

Strengthening requests for Directors Support in the Programme Delivery Process.

Proposal 1: FSoD Briefing Note Template.

The purpose of this briefing note is to update Directors on the status of this project and seek their support and advice in maximising the achievable outcomes.

Area Programme	North West
Project/Programme	West Kirby Flood Alleviation
Project Sponsor	EA -- Ollie Hope, Area Flood Risk Manager
Programme Manager	RMA – Wirral Council – Neil Thomas, Senior Manager Flood and Coastal Risk Management
Project Executive	RMA – Wirral Council – Simon Fox, Assistant Director of Highways and Infrastructure

Start Date	January 2018
Forecast completion	May 2023
Date of current FSoD approval	22.03.2022
Date of previous updates	28.01.2022
Date of update NPAS/LPRG review	Not known
Date project forecast to exceed tolerance	Exceeded

Current Approval	£11,082,046
Update forecast	£15,982,000
Revised BC ratio	2.2:1
Revised Partnership Funding Score	76%
Change to FDGiA requirement	£4,263,000

Background and Situation

West Kirby is a coastal town which situated at the north west corner of the Wirral peninsula adjacent to the mouth of the Dee Estuary

Flooding of property has occurred multiple times in the last 40 years with the most recent significant flood event in December 2013

- The scheme is being delivered through the Environment Agency’s Collaborative Delivery Framework
- The scheme consists of a linear flood defence over 1.15km, constructed on a piled foundation and new promenade slab in addition to public realm improvements across the whole footprint of South Parade, West Kirby
- The scheme protects West Kirby on the Dee Estuary at Wirral and contributes to the FCRM strategy by enabling West Kirby to be more resilient to flooding and climate change.

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Figure 1 : Aerial view south from northern extent of works

Organisations Involved

The Flood Alleviation scheme is being delivered through a collaborative approach with a number of organisations:

- Client - Wirral Council as:
 - Coast Protection Authority
 - Highway Authority (with funding from Liverpool City Region Combined Authority)
- Supported by - Environment Agency and Defra Group Commercial
- Contractor - VolkerStevin Infrastructure Ltd
- Design, Supervision, Project Management - AECOM

Changes during Construction Phase

- There are significant local variations in ground conditions over that expected from the ground investigations undertaken which were in excess of the requirements of Eurocode 7 Geotechnical.
- Variations in ground conditions also impacted on acceptance of pile capacity test results due to delayed and variable ground consolidation taking longer than anticipated. This delay had a significant impact on activities on the critical path
- At one location within the site, obstructions were encountered which required:
 - Tidally influenced additional plate load testing over a significant period of time which had not been considered within the programme and therefore caused consequential delay
 - Redesign of foundation within that area
- Information from the local Royal National Lifeboat Institute was disclosed after contract award which impacted significantly on the scheme logistics and critical path leading to programme delay during piling periods. This was despite consultation with the RNLI during the preceding years, during the ESE period by all parties, and during formal consultation through planning process.
- Global increase in material costs arising from market conditions. A contractual

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arrangement was included to address this (Additional Z clause). Contract award in April 2022 was coincidental with market uncertainty due to the impacts of the war in Ukraine.

- Design creep on the following elements as Target Cost was based on design freeze at 80%:
 - Floodgates (requiring input from RNLI)
 - Old Baths Site
 - Highway
 - Re-design of promenade slab



Figure 2 : Vertical and raked piles driven to refusal and awaiting trimming to design length

What Has Driven The Change

Scheme construction began in May 2022 and the change has been realised and challenges have been addressed.

The contractual programme was constrained by planning conditions which required completion of environmentally disruptive construction activities by the beginning of October 2022. The changes above all had significant impact on the critical path and additional ecological monitoring has been put in place to satisfy Natural England and Local Planning Authority.

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Figure 3 : Redshank adjacent to the works at the Old Baths Site

Impact of The Change

The compound impact of all the effects above significantly changed the critical path and programme with a consequential increase in scheme costs.

Budget, timescale or outcomes: Request for Approval

At March 2022 the approved funding arrangement for the project was as defined in Table 1 below:

Table 1 : Funding Arrangement March 2022

Funding Source	Amount (million)
FDGiA	£3.014
Wirral Council Partnership Funding	£3.300
Local Levy	£1.468
Defra OGD Funding	£3.300
Total	£11.082

As a consequence of the change realised and detailed above, the impact on critical path and programme the total project value has increased to £15.982m. Part of this increase can be met by increased Local Levy and Wirral Council Partnership Funding contributions however most of the change is identified through additional FDGiA as set out in the Table 2 below:

Table 2 : Proposed Funding Arrangement January 2023

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Funding Source	Amount (million)
FDGiA	£7.277
Wirral Council Partnership Funding	£3.800
Local Levy	£1.605
Defra OGD Funding	£3.300
Total	£15.982

A revised partnership Funding Calculator has identified £0.489m of GiA eligibility which is included in the increase in FDGiA from £3.014 (March 2022) to £7.277 (January 2023). This is an increase of £4.263m.

Partnership Funding has increased by £0.500m

The revised Partnership Funding score is 76% and the BCR is 2.2:1.

Construction works are programmed for substantial completion by mid-April however Outcome Measure delivery is not likely to occur until final flood gate installation in May 2023.

Governance activities and reporting

The project was initially assured by NPAS before being recommend for approval by the Area Flood Risk Manager and LAIDB Finance in January 2018. Further variations (FCRM4's) are also reviewed and approved by the appropriate Area Flood risk manager, LAIDB Finance and the appropriate FSoD signatory.

Project Governance :

Client : Wirral Council

Formal Governance arrangements are in place to manage project delivery, risks, change and finances.

- Project Board : Chaired by Senior Responsible Officer at Assistant Director Level.
 - Includes Client Project Manager, NEC 4 PM, EA Area Flood Risk Manager and senior representative from Contractor. Meets monthly and acts appropriately to manage risk. Key issues highlighted to Wirral Council Director and Chief Executive levels.
- Progress Meetings : Chaired by Client Project Manager
 - includes Contractor PM & Agent & Commercial , EA Project Advisor, NEC4 PM and Client Comms Teams & AECOM as Designer & Supervisor. Meets fortnightly with Standard Agenda covering Programme and Progress
- Early Warning Meetings: Chaired by NEC4 PM
 - to review and resolve Early Warnings. Meets fortnightly.
- Design Liaison meetings : Chaired by Contractor
 - input from Designer and Client to resolve design issues. Meets weekly.
- Commercial Meetings : Chaired by NEC4 PM
 - input from Contractor Commercial Team to review Compensation Events. Meets weekly.
- Risk Reduction Meetings : Ad hoc: Chaired either by Contractor Commercial or NEC4 PM to discuss and resolve particular issues

Contractor : VolkerStevin Infrastructure's internal governance includes:-

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- Monthly forecast reviews
- Weekly and monthly progress meetings
- Monthly programme updates and mitigation
- Weekly collaborative planning meetings with all parties invited
- Procurement and commercial sign off protocols
- Contract management – CE's, EW's, TQ's

Impact on Area and National programme and deliverables

The project will deliver 93 rOM2's which are needed to contribute to the EA local and National targets, without these contributions other works would have to be promoted to make up the shortfall.

Impact on reputation, relationships and risk

Client : Wirral Council

Wirral Council is currently facing a potential £40m budget deficit in 23/24 and as such is seeking to reduce its Capital Borrowing as this is serviced by revenue payments. There is therefore no additional capital borrowing available from Wirral Council without significant impact on other non-statutory service areas which are already being considered as part of budget saving exercises (library, leisure centre and parks closures).

For the Framework, Environment Agency and VolkerStevin Infrastructure this scheme is one of the highest profile schemes in the northwest which addresses flood risk whilst also upgrading an important public amenity.

The reputational damage to the framework and all parties would be significant especially as there is considerable focus on the scheme which is a pilot project for RMA use of EA Frameworks

However the positive behaviours and collaborative working and mutual support of all parties (EA, Wirral, VolkerStevin, AECOM) has helped to minimise the impact of the challenges faced whilst allowing relationships to grow.

The benefits of this can be used as a model (arising from this RMA pilot) for future schemes from the EA Framework e.g. at Blackpool Council Coastal Schemes.

Are there other associated risks that we need to be aware of in managing this change?

The project is nearing completion and the Project Team feel that all major risks associated have been realised, with some degree of contingency as set out in the changes above.

How have risks been managed by all parties

- Multiple resequencing of programme to minimise delay
- Collaborative design workshops on change design to minimise delay and identify efficiencies
- Development of working relationship with RNLI following intervention at a national level
- Customer centre jointly staffed by Wirral, EA & VolkerStevin to improve relationship with residents and local stakeholders
- Aligned communications and updates to press and community – this has resulted in

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a low level of complaints regarding construction disruption

- Flexible use of piling sub-contractor to react to ground condition challenges
- Collaborative approach to advance ordering of concrete units and steel piles to offset inflationary increases
- Enhanced relationship with pre-cast sub-contractor to mitigate storage and delivery delays
- Collaborative working has realised highway design efficiencies to minimise costs

What would be done differently next time?

EA Framework

- Review of Scope to add further requirements for the contractor during ESE to support client with stakeholders
- Review of ECC NEC PM requirements and whether these could be better met through use of the EA Framework (Defra Group Commercial or EA Commercial) rather than through a Consultancy.

Environment

- Greater strategic understanding of the likely environmental and planning constraints for a site outside statutory designated environmental areas.

Ground Conditions

- Consideration could be given to increasing contingency and risk allowance to allow for variability in ground conditions however this would impact on scheme viability.
- Detailed review of future scope with regard to piling to ensure all challenges that occurred during this scheme are considered.

RNLI

- Liaison with national organisation at a senior level and at an early stage to ensure that any local issues / concerns / reluctance to engage do not impact at critical stages

Design Creep

- Detailed design should be closer to full completion at agreement of Target Cost

Positive Outcomes:

The project team have overcome constricted timescales, environmental constraints and working parameters to deliver this complex coastal project, achieved by all organisations exhibiting exemplar collaborative behaviours. Trust, mutual respect and support of one another are advocated at all times, along with an attitude to actively seek and discuss challenges with a high level of professional maturity.