WEST DUNBARTONSHIRE COUNCIL

Report by Chief Officer Roads and Neighbourhood (Shared Service)

Committee Name: IRED 2nd November 2022

Subject: Flood Prevention Schemes - Levenhowe, River Leven and Gruggies Burn.

1. Purpose

- **1.1** As part of Roads and Transportation budget allocation for 2022/23 an additional £500,000 was provided to allow acceleration of flood schemes to reduce flooding in Levenhowe, the River Leven and Gruggies Burn.
- **1.2** The purpose of this report is to update IRED Committee on the progress of these flood alleviation works and to seek approval to progress with the recommended works.

2. Recommendations

- **2.1** It is recommended that the Committee:
 - Note the contents of this report
 - Agree the proposals as set out within the report to progress flood alleviation works within Levenhowe, River Leven and Gruggies Burn flood prevention schemes.

3. Background

- **3.1** A motion was raised at Council on 31st August 2022 by Councillor Jonathon McColl, local ward member for Lomond, requesting officers to provide an update to the next IRED Committee on the proposed works and at the same time to produce a summary briefing that can be emailed to Levenhowe residents to bring them up to date.
- **3.2** As part of West Dunbartonshire Councils duty & responsibility under the Flood Risk Management Act (Scotland) 2009, Roads & Transportation Services commissioned RPS Consultants to undertake a detailed flood study for the River Leven, this study included Loch Lomond and all tributary watercourses. It was agreed between WDC and SEPA that the specified study area was subdivided into 8 Flood Cells.
- 3.3 The 8 Flood Cells created are:-

Flood Cell 1 – Dumbarton Flood Cell 2 – Knowle Burn Flood Cell 3 – Murroch Glen Flood Cell 4 – River Leven Flood Cell 5 – Pappert Hill Burn Flood Cell 6 – Alexandria Burn Flood Cell 7 – Carrochan Burn Flood Cell 8 – Ballaghan Burn

- **3.4** This sub division was to assist with the deliverability and prioritisation of what measure may be required to be implemented to reduce the overall flood risk study area.
 - Levenhowe is located in FC4.
 - Ballagan Burn is located FC8
- **3.5** The Flood Study was submitted in December 2019 for the prioritisation list for Flood Schemes for Cycle 2 of the Flood Risk Management Act (Scotland) 2009, with Cycle 2 running from 2022-2028.
- **3.6** A funding group has been set up to prioritise and allocate funding from the Scottish Government based on a set criteria of prioritisation. Due to significant cost increases delivering Cycle 1, the funding group is re-evaluating how funding is allocated during Cycle 2.
- **3.7** Whilst the final outcome for cycle for cycle 2 is still to be decided it is expected that West Dunbartonshire Council will be in the higher tier for any allocation of funding.
- **3.8** It is a requirement of Scottish Government and SEPA that any proposed flooding works do not cause a negative impact or increase flooding risks to other locations.
- **3.9** It was initially suggested that the additional funds could be used to facilitate the flood alleviation works identified in Flood Cell 8 Ballagan Burn with works originally estimated at a cost of £500k in 2019.
- **3.10** After investigation by our Consultant it was noted that FC8 Ballagan Burn on its own is not cost beneficial and would not reduce the flood risk to Levenhowe and the surrounding area. It was also noted that proposed works in FC8 would result in a marginal increase to the flow rate of the Ballagan Burn and therefore not meet the requirements set out by Scottish Government and SEPA.
- **3.11** Additionally due to the substantial increases in cost in all sectors as a result of the current financial climate since the initial estimate in 2019, we would not expect the current level of funding to be sufficient to deliver the project.

4. Main Issues

- **4.1** After review of the current works associated with the various flood alleviation schemes to identify which projects would be best promoted to provide the best overall benefit to residents within the area, the Roads and Transportation team have identified the following works to progress:
 - Promote and support residents, in conjunction with the Scottish Flood Forum, with the design, procurement and installation of Property Level Flood Protection.
 - Undertake embankment vegetation clearing and improvement works within the Gruggies Burn, River Leven and Levenhowe, as well as other urban water courses within the area, both in advance preparation of future proposed flood schemes and to improve water flow through the area.
 - Undertake focused study of surface water high risk areas to develop high level mitigation measures that could be introduced as part of an overall Surface Water Management plan for the area
- 4.2 The anticipated cost of each element is shown below:-

Works Element	Cost
Promote and Install Property Level Protection	£75,000
Embankment Improvements	£50,000
Surface Water Management Study	£375,000

- **4.3** Whilst it is essentially the responsibility of residents to protect their home from the impacts of flooding events, in conjunction with the Scottish Flood Forum, West Dunbartonshire Council do offer subsidised assistance in implementing property level flood protection.
- **4.4** As part of this process we support residents with assessments and design of flood protection systems for their property such as flood gates, alteration of sockets, vent covers. We will provide funding to cover the cost of these assessments, with an average cost of £500 per property.
- **4.5** Additionally we will subsidise up to 50% of the cost for the procurement of materials. We will also assist with the procurement of suitable contractors to undertake the works however residents will be expected to pay for any installation costs.
- **4.6** Previous initiatives indicate that the average total cost for materials at each property to cost approximately £1000, with West Dunbartonshire then contributing half of this amount.
- **4.7** The total cost of this assistance will depend on the uptake from local residents however it is hoped at least 75 properties at risk of flooding

will participate.

- **4.8** The subsidised scheme is available to all Council residents within the risk areas identified in the Flood Maps and any who apply will be provided with this assistance. Particular focus will be given to promote the benefits and opportunities of the scheme with residents within the risk area of the River Leven, Levenhowe and Gruggies Burn areas.
- **4.9** It has been highlighted within the study that there are several watercourses within the area where some improvements to the water edge and embankments as well as clearing of vegetation would improve water flow within the area.
- **4.10** A number of these locations form part of future Flood Cells schemes and early intervention would only help to promote these schemes as part of future funding applications whilst providing some immediate improvement.
- **4.11** The existing overall flood study has also identified a number of locations at high risk to the impact of surface water and the need for a detailed Surface Water Management plan to be developed to address current capacity issue of the existing drainage system.
- **4.12** Whilst the responsibility for surface water lies with the local authority, the majority of drainage systems is owned and maintained by Scottish Water and as such any plans need to be developed in conjunction with them.
- **4.13** As part of this investment we will liaise with Scottish Water to undertake a focus study of the high risk areas with Levenhowe, the River Leven and Gruggies Burn area and develop plans for water alleviation and system upgrades to reduce the impact of surface water within the area.
- **4.14** A summery briefing on the above actions will be developed and issued updating local residents with current progress and to promote property level protection.
- **4.15** The Roads Capital team are currently in the final stages of procurement with our preferred consultant, Balfour Beattie to deliver the detailed design for the first phase of Gruggies Burn Flood prevention works. Site investigation works were undertaken by Balfour Beatty as part of previous funding streams to facilitate this. The final design will be delivered by end of March 2023.
- **4.16** Additionally the team are working with RPS Consultancy to prepare consultation documents to inform local residents and update them on proposed works related to Gruggies Burn Flood Prevention.

5. **People Implications**

5.1 There are no people implications associated with this proposal.

6. Financial and Procurement Implications

- **6.1** Existing procurement frameworks are in place to secure the required Consultancy to undertake the proposals.
- **6.2** Where any contracts exceed £50,000 a contract strategy will be developed to determine the procurement route.
- **6.3** £500,000 was included in 2022/23 budget to facilitate acceleration of flood prevention schemes. This budget will be used to fund projects related to the report.

7. Risk Analysis

7.1 It is not expected that any of the proposals within this report will negatively impact on water flow or increase flood risk to locations further downstream.

8. Equalities Impact Assessment (EIA)

8.1 Screening and impact assessments will be carried out on specific activities as required.

9. Consultation

9.1 All key stakeholders will be consulted as part of the development of any proposals.

10. Strategic Assessment

10.1 A full Strategic Assessment was not required for this Report but will be included in any future assessment.

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Wards Affected:	Ward 1 - Lomond, Ward 2 - Leven, Ward 3 - Dumbarton