Dear Mr Farrell and Mrs Robertson,

**TICC committee**  
**Evidence session 28 September**  
**Forth Replacement Crossing Project – Response to actions**

I refer to the evidence given by officials of the Forth Replacement Project Team to the committee on 28 September 2010.

At the committee session officials agreed to provide additional information in respect of three subject areas, namely:

- the contract award criteria;
- the provision of a scale model of the scheme; and
- recent changes to the scheme reflecting representations.

I have taken the step of addressing this letter to Mrs Robertson as the information is pertinent to the interests of the Forth Crossing Bill committee. The requested information is provided below.

**Contract Award Criteria**

It should be noted that both participants in the tender exercise have already fulfilled stringent quality and capability criteria which formed part of the requirements necessary to qualify to tender for the design and construction of the proposed scheme. In determining the award of the principal contract, the award criteria which will be used will be the most economically advantageous of a combination of Price and Quality Approach.

Price, which will be the participants’ comparative cost of final tender, is weighted at 92.5% of the award criteria.

Quality Approach is weighted at 7.5% and comprises the participants’ approach to project planning, risk mitigation & management, embodied carbon and community engagement and training.
The first two elements (planning and risk mitigation & management) are self-evident and the participants are required to submit information as part of their tenders covering these aspects. In respect of embodied carbon a range of issues will be evaluated including the planned embodied carbon in the Main Crossing; the carbon emissions due to transport of materials for the Main Crossing; the total embodied and emitted carbon and the monetised value of the total of these elements. The monetised value will be the baseline value on which the tender quality mark will be assessed.

At the completion of the work the contractor will have to resubmit details using the actual parameters which materialise. The resubmitted details will be the outturn total cost of carbon. If the outturn total cost of carbon exceeds the baseline value then the Scottish Ministers will be able to deduct the monetised difference from payments otherwise due under the contract. The Scottish Ministers will carry out interim audits of the contractor’s compliance with his carbon commitment. However, there will be only one final reconciliation for the purposes of making an assessment as to whether a deduction should apply.

In respect of community engagement and training a number of factors will be assessed including the number of employment opportunities as well as the number of vocational and professional site-based training places to be secured and maintained throughout the life of the contract. The extent to which the participants intend to make a positive contribution to the social and physical local environment will also be assessed.

**The Provision of a Scale Model of the Scheme**

Further to our evidence I can confirm that a scale model will be produced. It will, however, not be available until we have confirmed the final scheme design with the contractor and importantly the Contact and Education Centre is fully operational so that the model can be housed in an appropriate, accessible location.

The Virtual Reality Model will of course remain available and will be updated following contract award. The model is publicly accessible at: [http://www.transportscotland.gov.uk/projects/forth-replacement-crossing/information/Videos](http://www.transportscotland.gov.uk/projects/forth-replacement-crossing/information/Videos). This is a fly-through of the proposed scheme rather than an interactive model. The software necessary to produce and operate the fully interactive model is specialist software and requires a high specification computer to operate. As is normal practice, such as on the M74 Completion, M80 Stepps to Haggs and Aberdeen Western Peripheral Route schemes, Transport Scotland has ensured the public availability of the Virtual Reality Model by preparing a pre-set fly-through. As advised at the evidence session we use the interactive model to support exhibitions, presentations and community meetings.

**Recent Changes to the Scheme Reflecting Representations**

We have previously explained to the TICC committee various changes that were made to the proposed scheme prior to the introduction of the Forth Crossing Bill. Information regarding these changes can be found in the Public Information Exhibitions: Feedback and Outcomes Report published in June 2009.

Following introduction of the Forth Crossing Bill, representations were received covering four principal aspects of the scheme:

- Design
- Mitigation
Design
In respect of scheme design we have incorporated a large number of positive changes consequent on proposals and suggestions from individuals, communities and organisations. The changes have been made without compromising the delivery and objectives of the scheme and have included:

- redesigning the slip roads at Junction 1A on the M9 so as to reduce land take;
- through redesign of the slip roads at Junction 1A on the M9, the drainage basin and associated access road have been removed with further reductions in land take;
- replacing the strategic signing at Junction 2 of the M9 to encourage traffic to utilise the M9 and M9 spur to access the FRC, redirecting traffic away from Newton;
- reducing the speed limits to 30mph on extensive lengths of the B800 and A904;
- relocating the proposed junction and traffic signals on the B800 in respect of the revised intersection of the westbound A90 bus lane with the B800;
- removing traffic signals on the B800 in the vicinity of the access to the Dundas Home Farm community;
- realignment of the B800 to remove the requirement for land at Scotstoun Park;
- relocating the Intelligent Transport System gantries on the M9 and to the south of South Queensferry;
- retaining Ferrymuir roundabout in preference to a signalised junction;
- reducing the elevation of roads at Echline corner and aligning the B924 Bo’ness Road further from properties at Echline corner;
- providing an additional recreational rural path/cycle way from Echline to the west;
- extending the wind/noise barrier on the southern viaduct of the bridge to improve aesthetics;
- providing a car park for Fife council with the capability to be used as overflow car park for Deep Sea World;
- inclusion of bus hard-shoulder running on the M90 between Halbeath Interchange and Admiralty Junction which will operate during construction of the proposed scheme;
- refining the Intelligent Transport System design between Admiralty Junction and Halbeath Interchange to rationalise the proposals and reduce land take; and
- making modifications on detailed road design in accordance with representation from local roads authorities.

Mitigation
A number of additional and modified mitigation measures will now be incorporated within the scheme as a consequence of direct representation. These include:

- provision of an environmental barrier on the M9 spur to the west of the Kirklands Park Grove community;
- retention of a greater extent of existing planting and screening adjacent to Scotstoun Park;
- planting of a mixed woodland to a width of at least 30 metres to the south of the proposed road and north of Dundas Home Farm for an extent at least equal to that of the proposed noise barrier;
- refined planting proposals adjacent to properties at Echline corner to reflect the existing landscaping;
• additional planting to the east of the proposed south Queensferry junction to further screen the road;
• additional planting, extending at least 30 metres around the east SUDS basin in the vicinity of Clufflats and Cluffats Brae;
• a temporary physical barrier between Clufflats and Clufflat Brae community and the Echline field;
• a bituminous surface on the haul road on at least 200 metres of its most northerly extent;
• provision of additional mammal underpass where the route passes to the south of South Queensferry;
• screening at Inchgarvie Lodge during construction of the proposed scheme;
• reinstatement of the existing retaining wall between Clufflat and Inchgarvie Lodge adjacent to Society Road, following removal of the haul road;
• provision of noise and air monitors proximal to communities at which major works activity is likely to occur, in addition to other monitors determined by the contractor to be necessary;
• provision of contributory funding to West Lothian council for the purposes of traffic mitigation measures within the village of Newton;
• development of proposals for traffic monitoring on local roads in consultation with the local authorities to be implemented prior to, during and following construction of the proposed scheme; and
• provision of a temporary environmental screen to the east of Linn Mill community.

Land
The design revisions have meant that less land will be required to support the project and these changes will be reflected in the revision of the Parliamentary plans and the Book of Reference that will be presented to the Forth Crossing Bill committee in advance of Stage 2 (Legislative stage). The design revisions have been reflected in a number of commitments which were given to parties who had objected to the Forth Crossing Bill, thus allowing removal of some objections in their entirety and parts of other objections.

Additionally, as a result of representations by landowners, a review has been taken of all land so as to ensure that the least onerous method of taking land is applied. In certain instances this means that servitudes or leases will now be offered in preference to compulsory acquisition.

Code of Construction Practice
The code has been substantially revised in the light of representations. You will note that we have produced two revisions to the Code of Construction Practice (which were published by the Parliament on 27 August 2010 and 29 September 2010). Each revision was accompanied by a Schedule of Changes which identified the nature and reason for the change.

I have taken each chapter in turn and advise of significant changes. Any paragraph references are to those within the 29 September version (Revision 3):

1. Introduction

The application of the code has been clarified to cover the period both of construction as well as the immediate maintenance period thereafter (1.1.5). Clarification has been included regarding the contractor’s obligations to implement best practice mitigation measures (1.2.4) and to seek to implement measures which result in a lesser environmental impact than that identified in the Environmental Statement (definition of ‘reasonably practicable’ in the Glossary). Clarification has been provided as to how
community groups can make comment on the contractor’s various plans (1.7.12), how suggestions can be made directly to specialist working groups (such as the project’s Traffic Management Working Group) (1.11.4) and that the agendas and minutes of the aforementioned working groups will be publicly available (1.11.5).

2. Liaison and Public Information

This chapter has been substantially revised. We have specified our commitment unequivocally to ensure prior consultation with affected communities of how it is proposed to mitigate the effects of construction activities (2.2.2). Community forums will be established in advance of the commencement of the works (2.2.4) and a non-exhaustive list of participating community councils has been produced (2.2.3). The manner by which the contractor and the Scottish Ministers will consult and engage with communities is explicitly stated (2.2.3-2.2.6) and provides a reaffirmation of the Project’s commitment to proactive consultation.

Improvements have also been made to the notification process by including a requirement of prior notification of works to relevant community councils, in addition to the previously specified notification to local residents, with that notification covering both principal and ancillary works. The enquiries and complaints procedure has been overhauled so as to provide an escalation process, the engagement of specified working groups in reviewing complaints (which will include local authority representatives) and the provision of more information in the public domain (2.3.1).

3. General Site Operations

The working hours for the construction of the roads elements have now been aligned with those which applied in respect of Airdrie to Bathgate Railway and Linked Improvements Act 2007 in accordance with the express desire of the Forth Crossing Bill committee and local residents (3.4.1). Stricter controls have been applied in respect of the appearance and operation of the construction site, for instance, in regard to the removal of rubbish and the daily inspection of fencing and hoarding (3.5.6), and confirmation has been provided that general living accommodation for operatives will not be permitted within the site compounds, aside from security personnel and a limited number of other staff who are required to be on-site for 24 hours (3.8).

4. Public Access and Traffic Management

A number of improvements have been suggested and incorporated so as to ensure the safe passage of traffic through any road works, to reduce the likelihood of traffic diverting onto alternative routes, to mitigate potential impacts on the local community and keep delays and disruptions to traffic to a reasonably practicable minimum. An explanation has been provided that traffic management schemes will ensure the safe transition for road users into traffic managed sections of road and set out requirements relating to temporary traffic signs (4.2.3). A reference has been added so that the Traffic Management Working Group, as part of its responsibilities, will need to agree a resolution procedure if there are any disputes regarding traffic management (4.2.4). Clarification has been provided regarding provisions for routes for pedestrians, equestrians and cyclists (4.2.6 and 4.2.7). The participation within the Marine Liaison Group has been clarified to take into account wider interests for operators of dockyards in the Forth (4.2.10) and the contractor is now obliged to consult with organisations representing fishing interests (4.2.13).
Additions have been made to the traffic safety and control requirements (4.3) and the contractor is required to consult with a range of interests (4.3.9) including the owner and operator of visitor attractions (4.3.10). Clarification has also been added that the Scottish Ministers will work with the local authorities and the Police to address any issues associated with hazards created by the public parking on roads to view the construction works (4.3.11).

Additional clarification has been provided in section 4.5 to ensure the provision of separate pedestrian, equestrian and cyclist routes within the contractor’s traffic management plan (4.5.5) and the opening of alternative routes (4.5.7). In section 4.6, clarifications have been included relating to the contractor’s duty to keep all roads and accesses free from mud and loose materials (4.6.5).

In addition to consulting with local authorities regarding permitted access routes for construction traffic, consultation will also be undertaken regarding any restrictions on the times certain routes may be used (4.7.1).

5. Noise and Vibration

This chapter has been substantially revised following consultations with local authorities. The requirement for the contractor to undertake an assessment of likely noise and vibration levels has been extended to include details of maximum noise levels and that the Employer’s Representative in considering the assessments has to do so in accordance with his management plan as agreed with the Noise Liaison Group (which includes representatives from local authorities) (5.2.5). The role of the Noise Liaison Group has been clarified: the group will consider whether proposed construction methods comply with the Code of Construction Practice and whether best practicable means are proposed. The Employer’s Representative has to take appropriate consideration of the views of the Noise Liaison Group (5.2.6). A requirement has also been placed on the contractor to demonstrate that consideration has been given to minimising disturbance (5.2.7), including seeking to undertake noisier activities at times that minimise potential disturbance. The acknowledgement for the need for respite periods during the construction period has been reflected (5.2.10). Clarification has also been provided regarding the considerations to be given for undertaking works outside of normal working hours (5.2.11).

Additional requirements regarding noise insulation or temporary housing for special cases (such as night workers, those working in home occupations requiring a particularly quiet environment and those with a medical condition which will be seriously aggravated by construction noise) have now been included (5.2.16). Paragraphs 5.4.1, 5.4.2., 5.4.3. and 5.4.6 have been added in direct response to issues raised by the local authorities on matters relating to maximum noise levels as well as providing the opportunity for review of permitted maximum noise levels by the Noise Liaison Group. Section 5.6 has been inserted covering the process for obtaining local authority consent for noise effects above those defined by thresholds used in the Environmental Statement.

6. Dust and Air Pollution

Paragraph 6.2.6 has been inserted to clarify that temporary housing can be offered by the Scottish Ministers to residents should particular circumstances exist.

8. Disposal of Waste and Contaminated Materials
In response to consultation with SEPA appropriate references have been made to SEPA’s Land Remediation and Waste Management Guidelines.

You should also be aware that we have produced a Commitments and Undertakings Register. The register is available on the Forth Crossing Bill website as well as Transport Scotland’s own website. The register is detailed, containing both generic commitments and undertakings as well as those given to specific third parties which relate to their interests. Additionally, the Scottish Ministers have entered into a number of project specific agreements with third parties.

A revision will be made, in advance of Stage 2 consideration of amendments, to the Parliamentary Plans and the Book of Reference supporting the Bill.

I hope that the above has given you additional information relating to the many changes that have now been made to the project. The committees will doubtless appreciate that the above lists are not exhaustive: more detail is available within the documents supporting the Bill.

I trust the overview given above proves informative to the committees. Should you require clarification on any matter raised within the letter please do not hesitate to make contact.

Yours sincerely,

Frazer Henderson
Policy and Legislation Manager

Issued by email