



Accounting Officer Memorandum: Leeds Flood Alleviation Scheme Phase 2

It is normal practice for accounting officers to scrutinise significant policy proposals or plans to start or vary major projects, and then assess whether they measure up to the standards set out in Managing Public Money. From April 2017, the government has committed to make a summary of the key points from these assessments available to Parliament when an accounting officer has agreed an assessment of projects within the Government's Major Projects Portfolio.

Background and context

Leeds Flood Alleviation Scheme Phase 2

- The Scheme, with a value of £86.7m was approved by the Environment Agency in December 2018 to provide protection from a 1% Annual Exceedance Probability (AEP) flood event. It is led by Leeds City Council, supported by the Environment Agency. The approval was based on a “nationally preferred” option of a 1.33% scheme with additional Defra and local funding being secured to improve the level of protection to a 1% AEP scheme. This is now in construction and Leeds City Council wishes to pursue an opportunity to raise the protection further to 0.5% AEP. This is by enhancing the scope of the scheme with a flood storage facility and natural flood management measures. The capital cost of the enhanced scheme rises to £110.4m and the version 7 of the FBC (dated 17th March 2020) could not be recommended for approval as it showed a £23.7m funding gap. However, the combination of additional government funding (set out in a letter from Defra to the Environment Agency Deputy Director for Investment and Delivery Assurance dated 27th July 2020) plus the underwriting of the remaining funding gap by Leeds City Council has now made the scheme affordable.
- The Upper Aire Flood Risk Management Strategy approved by Defra/Environment Agency in 2010 recommends raising the standard of protection in Leeds to 0.5% AEP. The Humber River Basin Management Plan recommends improvements to the status of the River Aire to address sediment load, pollution and enhance riverine habitat. The Scheme will deliver both strategic objectives as well as realising key objectives in the Defra 25 year strategy.
- The Strategic Economic Plan published by Leeds City Region Local Enterprise Partnership in 2016 states that reducing flood risk and increasing resilience to climate impacts is one of its headline priorities. Their objective is to maximise growth potential of the city region economy.
- An earlier phase 1 of the Scheme with a separate discrete economic case was completed in 2017 and provides a 1% AEP protection to Leeds city centre.

- The Phase 2 work will increase protection to the western river corridor including 77 residential and 370 non-residential properties and safeguard access to a further 1408 flats. A total of 28 electrical substations and nine telecommunications centres will also be protected. Ecosystems services benefits extend to new wetland habitat, restoration of riverine and moorland habitat plus widespread tree planting, all of which will increase carbon sequestration potential.
- The Scheme will comprise linear defence alignments adjacent to the river varying in height from 1.2 to 2.5m, the removal of two bridges that obstruct high flows, a flood storage area located upstream of the city limits and an extensive programme of tree planting in the upper catchment. Collectively this will provide protection against a 0.5% AEP event until 2069. The present value cost of the Scheme is £105 million which is estimated to return £158 million of economic benefits over 100 years, giving an average benefit to cost ratio of 1.5. This increases to 7.4 if the additional GVA benefits are included.
- Leeds City Council (LCC) estimates that the Scheme will lead to regeneration benefits of £774 million over 10 years and significant job creation estimated at between 1,669-3,307 additional net jobs.
- Following the previous approval, LCC procured design services through a three stage assessment of a 60:40 quality price tender. The LCC contract procedure rules comply with the Public Contracts Regulations. A design and Build contract was tendered through the (expired) EA Water and Environment Management (WEM) Framework and awarded to BMM JV. The procurements presumed that the scope would be extended to encompass the 0.5% AEP Scheme.
- The total capital approval value requested is £110.4m including a contingency of £14.1 m (15%). The cost is met by grant in aid (£7.8m), previously agreed Defra booster (£60.2m), newly agreed booster (£21m) and external contributions (£21.4m). LCC will meet any cost exceeding this figure should costs escalate or risks materialise. Leeds have also agreed to fund all future maintenance costs for the scheme.
- Delivery of the Scheme faces a number of technical challenges including a temporary river diversion. There are a number of key risks associated with planning conditions and various Consents, access agreements from land owners and statutory bodies such as Network Rail, unknown utility services, unforeseen ground conditions and extreme weather conditions that have potential to cause prolongation and cost escalation.

This assessment was made at the Full Business Case stage on 24 August 2020.

Assessment against the Accounting Officer tests

Regularity

- The enhanced scheme cost exceeds the Environment Agency and Defra delegated authority from HM Treasury (above £100m whole life costs). Investment requires

business case approval from HM Treasury to ensure compliance with Managing Public Money.

- In promoting the project LCC exercises its flood risk management function in accordance with Parts 1.4 and 1.5 of the Flood and Water Management Act 2010 (FWMA2010) and Land Drainage Act 1991 (LDA 1991). Section 14 of the LDA 1991 gives LCC the power to carry out “flood risk management work” it considers desirable, having regard to the national flood and coastal erosion risk management strategies under Section 7 and 8 of the FWMA and that the purpose of the work is to manage flood risk.
- The LCC Strategic Economic Plan identifies flood risk reduction, green infrastructure and resilient development as a headline priority.
- LCC will submit a planning application to the local planning authority, also LCC. The application will be made under the Town and Country Planning Act 1990 supported by a full Environmental Impact Assessment under the Town and Country Planning (Environmental Impact Assessment) Regulations 2011. Determination is expected in July 2020.
- LCC has prepared a Preliminary Environmental Information Report (PEIR) to identify the environmental issues and opportunities that may arise. The report will accompany a request for an Environmental Impact Assessment (EIA) Scoping Opinion from Leeds City Council. The PEIR identified Ecology, Historic Environment, Townscape, Landscape & Visual Amenity, Water Environment and Noise and Vibration as key issues due to the sensitive nature and receptors along the river corridor and areas of high ecological value and cultural heritage including designated sites. The likely environmental impacts of the scheme in the short term are related to construction impacts. In the medium to long term these include visual impacts of linear defences in sensitive locations. A Water Framework Directive (WFD) Compliance Assessment notes that Scheme is not expected to result in deterioration in the status of any WFD waterbodies, will not prevent the achievement of future known objectives and provides opportunities to contribute to the delivery of the RBMP.
- LCC requires the following Consents or permits from:
 - Network Rail to construct works in proximity to NR assets
 - Land owner for purchase of land and the development of flood storage facility and associated structures
 - Land owners at various sites where linear defences will be located
 - Listed Building Consent from LCC
 - Main River Consent from the EA
 - Land owners for the tree planting programme

- The Environment Agency provides capital grants to other flood and coastal erosion risk management (FCERM) operating authorities in England under section 16 of the Flood and Water Act Management 2010.

Overall assessment

This test is met at this FBC stage subject to the grant of all permissions and consents.

Propriety

- The combination of additional government funding (set out in a letter from Defra to the Director of Asset Management and Engineering dated 27th July) plus the underwriting of the remaining funding gap by Leeds City Council means that the revised Full Business Case now presents a fully funded scheme. This is in accordance with the “Appraisal of Flood and Coastal Erosion Risk Management, 2009” and the Defra policy statement “Flood and Coastal Resilience Partnership Funding: 2011”.
- The enhanced scope Scheme is supported by third party funding (£21.4m) and Leeds City Council are underwriting this amount.
- LCC are underwriting the risk of the scheme above the approval value of £110.4m.
- Leeds City Council will fund future operation and maintenance from their revenue budget.

Overall assessment

The test is met at this FBC stage.

Value for Money

- Economic appraisal over a 100 year period has been undertaken in accordance with the Flood and Coastal Erosion Risk Management Appraisal Guidance (EA 2010) including supplementary guidance notes. The guidance follows the provisions of the HMT Green Book.
- Present value benefits amount to £157.6 million and were derived from hydraulic modelling of an appropriate range of flood event intensities, suitable enhanced to reflect climate projections. Modelled flood events resulted in economic damage to residential and commercial property, vehicles, loss of life, health and disruption to rail transport and emergency services.
- Present value cost is estimated at £105 million including a 15% risk contingency and has been derived from tender prices benchmarked against both the EA Project Cost Tool and the rates and process from the previous flood alleviation in Leeds city centre.

- The Scheme has an average benefit cost ratio of 1.5 when considering flood risk plus environmental benefits and 7.4 when including all identified GVA benefits. The DfT Value for Money Indicator identifies a BCR of 1.5 as the boundary between poor and medium value. Option selection is dependent upon the condition specified by the Minister's criteria for review.
- This business case does not meet the standard value for money tests as set out by Defra/Environment Agency FCERM Appraisal Guidance, because the incremental benefit cost ratio (iBCR) is not >3, which is the requirement for any 0.5% AEP scheme. However the business case demonstrates that the benefits outweigh the costs, with an iBCR of 1.1, which was a requirement for the consideration of additional Government funding, as set out in a letter from Dr Thérèse Coffey (dated 7th November 2018), then Parliamentary Under Secretary of State for Environment.

Overall assessment

The test is met at this FBC stage.

Feasibility

- It should be noted that unlike a conventional full business case, construction has started on elements of the previously approved scheme following award of the main contract in February 2019.
- Professional services were tendered in 2019 in accordance with the LCC Contract Procedure Rules that comply with the Public Contracts Regulations. The form of contract is the New Engineering Contract 3 Professional Services Contract using Option C; Target Cost with Activity Schedule. Tenders for the services were based on a 60:40 quality price methodology.
- The main works contract was tendered in late 2018 through the EA Water and Environment Management Framework, Lot 4 Design and Build framework. The enhanced scope including the flood storage facility were part of the original tender and will be awarded as a compensation event.
- The enhanced scope also includes natural flood management works in the upper catchment largely comprising tree planting and will be delivered by the EA through the Next Generation Supplier Framework.
- LCC leads a collocated delivery team, originally set up in 2013 that benefits from lessons learnt from the Leeds city centre scheme. The project board includes external partners with key interests in the success of the Scheme.

Overall assessment

The test is met at this FBC stage.

Affordability

- The proposal set out by Leeds City Council is to request approval for a £110.4m scheme with the current identified funding:
 - total commitment by Government (Defra) is £89m (£1.32m is to be ringfenced for the NFM element of the scheme)
 - LCC have committed to providing a total of £21.4m of partnership funding
- Provision for risk contingency is £14.1 million which represents 15% of the base cost. The sufficiency of this allowance must account for residual risks and uncertainties that include:
 - Outstanding planning permission and Consents.
 - Agreements from land owners to purchase land and provide access
 - Potential changes arising from the detailed design
 - Compliance with planning conditions and environmental mitigation
 - Assumptions about existing ground conditions
 - Underestimated scope and cost of service diversions
- As a result, the risk contingency may come under stress. LCC must remain vigilant to potential cost escalation and the impact this may have on overall affordability. Strong governance on cost control is required. LCC is advised that the FCERMGiA amount is fixed, subject to additional scrutiny should costs increase.
- LCC has made an allowance for inflation over the 4 year implementation period in accordance with the Green Book.

Overall assessment

The test is met at this FBC stage.

Conclusion

The Defra Investment Committee have authority for recommending the submission of major project business cases for final approval by HM Treasury. This authority is delegated from both the Defra and the Environment Agency Accounting Officers. The Defra Investment Committee recommended this Accounting Officer Assessment on 7th October 2020.

This summary will be published on the government's website (GOV.UK). Copies will be deposited in the Library of the House of Commons, and sent to the Comptroller and Auditor General and Treasury Officer of Accounts.

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