

**To the members
of the North Central Area Committee**

Clontarf Promenade Development & Flood Defence Project

Gerard O'Connell, Senior Engineer, Flood Projects and Water Framework Directive Division, Dublin City Council, Reports on the Current Status of the consultation & project progress for the October Area Committee of the North central Office:

Date: 15th October 2018

Background to the Project:

In 2005 the Dublin Coastal Flooding Protection Project (DCFPP) was commissioned as a direct response to the extreme tide and flood event that was experienced across Dublin City and Fingal County during the 1st February 2002. This tide was the highest on record since 1922, being in excess of 1 metre above the predicted tide for that day. It caused extensive flooding and disruption at a number of locations across Dublin City and within Fingal County. The Dublin Coastal Flooding Protection Project was primarily aimed at addressing the risk from tidal flooding around the coastline and within the tidal reaches of a number of the rivers and canals.

Following on from this report, a flood defence scheme for the Clontarf frontage was subsequently developed to protect the properties at risk. Due to public concerns of the proposed scheme, progression of the scheme was suspended. Following on from this a Joint Working Group was established in 2013.

A revised preliminary scheme layout was agreed. This, in general, proposes the removal of the earth embankments and relocating a flood wall closer to Clontarf Rd. It is anticipated that relocating the wall away from the immediate coastline will reduce the height of the flood wall. The concept being that when the primary wave breaks on the existing sea wall some of its energy is lost, and the promenade area starts to fill up. It will eventually fill with water in front of the sea wall and secondary waves can propagate towards the second defence beside Clontarf Road.

There are 4 main elements to this project which are:

1. The redevelopment of the Promenade
2. The construction on a flood defence
3. The reconstruction of a new cycle path
4. The installation of a new Water main

1. The Redevelopment of the Promenade:

The promenade is to be redeveloped. A landscape architect is to be engaged to lead this element of the project working with a multi discipline design team, comprising of personnel in DCC Roads & Traffic Division, DCC Parks Division, DCC Drainage Division/Irish Water and the JWG.

Initially 5 preliminary ideas are to be produced and scored by the architect. Three of these are to be further developed following comments from the JWG.

One preferred option will be arrived at following consultation between all interested parties.

The promenade ranges from 35m to 41m in width and approximately half of this on the Clontarf Rd side will be disturbed during construction of the wall, cycle track and water main however all of the promenade need to be considered when proposing design options.

2. The Construction of the Flood Defence:

The construction of a flood defence which must be sufficient to prevent the sea flooding the land and properties of Clontarf (400 properties are at significant risk)

3. The Reconstruction of a new Cycle Path

As the existing cycle path will be relayed to the latest specification before completion of the overall project. Liaison with DCC Roads & Traffic section is paramount here.

4. The installation of a new Water main

The installation of a new 630mm (OD) water main will also form part of the works, greatly enhancing the local residents and business water supply and quality when complete. Liaison with Irish Water is paramount here.

The coastal modelling required updating to recent guidance and using the most recent data. Royal Haskoning DHV were commissioned to undertake this study.

Following on from Royal Haskoning's work a minimum Wall Height (secondary wall running along existing up stand wall at Clontarf Rd) and position were proposed. The proposed height of the wall ranges from 0.040m to 1.624m along the 3.3 km Promenade.

There are still 3 main areas of concern regarding the height of the proposed wall; these are at the car park at Hollybrook Rd, the Baths and at Vernon Ave.

There are significant benefits to the new proposals such as; defence heights along the prom have been reduced by between 300mm and 700mm from the previous proposal.

Break down of the wall Heights:

- 317m of the wall is greater than 1.4m
- 391m is between 1.2 and 1.4
- 885m is between 1.0m and 1.2
- 1223m is less than 1m

In order to demonstrate fully the impact the new defence will have on the area, a consultant was commissioned to produce 3D visualization video.

This video will now be shown:

Other ongoing works:

Environmental reports, particularly bird counts, which can be only conducted at certain times of the year, have been carried out recently.

A multi party framework agreement for procuring future flood alleviation projects in County Dublin had been established by DCC, this will be used to procure a consultant in the near future to produce a preliminary design.

In the meantime draft tender docs have been prepared to procure this consultant. These currently with all JWG interested parties for comment.

Investigation work into the possibility of using demountables in certain areas is ongoing; cost is a major factor in the final decision regarding the use of demountables.

Programme and Budget

Preliminary estimate for the overall budget is €10 million.

The immediate programme target is appointment of Consultant - Q1 2019

Part 10 Planning Application to ABP – Q3 2019