

## HAMPSHIRE COUNTY COUNCIL

### Decision Report

<b>Decision Maker:</b>	Executive Member – Policy and Resources
<b>Date of Decision:</b>	11 March 2010
<b>Decision Title:</b>	Project Appraisal: M27 Junction 5 Improvement Scheme Phase 3
<b>Decision Reference:</b>	1194
<b>Report From:</b>	Director of Environment

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### 1. Executive Summary

1.1. The purpose of this paper is to seek approval for the implementation of Phase 3 main works of the M27 Junction 5 improvement scheme, following on from the ongoing works in Phases 1 and 2.

1.2. This paper seeks to provide:

- (i) full scheme justification and policy background based on the need to improve accessibility in the area, and also the need to provide infrastructure improvements in order to cater for growth requirements identified in the South East Plan and Regional Transport Strategy;
- (ii) background details for the full scheme proposed at this junction, including signalisation and dedicated left slip roads on Wide Lane, A335 Stoneham Way, M27 Westbound slip roads and Eastbound off-slip road; and
- (iii) details of the proposed phasing of these works, setting out the specific details for Phase 3 of the scheme, which forms the basis of the decision required as part of this report.

HAMPSHIRE COUNTY COUNCIL

EXECUTIVE MEMBER – POLICY AND  
RESOURCES

PROJECT  
APPRAISAL  
(Externally Funded)

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11 MARCH 2010

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PROJECT: M27 JUNCTION 5 IMPROVEMENT SCHEME PHASE 3

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COMMENCEMENT DATE: MAY 2010  
COMPLETION DATE: FEBRUARY 2011

PLANNED YEAR OF START IN ACCORDANCE WITH CAPITAL  
PROGRAMME: 2010/11

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**2. Contextual Information**

- 2.1 The policy justification for improvements to M27 Junction 5 stems from the growth objectives of the South East Plan (SEP). In addition, the scheme will assist in furthering the strategic development aims of the Partnership for Urban South Hampshire (PUSH).

**3. Introduction**

- 3.1 The M27 Junction 5 currently experiences significant peak-hour delays, which have a direct effect upon accessibility in the area particularly in relation to Southampton International Airport and Southampton (Airport) Parkway Station, as well as Eastleigh town centre. Delays at the junction also have safety implications in terms of the effective operation of the motorway mainline and its off-slips and, in particular, the west-bound off-slip, which regularly has peak hour queues of over 200 metres. The situation at Junction 5 is being compounded by incremental additional traffic growth associated with piecemeal developments in the area, and will be further compounded by forthcoming allocated and planned growth.
- 3.2 Improvements are therefore essential in order to manage the traffic at M27 Junction 5 in a more effective way.

4. **Details**

4.1 The proposed scheme comprises a number of improvements to the roundabout junction and its approaches. The phasing of the scheme is detailed below:

4.2 ***Phase 1 - Westbound Off-Slip into A335 Stoneham Way***

This phase of the scheme is not formally part of this report, as approval for Phase 1 was given following a previous report (4 March 2009). As such, this section is provided for information only.

- (i) *M27 Westbound off-slip* - The existing off-slip comprises a two-lane approach to the traffic signals at the roundabout junction. Under the proposals, the nearside lane will be widened to form a dedicated left-turn lane into A335 Stoneham Way. The lane will be segregated with hatched road markings and a physical kerbed island. The kerbed island will be 2.5 metres wide at the stop line to accommodate double-head traffic signals and taper down to a width of 1.5 metres at the other end of the island. The off-side of the slip road will be widened as proposed by the Section 278 application for the South Street development.

This widening will provide adequate width to allow the single remaining lane to flare into two lanes, approximately 75 metres from the roundabout junction. The nearside of these two lanes will be designated for 'Chandlers Ford' and the offside will be marked for 'Eastleigh'. The segregated lane will be marked 'Southampton'.

- (ii) *Monks Brook Playing Fields underpass* - this structure passes beneath the A335 Stoneham Way and will be lengthened on the eastern side under Phase 1.
- (iii) Construction of Phase 1 is programmed to start in October 2009 and will last for approximately 6 months.

4.3 ***Phase 2 - A335 Wide Lane into Eastbound On-slip Road***

This phase of the scheme is also not formally part of this report, as approval for Phase 2 was given following a previous report (10 December 2009). Therefore this section is also provided for information only.

- (i) *A335 Wide Lane* - The existing Wide Lane approach comprises a single lane flaring into two lanes at the roundabout junction. Under the proposals a segregated left

turn lane will be provided. The left turn lane will diverge from the single lane at approximately 200 metres from the roundabout to allow direct access onto the M27 Eastbound On-slip. The lane will be segregated with hatched road markings and a physical kerbed island. The kerbed island will be 2.5 metres wide at the stop line to accommodate double-head traffic signals and taper down to a width of 1.5 metres at the other end of the island. The single approach lane to the roundabout will flare into two lanes at approximately 130 metres from the roundabout junction. The segregated lane will be marked 'M27 Eastbound'; the inside lane will be marked 'Southampton' and 'M27 Westbound' and the offside lane will be marked 'M27 Westbound' and 'Chandlers Ford'.

- (ii) The Eastleigh Link Culvert bridges the A335 Wide Lane will be lengthened on both sides. The widening will include mitigation measures to satisfy Environment Agency requirements in the form of otter ledges and bat boxes.
- (iii) The existing lay-by on the A335 Wide Lane will be removed.

#### 4.4 ***Phase 3 - Western Side of Junction***

This phase of the scheme is the main subject of this report.

- (i) *Stoneham Lane approach* - The existing Stoneham Lane approach comprises a single lane flaring into two lanes at the roundabout junction. Under the proposals Stoneham Lane will flare from a single approach lane to two lanes at approximately 220 metres from the roundabout (just past the existing lay-by). The outside lane then splits again at approximately 60 metres from the roundabout creating three lanes at the signal stop line. The inside lane is marked 'M27 Eastbound and Eastleigh'; the centre lane is marked 'M27 Eastbound' and 'Southampton' and the third lane flare is marked 'Southampton' and 'M27 Westbound'.
- (ii) The existing lay-by on Stoneham Lane will be reduced in length by approximately 20 metres (approximately four car parking spaces) with seven car parking spaces remaining.
- (iii) *Footpath 28* - Footpath 28, which links the underpass with old Stoneham Lane and Monks Brook, will be realigned along a route that is more in keeping with the desired lines that are currently used. As the footpath passes through the western playing field it will meander within an area and will be landscaped to encourage use within an area 30 metres

from the northern boundary fence. Grass verges measuring 1.5 metres will border the footpath on both sides. Planting/landscaping will be located beyond the verges and a stock-proof fence incorporated to provide a border between the footpath/planted area and the open field.

- (iv) A Footpath Diversion Order will be required in order to facilitate this aspect of the scheme and as such the proposals will need to be advertised. The land along the route of the footpath is owned by the County Council and currently held by the Corporate Estate (for general county purposes). Subject to this report being approved, the required land to be appropriated from the Corporate Estate to Environment (for highway purposes) and a report to this effect is included by the Director of Property Business and Regulatory Services as a separate item in the Schedule of Routine Transactions to be considered at this meeting. Rights of Way have been consulted and are supportive of the proposals.

No consultation with user groups has taken place to date but no objections are anticipated due to the new route being located closer to the desire line, and improved amenity value gained by the associated landscaping.

- (v) *A335 Stoneham Way* - The existing approach comprises a two-lane dual carriageway.

Under the proposals a dedicated left turn lane will be provided into the M27 Westbound On-slip, starting approximately 270 metres from the roundabout. The lane will be segregated with hatched road markings and a physical kerbed island. The kerbed island will be 2.5 metres wide at the stop line to accommodate double-head traffic signals and taper down to a width of 1.5 metres at the other end of the island. The segregated left turn lane is to be marked 'M27 Westbound' and 'M3'. The inside lane of the dual carriageway is to be marked 'Chandlers Ford' and 'Eastleigh'; the outside lane is to be marked 'Eastleigh' and 'M27 Eastbound'. The existing lay-by on the A335 Stoneham Way will be removed.

- (vi) *Roundabout Circulatory Carriageway* - The existing roundabout comprises a two and three-lane circulatory carriageway. Under the proposals a three lane carriageway will be provided for the whole roundabout. This will be undertaken by removing areas of hatched road markings and widening the outer traffic islands. Road

marking will be provided around the roundabout as appropriate for the following destinations; M27 Eastbound, M27 Westbound, Eastleigh, Southampton and Chandlers Ford.

#### 4.5 **General Works Applicable to All Phases**

- (i) Improvements to surface water drainage:
  - (a) The existing surface water is drained from the highway via a network of roadside gullies, carrier drains and open ditches. The water is collected and discharged into Monks Brook in three locations. To the south of the roundabout runs an open ditch, lined with concrete slabs, that collects water from a variety of sources, including the highway, before discharging into Monks Brook. Across the centre of the roundabout, just north of the mainline motorway runs a carrier drain that carries water from a variety of sources, including highway water before discharging into the Brook. To the north of the roundabout runs an open ditch, lined with concrete slabs, that collects water from the highway before discharging into Monks Brook adjacent to Eastleigh Link Culvert.
  - (b) In accordance with current design standards for surface water drainage, flood control and Sustainable Urban Drainage Systems (SUDS) a drainage network has been designed that will utilise the existing outfall locations into Monks Brook. The additional flow created by the increased area of carriageway will be attenuated using grass swales that will not only control the flow of water but will also act as filter and pollution control measures before the discharging the water into the Brook.
  - (c) The existing ditches that are not subject to change as a consequence of the works will remain as lined ditches (concrete slabs). All new ditches will be naturalised ditches to improve filtration and biodiversity.
  - (d) The surface water will be drained from the highway using roadside gullies, kerbed drainage units and carrier drains.

- (e) Pollution control units will be provided in the locations where the water will be discharged into Monks Brook but cannot be controlled by SUDS methods.
- (f) In Wide Lane the existing ditches at the toe of the existing embankments will be removed. These have become very overgrown and difficult to maintain. The drainage will be provided by roadside gullies and carrier drains in the highway verge at road level. This will greatly improve access for maintenance operations and pollution control:
  - (i) upgrading the existing street lighting;
  - (ii) upgrading the traffic signal control; and
  - (iii) undertaking diversion/protection works to buried statutory undertaker plant, as necessary to enable construction.

4.6 It is intended that Phase 3 of the scheme will now be combined with Phase 2, which was approved on 10 December 2009. Recent developments in respect of potential funding sources for Phase 3 have identified that this is now likely to be progressed more quickly than originally anticipated. It is therefore desirable to let both phases under a single contract, thereby generating efficiencies in procurement and implementation. In addition, the combination of the phases will enable coordinated traffic management proposals and significantly reduce the construction period for the overall project. These improvements will provide tangible reductions in traffic congestion compared to the original phased approach.

## 5. **Targets and Outcomes**

5.1 The scheme aims to provide Phase 3 of the M27 Junction 5 Improvement in line with the following key dates:

- Confirmation of funding is anticipated before the end of March 2010
- Tenders for a single contract combining Phases 2 and 3 will be issued by the end of January 2010
- Contract award will take place only once full funding for the scheme has been confirmed and the required land secured, but it is anticipated that construction of Phases 2 and 3 will commence in May 2010
- Phases 2 and 3 are anticipated to be completed in Spring 2011.

5.2 Phase 3 of the scheme aims to reduce queuing on the A335 Stoneham Way approach to the junction and improve safety through better traffic management.

6. **Standards**

6.1 The scheme design complies with Department for Transport and Hampshire County Council's standards and has been Safety Audited at the appropriate stages in the design process.

6.2 A location plan and detailed drawing are attached.

7. **Statutory Procedures and Consultation**

7.1 A traffic regulation order has been processed to amend the length of the lay-by on Stoneham Lane to suit the scheme design. This order was approved to advertise as part of the Project Appraisal Report for Phase 1.

Public Consultation

7.2 Initial public consultation regarding the improvements to the M27 Junction 5 was undertaken in January 2009. The consultation identified support for improvements to Junction 5 from Southampton International Airport. No objections were received in relation to the proposed scheme as part of the consultation.

7.3 Eastleigh Borough Council and Southampton City Council are fully supportive of the scheme.

7.4 In order to keep the public and local interest parties fully informed about the scheme, a website has been prepared. This includes information about the scheme and will remain active during the course of the construction phase to ensure that residents, businesses and employees can keep up-to-date with the works programme and any changes that may become necessary.

7.5 Articles have been placed in Eastleigh Borough Council's newspaper 'Borough News' and Southampton City Council's 'City View' magazine.

7.6 Southampton and Fareham Chamber of Commerce (which also covers Eastleigh) have been consulted and have included an article within their publication 'Chamber news'.

7.7 The Town Centre Manager for Eastleigh has been consulted and is fully supportive of the scheme.

7.8 Southampton International Airport and South West Trains (Southampton Airport Parkway Station) have been consulted and are fully supportive of the scheme.

7.9 The construction of the scheme may temporarily impact on the business and residential community located in proximity to the junction, including Eastleigh town centre and Southampton International Airport, particularly in relation to access to the strategic motorway network.

7.10 As far as practicable it is intended to keep any temporary disruption to a minimum, although, in the longer term, the improvements are expected to be of significant benefit to local business and communities; however, in order to keep businesses and residents informed of progress during the construction phase, regular updates will be provided on the County Council's website.

## 8. **Policy Considerations**

8.1 The Regional Transport Strategy proposals identify a regionally significant transport hub around Southampton International Airport, designated as an International Gateway and adjacent to Southampton Airport Parkway Station and Eastleigh Station which are both accessed via the M27 Junction 5. The Eddington report also seeks to enable improved access to ports and airports.

8.2 The need to provide an improvement at the M27 Junction 5 is a high priority for both Hampshire County Council and Transport for South Hampshire. In designing the improvements, care will be taken not to compromise any future construction proposals of the Chickenhall Lane Link Road.

8.3 Commitment to the scheme is included in the second Local Transport Plan (LTP2) 2006-2011. The scheme is also included in the Transport for South Hampshire 'Towards Delivery' Statement (April 2007).

## 9. **Land Requirements**

9.1 Approval to acquire land needed for Phases 2 and 3 was given in the Project Appraisal for Phase 1 and negotiations are currently in progress.

10. **Alternative Arrangements**

10.1 Option 1: An alternative long-term solution involving a three-tier grade-separated junction and an east-to-west flyover was considered as part of the early scheme development.

- a) Risk Assessment: An east-to-west flyover was inconsistent with surrounding motorway infrastructure and was identified as a possible longer-term solution, subject to further work on the requirements of the surrounding motorway network and associated junction strategy. The proposed scheme is identified as an interim solution that will not compromise the future deliverability of a more complex and expensive longer-term solution once a wider network improvement strategy has been developed.

10.2 Option 2: An option to deliver all three phases of the currently proposed scheme as a single scheme was considered.

- a) Risk Assessment: Funding for the scheme is reliant on developer contributions and successful bids for regional funding through various bodies.

The overall cost of the entire scheme is in excess of £8 million, which could not be secured in total from funding bids at this time.

11. **Local Member's View**

11.1 The local Member, Councillor Alan Broadhurst, supports the implementation of the full scheme.

12. **Sustainability**

12.1 The M27 Junction 5 scheme helps the County Council deliver on five Aalborg themes:

- (i) **Local management towards sustainability** - The design of the scheme, environmental assessment, landscaping and mitigation proposals have all been completed in accordance with sustainable management practices. The construction works will be undertaken in a sustainable manner with construction waste subject to a waste management plan to monitor the extent of the waste produced and promote recycling/re-use where possible.
- (ii) **Natural common goods** - Environmental assessments and ecology surveys have identified the habitats and species that are likely to be affected by the scheme.

Measures to mitigate and improve the habitat and biodiversity have been incorporated within the landscaping design.

- (iii) **Responsible consumption and lifestyle choice** - Recycled/sustainable materials have been specified, where appropriate. The construction works will be subject to a waste management plan with the quantity and type of waste analysed to ensure that re-use or recycling are maximised.
- (iv) **Planning and design** - The purpose of the scheme is to reduce traffic queues and improve traffic flows. The improved flows are expected to have a positive effect on the local air quality and will also have an economic and social effect as a consequence of shorter journey times.
- (v) **Vibrant and sustainable local economy** - The proposed scheme, as a stand-alone scheme, will improve journey times for road-users using the junction particularly during peak periods. This will improve access to Eastleigh town centre and Southampton Airport.

### 13. Financial Arrangements

13.1	<u>Expenditure</u>	<u>£'000</u>	<u>Funding Sought</u> <u>(see below)</u>	<u>£'000</u>
	Design Fee	200	Underspend transferred from Phase 1	50
	Supervision	120	New Growth Point Funding (2010 to 2011)	400
	Project Works	2,630	Regional Funding Allocation Bid	2,500
	Total	2,950	Total	2,950

13.2	<u>Revenue</u> <u>Implications</u>	<u>£'000</u>
	Net increase in current expenditure	9.7
	Capital Charges	Nil
	Total Expenditure	9.7

13.3 Funding for this scheme is not fully secured at the time of drafting this report; however, it is necessary to progress the decision on Phase 3 of the scheme to ensure that it can be delivered during 2010/11, in conjunction with Phase 2, as soon as funding for which the County Council has applied is approved and subject to securing the required land by agreement and within timescale.

13.4 A Regional Funding Allocation bid has been submitted to the South-East England Partnership Board (SEEPB) to seek assistance with the delivery of Phase 3 of the scheme. SEEPB programme includes an allocation of £40 million to improve access to strategic development in Southampton and South Hampshire. The Regional Transport Board has agreed in principle to an allocation of £3.5 million for the scheme (£1.0 million for Phase 2 and £2.5 million for Phase 3) subject to submission of a full and satisfactory business case before the release of the funds.

13.5 PUSH has provisionally approved a £400,000 funding allocation for 2010/11, subject to Hampshire County Council successfully securing £2.5 million for Phase 3 of the scheme from SEEPB virement.

13.6 A reallocation of £50,000, anticipated under-spend, from Phase 1 of the scheme to Phase 3 is needed to ensure full funding of the scheme.

#### 14. **Maintenance Implications**

14.1 The extra areas of new road and supplementary items resulting from the scheme will require ongoing future maintenance in line with local highway authority policies.

15. **Recommendations**

- 15.1 That the Project Appraisal to implement Phase 3 of the M27 Junction 5 Improvement Scheme (A335 Stoneham Way into Westbound On-Slip, Eastbound Off-slip and Stoneham Lane), at an estimated cost of £2.95 million, be approved, subject to the full funding being assembled and land being acquired.
- 15.2 That Phase 2 and 3 of the scheme be implemented as a single contract to maximise cost efficiencies and minimise traffic disruption during construction.

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

<b>Hampshire safer and more secure for all:</b>	Yes
Corporate Business plan link number (if appropriate):	
<b>Maximising well-being:</b>	No
Corporate Business plan link number (if appropriate):	
<b>Enhancing our quality of place:</b>	Yes
Corporate Business plan link number (if appropriate):	

**Other Significant Links**

<b>Links to previous Member decisions:</b>		
<u>Title</u>	<u>Reference</u>	<u>Date</u>
M27 Junction 5 Advance Clearance Contract	1862	9 Dec 2008
M27 Junction 5 Improvement Scheme – Phase 1	457	4 March 2009
M27 Junction 5 Improvement Scheme: Section 6 Agreement	2044	1 June 2009
M27 Junction 5 Improvement Scheme Phase 2 – Advance Site Clearance Works	2142	28 Aug 2009
M27 Junction 5 Improvement Scheme – Phase 2	872	December 2009
<b>Direct links to specific legislation or Government Directives</b>		
<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.)

DocumentLocation

None

## **IMPACT ASSESSMENTS:**

### **1. Equalities Impact Assessment:**

- 1.1. Assessment of the Race Relations (Amendment) Act has been considered in the development of this scheme. No adverse impact has been identified in terms of race, creed or gender.

### **2. Impact on Crime and Disorder:**

- 2.1. The provisions of the Act have no impact on this proposal.

### **3. Climate Change:**

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

Carbon dioxide emissions may increase during the 9 month construction period due to traffic congestion and the physical processes of construction. Thus on a short time-scale the impact on climate change could be considered to be slightly adverse.

The impact on climate change of the scheme in the long term can be considered to be positive, primarily due to the Scheme improving traffic flow and alleviating congestion. This improvement in traffic flow will lead to a reduction in vehicle carbon dioxide emissions due to more efficient fuel consumption.

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

The proposed drainage improvements will enable the immediate area to be more resilient to flash flooding of the kind likely to be experienced more frequently in the future, given current predictions.