

Annex D (to Appendix A): WLTB Final Business Case Pro-Forma for Major Schemes

Note

Major Local Transport Schemes are those with a cost of £5m or greater.

For these schemes there are three stages of assessment:-

1. Outline Business Case (to determine whether the scheme is a candidate for funding)
2. Conditional Approval Business Case – the key decision to confirm that the business case for the scheme is sound and to confirm the principle that it will be funded.
3. Final Approval – once procedures and procurement have been completed.

This pro-forma is to be used for the Final business case.

The decision in principle to fund the scheme will already have been taken at the Conditional Approval stage. Hence the Final Approval stage is effectively confirming that earlier decision, and at the same time updating the Business Case with the latest information, including the latest cost and a revised Benefit to Cost Ratio.

For some major schemes, which are being delivered in separate phases, the Conditional Approval will deal with the Business Case for the whole scheme, and there will then be separate Final Approval submissions for each phase.

STRATEGIC CASE

Scheme Name

A38 Bromsgrove Major Scheme – Package 1
(Phase 1, Barley Mow Lane Junction)

Date

March 2019

Statement of Change

Update of the Strategic Case

Set out and changes in the Strategic Case which have occurred since the Business Case submission for Conditional Approval.

If there have been no changes then it will be sufficient to say so.

The supporting appendices should include a final layout plan of the proposal.

Overview of FBC submission

This Final Business Case (FBC) is for Phase 1 of Package 1 of the A38 Bromsgrove Major Scheme. It seeks to release funding for improvements to the junction of Barley Mow Lane and the A38. In summary:

- £365,044 is sought from WLEP and £115,277 is sought from GBSLEP as contribution towards the Barley Mow Lane junction scheme. Overall this scheme is costed at £480,321.
- Overall the scheme cost for Package 1 as a whole (to include Barley Mow Lane, M42 Junction 1 and M5 Junction 4) is estimated at £7,586,684.
- The BCR for Package 1 as a whole is recalculated, based on revised costs, as 3.44 (core scenario). This remains in line with the BCR included at CABC stage.
- Works on site to implement the Barley Mow Lane junction scheme are programmed for April 2019. Works at M42 Junction 1 and M5 Junction 4 are programmed to start in May 2020.
- Baseline costs are in 2018 Q4 prices. Please note that all costs (except the discounted costs/benefits outlined in the economic case) quoted in this proforma are outturn cost (therefore include inflation and QRA but exclude optimism bias).

Background

The A38 Major Scheme will support the sustainable growth of Bromsgrove, Redditch and South Birmingham by enhancing the existing A38 Bromsgrove Eastern Bypass and targeting locations where delay and congestion are currently experienced and where conditions are predicted to deteriorate further without intervention. Package 1, comprises three junction improvements, as follows:

- M42 Junction 1;
- M5 Junction 4; and
- Barley Mow Lane junction.

A Conditional Approval Business Case (CABC) for Package 1 was submitted in August 2018 and approved by both Worcestershire Local Enterprise Partnership (WLEP) and Greater Birmingham and Solihull Local Enterprise Partnership (GBSLEP). The CABC proposed a phased approach to the FBC stage, with the Barley Mow Lane junction scheme being brought forward for funding approval ahead of the two motorway junctions (reflecting the overall ability to deliver the Barley Mow Lane junction scheme sooner). The purpose of this FBC is therefore to secure funding approval for works to the Barley Mow Lane junction. A separate FBC submission will follow for M42 Junction 1 and M5 Junction 4 in February 2020.

The scheme for the Barley Mow Lane junction remains as per CABC stage and includes:

- A new right turn lane into Barley Mow Lane within the existing road width.
- Moving the signalised pedestrian crossing further north to allow for the right turn lane.
- Slight relocation of the bus stops.

Since CABC stage the scheme for the Barley Mow Lane junction has been:

- Awarded to the contractor who has progressed the scheme to detailed design and completed a Stage 2 road safety audit.
- Fully costed by the contractor to provide a Target Price for construction.
- Further assessed in terms of risk (the Quantified Risk Assessment for the full Package 1 scheme has been reviewed).
- Further considered (alongside the motorway junction schemes) in terms of opportunities to provide enhancements for people walking, cycling and horse riding.

The scheme designs for the M42 Junction 1 and M5 Junction 4 remain as per CABC stage. Work continues to progress these schemes. However, to date, there have been no significant design or cost changes, hence for the purpose of this FBC, the CABC stage designs and costs are carried forward. New information on likely timescales for delivery does however mean that the funding profile for these schemes has moved on since CABC stage. In addition, further work has been undertaken to assess opportunities to provide further enhancements for walking, cycling and horse riding.

In this context this FBC uses the updated information for the Barley Mow Lane junction scheme to present:

- Appendix 1 - Final scheme design for the Barley Mow Lane junction with the A38.
- Appendix 2 - An updated scheme cost for the full Package 1 scheme. This factors in the new Target Price for the Barley Mow Lane junction, but retains the scheme cost for the motorway junctions as per the CABC.
- Appendix 3 - An updated assessment of risk and QRA for the Package as a whole.
- Appendix 4 - An updated BCR for the full Package 1 scheme based on the above and an updated supporting Value of Money Report.
- Appendix 5 - An updated AST for the Package as a whole.
- Appendix 6 - An updated programme for delivery of the Package as a whole.
- Appendix 7 - An quarterly funding profile for the Package as a whole.
- Appendix 8 – Note that this appendix, covering confirmation that necessary procedures have been completed, is assumed to not be required. Instead please see later section on statutory powers.
- Appendix 9 - An updated Communications and Stakeholder Management Plan.
- Appendix 10 - An updated Benefits Realisation Strategy.
- Appendix 11 - An updated commercial strategy, reflecting phased implementation.

- Appendix 12 - An assessment of opportunities (across all 3 package 1 schemes) for walking, cycling and horse riding.
- Appendix 13 – WCC cabinet report confirming forward funding of S106 contributions.
- Appendix 14 – Confirmation of GHF funding.

Update of the Strategic Case

This section summarises the Strategic Case and updates the information provided in the CABC in respect of:

- Policy context, reflecting Bromsgrove’s evolving District Plan; and
- Estimated outputs (housing and jobs).

Otherwise the Strategic Case set out in the August 2018 CABC remains valid and should be read alongside this FBC submission.

Overview of objectives and context

To summarise, the Major Scheme as a whole addresses the following key problems:

- The existing traffic demand on the A38 corridor means that the existing highway has reached capacity, which at peak times causes congestion on the corridor.
- The existing highway provision on the A38 corridor does not have sufficient capacity to accommodate future housing or employment growth.
- As the A38 corridor has reached capacity, the inability to accommodate additional traffic is constraining access from Bromsgrove and Redditch to the full range of employment opportunities in the West Midlands.

In this context, the overall objectives of the Major Scheme are to:

- Support the delivery of housing and employment growth as outlined in the Bromsgrove Development Plan and the Redditch Local Plan.
- Reduce congestion and transport costs.
- Maximise the efficiency of the road network.
- Increase journey time reliability.

The Major Scheme will contribute to the delivery and achievement of the stated policies and priorities of:

- **WLEP and GBSLEP** – Both LEPS are focussed, through their economic strategies, on realising the full potential of Bromsgrove as an important centre for local growth and employment. Without capacity enhancements to the highway infrastructure the ability to meet this objective would be compromised.
- **Worcestershire County Council** – The objectives of the Council, set out particularly though the fourth Local Transport Plan 2018-30, aim to support economic competitiveness and growth through delivering a safe, reliable and efficient transport network.
- **Bromsgrove District Council and Redditch Borough Council** – both Councils aim to deliver, through their development plans, significant housing and employment growth and the importance of improvements to M42 Junction 1 and M5 Junction 4, in enabling this development to come forward, has been established through the Local Plan process.

Since the CABC stage Bromsgrove District Council has been out to consultation (September to November 2018) on their District Plan Review via an Issues and Options paper. This looks at a

range of options for allocating land for housing growth, but emphasises that Bromsgrove District will need to deliver significant growth into the future and acknowledges transport infrastructure as a critical part of delivering economic growth plans. The Issues and Options document specifically notes the role of this Major Scheme in addressing the A38. A range of development distribution options are being considered through the Plan review, including focussing development on Bromsgrove, on transport corridors and urban intensification. Many of these potential future options would impact on the A38 and reinforce the need for enhancements on the corridor.

Estimated outputs

At CABC stage it was recognised that the Package 1 scheme would support and contribute to the delivery of both housing and employment. Estimated outputs were calculated based on assessments used to support the Growth and Housing Fund (GHF) bid.

This assessment has been revisited at FBC stage and slightly updated estimates are presented below. Full detail is provided within Appendix 4, the Value for Money Report. In brief:

- Estimated outputs reflect the jobs and homes that would be supported by the Package 1 scheme. It should be noted that no development sites are dependent on this scheme (that is, there are no planning conditions linking specific sites to these works).
- Estimated outputs are based on an understanding of the quantum of development that the full A38 major scheme would support. This was established through the GHF funding bid as:
 - 383 jobs and 234 homes for M42 Junction 1
 - 266 jobs and 163 homes for M5 Junction 4
- Estimated outputs for the Barley Mow Lane junction scheme are established based on a cost proportionality approach. This apportions the residual impacts of the full major scheme (Packages 1 -5) based on the total cost of the Barley Mow Lane junction works as a proportion of the overall major scheme.
- Because the overall cost of the works to the Barley Mow Lane junction have reduced compared to CABC stage the associated outputs are therefore now slightly lower (whilst outputs associated directly with schemes at M5 Junction 4 and M42 Junction 1 remain the same).
- This cost proportional approach is based on the same assumptions as at CABC stage, as this is the best available information at the time of writing. However, it should be noted that Packages 2 to 5 are currently being reviewed in terms of design options and associated costs. Changes to scheme costs would, based on the approach adopted, impact on the estimated outputs associated with the Barley Mow Lane junction works.

On this basis it is estimated that the full Package 1 scheme with help to deliver/unlock:

- 419 housing units (of which 22 are directly related to the Barley Mow Lane junction scheme, compared to 35 estimated at CABC stage).
- 685 gross FTE jobs (of which 36 are directly related to the Barley Mow Lane junction scheme, compared to 59 at CABC stage).
- 15,679 sq metres of employment floorspace.

As previously agreed with funding partners, these outputs are to be 'claimed' based on a cost proportionality approach (i.e. each funding partner claims benefits in proportion to their contribution to the scheme). In this context, the tables below identify the outputs specifically related to the contribution of each funding body. In order to assist the LEP's in their reporting these outputs are also profiled on a year by year basis. In line with GHF reporting benefits are

ECONOMIC CASE

Scheme Name

A38 Bromsgrove Major Scheme – Package 1
(Phase 1, Barley Mow Lane Junction)

Date

March 2019

Include a statement of any change in Assessment of Benefits/Impacts since submission of Business Case for Conditional Approval. If there has been no change in the Benefits it will be sufficient to say so.

Provide a revised Benefit to Cost ratio on the basis of the latest cost information.

Where a scheme is being delivered in phases the BCR calculation will be on the basis of the whole scheme, not the individual phase, and hence will be directly comparable with the BCR in the Conditional Approval Business Case.

For full details of the BCR calculations please see Appendix 4.

Assessment of benefits in the economic case

The assessment of benefits has been updated to reflect new TAG tables issued in November 2018. Otherwise, the calculation of benefits remains as per the CABG for the following reasons:

- No significant changes to the development assumptions have been identified, therefore no changes to the transport modelling have been taken forward.
- The detailed design for the Barley Mow Lane junction is as per the CABG design therefore no changes to the modelling of this junction are required.
- The design of the schemes for M42 Junction 1 and M5 Junction 4 remain as per the CABG.
- Whilst the timing of delivery of phased elements has moved on from the CABG, overall scheme opening (of all three junction improvements in Package 1) remains programmed for financial year 2020/21 therefore accords with the 2021 opening year assumed within the modelling.

Assessment of costs in the economic case

The assessment of costs within the financial case has been updated to reflect the final Target Price and updated assumptions for QRA and optimism bias. The following process has been adopted for the economic case:

- The Target Price from the Contractor has been used for the Barley Mow Lane junction scheme. This has been added to the costs of the motorway junction schemes as per the CABG, to calculate a cost for the overall Package.
- Optimism bias has been applied to the cost of the Barley Mow Lane junction scheme at 3% reflecting the fact that this scheme is at Stage 3 as per the definition in Webtag Unit A1.2.
- Optimism bias has been applied to the cost of the motorway junction schemes at 15% (as per CABG stage) to reflect that these designs remain at Stage 2.
- A revised QRA figure has been established based on an updated risk assessment. The P(mean) figure is used.
- A revised funding profile has been developed, taking account of new information on construction timescales for the Barley Mow Lane junction and approvals and construction timescales for the motorway junction schemes.

The revised BCR is 3.44.

Economic Summary:		Value for Money Category
PV Benefits (£m)	£14,994,050 (2010 prices and discounted to 2010 values)	See DfT guidance: High http://assets.dft.gov.uk/publications/value-for-money-assessments-guidance/vfmguidance.pdf
PV Costs (£m)	£4,355,725 (2010 prices and discounted to 2010 values)	
BCR	3.44	

BCR Sensitivity

Provide an updated calculation of Benefit to Cost ratio for core scenario and low growth.

The data for this table comes from the Analysis of Monetised Costs and Benefits.

Appendix 4 provides full details of the sensitivity tests undertaken for the BCR. Costs and benefits reported below are in 2010 prices and discounted to 2010 values.

Scenario	Travel Time	VOC	Indirect Tax	Other monetised benefits	Total monetised benefits	BCR
Core Scenario	£15.3m	£0.01m	-£0.0001m	-£0.35m	£14.99m	3.44
Low Growth	£5.4m	£0.01m	-£0.0001m	-£0.35m	£5.10m	1.17

Overall assessment - Appraisal Summary Table

Set out any changes in the environmental or social/ distributional impact of the scheme. If there have been no significant changes it will be sufficient to say so.

Environmental, social and distributional impacts remain as per set out at CABC stage.

Since CABC stage additional work has been undertaken to assess the impact of the Barley Mow Lane junction scheme on significant trees and protected tree roots. Lighting columns have been positioned to avoid any impact.

Additional assessment of opportunities to improve conditions for walking, cycling and horse riding has been carried out (see Appendix 12). Within the Barley Mow Lane junction scheme opportunities to

improve signage and drainage to benefit pedestrians and cyclists have been incorporated within the final design. Other opportunities at the motorway junctions will be considered as the detailed design continues.

The overall impact of the proposal should be set out in an updated Appraisal Summary Table which will be an Appendix to the Business Case.

An updated AST is included as Appendix 5. Please note that the assessments remain as per CABG stage with the exception of revised economic indicators (taking account of TUBA updates and revised costs).

Value for Money Statement

Conclusion from value-for-money assessment and VfM category.

As noted above the revised BCR is 3.44 (core scenario). This falls into the high value for money category.

FINANCIAL CASE			
Scheme Name:	A38 Bromsgrove Major Scheme – Package 1 (Phase 1, Barley Mow Lane Junction)	Date:	March 2019
Summary Financials			
Overall Cost of Scheme	Total cost of works to Barley Mow Lane junction (sought through this FBC) - £480,321 Total cost of Package 1 - £7,586,684		
LTB Contribution	<p>WLEP contribution sought for works to Barley Mow Lane junction (this FBC) – £365,044.</p> <p>GBSLEP contribution sought for works to Barley Mow Lane junction (this FBC) – £115,277.</p> <p>Total WLEP contribution sought for Package 1 - £1,299,145.</p> <p>Total GBSLEP contribution sought for Package 1 – £2,261,992.</p>		
Available Budget	-		
Contingent Liabilities	-		

Scheme Costs – Barley Mow Lane junction scheme					
<p>This table sets out the funding sought through this FBC. As such, it relates to just the Barley Mow junction scheme. These figures are outturn costs therefore include inflation and QRA but exclude optimism bias.</p>					
Main Expenditure Items (include project income separately) (£m)	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Scheme preparation costs including design and project management	£19,666	£56,597	-	-	£76,263
Part 1 claims	-	-	-	£81,555	£81,555
Works construction including land, stats costs (including QRA)	-	£5,422	£301,508	-	£306,930
Site supervision and other external costs	-	-	£13,663	-	£13,663
Monitoring	-	-	-	£1,910	£1,910
TOTAL COST	£19,666	£62,019	£315,171	£83,465	£480,321

Scheme Costs – M42 Junction 1 and M5 Junction 4

This table sets out the funding that will be required for the additional schemes that comprise Package 1. This funding will be sought through a second phase of the FBC.

These figures are outturn costs therefore include inflation and QRA but exclude optimism bias.

Main Expenditure Items (include project income separately) (£m)	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Scheme preparation costs including design and project management	£176,990	£509,376	£517,634	-	£1,204,000
Part 1 claims	-	-	-	£157,673	£157,673
Works construction including land, stats costs (including QRA)	-	£12,501	£344,686	£4,992,690	£5,349,877
Site supervision and other external costs	-	-	-	£366,998	£366,998
Monitoring	-	-	-	£27,814	£27,814
TOTAL COST	£176,990	£521,877	£862,320	£5,545,175	£7,106,362

Scheme Costs – full Package 1

This table shows the full scheme cost for Package 1 (Barley Mow Lane junction, M5 Junction 4 and M42 Junction 1). These figures are outturn costs therefore include inflation and QRA but exclude optimism bias.

Main Expenditure Items (include project income separately) (£m)	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Scheme preparation costs including design and project management	£196,656	£565,973	£517,634	-	£1,280,263
Part 1 claims	-	-	-	£239,228	£239,228
Works construction including land, stats costs (including QRA)	-	£17,923	£646,194	£4,992,690	£5,656,807
Site supervision and other external costs	-	-	£13,663	£366,998	£380,661
Monitoring	-	-	-	£29,724	£29,724
TOTAL COST	£196,656	£583,897	£1,177,491	£5,628,640	£7,586,684

Budgetary Impact Summary – Barley Mow Lane junction

This table sets out the funding sought from WLEP and GBSLEP through this FBC. As such, it relates to just the Barley Mow junction scheme.

Forecast Net Budget profile (£m)	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Total Required Budget	£19,666	£62,019	£315,171	£83,465	£480,321
Total Local Contribution (Secured)	-	-	-	-	-
Total Local Contribution (Unsecured)	-	-	-	-	-
Total HE GHF contribution (Secured)	-	-	-	-	-
Total LTB Requirement (WLEP)	£19,666	£62,019	£219,925	£63,434	£365,044
Total LTB Requirement (GBSLEP)	-	-	£95,245	£20,032	£115,277

Budgetary Impact Summary – M42 Junction 1 and M5 Junction 4

This table sets out the funding sought from WLEP and GBSLEP for the additional schemes that comprise Package 1. This funding will be sought through a separate FBC.

Forecast Net Budget profile (£m)	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Total Required Budget	£176,990	£521,877	£862,320	£5,545,175	£7,106,362
Total Local Contribution (Secured) Note that S106 contributions will be forwarded funded, as per Cabinet approval included as Appendix 13.	£176,990	-	-	£1,164,557	£1,341,547
Total Local Contribution (Unsecured)	-	-	-	-	-
Total HE GHF contribution (Secured)	-	-	£431,160	£2,252,840	£2,684,000
Total LTB Requirement (WLEP)	-	£521,877	-	£412,223	£934,100
Total LTB Requirement (GBSLEP)	-	-	£431,160	£1,715,555	£2,146,715

Please note that the GHF lump sum funding will be received 15 March 2019 to be spent in accordance with the spend profile for the HE schemes.

Budgetary Impact Summary – full Package 1

This table sets out the funding that will be sought in total for the full Package 1 scheme (Barley Mow Lane junction, M5 Junction 4 and M42 Junction 1) via a combination of this business case and a future second phase business case relating to the motorway junctions.

Forecast Net Budget profile (£m)	FY 17/18	FY 18/19	FY 19/20	FY 20/21	Total
Total Required Budget	£196,656	£583,897	£1,177,491	£5,628,640	£7,586,684
Total Local Contribution (Secured) Note that S106 contributions will be forwarded funded, as per Cabinet approval included as Appendix 13.	£176,990	-	-	£1,164,557	£1,341,547
Total Local Contribution (Unsecured)	-	-	-	-	-
Total HE GHF contribution (Secured)	-	-	£431,160	£2,252,840	£2,684,000
Total LTB Requirement (WLEP)	£19,666	£583,897	£219,925	£475,657	£1,299,145
Total LTB Requirement (GBSLEP)	-	-	£526,406	£1,735,586	£2,261,992

Anticipated Funding & Financing Arrangements

Summarise the funding arrangements for the scheme. Indicate the situation with regard to third party funding and/ or borrowing. Outline risks associated with delivery of external funding and repayment of borrowing.

The overall scheme cost, for use in the financial case, is £7,586,684 (outturn cost, including inflation and QRA). Further detail on the scheme cost is included as Appendix 2. The overall total estimated cost for Package 1 is now slightly below the original forecast assumed in the CABC submitted in September 2018.

Please note that:

- The sum stated in the financial case takes the Target Price from the Contractor for the Barley Mow Lane junction scheme and adds this to the costs of the motorway junction schemes as per the CABC, to calculate a cost for the overall Package.
- The Target Price for constructing the Barley Mow Lane junction is below the original forecast assumed in the CABC. This reflects a reduction in the estimated value of Part 1 claims and reduced risks/QRA costs specific to this junction. Please note that the cost used is the Target Price plus 5% as this represents the maximum cost that could be claimed by the contractor under the terms of the contract.
- With no change in scope since the CABC, the baseline construction costs for works at the M42 and M5 remains the same. Overall the total package cost remains broadly the same as at CABC stage. This is because whilst QRA and Part 1 claims costs are reduced there are increases in construction costs due to changes in programme and also increased preparation and supervision costs.
- The financial case includes an allowance for inflation, as set out in Appendix 2.
- The financial case includes a sum for QRA, as set out in Appendix 3. The QRA has been updated for this FBC submission and includes a robust assessment of potential risks. Overall the risk allowance within the QRA equates to around 25% of works/preparation and supervision costs.
- Optimism bias is not included in the financial case. This is consistent with the presentation of scheme costs within the CABC and in line with WebTag guidance. However, optimism bias is included separately at the appropriate rate for assessment within the economic case.
- The scheme costs used in the financial case include an updated cost estimate for Part 1 claims across all the Package 1 schemes.

Package 1 funding is being sought from a combination of sources, as follows:

- GHF – Contribution of £2.684 million was confirmed by Highways England in October 2018 as shown in Appendix 14.
- WLEP – Contribution sought as set out above. WLEP's Local Transport Board approved the CABC in May 2018. Subsequently the scheme was updated and further approval of the revised CABC was granted in November 2018.
- GBSLEP – Contribution sought as set out above. GBSLEP approved the CABC in a letter to WCC dated 27 November 2018
- Section 106 contributions (see below).

WCC has developed a Section 106 Contribution model to secure monies from all development proposals within Bromsgrove and Redditch. These Section 106 monies will be allocated towards

improvements to the transport network necessary to support growth. The proposed scheme is part of these improvements.

WCC is currently in negotiations with the developers of two large strategic sites for which £1.34 million of S106 monies are planned to be allocated to Package 1 schemes. However, at the time of writing, these funds have not been secured, due to delays in consenting these sites. This risk was noted at CABC stage and since CABC approval WCC has been working to address this issue. At the WCC formal Cabinet meeting in September 2018 it was agreed that the Council would 'forward fund' these sums. The Cabinet Report which confirms this is included as Appendix 13 for information.

Scheme Cost Estimate and Key Financial Risks

A detailed cost estimate and a quantified risk assessment should be included as an Appendix.

Summarise in the table below key risks to cost forecasts or to budgetary impacts.

A revised project cost estimate and spend profile is provided in Appendix 2. A quarterly spend profile is provided in Appendix 7 and a summary of the updated Quantified Risk Assessment (QRA) is included as Appendix 3.

The key risks to cost forecasts or to budgetary impacts are summarised below.

Summary of risks

Risk number	Risk	Mitigation status	Calculated Risk Value
007	Scheme preparation costs greater than estimated resulting in inadequate budget available.	Regularly review preparation cost. Include allowance in QRA.	Range: £33k to £163k
018	Increase in land costs and accommodation works at M42.	Currently negotiating with landowner to keep within scheme budget.	Range: £86k to £235k
020a	Statutory undertakers C4 diversion costs higher than C3 estimates.	Trial holes at M42 to be carried out during early stage of detailed design. No stats diversions required at M5 or Barley Mow Lane junction.	Range: £145k to £290k
027	Scheme costs greater than estimated resulting in inadequate budget available.	Undertake additional assessment and further scheme refinement to achieve construction estimate price as scheme progresses. Will need allowance in QRA unless fixed price contract used.	Range: £163k to £817k
031	Unmapped utilities encountered during construction leading to delay to	Include allowance in QRA. Allowance to allow for	Range: £73k to £145k

	construction programme, redesign and extra costs.	complications caused by phased approach.	
039	Unforeseen ground conditions including contaminated land leading to increase in costs/ programme delay.	Ground investigations will be undertaken during detailed design to establish the level of risk anticipated during construction phase.	Range: £150k to £600k
050	Cost of valid part 1 claims exceeding expected total resulting in additional cost to WCC.	Risks to be assessed as scheme progresses.	Range: £50k to £150k

Local contribution/ Third Party Funding

Outline the source of the secured local contributions.

Indicate the position with regard to contributions which are unsecured at the time of submission, and indicate the provision which will be made in the event that external contributions are not achieved (e.g. underwriting by promoting authority)

As detailed above the local contributions will come from S106 agreements. WCC has agreed to forward fund these. See Appendix 13.

COMMERCIAL CASE

Scheme Name:

A38 Bromsgrove Major Scheme – Package 1
(Phase 1, Barley Mow Lane Junction)

Date:

March 2019

Capability and Skills

Outline any changes to the internal / external expertise assigned to the project since the Conditional Approval Business Case.

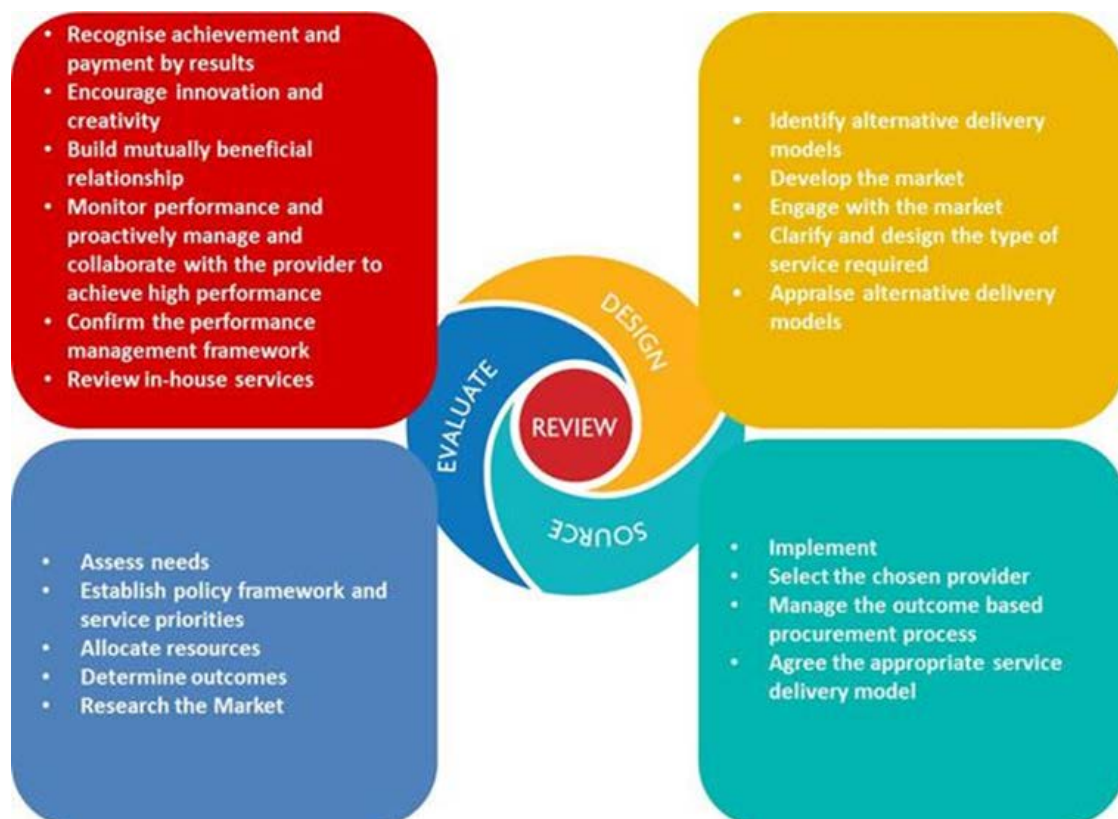
Indicate the resourcing, and responsibilities of the respective parties, going forward to implementation.

WCC has extensive in-house strategic and technical procurement expertise and a wealth of knowledge and experience, with a proven track record of delivery, with different types of contracts.

WCC is establishing itself as a strategic commissioning organisation that will only directly provide services where there is no viable alternative. Supporting this WCC has a commercial vision is to "drive commercial excellence through developing an open, challenging and proactive culture and deploying effective commissioning strategies to source the right service from the right provider at the right cost."

The diagram below describes WCC approach to commissioning and procurement and has influenced the choice of the procurement approach to the project.

Approach to commissioning and procurement



Having recently appointed contractors to deliver several strategic infrastructure projects, including Worcestershire Parkway Railway Station and the Design Development stage of the Worcester Southern Link Road Phase 4, the Council has recent and relevant market intelligence and commercial data to inform its decision-making and procurement plan. This is complemented by technical expertise from our term professional services supplier providing the breadth of both commercial and technical expertise required to prepare for and deliver the right contractual arrangements for the project. Market engagement specifically focused on this project has been undertaken.

WCC has appointed its Infrastructure Engineering Term Contractor (IETC) to undertake the design of the Barley Mow Lane junction (being the first of the 3 elements of Package 1 to be progressed).

Taking each element of package 1 in turn, the responsibilities of the parties going forward to implementation can be explained as follows:

Improvements to the A38 junction with Barley Mow Lane:

The resources for the design of this revised junction are the responsibility of the contractor and his designer, with WCC responsible for the project management, contract assurance and cost validation of this work. Moving into the construction phase, the construction will remain the responsibility of the contractor, with WCC being responsible for site supervision alongside their current functions.

Improvements to the M42 Junction 1:

The resources for the design of this revised junction are the responsibility of the contractor and his designer, with WCC responsible for the project management, contract assurance and cost validation of this work. WCC will appoint their IETC contractor for the construction phase, with WCC being responsible for site supervision alongside their current functions.

Improvements to the M5 Junction 4:

The resources for the design of this revised junction are the responsibility of the contractor and his designer, with WCC responsible for the project management, contract assurance and cost validation of this work. WCC will appoint their IETC contractor for the construction phase, with WCC being responsible for site supervision alongside their current functions.

Procurement Strategy & Sourcing Options

Report on the procurement which has been conducted, providing evidence of competitive pricing.

Explain any changes in the procurement approach from that given in the Conditional Approval Business Case, with justification for the revised approach.

A supporting Commissioning Strategy is contained in Appendix 11; this includes analysis of the alternative procurement options considered as well as an options analysis. A summary of the proposed strategy is provided below and includes evidence to justify the approach.

At CABG stage use of the Council's Infrastructure Engineering Term Contract was identified as the preferred route because it provides the best result in the options to outcomes analysis and facilitates a healthy environment to maximise opportunities for cost down initiatives. Additionally, it

complements the Council's strategic approach to commissioning. The term contractor is engaged for a number of years to deliver small to medium-sized projects for the Council and has been engaged following an Open procurement under OJEU and the Public Procurement Regulations. The contractor has already been engaged for the Barley Mow Lane junction scheme.

Rates and prices agreed at the outset of the contract are benchmarked against inflation indices to ensure they remain competitive and maintain cost-effective pricing. Incentives are included to ensure the contractor is engaged in delivering Early Contractor Involvement (ECI) solutions that not only reduce project costs but also optimise programmes and resources. In a long-term contract, the contractor works with The Council to find ways to provide the works inside the funding profile and the budget constraints.

The contractor, being a long-term supplier, is familiar with The Council's aims and objectives, the Local Transport Plan and the Worcestershire Economic Plan and works collaboratively to achieve those goals. This can be evidenced in a number of schemes currently in delivery with the contractor, for example, Southern Link Road phases 1 to 3 and the Hoobrook Link Road and schemes they are already contributing to the development of, such as Churchfields in Kidderminster and Upton-upon-Severn flood alleviation. Their understanding of WCC corporate aims ensures they consider these when compiling their working methods. Additionally, they are invested in an ongoing relationship with WCC, delivering multiple projects, and are incentivised to meet our goals as this encourages us to procure more projects via this contract.

Design finalisation and asset management including whole life costs are optimised because the contractor is able to comment and influence designs at the earliest opportunity.

Having the contractor engaged early broadens the project team which in turn helps to identify and manage risks early in the project resulting in improved cost certainty for the latter construction phases.

Financing Arrangements and Payment Mechanisms

Outline financing arrangements, and payment mechanisms including incentives.

A method of payment allowing for monthly assessments of the costs accrued is included in the contract as this allows for optimal cash flow for the supplier, the supply chain and The Council. Similarly, quality and standard of final construction will be managed through retention clauses and performance management.

Operationally, when the contractor submits an application for payment to the project manager for acceptance, we have engaged experienced quantity surveying advice to examine the submission. This will ensure we have oversight and detailed scrutiny of cost applications. The project manager will have a clear understanding of the current status of the actual costs to date and the anticipated costs to completion as the contractor is required to submit a forecast of the costs to him every calendar month.

Clauses requiring fair payment terms throughout the supply chain along with measures to audit this in contract form an integral part of the terms and conditions.

Construction quality will be regularly audited through the project lifecycle, using qualified and experienced personnel to ensure all defects are corrected promptly and the scheme meets the standards required by the specification. Contract assurance audits are also undertaken from time to time to ensure contractual processes are timely, accurate and compliant.

Risk Allocation and Transfer

Summarise how risk is transferred as part of contracting process.

An initial assessment has been undertaken on how the types of risk might be apportioned or shared, with risks allocated to the party best placed to manage them, subject to achieving value for money. The contract will include clauses to facilitate the transfer of appropriate risks from The Council to the contractor.

The risk of costs being higher than currently predicted remains until the pricing process is complete, which is the point that this risk can be transferred to the contractor (on project award). The indicative allocation of risks resulting from the contractual and procurement arrangements is summarised in Table 23. At this stage, ticks have been provided to indicate where each risk type rests or whether these risks are shared between the two.

Risk allocation

Risk Category	The Council	Supplier	Shared
Construction		✓	
Implementation			✓
Operations		✓	
Termination			✓
Financing	✓		
Legislative			✓

MANAGEMENT CASE

Scheme name:

A38 Bromsgrove Major Scheme – Package 1
(Phase 1, Barley Mow Lane Junction)

Date:

March 2019

Project delivery

Outline the timescale for project delivery. An updated scheme programme should be included in the appendices. Identify in this section the key milestones and dependencies.

A revised profile of expenditure, on a quarterly basis, should be included in the Appendices.

The Project Plan is included as Appendix 6. This identifies key resources, responsibilities and dependencies. Key milestones are summarised below. A quarterly spend profile is included as Appendix 7.

The programme has evolved since CABG stage to take account of latest information on likely timescales for approval and negotiation.

At CABG stage it was envisaged that funding would be sought in three phases. This approach has been revisited and, taking account of revised timescales and of the key funding link between the motorway junction schemes, it is now proposed that these would be considered together in a second FBC in Autumn 2019.

Project Programme

Milestone	Target date (end of)
Final Approval (Barley Mow Lane junction)	March 2019
Commencement of works on site (Barley Mow Lane junction)	April 2019
Completion of works on site (Barley Mow Lane junction)	May 2019
Detailed design (M42 Junction 1 / M5 Junction 4)	January 2019 – July 2019
Land negotiations (and CPO if required) (M42 Junction 1 / M5 Junction 4)	August 2019
Final business case (M42 Junction 1 / M5 Junction 4)	End February 2020
Final approval (M42 Junction 1 / M5 Junction 4)	April 2020
Commencement of works on site (M42 Junction 1 / M5 Junction 4)	May 2020
Completion of works on site (M42 Junction 1 / M5 Junction 4)	January 2021
Monitoring and evaluation	January 2022 to 2027

Governance, Organisational Structure & Roles

Set out any revisions to the governance and organisational structures which have occurred since the Conditional Approval Business Case submission.

If there have been no changes it will be sufficient to say so.

The governance and organisation structures were set out at CABG stage and remain unchanged.

Risk Management Strategy

Include a summary of the main risks derived from scheme risk register, together with an assessment of the effectiveness of any mitigating actions.

The updated risk register is included alongside the QRA in Appendix 3.

The main risks to the delivery of Package 1 are set out below. Risks related to finance and budget are included within the financial case.

Summary of risks

Risk no	Risk	Mitigation status	Calculated Risk Value
Risk 003	Project sponsor/key stakeholder decisions affect programme delivery	Keep involved via Project Board and regular stakeholder briefings	Range: £16.5k to £59k
Risk 006	Land acquisition. Not all land acquired via negotiation requiring CPO with a risk of Public Inquiry resulting in delay to programme.	Secure all land by agreement, engage with local land owners	Not costed
Risk 009/10	Statutory and other approvals/ agreements leading to delays to programme/ full approval/ construction delay	Identify and prioritise all approvals/agreements required. Approvals to be sought in a timely fashion. Early engagement with relevant bodies to be undertaken – ongoing. Maintain approvals/agreement register to monitor status	Range: £5k to £25k
Risk 011	Highways England approvals take longer than programmed resulting in delay to programme.	Early discussions with Highways England to agree programme.	Not costed.
Risk 012	Loss of stakeholder and public support resulting in delay to programme and/or reduction in scope of scheme.	Keep involved via regular briefings.	Not costed.
Risk 023	Drainage strategy has not yet been carried out, there is a risk that a requirement for	Undertaken drainage strategy as part of next phase of work.	Range: £50k to £100k

	attenuation and designated outfalls may require additional and if the design required cannot be implemented within the existing public highway.		
Risk 024	Highways England may not approve proposed departures from standard resulting in scope reduction.	M42 slip road widening scheme would not happen if fully compliant design required.	Not costed.
Risk 031	Unmapped utilities encountered during construction leading to delay to construction programme, redesign and extra cost.	Include allowance in QRA. Allowance to allow for complicated caused by phased approach.	Range: £72K to £145k
Risk 039	Unforeseen found conditions including contaminated land leading to increase in costs/programme delay.	GI will be undertaken during detailed design to establish the level of risk anticipated during construction phase.	Range: £150k to £600k

Communications and Stakeholder Management

Outline the approach to communications and stakeholder management which will be adopted during the life of the project. An updated Communications and Stakeholder Management Plan should be included as an appendix.

A Communications and Stakeholder Management Plan was included at CABC stage. Since that time additional work has been undertaken to consider the communication required to support delivery of the Barley Mow Lane junction scheme. A revised Plan is therefore included alongside this FBC as Appendix 9.

A two-phase approach to communications is proposed, with appropriate notifications in advance of the works at the Barley Mow Lane junction followed by a separate public information exercise relating to the two motorway junctions ahead of their implementation.

Statutory Powers and Acquisitions

Confirm that all necessary procedures have been completed, and that all necessary approvals have been secured. If any items are outstanding, indicate the steps which are being taken to resolve them, and the timescales involved.

No specific statutory powers or acquisitions are required for the Barley Mow Lane junction scheme. Road safety audits have been undertaken, and no other procedures are required prior to starting on site.

Work is ongoing to complete the approvals required for M42 Junction 1 and M4 Junction 5. The table below has been updated to reflect the progress since CABC stage.

Consents; licenses and approvals required – M42 Junction 1 and M5 Junction 4

Statutory Powers and Consents Required		
Description	Act or Legislation	Comments
Permitted Development Rights	The Town and Country Planning (General Permitted Development) Order 1995	A screening assessment was submitted and a screening opinion response was received from Worcestershire County Council’s planning team. The Planning Authority has determined that further to the information provided that there would be no requirement for an EIA and thus no planning permission is required for the scheme and thus the development of the junctions is considered to be permitted development.
Compulsory Purchase Order (CPO)	Highways Act 1980	It is intended that the area of land required at M5 Junction 4 can be acquired by negotiation. If this is not possible, a CPO may be required and would be determined by the Secretary of State. No other land is required.
Traffic Regulation Orders (TROs)	Road Traffic Regulation Act 1984	TROs will be required for M42 J1, and will be considered at the next stage of the project.
Highways England approval for departures from standard		Appropriate consent from Highways England for M42 J1 and M5 J4 including relevant approvals and sign off relating to the design and highway layout, assessments and departures from standard.
WCC approval for departures from standard		Appropriate consent from WCC for M42 J1 and M5 J4 including relevant approvals and sign off relating to the design and highway layout, assessments and departures from standard relevant to their network.

Contract Management

Summarise outline arrangements. Confirm arrangements for continuity between those involved in developing the contract and those who will subsequently manage it.

Penny Lillie remains the WCC project manager and she will guide the project through the design and implementation stage. Penny has led on liaison with the contractor and will continue to do so whilst works are on site.

Benefits Realisation and Monitoring and Evaluation Plan

Identify the high level benefits and how they will be managed, measured (both quantitative & qualitative) and monitored. There should be a clear relationship between the Objectives and Outputs included in the Strategic Case and the approach to monitoring

Attach an updated Benefits Realisation and Monitoring and Evaluation Plan as an Appendix.

An updated Benefits Realisation Plan is included as Appendix 10.

Contingency Plan

Summarise outline arrangements for contingency management such as fall-back plans if service implementation is delayed.

Assumed not applicable.

Appendices provided:-

1. Layout Plan of scheme.
2. Updated project cost estimate following procurement. This should include the impact of the Quantified Risk Assessment and Optimism Bias (normally 3% at this stage for the phase seeking Final Approval)
3. Updated Quantified Risk Assessment.
4. Revised calculation of BCR.
5. Revised Appraisal Summary Table
6. Revised scheme programme.
7. Profile of expenditure, on a quarterly basis.
8. Confirmation that necessary procedures have been completed. [Assumed not required.](#)
9. Updated Communications and Stakeholder Management Plan.
10. Updated Benefits Realisation and Monitoring and Evaluation Plan.
11. [Commissioning Strategy](#)
12. [Walking, Cycling and Horse Riding](#)
13. [Cabinet Report confirming forward funding](#)
14. [Confirmation of GHF funding](#)

Senior Responsible Owner DECLARATION

As Senior Responsible Owner for [[A38 Bromsgrove Major Scheme Package 1, Phase 1](#)] I hereby submit this request for funding consideration to the Worcestershire Local Transport Body.

Name:

[Nigel Hudson](#)

Signed:

Position:

[Head of Strategic Infrastructure and Commissioning](#)

Section 151 Officer DECLARATION

As Section 151 Officer for [Worcestershire County Council](#) I declare that the scheme cost estimates quoted in this bid are accurate to the best of my knowledge and that [Worcestershire County Council](#) has allocated sufficient budget to develop and deliver this scheme on the basis of its proposed funding contribution

Name:

[Steph Simcox](#)

Signed:

Position:

[Head of Strategic Infrastructure and Financial Resources](#)

CONTACT DETAILS FOR FURTHER ENQUIRIES

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