

# Residents Meeting Brandon Gardens and St. Nicholas Road, Prestwick

12 March 2019



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## Background of sewer flooding issues in Prestwick

- The sewer system in Prestwick is predominantly a **combined sewer system**
- Collects wastewater and rainfall in the same pipe – from properties and roads
- Flows from Prestwick are pumped through a number of pumping stations along the coast to Meadowhead WWTW
- Increasing pressures upon a combined system:

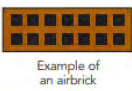
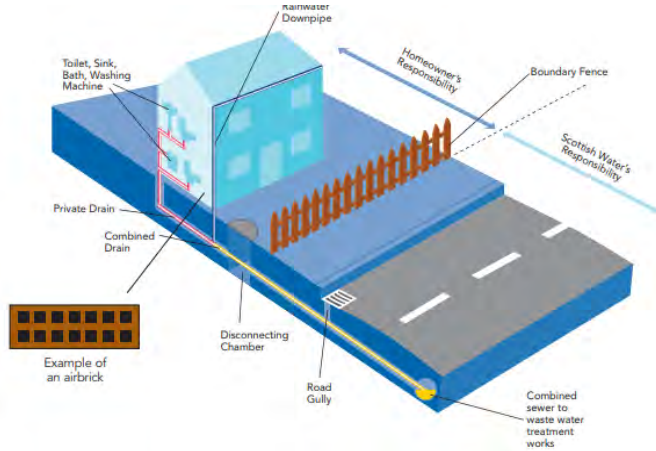


## Background of sewer flooding issues in Prestwick

- Historic sewer flooding affecting several areas of the town
- Sewer flooding is generally rainfall driven
- Flooding is complex, with many organisations responsible for different parts of the drainage systems
  - **Scottish Water** is responsible for the sewerage network,
  - **South Ayrshire Council** is responsible for roads drainage, managing flood risk from surface water and watercourses, and
  - **SEPA** is responsible for providing flood advice and flood warnings.
- Resolution will require a longer term phased approach with a range of interventions
- Working with the other flood risk organisations and communities is key to managing flood risk.



### Internal v External Sewer Flooding



Example of an airbrick

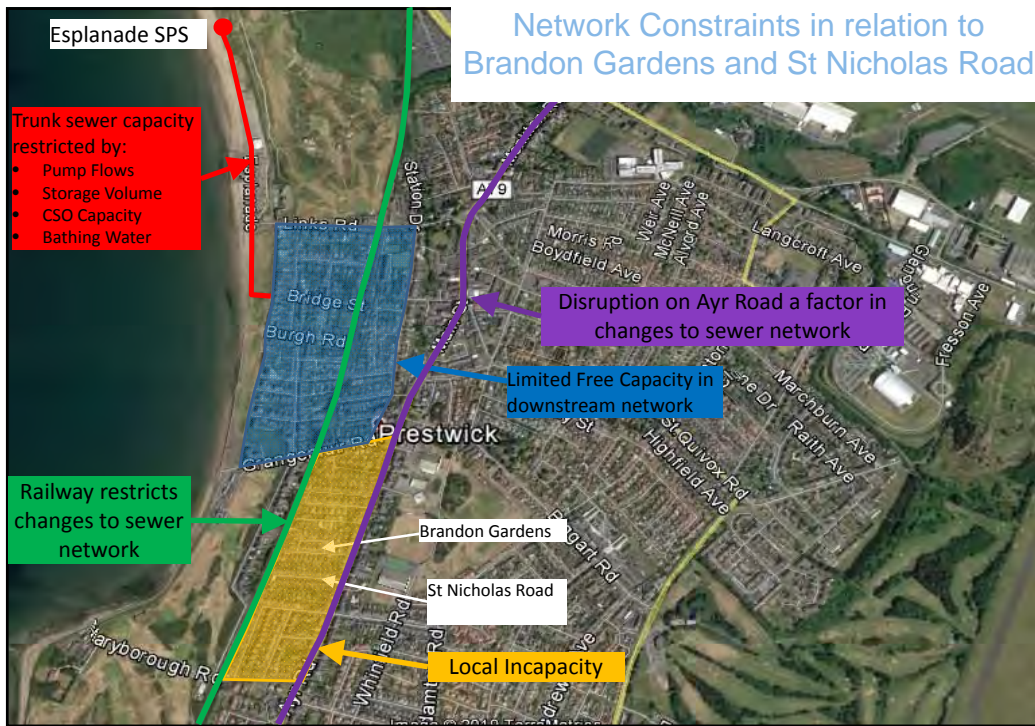
- **Internal** – where sewer flooding enters your property.
- **External** – where sewer flood water enters your garden or driveway, or ponds on the roadway
- We maintain a Register of internal and external flooding



### Background: Known Sewer Flooding Locations







## What have we been doing about it?

- Project focused on Brandon Gardens and St Nicholas Road
- Properties at risk of internal sewer flooding
- Developed and assessed options that we can do to reduce the risk of flooding internal and external flooding
- Reviewed a range of solutions:
  - Short, medium and long term
  - Traditional and surface water management



## Range of solutions reviewed:

- Large scale upsizing of main and local sewers
- Large storage tank and pump options
- Upsize sewer under railway line
- New Combined Sewer Overflow
- Improved road drainage/removal from sewer
- Removing surface water from sewer
- Property level interventions
- **Local sewer upsizing – 300m of large pipes (2m x 1m)**
- **Local storage tank – 1,300m<sup>3</sup>**



## Shortlisted options **discounted** at this stage:

### Location:

- Constrains the size of the solution, in terms of land availability and restrictions working so close to a live railway line.
- So even the proposed local scale storage or upsizing options **would not fully resolve the flood risk**
- Also need to consider the disruption during construction. And working so close to the railway

### Cost benefit assessment:

- Options are subject to a cost-benefit analysis and affordability assessment to ensure value for money
- Shortlisted options were deemed not economically viable.



## What next?

### Kicked off **Prestwick Strategic Drainage Project**

- Include all sewer flooding locations in Prestwick
- Identify all interventions to alleviate sewer flooding which address short and long term needs
- Strategic delivery plan for phased reduction of flooding will be directed by Stakeholder Group.

Continue to develop **localised option to reduce impact and frequency** of flooding in St Nicholas Road and Brandon Gardens



## Localised option for St Nicolas Road & Brandon Gardens

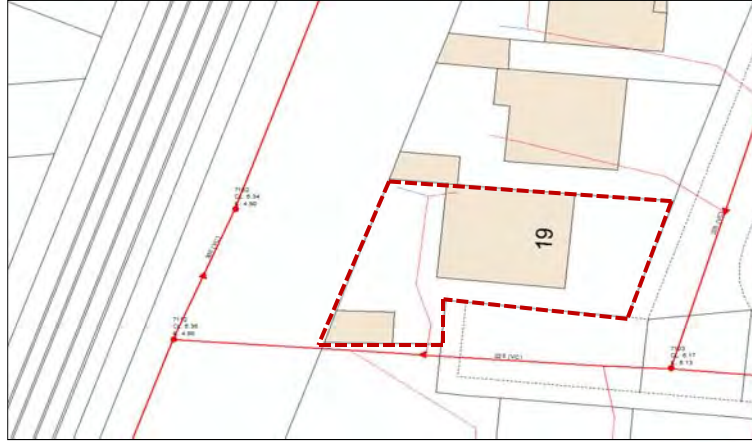
- Offered to purchase of 1 property in Brandon Gardens:
  - Help the individual customers that have experienced internal sewer flooding
  - Use the land to provide us with options to reduce the risk of external sewer flooding for others
  - Allows Scottish Water to remove this property from our Internal Sewer Flooding Register



## Localised option for St Nicolas Road & Brandon Gardens

- Once sale is complete we have a number of options:
  1. Demolish property and re-profile land to create a flood storage area
    - Re-profile the roadway to direct flood water away from other properties and road
    - Reviewing additional potential measures to continue to reduce both impact and frequency of flooding in Brandon Gardens & St Nicholas Road
  2. Demolish property, grass over and maintain
  3. Hold on to the property and maintain for future options

## Available land No 19 Brandon Gardens



## Existing View of No 19 Brandon Gardens





## Initial Mock-up of Option 1: Demolish Property and re-profiling the available land



## Next steps

On conclusion of the sale:

- We will finalise designs for the options and discuss these in more detail with residents to get input.
- Then go through planning process to get permission to demolish the house and re-profile ground. Timeframe dependent on planning process & representations made by residents.
- Continue with **Prestwick Strategic Drainage Study** to identify further actions to continue to reduce flood risk in St Nicholas Road & Brandon Gardens, and across Prestwick

## Summary

- Recognise historic and complex issues relating to sewer flooding in Prestwick
- Committed to progressing **Prestwick Strategic Drainage Study** to identify strategic solutions
- In interim committed to doing what we can to reduce frequency/impact of localised flooding in Brandon Gardens & St Nicholas Road
- Plans progressing with respect to Brandon Gardens
- Will maintain dialogue with the community as we progress

