

Project Title: Proposed Sites at Seatown Road, Swords,
Co Dublin

Report Title: Flood Risk Assessment

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Client: Fingal County Council

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Index:

Item	Page
1.0 Introduction	1
2.0 Stage 1 – Flood Risk Identification	1
2.1 Site Location	1
2.2 Previous Flooding Occurrences	2
2.3 Likelihood of Flooding	2
2.3.1 Tidal/Coastal Flooding	2
2.3.2 Fluvial Flooding	2
2.3.3 Pluvial Flooding	3
2.3.4 Groundwater Flooding	3
3.0 Stage 2 – Initial Flood Risk Assessment	4
3.1 Existing Site Topography & Flood Alleviation measures	4
3.2 Proposed development of Site & Flood Alleviation Measures	4
4.0 Stage 3 – Detailed Risk Assessment	5
5.0 Conclusions	6

1.0 Introduction

This flood risk assessment has been conducted at the request of Fingal County Council to support a Part 8 planning application for two different sites. The flood risk assessment has been conducted in line with The Planning System and Flood Risk Management Guidelines for Planning Authorities.

2.0 Stage 1 – Flood Risk Identification

2.1 Site Location:

The 2 No. proposed sites are located off Seatown road in Swords, Co. Dublin and are located either side of the junction with St Columcilles Drive (See Figure 1).

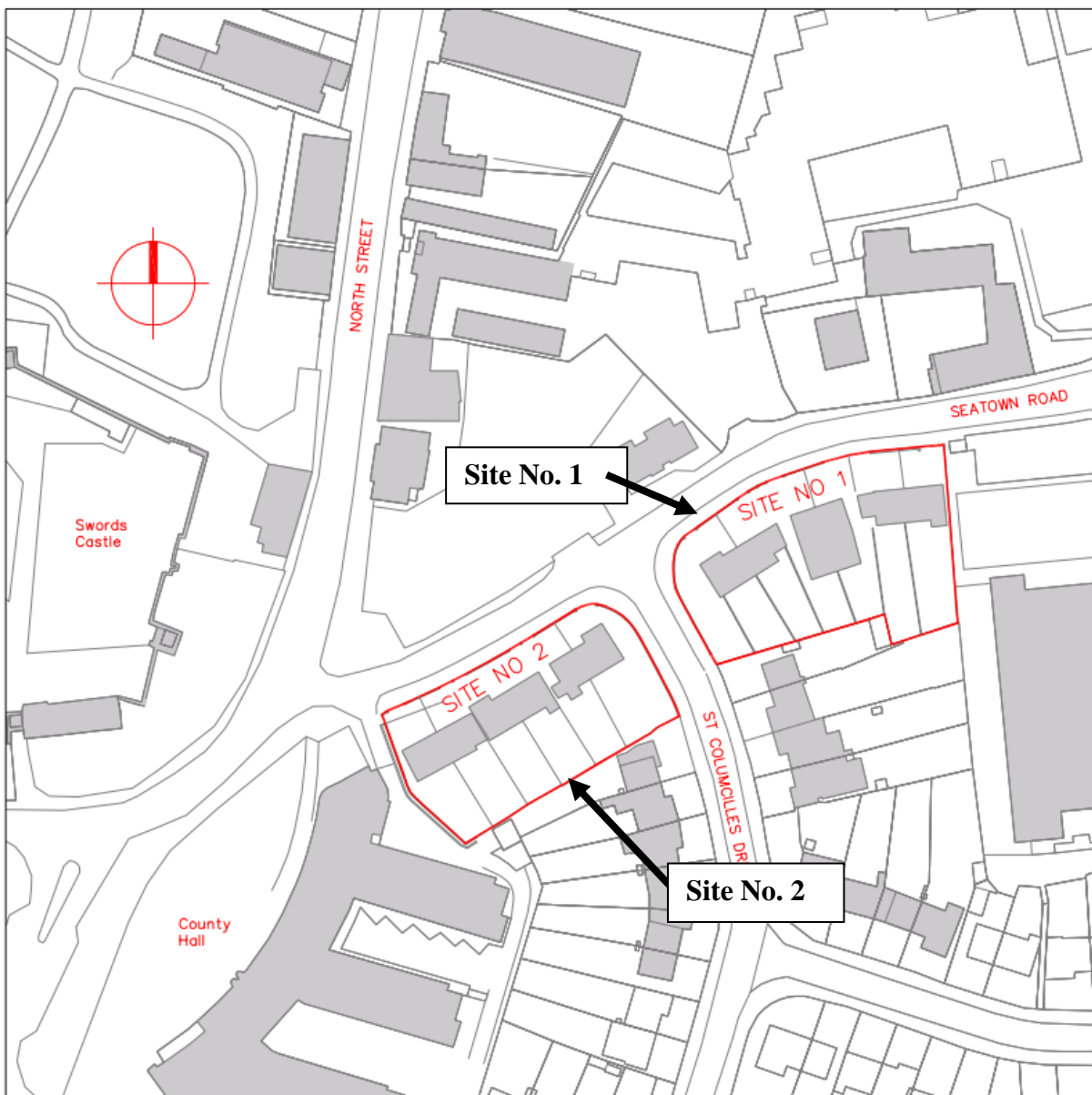


Figure 1: Site Location (Extract from site location map)

2.2 Previous Flooding Occurrences:

Inspection of Flood Maps records from the OPW indicates that there have been no recorded flood events that have influenced the sites in question, refer to Figure 2 below.

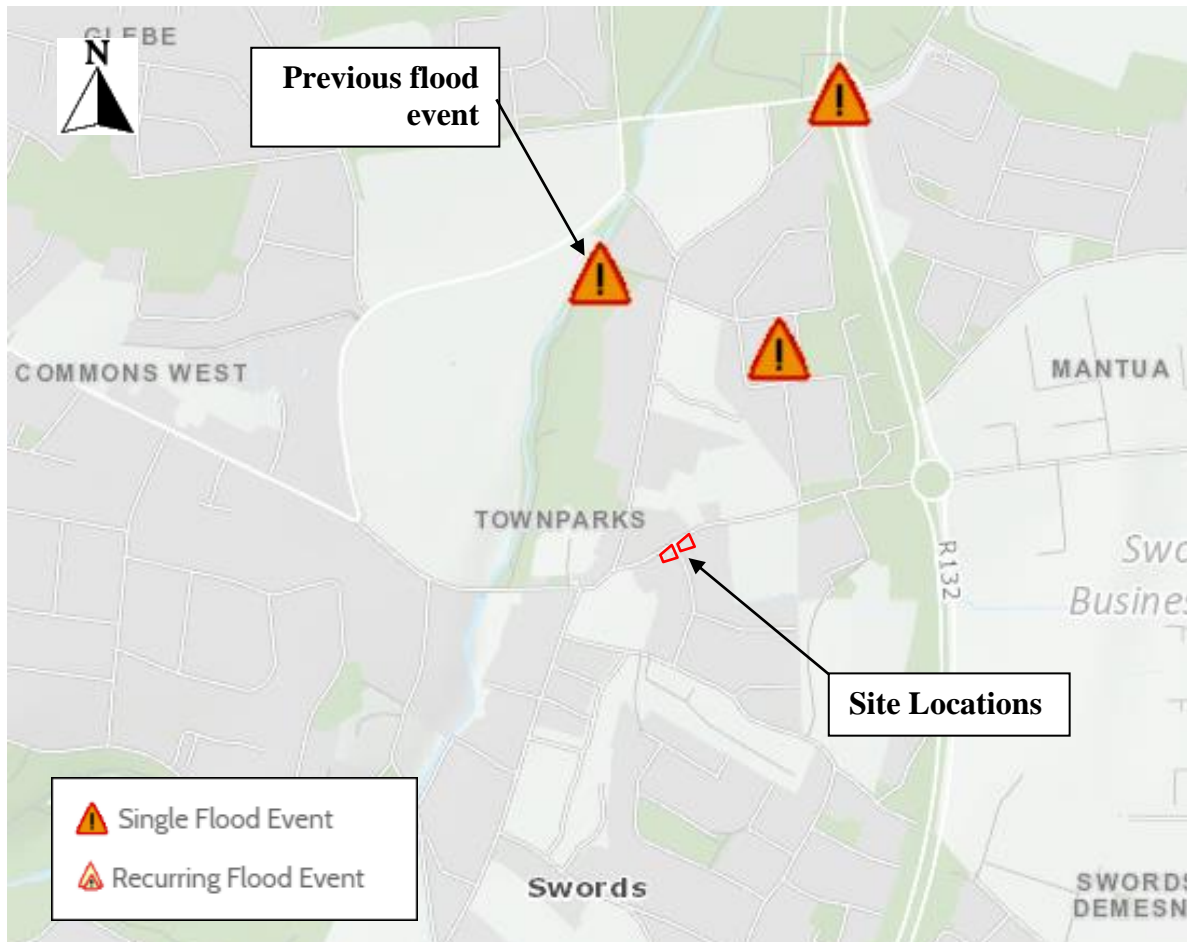


Figure 2: Previous Flood Events (Extract from floodinfo.ie from the OPW)

2.3 Likelihood of Flooding:

2.3.1 Tidal/Coastal Flooding

The sites are located approx. 1.5km from the sea and therefore is not at risk from coastal/tidal flooding.

2.3.2 Fluvial Flooding

Inspection of OPW maps contained on floodinfo.ie indicates that a neither a 10% (1 in 10 year event), 1% (1 in 100 year event) or 0.1% (1 in 1000 year event) fluvial Annual Exceedance Probability (AEP) flood depth will not affect these sites or the surrounding boundary. This can be seen in Figure 3 below as per extracts from floodinfo.ie.

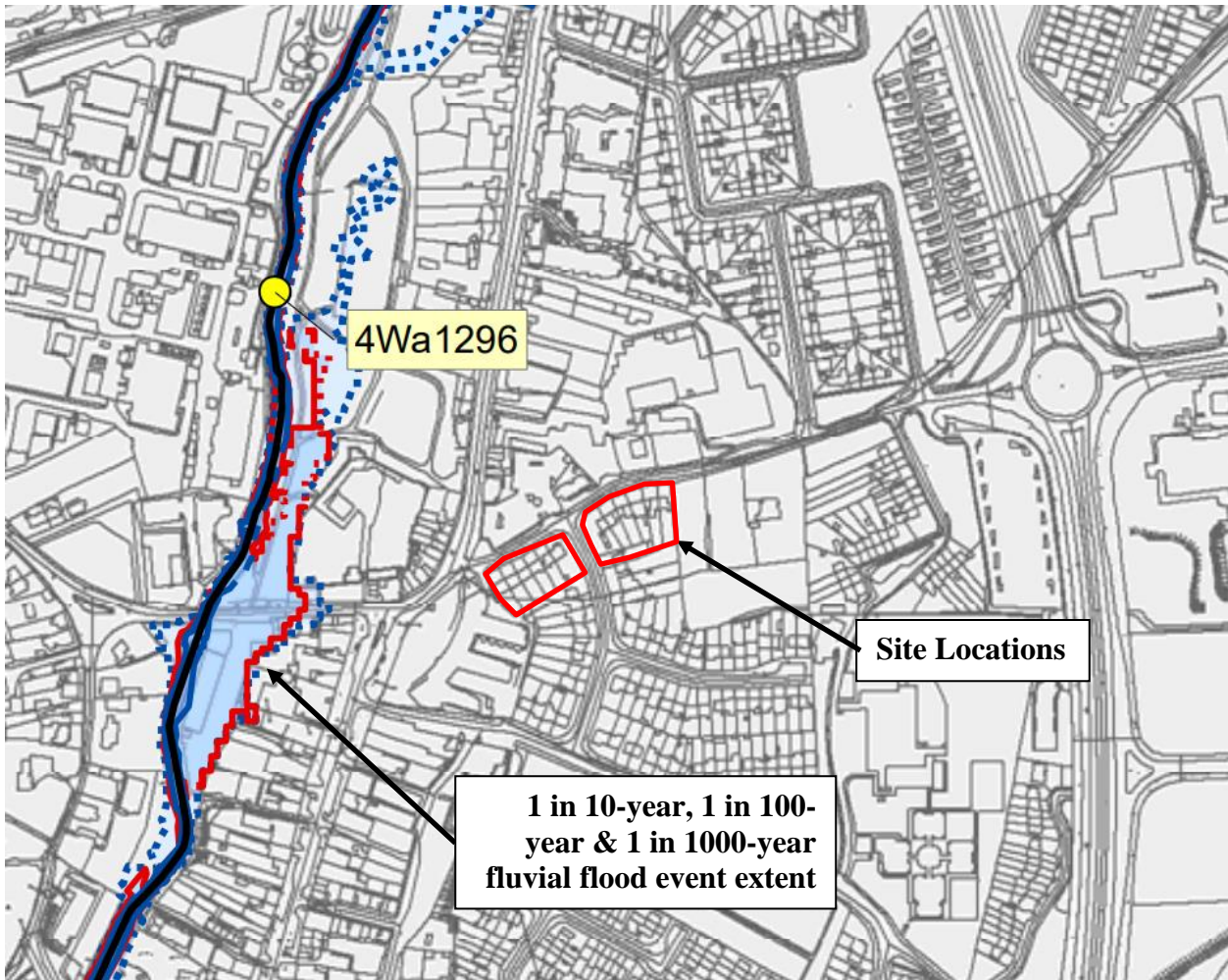


Figure 3: Fluvial Flooding (Extract from floodinfo.ie)

2.3.3 Pluvial Flooding

From examining OPW maps contained on floodinfo.ie and Fingal County Councils Strategic Flood Risk Assessment (contained within the Fingal County Development Plan 2017-2023) there is no pluvial flooding was identified at the site locations.

2.3.4 Groundwater Flooding.

From examining GSI from OPW maps contained on floodinfo.ie and Fingal County Councils Strategic Flood Risk Assessment (contained within the Fingal County Development Plan 2017-2023) there is no groundwater flooding identified at the site locations.

Taking all the above into consideration, the site is deemed to have a low probability of flooding. This low probability of flooding places the site within **Flood Zone Type C Region.**

3.0 Stage 2 – Initial Flood Risk Assessment

3.1 Existing Site Topography & Flood Alleviation Measures.

The sites are brownfield sites which currently have residential dwellings on them refer to figure 4). The sites are relatively level, site 1 has an area of 2,090 square metres (0.209 hectares) and site 2 has an area of 1,816 square metres (0.1816 hectares).

There are no current flood alleviation measures in place.

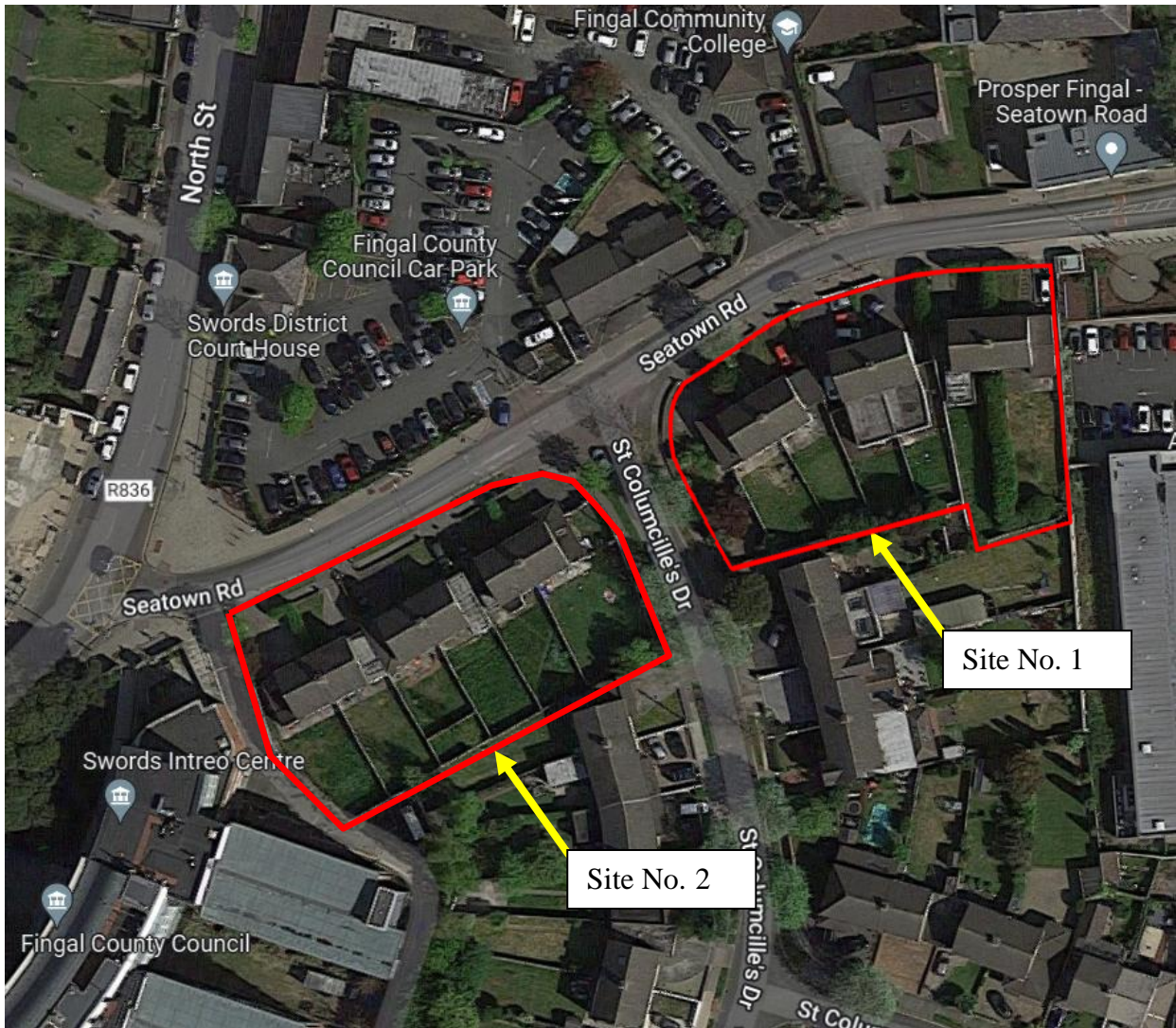


Figure 4: Existing Site

3.2 Proposed Development of Site & Flood Alleviation Measures.

The development consists of the demolition of the existing dwellings on the 2 No. sites and the construction of a residential apartment block on each site (see figure 5 & 6). On site number 1 it is proposed to build a 4-story apartment block consisting of 20 apartments, on site 2 it is proposed to build a 4-story apartment block consisting of 16 apartments. Ancillary services, surface car parking spaces, bike storage, bin storage to be provided to each site. All with

associated site works, signage, open space, landscaping, and boundary treatments. The sites access will be via St Columcille Drive.



Figure 5: Proposed Development - Plan

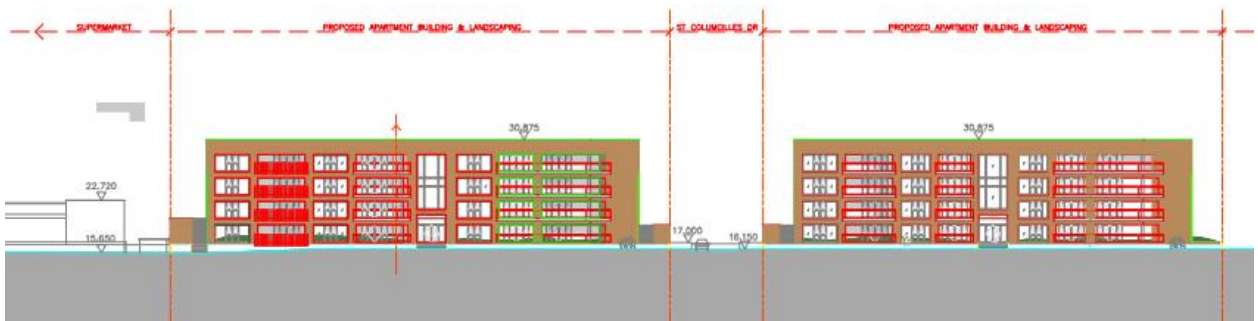


Figure 6: Proposed Development – Elevation from Seatown Road

There are no proposed flood alleviation measures as the site is not in an area subject to flooding and there has been no recorded floods at the site location. Surface water from each site will be attenuated to 2 l/s. Green roof to the upper roof levels will allow for interception storage of surface water.

4.0 Stage 3 – Detailed Risk Assessment

It is noted from stages 1 and 2 that the proposed development is not subject to any significant flood risk therefore stage 3 is deemed not applicable as per The Planning System and Flood Risk Management Guidelines for Planning Authorities Technical Appendices Document.

5.0 Conclusions

The development consists of the demolition of the existing dwellings on 2 No. sites and the construction of a residential apartment block on each site

The site is a brownfield site and is currently located in a flood zone type C and therefore has a low probability of experiencing a flood.

There are no recorded flood events that have influenced the site in question or its boundaries.

With reference to OPW data there is little risk of Fluvial, Coastal, Pluvial & Groundwater flooding. It is therefore our opinion that the risk of flooding at this site and the risk of flooding due to the development of this site in flood events is minimal.

We trust that this is in order, but should you have any queries on the foregoing, please do not hesitate to contact the undersigned.

Yours sincerely,



Mr. Peter O Connor B.Eng.
for Lohan & Donnelly Consulting Engineers