**North Somerset Council Property Level Flood Resilience**

**Surveys Project Specification**

**1.0 Background**

There are approximately 11,000 properties at risk from surface water flooding within the North Somerset area. Due to the nature of surface water flooding, these properties are widely dispersed throughout the area, many are isolated or very small groups of properties and the risk is presented through a number of different and independent local flood mechanisms.

The 2014 Local Flood Risk Management Strategy identified areas where ‘traditional’ engineered flood risk management schemes could be technically and economically feasible and schemes have since been designed and built.

The remaining unmanaged flood risk to properties is very localised and more suited to management at the individual property level. North Somerset Flood Risk Management Team are therefore looking to provide Property Level Flood Resilience measures, where appropriate throughout the area to reduce the risk of surface water flooding.

The project will operate on a rolling programme for the next 3 years and the appointment will be for three years, with the aim of surveying between 5 and 10 properties per year.

**For pricing purposes, assume that 10 properties will be surveyed each year for 3 years**. **However, the number of properties surveyed is depended on take-up from residents and this amount of work is not guaranteed**. **Larger commercial property may be included in the surveying.**

Properties have been identified as at risk from surface water flooding based on flood reports received, surface water management plans and the Environment Agency’s Risk of Flooding from Surface Water maps.

**2.0 Project requirements and scope**

The requirement is to undertake individual property surveys, produce survey reports identifying appropriate external interventions, passive flood resistance measures and cost estimates, carry out post installation survey and sign off and support residents and council officers in understanding the report outcomes, recommended measures, and ongoing maintenance requirements.

The work is to be completed in line with the code of practice for property flood resilience (edition 2) CIRIA C790.

Tasks to include:

Phase 1 – Survey

* Property appraisal surveys to assess whether other measures e.g. raised kerbs/boundary wall interventions/flow redirection might offer a similar reduction in risk / confirm PLR survey to be appropriate.
* Managing and arranging survey dates with property owners (and tenants where applicable).
* Identify if any of the properties are listed or have any restrictions that would impact on the delivery of any resilience measures.
* Carrying out property surveys and producing reports identifying appropriate passive flood resistance measures.
* Attendance at a pre-installation discussions with property owners / residents.
* Bill of quantities for installation from this year’s surveys to provide cost estimates for phase 2.

Phase 2 – Installation

* Subject to a separate tender exercise and not part of this contract.

Phase 3 – Post Installation

* Post installation surveys and sign off
* Provision of aftercare guidance for homeowners on the installed products.

Note

* Passive resistance measures such as flood doors and smart airbricks are required due to the risk being from surface water flooding and no flood warning scheme being in place.
* The council will not fund the installation of flood recoverability measures other than pumps and water-resistant wall coatings.

**3.0 Pre-installation**

Following the initial surveys, meetings will be held with property owners and Council officers to discuss the outcome of the reports, show examples of products for demonstration purposes and answer pre-installation questions and queries.

**4.0 The Products**

The full list of products required for each property is to be produced as a Bill of Quantities at the end of phase 1. In a format suitable to be used as part of the tender documents for the construction phase

Protection should be provided up to 600mm above the property internal floor level.

The requirements for each building product are:

**4.1 Flood doors:**

Flood doors should be available is a range of styles and colours for the resident to be able to choose from.

Doors should be fitted by FENSA registered installers.

Doors should be to BS 851188-1:2019+A1:2021.

**4.2 Smart Air Bricks:**

Existing airbricks should be replaced with ‘smart air bricks’. These should be a product that can fitted and will close when flood waters rise to the air brick level. Beyond cleaning, no resident interaction should be required. Air bricks should comply with BS 851188-1:2019+A1:2021.

**4.3 Non-return Valves:**

Non-return valves are required on all ground floor sewerage connections and installed in an existing chamber. Backflow connectors are required for all ground floor waste pipes from sinks and washing machines etc.

**4.4 Exterior wall sealant/render repair:**

Cracks to walls, within the brick or blockwork or mortar joints, or render below the expected maximum flood level should be identified and marked on a drawing.

Recommendations for external sealants should be made in the survey report.

**4.5 Interior concrete floor/wall interface sealing**

Recommendations for any interior works to the property should be made in the survey report.

**4.6 Sealing service entry points**

All service entry points that require sealing should be identified and marked on a plan. A specification for the sealing should be provided.

**4.7 Other holes**

There are likely to be other holes on several properties that require further investigation into their purpose. This will determine if they are to be sealed or to be retained and replaced with a product that will allow the hole to function as either a vent or a weep hole.

These should be identified and marked on a plan, with recommendations for future works.

**4.8 Cat/dog flaps**

Where properties have dog and cat flaps that are in walls or in doors. A flood resilient replacement is required and should be shown on the plans associated with the survey.

**6.0 Extent of works**

An initial list of 10 properties whose owners have requested a survey will be provided along with all relevant contact details. Further groups of approximately 10 properties will then be provided as surveys are requested. Where possible, properties will be grouped by geographical location.

There is a fixed budget and therefore it maybe that not all elements of work will be undertaken or progressed. This will be discussed with the resident prior to construction.

**8.0 Timing and staffing**

The Contractor should ensure that sufficient appropriately trained and competent staff are employed for the contract. The contractor should also provide sufficient resources to maintain the timetable and have provision for unplanned staff absences due to sickness and holidays.

A programme of work shall be provided to the contract manager as soon as is practicable for agreement.

**10. Health and Safety**

A risk assessment and method statement for undertaking the survey works should be completed and submitted for approval to North Somerset Council.