

NRDD OFFER PACK (SHORT FORM)

Compliance Date: 21/09/2020

|                         |   |                                   |            |
|-------------------------|---|-----------------------------------|------------|
| <b>Project Title:</b>   | March to Wisbech Phase 2: Shuttle Option  | <b>NRDD Offer Pack Ref:</b>       | NAT446A    |
| <b>Project Op Code:</b> | TBC   | <b>NRDD Offer Pack Version:</b>   | V 1.0      |
| <b>Client:</b>          | Mark Chettle Development Manager<br>Capital Delivery Eastern Region on behalf of Robert Russell Sponsor<br>Eastern Region | <b>Date</b>                       | 06/09/2022 |
|                         |   | <b>This offer is valid until:</b> | 06/10/2022 |

**Requirements:**

**Context and Background**

Network Rail Design Delivery working with Network Rail's Light Rail Team shall consider opportunities to introduce a shuttle passenger service between March and Wisbech in Cambridgeshire to improve transport connectivity and access to the commuting markets nearby to support job opportunities and the economic regeneration of the region.

The proposed infrastructure enhancements are limited to the March to Wisbech transport corridor. The objective of these enhancements is to facilitate the following project outputs:

- Provision of guided rail transport system from March to Wisbech based on a shuttle service between March and Wisbech
- Transport options considered to include conventional rail vehicle Tram-Train, Very Light Rail (VLR)

**Purpose**

The purpose of the outputs provided by Network Rail Design Delivery and Network Rail's Light Rail Knowledge team are:

- To develop guided rail transport options linking March to Wisbech based on a conventional rail vehicle, Tram-Train and Very Light Rail (VLR).  
Previous work for Cambridge and Peterborough Combined Authority (CPCA) by Mott Macdonald has focussed on a transport solution that includes connectivity to the national rail network. There are significant capacity issues on the wider network, which there is currently no timescale to resolve. CPCA have asked Network Rail to look at options for a shuttle service to facilitate engagement and informed decision making by CPCA and their stakeholders
- To provide Cambridge and Peterborough Combined authority with an Option Selection Report to enable CPCA and their stakeholders to make an informed modular choice based on a minimum viable product approach; a shuttle service of 2 trains per hour between March and Wisbech.

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## Background

The railway from March to Wisbech was opened by the Eastern Counties Railway in 1847 and became part of the Great Eastern Railway in 1862. Originally built as a double track railway to serve the Port of Wisbech, it was later extended to Watlington Junction on the Ely to King's Lynn route. The line from March to Wisbech; the Wisbech Goods Branch, Engineer's Line Reference (ELR) WIG, runs from March East Junction at 85 miles 78 chains to the nominal end of the line at 93 miles 49 chains at Wisbech. Passenger service ceased in 1968. The track has been substantially removed beyond Weasenham Lane level crossing at 93 miles 15 chains. The remaining rail corridor remains in Network Rail ownership.

The line was constructed as a twin track railway but was single lined in 1972. From 1972 to 2000 it was used for freight only operations as far as the Metal Box and Purina sites, located south of Wisbech. The March end of the line continues to be used to access Whitemoor Yard in conjunction with the chord line from March West Junction and to support shunting movements, but only as far as 86 miles 18 chains.

The line was operated on the "One Train" principle with a Train Staff (OTS), and therefore facilitated only one train operating on the line at any one time.

Since 2000, the line has been officially described in the Network Rail Sectional Appendix as "Out of Use" (temporarily), from 86 miles 18 chains to Wisbech". The line has not been formally closed, nor has it been subject to Network Change, taking it out of the existing National Rail railway network.

## Work completed to date:

CPCA commissioned Mott MacDonald to investigate options to introduce a transport link between March and Wisbech. The work undertaken by Mott MacDonald began in 2015 and a significant number of documents were produced to inform the development of the proposed transport link. Key documents were updated and re-issued in 2020.

In 2021/20222:

- Network Rail Design Delivery undertook a feasibility review of proposals developed by Mott MacDonald on behalf of the Cambridgeshire and Peterborough Combined Authority. The review was informed by 9 key documents and other supporting information.
- Network Rail's Light Rail Knowledge team considered the options for adopting suitable light rail technology and operational solutions. This was done without a constraint of complying with current national rail design and operating standards – other than at any interface with the current rail network.
- Network Rail's Eastern Region Development Group produced a report capturing Network Rail's view on the Wisbech Rail GRIP 3 documentation produced by Cambridgeshire and Peterborough Combined Authority (CPCA) in response to a request from CPCA. The report

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broadly covers four areas which identify any gaps in the existing documentation and provide a list of recommendations/requirements to address them:

- Business Case review
- PACE / GRIP review including PM review of documentation
- Engineering review
- Light Rail feasibility

This piece of work follows on from work already completed by NR.

### Scope

This remit is for Network Rail Design Delivery and Network Rail's Light Rail Knowledge team supported by Network Rail's Eastern Region Development Group to investigate options to provide a transport link from March to Wisbech based on a rail guided shuttle solution.

The following infrastructure engineering disciplines shall be included:

Track engineering

Control: signalling engineering

Traction system

Civil and structures engineering

Level Crossings

Network Rail Light Rail

This remit will be delivered in three phases.

#### Phase 1: Remit:

Network Rail Design Delivery work with the client and Network Rail's Light Rail Team to develop an agreed remit. This document contains the draft output of this collaboration.

#### Phase 2: Development of shuttle based conceptual solutions

Network Rail Design Delivery and Network Rail's Light Rail Knowledge team supported by Network Rail's Eastern Region Development Group to develop outline shuttle based options for a rail guided transport solution between March and Wisbech. The modal choices to be considered include conventional rail vehicle, Tram-Train and Very Light Rail (VLR). The outputs will include:

- Rail vehicle options including maintenance and operation
- Outline infrastructure requirements
- Aspirational service patterns

A short summary report will be produced detailing the infrastructure engineering opportunities, vehicle options and potential operating model(s).

#### Phase 3: Development of single modal solution

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- Review the existing out of use rail network infrastructure.
- Confirmation of aspirational service patterns for chosen modal solution through liaison with internal Stakeholders (supplied by client).
- Provide outline rolling stock requirements.
- Undertake a desktop review of the existing and new infrastructure required to support the outline service provision working with stakeholders including Network Rail Capacity and Planning Team as appropriate.
- Confirm the restrictions on capacity on the existing network/wider connectivity and identify future opportunities to enhance the infrastructure between March and Wisbech to support connectivity onto the wider rail network.
- Support Capital Delivery (CD) Cost Planner during estimating process.

**Governance and Assurance**

The Delivery Manager for NRDD will meet (anticipated this will be virtual) with the Customer Lead Contact (or nominee) on a periodic basis to review:

- Work undertaken previous period
- Planned work to be undertaken next period
- Variations
- Cost of work done with variance to budgeted work
- AGFC of the agreed work

Both the engineering assessment and the final report referred to in Sections 4 and 5 will be checked and peer reviewed prior to final issue to the Eastern Region Development Team Manager.

**Assumptions:**

- No site visits will be undertaken, all work will be based on the information available from Network Rail records and data or that available from other secure sources.
- Current information shall be available as required. Any delay may result in resource re planning and delay to delivery dates.
- Scope of work is pre GRIP as such NR/L2/INI/02009 will not be directly applied however, appropriate assurance will be provided through application of 'Scheme Design Team Local Work Instruction: Checking and Review'.
- Cost Planning data can be applied to the level of detail provided at this stage of development.
- Stakeholder delivery to programme.
- The breakdown in cost between Phase 2 and 3 is indicative.

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**Deliverables:**

Network Rail Design Delivery and Network Rail's Light Rail Knowledge team supported by Network Rail's Eastern Region Development Group shall:

- a. Provide a short report detailing the infrastructure engineering opportunities (Phase 2)
- b. Provide a final report detailing the infrastructure enhancements required (Phase 3)
- c. Provide a schedule of quantities

**Exclusions:**

The following are specifically excluded from this offer:

- timetable and capacity modelling and advice;
- preparation of cost plans;
- completion of risk and value analyses;
- deliverability (constructability) assessments (although general advice concerning constructability issues will be provided); and;
- site visits.

For the avoidance of doubt, the following staff resources are therefore excluded from the cost estimate:

- FNPO / System Operator;
- Region / Route based teams (inc RAM, Level Crossing Managers, etc);
- Capital Delivery (including estimating & construction);
- Legal;
- Property and legal teams; and;
- Economic analysis team.

As Client, please refer to the following for details of Client and Principal Designer duties under CDM 2015 :

<https://www.citb.co.uk/documents/cdm%20regs/2015/cdm-2015-clients-interactive.pdf>

<https://www.citb.co.uk/documents/cdm%20regs/2015/cdm-2015-principal-designers-interactive.pdf>

for details of Client and Principal Designer duties under CDM 2015

**Programme / Delivery dates:**

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The key milestones for the delivery of the outputs are set out below.

| Deliverables |   |       |  |
|--------------|---|-------|--|
|              | Description   | Owner | Due Date                                       |
| 1            | Agree scope with Senior Development Manager         |       | 30 September 22                                |
| 2            | Agree remit and funding                             |       | 28 October 22                                  |
| 3            | Commence  |       | 30 January 23                                  |
| 4            | Progress review                                     |       | Every 4 weeks from 30 <sup>th</sup> January 23 |
| 5            | Commence Phase 1 summary report                     |       | 27 March 23                                    |
| 6            | Draft Phase 1 summary report for stakeholder review |       | 17 April 23                                    |
| 7            | Commence Phase 2 report                             |       | 31 July 23                                     |
| 8            | Draft final report for stakeholder review           |       | 11 September 23                                |
| 9            | Draft Schedule of Quantities for each option        |       | 25 <sup>th</sup> September 23                  |
| 10           | Final Report  |       | 16 <sup>th</sup> October 23                    |
| 11           | Final Schedule of Quantities                        |       | 30 <sup>th</sup> October 223                   |
| 12           | Project close out                                   |       | 30 <sup>th</sup> November 23                   |

Table 1: Programme

**Pre-requisites and Dependencies:**

The following pre-requisites and dependencies are applicable to enable NRDD and Network Rail's Light Knowledge team to undertake the proposed scope of works:

- Provision of any documents (and the revision status of each) provided by the client.
- Support by Network's Rail's Eastern Region Development team working collaboratively with NRDD and Network Rail's Light Knowledge Rail team

**Risks and Mitigations**

A preliminary project risk assessment has been undertaken and the results are set out in the table 3 below:

| Risks and Mitigations |   |   |
|-----------------------|---|---|
|                       | Risk Description                                      | Mitigating Action   |
| 1                     | Lack of scope at start of project                     | Agreed project remit  |
| 2                     | Volume of work and resource available                 | Proactive management of priorities and liaison with Eastern Region Development team   |
| 3                     | Remit update by client                                | NRDD reserve right to increase charge and timescale in light of major changes   |
| 4                     | Availability of stakeholders for input                | Client to arrange and lead input by external stakeholders   |
| 5                     | Design detail does not match with cost planning data. | Share example level of detail required for development team to match to detail of design included in concept development stage. |

Table 2 Risks and Mitigations

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**Commercial:**

This offer is based on an estimated number of hours required to complete the remit / scope as detailed here-in. Resources to deliver the work will be planned, but not secured, until receipt of signed budget holder's agreement in the form of a NRDD Agreement Form or Finance WAF is received by NRDD. This offer does not include any allowance for shift enhancement payments incurred for working Bank Holidays to provide design office cover or similar. Any variations to the content of the original offer shall be managed via Project Change Control. The combined offer and agreement will be used to form the basis of the commercial arrangement between the client and NRDD. Estimating costs have been included in this offer and will need to be recovered whether the work is awarded or not.

**NRDD and Network Rail Light Knowledge team costs will be recovered via Direct Booking:**

NRDD operate via Oracle Time and Labour and will book directly to the Client's Oracle project number requiring an NRDD allocated Task line within and project budget to the value of this Offer.

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