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Wiltshire Council

M4 Junction 17 OBC

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M4 J17 OBC Procurement Strategy

18/08/22
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This document has 25 pages including the cover.

Document history

Revision	Suitability	Purpose description	Originated	Checked	Reviewed	Authorised	Date
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1. Introduction

1.1. Purpose

This procurement strategy has been prepared to examine various procurement and payment options for the Wiltshire Council M4 Junction 17 Improvements scheme. It is an appendix to the M4 Junction 17 Improvements Outline Business Case (OBC). This report summarises a procurement options appraisal and outlines recommendations based on discussions with the Wiltshire Council project team.

1.2. Scheme information & requirements

Wiltshire Council is applying to the DfT for funding from the Major Road Network (MRN) fund for the M4 Junction 17 Improvements scheme. Located where the M4 meets the A350, M4 Junction 17 is an intersection between the Strategic Road Network (SRN) and the MRN.

M4 Junction 17 comprises five approach arms from the A429 to the north, M4 to the east, B1422 to the south east, A350 to the south and M4 to the west. On both of the approaches to the junction from the M4 there are signals on the off-slip as well as signals on the gyratory to allow traffic to exit the off-slips. The rest of the junction does not currently have any signals. All approaches to the junction have two lanes at the stop line, with the exception of the B4122 approach which only has a single lane. The entirety of the gyratory has two lanes for traffic.

The Outline Business Case is being developed under a single option approach; the proposed improvements are as follows:

- Widen all approaches to M4 Junction 17; A350, B4122, A429.
- Widen the slip roads to the M4 mainline; Eastbound off-slip, westbound on and off-slips.
- Deliver signalisation to the A429, B4122 and A350 arms of the gyratory.

1.3. Programme

Table 1-1 presents key milestones for the delivery of the M4 Junction 17 improvements works.

Table 1-1 - M4 Junction 17 Milestones

Milestone	Estimated completion date
Options Assessment Report	Apr-19
Strategic Outline Business Case submission	Jul-19
Preliminary Environmental Assessment Report	May-21
Options Assessment Report refresh	May-21
Operational assessment (with National Highways)	Sep-21
Outline Business Case submission	Aug-22
OBC approval	Oct-22
Prelim start date	Jan-23
Topographical survey / drainage survey / ground investigations	Jun-23
Preliminary design	Aug-23
Ecology surveys	Oct-23
Environmental Assessment Report	Feb-24
Detailed Design	Feb-24
Section 6 Agreement (Detailed Design Stage)	Feb-24
Tender preparation	Mar-24
Draft Full Business Case	Apr-24

Tender process complete (identification of preferred contractor)	Sep-24
FBC submission	Oct-24
FBC approval	Dec-24
Section 6 Agreement (Procurement of Works & Finalise Agreement)	Jan-25
Award of contract	Feb-25
Start construction	Apr-25
Finish construction	Feb-26
Section 6 Agreement (Construction and Final Accounts)	Mar-26

1.4. Current state of the UK infrastructure sector.

It is generally well understood that procurement within the construction sector, be that for services, consultancy or works, is expanding. The sector has seen significant commitment by the UK Government despite the impacts of COVID-19 and Brexit. This increased investment within the industry has introduced both challenges and opportunities. A particular challenge for clients is ensuring that their project is attractive to the market. High levels of available work can drive selective tendering by consultants and contractors, whereby more attractive schemes are targeted or ‘cherry picked’.

There can be a large number of reasons why a consultancy or contractor do not bid for a project. Focus on particular geographical regions at a certain point in time, commercial strategies, excessive risk transfer and constrained resources are all aspects that can influence the decision whether to bid or not. A key theme being experienced in the market is organisations becoming uncomfortable with excessive risk transfer. Coupling this with a lack of information and absence of input into design development excessive risk transfer could limit the attractiveness of a project to the market.

2. Output-based specification

This section of the Procurement Strategy considers what skills and services are required to deliver the M4 Junction 17 scheme. The development and assessment of the scheme utilises staff resources from a number of sources, including the local authority and consultants. Table 2-1 sets out an overview of the project output specification for the M4 Junction 17 scheme.

Table 2-1 - M4 J17 Output-based specification

Stage of scheme development	Work stream	Output
Preparation	Project Management	Provision of project management services
	Highway Design	Completion of highways preliminary and detailed design
	Drainage Design	Completion of drainage preliminary and detailed design
	Lighting Design	Completion of lighting preliminary and detailed design
	Surveys	Provision of site surveys to facilitate preliminary and detailed design
	Safety Audit	Provision of safety audit advice
	Environmental Advice	Completion of mandated environmental reports, assessments and surveys. Liaison with relevant statutory environmental bodies
	Commercial	Approach for procurement of construction and operation of scheme as set out below
	Land / Property	Provision of land negotiation for easement during construction phase
Construction	Construction of the M4 J17 improvements scheme	Construction to deliver highway works. Works completed in accordance with programme
Maintenance	Ongoing maintenance of highway and structures	Maintenance to be undertaken in accordance with Wiltshire Councils policies/asset management plan

3. Procurement considerations & objectives

3.1. Overview

This section will consider scheme specific procurement considerations and objectives. Considerations have been given regarding time and cost aspects of the MRN funding scheme being promoted by the DfT. Scheme specific considerations have been given regarding quality and health & safety requirements. The procurement objectives of Wiltshire Council are also stated, as it is necessary to understand the objectives prior to assessing procurement, pricing and tender options.

3.2. Key considerations

The key procurement considerations comprise:

- Time;
- Cost;
- Quality and Heath & Safety;
- Site constraints; and
- Sharing of costs and risks.

3.2.1. Time

The (MRN) scheme was established by the DfT to consider which schemes could be delivered by 2025. The current programme for the M4 Junction 17 Improvements scheme has the construction works being completed in late 2025. Due to the scheme being forecast to be delivered within the MRN funding timescales there isn't a need to implement a procurement route which would start works early on site.

3.2.2. Cost

The scheme is being delivered through the DfT MRN programme and will require a high level of cost certainty to deliver the works within the fixed funding constraints. The benefit-cost ratio (BCR) developed in the business case will demonstrate the schemes economic viability, any increase to scheme costs will impact on the BCR.

To support the BCR there will be a need to ensure value for money in the procurement stage. The procurement option considered will need to ensure that sufficient information is provided to the contractor in the tender stage to keep risk premiums at a minimum.

3.2.3. Quality and Health & Safety

One key consideration in the selection of a preferred supplier will be experience of working on the SRN. The preferred supplier will be required to provide demonstrable evidence of implementing safe systems of work on the SRN. The M4 Junction 17 construction works will require various phases of traffic management to ensure network resilience and eliminate the potential for queuing on the M4 mainline.

3.2.4. Site constraints

The following constraints have been identified for the M4 Junction 17 Improvements scheme, although these are specific to the scheme's location, they are all considered to be manageable by a competent contractor.

1. Geological Site of Special Scientific Interest (SSSI): There is an SSSI located between the M4 mainline and eastbound onslip/westbound offslip. Although the proposed works do not fall within the footprint of the SSSI there will be a need to control construction activities so that the SSSI is not impacted.
2. Highway Boundary: The scope for the scheme does not allow for the footprint of the new improvements to be constructed outside of the existing highway boundary. The scheme will therefore be a permitted development with no land purchase required.

3.2.5. Contractual forms

The contractual forms considered as part of the M4 J17 Procurement Strategy can be found in the guidance to the NEC suite. The contractual form selected must consider the balance of risk in terms of time, cost and quality. In terms of the form for the construction of the M4 J17 works the NEC4 Engineering and Construction Contract (ECC) is to be used. Table 2-1 outlines the risk transfer between client and contractor for the ECC option.

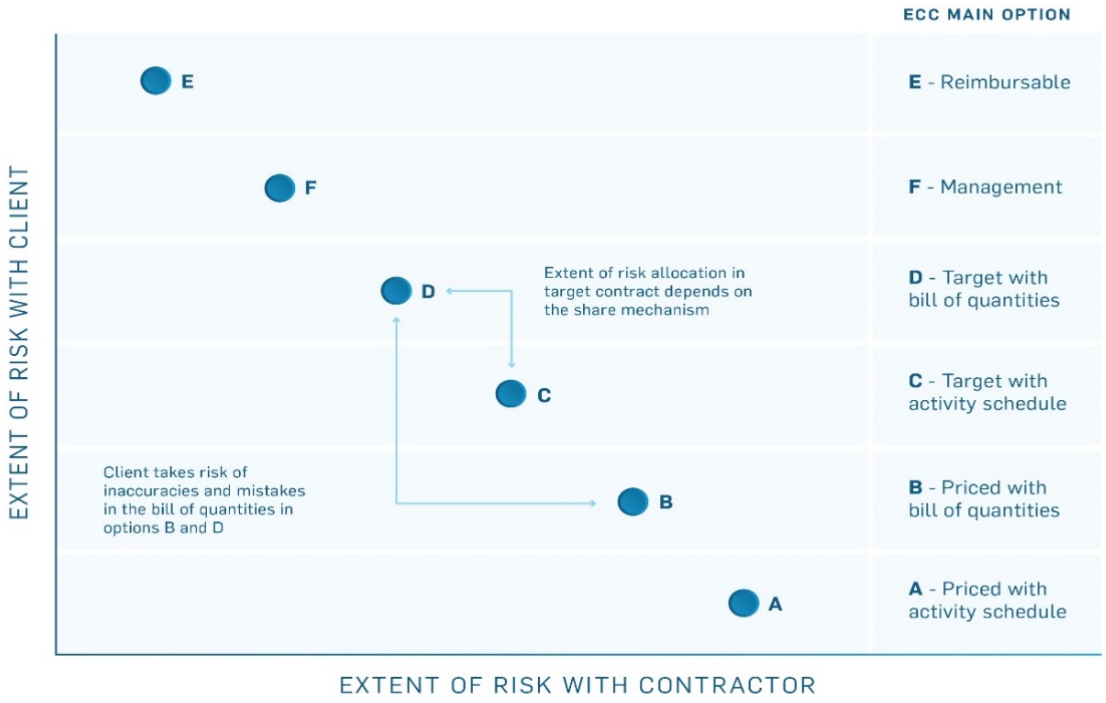

Figure 3-1 - ECC Payment Options

3.3. Procurement objectives

Prior to assessing options and developing a strategy for procurement of a project, it is necessary to understand clearly the focus of the procurement process. The objectives must be specific to the individual project. In addition, it is common to use some generic objectives to ensure that the general regulatory requirements will be met by any particular approach to procurement.

At this stage of the schemes development the procurement objectives comprise:

1. Deliver the scheme within the available MRN funding;
2. Ensure that best value is delivered, supporting the schemes BCR;
3. Ensure that appropriate quality is delivered to both Wiltshire Council and National Highways on their respective networks;
4. Reduce construction risks to a level that is As Low As Reasonable Practicable (ALARP); and
5. Ensure consistency in approach with the other Wiltshire Council promoted MRN schemes in order to achieve efficiency.

4. Procurement options

The following procurement options have been shortlisted for assessment through discussions with Wiltshire Council. All options mentioned form viable procurement routes for a scheme this size.

Table 4-1 - Procurement options assessed

Option	Description
Traditional Contract	Tender based on drawings, schedules, specifications and bills of quantities Contractor is not responsible for the design, only temporary works as required Traditional contracts are predominantly lump sum
Design and Build Contract	Tender for the design and construction of the main works by a single contractor Contractor is responsible for the design, planning, coordination and construction of the works
Early Contractor Involvement Contract	Usually enabled via a two-stage tender process, the first stage used to procure a contractor to have involvement in the design process Contractors can undertake the design work, or contribute to the design development
Framework Contract	Allows the client to procure services via tendering on a call-off basis as required Pricing mechanisms can vary from project to project

4.1. Traditional (Design – Bid – Build)

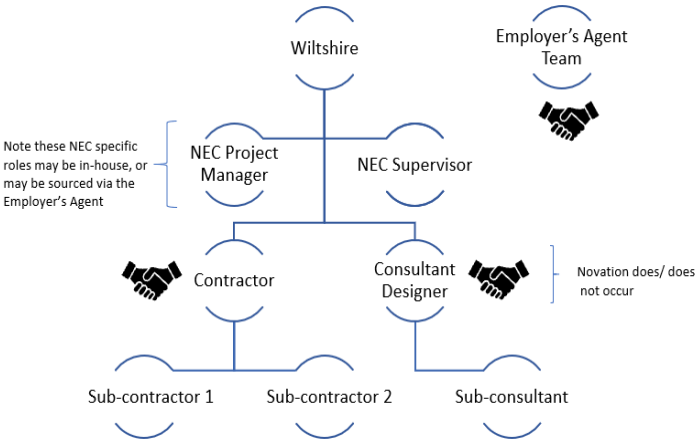

Figure 4-1 - Traditional Procurement Option

Traditional contract approach involves procuring a designer to undertake the preliminary and detailed design and manage the project through its statutory processes. The designer will support the preparation of tender documents for the construction contract.

A successful traditional contract approach requires the design to be well defined with little to no ambiguity or scope for change. In order to be effective this option will require a complete design with supporting documentation to be available to the contractor in the tender stage. This option would enable the contractor to accurately price for the works in the tender stage, reducing the risk premium associated with design uncertainty.

The advantages of traditional contracts are outlined in Table 4-2.

Table 4-2 - Traditional: Advantages and Disadvantages

Advantages	Disadvantages
Well known and established procedures, roles and responsibilities understood well	Overall project duration may be longer than other procurement routes due to its sequential process
Design led process – client can ensure quality prior to tendering	No input into the design by the contractor
Price certainty before commencement, a complete design and specification is available to the contractor	Strategy for contractors based around price competition
Changes are easy to implement and cost, bill of quantities can be used to price changes at tendered rates	Dual responsibilities for the design team and contractor

4.2. Design & Build

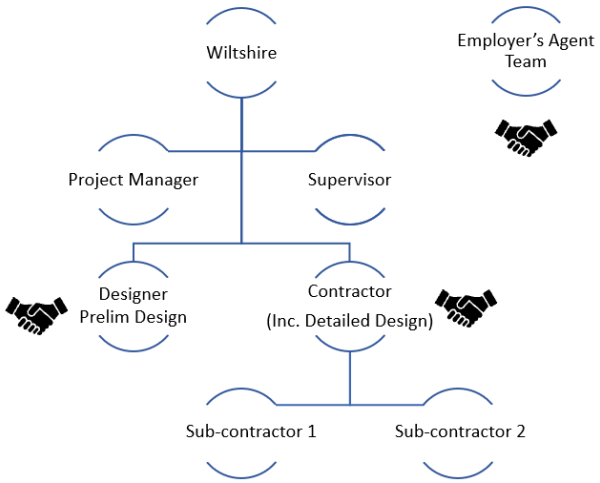

Figure 4-2 - Design and Build Procurement Option

Design and build contracts involve procuring a contractor who will be responsible for the design, planning, organisation and construction of the works to the employers' requirements. The contractor can use either an in-house design team or employ a consultant. Typically, a consultant employed by the client would prepare the conceptual and preliminary design and specification, with the contractor appointed to complete the detailed design and carry out the construction.

The contracts are usually awarded on a fixed price, lump sum contract basis. Price certainty is dependent on the design not undergoing any significant changes between the contract award and construction.

Design and build contracts are appropriate where there is a need to start works early on site, as design work can overlap with construction. They can provide significant benefits for complex and technically challenging projects, as the contractor can influence the design and provide their expertise earlier in a projects lifecycle when compared to traditional contracts.

The advantages of design and build contracts are outlined in Table 4-3 below.

Table 4-3 - Design and Build: Advantages and Disadvantages

Advantages	Disadvantages
Leads to an earlier commencement of the works on site	The contractor takes on the majority of the financial risk, therefore this may be reflected in the tender pricing as a risk premium
The contractor provides a single source of responsibility for the design and construction	Due to the fixed price nature of design and build contracts any changes required to the design will have cost and time implications
Provides early price certainty for the client as the contractor provides a pre-agreed price	The client has less control and influence over the design
The contractors experience can be utilised at an earlier stage to influence the design	The contractor may undertake the works via the cheapest route in order to reduce their own costs, impacting on the quality of the works

4.3. Early Contractor Involvement

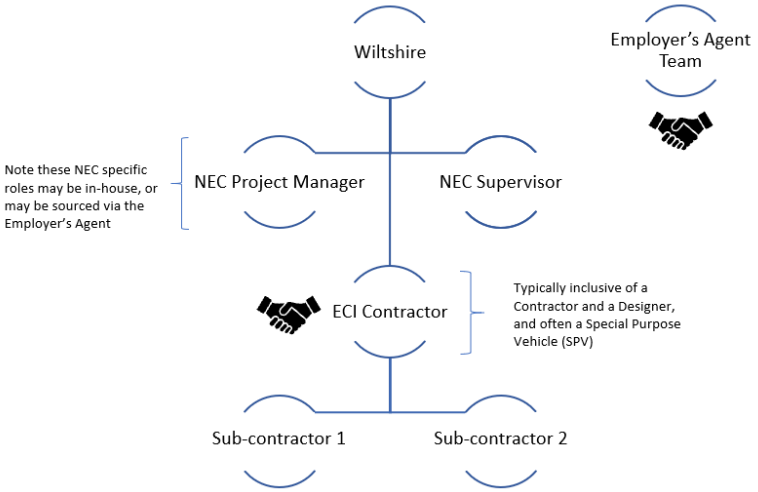

Figure 4-3 - Early Contractor Involvement Procurement Strategy

Early Contractor Involvement (ECI) is a non-traditional procurement route whereby the contractor's skills and experience are introduced at an earlier stage in the project. This introduction of the contractor's specialist skills in the pre-construction phase can influence and modify the design to achieve better buildability as well as cost-efficiencies. The contractor can assist with developing the cost plan and construction programme, introduce innovations, advise on build sequencing and construction risk.

ECI can be adopted on any construction project but is usually suited to large scale or technically complex projects, or projects that are not fully defined or developed. ECI may require the contractor to undertake elements of the early design work themselves or contribute to the design development carried out by a separate consultant.

Implementing this procurement approach requires the client to carefully consider the contractual conditions which the contractor will be appointed under, ensuring the appropriate clauses are in place at key milestones in the design development phase. A perceived disadvantage of this approach is that the contractor is appointed before the design has been developed in a great level of detail, leading to inaccurate prices for the construction works.

The timing of appointing a contractor should consider at what stage the design will be sufficiently developed to enable for accurate estimates to be prepared, and the clients brief to be well developed. The client is required to balance the early appointment of the contractor to bring greater potential benefits with the contractor being less able to provide accurate pricing information.

The advantages of ECI contracts are outlined in Table 4-4.

Table 4-4 - ECI: Advantages and Disadvantages

Advantages	Disadvantages
The contractor can contribute to the design process at an earlier stage, advising on buildability, sequencing and construction risks	Can be a degree of ambiguity around the contractors exact scope of works in the design stages
Decisions around the design and construction can be influenced from a wider team	As the contractor becomes involved in the project before it has been designed in detail, they are unable to give an accurate price for the construction works
The contractor can assist with planning applications required for the construction phase, such as land easement, waste disposal, ecological protection.	In the second appointment stage other tenderers may lost interest, due to the embedded contractor already having developed a strong understanding of the project and therefore having a competitive advantage

4.4. Framework

Framework agreements can be used by clients to reduce procurement timescales and risks. The options open to Wiltshire Council are to either use an existing framework, or setup a bespoke local framework based on their specific objectives.

4.4.1. Existing frameworks

The use of existing frameworks will enable Wiltshire Council to procure the works through a tried and tested process, saving costs and time associated with the pre-qualification stage of the tender process. Existing frameworks, particularly the Hampshire County Council Gen 4 have been considered as viable procurement routes for the M4 Junction 17 Improvements scheme.

4.4.2. Local framework

Wiltshire Council has identified a bespoke local framework option for the delivery of the three MRN schemes that they are promoting, and potentially other highway improvement schemes funded from other sources, including Housing Infrastructure Fund, Future High Streets Fund and Levelling Up Fund. The MRN schemes are M4 Junction 17 Improvements, A338 Southern Salisbury Improvements and A350 Chippenham Phases 4 & 5. These three schemes are of a similar nature, all having well defined designs being delivered predominantly within existing highway boundaries and similar timescales.

The local framework option would involve a pre-qualification stage to determine a shortlist of approved bidders based on quality requirements. Each scheme would follow an individual tender process in order to select a preferred supplier from the shortlist. The purpose of this option would be to reduce costs and timescales compared to undertaking separate tender processes for each MRN scheme. The benefits of the local framework approach compared to using existing frameworks are that Wiltshire Council can tailor the approach to the scheme objectives and considerations mentioned above. This option would also achieve resource savings for Wiltshire Council compared to the traditional approach of managing multiple full tenders in a short space of time.

Soft market testing has been undertaken with the Civil Engineering Contractors Association (South West) and with a number of key potential suppliers who were keen on the local framework concept, especially in view of the number of schemes potentially in the programme and their proximity. Contractor resources for bidding appear to be becoming an issue and rising workloads are enabling them to be selective about which schemes they tender for. Ongoing dialogue is being undertaken to keep them aware of the timescale for the Wiltshire Highway Framework.

Table 4-5 - Framework: Advantages and Disadvantages

Advantages	Disadvantages
Allows a client access to a previously approved supplier list and existing processes for procurement	Can limit access to the open market due only accessing suppliers through a shortlist
The client is able to instigate a selection procedure for individual projects without having to undergo a time-consuming pre-qualification procedure	Strategy for contractors based around price competition
A suitable pricing option can be selected by the client for each individual project	No input into the design by the contractor

4.5. Summary and options Assessment

To compare the procurement options above consideration was given to levels of time, cost, quality, and suitability given the scheme type and constraints. Table 4-6 summarises the level of certainty for cost, time and quality for each assessed option.

Table 4-6 - Procurement option summary

Procurement Option	Level of Certainty		
	Cost	Time	Quality
Traditional Contract	**High**	**High**	**High**
Design & Build	Medium	**High**	Medium/High
Early Contractor Involvement	Medium	**High**	Medium/High
Framework	**High**	**High**	**High**

4.5.1. Discounting of design and build and early contractor involvement options

There is little scope for innovation or significant modifications that a contractor would bring through involvement in the design stage due to site constraints. The M4 Junction 17 works involves widening all approaches to the gyratory as well as the gyratory itself, widening the slip roads to the M4 mainline and delivering full signalisation. The site around the gyratory and slip roads is limited by the existing highway boundary. The two overbridges are in place which span the M4 mainline and will not be modified as part of the scheme. The works do not involve any major structures or new sections of road through greenfield areas. These constraints provide little to no scope for major design alterations, the highway geometry is likely to be fixed from the preliminary design stage and purely refined during the detailed design stage.

The most challenging aspect of the scheme will be the implementation of traffic management that safely allows construction and the movement of traffic on the M4 mainline, Junction 17 gyratory and its approaches. The traffic management will also be required to ensure resilience for the SRN and eliminate the risk of traffic queuing on the mainline.

Overall the use of Design and Build and Early Contractor Involvement options are unlikely to deliver any significant benefits because of the scheme's spatial limitations, and their use could unnecessarily increase the risk of increased outturn costs.

4.5.2. Traditional contract option

The use of a traditional contract approach has been identified as a potentially suitable procurement route for the M4 Junction 17 Improvements scheme. The scheme is well defined with little scope for ambiguity or design changes in future stages of the project. The type of work and associated quality standards are well understood by competent contractors.

The types of risks associated with this form of contract would be well defined and be understood by potential bidders, removing the need for them to include additional risk allowances in their prices. Traditional procurement is well established and understood by Wiltshire Council, consultants, and highway contractors, and therefore this option should attract a high level of interest and increase the competitiveness of the bids.

Treating the M4 Junction 17 Improvements works as a standalone scheme would result in a traditional contract being selected as the most suitable procurement option. Wiltshire Council however will be delivering several similar schemes within a small geographic area and all with similar project schedules. The use of traditional contracts would mean that Wiltshire Council may be in a position of managing several tenders running concurrently.

The proposed procurement strategy would mean that the responsibility for ensuring appropriate specifications would remain with the client, assisted by their consultants. This would include consideration of whole life costs. The scheme consists of predominantly highway works, without significant structures, and the performance and longevity of highway materials are understood by the client engineers through their experience of maintaining a network of over 4,400km of road.

The choice of materials and specifications would reflect the requirement to reduce the need for frequent maintenance because of the importance of this junction and would focus on durable and easily available materials and common highway standards. The design and materials for other assets, including drainage, street lighting and traffic signals, would be selected at the detailed design stage to match existing materials and equipment used on the local highway network where appropriate. The management and maintenance processes for these are established and set out in the Council's highways asset management procedures.

In the current set up and circumstances, this type of delivery will be based on a traditional design, bid and build process, using NEC4 would offer the best value for money and reduce the risks associated with this scheme.

4.5.3. Local framework option

The use of a local framework would enable Wiltshire Council to set up a consistent approach to delivering their MRN schemes. The local framework option would reduce procurement timescales for each project as individual pre-qualification stages would be eliminated through the production of the preferred supplier list. This option would also reduce the resourcing requirements for Wiltshire Council in connection with the tenders for each project. However, this approach has been discounted due to Wiltshire Council undertaking a limited number of MRN/LLM schemes and that these are programmed for different times.

5. Pricing options

The use of NEC4 Engineering and Construction Contract has been identified by Wiltshire Council as the optimum contractual and pricing mechanism to deliver the works.

Table 5-1 - NEC4 Pricing Options

Pricing Option
Option A – Priced Contract with Activity Schedule
Option B – Priced Contract with Bill of Quantities
Option C – Target Contract with Activity Schedule
Option D – Target Contract with Activity Schedule
Option E – Cost-reimbursable
Option F – Management Contract

Based on the summary and recommendations for the procurement option in Section 4 other NEC4 options such as C and E which are suitable for early contractor involvement have not been assessed. Wiltshire Council have identified pricing Options A and B as suitable for use in the M4 J17 Improvements scheme procurement, through the local framework approach.

5.1. NEC4 Option A – Priced contract with activity schedule

Option A relates to a project programme whereby each construction activity is allocated a fixed price. Interim payments are made by the employer upon completion of each activity. The contractor bears the risk of undertaking the works at the agreed prices, therefore this would attract greater risk premiums increasing the schemes outturn costs.

5.2. NEC4 Option B – Priced contract with Bill of Quantities

Under Option B a bill of quantities (BoQ) is prepared by a cost consultant. The BoQ provides project specific measured quantities for the items of work identified in the scheme drawings, specifications and other reports. From the employers specified quantities the contractor prices the work accordingly usually via a list of rates. The contractor takes on the risk of delivering the works to the agreed price in the BoQ.

5.3. Summary

The use of NEC4 ECC Option B is the preferred pricing option to be used by Wiltshire Council. The M4 Junction 17 works will be well defined at the completion of the detailed design and construction preparation stages, giving the contractor confidence in the quantities provided in the BoQ, whereby the use of an activity schedule may attract higher risk premiums. Any variations can be priced at the tendered rates, making the variations easy to understand. As there is little ambiguity in the proposed works the lowest price tender will usually present the best value for money, as the contractors will be pricing against identical works with little to no scope for change. The use of a BoQ will mean there will be no need for the contractor to build in a risk premium which would artificially inflate the contract price.

6. Risk management

6.1. Risk allocation and transfer

The standard NEC4 approach to risk will be utilised as part of the contract. NEC4 allocates risk through early warnings and compensation events, where a contractor can potentially claim for additional unforeseen work at Wiltshire Councils risk.

The early warning system is used where there are any changes to the agreed scope or specification to the works. The Contractor must notify the Wiltshire Council Project Manager within 8 weeks of becoming aware of an event that they consider to constitute a compensation event.

6.2. Sharing of costs and risks

Sharing of cost contributions is a mandatory requirement for MRN schemes, where the scheme promotor will honour by agreement with their Section 151 officer to underwrite the prescribed contribution and meet bid expectations. Cost overruns arising through the procurement and construction process will be managed by Wiltshire Council. Wiltshire Council has adopted the NEC4 Engineering and Construction Contract (ECC) as it's standard form of contract for this scheme. The ECC ensures a collaborative approach between client and supplier, and this standard approach allows for consistency between supply chain, internal processes, staff and performance.

6.2.1. Approach to procurement risks

The commercial risk profile will change throughout the lifecycle of the project, risk management will be a continuous and standardised activity throughout.

A Risk Manager has been appointed onto the project to manage and supervise project level risks. A Risk Management Plan will be produced during the conceptual design stage, outlining the risk management strategy for current and future phases of the project leading into the tender process. The risk management strategy will be developed through the use of a live Risk Register and Risk Workshops to identify risks to the management of the contractor's cost, quality and programme. The mitigations identified through this process will be used to influence the design of the works, or inform the content of the Instructions to Tenderers, the Bills of Quantities and the Specification documents. Standard industry risk probability analysis software will be used in this process.

The project team have significant experience of managing and supervising these types of contract and the risks involved. The detailed design and development of the specification will take these risks into account in developing the design and tender documentation. The detailed design process up to tender invitation will focus on managing the risks associated with the project by the development of a comprehensive Risk Register.

A Cost Consultant will be appointed to the project team to advise on any changes in market forces, rates and materials. The Cost Consultant will take responsibility for drafting of the Bills of Quantities, Invitations to Tenderers and advise on the details of the proposed tender strategy.

6.2.2. Construction risks

The main risks associated with this scheme and the other Wiltshire MRN schemes are in connection with the traffic management limitations, restricted working space, and the other issues involved in working on live carriageways at busy junctions. Previous experience of successfully dealing with such situations will be expected to be demonstrated by potential bidders at the first stage of the procurement process. There are known to be suitable contractors with the relevant experience to manage these risks effectively who have already indicated that they would be interested in bidding.

The gyratory widening will be complex due to the need to maintain suitable access to the M4, A350, A429 and B4122. It will be necessary to keep delays to a minimum and ensure network resilience of the SRN and MRN. The phasing of the traffic management will need to mitigate against any potential queuing on the M4. This will therefore require an experienced highway contractor to be appointed with demonstrable experience of implementing safe systems of work on the SRN.

The engineering works to the gyratory are straight forward and will be well defined upon the completion of preliminary design. Construction risks will remain such as buried services, unknown ground conditions and sensitive ecological receptors.

7. Contract management

Wiltshire Council will setup a dedicated contract management team that will be in place before, during and after the scheme contract. The team will comprise the following members;

- Contracts Manager
- NEC4 Supervisor (site based)
- Clerk of Works
- Quantity Surveyor (QS)

The Contract Management team will complete all as-built information and the Health and Safety file. The QS team who had input into the design phase will remain involved during the works, to ensure continuity of the knowledge built up during the schemes development.

8. Design responsibility and ownership

8.1. Design risk

Design is key to the success of any infrastructure project. The M4 Junction 17 Project is no different in this regard.

A key aspect to this success is ensuring that clarity exists around design risk – design risk in this context referring to liability should the design need to change following the appointment of a Contractor.

Put another way, it is the answer to the question: if the design changes for whatever reason after the Contractor is appointed, is the Contractor going to be afforded relief (time and money) or is it a cost that Wiltshire Council is to bare?

Wiltshire Council need to be clear as to the extent of design risk they are willing to adopt. In turn this will need to be set out in the conditions of contract. In this context it is worth noting that should Wiltshire Council be willing to retain the majority of design risk, it needs to ensure sufficient risk monies are available, since civil construction works tend to involve "change".

9. Pre-procurement market engagement

9.1. Market analysis (high-level)

Purchasing within the construction/ infrastructure sector – be that for services, consultancy or works – is expanding. Despite the impact of the COVID-19 crisis and Brexit the infrastructure sector has seen significant commitment by government through 2020: £25bn plus for the roads sector, £50bn plus for the water and sewerage, and a similar amount for the rail sector.

Such increased activity introduces both challenges and opportunities. A particular challenge in the context of the project (and any major civils/ infrastructure project at present) is the need for clients to make their projects attractive to the market – the availability of work can drive selective tendering by both consultants and contractors, and this is something we are seeing evidence of developing across the UK.

There can be a myriad of reasons behind an organisation's decision to becoming selective as to their bidding activity (locality, locked up resource, commercial pressures, all play a role). A key theme beginning to emerge however is that the market is becoming uncomfortable with extensive transfers of risk, particularly when coupled with a lack of information, lack of design development and so on.

It is therefore felt key that there is market consultation as to proposed route for procurement – both in terms of the delivery model and contractual model to be deployed. A dialogue with the market pre-procurement can also help identify potential opportunities for improvement to proposals (or indeed innovative ideas).

9.2. Market Engagement

Care must be taken not to distort competition when engaging with the market and to safeguard matters we advise that the engagement is conducted using the following measures:

- Openly announcing the preliminary market engagement via the publication of a prior information notice on the UK government's portal
- Giving bidders enough time to be able to organise attending such an event
- The sharing of information about the findings of market engagement post holding the event, again giving providers enough information after the event to make meaningful use of the information.

We recommend that there 3 stages to the engagement process:

- Stage 1 – an event to kick off the engagement where aspects such as the nature of the project, programme, proposed procurement etc. can be set out.
- Stage 2 – more detailed engagement with bidders to be had on a one-to-one basis, focusing on procurement/ commercial and technical matters.
- Stage 3 - an opportunity be afforded to bidders to come back in writing regarding matters, post Stages 1 and 2.

The resulting findings from the above engagement process will in turn feed into an update of this OPS.

10. Tender process

10.1. Soft market testing

Wiltshire Council would undertake soft market testing to establish the markets appetite for the schemes, and to understand any concerns or issues around the procurement route. An Initial Prior Information Notice would be issued after, as well as an initial presentation given to interested suppliers. Feedback would be sought from interested suppliers and reviewed by Wiltshire Council.

Set out below is a link to F+G's UK Construction Intelligence Report for Q3 2021:

UK Construction Intelligence Report (pitchspace.net)

The UK economic recovery has continued throughout 2022. By the summer it was reported UK business confidence had hit a four-year high, thanks to growing optimism about the post-Covid recovery, with the successful vaccine rollout, removal of lockdown restrictions and changes to self-isolation rules all contributing to greater optimism among firms. At the same time concerns about supply chain issues and staff shortages were highlighted as reasons which could constraint the economy.

It should be noted that when conducting the analysis set out in this report, consideration has been given to this market intelligence. Moving forward it is important that Project continues to keep abreast of how the marketplace is developing.

10.2. Pre-qualification and price/quality split

A pre-qualification stage will be carried out to determine a shortlist of suppliers. This will ensure that all shortlisted suppliers have the required knowledge and expertise to deliver the works, as well as requiring demonstrable evidence of delivering similar schemes. Upon arriving at the shortlist of suppliers the individual work packages and tender documentation will be developed. Consideration will be given to the price/quality ratio to be applied to the assessment of tenders. Wiltshire Council has previously used a 70:30 ratio for price/quality, however a 60:40 ratio will be considered during the detailed design and construction preparation stage. It is envisaged that the quality element will be used to assess the sustainability proposals from the tenderers, with regards to carbon measurements, monitoring and reduction. It will also be used to assess social value brought by suppliers in terms of local training and upskilling, community engagement as necessary and interaction with educational establishments.

10.3. Pricing mechanism and standalone tenders

The final stage will be to determine the pricing mechanism for each individual scheme, for M4 Junction 17 the recommendation is NEC4 ECC Option B. A standalone tender will be undertaken for each scheme, and a preferred supplier selected based on answers to quality questions and pricing submissions.

10.4. Tender process summary

The tender process for the local framework option will comprise:

1. Identify which schemes which would fall within the framework;
2. Undertake soft market testing / market engagement to establish the markets appetite for the schemes, and any major concerns or issues surrounding the procurement route;
3. Initial Prior Information Notice;
4. Initial presentation given to interested suppliers;
5. Feedback and comments requested from the market;
6. Carry out 1-2-1 discussions with suppliers to help achieve feedback from market;
7. Review of feedback to identify any key messages / areas for development;
8. Pre-qualification stage – info required ref suitability of potential suppliers in terms of knowledge, expertise, track record, financial status accreditations etc;
9. Pre-qualification assessment to identify short list of approved suppliers;
10. Development of works information and tender documentation for each individual scheme;
11. Determine the Price / Quality split for evaluating tender responses;
12. Mechanism for pricing determined, the current recommendation as per Section 5 is NEC4 Option B – Priced Contract with Bill of Quantities;
13. Identify the quality questions to be issued to suppliers;

14. Undertake a stand-alone tender for each scheme; and
15. Standalone tender review and appointment for each scheme.

11. The Project's current Strengths, Weaknesses, Opportunities and Threats (SWOT)

Set out below is a summary of the Project as it currently stands – from the perspective of strength, weaknesses, opportunities, and threats:

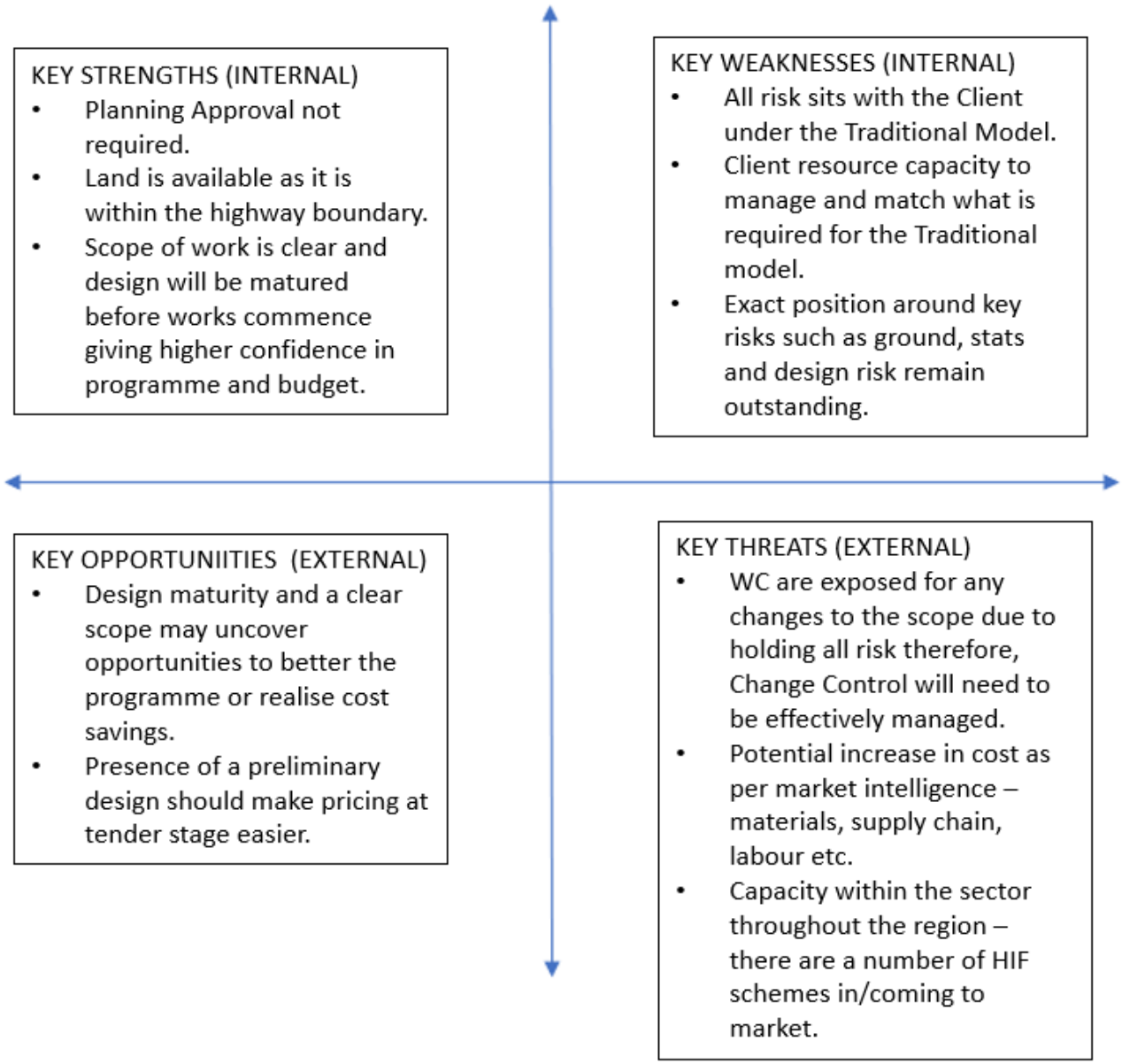

Figure 11-1 - M4 J17 Current SWOT Analysis

12. Draft recommendations

It is recommended that the project be progressed on the basis of the following:

1. That subject to Recommendation 2, delivery of the Project is brought about through the deployment of:
    a. A Traditional Delivery model whereby the preliminary and detailed design is progressed by Wiltshire Council, prior to the engagement of a contractor (it should be noted that the risk profile will predominantly see the Key Risks pertaining to the Project sitting with Wiltshire Council),
    b. a contractual model that utilises NEC4 ECC Option [A][B]; and
    c. the use of the “Restricted Procedure” under the Public Contracts Regulation 2015.
2. That the delivery model and contractual arrangements set out above are tested as part of a market engagement exercise, with that market engagement exercise to be held/ undertaken as soon as possible.

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