

## **APPENDIX E**

### **OPEN DAY DISPLAYS**

## What is Greater Dublin Drainage?

The Greater Dublin Drainage initiative aims to provide strategic drainage infrastructure that the Greater Dublin Area (GDA) needs to continue to develop, both socially and economically. It is being overseen by Fingal County Council, on behalf of Dublin City Council, Dún-Laoghaire-Rathdown County Council, and South Dublin County Council, in partnership with Kildare and Meath County Councils.

The initiative involves the provision of:

- A new wastewater treatment works;
- A marine outfall, and
- A new drainage network in the northern part of the GDA

## Why is it needed?

Greater Dublin Drainage is needed to facilitate vibrant social expansion, economic growth and to protect the environment in the GDA. It will provide vital strategic infrastructure that will facilitate employment, social progress, and economic growth while also protecting the environment.

Currently, the lack of wastewater treatment capacity in certain parts of the GDA is placing constraints on development. Without Greater Dublin Drainage, future development may be seriously curtailed and, the potential for developing essential resources and facilities, such as schools, hospitals, industry, businesses and homes, will be severely restricted throughout the GDA – a scenario which is unthinkable for a capital region.

## Why is this project important?

Drainage and wastewater treatment is something we take for granted and only think about when the unthinkable happens - it stops working. Throughout the Greater Dublin Area there is a vast system made up of pipes, pumps, and plants that remove and treat the wastewater that we produce from our homes, industries, schools, and hospitals, for example. This system protects the health, welfare, and environment of all of the citizens of our region. In order to prosper and develop, a city needs adequate drainage and treatment capacity to protect the health and well-being of its citizens and the environment.

Greater Dublin Drainage will ensure that there is adequate drainage and treatment of the wastewater produced in the Dublin Region. It will ensure that the Region can develop into the future and protect the environment for generations to come.

## What will Greater Dublin Drainage entail?

Greater Dublin Drainage will involve the development of a network of new sewage pipes that will transport untreated effluent to a new large wastewater treatment plant (somewhere in North County Dublin) and take clean treated effluent to the coast to be discharged into the Irish Sea.

## What has happened already?

Greater Dublin Drainage has its origins in the key findings of the Greater Dublin Strategic Drainage Study (GDSDS). This study took a high level view of the wastewater drainage and treatment requirements of the Greater Dublin Area.

The GDSDS concluded that in order to facilitate vibrant social and economic development and to protect the environment in the GDA, the following is needed:

- Upgrade of the existing drainage and treatment plants to their ultimate capacity;
- Construction of a new regional treatment plant in Fingal; and
- Provision of a new orbital sewer to western suburbs of Dublin and adjacent catchments in Counties Meath and Kildare.

The GDSDS was then subject to a Strategic Environmental Assessment (SEA). The SEA identified North County Dublin as the optimal area for the development of the treatment plant, the marine outfall and the associated drainage pipes that will bring untreated effluent to the plant and clean treated effluent to the coast.

## How will the project progress?

### Constraints Consultation

The first step in finding suitable locations for the Greater Dublin Drainage project is the identification of 'constraints' that exist within the study area. Constraints are those features or designations, such as protected areas, in the landscape that might make an area unsuitable as a location for the project. A number of constraints have already been identified by Fingal County Council in the Fingal County Council Development Plan. These will be supplemented by additional constraints that will be identified through Public Consultation (step a) and Desk Top Studies (step b) as indicated in the project road map.

### Project Options Consultation

Once these constraints are mapped (step c), all unsuitable areas are screened out and a short list of potential locations for the treatment plant is drawn up. This allows for the identification of possible locations for the drainage system (the pipes that will bring untreated water in and take treated water out of the plant) and the marine outfall (where the clean treated effluent is discharged to the sea).

Undertaking this selection process will result in the identification of a short list of approximately six potential solutions (areas where the three elements of the project can be developed) (step d).

In order to determine which of these short listed locations is most appropriate, more information will be gathered. This will be done by consulting with local communities about these sites (step e) and also by assessing the local environment (step f).

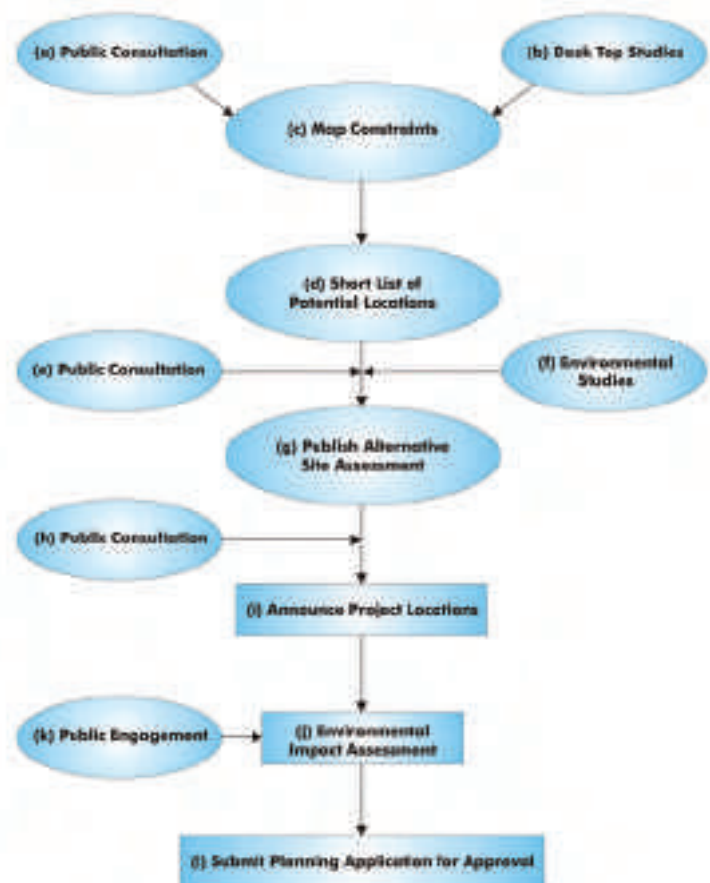
### Alternative Site Assessment Consultation

This process will result in the publication of the Alternative Site Assessment Report (step g) which will contain all of the information gathered from both the public consultation and the environmental studies.

The full report will go out for consultation (step h) after which a decision will be made regarding the locations of the project (step i).

### Environmental Impact Assessment

Once the locations for the project have been determined a complete assessment of any potential environmental impact will be carried out (step j). There will also be a full programme of public engagement carried out during this time (step k).



### Planning Process (Statutory Consultation)

The culmination of this process will result in the submission of a planning application to An Bord Pleanála for approval (step l). This will also provide another opportunity for stakeholders to be consulted on the project.

## What are we consulting on today?

Fingal County Council seeks feedback from stakeholders on what issues or concerns should be taken into account in determining the locations of the three elements of the Greater Dublin Drainage project (the waste water treatment plant, the marine outfall and the new drainage system that will link them and the existing network together). This early engagement is in addition to the future statutory consultation phases of the initiative, when a planning application will be made for whichever locations are chosen for the new infrastructure.

Please consider the following questions:

1. **What regional or locally important constraints should Fingal County Council consider in the identification of sites for the drainage system, treatment plant, and marine outfall?**
2. **What concerns or potential issues do you consider important that Fingal County Council should address during this alternative site identification phase?**
3. **How would you like to be involved and communicated with as the project progresses?**
4. **Are there any other points that are relevant that you would like Fingal to consider?**

Fingal County Council will collate all feedback received from this engagement process into a report, which will be placed on [www.greaterdublindrainage.ie](http://www.greaterdublindrainage.ie) for comment. This report will form part of the decision-making process on the development of Greater Dublin Drainage.

## How to participate:

This phase of the non-statutory consultation is four weeks long, ending on 24 June 2011.

There are many ways in which members of the public and interested groups/organisations can have their say on Greater Dublin Drainage.

### Come meet the Project Team at one of our Open Days in Fingal:

#### 7th June 2011

Fingal County Council, Swords — 2:00 p.m. – 7:00 p.m.

#### 8th June 2011

Fingal County Council, Blanchardstown — 2:00 p.m. – 7:00 p.m.

#### 14th June 2011

Balbriggan Town Hall — 2:00 p.m. – 7:00 p.m.

#### 16th June 2011

Fingal County Council, Swords — 2:00 p.m. – 7:00 p.m.

Submissions can also be made in the following ways:

- On our Lo-Call Information Line: 1890 44 55 67
- To our email address: [info@greaterdublindrainage.ie](mailto:info@greaterdublindrainage.ie)
- Or in writing to:  
Greater Dublin Drainage,  
c/o RPS Groups  
West Pier Business Park,  
Dún Laoghaire,  
Co. Dublin

This early engagement is in addition to and does not affect peoples' rights to consult later during the statutory phases. All consultation periods are equally important to the development of Greater Dublin Drainage and Fingal County Council welcomes feedback from all interested stakeholders at any stage

We are seeking feedback from stakeholders on what issues or concerns should be taken into account in determining the locations of the three elements of the Greater Dublin Drainage project. This early engagement is in addition to the future statutory consultation phases of the initiative, when a planning application will be made for which ever locations are chosen for the new infrastructure.

## What is Drainage and Wastewater?

Wastewater is any water whose quality has been adversely affected by human activity or industry. It can be liquid waste discharged by domestic residences, commercial properties, industry, or agriculture and it can contain a wide range of contaminants.

Even simple everyday activities like showering, brushing teeth, cooking, and using the toilet create wastewater. Some of these organic products can be broken down easily in the environment but others are not so easily degraded.

The drainage system transports this wastewater to a treatment plant before it is discharged as clean treated effluent into our rivers or seas.

## Why Do We Need To Treat Wastewater?

Untreated wastewater poses a threat to public health and the environment. All wastewater is ultimately discharged back into the aquatic environment and, if the treatment is inadequate, the receiving waters will be polluted.

Furthermore, proper wastewater treatment systems are essential for sustaining modern livelihood and contributing to development. Businesses, industries, and hospitals, along with all other water users, rely on a robust wastewater treatment system to maintain daily activities.

## How do we treat wastewater?

Sewage treatment or domestic wastewater treatment is the process of removing contaminants from wastewater and sewage from homes and businesses.

The process of wastewater treatment is to remove physical, chemical, and biological contaminants. The objective of undertaking this treatment is to produce an environmentally safe fluid waste stream or sludge that is suitable for disposal or reuse (usually in the form of fertiliser). Tertiary treatment may be needed in certain circumstances due to the sensitivity of the receiving environment.

There are two main phases of treatment undertaken in wastewater plants:

**Primary treatment** consists of temporarily holding the sewage in a tank where heavy solids can settle to the bottom while oil, grease, and lighter solids float to the surface. The settled and floating materials are removed and the remaining liquid may be discharged or subjected to secondary treatment.

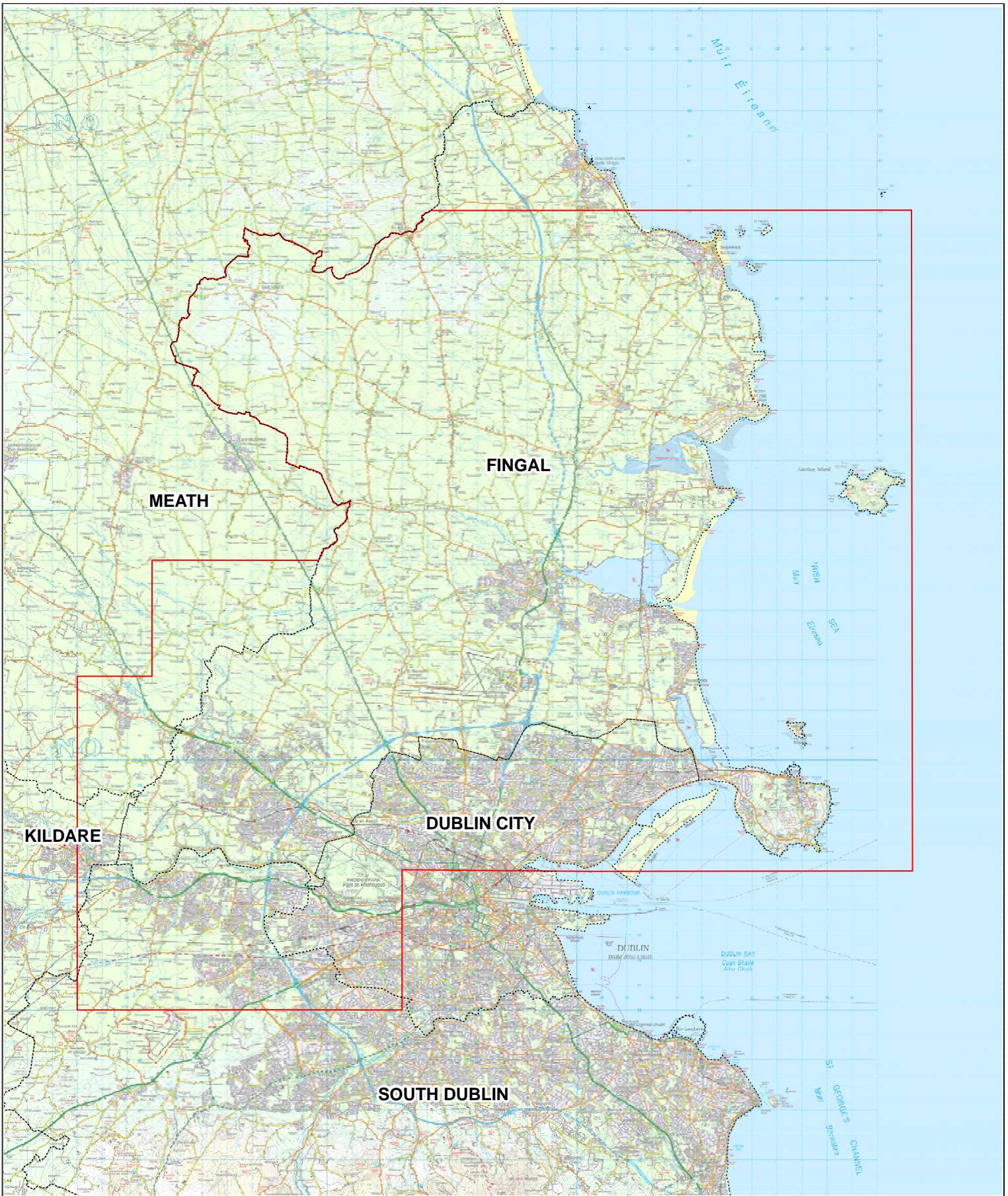
**Secondary treatment** removes dissolved and suspended biological matter. Secondary treatment is typically performed by indigenous, water-borne micro-organisms in a managed habitat. Secondary treatment may require a separation process to remove the micro-organisms from the treated water prior to discharge.

The graphic below demonstrates how a modern wastewater treatment system process works.



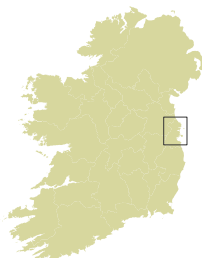
The image above shows the layout of a typical treatment works. Ideally, wastewater treatment in a municipal treatment works involves two main stages: Primary and Secondary treatment. There are two products from the treatment process: sludge and final effluent. The process of wastewater treatment removes physical, chemical and biological contaminants, producing an environmentally safe fluid waste stream or sludge that is suitable for disposal or reuse.





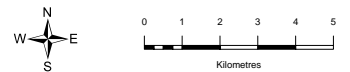
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**PUBLIC CONSULTATION  
STUDY AREA**



**Legend**

- Study Area
- County Boundary



Prepared by: A.Gruschka	Checked by: A.Gruschka	Project Director: C. O'Keefe	Date June 2011
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Drawing Status: **ISSUED**

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