

AUDIT AND RISK MANAGEMENT COMMITTEE**24 OCTOBER 2023**

Report Title:	WEST KIRBY FLOOD ALLEVIATION PROJECT, PROCUREMENT OF CONSTRUCTION CONTRACT AND INCREASE IN COST OF PROJECT
Report of:	DIRECTOR OF NEIGHBOURHOOD SERVICES

REPORT SUMMARY

This report refers to this Committee a resolution of the Environment Climate Emergency and Transport Committee made on 14 March 2023, so that consideration can be given to reviewing concerns relating to the procurement of the construction contract and the increase in cost of the project.

The West Kirby Flood Alleviation scheme strategically aligns with both the Sustainable Environment and Safe and Pleasant Communities themes of the Wirral Plan 2021-26.

The scheme is located within Hoylake & Meols and West Kirby & Thurstaston wards.

The recommendations of this report do not constitute a key decision.

RECOMMENDATIONS

The Audit and Risk Management Committee is recommended to:

1. Consider the report to Environment, Climate Emergency and Transport Committee on 14 March 2023 concerning the West Kirby Flood Alleviation Scheme;
2. Consider the background to the procurement of the contract and all increases in costs of the project, and
3. Resolve that on the available evidence the Committee is satisfied that the contracts for West Kirby flood defence works were procured in accordance with the law and administered in accordance with the requirements of those contracts.

SUPPORTING INFORMATION

1.0 REASON FOR RECOMMENDATIONS

1.1 Following a report to the Environment Climate Emergency and Transport Committee on 14 March 2023 a substantive motion was resolved resulting in an amendment to the recommendations of the report to include the following additions:

- officers be thanked for the considerable amount of work put into the project, and
- the report be referred to the Audit & Risk Management Committee so that consideration can be given to reviewing concerns relating to the procurement of the construction contract and the increase in cost of the project.

1.2 Further project costs have been incurred and additional budget has been secured in the form of Grant in Aid from the Environment Agency (EA) since the report to the Environment Climate Emergency and Transport Committee on 14 March 2023. The construction contract final account has now been settled and the all the project costs are fully defined.

2.0 OTHER OPTIONS CONSIDERED

2.1 To do nothing is not an option. This report is a referral from the Environment Climate Emergency and Transport Committee. Other procurement options are discussed in section 3.0 to this report.

3.0 BACKGROUND INFORMATION

3.1 **Procurement Route:** The delivery of the West Kirby Flood Alleviation Scheme has utilised two different procurement frameworks. Four different contracts have been procured through these frameworks since the scheme received financial and technical approval from the EA in January 2018:

3.1.1 **Merseytravel Multi-Party Consultancy Framework (1).** The framework was established by Merseytravel in 2015 following competitive tendering under the Office of the Journal of the European Union (OJEU) Regulations and Public Contracts Regulations (PCR) (2015), to provide technical and professional multi-disciplinary consultancy services to local authorities in the Merseytravel area. Wirral Council has access under agreement to this framework and such services, to support Council officer resource for the West Kirby Flood Alleviation scheme, were procured using a mini-competition approach across suppliers in Lot 4, Civil & Structural, of the framework. AECOM provided the most economically advantageous bid and were awarded the contract with Wirral Council in July 2018. The contract value, based on the initial scope of works, with construction costs estimated at £2.280m, was £147,305.

3.1.2 **Environment Agency Collaborative Delivery Framework (CDF).** The CDF is a regionally-split sole source supplier agreement, with VolkerStevin Ltd appointed as the construction partner for the North West hub. The West Kirby Flood Alleviation Scheme geographically falls within this hub's scope and Volkerstevin Ltd was therefore selected as the partner construction supplier. The CDF was procured by the EA in 2018 under the Office of the Journal of

the European Union (OJEU) Regulations and Public Contracts Regulations (PCR) (2015), which were the applicable tendering regulations at that time, meaning the framework was exposed to competitive tender across the European Union. As a central government procured framework agreement, the framework was subject to scrutiny from Cabinet Office Commercial Assurance and to ensure compliance with Government best practice with outsourcing Infrastructure projects. A copy of the OJEU notice for the CDF is included as Appendix A.

- 3.3 VolkerStevin Ltd are one of four Construction partners that sit in geographically specific Lots under the CDF and are the associated delivery partners for the North West and South East delivery hubs for the EA. The scope of Lot 2 includes for construction activities on major civil engineering flood defence infrastructure under the New Civil Engineering form of contract (NEC4) Engineering and Construction Contract (ECC). Specific information relating to bidders for each Lot remains commercially confidential and is retained by the EA but VolkerStevin were one of 4 tendering organisations for the North West Hub. The selection criteria was 70/30 quality cost basis. Significant commercial tension was undertaken during the commercial process in a two stage tender-bid process with delivery partners held accountable for rates tendered throughout the duration of the framework agreement.
- 3.4 Upon award to the framework each delivery hub operates as a sole source supplier agreement based driven by delivery partners' tendered rates and the ability of the client to set the price for the delivery of the scope. Having a single supplier helps to deliver a value engineered infrastructure project through Early Supplier Engagement (ESE) throughout the appraisal and detailed design processes.
- 3.5 Wirral Council as Lead Local Flood Authority and Coast Protection Authority had access to this government approved framework as a route to market with access to specialist Flood and Coastal Risk Management approved contractors with competitively tendered rates and economies of scale permissible through large government infrastructure agreements.
- 3.6 The Environment Climate Emergency and Transport Committee, at its meeting on 15 November 2021 approved the use of the Environment Agency Collaborative Delivery Framework and also to delegate authority to the Director of Neighbourhood Services to award both the advanced ECC and main ECC contracts.
- 3.7 **Environment Agency Collaborative Delivery Framework (2)** On 1 September 2020 Wirral Council appointed VolkerStevin Ltd under the CDF to provide ESE services. In summary the ESE contract required the Contractor to:
- provide construction related advice to support the development of the detailed design
 - provide comprehensive advice on construction options to streamline the design process
 - to provide logistical and practical considerations in relation to the detailed design including supply chain factors

The value of the ESE contract, as awarded in September 2020, was £69,623.

- 3.8 **Environment Agency Collaborative Delivery Framework (3)** On 24 January 2022 Wirral Council awarded a contract to VolkerStevin Ltd under the CDF to provide

advanced ECC services for the production of moulds and mould formers for the pre-cast concrete wave wall / seating units.

- 3.9 Planning conditions limited the programme for the main ECC construction activities to the period April to September. A lead in time of eight weeks was identified for the fabrication of the pre-cast unit fibre glass moulds and mould formers. Consequently, the advanced ECC was required so that fabrication of the final pre-cast concrete units could meet the requirements of the main ECC construction activity programme.
- 3.10 The value of the advanced ECC contract, as awarded in January 2022, was £405,194.03
- 3.11 **Environment Agency Collaborative Delivery Framework (4)** On 18 April 2022 Wirral Council awarded the main ECC construction contract to VolkerStevin Ltd under the CDF.
- 3.12 As with the advanced ECC a NEC4 form of contract was used. For the main ECC additional Option C, Target Cost contract, was selected. This is a form of 'cost-plus' contract where the contractor is paid his actual costs for carrying out the works, plus a fee for profit and overheads, but with a set Target to incentivise sound commercial management and provide some degree of cost certainty for budgeting. Option C sets the Contract Value at an agreed Target Cost. If the actual, or defined cost, of the works provided are less than or exceed the Target Cost then any savings or additional costs are shared between the Contractor and the Client using a gain share mechanism in the contract. The Target Cost can change through the submission and acceptance of Compensation Events. Compensation Event prices are considered by the impartial Project Manager appointed by the Client, in this case Wirral Council, and thus risk is shared equally between Client and Contractor.
- 3.13 The CDF requires the Client, in this case Wirral Council, to set the Target Cost for any ECC. The Client Set Target Cost (CSTC) is based upon the detailed scope of works which set out what the Contractor is required to provide and deliver under the contract. In collaboration with the Environment Agency's Carbon Cost Estimating Team a CSTC of £9,640,000 was determined in April 2022. The CSTC of £9,640,000 was offered to Volkerstevin Ltd under the EA CDF. Volkerstevin Ltd accepted the CSTC following a procurement exercise undertaken on The Chest procurement portal.
- 3.14 The contract with AECOM, procured through the Merseytravel Multi-Party consultancy Framework, included for the provision on an independent NEC Project Manager to undertake the contract management associated with the main ECC. The NEC Project Manager is required to review and accept any legitimate Compensation Events (CEs) brought by the contractor. As CEs are accepted, for example for a change in scope of the required works, the Target Cost also changes. If a CE is rejected and the Contractor incurs costs then this is reflected in the defined cost for the contract and subject to the gain/pain share mechanism.
- 3.15 Other procurement options and reasons for rejection:
- 3.16 **Separate individual OJEU Tender**
Following EA approval of the business case for the West Kirby Flood Alleviation Scheme in January 2018, a preferred route for procurement of the necessary consultancy and construction services to deliver the project was identified. At this time the scheme was identified as comprising a simple linear defence wall, without

the need for significant foundations and associated additional infrastructure improvements. As with other Council infrastructure schemes a traditional design and construct arrangement (NEC3 Contract) was identified as the preferred way forward to meet the scheme requirements, with separate commissions for:

- a) Design and contract management services; and
- b) Construction of the Works

As set out in 3.1 above the Council procured the services for item (a) via competitive tender through the Merseytravel Multi-Agency Framework. Under this arrangement the Consultant appointed would include the provision of services to produce a tender list of suitable Contractors, in accordance with OJEU and other public sector procurement requirements.

This approach for (b) was subsequently changed to a procurement approach utilising the EA's Collaborative Delivery Framework. The background and benefits of the change of approach are set out in paragraph 3.19 below.

3.17 **Alternative Frameworks**

Other frameworks are available to procure the Works, with SCAPE being the most well known. SCAPE provides a range of frameworks for use by public service clients to procure public sector consultancy and construction services, primarily for use in the delivery of built environment projects. The use of SCAPE could be for procurement of design services, construction services or design and build. Based on the original scheme budgets design and build services would have been delivered by Balfour Beatty, whilst construction services only would have been through Kier Construction or Morgan Sindall. SCAPE is predominantly used for building services and has only been sparsely used in the field of Flood and Coastal Erosion Risk Management, making the CDF a better fit.

3.18 **Design and Build Contract**

Delivery of the scheme through a design and build (D&B) contract option would have involved the procurement of a single firm/joint venture to both design and construct the works. A procurement exercise to define suitable business entities to bid would have been required in the first instance, which would have had to have been carried out prior to award of the separate design commission by the traditional route identified above. The Council has limited experience of the conditions of contract associated with such arrangements on flood and coastal works, and recent experience of D&B on a major civil engineering project, Wirral Docks Bridges, did lead to some contractual issues for the Council to resolve. In all the circumstances this procurement route was rejected.

3.19 As the design and contract preparation phase progressed, Council officers from Flood and Coastal Risk Management, Procurement, Legal and Financial Services undertook discussions with EA representatives with regard to potential use of the Agency's Collaborative Delivery Framework to deliver the construction phase of the Works. This would involve the use of the EA's framework contractor for the North West Region, VolkerStevin Ltd, being contracted to undertake the construction element. Use of the CDF brought the following specific benefits:

- Contractor approval through the framework procurement process;
- Provision of dedicated support during scheme development through Early Supplier Engagement;

- Availability of EA and DEFRA Commercial support staff in producing the Contract and agreeing the Target Cost for the Works and throughout the Contract;
- Use of an EA framework provides increased likelihood of additional grant funding if budgetary pressures are realised for legitimate reasons;
- Provision of a Contractor with a proven track record in delivering flood and coastal erosion risk management schemes, bringing that experience with them into the ESE process;
- A fast-track route to market, removing the need for OJEU advertising as this had already been undertaken when procuring the framework. The early route to market itself brought additional benefits:
 - Ability to meet the seasonal constraints imposed by planning conditions
 - A mechanism to meet programme through the advanced ECC
 - Ensuring the risk of losing grant was minimised by demonstrating achievement of key EA project management gateways
 - Understanding market sensitivities and including early ordering of materials through the ESE, thus avoiding additional inflationary costs

3.20 Many of the advantages of using the CDF have been captured and quantified through the EA's Efficiencies reporting process. Efficiencies are cost savings brought about by considering alternative design or approaches to delivery. Projects supported by Flood Defence Grant in Aid are expected to achieve a minimum of 10% efficiency savings of the total project cost.

3.21 Efficiencies for West Kirby Flood Alleviation have been submitted for approval by the EA Review Board totalling £4,690,400. A breakdown of the efficiencies submitted is included in Appendix B. The review is ongoing however the minimum value of accepted efficiencies, following review, is £4,077,684.

3.22 The total cost of the West Kirby Flood Alleviation project has increased because there have been increases in the value of all four contracts awarded to deliver the project. These are summarised below:

Merseytravel Multi-Party Framework (1)

AECOM – Design, Consenting and Contract Management

Initial contract value £147,305 in 2018 rising to £847,607 at contract final account. AECOM's professional service contract had no fixed term but had been priced with a view to completion in June 2019. The contract continued until all the services scoped were completed with a resultant impact on project management costs. The final contract value includes legitimate compensation events which were agreed due to the widened scope of the contract. The initial scope of the contract was for the delivery of a simple linear defence wall, without the need for significant foundations and associated additional infrastructure improvements.

AECOM had also undertaken a Feasibility Study and developed the Business Case for West Kirby Flood Alleviation. Both contracts were procured through the North West Construction Hub administered by Manchester City Council. The combined value of the two contracts was £77,988.

Environment Agency Collaborative Delivery Framework (2)

VolkerStevin Ltd - Early Supplier Engagement

Initial contract value £69,623 in September 2020 rising to £191,519 at contract end in December 2021. The original contract programme had anticipated a planning decision in January 2021 however the planning approval process took significantly longer than anticipated due to environmental issues based on contemporary bird

data. The emerging constraints to mitigate against the environmental impact required a change to the original scope of works and additional project management time. Additional ground investigations also took place during the ESE which fed into the design development process. The changes were dealt with through a series of compensation events which were legitimately brought by the contractor.

Environment Agency Collaborative Delivery Framework (3)

VolkerStevin Ltd - Advanced Engineering Construction Contract

Initial contract value £405,194.03 in January 2022 rising to £424,846 at contract end. There was a slight increase in contract value due to additional design fees for changes required by the Client.

Environment Agency Collaborative Delivery Framework (4)

VolkerStevin Ltd - Advanced Engineering Construction Contract

Initial contract value £9,640,000 in April 2022 rising to £17,780,596 at contract final account settlement in October 2023. The most significant changes to contract value (brought via compensation events) have been reported to the Environment, Climate Emergency and Transport Committee in March 2023 and published in an Officer Decision Note of July 2023. In total 112 compensation events have been agreed for changes in scope to the works originally specified in the Works Information for the contract. Compensation events have also been agreed for delays to programme that have been assessed by the independent NEC PM and deemed to be not the fault of the Contractor. A full schedule of the accepted compensation events and their associated value is included in Appendix C. The schedule has been generated from FastDraft, the Contract Management platform used to administer all contract related issues throughout the construction phase of the scheme.

- 3.23 The final cost of the works delivered through the ECC is £18,107,170 which is in excess of the agreed final Target Cost (changed through agreed Compensation Events) of £17,454,022. As a result the difference of £653,148 is shared equally between Wirral Council as Client , and VolkerStevin Ltd as the Contractor. The final contract value to Wirral Council equates to £17,454,022 plus £326,574 = £17,780,596.
- 3.24 On 14 March 2023 the Environment, Climate Emergency and Transport Committee approved a variation of the Main ECC contract value to £14,282,000. Following that meeting the Contractor, VolkerStevin, advised of a revised Forecast Cost for the scheme which exceeded the new contract value approved at Committee. The reason for the latest increase in the value of the works are set out in detailed in the Officer Decision Note of 17 July 2023 and summarised below:
- Complex modifications to the design of the moving gates impacted on the overall cost of the gate supply
 - Consequential impact on the design of the foundations, surfaces and adjacent insitu walls and consequential delay to construction programme as a result of additional design work
 - Additional material requirements as a result of the redesign of the foundations
 - Unchartered underground obstructions were encountered during the construction of insitu lengths of the flood wall and gate foundations.
- 3.25 A bid for an additional £3,000,000 Flood Defence Grant in Aid was made to the Environment Agency and approved on 30 June 2023. The ODN of 17 July 2023 reported the acceptance of the additional grant by the Director of Finance (Section 151 Officer) and variation of the value of the main ECC to £17,273,533.

3.26 Value For Money

Professional Services

AECOM's initial contract value was £147,305, including the feasibility and business case contracts, the total value of the commissions equate to £225,293. This represented 10.1% of the estimated construction cost (£2,228,000) at the time of the award. The Environment Agency have advised that professional fees are normally between 10% and 15% of the construction value of a scheme which accords with Wirral Council's professional officers' own previous project management experiences.

Whilst AECOM's fees have increased significantly due to the increased scope and time required to deliver the project the final value of all commissions of £925,595 represents just 5.2% of the final value of the main ECC final account of £17,780,596, which is considered reasonable and proportionate when compared with the typical fee percentages noted above.

Construction Contract

Increases in the value of the main ECC have been primarily dealt with by additional project budget funded from additional Flood Defence Grant in Aid.

The Business Case for the West Kirby Flood Alleviation Scheme received technical and financial approval from the EA, following a robust assurance process, in January 2018. Applications for additional grant aid are undertaken by submission of a FCERM4 Variation Application. Variations are subject to the same assurance process as business case submission, requiring regional sign off from the EA Area Flood Risk Manager before scrutiny by an EA Assurance Board. Variations 4 and 5 made in March and June this year were subject to scrutiny via the Large Projects Review Board and supported by a Director's Briefing Note to allow for final sign off from the Chief Executive of the Environment Agency. Value for money was challenged as part of the assurance process as the "Partnership Funding" score had fallen below the threshold at which new business cases would normally be approved. Focus was made on the whole life benefits of the scheme (in excess of £33m) and the Environment Agency were content that the scheme still provided value for money to the taxpayer as the Benefit Cost Ratio is 1.9.

3.27 DEFRA Audit

Flood Defence Grant in Aid is administered by the Environment Agency on behalf of Defra. Defra undertake monitoring visits to projects that have received grant aid to confirm the location and extents of the works and also to check financial processes and information.

Defra visited West Kirby on 20 September 2023 and indicated that the grant funding for the scheme had been secured and used in accordance with the "Memorandum relating to capital grants for other risk management authorities in England (2020)". Defra provided a report on 6 October 2023 that concluded "This was a very informative grant monitoring visit and reassured us of the legitimacy of needing 5 FCERM4 (BCUR) variations over the life of scheme due to original GEO surveys not picking up the very varied ground conditions in close proximity, the obvious impact of covid and increase material costs, having to construct the scheme while keeping access for residents and to the public for recreation purposes and the extra complexities needed for the RNLI to still launch their vessels in a timely manner."

4.0 FINANCIAL IMPLICATIONS

4.1 The final project costs are summarised as follows:

4.2 The project budget identified to meet the project costs is set out below:

○ Environment Agency's Flood Defence Grant Aid	£10,277,000
○ Environment Agency's Other Government Department Grant	£3,300,000
○ Regional Flood Coastal Committee Local Levy	£1,605,000
○ Wirral Council Capital Programme funding	£4,539,000
TOTAL	£19,721,000

with costs against this total budget identified as:

○ Client costs (Ground Investigation, surveys, staffing)	£ 324,279
○ Professional Services Contracts (AECOM)	£ 925,595
○ Early Supplier Engagement Contract (VolkerStevin)	£ 255,458
○ Advanced ECC	£ 424,846
○ Main ECC payments	£17,780,596
TOTAL	£19,710,774

4.3 The Wirral Council funding is comprised of:

○ Capital borrowing directly for the scheme	£2,410,000
○ Flooding Prevention Reserve	£ 455,000
○ Liverpool City Region Combined Authority Highways Grant	£ 709,000
○ Approved virements from Neighbourhoods capital programme	£ 965,000
TOTAL	£4,539,000

No additional council Capital borrowing has been required.

5.0 LEGAL IMPLICATIONS

5.1 The contract was competitively procured in accordance with the OJEU regulations via the EA's CDF. The contract was procured and administered in accordance with the Council Constitution. There are no further legal implications arising from this report.

6.0 RESOURCE IMPLICATIONS: STAFFING, ICT AND ASSETS

6.1 There are no further resource, staffing, ICT or assets implications arising from this report.

7.0 RELEVANT RISKS

7.1 Increase in project cost has the potential to generate public interest with potential reputational and resources impacts on the council.

7.2 All risks were managed throughout the project and construction phase through a robust project governance structure utilising itemised and costed risk registers as tools to inform dynamic contract and project decision-making.

8.0 ENGAGEMENT/CONSULTATION

- 8.1 Wirral Council engaged with the EA major funding partner from project inception and throughout project delivery. VolkerStevin Ltd provided a community room facility, available to the public, within their site compound showing images of the scheme, progress reports and offering individual feedback and enquiry resolution. The community room was staffed by officers from the council, VolkerStevin Ltd and the Environment Agency.
- 8.2 Project officers working with the council's Communications team and colleagues at the Environment Agency and VolkerStevin Ltd provided regular progress updates throughout the works via social media, press statements and Wirral View news items.

9.0 EQUALITY IMPLICATIONS

- 9.1 There are no direct equality implications arising from this report which is concerned with contract procurement and project cost.

10.0 ENVIRONMENT AND CLIMATE IMPLICATIONS

- 10.1 Use of the EA's CDF as the procurement mechanism required the ECC contract to be delivered in accordance with the EA's Minimum Technical Requirements. The Minimum Technical Requirements are imposed to minimise the carbon budget of flood and coastal risk management schemes.
- 10.2 The West Kirby Flood Alleviation Scheme supports the council's Environment and Climate Emergency policy in developing resilience to more extreme weather patterns and rising sea levels that impact Wirral. The scheme reduces flood risk to 70 properties from an extreme event, with a further 134 properties benefitting from protection, due to rising sea levels, by 2040.
- 10.3 The construction site and its impact on the environment and people was assessed independently by the Considerate Constructors scheme in November 2022 and VolkerStevin scored 'Excellent' in each of the following three categories: Respect for the Community; Care for the Environment; Value Their Workforce, with an overall score of 41 from 45, which is rated 'Excellent' overall in the national scheme.

11.0 COMMUNITY WEALTH IMPLICATIONS

- 11.1 The scheme to reduce flood risk at West Kirby brings in over £15m in external grant aid. The scheme, through its public realm attributes, will increase tourism and the visitor economy to the area.
- 11.2 No formal requirement under the EA's CDF framework is included in the ECC contract for the measurement of social value. However, VolkerStevin Ltd has used its own Thrive model to measure social value, and based upon this model has provided social value with an equivalent financial value of over £5,545,003. Appendix D refers.

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APPENDICES

Appendix A - Environment Agency Collaborative Delivery Framework (CDF) OJEU NOTICE

Appendix B – West Kirby Flood Alleviation Efficiencies

Appendix C – ECC Construction Contract schedule of compensation events

Appendix D – VolkerStevin West Kirby Social Value Report

BACKGROUND PAPERS

Statutory guidance

Memorandum relating to capital grants for other risk management authorities in England (2020) updated 8 September 2023

Defra Grant Monitoring Checklist

Defra Grant Monitoring visit report

TERMS OF REFERENCE

This report is being considered by the Audit and Risk Management Committee in accordance with Section (c)(v) of its Terms of Reference.

SUBJECT HISTORY (last 3 years)

Council Meeting	Date
Strategic Applications Sub Committee	02 November 2021
Environment, Climate Emergency and Transport Committee - West Kirby Flood Alleviation - Award of Contract for Construction Phase	15 November 2021
Decision – West Kirby Flood Alleviation – Advanced Engineering Construction Contract	21 February 2022
Decision – West Kirby Flood alleviation – Award of Main Engineering Construction Contract	11 April 2022
Environment, Climate Emergency and Transport Committee - West Kirby Flood Alleviation – Variation of Construction Phase Contract and Acceptance of Flood Defence Grant Funding	14 March 2023
Decision – West Kirby Flood Alleviation Scheme – Additional Grant Funding and Construction Contract Variation	17 July 2023