



Lincolnshire County Council

NORTH HYKEHAM RELIEF ROAD

Commercial Case – Outline Business Case





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NORTH HYKEHAM RELIEF ROAD

Commercial Case – Outline Business Case

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1 COMMERCIAL CASE OVERVIEW

1.1 INTRODUCTION

This section of the Outline Business Case describes the Commercial Case for the North Hykeham Relief Road (NHRR) and aims to demonstrate that the proposal is commercially viable. It sets out the procurement strategy that will be used to engage the market and presents evidence on risk allocation and transfer. It also outlines contract timescales and the implementation timescale, as well as detailing on the capability and skills of the team delivering the project and any personnel implications arising from the proposal.

Following the scheme’s approval at the OBC stage, Lincolnshire County Council’s (LCC) main aim will be to ensure that NHRR is delivered to time and within/on budget, with a robust contracting and procurement strategy in place.

The Department for Transport’s (DfT’s) guidance document ‘The Transport Business Case’ outlines the matters that should be covered within the Commercial Case for a scheme. Table 1 sets out how and when these minimum requirements should be outlined (initial findings), completed (a full assessment) and updated (past information is verified and new information incorporated) for each iteration of the business case.

Table 1 – Commercial Case requirements

| Issue | Description | Outline | Full |
|---|---|-----------|-----------|
| Introduction | Outline the approach taken to assess commercial viability. | Completed | Updated |
| Output based specification | Summarise the requirement in terms of outcomes and outputs, supplemented by full specification as annex. | Completed | Updated |
| Procurement Strategy | Detail procurement/purchasing options including how the economic, social and environmental factors outlined in the Economic Case will be secured | Completed | Updated |
| Sourcing options | Explain the options for sources of provision of services to meet the business need e.g. partnership, framework, existing supplier arrangements, with rationale for selecting preferred sourcing option. | Outlined | Completed |
| Payment mechanisms | Set out the proposed payment mechanisms that will be negotiated with the providers e.g. linked to performance and availability, providing incentives for alternative revenue streams (see the Office for Government Commerce’s Achieving Excellence briefing for advice on payment mechanisms for construction projects). | Outlined | Completed |
| Pricing framework and charging mechanisms | To include incentives, deductions and performance targets. | Outlined | Completed |
| Risk allocation and transfer | Present an assessment of 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. | Outlined | Completed |
| Contract length | Set out scenarios for contract length (with rationale) and proposed key contractual clauses. | Outlined | Completed |

| Issue | Description | Outline | Full |
|---------------------|---|----------|-----------|
| Contract management | Provide a high-level view of implementation timescales. Detail additional support for in-service management during roll-out / closure. Set out arrangements for managing the contract through project / service delivery. | Outlined | Completed |

1.2 STRUCTURE OF THE DOCUMENT

The remainder of this document is structured as follows:

- **Chapter 2 Procurement Overview:** highlights the key considerations such as the scope of the procurement exercise, the procurement principles, existing arrangements, output based specification and any constraints;
- **Chapter 3 Procurement Strategy & Sourcing Options:** This section presents the procurement options available and the expected procurement strategy;
- **Chapter 4 Contracting:** examines the likely contracting process in more detail including payment mechanisms, risk allocation and contract management; and
- **Chapter 5 Summary:** provides a summary and the outlines the expected procurement approach for the NHRR scheme.

2 PROCUREMENT OVERVIEW

2.1 OVERVIEW

This section summarises the key procurement considerations, scope, existing arrangements and reviews the procurement options and expected approach. This section covers the following:

- Procurement scope;
- Procurement principles;
- Output base specification;
- Existing arrangements and constraints;
- Programme; and
- Procurement options & strategy.

2.2 KEY CONSIDERATIONS

2.2.1 PROCUREMENT SCOPE

The geographical extent of the proposal is highlighted within Figure 1. The preferred solution provides a dual carriageway between the A46 and the A15 where it will link into the Lincoln Eastern Bypass (LEB) which is currently under construction. Once implemented the route will create a continuous orbital route around the city.

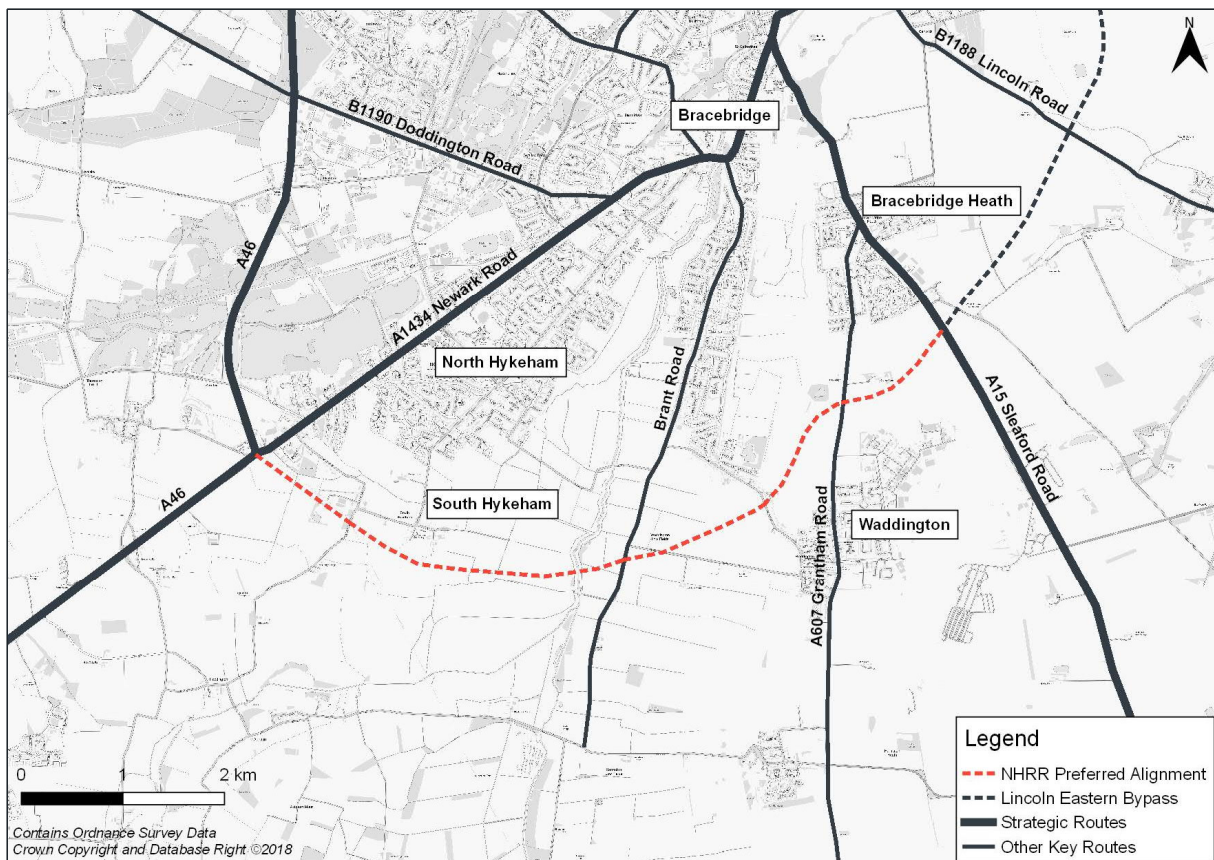


Figure 1 – North Hykeham Relief Road General Arrangement

The delivery of the scheme will include the construction of a new dual carriageway, a new bridge structure over the River Witham and new pedestrian, cycle and equestrian crossing. It will also include the provision of new junctions with the existing highway network, landscaping and drainage infrastructure. The procurement strategy for the scheme will include the provision of services to support the design and preparation stage and the construction of the scheme. Further details regarding the scope of the procurement exercise are set out below:

Design & Preparation

The options assessment, feasibility design development and production of the Outline Business Case (OBC) to date has been delivered by WSP through Lincolnshire County Council's Professional Services Contract. The contract commenced on 1st April 2010 and has been secured until 31st March 2020. This contract has provided the necessary planning, design and assessment support to enable the scheme to progress and it is envisaged that the contract will provide a stable delivery mechanism through to 2020. However, the procurement strategy will also cover the design and preparation support beyond the end of the existing contract.

Legal Advice and Support

In addition to the design work the development of the scheme will also require legal advice and support. The scheme will require planning approval, the acquisition of land and the approval of the relevant statutory orders - all of which will require legal support.

Land & Property

The development of the scheme will also require advice land acquisition, valuation and compensation support. This is currently being provided through the contract with VINCI Facilities Partnerships Ltd which provides a range of facilities management services including property management, energy management and estates management.

Construction

As detailed above, delivery of the NHRR will result in the construction of the following:

- A 70mph dual carriageway link between the A46 on the western side of Lincoln and the A15 / LEB Junction. The scheme will tie into the existing at-grade five arm roundabout at A46 Western Relief Road / A1434 Newark Road / A46 (T) / Middle Lane and join the A15 / LEB junction on the eastern side of Lincoln through an additional fourth arm;
- New junctions with the following existing roads:
 - **South Hykeham Road:** A new four arm at-grade roundabout junction will be provided which will maintain access onto the local road network and will provide access to the SWQ;
 - **Brant Road:** A new four arm at-grade roundabout junction will be provided which will maintain access onto the local road network; and
 - **A607 Grantham Road:** A four arm at-grade roundabout will be provided, this will support maintain access to the A607 Grantham Road and support access to RAF Waddington.

- Bridge structures at the following locations:
 - **River Witham Overbridge:** This will form a 119m 3 span bridge and carry the NHRR over the River Witham;
 - **Station Road Overbridge:** This will form 47m single span bridge which will carry Station Road over the NHRR;
 - **A46 / NHRR Roundabout Non-motorised User (NMU) Overbridge:** This will provide a crossing over the NHRR to maintain National Cycle Network route 9;
 - **Wath Lane Overbridge:** A NMU structure will be provided over the NHRR to maintain the existing public right of way along Wath Lane. Further options are being developed to consider allowing use by agricultural vehicles; and
 - **Viking Way / A607 Grantham Road NMU Overbridge:** A NMU structure will be provided over the NHRR to maintain the existing public right of way along Viking Way and the cycle route along the A607 Grantham Road.
- Highways Drainage: The highways drainage will be developed to incorporate the principles of Sustainable Drainage Systems (SuDS); and
- Landscaping: Targeted landscaping and planting to reduce the visual impact of the scheme at key points along the route.

Monitoring & Evaluation

The procurement strategy will also need to cover the provision of services to support the delivery of the Monitoring and Evaluation (M&E) stage of the project. This will need to cover the pre-construction and post construction data collection and assessment. Further details of the indicative M&E scope and programme are provided in Section 9 of the Management Case.

2.2.2 PROCUREMENT PRINCIPLES

The procurement process will be run in accordance with Procurement Lincolnshire which is a partnership of Lincolnshire District Councils and LCC and operates at a strategic level focussing on delivering activities which will lead to financial savings and improved service delivery. The current principles of the partnership are set out within the Procurement Lincolnshire Strategy 2016 - 2019. It should be noted that scheme construction is forecast beyond this period.

The procurement options described within this document will support the vision of the the strategy which is *'to deliver commercially effective and compliant procurement through a tailored service that is responsive to our partner's needs and adapts to the challenges presented. In doing so Procurement Lincolnshire will procure goods, services and works by the economic, efficient and effective means, reflected in the resultant contracts which will work harder to support the people of the county through the delivery of additional social value'*.

The strategy highlights that the vision will be achieved through three strategic objectives which are:

- Delivering efficiencies – this involves utilising more innovative procurement procedures to ensure that the partners secure the best possible price for the desired level of quality, and a

renewed focus on the contractual arrangements to ensure there is optimum risk transfer between partners and suppliers.

- Enabling commercial transformation – this involves deploying commercial acumen from the outset and in doing so partners are committing to the early involvement of Procurement Lincolnshire.
- Delivering social value – Procurement Lincolnshire consider the following values important to the people of Lincolnshire and commit, alongside partners, to consider them in a proportionate way where relevant to the contract when procuring goods, services or works:
 - a. Economic values
 - i. Growing the local economy
 - ii. Paying the living wage
 - iii. Increasing employment opportunities
 - b. Environmental values
 - i. Environmental sustainability
 - ii. Reduction of waste
 - iii. Reduction of carbon emissions
 - iv. Improving outdoor spaces
 - c. Social values
 - i. Encouraging health and well-being
 - ii. Improving safety
 - iii. Improving community participation and reducing social isolation
 - iv. Improving housing (quality and quantity).

Adhering to these principles will ensure the scheme is commercially viable and the outcomes highlighted within Section 2.2.3 are achieved.

2.2.3 OUTPUT BASED SPECIFICATION

The procurement strategy and process will enable LCC to appoint suitable suppliers to support the design, preparation and building of the NHRR scheme. The Commercial Case is based on a defined number of strategic outcomes and outputs, against which the procurement strategy and options can be assessed. A more detailed output specification is provided in Appendix A and the strategic outputs and outcomes are summarised below.

The strategic procurement outputs are:

- Provision of services to support the preliminary and detailed design process;
- Provision of services to support the successful completion of all statutory procedures including planning and land acquisition;
- Construction of the scheme; and
- Monitoring & Evaluation

The outcomes which the preferred procurement strategy must deliver are to:

- Achieve cost certainty, or certainty that the scheme can be delivered within the available funding constraints;
- Ensure best value is delivered
- Ensure the scheme is delivered to programme;
- Ensure stakeholders' acceptance and support for the procurement strategy;

- Develop the scheme to the expected standards and quality;
- Optimise further design and preparation costs with respect to scheme design; and
- Utilise contractor experience and input to the construction programme to ensure the implementation programme is robust and achievable.

2.2.4 EXISTING ARRANGEMENTS

As described in Section 2.21 the design and preparation of the NHRR including the feasibility design development and OBC is currently being delivered by LCC in collaboration with its Professional Services Partner, WSP. The contract spans a wide range of services broader than those typically delivered by Highways, Structures, Geotechnical, Transport Planning and Environment. The technical works and services which have been delivered as part of the contract include highways; topographical surveys; structures design; structures inspection; geotechnical; quantity surveying; funding bid support; process development; street lighting; public inquiry support and expert witnesses; transport planning; environment; planning; drainage; flood alleviation; and major projects.

It is intended that the design and preparation phases of the project up to 2020 will continue to be supported by the Professional Services Contract. The use of the existing partnership to progress the design and preparation will ensure that the technical delivery team identified in Section 4 of the Management Case will continue to support and deliver the next critical stages of the project. This ensures continuity and maintains the robust delivery and governance framework currently in place.

In respect of the provision of legal advice and support, this is currently provided through the Council's internal service (Lincolnshire Legal Services) and through external specialist Counsel support. This is provided from a select list of Chambers which LCC has the option to use and is procured on an as required basis. These arrangements will continue to be used for the development of the NHRR.

The advice and support in relation to land acquisition, valuation and compensation support is provided through the contract with VINCI Facilities Partnerships Ltd. The 10 year joint venture started in 2015 and the scope includes providing a full range of facilities management services as well as project management, property management, energy management and estates management (including valuation, land acquisition and compensation) to the council's corporate property estate. Again, these arrangements will continue to be used for the development of the NHRR.

LCC currently have use two routes to procure suitable contractors for the delivery of major highways schemes:

- **Restricted Procedure:** A restricted procedure using a combination of price and quality award criteria to allow evaluation of the most economically advantageous tender
- **Midlands Highway Alliance Medium Schemes Framework 3 (MSF3):** The Highway Alliance MSF3 allows LCC to appoint contractors for the execution of highway improvements, highway maintenance, highway infrastructure works (including structures), public realm works and other infrastructure works. The four-year framework runs from May 2018 until 2022 and operates under the NEC4 framework contract with work packages awarded under NEC4 engineering and construction contract option C. There is no limit to the size of the project and LCC can award to any of the four contractors on the framework via the following routes:
 - Mini-bid competitive tender

- Direct Call-off
- Regional Direct Award

2.2.5 PROGRAMME

The major milestones of the project including an indication of the timescales for the procurement exercise is presented in Table 2 below.

Table 2 – NHRR milestones

| Milestone | Forecast Start Date | Forecast Finish Date |
|---|----------------------------|-----------------------------|
| Options Assessment | July 2017 | April 2018 |
| Stakeholder & Public Engagement | Jan 2018 | June 2018 |
| Outline Business Case | August 2018 | December 2018 |
| Preliminary Design Assessments / Surveys | September 2019 | September 2020 |
| Preliminary Design Assessments | September 2020 | May 2021 |
| Preliminary Design | September 2020 | May 2021 |
| Pre-Planning Application Stakeholder & Public Engagement | November 2020 | May 2021 |
| Planning Application Preparation | January 2021 | November 2021 |
| Planning Application Determination | November 2021 | May 2022 |
| Statutory Procedures – Preparation | May 2022 | June 2023 |
| Public Inquiry & Approval | June 2023 | November 2023 |
| Detailed Design | August 2023 | February 2024 |
| Procurement – (flexible date based on procurement decision) | November 2023 | May 2024 |
| Full Business Case | May 2024 | September 2024 |
| Pre-construction Assessment | March 2024 | August 2024 |
| Construction | September 2024 | November 2026 |
| Monitoring and Evaluation (One-Year After Opening) | January 2028 | July 2028 |
| Monitoring and Evaluation (Five-Years After Opening) | February 2032 | July 2032 |

3 PROCUREMENT STRATEGY & SOURCING OPTIONS

3.1 OVERVIEW & HIGH-LEVEL STRATEGY

The following section provides an overview of the procurement options available for the delivery of the scheme including for the provision of professional services and construction. It identifies the potential options, the opportunities, risks and challenges and presents the emerging high-level strategy.

3.1.1 PROFESSIONAL SERVICES – DESIGN & PREPARATION

As detailed in Section 2.2.4 it is intended that the design and preparation phases of the project up to 2020 will continue to be supported by the existing Professional Services Contract. The next phases of the project will involve completing the necessary assessments to inform the preliminary design and developing the preliminary designs for the highways, structures, landscaping, drainage and mitigation designs. Using the existing Technical Services Partnership will:

- Provide LCC with the necessary technical services required for the preparation of the preliminary designs including transport planning support, environmental assessment and highways / structures / landscape / drainage design.
- Ensure that LCC are able to use the existing technical delivery team to progress and support the next critical stages of the project;
- Provide a robust existing procurement route for the delivery of the preliminary design; and
- Ensures that there is no impact on programme and a separate procurement exercise is not required for the next immediate phase of work.

To support the development of the NHRR after 2020 and the end of the existing Professional Services Contract, LCC will use the new Highways 2020 contract. LCC has now formally commenced the procurement exercise for the contract and the OJEU notice was released in early October 2018. A single provider will be appointed for each of the three lots being tendered:

- Lot 1 - Highways Works: This will cover highways maintenance;
- Lot 2 - Traffic Signals: This includes routine maintenance, cleaning, replacement and emergency response; and
- Lot 3 - Professional Services: This will include highways/ structures / drainage / landscape design services, topographic surveys; environmental assessment and transport planning.

The contract will use the New Engineering Contract NEC4 model. The contract is expected to be awarded in November 2019 formally commencing in April 2020 and be in place for a maximum of 12 years. As part of the procurement exercise LCC assessed a number of different models and options including private funding, single provider, multiple providers, framework, joint venture, in-house and in-house with top up, with five main options (a total of 17 options were initially identified) being considered in detail, these were:

Table 3 – Highways 2020 Procurement Options

| Option Reference | Description |
|------------------|--|
| Option 1 | Single provider contractor for works contract to remain as is. Design service top up for current LCC in house design function Separate works contract for Traffic Signals |
| Option 2 | Single provider contractor with improved reactive service incentivisation for works contract. Single Provider for design services with LCC design function externalised Separate works contract for Traffic Signals. |
| Option 4 | Works contract split down into multiple providers (reactive service, schemes, and cyclical). Design service top up widened to broader highway service Separate contract for Traffic Signals. |
| Option 13 | Single provider contractor with reactive service brought in house. Design service top up widened to broader highway service. Separate works contract for Traffic Signals. |
| Option 17 | Single provider contractor with improved reactive service incentivisation for works contract. Design service top up widened to broader Highway Service. Separate works contract for Traffic Signals. |

LCC identified that Option 17 would provide the most effective and efficient mechanism for delivering the Highway Service in Lincolnshire, this was approved by LCC Executive Committee based on the following recommendations:

- *‘The option improves on the existing model through a knowledge capture exercise from the current arrangement and offers the opportunity for ongoing improvement;*
- *The risks involved with moving to an alternative procurement model at this stage were not offset by the challenges that the existing model faces;*
- *Lessons learnt, market analysis and local authority benchmarking confirmed that the model is the correct solution for Lincolnshire County Council; and*
- *Implementing these improvements, together with the continued implementation of the Future Operating Model, will enable Lincolnshire to continue to be a leading authority in the Highways sector.’*

This will provide LCC with a robust mechanism for accessing the necessary technical support for the planning application preparation, stakeholder engagement and statutory approvals preparation as well as the final business case submission.

In respect of the provision of legal advice and support and land and property, as detailed in Section 2.2.4 LCC will continue to use the existing arrangements to support the design and preparation of the scheme. This provides a robust mechanism for accessing the specialist advice and support and will allow LCC to continue to use this for the development of the NHRR.

3.1.2 CONSTRUCTION

LCC has also completed an initial review of the potential delivery routes for the detailed design and construction phase of the NHRR. The delivery options include Design and Build, Early Contractor Involvement (ECI) with Design and Build and a standalone build contract.

These options are further explored and described in the Table 4 below.

The review of the potential options has identified that Option 4 (see Table 4) is likely to provide the most suitable approach, this would result in LCC completing the preliminary and detailed designs and then procuring a contractor to complete an ECI phase and construct the NHRR. The ECI element would be used to inform the development of the preliminary designs (prior to submission of the planning application) and as detailed in Table 4 this approach would have the following advantages:

- LCC would retain control of the scheme design through to completion of detailed design.
- It would enable LCC to pass on all or most of the risk associated with a scheme to the Contractor.
- A similar approach was used to develop the Lincoln Eastern Bypass allowing LCC to follow a robust procurement route as incorporate the major lessons learnt;
- The ECI phase would help inform the development of the design, this has the following advantages for the delivery of the NHRR:
 - It would help to identify and mitigate the key construction risks;
 - Input into the construction management process and design – this will be beneficial for dealing with the more sensitive areas (flood risk zone, crossings of the River Witham and Station Road and the area through the Lincoln Edge); and
 - Provide earlier input into the planning application and land acquisition phases ensuring that adequate construction land is included within the planning boundary.

It is expected that this approach would use a phased contract, with the first phase covering the ECI element and the second covering the construction of the NHRR.

LCC has also assessed the potential procurement mechanisms for progressing the above approach, as detailed in Section 2.2.4 there are currently two options:

- **Restricted Procedure** - A restricted procedure using a combination of price and quality award criteria to allow evaluation of the most economically advantageous tender. This will be advertised and awarded in compliance with the current Procurement Regulations and make use of the two-stage process to determine the preferred bidder; and
- **Midlands Highway Alliance MSF3** – This approach would use one of the three sub-options (mini-bid competitive tender, direct call-off, regional direct award) to appoint one of the four contractors.

However, as the MSF3 contract expires in 2022 and there are no details concerning the next iteration of this contract, it will not be available for the NHRR project and the award of a phased ECI and build contract. Therefore, LCC are working on the assumption that the restricted tender

procedure will be the most likely route. This will continue to be reviewed as the scheme progresses and further details are known concerning the next iteration of the Midlands Highway Alliance MSF3.

Table 4 – Procurement Route: Detailed Design & Construction

| Option Ref | Delivery Route | Description | Assessment |
|------------|----------------------|--|--|
| 1 | Design & Build | <p><u>Contractor Design & Build</u></p> <ul style="list-style-type: none"> Under this option LCC would continue with preliminary design development and the completion of the statutory process up to the point where the project is ready to proceed to the detailed design and construction phase. This option has no Early Contractor Involvement and the Detailed Design and Build Contractor would normally only be appointed after the statutory process is complete as it is only at that point that the progress of the scheme and its scope can be accurately ascertained. | <ul style="list-style-type: none"> This option would allow LCC to pass on all or most of the risk associated with a scheme to the Contractor. It is likely to result in the cheapest initial tendered construction cost. Contractor input into the construction phasing and management would be provided at an earlier stage. No ECI as part of the initial design phase or in advance of the planning and statutory approvals phase. Earlier contractor involvement could help identify additional land requirements that will support the construction phase. There is a limited degree of cost certainty until the tenders are received. This may result in tendered costs exceeding budgets, leading to possible delays in delivery due to having to re-tender or re-evaluate the affordable scope of the works. |
| 2 | ECI / Design & Build | <p><u>ECI with Contractor Design & Build</u></p> <ul style="list-style-type: none"> The design development up to the completion of the statutory process and the obtaining of any required funding. A Contractor would be appointed to support the project team during this process and to begin to plan delivery of the construction phase. The Contractor would take responsibility for the detailed design and construction of the scheme. | <ul style="list-style-type: none"> The design can be informed by the knowledge and experience of a Contractor and key supply chain partners. Contractor input into the construction phasing would be provided early in the design process. This would allow contractor input ahead of the planning and land acquisition phases. This would allow more time to plan ahead and address buildability issues, assess scheme and construction risks, mitigate or design out these risks at an early stage. In relation to the NHRR, ECI would be beneficial for developing the approach to: <ul style="list-style-type: none"> The works around the Lincoln Edge where the scheme will be in cut and there will be significant earthworks; Environmentally sensitive areas – such as the flood risk zone in South Hykeham; Traffic management at the intersections with existing junctions; and Developing the designs for the major bridge crossings (over the River Witham and at Station Road). |
| 3 | Build | <p><u>LCC Preliminary & Detailed Design / Contractor Build</u></p> | <ul style="list-style-type: none"> LCC would retain control of the scheme design through to completion of detailed design. |

| Option Ref | Delivery Route | Description | Assessment |
|------------|----------------|---|---|
| | | <ul style="list-style-type: none"> In this option the LCC would complete the detailed design followed There is limited contractor input into the detailed design and it would not include any ECI during the design | <ul style="list-style-type: none"> It would enable LCC to pass on all or most of There is a limited degree of cost certainty until tendered costs exceeding budgets, leading to possible delays in delivery due to having to re-tender or re-evaluate the affordable scope of There will be no ECI input during the design phase of the scheme. This could represent a risk given the potential design challenges and This option was used to progress the Lincoln |
| 4 | ECI / Build | <p><u>LCC Preliminary & Detailed Design with Contractor ECI Build</u></p> <ul style="list-style-type: none"> Under this option LCC would complete the detailed design followed by tendering for a Contractor. This would also include an ECI phase to support the development of the design. This allows LCC control over the design process. | <ul style="list-style-type: none"> As with Option 3 LCC would retain control of the scheme design through to completion of detailed design. It would enable LCC to pass on all or most of the risk associated with a scheme to the Contractor. There is a limited degree of cost certainty until the tenders are received. The ECI phase would help inform the development of the design, this has the following advantages for the delivery of the NHRR: <ul style="list-style-type: none"> It would help to identify and mitigate the key construction risks; Input into the construction management process and design – this will be beneficial for dealing with the more sensitive areas (flood risk zone, crossings of the River Witham and Station Road and the area through the Lincoln Edge); Provide earlier input into the planning application and land acquisition phases ensuring that adequate construction land is included within the planning boundary. |

3.1.3 MONITORING AND EVALUATION

The Monitoring and Evaluation (M&E) phase will include the pre-construction baseline data collection, the post one-year evaluation and the post five-year evaluation exercise. Further details of the indicative M&E scope and programme are provided in Section 9 of the Management Case but this final phase of the scheme is expected to be completed by mid-2032. This will be within the timescales of the Highways 2020 contract and as a result this is expected to be used to complete the M&E phase. This provides again a robust mechanism for accessing the specialist advice and support and will allow LCC to complete this element of the NHRR project.

3.2 SUMMARY

3.2.1 PROFESSIONAL SERVICES

LCC will use the existing Professional Services contract to progress the scheme up to 2020 and then use the new Highways 2020 contract to deliver the necessary professional services from April 2020 onwards. The key details regarding the Highways 2020 procurement exercise is as follows:

- The OJEU tender notice was issued on the 6th October 2018;
- The invitations to tender will be issued on 07th January 2019;
- The award date is expected to be November 2019;
- The formal commencement date is expected to be April 2020; and
- This will provide LCC with a robust mechanism to procure the specialist services necessary to complete the design of the NHRR, complete the statutory approvals processes, finalise the funding bid to DfT and complete the M&E exercise.

3.2.2 CONSTRUCTION

The key details relating to the construction phase of the scheme are as follows:

- LCC will complete the detailed design of the NHRR scheme and the contractor will be employed through a build contract with ECI phase;
- At this stage due to the uncertainty regarding the next iteration of the MSF3 contract it is assumed that a restricted procedure will be used to procure the contractor;
- This is expected to be phased to cover the ECI Phase and the Construction Phase; and
- Would need to be awarded for a construction start by January 2024 but may start earlier in the programme based on decisions made by the Project Board and the level of ECI required.

4 CONTRACTING

This section examines the likely contracting details in more detail and includes:

- Forms of Contract
- Payment mechanisms;
- Pricing framework and contract management;
- Risk allocation and transfer;
- Contract length; and
- Contract management.

4.1 FORMS OF CONTRACT

4.1.1 PROFESSIONAL SERVICES

As detailed in Section 2.3.1 the procurement exercise for the Highways 2020 contract has now commenced. As stated a single provider will be appointed to each of the three lots and the contract will use the New Engineering Contract NEC4 model. The contract term for each lot will be 6 years with the opportunity to extend the contract an additional 6No. 1 years to a maximum term of 12 years.

The NEC4 Professional Services Contract may also be used for the construction ECI Phase depending on the final procurement decision.

4.1.2 CONSTRUCTION

The current proposal is to use the NEC4 Engineering and construction contract Option C – Target Cost with Activity Schedule. This would provide a cost for completing the works and detail the percentage add-ons to form the defined actual cost. It will also incentivise all parties to make time and cost savings by including a target pain / gain mechanism. Clause X22 may be used to allow ECI to be undertaken as part of a two-stage delivery mechanism. Again, this will depend on the final construction procurement decision.

4.2 PAYMENT MECHANISMS

Payment timing will be adopted to maximise the value from the contract through minimising financing and transaction costs. Prompt and fair payment mechanisms will be applied and monitored during the contract, to ensure full value is delivered.

4.3 PRICING FRAMEWORK AND CHARGING MECHANISMS

In relation to the ECI and construction phase the pricing mechanism will be determined following final decision on the most appropriate procurement route. However, it will generally be by using the prices submitted during the tender phase together with an allowance for compensation events based on the fee percentages submitted. This total figure will be used to give an estimation of budget requirement. Once work has commenced on site, costs will be closely monitored by the Project Board. The proactive management of any compensation events and changes to the works will allow the budget to be effectively managed.

To incentivise the Contractor to achieve cost savings at all stages of the scheme and across all components of the scheme budget, a number of incentive mechanisms could be incorporated into

the contract. These would need to be agreed but could include shared financial incentives to reduce the overall costs.

4.4 RISK ALLOWANCE AND TRANSFER

A project risk register has been developed to consider the risks associated with the delivery of NHRR. The register logs risks identified during the planning and design phases and outlines any potential issues that have or that could adversely impact the scheme delivery programme and cost. Each risk is classified and grouped into one of the following areas:

- Engineering – Including scheme design, structures and earthworks;
- Planning & Site Supervision – Including legal/statutory processes, site supervision, policy changes and overall programme;
- Strategic – Including funding, policy, planning, stakeholder consultation;
- Statutory Undertakers – Including unforeseen statutory services and delivery programme risks;
- Environment – Contaminated land, construction/operation phase impact on protected designated sites and protected species discoveries;
- Ground Conditions – Including land drainage and unforeseen ground conditions; and
- Contractual/Construction - Including adverse weather, programme delays and resource issues.

The risks will be managed throughout the development of the scheme and allocated to an appropriate group or bearer - this includes the contractor. Where this is the case these will be transferred to the contractor at an appropriate stage of the contract.

The key risks in the Risk Register as ranked by probability and cost are provided In Table 3 below and the key procurement risks summarised in Section 4.4.1

Table 5 – Key Project Risks

| Description | Expected Impact | Cost Risk Ranking | Time Risk Ranking | Overall Risk Ranking |
|---|---|-------------------|-------------------|----------------------|
| Not all discharge points are necessarily maintained by Flood Risk Management Authority | Further approvals required with additional risks of objections at the planning stage Design needs to incorporate low maintenance regime | 25 | 10 | 25 |
| Unforeseen archaeological finds. Trial trenching reveals requirement for detailed excavation | Delays and restrictions to site activities. Increased cost during construction | 20 | 20 | 20 |
| Expected developer contributions not agreed (CIL/S106) or not viable | Increase in LCCs borrowing costs | 15 | 9 | 15 |
| NMU structures designs not yet complete | Underestimate of NHRR Scheme Costs | 15 | 6 | 15 |
| Landscape designs not yet complete | Underestimate of NHRR Scheme Costs | 15 | 6 | 15 |
| There is no scope to alter Station Road Design. | If ground conditions are not suitable for 1 in 2 slopes then there is a risk that additional land will be required or more complex engineering solutions. Increasing the scheme costs. | 15 | 9 | 15 |
| Eastern end of the new route is over a major aquifer and a Ground Water Source Protection Zone. | Potential risk of exposed cut to be unstable | 16 | 16 | 16 |

4.4.1 PROCUREMENT RISKS

The key procurement related risks have been identified and included within the scheme risk register. They are summarised in the table below.

Table 6 – NHRR Procurement Risks

| Description | Expected Impact | Cost Risk Ranking | Time Risk Ranking | Overall Risk Ranking |
|--|---|-------------------|-------------------|----------------------|
| Change of Framework Consultant in 2020 | Changes to key members of staff affects programme | 6 | 6 | 6 |
| Delays in appointing the GI Contractor | Leading to delay to programme | 2 | 6 | 6 |
| Preferred procurement approach not agreed in timely way. | Leads to delay or inefficiency in overall programme. | 2 | 3 | 3 |
| Increase in contractor's prices due to number of schemes nationally | Lack of competitive prices | 10 | 2 | 10 |
| Contractor prices increase to include higher margins and risk | Increase in construction costs | 10 | 4 | 10 |
| Lack of resources in the construction market to deliver scheme (HS2 and Brexit being possible constraints) | Lack of suitable contractors to deliver the scheme or to secure sufficient high-quality bids. | 2 | 6 | 6 |
| Prime Contractor / sub-contractors goes into liquidation / administration | Delays to the construction phase of the scheme and increased construction costs. | 6 | 6 | 6 |

4.5 CONTRACT LENGTH

As stated earlier the Highways 2020 contract will be 6 years with the opportunity to extend the contract for an additional 6No 1 years to a maximum term of 12 years

The construction contract length will be determined by the phasing strategy for the scheme. The Project Board will determine how much constraint will be placed on the contractor at the tender stage and it is also likely that the tender responses will identify any further efficiencies in the programme that will reduce the overall construction programme. The indicative details of the design and preparation phase and construction period are presented in Table 7.

Table 7 – Indicative Design & Construction Timescales

| Contract Phase | Delivery Mechanism | Milestone | Forecast Start Date | Forecast Finish Date |
|----------------------|-------------------------------------|---|---------------------|----------------------|
| Design & Preparation | Highways 2020 | Outline Business Case | August 2018 | December 2018 |
| | | Preliminary Design Assessments / Surveys | September 2019 | September 2020 |
| | | Preliminary Design | September 2020 | May 2021 |
| | | Planning Application Preparation | January 2021 | November 2021 |
| | | Planning Application Submission & Determination | November 2021 | May 2022 |
| | | Preparation of Statutory Orders | May 2022 | June 2023 |
| | | Public Inquiry & Approval | June 2023 | November 2023 |
| | Final Business Case | May 2024 | September 2024 | |
| | NHRR ECI / Build Contract – Phase 1 | Early Contractor Involvement | TBC | TBC |
| | Highways 2020 | Detailed Design | August 2023 | February 2024 |
| Construction | NHRR ECI / Build Contract – Phase 2 | Construction | September 2024 | November 2026 |
| M&E | Highways 2020 | Monitoring & Evaluation <ul style="list-style-type: none"> • Pre-Construction Surveys • Post 1 Year Assessment • Post 5 Year Assessment | March 2024 | July 2032 |

4.6 CONTRACT MANAGEMENT

As set out in the Management Case the scheme will be delivered under a structured project management methodology based on PRINCE2 as promoted by the UK Government. This ensures that a robust and structured project management framework is used to successfully manage and effectively deliver the scheme.

The professional services elements of the scheme and eventual construction phase will be subject to the controls, processes and reporting procedures as set out in the Management Case.

The Suppliers will join the Project Board as one the ‘Senior Suppliers’ (as described in Section 4 of the Management Case). This role represents the interests of those designing, developing, facilitating, procuring, and implementing the project products.

5 SUMMARY

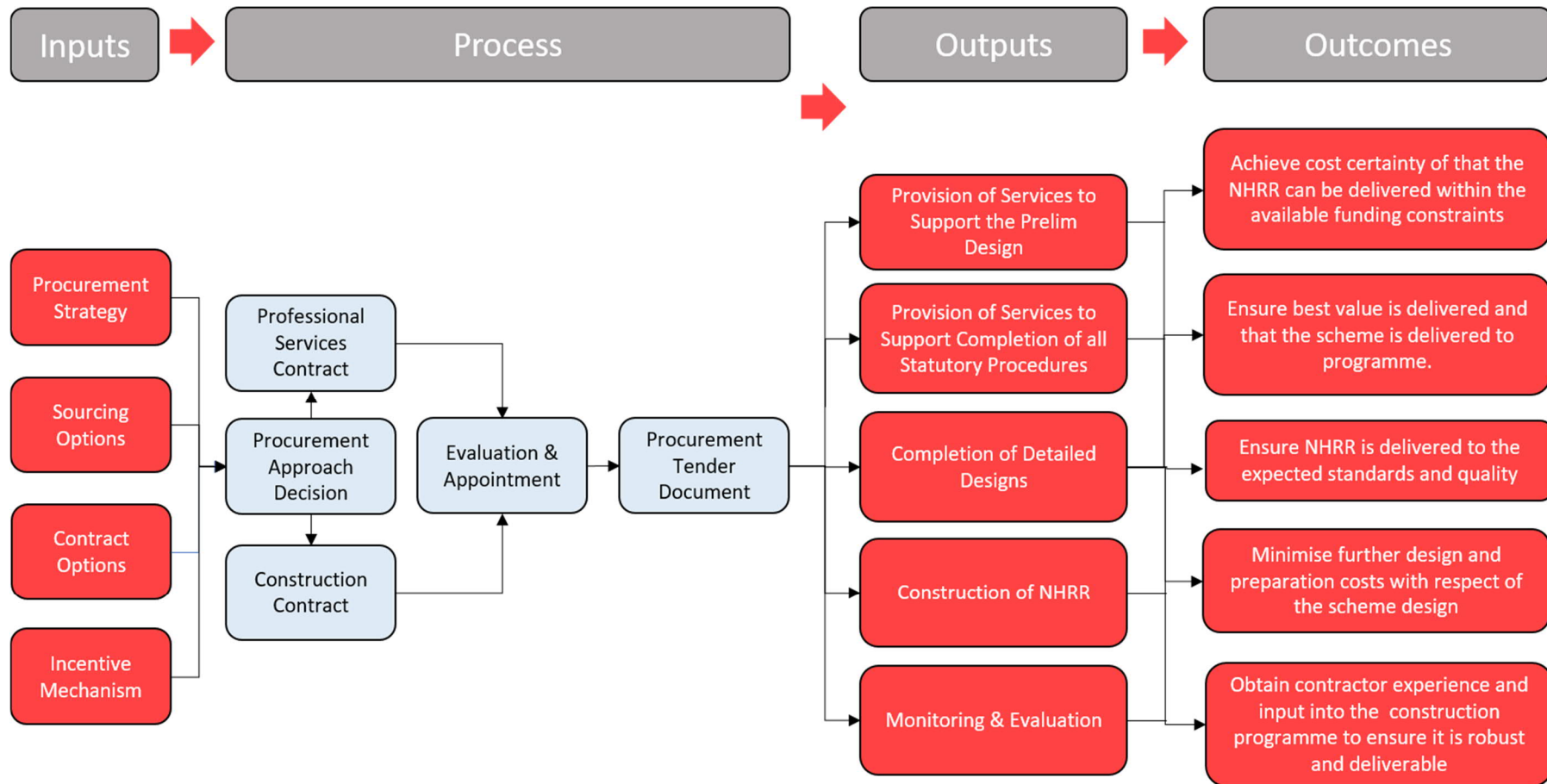
The Commercial Case demonstrates that there are several clear and robust procurement options for progressing the NHRR that will deliver the required outcomes:

- Achieve cost certainty, or certainty that the NHRR can be delivered within the available funding constraints;
- Ensure Best Value is delivered and that the scheme is delivered to programme;
- Ensure stakeholders' acceptance and support for the procurement strategy;
- Develop the scheme to the expected standards and quality;
- Minimise further design and preparation costs with respect to scheme design; and
- Obtain contractor experience and input to the construction programme to ensure the implementation programme is robust and achievable.

The existing Professional Service Contract provides a robust route for developing the scheme up to the preliminary design stage and the procurement process is already underway to appoint a new Professional Services provider as part of the Highways 2020 contact. In relation to the construction of the scheme LCC has identified that a build contract with ECI Phase will provide a suitable and appropriate mechanism for progressing the scheme beyond the design phase. This is similar to the approach used to construct the Lincoln Eastern Bypass with the added ECI element which will provide additional assurance through earlier design phases.

In summary this Commercial Case has illustrated the sourcing and contract approach demonstrating that **the scheme is commercially viable** and that there are tried and tested mechanisms in place engage the market and to deliver the scheme.

6 APPENDIX 1 - OUTPUT BASED SPECIFICATION





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