



**ENVIRONMENTAL IMPACT STATEMENT
NON-TECHNICAL SUMMARY
FOR
SCULPTURE**

At

River Liffey, City Quay, Dublin 2

Prepared on behalf of

Dublin Docklands Development Authority

By

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December 2007

NON TECHNICAL SUMMARY

INTRODUCTION

This is the Non-Technical Summary of the Environmental Impact Statement relating to the proposed sculpture in the River Liffey, at City Quay, Dublin 2. The need for an EIS was considered in the light of legislation governing the requirement to prepare an EIS for particular classes of development.

The purpose of the Non-Technical Summary is to explain to the public in non-technical language all of the likely and significant environmental effects arising from the project. The non-technical summary follows the format outlined in the relevant Environmental Impact Assessment (EIA) regulations.

The proposed piece of public art was selected following a limited competition held by the Dublin Docklands Development Authority (DDDA). The selection process followed the relevant government guidelines on selecting and procuring public art.

The EIS has been prepared in accordance with Environmental Protection Agency Guidelines on EIS and adopts a grouped format. The following matters are broadly addressed in each topic:

- Characteristics of the Proposed Development
- Assessment Methodology
- Receiving Environment (Baseline Situation)
- Potential Impact of the Proposal
- Mitigating Measures
- Predicted and/or Residual Impacts
- Monitoring

An EIS scoping report was prepared and circulated to prescribed bodies and other relevant agencies. Ongoing consultations were held with the local community and local representatives. A number of open days were held prior to the submission of the application which allowed for interested parties to express their views and concerns.

DESCRIPTION OF THE DEVELOPMENT AND ALTERNATIVES

The sculpture is to be sited adjacent to the Sean O'Casey Bridge, on the axis of Lombard Street East/Westland Row. The sculpture is designed by Antony Gormley and is a figure 46m in height and 12m across at its widest point. The sculpture would be a lattice structure and consists of two principal fabricated steel elements. Firstly, the structural sections would be fabricated from flat steel plate and welded to form box sections. The box sections would be factory fabricated in lengths and cut to size. Secondly, there would be 600 nodes within the sculpture, machined from polystyrene and then sand cast in steel. The sculpture would be painted black and unlit. It would be placed on a single pile driven to the bedrock.

The structure has a design life of 120 years and specific boat collision protection measures would be provided to protect it against any damage. The structure design also takes account of deflection, wind impacts and robustness requirements.

The River Liffey is 95m wide at the site of the proposed sculpture, the centre of which would be 12m from the quay wall and 30m to the east of the Sean O'Casey Bridge. The campshires are approximately 13m in width and contain walkways and cycleways. Traffic on the City Quay between the Matt Talbot Bridge and Lombard Street East is one way in an easterly direction. City Quay is two-way to the east of its junction with Lombard Street, which itself in turn is one-way in a southerly direction.

The surrounding area is in a mix of residential and commercial uses with buildings in the immediate vicinity ranging between 2 and 6 storeys in height. There is a pocket park on the southern side of City Quay and the campshires extend as public realm on both sides of the River.

The construction compound would total an area of 760 sqm and extend from the quay wall to the northern edge of the cycle track. An ESB substation lies at the eastern end of the area to be occupied by the construction compound.

The on-site construction period would last for three months. The structure would be fabricated and assembled in its entirety off site. It would then be cut into between four to six sections for transportation to the site by either barge or road. It will be assembled on site and the sections welded into place. A crane will be placed on the campshire and a piling barge used to drive the single main pile to the bedrock.

INFORMATION REQUIRED TO ASSESS LIKELY SIGNIFICANT EFFECTS

Some aspects of the environment and the effect which the proposed development might have on them, are not readily quantifiable in data terms, e.g. archaeology. Those which are more easily measurable in data terms and which fall within the scope of the Environmental Impact Statement, are considered below.

Human Beings

The data required for this section of the EIS is included in the Census of Population 2006.

Flora and Fauna

The site is aquatic in nature. Existing survey information was used and supplemented by site surveys to consider the likely presence of protected species, such as bats, otters, waterfowl, rare flora, etc.

Soils and Geology

A desktop survey was undertaken, principally utilising accurate information and site investigations undertaken for the construction of the adjacent Sean O'Casey Bridge.

Water

Relevant EPA databases, OPW records and existing local authority water quality data for the River Liffey and Dublin Bay were examined.

Air Quality and Climate

Baseline air quality data supplied by the EPA was used in the assessment.

Noise and Vibration

Ambient noise levels were surveyed in a 24 hour period during the month of November 2007.

Visual and Landscape Impacts

The principal data used in the appraisal of landscape and visual matters concerns the height and orientation of the proposed sculpture. Consideration was given to its setting within the existing built environment including views along the River Liffey.

Cultural Heritage

An appraisal of the cultural heritage was undertaken to assess the relevant aspects of local history, archaeology and architecture.

Material Assets

Vehicular and marine traffic flows in the vicinity of the site were reviewed.

ALTERNATIVES CONSIDERED

Five alternative designs by different artists were considered. Four alternative locations for the preferred sculpture were assessed. The final site was chosen because:

- It was positioned at point that lay between the old and new development areas thus enabling the work to act as signpost for the revitalised Dublin Docklands area .
- It was a prominent site when viewed along the Liffey Corridor and along one of the main thoroughfares down to the River (Lombard Street East/Westland Row axis).
- It was located at a site where north/south and east/west pedestrian movements intersected.
- The sculpture could be viewed against the skyline within an area of Dublin that has low rise buildings on both sides of the river.
- It did not interfere with, or give rise to, any material conflict with navigation on the river.

Alternative materials, including stainless steel were considered. Different construction methods were evaluated, including full in-situ construction, full off-site construction and segmented construction.

PLANNING AND DEVELOPMENT CONTEXT

Relevant statutory planning policy and guidelines include the Architectural Heritage Protection Guidelines, the Regional Planning Guidelines for the Greater Dublin Area, the Dublin Docklands Area Master Plan 2003, the Dublin City Development Plan 2005-2011 and Grand Canal Docks, North Lotts and Custom House Docks Planning Schemes.

Non-statutory policy includes the DDDA's own Arts Strategy, the City Quay Westland Row Area Action Plan and the Liffey Regeneration Strategy.

LIKELY SIGNIFICANT ENVIRONMENTAL EFFECTS AND MITIGATION MEASURES

Human Beings

The construction phase should not have any direct or significant impact on the demography of the hinterland. The development does not involve the provision of residential units and hence there will be no direct impact upon the demography of the area. Furthermore, the scheme does not involve the provision of employment generating uses or services. Hence there is no direct predicted impact upon employment upon completion of the structure.

Temporary construction works has the potential to generate temporary general disturbance and inconvenience during the construction phase for residents in the vicinity of the construction area, for the

working community situated in the premises in the immediate vicinity and for those visiting the environs. In addition, the piling and welding works have potential to cause noise and disturbance to the local community.

Once completed, the proposed sculpture is likely to increase the number of visitors, pedestrians and tour buses visiting the area. This would have a beneficial effect. The resident, visiting and working communities will benefit from the enhanced urban landscape and visual impact.

The following mitigating measures will be put in place during the construction phase:

- A HGV traffic management plan will be prepared by the contractor and agreed with the planning authority.
- Hours of construction work will be agreed with the planning authority to avoid late night or early morning working.
- Noise mitigation measures will be put in place during piling activities.
- Wheel washing facilities will be put in place on-site to ensure that the public road is not adversely affected by deposits from truck tyres.

Flora and Fauna

Disturbance of the river bed during construction works will result in an inevitable release of sediments into the water column. There may also be a release of pollutants and heavy metals from the sediments, into the estuary water column. This potential impact is therefore determined to be a short-term, negative impact of minor significance. A number of trees will be lost on the campshire, but this does not represent a significant loss. These trees will be replaced upon the completion of the sculpture.

The impact to migratory fish species such as Atlantic salmon as a result of elevated suspended solids and pollutants could cause a potentially moderate-severe significant impact in the absence of any mitigation (such as timing of works).

Construction works causing elevated noise and visual disturbance have the potential to impact on the breeding and sites of Black Guillemot. Whilst successful breeding in the local area has not been confirmed, the area is not regarded to be an important breeding site.

The sculpture will not be floodlit so there will be no negative impact arising at night to any nocturnal species such as bats and otters. The completed structure is not expected to produce any negative impacts on ecology. Potential minor positive impacts on fauna may occur as some bird species that may use the structure for feeding, resting and roosting.

As a mitigating measure, a construction method statement will be provided by the contractor.

Water Quality will be routinely monitored to detect the release of sediments and heavy metals during the construction of the substructure.

Soils and Geology

Based on the information available, the risk of contamination associated with the site would be considered to be low. In relation to the construction phase, the potential impact on the soils is considered temporary and imperceptible. Due to the nature of the proposed development, there will be no impact on the soils environment during the operational phase. No mitigating measures are required.

Water and Hydrogeology

Surface water runoff from the temporary construction compound during the construction phase may contain increased silt levels or become polluted from construction activities. Silt water can arise from stockpiles of material and site roads and vehicles. During the erection of the sculpture, piling will be carried out into the riverbed. The predicted impact of water emissions from the construction phase of the development will therefore be short term - slight. During general maintenance and upkeep of the sculpture, working materials i.e. paint and abrasives have the potential to enter the watercourse, which could cause pollution. Mitigating measures include measures to be undertaken to appropriately manage the construction phase. Future cleaning, maintenance of the sculpture will be carried out with due regard for dirt/sediment falling into the River Liffey.

The bedrock is of calp limestone. The associated aquifer is not used as a potable water supply. Groundwater will not be encountered during work at the temporary construction site. Groundwater may be encountered during piling to bedrock, but this is likely to be as baseflow to the River Liffey. Mitigation measures and recommended construction practices will be put in place in order to prevent any possible contamination of groundwater.

Air Quality and Climate

The impact upon air quality during the construction and operational phases will be imperceptible. A dust minimisation plan will be put in place during construction.

The emission of greenhouse gases during the construction and operational phase will be imperceptible and the proposal will not have an adverse impact upon climate.

Noise and Vibration

Due to the impact associated with driving the steel pile into the ground there is potential for intermittent ground borne vibrations to occur during the piling phase. There is likely to be some impact on the human comfort of the nearby residences during the piling operation. However, due to the short duration of the piling operation it is unlikely that these vibrations will have a significant impact. The predicted noise levels are within the criterion. Mitigating measures relating to noise and vibration management will be put place, including restriction of working hours.

The potential for tonal noise to be generated by wind blowing through the proposed structure is unlikely. There is the potential for some broadband wind generated noise, such as that generated in trees; however it is unlikely to have any impact on the surrounding environment.

Visual Impact upon Urban Character and Urban Landscape

The extent of impact of the proposed sculpture will vary from 'significant' to 'none' in direct proportion to the extent of its visibility. In height and bulk, the proposed sculpture is no greater than one of the skeletal cranes that for many years stood on the campshires of that part of the Docklands. In that regard, its appearance is not unexpected and is a memory of what once was. At 46 metres in height, it is not as tall or as bulky as Liberty Hall, the buildings at George's Quay or the approved building over Tara Street station. It is less than half the height of the two landmark buildings approved by the Dublin Docklands Development Authority behind the Point and at the confluence of the Dodder and the Liffey.

The structure even though it will be 46 m tall is an open lattice and 'skeletal'. It is to be located in an area that is characterised as open and expansive. The significance of these elements is reflected in the low level of visibility recorded. Thus in terms of significance although the area is represented as having high townscape and viewer sensitivity, the significance of impacts will be slight.

Cultural Heritage

The construction work has the potential to disturb sub-surface archaeological remains. An underwater assessment will be carried out by a suitably qualified archaeologist.

There are a number of protected structures in the broader area. The quay walls are included in the Record of Monuments and Places (RMP no. DU018-020479) and hence are protected under the National Monuments Legislation.

The erection of a crane on the campshire may have a slightly negative impact upon the architectural heritage, but it is not predicted that the proposed sculpture would have any negative impacts upon the architectural heritage of the area.

Material Assets

Traffic

The erection of a construction compound on the Campshire/Quayfront area, of City Quay will have a short term impact on cyclists as the cycle track will have to be closed and converted to a footpath. The delivery of materials to site and the location of a crane on the Quays will also result in short term inconvenience and loss of space/amenity on the Quay. There will also be localised traffic impacts from the delivery of concrete or other bulk materials to the site. Once the sculpture is completed, the need for bus layover and improved phasing in the pedestrian lights will be kept under review as part of a monitoring exercise.

Water and Air Navigation

There is the potential for boat collision with the sculpture. Mitigating measures, including the piling around the base of the sculpture to protect it from boats, are proposed.

The sculpture will not require any red obstacle aviation light. Other requirements of the IAA will be satisfied.

Public Utilities (including surface water drainage)

The proposed development will have no negative effect upon public utilities, such as gas mains, water mains, sewers or telecommunications infrastructure.

It will not give rise to a risk of flooding, owing to its design and location.

INTERACTIONS

The principal interactions of effects relate to the impact which air quality, visual impact, cultural heritage and material assets have on human beings.

DIFFICULTIES IN COMPILING SPECIFIED INFORMATION

There were no particular problems associated with compiling the information for this EIS.

NEXT STEPS

Any representations made to the planning authority must be within five weeks of the submission dated, and in writing, addressed to:

Executive Manager
Planning Registry and Decisions
Dublin City Council
Civic Offices
Wood Quay
Dublin 8