HAMPSHIRE COUNTY COUNCIL

Decision Report

Decision Maker:	Executive Member for Economy, Transport and Environment
Date:	14 January 2020
Title:	Project Appraisal: M27 J7 Corridor - Technology Improvements
Report From:	Director of Economy, Transport and Environment

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Purpose of this Report

1. The purpose of this report is to seek the necessary approvals to implement Highways England (HE) funded network technology improvements, to enable improved visibility, management and traffic control through the local Hampshire County Council network adjoining M27 Junction 7.

Recommendations

- 2. That the Executive Member for Economy, Transport and Environment approve the Project Appraisal for the M27 Junction 7 Corridor Technology Improvements, as outlined in the supporting report.
- 3. That approval be given to enter into agreement with Highways England, in consultation with the Head of Legal Services, to secure external funding to support technology and traffic signal improvements to assist the control and throughput of traffic on the local highway networks adjoining M27 Junction 7 at an estimated cost of £1.2million, to be funded by Highways England.
- 4. That approval be given to procure, spend and enter into necessary contractual arrangements, in consultation with the Head of Legal Services, to implement the proposed network technology improvements including the design and installation of Variable Message Signs, CCTV, Bluetooth detection, associated to M27 Junction 7, and traffic signal junction improvements to Thornhill Park Road/Hinkler Road, as set out in this report at an estimated cost of £1.2million to be funded by Highways England.
- 5. That authority to make the arrangements, including the highway agreements, to implement the scheme, including minor variations to the

design and contract, be delegated to the Director of Economy, Transport and Environment.

Executive Summary

6. HE is promoting and funding technology improvements to assist and improve the management and throughput of traffic at and around the M27 at Junction 7. This report seeks approval to secure and utilise that funding to install seven Variable Message Signs (VMS), four network management CCTV cameras and 64 roadside Bluetooth journey time monitoring detectors, and to implement improvements to the Thornhill Park Road/ Hinkler Road traffic signal junction in Southampton.

Contextual Information

- 7. The roundabout at M27 Junction 7 connects Charles Watts Way with Hedge End to the west and Southampton to the east. The area is subject to extensive peak time congestion leading to extended delays affecting both the local and strategic road networks.
- 8. HE has secured funding to implement a package of technology improvements at and around M27 Junction 7 designed to improve journey times, route planning and traffic throughput.
- 9. The proposed improvements include three elements. An upgrade of the M27 Junction 7 traffic signals; the installation of new VMS and Bluetooth traffic monitoring equipment; and, an upgrade to the Thornhill Park Road/Hinkler Road traffic signal junction.
- 10. The upgrade of the M27 Junction 7 traffic signals is being led and delivered by HE. These works sit across the HE and Hampshire County Council networks and as such a Section 4 agreement will be required to assign HE the local Highway Authority responsibilities.
- 11. The installation of VMS, CCTV and Bluetooth traffic monitoring equipment will be designed and implemented by Hampshire County Council. All of this equipment will be installed on the local Hampshire County Council network other than a single VMS sign being installed on the Southampton City Council network.
- 12. The Thornhill Park Road/Hinkler Road traffic signal junction sits within the Southampton City Council boundary. This work will be designed and implemented by Hampshire County Council under a Section 6 Agreement with Southampton City Council.

Finance

13. Of the £1.2million to be secured via a funding agreement between HE and Hampshire County Council, £0.8million will fund delivery of VMS, CCTV and Bluetooth traffic monitoring equipment to the Hampshire County Council network, maintenance responsibility for which will fall to the County Council.

The remaining £0.4million will fund delivery of the Thornhill Park Road/Hinkler Road traffic signal junction improvements and a single VMS sign within the Southampton City Council boundary, and these assets will remain with Southampton City Council for maintenance purposes.

14.	<u>Estimates</u>	£'000	% of to	tal	Funds Available	£'000
	Design Fee	50	4.0	%	Highways England Congestion Relief Programme (CRP)	1,200
	Client Fee	30	2.5	%	J ()	
	Supervision	35	3.0			
	Construction	1,085	90.5	5%		
	Total	1,200	100	1%	Total	1,200
15.	Maintenance		£'000	% Vai	riation to	
10.	<u>Implications</u>		<u>~ 000</u>		nittee's budget	
	Net increase i current expenditure	n	12	0.010	%	
	Capital Charg	е	115	0.072	%	

Programme

16. Works are currently planned to commence in February 2020 for approximately 4 months.

Scheme Details

- 17. The works to the Hampshire County Council network include the installation of seven VMS, four network management CCTV cameras and the installation of 64 Bluetooth journey time monitoring detectors, with associated ancillary ducting, communications and power supply connections. This technology will help manage congestion, identify network incidents and assist journey planning and route choice within the local and strategic road network. Additionally, it will complement the adjacent M27 SMART Motorway measures. The proposals are outlined on the plan attached at Appendix A.
- 18. Proposed improvements to the layout and operation of the traffic signal junction at Thornhill Park Road/Hinkler Road in Southampton include the installation of an enhanced adaptive MOVA signal control system (Microprocessor Optimised Vehicle Actuation, commonly known as 'smart

traffic lights'), with new signal poles, heads, cabling and associated vehicle detection. These proposals are designed to improve traffic capacity and to reduce instances where westbound queues on Charles Watts Way block back to affect the motorway operation. A single VMS sign is also being installed on the Southampton City Council network.

19. The works to the Thornhill Park Road/Hinkler Road junction are being designed and delivered by the County Council to help secure the delivery of the proposals which will reduce delays to the Hampshire County Council network, to assist Southampton City Council's delivery capacity and to streamline the funding arrangements with HE.

Departures from Standards

20. None identified at this stage.

Consultation and Equalities

- 21. This package of technology improvements was developed in consultation with Highways England and Southampton City Council. All works on Hampshire County Council's network are "off-highway" and are not expected to cause any significant disruption to the traveling public during construction/installation. Traffic signal upgrade at Hinkler Road will require a series of communications in association with Southampton City Council, which will commence on approval of this Project Appraisal.
- 22. The proposed scheme will help manage congestion, identify network incidents and assist journey planning and route choice within the local and strategic road network around M27 Junction 7. As such, the scheme will benefit all road users, and will have a neutral impact on groups with protected characteristics.

Statutory Procedures

23. A Section 6 Agreement will be required with Southampton City Council. Temporary Traffic Regulation Orders will be progressed if required.

Land Requirements

24. No third-party requirements have been identified with all works expected to be within the highway boundaries.

Maintenance Implications

25. The M27 J7 traffic signals are an existing HE asset and will remain its responsibility on completion of the works with no additional impact to Hampshire County Council revenue budgets. A 12-month warranty period will be required under the Section 4 agreement to ensure any defects are addressed and funded by the scheme.

- 26. Four of seven new VMS signs on the Hampshire County Council network will replace time expired equipment currently maintained by the County Council. The other new VMS, CCTV and Bluetooth equipment will add to the inventory of ITS assets and allowance for this additional maintenance obligation should be made when setting future maintenance budgets.
- 27. The Thornhill Park Road/Hinkler Road traffic signals are an existing Southampton City Council asset and the maintenance obligations for the new asset, including a single VMS sign, will revert to Southampton City Council following the final certification of this element of the scheme.

LTP3 Priorities and Policy Objectives

3 Priorities To support economic growth by ensuring the safety, soundness and x efficiency of the transport network in Hampshire Provide a safe, well maintained and more resilient road network in Hampshire \mathbf{x} 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 \mathbf{x} 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) \mathbf{x} 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	or
	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 reliabil	ity
•	Outline and implement a long term transport strategy to enable sustaina	ıble
	development in major growth areas	

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

REQUIRED CORPORATE AND LEGAL INFORMATION:

Links to the Strategic Plan

Hampshire maintains strong and sustainable economic growth and prosperity:	yes
People in Hampshire live safe, healthy and independent lives:	yes
People in Hampshire enjoy a rich and diverse environment:	no
People in Hampshire enjoy being part of strong, inclusive communities:	no

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.)

Document	<u>Location</u>	
None		

EQUALITIES IMPACT ASSESSMENT:

1. Equality Duty

The County Council has a duty under Section 149 of the Equality Act 2010 ('the Act') to have due regard in the exercise of its functions to the need to:

- Eliminate discrimination, harassment and victimisation and any other conduct prohibited by or under the Act with regard to the protected characteristics as set out in section 4 of the Act (age, disability, gender reassignment, marriage and civil partnership, pregnancy and maternity, race, religion or belief, sex and sexual orientation);
- Advance equality of opportunity between persons who share a relevant protected characteristic within section 149(7) of the Act (age, disability, gender reassignment, pregnancy and maternity, race, religion or belief, sex and sexual orientation) and those who do not share it;
- Foster good relations between persons who share a relevant protected characteristic within section 149(7) of the Act (see above) and persons who do not share it.

Due regard in this context involves having due regard in particular to:

- The need to remove or minimise disadvantages suffered by persons sharing a relevant protected characteristic that are connected to that characteristic;
- Take steps to meet the needs of persons sharing a relevant protected characteristic that are different from the needs of persons who do not share it;
- Encourage persons sharing a relevant protected characteristic to participate in public life or in any other activity in which participation by such persons is disproportionally low.

2. Equalities Impact Assessment:

The proposed scheme will help manage congestion, identify network incidents and assist journey planning and route choice within the local and strategic road network around M27 Junction 7. As such, the scheme will benefit all road users, and will have a neutral impact on groups with protected characteristics.