1 Introduction

1.1 Introduction

This Environmental Impact Statement (EIS) is a statement of the potential impacts on the environment which may result from the Proposed College Green Project (the 'Proposed Project').

The objectives of this EIS are:

- To identify the likely significant environmental impacts of the Proposed Project during the construction and operational phases, having regard to the characteristics of the local environment; and
- To evaluate the magnitude and significance of likely impacts and to propose appropriate measures to mitigate potential adverse impacts.

This EIS has been prepared as part of the statutory development consent procedure for the Proposed Project in accordance with the requirements of Section 175 of the Planning and Development Act, 2000, as amended ('The Act'), Part 10 Planning and Development Regulations 2001, as amended and any other applicable legislation.

This EIS has been prepared on behalf of Dublin City Council (DCC) by a Consultancy Team led by Arup with inputs from a number of specialist subconsultants.

The site of the Proposed Project is located in Dublin City centre, as illustrated in **Figure 1.1**.

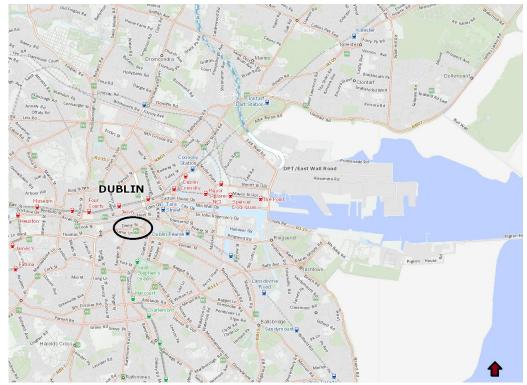


Figure 1.1 - Site location

1.2 The Proposed Project

The Proposed Project involves the development of a civic plaza and the introduction of traffic management measures and minor road works in the area of College Green, Dublin. The proposed civic plaza at College Green which will contribute to the achievement of the vision for College Green set out both in the Dublin City Development Plan 2016-2022 and the Heart of Dublin, City Centre Public Realm Masterplan (Dublin City Council, 2016).

The overall objective of the Proposed Project at College Green is in accordance with objective SCO8 of the Dublin City Development Plan (Dublin City Council, 2016) "To prioritise the redevelopment of College Green as a pedestrian friendly civic space, including the pedestrianisation of Foster Place."

Policy SC2 aims to:

"develop the city's character by cherishing and enhancing Dublin's renowned streets, civic spaces and squares; to create further new streets as part of the public realm when the opportunities arise; to protect the grain, scale and vitality of city streets; to revitalise the north and south Georgian squares and their environs, and to upgrade Dame Street/College Green as part of the Grand Civic Spine."

The Heart of Dublin, City Centre Public Realm Masterplan recommends:

"To develop a transport strategy that facilitates the longer-term ambition to create a pedestrian friendly core by reorganising bus routes to minimise traversing of the city centre."

As outlined in the Dublin City Centre Transport Study (Dublin City Council, National Transport Authority, 2016) the development of Luas Cross City and associated traffic management measures provides a catalyst for major transport change at College Green and the creation of a new public realm:

"At College Green, those revised arrangements, reflecting the reduced road capacity following the commencement of Luas operations, will enable the creation of a new civic plaza, framed by Trinity College to the east, the Bank of Ireland to the north and a row of protected structures which form part of the Grafton Street Architectural Conservation Area, to the south."

The space created by the Proposed Project has the potential to transform College Green and to redefine the area as a Civic Space of National importance in line with Dublin City Council's long standing objective for College Green.

The core area of works occupies an area of approximately 14,000m² and extends east-west from the junction with South Great George's Street to the front of Trinity College. It extends north-south from the end of Grafton Street to College Street. It also includes a number of measures on Trinity Street, St. Andrew's Street and Church Lane. The extent of the main works area is illustrated in **Figure 1.2**. The proposed civic plaza occupies a space of approximately 7,300m².

The Proposed Project involves the removal of east-west through traffic at College Green, provision of a designated cycle track, bus re-routing and the relocation of some taxi parking and taxi ranks to nearby streets.

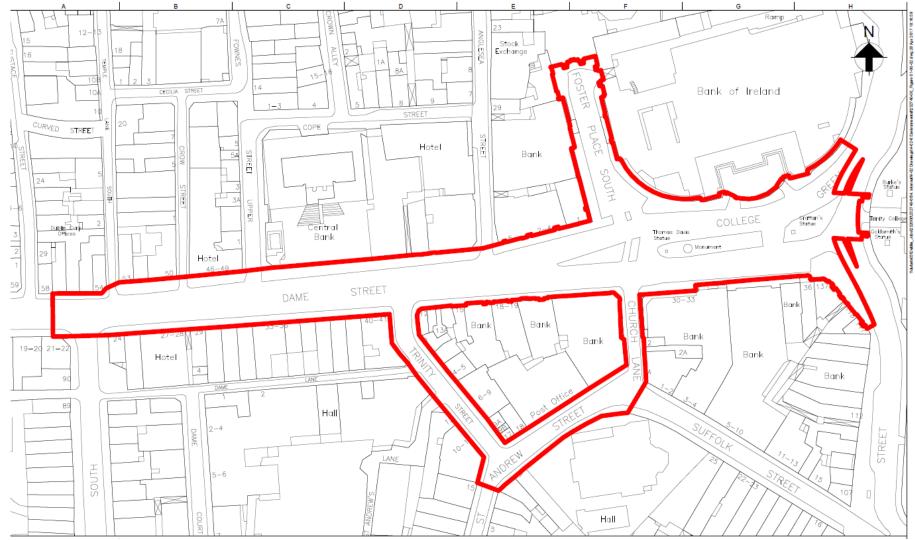


Figure 1.2 - Extent of Main Works Area

In addition, the Proposed Project involves the alteration of road and surface pavement, kerbs, street furniture, signage and utilities to provide for the development of a largely vehicular-free civic plaza at College Green.

Further detail on the Proposed Project is provided in Chapter 4, '*Proposed Project Description*'.

1.3 Planning Process for the Proposed Project

1.3.1 Need for an EIA

Environmental Impact Assessment legislation as it relates to the planning process has now been largely brought together in Part X of the Planning and Development Acts 2000-2010 and Part 10 and Schedules 5, 6 and 7 of the Planning and Development Regulations 2001-2010.

Part 1 of Schedule 5 to the Planning and Development Regulations lists projects included in Annex I of the EIA Directive (Directive 2011/92/EU) which automatically require EIA. Part 2 of the same Schedule outlines thresholds for other projects which also require EIA, per Annex II of the Directive.

Dublin City Council engaged CAAS Ltd. to carry out Environmental Impact Assessment Screening in order to determine whether the Proposed Project should be subject to EIA.

In the first instance it was necessary to determine whether the Proposed Project is of a type [or 'class'] that requires an EIS. Part 10 of the Planning and Development Regulations 2001-2010 - in Schedule 5 Development for the Purposes of Part 10, Part 2, identifies:

"Class 10. Infrastructure projects (b) (iv) Urban development which would involve an area greater than 2 hectares in the case of a business district, 10 hectares in the case of other parts of a built-up area and 20 hectares elsewhere. (In this paragraph, "business district" means a district within a city or town in which the predominant land use is retail or commercial use)."

As the development area was deemed to be less than 2 hectares in area, CAAS determined that the Proposed Project was to be considered 'sub-threshold development' with respect to Class 10 developments.

In deciding whether an EIS is required for 'sub-threshold developments', it is then necessary to determine the characteristics of the Proposed Project, the location of the Proposed Project and the likelihood of whether significant effects on the environment could arise. In their assessment of the Proposed Project, CAAS and DCC determined that:

- The proposal comprises urban development over an extensive area of the core of the Central Business District, the Proposed Project is of a class that requires an EIS.
- The environmental sensitivity of the receiving environment on account of its social, tourism, cultural and business significance there is a likelihood that significant environmental resources could be affected which would warrant an Environmental Impact Assessment.

- The potential for significant environmental effects to arise relating to
 - Human Beings (socio-economic, amenity, tourism and trade);
 - Cultural Heritage (context and setting of Protected Structures);
 - Air [air quality and noise];
 - Material Assets (traffic and parking);
 - Health and Safety; and
 - Interaction, secondary and off-site effects.

In addition, Irish Case law agrees with the European Court of Justice that the wording of the 2011 EIA Directive 'has a wide scope and a broad purpose' and accordingly that a project which is likely to have significant effects on the environment is required to have an EIS to be prepared in accordance with the 2011 Directive and the Regulations.

It was therefore concluded that an Environmental Impact Assessment should be carried out of the Proposed Project.

1.3.2 Planning Process

This EIS has been undertaken in accordance with Section 175 of the Planning and Development Act, 2000 as amended ('The Act'), Part 10 Planning and Development Regulations 2001 as amended and any other applicable legislation.

Section 175 of the Act covers environmental impact assessment of certain development carried out by or on behalf of local authorities, as set out below:

- 175.-(1) "Where development belonging to a class of development, identified for the purposes of section 176, is proposed to be carried out—
 - (a) by a local authority that is a planning authority, whether in its capacity as a planning authority or in any other capacity, or
 - (b) by some other person on behalf of, or jointly or in partnership with, such a local authority, pursuant to a contract entered into by that local authority whether in its capacity as a planning authority or in any other capacity within the functional area of the local authority concerned (hereafter in this section referred to as "proposed development"), the local authority shall prepare, or cause to be prepared, an environmental impact statement in respect thereof."

Under Section 175 of the Planning and Development Act, 2000, An Bord Pleanála is the Competent Authority which is required to carry out the EIA. The requirement to submit the EIS to An Bord Pleanála is set out at section 175(3):

175.-(3) "Where an environmental impact statement has been prepared pursuant to subsection (1), the local authority shall apply to the Board for approval."

Article 120 of the Planning Regulations 2001 (as amended) outlines the procedure for submission of an EIS to the Board:

(1) "Where a local authority proposes to carry out a sub-threshold development, and where it considers that the development would be likely

to have significant effects on the environment, it shall prepare, or cause to be prepared, an EIS in respect thereof."

- (5) "Where an EIS is prepared, or caused to be prepared, by a local authority under this article, the local authority concerned shall apply to the Board for approval."
- (6) "An application for approval under sub-article (5) shall be deemed to be an application for approval under section 175(3) of the Act and the provisions of that section shall apply to the application."

It is acknowledged that the new EIA Directive (Directive 2014/52/EU) is due to be implemented by 16 May 2017. As DCC undertook an EIA screening assessment in August 2016, the 2011 EIA Directive applies. A copy of the Planning Authority Determination which agreed with the CAAS conclusion that an EIA was required, is included in **Appendix 1.1**.

Nevertheless, this EIS has been prepared with general regard to new requirements outlined in the 2014 directive.

1.4 EIS Methodology

1.4.1 Purpose of the Environmental Impact Statement

The purpose of an EIS is to report on the potential effects of a proposed development on the environment and to accompany the consent application of a proposed development.

This EIS includes information on potential significant environmental impacts of the Proposed Project, and highlights the proposed mitigation measures, where applicable.

1.4.2 Statutory Requirements and Guidance for the Contents of an EIS

Sections 1 and 2 of the European Communities (Environmental Impact Assessment) Regulations 1989 (S.I. No. 351/1998) as amended, sets out the information that should be included in an EIS, as follows:

1. (a) "A description of the proposed development, comprising information about the site and the design and size or scale of the development;

(b) The data necessary to identify and assess the main effects which that development is likely to have on the environment;

(c) A description of the likely significant effects, direct and indirect, on the environment of the development, explained by reference to its possible impact on —

human beings;

flora; fauna; soil; water; air; climate; the landscape; the interaction between any of the foregoing; material assets; the cultural heritage;

(d) Where significant adverse effects are identified with respect to any of the foregoing, a description of the measures envisaged in order to avoid, reduce, and, if possible, remedy those effects."

2. "Further information, by way of explanation or amplification of the information referred to in paragraph 1, on the following matters —

(a) the physical characteristics of the proposed development, and the land use requirements during the construction and operational phases;

(b) the main characteristics of the production processes proposed, including the nature and quantity of the materials to be used;

(c) the estimated type and quantity of expected residues and emissions (including pollutants of surface water and groundwater, air, soil and substrata, noise, vibration, light, heat and radiation) resulting from the proposed development when in operation;

(d) (in outline) the main alternatives (if any) studied by the applicant, appellant or authority and an indication of the main reasons for choosing the development proposed, taking into account the environmental effects;

- (e) the likely significant direct and indirect effects (including secondary, cumulative, short, medium and long term, permanent, temporary, positive and negative effects) on the environment of the proposed development which may result from —
- *(i) the use of natural resources;*
- *(ii) the emission of pollutants, the creation of nuisances, and the elimination of waste;*
- (f) the forecasting methods used to assess any effects on the environment about which information is given under subparagraph; and
- (g) any difficulties, such as technical deficiencies or lack of knowledge, encountered in compiling information in this Schedule."

Consideration was also given to the following guidance in the preparation of this EIS.

- European Commission, 2001. Guidance on EIA EIS Review;
- Department of the Environment, Community and Local Government (DoECLG), 2013. *Guidelines for Planning Authorities and An Bord Pleanála on carrying out Environmental Impact Assessment*;
- NRA, 2004. Environmental Assessment and Construction Guidelines;
- Conservation and Amenity Advice Service (CAAS), 2002. *Guidelines on the Information to be contained in Environmental Impact Statements*;
- CAAS, 2003. Advice Notes on Current Practice in the Preparation of Environmental Impact Statements;
- CAAS, 2015, Draft Revised Guidelines on the Information to be contained in *Environmental Impact Statement;*
- CAAS, 2015, Draft Revised Advice Notes on Current Practise in the Preparation of Environmental Impact Statements.

1.4.2 General EIS Methodology

1.4.2.1 Introduction

The methodology adopted for the preparation of this EIS comprised a systematic analysis of the impact of the Proposed Project in relation to the existing environment. The overall methodology for preparation of the EIS is discussed under the following headings:

- Basis for assessment;
- Impact assessment and mitigation; and
- Significance of environmental issues.

1.4.2.2 Basis for Assessment

The impact assessment examines the existing environmental conditions within the study area for each element of assessment and then determines the potential impacts associated with the Proposed Project during its construction and operational phases.

The impact assessment considers the following scenarios:

- Do-minimum (DM) scenario Represents movement and access in the city centre as it exists currently, taking into account developments with approved planning permissions, as well as projects committed to be implemented prior to the Proposed Project. This scenario includes the continuation of all east-west through traffic at College Green during the weekends and public transport access only from Monday to Friday. This scenario includes no plaza provided at College Green;
- Do-something (DS) scenario There will be two representative 'dosomething' scenarios. The first represents a situation where the

Proposed Project has been implemented as well as other planned projects outlined in the do-minimum scenario (by 2018). The second represents a situation where the Dublin City Centre Transport Study (Dublin City Council, National Transport Authority, 2016) has been implemented in totality (by 2035). This includes the Proposed Project, as well as a number of 'other planned projects'. This scenario includes the plaza at College Green.

The do-minimum scenario is assessed in chapters where relevant. Where there is no discussion around the do-minimum scenario it is assumed that the Proposed Project area will remain as it currently exists and the impact would therefore be neutral.

The study area considered within this EIS differed for each environmental aspect and extended to incorporate all areas where there was potential for significant impact. Further information on the extent of study area considered for each topic is addressed in the relevant corresponding EIS chapter.

1.4.2.3 Impact Assessment and Mitigation

The preparation of the EIS was an iterative process, linking into the design development process. The approach adopted in the impact assessment and preparation of the EIS was generally based on that recommended in the *Guidelines on the information to be contained in Environmental Impacts Statements* (EPA, 2002), as outlined below.

A design was developed and the potential impacts of the proposal on the receiving environment were identified along with mitigation measures, as required.

1.4.2.4 Significance of Environmental Issues

The glossaries contained in the *Guidelines on the information to be contained in environmental impact Statements* (EPA, 2002) describes an impact as "the degree of change in an environment resulting from a development" and a significant impact as "an impact which, by its magnitude, duration or intensity alters an important aspect of the environment."

The following factors were considered when determining the significance of the impact, both positive and negative, of the Proposed Project on the various aspects of the receiving environment:

- The quality and sensitivity of the existing/baseline receiving environment;
- The relative importance of the environment in terms of national, regional, county, or local importance;
- The degree to which the quality of the environment is enhanced or impaired;
- The scale of change in terms of land area, number of people impacted, number and population of species affected, including the scale of change resulting from cumulative impacts;
- The consequence of that impact/change occurring;
- The certainty/risk of the impact/change occurring;

- Whether the impact is temporary or permanent; and
- The degree of mitigation that can be achieved.

The guidance outlined in the EPA guidelines has also been followed when quantifying the duration and magnitude of impacts. The quality of the impact is described as 'negative', 'neutral' or 'positive'. Further information on the specific methodologies utilised for the assessment of each environmental aspect are included in the relevant EIS chapters.

Where no impact or a positive impact was predicted to occur, the design of the Proposed Project remained unchanged. In the case where significant adverse impacts were predicted, mitigation measures were proposed to avoid or minimise impacts. Where feasible, these measures were then incorporated into the design of the Proposed Project.

The Proposed Project presented in the planning application (including the environmental mitigation measures) will be further progressed and refined during the detailed design and construction stages. This includes any mitigation measures contained in such planning permission, as may be granted.

The detailed design and construction will develop the Proposed Project in a manner such that there is no material change in terms of significant adverse effect on the environment. Opportunities may be identified to further reduce the significance of adverse effect/impact and, in some cases, improve the residual effect/impact through modifications to the Proposed Project. Such modifications may be identified in detailed design or construction in order to allow for innovations in construction methods, available technology or changes in the existing situation.

Any modification to the Proposed Project will only be possible where there would be no significant change, or where there would be an improvement, in environmental impacts. The final Proposed Project design and construction will have to comply with all relevant statutory approvals.

1.4.3 EIS Format

The format used in this EIS document is referred to as the 'grouped format' in that it seeks to enable the reader to access the issues of interest to them as easily as possible. The EIS has been divided into the following chapters:

- Chapter 1 Introduction;
- Chapter 2 Background to the Proposed Project and Alternatives Considered;
- Chapter 3 Consultation;
- Chapter 4 Proposed Project Description;
- Chapter 5 Planning and Policy;
- Chapter 6 Traffic and Transportation;
- Chapter 7 Air Quality and Climate Factors;
- Chapter 8 Noise and Vibration;

- Chapter 9 Biodiversity;
- Chapter 10 Archaeological, Architectural and Cultural Heritage;
- Chapter 11 Townscape and Visual;
- Chapter 12 Soils, Geology, Hydrogeology and Hydrology;
- Chapter 13 Resource and Waste Management;
- Chapter 14 Material Assets: Utilities;
- Chapter 15 Material Assets: Land Use and Property;
- Chapter 16– Socio-Economics;
- Chapter 17 Cumulative Impacts and Interaction of Effects; and
- Chapter 18 Summary of Mitigation Measures and Residual Impacts.

Each element of the environment is described in a separate chapter generally under the following headings:

- Introduction;
- Assessment Methodology;
- Baseline Environment;
- Predicted Impacts;
- Mitigation Measures; and
- Residual Impacts.

1.4.4 Consultation Process

Information on all consultation undertaken on the Proposed Project, including a summary of the comments and feedback received, is outlined in Chapter 3 of this EIS.

1.4.5 EIS and Design Team

The design team is led by Paul Keogh and Dixon Jones architects on behalf of DCC and the NTA.

This EIS has been prepared by Arup and various specialist sub-consultants on behalf of DCC. **Table 1.1** includes the relevant EIS specialists and their qualifications.

Environmental Aspect	Company name	Person responsible	Qualifications
EIS manager	Arup	Sinead Whyte	B.Sc, M.Sc
EIS support	Arup	Ailsa Doyle	B.Sc

Table 1.1 - EIS team and qualifications

EIS reviewer	Arup	Niamh O'Sullivan	BE, M.Sc, DIC
EIS review	Arup	Donal McDaid	BE, MSc
EIS technician	Arup	Gerry McTiernan	NCEA Diploma
Construction Strategy	Roughan O'Donovan Consulting Engineers	Eoin O'Cathain	BE, MSc, HDip, CEng, MIEI
Planning and Policy	Future Analytics Consulting	Richard Hamilton	BA, M.Sc, MIPI MRTPI
Traffic and Transportation	Arup	Conor McGrath	BAI
Air Quality & Climate	AWN Consulting Ltd.	Edward Porter	BSc PhD C Chem
Noise & Vibration	Dublin City Council	Brian McManus	Dip, Dip, MIOA, MEHAI
Biodiversity	Moore Group	Ger O'Donovan	B.Sc. M.Sc.
Archaeology, Architectural and Cultural Heritage	Irish Archaeological Consultancy	Faith Bailey	MA, BA (Hons)
Archaeology, Architectural and Cultural Heritage	Rob Goodbody	Rob Goodbody	BA(mod), Postgraduate Diploma, MA, MA,
Townscape and Visual	Macro Works	Richard Barker	Irish Landscape Institute Professional Practice Qualification MLA, PG Diploma, BA
Townscape and Visual	Macro Works	Nik Hennessy	B.Sc. (Agr.), MAgr(for)
Soils, Geology, Hydrogeology, Hydrology	Arup	Catherine Buckley	MSc, BA (Hons) PGeo
Soils, Geology, Hydrogeology, Hydrology	Arup	Alison Orr	PhD M.Sc, B.Sc

Resource and Waste Management	Arup	Janet Lynch	BE (Hons), FETAC Certificate
Material Assets, Land Use and Property	Future Analytics Consulting Ltd.	Richard Hamilton	BA, M.Sc, MIPI MRTPI
Socio-Economics	Future Analytics Consulting Ltd.	Richard Hamilton	BA, M.Sc, MIPI MRTPI

1.5 What Happens Next?

DCC has forwarded copies of the consent application documents including this EIS to An Bord Pleanála. Copies have also been circulated to the relevant prescribed bodies, as follows:

- An Chomhaile Ealion;
- Failte Ireland;
- An Taisce;
- CIE;
- Transport Infrastructure Ireland;
- National Transport Authority;
- Heritage Council;
- Minister for Housing, Planning, Community and Local Government.

The formal adjudication period for the Proposed Project commences when the planning application is lodged to the Board.

The planning application will be placed on display for public inspection for a statutory period of at least six weeks from the date of lodgement of the application. Any person may make a submission or observations to An Bord Pleanála, 64 Marlborough Street, Dublin 1 in relation to the application during this period.

A copy of the consent application and each document accompanying the application (including this EIS) may be inspected, free of charge, during normal office or opening hours at the following locations:

- An Bord Pleanála, 64 Marlborough Street, Dublin 1; and
- Dublin City Council, Civic Offices, Wood Quay, Dublin 8.

All planning documents will also be available for download from the Dublin City Council website i.e. <u>www.dublincity.ie/main-menu-services/roads-and-traffic</u>.

Submissions or observations on the application may be made only to An Bord Pleanála and must be accompanied by the appropriate fee of \in 50 (except for certain prescribed bodies).

Further details of the planning process can be found on the An Bord Pleanála website (<u>http://www.pleanala.ie</u>).

1.6 Difficulties Encountered During the Study

Difficulties encountered in the preparation of the EIS are outlined in each chapter as they relate to the various environmental topics.

Dublin City centre, as with all central environments, is ever-changing and evolving. Proposals for the Proposed Project are made within a dynamic city centre environment, with a broad range of developments and interventions to public space. This includes Luas Cross City construction (and operation) and access arrangements to the city centre generally. This raises issues in terms of the consideration of the baseline scenario. In instances where difficulties arise in determining what represents baseline conditions, a worst-case scenario is assessed.

1.7 References

Government of Ireland. Planning and Development Act. (2000) Dublin, Ireland. Government of Ireland. Planning and Dev Regulations. (2001) Dublin, Ireland. Dublin City Council (2016) *Dublin City Development Plan 2016-2022*. Dublin, Ireland.

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CAAS (2015), Draft Revised Advice Notes on Current Practice in the Preparation of Environmental Impact Statements. EPA, Johnstown Castle Estate, Wexford, Ireland.

EU Directive 2014/52/EU

EU Directive 2011/92/EU