Millport Coastal Flood Protection Scheme

Protecting the people of Millport

4.1

How to protect Glasgow Street

What is the hazard?

- Waves travelling around the east and west of The Eileans can overtop the low defences.
- With sea level rise, water levels during a storm surge could be close to the promenade level.
- The masonry sea walls to the war memorial area on Guildford Street are higher, but overtopping also occurs here on severe storms.

What is at risk?

- Wave overtopping along Glasgow Street is dangerous for people and vehicles. The promenade and grass areas flood regularly and flooding extends to the road and properties on severe storms.
- The Cross House and properties at the eastern end of Glasgow Street are likely to flood more than once every 10 years.

Risk to...

Houses	
Pedestrians	
Vehicles	

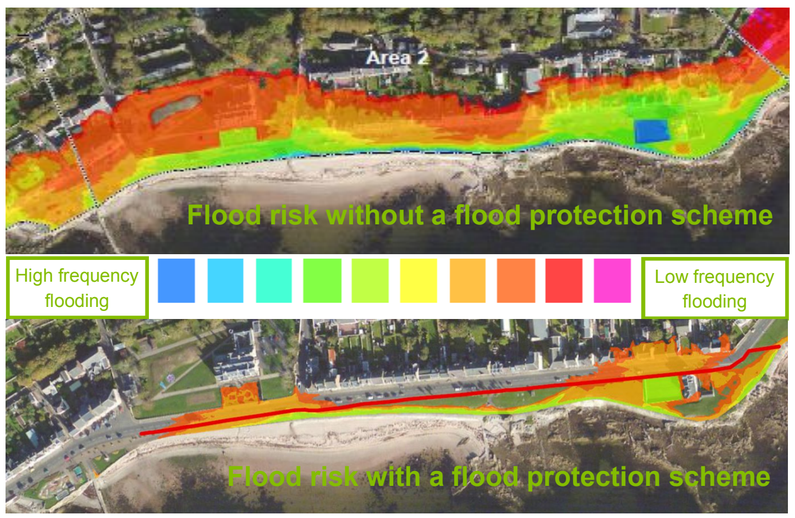
What is the solution?

Flood wall

A flood wall is needed to stop flood water from reaching the road and properties. Offshore breakwaters or an extension to Millport Pier would not reduce the flood risk to Glasgow Street.

The flood wall could be positioned along the top of the existing coastal defences, or closer to the road. The height of the wall might depend on its position, but would not be more than 1.2m (3ft 11in) above the existing ground level.

If the pier was extended or offshore breakwaters constructed, the risk of flooding to the war memorial area (Guildford Street) would be reduced and the remaining flood risk could be addressed by improving the drainage.



Issues

We recognise that construction of a flood wall through this part of Millport will change the appearance of the seafront area. We want to work with you to select the best route and construction materials for the wall, and to provide access between the road and the beach where it is needed.

The height of the wall will be kept as low as possible so that it does not block the view out to sea. The height of the wall will depend on its position. More information about the possible route of the wall is provided on boards 3.2 and 3.3.

There is a complex network of water mains and sewer pipes that run along Glasgow Street. In some places, the route of the wall will be restricted by the location of these underground services.

For more information about the Millport Flood Protection Scheme please visit the Flooding page on North Ayrshire Council's website: **http://www.north-ayrshire.gov.uk/MillportFPS**

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4.2

Sea wall alignment

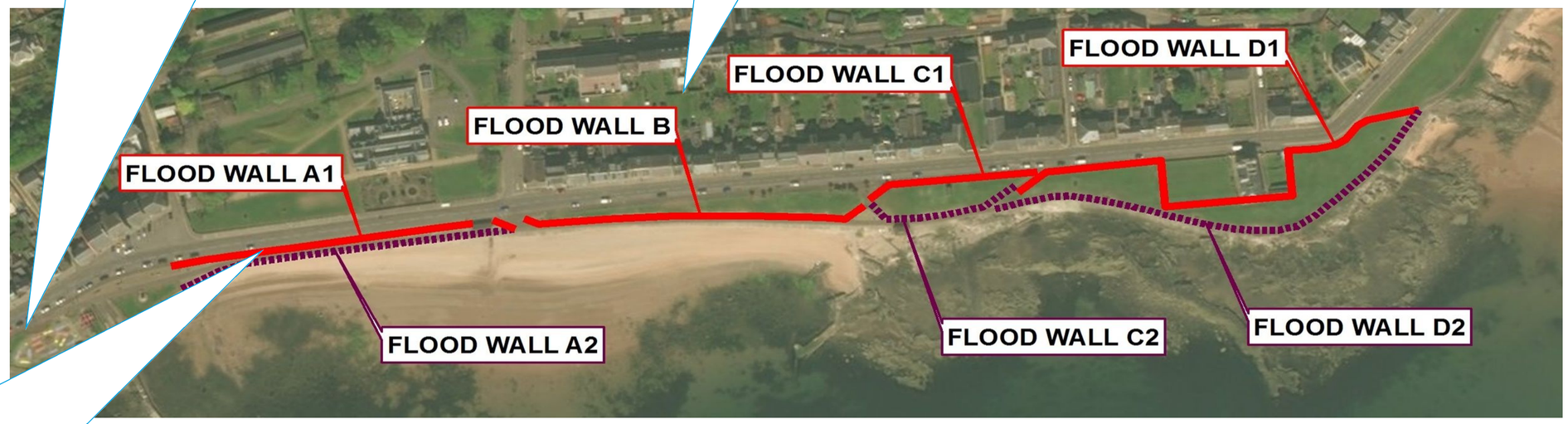
The possible alignments of the sea wall along Glasgow Street are illustrated and described here.

War Memorial (Guildford Street)

Waves do break over the sea wall here but the risk of flooding is less as the walls are higher than those along Glasgow Street. Also the road and properties are located further back from the shore line. Improving the drainage in this area should be sufficient to address future flood risks.

Flood Wall B

Along this part of Glasgow Street the position of the underground sewer pipes means that the flood wall would need to be built along the landward side of the promenade.



Flood Wall A

- The wall could be positioned along the top of the existing sea wall or at the rear of the promenade.
- Both alignments will provide the same protection and require a wall 1.2m (3ft 11in) high.
- Wall alignment A2 would have the least impact on access to the beach.

The visualisations are scaled to show a flood wall approximately 1.2m (3ft 11in) high.

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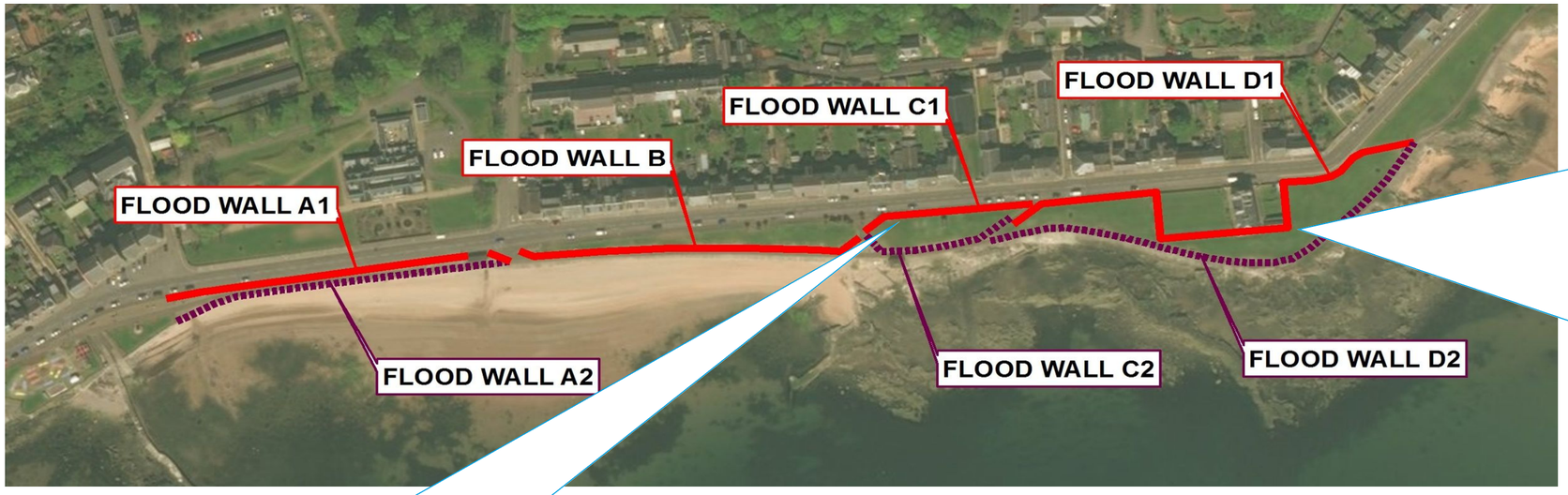

Flood Wall C

- Flood wall alignment C1 provides the best protection against flooding. But it might be necessary to move a sewer pipe in order to construct the wall here.
- Waves could overtop flood wall C2 on very severe storms in the future. The volume of water coming over the wall would not be enough to flood properties.
- The wall would not block the existing access routes to the beach.


Flood Walls B, C2 and D2

The visualisations are scaled to show a flood wall approximately 1.2m (3ft 11in) high.

Flood Wall D

- Very large waves can travel into this part of Millport Bay. A 1.2m (3ft 11in) high flood wall along alignment D2 would be overtopped on storms with a 4% probability (once every 25 years on average). This wall would address flood risks to properties along Glasgow Street in this area although additional protection would need to be provided to the Cross House. Alignment D2 would avoid the buried pipes.
- A 1.2m (3ft 11in) high flood wall along alignment D1 would provide better protection but might require work to move buried infrastructure. The existing wall around the Cross House would be replaced with a flood wall.


Flood Wall D2

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