the Bus Gate, between Western Road and the A27 Western Way, is to enable *Eclipse* BRT buses, travelling westbound, then south to Gosport, to avoid the heavily congested Quay Street roundabout thereby, reducing delays to services and improving journey time reliability. This paper seeks to explain the background and the development of the scheme and the benefits and details of the proposed infrastructure measures.

Alternative Options Considered and Rejected

1.3. Three locations on Western Road were considered for the Bus Gate to provide *Eclipse* Bus access on to the A27 Western Way westbound carriageway. It was considered that of the three options, the preferred Bus Gate location would be furthest east, on Western Road and would meet the journey time saving objectives and have the least detrimental impact on the environment and loss of parking. It is also the least expensive of the three options. The final recommended scheme was agreed at the BRT Board Meeting, in February 2013. The following two options were investigated and discarded:

- (i) A Bus Gate to be located approximately 150 metres west of the Western Road/ Queen's Road junction, on Western Road and opposite the Kings' Road junction. The environmental bund between Western Road and the A27 Western Way, would have needed to be reduced in length by

approximately 14 metres, with the loss of 3 or 4 trees. This may have increased noise levels along King's Road. In this option, traffic signals would have controlled both lanes of the eastbound and westbound carriageways of the A27 Western Way.

- (ii) The other option was located the furthest west, on Western Road, approximately 500 metres west of the selected location at the eastern end of Western Road, next to the entrance of the Holy Trinity Street off street Car park. The environmental bund would have been reduced in length by approximately 9 metres, with the loss of 1 to 2 trees. There would have also been a loss of approximately 9 metres of permit holders only parking. Traffic signals would have controlled both lanes of the eastbound and westbound carriageway of the A27 Western Way.

Measures of Success

- 1.4. On Thursday 17 January 2013 bus journey times were recorded for buses between the hours of 16:00 and 18:30. Buses were observed leaving the Fareham Bus Station and travelling westbound onto Western Way via the Quay Street Roundabout, towards the A27 Station Roundabout. A time was recorded between the bus station and when each *Eclipse* bus arrived at the 3 possible locations considered viable for the bus gate, along Western Road. The greatest times recorded were 8m.15s, 9m 04s and 9m 47s for an *Eclipse* bus travelling from the bus station to the first bus gate position, the most easterly of the 3 locations. The shortest times recorded during this time period were 1m 38s, 2m 15s and 2m18s. The longest recorded time for a journey between the bus station and the Station Roundabout was 11m 50s and the quickest 3m 28s. This location is the cause of the greatest delay with the most detrimental impact upon journey time reliability for *Eclipse* services over the whole routes.
- 1.5. Traffic queue length monitoring was undertaken on the A27 Western Way, between 20 and 23 November 2012, from 07:00 - 09:00 and 16:15 and 18:15, for both the east and west bound carriageways. These identified the position of the back of the traffic queues during the am and pm peak periods on the west bound approach to the A27 Station Roundabout and on the east bound approach to the Quay Street Roundabout.
- 1.6. In the AM peak, the surveys demonstrated there was no queue on the western approach to the Station Roundabout and therefore access to the bus lane was unimpeded. On the eastbound approach to the Quay Street Roundabout, the longest queue observed was back to the western end of the existing lay-by, approximately 270 metres from the Quay Street Roundabout.
- 1.7. In the PM peak, traffic queues on the westbound A27 Station Roundabout approach commenced at a point approximately opposite the middle of the Delme Arms Fly-Over. Therefore, beyond the start of the A27 Western Way bus lane and blocking entry to the bus lane. On the eastbound approach to the Quay Street Roundabout, the worst queues in the PM peak were always

contained within 80m of signals. The maximum queue length was approximately back to the position of the bus link.

- 1.8. Improvements in the *Eclipse* BRT bus journey time reliability, between the Fareham Bus Station and the A27 Station Roundabout would demonstrate the success of the scheme.
- 1.9. Accident data on the A27 Western Way, including the Quay Street and Station Roundabouts shows a total of 30 personal injury accidents, 28 of which were *slight* and 2 were *serious* injury accidents, between 01/04/08 and 31/03/13. For the same time period, accident data for Portland Street, between Hartland's Road and the Quay Street Roundabout shows a total of 5 personal injury accidents, 4 *slight* and 1 *serious*.
- 1.10. A reduction in the number of recorded personal injury accidents on the A27 Western Way and at the Quay Street Roundabout and A27 Station Roundabouts junction would signify a successful scheme.
- 1.11. Post scheme monitoring will be achieved by comparing the 'before' surveys with similar 'after' surveys, following implementation and settlement of the scheme.

2. Background

- 2.1. To access the off-road bus-way from Fareham, 'Henry Cort Way', the *Eclipse* BRT services and Service 10 exit the Fareham Bus Station, located on Hartland's Road and travel via the Quay Street Roundabout, westbound onto the A27 Western Way, towards Fareham railway station. Prior to the opening of the *Eclipse* bus way, bus services travelled between the bus station, on Hartland's Road and the railway station accessed off Station Roundabout, via West Street. However, substantial evening peak traffic delays for buses seeking to exit West Street at the western end were exacerbated by through local traffic diverting onto West Street, aiming to avoid the delays on the A27 Western Way and Eastern Way. Therefore, an alternative route for the *Eclipse* services and Service 10, between the bus station and railway station, was sought and in April 2012, an experimental Traffic Regulation Order (TRO) was implemented for bus lanes on the Western Way westbound approach to the Station Roundabout and southbound on Portland Street, to the Quay Street Roundabout. All buses and cyclists were permitted to use the bus lanes. This was undertaken at the request of the *Eclipse* Bus Rapid Transit (BRT) operators and the BRT project team, to reduce delay time to the *Eclipse* services.
- 2.2. However, traffic delays and queues, at evening peak times, are still causing significant delay to Gosport bound *Eclipse* services, between Fareham bus station and Quay Street roundabout and the A27 Station roundabout. The principle delays are on the A27 Western Way westbound approach to the Station roundabout and the second, on Portland Street, on the southbound approach to the Quay Street roundabout.

- 2.3. In May 2013, initial monitoring results with the bus lanes in operation were reported to the Bus Rapid Transit (BRT) Board and Fareham Borough Council Members. The results identified some localised congestion at the A27 Station Roundabout and that the congestion on the A27 has become perceivably worse, since improvement works were undertaken at the Quay Street roundabout, in late 2011. Traffic queues previously associated with Quay Street Roundabout were shown to transfer further along the A27 Western Way, back from the A27 Station Roundabout and the A27 The Avenue/Redland's Lane/ Gudge Heath Lane junction.
- 2.4. Overall, 'Strategis' traffic queue data has demonstrated that end to end journey times are largely unaffected and in addition, bus patronage and perception surveys identified that there has been a positive shift to use more sustainable transport, in particular the Eclipse BRT. There is strong evidence of public satisfaction with the Eclipse BRT service. There has been a 64% increase in passengers on the Eclipse E1 and E2 services compared with the previous 82 and 86 services. The number of people using all bus services to travel between Gosport and Fareham has increased by 12% overall and there has been an associated reduction in traffic on the A32 of approximately 2% southbound and 3% northbound.
- 2.5. Since the start of operation, the bus lanes have been monitored to assess the impact on traffic flow and performance of bus journey times. Since the introduction of the bus lanes on the westbound A27 Western Way and Portland Street, delay to buses has reduced. However, despite the clear success of the bus lane, in relation to the Eclipse service operation, there is still concern regarding the delays on the A27 to general traffic. To assist in addressing concerns, further improvements are required and a phased improvement strategy has been developed and proposals set out for the short, medium and long term. These will aid in improving traffic capacity and bus journey time reliability on this important Eclipse bus link to the off road route. This Project Appraisal seeks approval for item (i), as set out below within the Medium Term proposals.
- 2.6 The experimental Traffic Regulation Order (TRO) for the bus lanes was due to expire in October 2013. To retain the bus lanes on Portland Street and the A27 Western Way, the order was converted to permanent in August 2013 and should allow the continued success of the *Eclipse* BRT services. Modifications have been made to the existing order for alterations to the A27 Western Way bus lane, to improve the operational safety and driver awareness of the bus lane.

These include stopping the bus lane approximately 36 metres before the Station Roundabout. This reduction will enable the approach to the roundabout to be reverted to two lane running for all traffic in order to help reduce congestion in peak periods, during this interim scheme period. As a result of this, the short length of bus lane on the A27 The Avenue has been removed for safety reasons.

2.7 Further measures are required to improve *Eclipse* BRT journey time reliability between the Fareham bus station, Market Quay Roundabout and the A27 Station Roundabout and to improve capacity for general traffic at the A27 Station and Quay Street Roundabouts. In addition to this scheme to implement a A27 Western Way/ Western Road Bus Gate, approval will also be sought for alterations to the existing A27 Western Way westbound bus lane and the introduction of a second general traffic lane on the westbound carriageway of the A27 Western Way.

2.8 In the longer term, ITS Traffic Signals and Engineering Consultancy are investigating options to provide improvements at the A27 Station Roundabout, where the A27 The Avenue, The A27 Western Way and West Street converge and at the A27 Redlands Lane/ Gudge Heath Lane junction and their connecting carriageway links. The objective is to successfully address the restricted traffic capacity through the two junctions, reduce congestion, thereby improving journey times for all transport modes, including the *Eclipse* BRT services and enabling better traffic management, now and in the future.

The A27 Station Roundabout will be re-configured to include improved multi-modal transport infrastructure improvements to enhance interconnectivity and the interface between BRT *Eclipse*, bus and rail, and non car modes, along with improved cycle route connections between Fareham Railway Station and Fareham College. The station and multi-modal interchange will form a critical part of access strategies linked to two important strategic development sites, Welborne to the north of Fareham, (Construction may commence in 2015/16) and the Solent Enterprise Zone (Opens September 2014).

At the A27 The Avenue/ Gudge Heath Lane/ Redlands Lane signal controlled junction, two westbound lanes on the A27 The Avenue will be provided, with a right turn lane for westbound traffic, turning into Gudge Heath Lane.

Hampshire County Council has submitted a bid for funding, to the Local Transport Board, for the project.

3. Finance

| 3.1 | <u>Estimates</u> | <u>£'000</u> | <u>% of total</u> | <u>Funds Available</u> | <u>£'000</u> |
|-----|------------------|--------------|-------------------|------------------------|--------------|
| | Design Fee | 9 | 3 | BBAF Grant | 40 |
| | Client Fee | 2 | 1 | Local Resources | 44 |
| | Supervision | 4 | 2 | LTP | 165 |
| | Construction | 234 | 94 | | |
| | Land | 0 | | | |
| | Total | <u>249</u> | <u>100</u> | Total | <u>249</u> |

| 3.2 | <u>Revenue Implications</u> | <u>£'000</u> | <u>% Variation to Committee's budget</u> |
|-----|-------------------------------------|--------------|--|
| | Net increase in current expenditure | 22 | 0.020 |
| | Capital Charge | 22 | 0.014 |
| | Total Expenditure | <u>44</u> | <u>0.034</u> |

4. Programme

| | Gateway Stage | | | |
|---------------------|------------------------------|----------------------|--------------------|-------------------|
| | 3 - Project Appraisal | Start on site | End on site | 4 - Review |
| Date (mm/yy) | Nov 2013 | Feb 2014 | April 2014 | April 2015 |

5. Scheme Details

5.1. Location plans and general arrangement drawings, for the A27 Western Way/Western Road Bus Gate are attached in Appendix 1.

5.2. The Bus Gate will be limited to authorised buses only and is defined as an *Eclipse* Bus Rapid Transit (BRT) bus service, which conforms to a specification approved by the South East Hampshire Bus Rapid Transit Partnership Board. In addition, school and other work buses that conform to a specification approved by the partnership board can also use the bus link.

5.3. The Bus Gate will be located at a new signal controlled intersection of the A27 Western Way/ Western Road, in Fareham and will provide direct access to the A27 Western Way for authorised buses, from Western Road.

5.4. As with the A27 Western Way westbound bus lane, taxis will not be authorised to use the bus gate, or the new access link to the bus gate from Western Road. Although the draft Traffic Management policy has a presumption to allow taxis to use bus lanes in Hampshire, there are specific circumstances where this would not be appropriate, for instance, in the Fareham and Gosport area. This has been reviewed and recommended for a number of reasons, in particular, maintaining consistency in taxi use of bus lanes across all bus lanes in Fareham and Gosport and the existing bus operator agreement, regarding Bus Rapid Transit.

5.5. The *Eclipse* (BRT) service bus operation frequency operates every 6 minutes, between 07:00 and 18:00 Monday to Saturday. On Saturdays, the service operates every 6 minutes between 09:00 and 18:00 and on Sundays, every 10 minutes until 10:00, before changing to a 15 minute service. Outside of

these times, the service operates between every 10 and 15 minutes, until closure.

- 5.6. The traffic signals will be activated by Selected Vehicle Detection (SVD) and demand technology, carried by the authorised buses. The buses will not need to stop at the junction as advanced detection will activate the traffic signals. There will be sufficient stacking space eastbound to allow full use of the eastbound Quay Street roundabout traffic signal phases. Buses accessing the A27 Western Way will then connect with the A27 Western Way westbound nearside lane, before the merge with the main flow from the flyover and travel the short distance to join the existing westbound Western Way bus lane.
- 5.7. Selective Vehicle Detection (SVD) will be provided by *Tagmaster*. The *Tagmaster* Selective Vehicle Detection is an above ground detection system provided by *Siemens*. The system uses automatic Radio Frequency Identification to selectively detect suitably tagged vehicles. The uniquely identified tag is mounted in the windscreen of the bus and the tag reader is mounted on a wide range of existing poles or lamp columns.
- 5.8. Due to the close proximity of the Quay Street roundabout, to the Bus Gate and the necessity to link the operation of the two junctions together, there may be occasions when the buses may not receive immediate priority.
- 5.9. An opening of approximately 9 metres in the existing central reservation, on the A27 Western Way eastbound carriageway, will be created to provide access for the authorised buses, from Western Road, to the A27 Western Way. 'Keep Clear' markings will be painted on the eastbound carriageway across the junction of the Bus Gate.
- 5.10. The traffic island separating the eastbound from westbound traffic will be extended eastwards for approximately 40 metres.
- 5.11. The existing earth bund, running parallel, between the A27 Western Way and Western Road will be excavated to enable construction of the connecting link road between both roads. The end of the bund will be moved westwards by approximately 6 metres and two trees will be removed.
- 5.12. Trees adjacent to the A27 Western Way, to the east of the Bus Gate and to the rear of 35-39 Hartland's Road will be removed to provide the required visibility of the new junction.
- 5.13. Timber post and rail fencing will be provided for sections on either side of the Bus Gate link road.
- 5.14. Inlay surfacing will be undertaken on the existing Western Road carriageway, from the junction with Hartland's Road, to the Bus Gate and from the Bus Gate for a further 30 metres westwards. Inlay surfacing will also be laid for a section of the A27 Western Way eastbound carriageway, where the Bus Gate Access road meets the A27. To ensure the road surfacing is continuous in both locations, the new surfacing will be tied into the existing.

- 5.15. In order to deter use of the Bus Gate by restricted vehicles, the junction will be kept as narrow as possible to discourage general traffic using the route as a cut through to Western Road, from the A27 eastbound.
- 5.16. The existing kerb line on the southern side of Western Road, to the west of the Bus Gate, will be realigned to accommodate an area for Hampshire County Council authorised vehicles to park.
- 5.17. 20 metres of footway on the southern side of Western Road, to the west of the access to the Bus Gate and 10 metres of footway to the east of the access to the Bus Gate will be constructed to tie in with the existing footways.
- 5.18. Approximately 50 metres of buff coloured high friction surfacing, will be laid on the two lanes of the A27 Western Way eastbound approach to the Bus Gate. Similarly, approximately 50 metres of the surfacing will be laid on the single lane westbound approach, from the Quay Street Roundabout. Two '30' roundel markings in red high friction surfacing and two 'Slow' markings will be laid at the start of each traffic lane, on the A27 Western Way eastbound approach to the Quay Street Roundabout.
- 5.19. Safety Engineering has been consulted during the feasibility work and a Safety Audit undertaken. Any issues raised were addressed in the detail design. A further Safety Audit will be undertaken on completion of construction.

6. Departures from Standards

- 6.1. None.
- 6.2. The proposals have been designed to comply with Department for Transport and Hampshire County Council standards for highway improvement schemes.

7. Community Engagement

- 7.1. A letter drop to residents and local businesses was undertaken on 2 September 2013 and the TRO will be advertised in October, for 21 days.
- 7.2. The Local Members were briefed on the proposals at the Fareham Borough Council offices on 21st May 2013 and have no objections to the scheme.
- 7.3. The Local Members and Fareham Borough Councillors were updated on the scheme in August 2013 and had no objections to the proposals.
- 7.4. *First Hampshire & Dorset* have been consulted throughout the development of the proposal and support the scheme.
- 7.5. On-going public consultation will be undertaken through 1 to 1 engagement with property owners and tenants. A dedicated website, shared with the A27 Western Way Bus Lane scheme, will be provided and kept up to date with the latest information. An Email register has been created to provide those

registering with the latest information, as the scheme is progressed. The website will include public information drawings showing proposals for the bus gate and bus lane and these are attached in Appendix 3.

8. Statutory Procedures

8.1. A Traffic Regulation Order (TRO) is required for which Police and Hampshire County Member approval has been obtained, in order to prepare and advertise the TRO. This will cover the following aspects of the scheme:

- The relocation of an existing 30mph speed limit transition sign, on the A27 Western Way eastbound approach to the Quay Street Roundabout, to 40 metres west of the existing location.
- The provision of a bus only stub to Western Road linking to the new traffic signal control Bus Gate on the A27 Western Way. Permitted access:
- Pedestrians walking along the bus link will be prohibited.
- Hampshire County Council 'Authorised Bus' is a Bus Rapid Transit (BRT) bus service which conforms to a specification approved by the South East Hampshire Bus Rapid Transit Partnership Board.
- School buses and Work bus conforming to a specification approved by the partnership board can also use the bus link.
- Exempt vehicles are emergency services (including Special Forces), vehicles attending breakdowns, maintenance vehicles, Community Safety service vehicles, and statutory undertaker vehicles.
- A no waiting and loading restriction at anytime is proposed on the bus link and approaches in Western Road.

9. Land Requirements

9.1. No third party land is required for the Bus Gate and all works are within Public Highway.

10. Maintenance Implications

10.1. The proposed new traffic signals will generate maintenance costs, which have been incorporated in the revenue implications.

11. Recommendation

- 11.1. That, approval be given to procure and spend and enter into necessary contractual arrangements to implement a Bus Gate, at a new intersection of the A27 Western Way and Western Road in Fareham (subject to approval of the Traffic Regulation Order) at an estimated cost of £249,000.

LTP3 Priorities and Policy Objectives

3 Priorities

- To support economic growth by ensuring the safety, soundness and efficiency of the transport network in Hampshire
- Provide a safe, well maintained and more resilient road network in Hampshire
- Manage traffic to maximise the efficiency of existing network capacity, improving journey time reliability and reducing emissions, to support the efficient and sustainable movement of people and goods

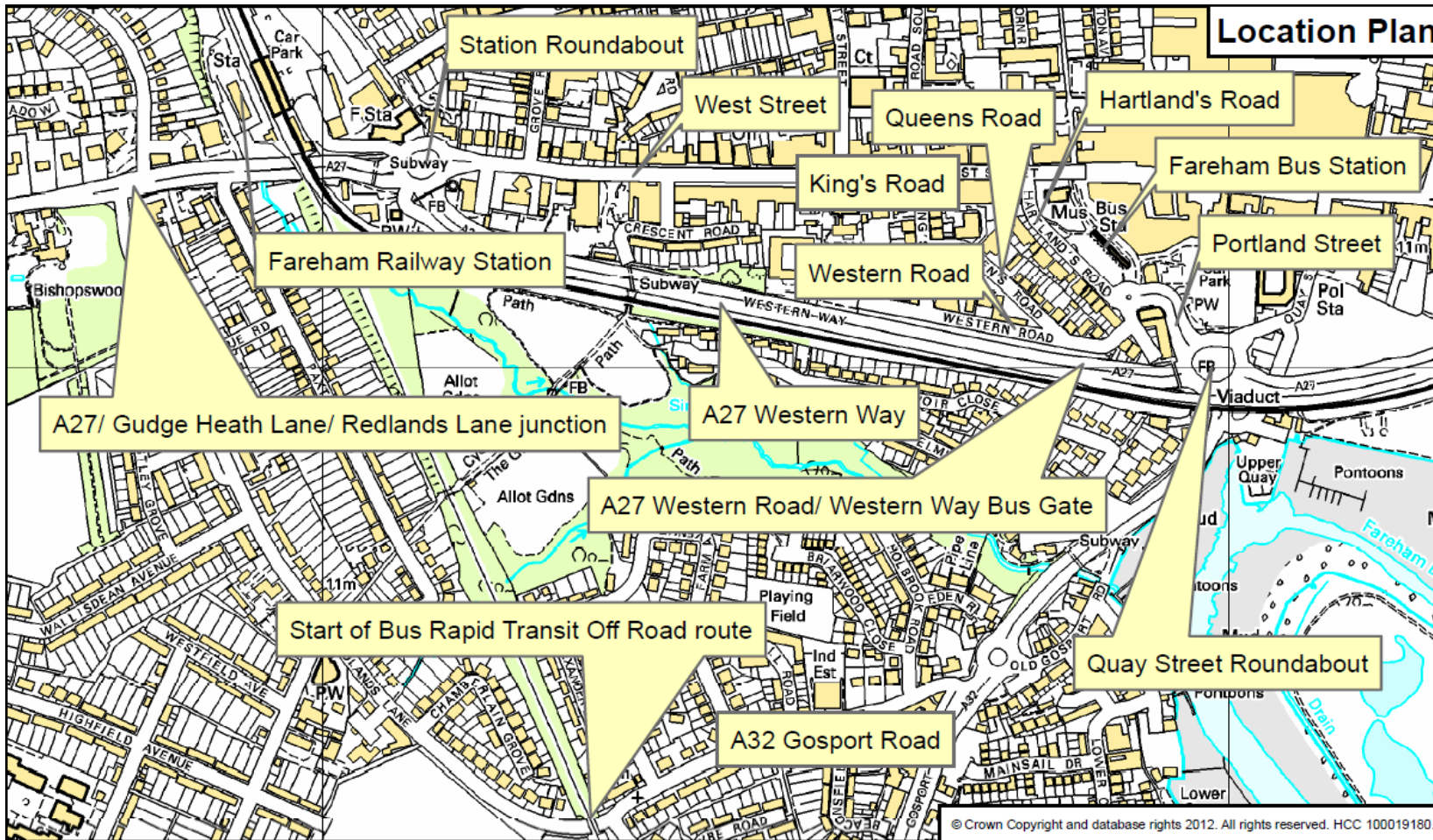
14 Policy Objectives

- Improve road safety (through delivery of casualty reduction and speed management)
- Efficient management of parking provision (on and off street, including servicing)
- Support use of new transport technologies (i.e. Smartcards; RTI; electric vehicle charging points)
- Work with operators to grow bus travel and remove barriers to access
- Support community transport provision to maintain 'safety net' of basic access to services
- Improve access to rail stations, and improve parking and station facilities
- Provide a home to school transport service that meets changing curriculum needs
- Improve co-ordination and integration between travel modes through interchange improvements
- Apply 'Manual for Streets' design principles to support a better balance between traffic and community life
- Improve air quality
- Reduce the need to travel, through technology and Smarter Choices measures

- Promote walking and cycling to provide a healthy alternative to the car for short local journeys to work, local services or school
- Develop Bus Rapid Transit and high quality public transport in South Hampshire, to reduce car dependence and improve journey time reliability
- Outline and implement a long term transport strategy to enable sustainable development in major growth areas

Other

Please list any other targets (i.e. National Indicators, non LTP) to which this scheme will contribute.



TITLE: A27 Western Way/ Western Road Bus Gate, Fareham

DIRECTOR OF ECONOMY, TRANSPORT AND ENVIRONMENT

Date November 2013

Drawn by: Louise Berridge

Scale: 1:10,000 FS21845



Economy, Transport and Environment

Appendix 2 - Consultation Responses

| Date | Name | Objection | Response |
|---------|--------------------------|---|--|
| 2/9/13 | Hartland's Road Resident | Objection to the noise generated by buses passing XX Hartlands Rd and risks to pedestrian safety. | Response emailed 13/9/13. Vehicle specification and pavement design and road construction assist in minimising the impact of increased noise. |
| 16/9/13 | Sacred Heart Church | Concern for the safety of parishioners using Western Rd to access the church via Hartland's Road | Email response sent 19/9/13. Meeting took place on 23/9/13. Access arrangements and the implementation of pedestrian barriers around the footway outside the church were agreed. |

Appendix 3 - Consultation Plans

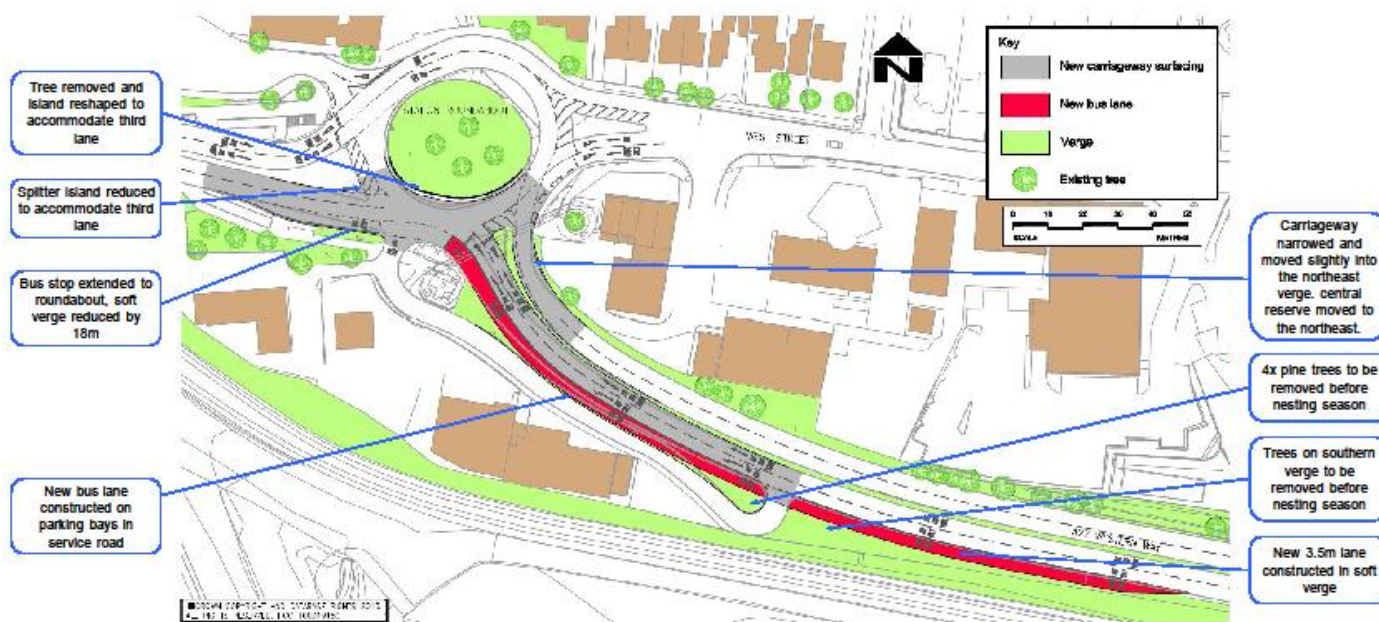
A27 Western Way

Bus Gate



A27 Western Way

Bus Lane



CORPORATE OR LEGAL INFORMATION:**Links to the Corporate Strategy**

| | |
|--|-----|
| Hampshire safer and more secure for all: | yes |
| Corporate Improvement plan link number (if appropriate): | |
| Maximising well-being: | yes |
| Corporate Improvement plan link number (if appropriate): | |
| Enhancing our quality of place: | yes |
| Corporate Improvement plan link number (if appropriate): | |

Other Significant Links

| Links to previous Member decisions: | | |
|---|------------------|-------------------------------|
| <u>Title</u> | <u>Reference</u> | <u>Date</u> |
| Report to the Executive Member for Economy, Transport and Environment – A27 Improvements and Traffic Regulation Order - Bus Lanes, Fareham. | | 23 rd July 2013 |
| Report to the Executive Member for Economy, Transport and Environment - Project Appraisal: A27 Western Way Bus Lane, Fareham | | 5 th November 2013 |
| Direct links to specific legislation or Government Directives | | |
| <u>Title</u> | <u>Date</u> | |
| | | |

Section 100 D - Local Government Act 1972 - background documents

The following documents discuss facts or matters on which this report, or an important part of it, is based and have been relied upon to a material extent in the preparation of this report. (NB: the list excludes published works and any documents which disclose exempt or confidential information as defined in the Act.)

| <u>Document</u> | <u>Location</u> |
|-----------------|-----------------|
| None | |

IMPACT ASSESSMENTS:

1. Equalities Impact Assessment:

- 1.1 The proposals in this report have been developed with due regard to the requirements of the Equality Act 2010, including the Public Sector Equality Duty and the Council's equality objectives.

It is considered that the issues covered by this report will not have impacts requiring further specific actions by the Council above those already established in its existing policies and working procedures.

- 1.2 It is considered that the issues covered by this report will not have impacts requiring further specific actions by the Council above those already established in its existing policies and working procedures.

2. Impact on Crime and Disorder:

- 2.1. The proposal has no impact on crime and disorder.

3. Climate Change:

- 3.1. How does what is being proposed impact on our carbon footprint / energy consumption?

The current policy of Reduce, Recycle, Reuse will be implemented, such that excavated material, where possible, will be reused as sustainable material on future schemes.

- 3.2. How does what is being proposed consider the need to adapt to climate change, and be resilient to its longer term impacts?

The scheme proposals are expected to have a positive effect on climate change by improving facilities and infrastructure for bus services, thereby offering a healthy alternative travel opportunity.