

## Full Business Case (Stage 2 Commit to Construct)

<b>Project/Programme Name:</b>	Science Vale UK A34 Milton Interchange Improvements
<b>Total Capital Budget:</b>	£10.625m
<b>Divisions Affected:</b>	Chilton, Didcot, Harwell, Milton
<b>Purpose of this report:</b>	This report requests to contractually commit to construction of this project.
<b>Approval No:</b>	H304

### Sign-off & Approval

*In preparing this report input must be obtained from the following:*

Responsible Owner	Name	Date
Service Manager/ Client / Project Sponsor (Contributor)	Pat Mulvihill	29/8/14
Delivery Team Representative / Project Lead (Author)	Nigel Day	29/8/14
Service Finance Business Partner or Senior Financial Adviser (Contributor)	Rob Finlayson/Matt Barlow	
The Capital Finance Team (Contributor)	Kathryn Goldsby-West / Bill Evershed	29/8/14
Other Contributors as applicable - E&E senior management	Mark Kemp Sue Scane	MK 29/8/14

*Final approval as per the Financial Procedure Rules must be obtained from:*

Approval Level Required	Name	Date
Over £5m - Cabinet/ On behalf of Cabinet (Leader of the Council)	Cabinet	

## **1 Description & Objectives of the Proposal / Desired Outcomes & Business**

### **Benefits**

The Milton Interchange scheme will provide enhanced connectivity of the Science Vale UK Enterprise Zone to the national road network by improving the operation and increasing capacity at Milton Interchange, the area's gateway to the A34. This will provide confidence and reliability in the transport network to secure business investment in the Enterprise Zone. The direct effects of increased junction capacity and reduced delay will bring indirect benefits through improving investor confidence which will result in employment and housing developments in the local area.

### **Economic benefits**

The transport user benefits associated with changes in travel times, and operating costs for private vehicles between modelled scenarios (with and without the scheme) have been calculated. These calculations were undertaken using time and distance matrix summaries from the Central Oxfordshire Transport Model (COTM).

The scheme benefits have been assumed for 60 years. Then benefits were discounted to create a Present Value of Benefits (PVB). It has been assumed that the benefits accrued in the peak hours represent the benefits for throughout the day. This is because the scheme itself does not provide additional route choice; rather it offers users benefits when the junction is reaching capacity.

The costs of the scheme were adjusted to calculate a Present Value of Costs. From this, Net Present Value, (NPV = PVB-PVC) and Benefit to Cost Ratio, (BCR = PVB/PVC) for the scheme was calculated. The results of this appraisal are:

Present Value of Costs (PVC)	£8,945,000
Present Value of Benefits (PVB)	£19,447,000
Net Present Value (NPV)	£10,502,000
Benefit to Cost Ratio (BCR)	2.17

## **2 Updated Project/Programme Scope**

No changes have been made to the project scope since submission of the stage 1 business case (approved by Cabinet in October 2013).

The intention is still to provide a hamburger junction for traffic from the westbound A4130 heading onto the northbound A34 towards Oxford, including widening the Milton Park Link, eastbound A4130 and southbound A34 off-slip approaches to the circulatory to four lanes. Existing routes through the junction for non-motorised users will be maintained and improved, including the footway/cycleway around the eastern half of the central island. See appendix A for the scheme drawing.

The construction programme, subject to updates from the successful tenderer, is still planned as a 12 month construction programme.

### **3 Estimated Cost & Proposed Funding Plan**

Tender returns were received at the end of August and are now being evaluated, but confirm that the total budget required for this project remains as previously estimated at £10.625m.

	Stage 1 £000	Stage 2 £000
A: Cost of feasibility and preliminary design (previously released at Stage 0b)	<i>n/a - revenue</i>	<i>n/a - revenue</i>
B: Estimated cost of detailed design, procurement & enabling works (previously released at stage 1)	590	1,113
<b>C: Estimated delivery / construction cost (requested to be committed at stage 2)</b>	<b>9,079</b>	<b>8,346</b>
D: Contingency	964	1,166
Total	10,625	10,625

The estimated annual expenditure profile for the project is as follows:

Year	Previous Costs	2014/15	2015/16	Contingency
£000	684	5,051	3,724	1,166

See appendix B for the detailed resource appraisal.

### **4 Project Delivery Timetable & Procurement Plan**

The current programme indicates that construction will commence on 27 October 2014 and will continue until 24 November 2015. This assumes a 20 day mobilisation period following the contract being awarded on 26 September 2014.

Activity	Start Date	Finish Date	Milestone/decision point & scheduled technical gateways
Procurement	09/06/14	29/09/14	Approval of Stage 2 BC GW4
Construction	27/10/14	31/10/15	GW5

## **5 Risks, Constraints, Dependencies and Exclusions**

See appendix C for detailed risk register

### **Constraints**

The following factors may affect the successful delivery of the project or achievement of business benefits/ desired outcomes:

- Timescales – The design has been completed in as timely a manner as possible to enable the commencement of construction within the stated financial year. Any programme delay that occurs may have a prejudicial impact on the scheme financial profiling. This has been mitigated by including conditions in the contract to encourage a spend profile which matches the grant conditions imposed by the DfT
- Engineering issues. Ground investigation has taken place and been used to inform the design. However, for any unforeseen condition, the requirement to manage existing traffic flows on the A34 and the limited working space this will yield may mean finding appropriate solutions is more challenging. To facilitate an appropriate spend profile will require the construction activities to commence during winter months where site conditions may be less favourable. There is an associated risk that this could adversely affect the programme and cost.
- Communications – the A34 is a heavily used piece of infrastructure and the works will coincide with other major projects being delivered within Oxfordshire. Outgoing messages will need to be carefully controlled to ensure that the expectations of the travelling public are suitably managed and that the minimum of disruption is caused. The tendered contract has allowed for the provision of a dedicated communications officer to work with OCC in delivering appropriate updates to stakeholders.

### **Dependencies**

The following factors have the ability to influence the delivery of this project:

- The provision of improvements to Milton Interchange will be of maximum benefit if provided in conjunction with north facing slips at Chilton junction, as they will have a knock-on effect of increased demand at this junction. This will be dependent on the final detailed design of the roads and the timescales within which they are planned and constructed. The current programme shows the construction of the Chilton slip roads commencing in November 2014 (subject to confirmation of draft Orders).

Description of areas or sources of risk and impact on project	Mitigation	Owner
Failure to spend allocated DfT funds by stated deadline	Design has been undertaken within a constrained programme to enable start of construction works to be made as soon as possible	OCC
Constrained working area prolongs programme and reduces spend profile	Temporary speed restriction adjacent to works area will enable additional working space to be provided. Impact on A34 modelled and mitigation agreed with HA	Skanska/Atkins
Adverse publicity arises from traffic disruption during work	Appointment of dedicated communications officer included in tender document to manage outgoing information and provide updates to stake holders	OCC

## **6 Communication & Consultation**

The communication plan is in Appendix D of this document.

The Highways Agency (HA) is the authority responsible for the A34 and designers have liaised closely with them throughout. Necessary approvals in principle, design checks and approval of departures from standard where applicable have been sought. The HA have provided input on the various elements of the design to ensure continuity with their network and together with Thames Valley Police provided input on the A34 traffic management proposals.

The stakeholders are identified in the communications plan in Appendix D of this document. It is anticipated that the main source of information from site will be the communications officer appointed to support the scheme and assist OCC in managing information provided to stakeholders.

## **7 Programme/ Project Governance**

The project manager will be supported by the Project Sponsor and the delivery team, comprising OCC, Skanska and Atkins staff.

## **8 Supporting Documents**

### **Appendix A - Scheme drawing**

Attached

### **Appendix B - Resource Appraisal**

Attached

### **Appendix C - Project Risk Register**

Appendix C contains commercially sensitive information. The public should therefore be excluded during consideration of the Appendix as discussion in public would be likely to lead to the disclosure to members of the public present of information in the following category prescribed by Part I of Schedule 12A to the Local Government Act 1972 (as amended):

*Category 3; Information relating to the financial or business affairs of any particular person (including the authority holding that information)*

and since it is considered that, in all the circumstances of the case, the public interest in maintaining the exemption outweighs the public interest in disclosing the information, in that where a tender or bidding process is in progress disclosure would distort the proper process and would prejudice the position of the authority in the process of the transaction and the Council's standing generally in relation to such transactions in future, to the detriment of the Council's ability properly to discharge its fiduciary and other duties as a public authority.

### **Appendix D - Communication Plan**

Attached.