January 2025, Greyfriars Citizen Space Update

Since our last update we continue to investigate the feasibility of different options available, to effectively reduce flood risk to the community.

Ground Investigations

As many of the residents in and around Greyfriars Avenue will know, we undertook an extensive programme of archaeological and ground investigations (GI) last year. The main purpose of the GI was to understand the ground and soil properties of the area, which will subsequently help inform the foundation design of any proposed flood defence. We would like to thank all residents affected for their help and patience while this work was completed, we appreciate it was disruptive. The GI consisted of: -

- 14 boreholes
- 17 trial pits
- Physical and chemical testing of collected soil samples
- 8 ground water monitoring loggers were installed
- A ground penetrating radar survey to locate existing services

Collectively this has informed the work we have subsequently undertaken on the scheme.



The key findings from the GI are listed below: -

- Soil types and structure were of generally low strength.
- Soil was saturated down to the bed rock (encountered at between 5-6 meters depth).
- No features of archaeological note were found.
- No contamination outside of background levels was observed.



Implications

The practical implications of the GI findings for any proposed scheme are

- More robust foundations are likely to be required due to the weak soil characteristics.
- Observed ground conditions would mean any embankment would settle significantly; therefore a flood wall is more likely to be used.
- Ground Water needs to be carefully considered as part of the foundation design.



Next Steps

These findings in conjunction with the ongoing challenging financial and economic environment, means that a potential scheme is becoming more challenging. We have been looking at different alignment options, understanding their costs and impacts on areas outside of defended areas by hydraulic modelling of options.

We are in the process of producing an appraisal report that summarises all the information discussed above. We intend to present this to the community at a community event in the early spring and seek community input to help guide the projects next steps.