

# **Havant**

## **BOROUGH COUNCIL**



## **Mengham Park**

**Bunds and swales**

## **Flood Risk Assessment**

## Contents

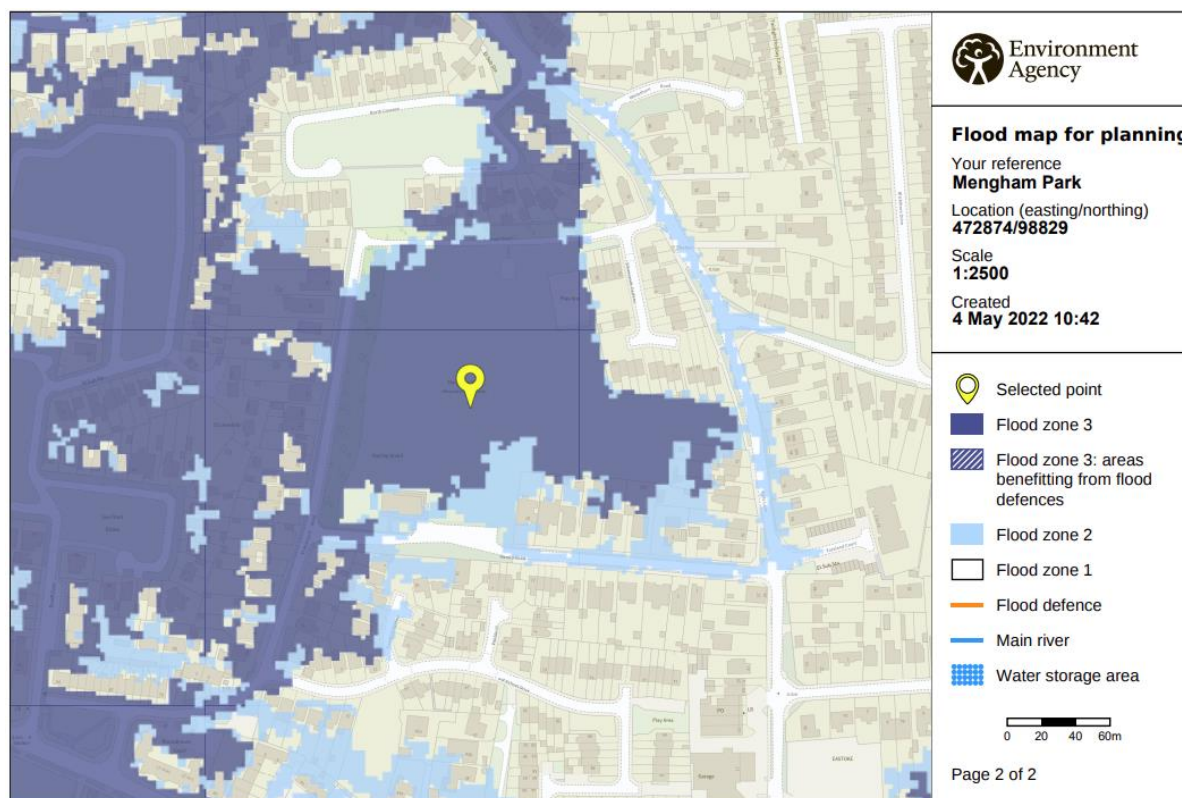
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## **1 Introduction**

- 1.1 Havant Borough Council (HBC) propose to undertake works to introduce natural defences in the form of bunds, swales and boulders to sections of the boundary of Mengham Park.
- 1.2 The purpose of the works is to mitigate the access of vehicles onto the area of open space.
- 1.3 The bunds, swales and boulders have been positioned as to allow pedestrians to walk in between the interventions to retain ease of access park but narrow enough to mitigate vehicles driving into the park.
- 1.4 Mengham Park has been identified as being located within flood zone 2 and 3.
- 1.5 The project will predominately utilise materials on site by creating the bunds using the materials excavated from the swales. However, some additional topsoil will be brought in to where there is a higher number of bunds to swales.

## 2 Flood Risk

- 2.1 The source of flood risk identified in HBC strategic Flood Risk Assessment (SFRA) 2018 is identified as tidal flooding.
- 2.2 The site currently lies within flood zone 2 and 3
- 2.3 Tidal flooding is the temporary inundation of coastal areas during exceptionally high tides of storm surges. The proposed works to introduce bunds, swales and boulders to the perimeter of the park, are not considered to increase the risk of Tidal Flooding
- 2.4 The present day 1:200 year extreme tidal flood level for Chichester Harbour is 3.4mAOD and the site sits approx. 4.5m – 4.8m.



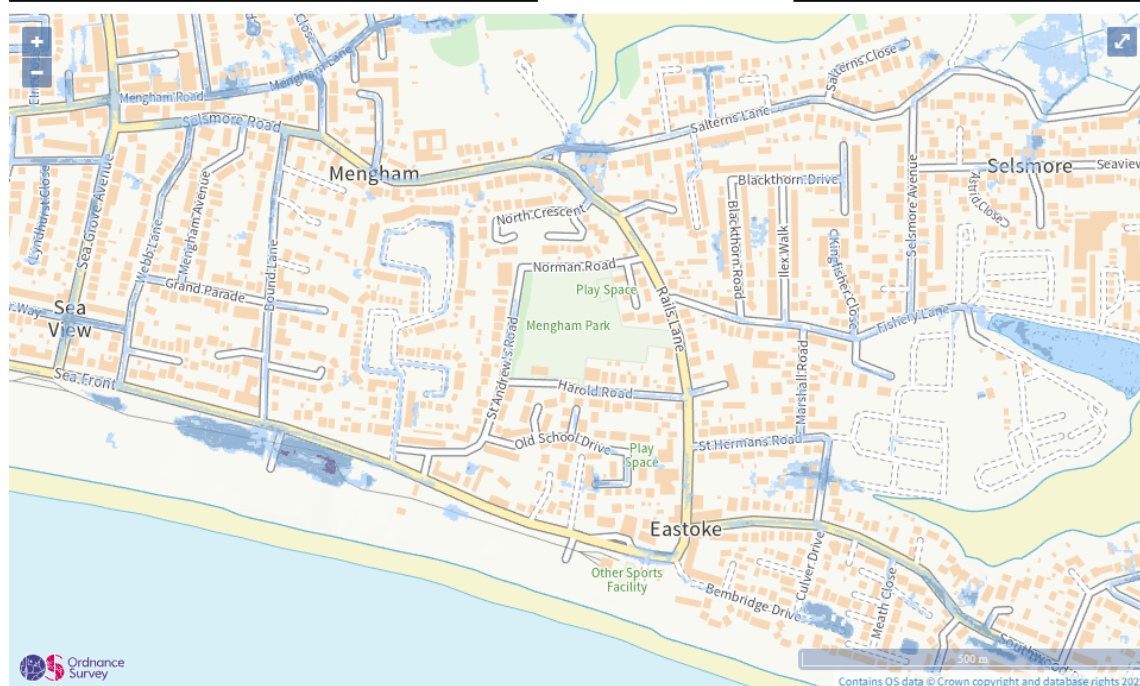
- 2.5 Both Harold Road and St Andrews Road have been identified as presenting a low risk from surface water which is below 300mm. However, given the proposals are seeking to create swales this will in fact help alleviate the issue, so there is no increased risk of pluvial flooding as we are creating space for the surface water.

Flood risk

Low risk: depth

Location

Enter a place or postcode



- 2.6 Sequential Test – As described in S1 the works are to introduce natural defences around the perimeter of Mengham Park. As this is a development of the Amenity Open Space as set out in PPG Table 2: Flood Risk Vulnerability Classification. These works can be considered Water-Compatible development in accordance with the PPG Table 3: Flood Risk vulnerability and flood zone ‘compatibility’ (NPPG, 2014) As such the development works are appropriate so the Sequential Test does not apply.

### **3 Climate Change**

- 3.1 When assessing flood risk climate change should be considered to ensure that development will not have a detrimental effect for the lifetime of the development.
- 3.2 The present day 1:200 year extreme tidal flood level for Chichester Harbour is 3.4 mAOD, increasing to a predicted 4.5 m AOD by the year 2115 (design tide level), due to the effects of climate change. In addition, the present day 1:1000 year extreme tidal flood level for Chichester Harbour is 3.6 m AOD, increasing to a predicted 4.7 mAOD by the year 2115.
- 3.3 Given the sites location the impact of waves is considered less significant in this area.
- 3.4 As stated in S2 the site sits approximately 4.5 – 4.5m AOD, so the site will be affected because of climate change. However, this is not a result and/or exacerbated due to the proposed interventions.
- 3.5 No further assessment of climate change impacts has been undertaken as the natural defences are an amenity.

## **4 Conclusion**

- 4.1 As discussed in S1 the works to be undertaken are improvements to the Amenity Open Space which in line with the NPPG Table 3 is categorised as Water-compatible development.
- 4.2 The works to create natural defences around the perimeter of the park will not have a detrimental effect on the existing flood risk.