

Major Transport Infrastructure Projects

Forth Replacement Crossing
Principal Contract Project Office
King Malcolm Drive, Rosyth KY11 2DY



Steve Farrell
Clerk to the Rural Economy and Connectivity Committee
The Scottish Parliament

Our ref:
FRC/REC/Jan
2018

Issued by Email

Date:
8 January
2018

Dear Mr Farrell

Rural Economy and Connectivity Committee - Request for further information

I refer to the oral evidence session on 29 November 2017 and the request from the Convener for further information in relation to:

- a list of on-going projects/work planned for the Queensferry Crossing;
- a list of on-going projects/work planned for the Forth Road Bridge; and
- clarification on the Ministerial lead for the Queensferry Crossing going forward.

On-going projects/work planned for the Queensferry Crossing

The contract has three distinct contractual completion points:

- Section A – Considered substantially complete on 30th September 2017 (covers the whole of the works required under the Forth Replacement Crossing Principal Contract save for those which constitute Section B and any planting works)
- Section B – Completed on 13th December 2017 (covers the southbound slip roads from Ferrytoll onto both (a) the Forth Road Bridge and (b) the Main Crossing, together with any associated works in respect of such southbound slip roads)
- Section C - target date March 2018 (covers planting works)

The contract has a 5 year defects correction period (often referred to as the 'Maintenance Period'). During this time, the contractor is responsible for correcting defects which arise – but routine inspections, maintenance, accident damage repair and snow clearance / gritting is undertaken by the Operating Company (AMEY).

Finishing works and snagging noted at Section A Completion are to be completed within the first year of the 5-year defects correction period. This means that the contractor has until 30th September 2018 to complete the remaining outstanding works and snagging for Section A. The programme for undertaking these works is determined by the contractor. However, this is subject to change for a variety of reasons including weather sensitivities, availability of resource and progress on other activities.

A list of the on-going and planned works for the Queensferry Crossing is provided in Annex A.

On-going projects/work planned for the Forth Road Bridge

A list of the on-going and planned works for the Forth Road Bridge is provided in Annex B.

Ministerial lead for Queensferry Crossing

I can confirm that the Minister for Transport and the Islands is responsible for the Queensferry Crossing.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Michelle Rennie', followed by a period.

Michelle Rennie
Major Transport Infrastructure Projects Director

Annex A: On-going and Planned Works for Queensferry Crossing (noted at Section A Completion)

Work / Item	Target Date
Complete for managed motorway	end Jan 2018
Completion of deck internal Mechanical & Electrical (dehumidification, structural health monitoring, deck shuttle, tower lifts)	Generally end March 2018 but tower lifts end Sep 2018
Completion of Mechanical & Electrical in abutments and general finishing work	end March 2018
Completion of Bridge Control Room systems (structural health monitoring, SCADA)	end March 2018
Concrete finishing, towers, piers and deck edge cantilevers	on-going to end Sep 2018
Commissioning of tower maintenance access platforms	end March 2018
Commissioning of cable maintenance access cradles	end March 2018
Load verification test for Weigh in Motion (WIM) and Structural Health Monitoring System (SHMS)	end May 2018
Bearing remedials at piers S1 and S3	end July 2018
Completion of internal painting (start next spring)	March to end Sep 2018
Touch-up external painting (repair chips to paint from handling damage (start next spring)	March to end Sep 2018
Galvanising repairs to Vehicle Restraint System (VRS) (zinc paint – to start next spring with other painting)	March to end Sep 2018 (minor works)
Complete painting of dampers (next spring with other painting)	March to end Sep 2018
Completion of architectural lighting	end March 2018
Monitoring of towers at cable anchorages	Final monitoring March 2018
Alignment of underdeck inspection gantry rails	end June 2018

Commissioning of underdeck gantries	end July 2018
Adjustment of windshield louvres	end Feb 2018
Snagging works to windshield post bolts and additional works to wind shield louvres	end June 2018
Finishing work to baseplate grout at windshields and VRS	end Feb 2018
Snagging to road lighting	end March 2018
Road drainage snagging	end March 2018
Section C completion (Planting works)	26 th March 2018

Note: We have provided the contractors outline programme for these works, however this is subject to change for a variety of reasons including weather sensitivities, availability of resource and progress on other activities. These are target dates only and are subject to change. Contractor has until September 2018 to complete these works.

Annex B - On-going and Planned Works for Forth Road Bridge

Work/Item	Description	Programme
Critical Member Programme	A programme of detailed analysis and assessment works instigated following the emergency closure of the Forth Road Bridge (FRB) in December 2015. This project systematically reviews and assesses the FRB to identify future programmes of works that may be necessary to allow the FRB to be maintained in a consistent, safe and effective manner by identifying optimum maintenance and repair interventions.	Commenced 2016 – on-going
Main Cable Investigation	Planned intrusive investigation and inspection of the FRB main cables to determine the condition of the internal wires. This work has been planned and programmed to compliment the most recent main cable investigation works undertaken in 2012, and previous investigations in 2004 and 2008.	Contract awarded in Oct 2017. Main site works due to commence in spring 2018.
Truss End Link Replacement	Following the emergency closure of FRB in December 2015, a replacement Truss End Link trial project was successfully completed in 2016/17. A contract to replace the remaining 7 no. Truss End Links was tendered and awarded in the summer of 2017.	On-going at present. Expected completion late spring 2018.
Main Expansion Joint Replacement	A project to replace the 53 year old main expansion joints on the FRB. The project was issued to tender in 2017. Tender returns currently are being assessed, with an award pending in early 2018.	Estimated contract award early 2018, with site completion 2019.
Suspended Span Under Deck Access replacement	A sequential programme of works to replace the 9km length of life expired permanent under deck access walkways below the FRB to allow safe access for inspection and maintenance personnel.	Commencing in 2016, a rolling annual programme of replacement works has / is being undertaken to replace circa 13 panels (approx. 1200m) within each annual phase. This will allow the works to be completed over circa 9 seasons.
Resurfacing / Waterproofing FRB	The existing surfacing and, where present, waterproofing to the main truss deck and the approach viaducts of the FRB requires replacement. A small trial replacement scheme was undertaken in Oct/Nov 2017, when the traffic was using the new Queensferry	Programme / phasing currently being developed following trial works

	Crossing. This will be used to inform the future replacement strategy.	undertaken in Nov 2017.
New Suspended Span Gantry	A project to provide a new access gantry system on the suspended span of the FRB to aid in inspection and routine maintenance works.	Tender currently being prepared for issue in 2018
FRB Painting and refurbishment	The FRB main truss deck has never been painted since the time of its construction completion in 1964. A series of small programmed patch repairs are routinely undertaken by the in-house painting team, however an extensive programme of major painting and steelwork repair and refurbishment works are required to the exposed areas of steel. At present a trial is being developed for implementation in 2018. This will then be used to inform the future long term painting and repair / refurbishment works that may be undertaken over a period up to 10 years.	Trial works currently being developed for use in 2018
Side & Main Tower Thrust Bearing and Rocker	A programme of works identified in the critical element programme to replace the main tower lateral thrust bearings and side tower rockers that provide lateral restraint to the deck truss.	Investigation / design works underway for construction in 2018
FRB Parapet Investigation / Improvement	This project will consider relevant upgrade, improvement or replacement works that may be required to the FRB parapets.	TBC dependent upon investigation outcome
FRB General / Routine Maintenance	Planned routine works undertaken throughout the year to ensure the serviceability of the FRB. Typical works include weld repairs, maintenance painting, minor remedial works, etc.	ongoing
Box Girder Viaduct Lighting Replacement	Scheme to replace the existing FRB box girder viaduct lighting with intrinsically safe lighting	2018