

Roads Service Consultancy Framework Contract

BRIEF FOR

MAJOR WORKS SCHEMES, EASTERN DIVISION

1.0 PROJECT BRIEF

1.1 Objectives

It is planned to progress the following Major Works scheme:

- York Street Interchange

Roads Service wishes to engage consultancy support to assist Eastern Division's Strategic Route Improvement Team to deliver the York Street Interchange. The work is to include the following main activities:

- Stage 1 scheme assessment in accordance with the procedures in The Design Manual for Roads and Bridges (DMRB);
- Stage 2 scheme assessment in accordance with the procedures in The Design Manual for Roads and Bridges (DMRB);
- Preliminary site investigation survey, including existing underground structures;
- Extend topographical survey to cover York Street junction and the surrounding local road network; and
- Development of the preliminary design in accordance with DMRB.

This work will include all necessary consultations with statutory authorities and statutory consultees.

The option for Roads Service to also include, by written instruction, the following activities:

- Stage 3 scheme assessment in accordance with the procedures in The Design Manual for Roads and Bridges (DMRB);
- Preparation of Environmental Statement, Designation Order, Vesting Order, and Economic Appraisal documents in support of the statutory procedures; and
- Assist Roads Service in taking the scheme through the statutory procedures, including all necessary consultation, public exhibitions and dealing with objections, preparing proofs of evidence and providing evidence at public inquiries, if required, as a result of the statutory procedures;
- Advise Roads Service on a procurement strategy;

- Preparation of the specification and contract documents and procurement of a suitable contractor; and
- Monitoring of the construction of the works.

1.2 Statutory Procedures

The Roads (Northern Ireland) Order 1993 defines the statutory procedures to be completed for road improvement schemes:

- Article 67A(3) requires the preparation of an Environmental Statement (ES) to fulfil the requirements of EC Directive 85/337, as amended by Council Directive 97/11EC;
- Article 14 requires the preparation of a Direction Order (DO) and equates to planning approval for the scheme; and
- Article 110 requires the preparation of a Vesting Order (VO) to acquire the land footprint to construct the road improvement.

The three statutory procedures will be published into the public domain as defined in Article 133A of the Roads (Northern Ireland) Order 1993. Publication of the statutory procedures actively seeks comment and objection and may lead to a public inquiry.

The Roads (Amendment)(Northern Ireland) Order 2004 allows all three parts of the statutory process (so far as practicable) to be taken forward at the same time.

1.3 Background and Scheme Description

1.3.1 York Street Interchange

York Street Interchange is a key link in the Strategic Road Network. It presently links the A12 Westlink, the M2 Motorway and the M3 Motorway through a complex arrangement of traffic signals that interface with the surface street network that include York Street, Great George's Street and Nelson Street. Road users currently experience long delays and congestion at peak periods traveling through this 'At Grade' signalised gyratory system.

The Regional Transportation Strategy, published in 2002, identifies transportation investment priorities and considers potential funding sources and affordability of planning initiatives within the period up to 2012. The RTS sees improvements that address bottlenecks on the strategic highway network, such as the York Street Interchange, as one of its priorities.

The Investment Strategy for Northern Ireland 2005 - 2015 envisaged an additional investment of £400 million to improve the Strategic Road Network. During 2006, Roads Service consulted on an expanded programme of strategic road improvements, which included improvements to the York Street Junction.

In January 2006, Roads Service awarded the DBFO Package 1 contract, which involves widening the M1 and Westlink, grade separation of Broadway and Grosvenor Road junctions with Westlink and widening the Belfast-bound carriageway of the M2 Motorway. When these improvements are completed in 2009, York Street junction will be the only traffic signal controlled 'At Grade' junction remaining on the motorway network. Furthermore, these improvements will deliver traffic quicker to York Street Junction and the need to improve it will become increasingly important.

During 2004 consultants Scott Wilson were commissioned to examine a range of options to improve the efficiency of the 'At Grade' York Street Interchange. This examination involved a staged approach that dealt with the short, medium and long term solutions. This work focused on traffic control measures and major junction remodelling.

The results of the assessment into possible traffic control measures are contained in a report entitled "M1 Westlink / M2 / M3, York Street Improvements, Traffic Management Options Report". The possible traffic management measures identified in the report involved squeezing additional traffic lanes into the existing junction, but this solution was on the margins of acceptability, involving very tight road geometry and it had an adverse impact on pedestrians.

The possible long term solution involved completely remodelling the existing junction to create a grade separated junction. The assessment found a solution is feasible within the constraints of the existing structures and road layout. If constructed, it would provide continuous links between the motorway network, except for the link from the M3 to Westlink south bound. The results of this assessment are contained in a report entitled "York Street Interchange, Preliminary Appraisal Report".

1.4 Timescale

1.4.1 York Street Interchange

The target date for the completion of the Stage 1 and Stage 2 Scheme Assessment Reports should be agreed with the Project Sponsor.

2.0 CONSULTANT'S BRIEF

2.1 Services Required

2.1.1 York Street Interchange

Analyse existing junction

The consultant shall analyse the existing baseline conditions of the existing junction to establish an understanding of road geometry, traffic conditions, and the environment and use this to establish the extent of work, including additional surveys and modeling work required for completion of the commission. Following approval from Roads Service, the consultant will procure, in accordance with Public Procurement Policy, and manage all necessary topographical, site investigation, traffic, environmental and other surveys.

Stage 1 Scheme Assessment

The consultant shall carry out a Design Manual for Roads and Bridges (DMRB) Stage I Assessment to identify the environmental, engineering, economic and traffic advantages, disadvantages and constraints associated with a broadly defined area of interest to help Roads Service to identify a preferred improvement strategy. This will include organising Value Engineering and Risk Management Workshops, preparation of preliminary cost estimates, procurement of surveys and the preparation of modeling required for the completion of the commission. The consultant shall prepare a TD 37/93 Stage 1 Scheme Assessment Report.

Stage 2 Scheme Assessment

The consultant shall:

- Prepare cost estimates for scheme options;
- model the preferred scheme options;
- prepare a TD 37/93 Stage 2 Scheme Assessment Report to identify the environmental, engineering, economic and traffic advantages, disadvantages and constraints associated with each scheme option;
- assist Roads Service with public consultation on scheme options; and
- assist Roads Service to select a preferred scheme.

By the written instruction of Roads Service the consultant shall also:

Stage 3 Environmental Statement & Economic Appraisal

The consultant shall:

- model the preferred scheme and prepare the preliminary design;
- Prepare a TD 37/93 Stage 3 Scheme Assessment Report including an Environmental Statement in accordance with the requirements of Article 67 of the Roads (Northern Ireland) Order 1993 and The Roads (Environmental Impact Assessment) Regulations (NI) 1999 implementing Council Directive 97/11/EC;
- carry out an Economic Appraisal in accordance with the NI Practical Guide to the Green Book (Appraisal and Evaluation in Central Government). The Green Book can be ordered from www.hm-treasury.gov.uk and the NI Practical Guide to the Green Book can be ordered from www.dfpni.gov.uk; and
- Update the preliminary cost estimate.

Statutory Orders

Statutory Orders means:

- publication of the Environmental Statement in accordance with Article 67(A) of the Roads (Northern Ireland) Order 1993;
- designation of the preferred route as a trunk road in accordance with Article 14(1) of the Roads (Northern Ireland) Order 1993; and
- acquisition of lands to construct the preferred scheme in accordance with Articles 110 to 117 of the Roads (Northern Ireland) Order 1993.

The consultant shall:

- Provide lands support to Roads Service to meet and agree accommodation works with affected land owners;
- Complete necessary work to support Roads Service in progressing the scheme through the Statutory Procedures including preparation of Environmental Statement, Designation Order and Vesting Order;
- Assist Roads Service with public consultation, public exhibitions, meeting community groups and external organisations;
- Assist Roads Service to prepare rebuttal evidence and Proofs of Evidence and act as professional witness at any subsequent public inquiries.

Preliminary Design

The consultant shall:

- Act in the role of CDM Co-ordinator and Designer
- Organise Value Engineering and Risk Management Workshops
- Complete the preliminary design of scheme, including drawings and updating cost estimates;
- Obtain the necessary Technical / Geometric / Geotechnical Standards Approval of structures, highways design and geotechnical design; and
- Undertake a Stage 1 Road Safety Audit.

Procurement

- Advise Roads Service on a procurement strategy;
- Update scheme cost estimate; and
- Prepare Tender documentation (including drawings, specification and other tender documents);

Construction

- Administer the Contract;
- Monitor Construction; and
- Undertake post scheme evaluations.

2.2 Outputs

- Progress meetings shall be held at monthly intervals. Progress reports shall be submitted at least one week in advance of the meeting at which they are to be considered;
- Designs, drawings, graphics, maps, layouts and specifications which shall be provided in draft form for approval by Roads Service Project Manager;
- All outputs including cost estimates shall be provided with the appropriate level of supporting information;
- Briefings, workshops and presentations to Roads Service and external organisations and public exhibition presentations;
- Public consultation and community involvement and meeting affected land owners; and
- Appearance at public inquiries.

2.3 Other Information

- All proposed infrastructure improvements are to be in accordance with the Design Manual for Roads and Bridges (DMRB), and/or any other relevant design standards or guidance notes.
- All intellectual property rights to the material generated by this commission are to be assigned to the Department in accordance with the Conditions of Contract for the Provision of Engineering Consultancy Services.

2.4 Commission Programme

- The consultant shall provide a preliminary programme for the completion of the commission. This programme will be subject to review at progress meetings and amended as necessary.
- Within 2 weeks of award of the commission an Initial Scoping Meeting will be held.
- Within 2 weeks of the scoping meeting the consultant shall prepare a management proposal comprising a 'Project Initiation Document' to outline the consultants understanding of and approach to the delivery of the services to be provided. This shall be based on the requirements set out in Appendix A.

3.0 MANAGEMENT & PAYMENTS

- The Roads Service Project Sponsor will be Roy Spiers, Strategic Route Improvement Manager.
- The consultant will nominate a Project Manager who will be the principal point of contact with Roads Service. The consultant's Project Manager will be required to attend routine progress meetings with the Roads Service Project Team.

- A register of milestones will be established and a schedule of meetings arranged to monitor these. The consultant will be required to attend Roads Service Project Team meetings and present reports on progress and recommendations as required.
- At the start of each individual tranche of work the consultant shall submit an inception report as outlined in Appendix A which will detail the work to be done, details of the outputs, delivery times, the staff input (names, grades and hours) and establish a cost ceiling. The cost ceiling for any part of the work must be approved by the Roads Service Project Sponsor before any work is undertaken on that tranche of the work and it shall not be exceeded without the prior agreement of the Roads Service Project Sponsor.
- Remuneration up to the cost ceiling will be on the basis of time charged using the Consultancy Framework rates. The consultant will be required to provide appropriate information to verify invoiced amounts i.e. the name and grade within the commission along with time record sheets for staff identifying the hours and the associated task under the commission.

4.0 AVAILABLE INFORMATION

The following information will be made available to assist in the study:

- Traffic information – access to Automatic Traffic Counts (ATC) in the area.
- Scott Wilson June 2005 Report entitled - “M1 Westlink / M2 / M3, York Street Improvements, Traffic Management Options Report”.
- Scott Wilson June 2005 Report entitled - “York Street Interchange, Preliminary Appraisal Report”.
- Topographical Survey of York street Junction.
- Ordnance Survey drawings.
- Belfast Transportation Model - access to a 4-stage TRIPS model which covers the Belfast Metropolitan Area. Models include a 2001 base year and 2015 forecast year (Do Minimum network and Proposed BMTP network)

APPENDIX A

Project Initiation Document

At the outset of the commission the consultant shall produce a Project Initiation Document, for approval by the Project Sponsor, which defines all major aspects of the project and forms the basis for its management and the assessment of overall success. This document should include, but is not limited, to the following:

- Project Brief
- Project Background and Definition
- Project Scope and Deliverables/Outputs
- Project Aims and Objectives
- Project Organisational Structure with Names and Titles
- Roles and Responsibilities / Job Definitions / Management Plan
- Methodology/ Standards / Procedures
- Reporting and Control
- Communication Plan
- Inception Reports completed and agreed prior to each key stage
- Activity Schedules for each key task indicating the staff input (names, grades and hours) to establish a cost ceiling
- Project Quality Plan incorporating quality responsibilities; quality control and audit processes; tools to be utilised; acceptance criteria; and quality management system and standards.
- Project Plan in MS Project Gant Chart Format (updated monthly)
- Constraints and Assumptions
- Milestone/Delivery Summary (updated monthly)
- Project Cost Summary showing the total current estimate of the commission broken down into outturn and profiled expenditure (updated monthly)
- Change Control Register
- Risk and Opportunities Register
- Decision Register

The Project Initiation Document is not necessarily one document, but can be a set of documents. This should be a dynamic document(s) and will need to be up to date with additions/revisions being incorporated as the project progresses.