

SOUTH DUBLIN COUNTY COUNCIL
Department of Land Use Planning and Transportation



Belgard Sq North – Cookstown Industrial Estate Link Road

Environmental Report

October 2017

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Non-Technical Summary

1.0 Introduction

This Environmental Report (ER) has been prepared by South Dublin County Council (SDCC) as part of the documentation to accompany a Part 8 planning process for the proposed Belgard Sq North – Cookstown Link Road, and includes a new signalised junction at Belgard Sq North. The ER documents the assessment of the impact of the proposed development on the environment in the vicinity of that development.

This non-technical summary summarises the outcome of the environmental assessment and highlights, in non-technical language, the main impacts of the proposed scheme.

2.0 Background to the Scheme

The South Dublin County Council Development Plan (SDCC DP) changed the zoning of the Cookstown area to REGEN (To facilitate enterprise and/or residential lead regeneration). The Council seeks to support and facilitate the regeneration of underutilised industrial lands that are proximate to town centres and transport nodes to provide for a more intensive mix of enterprise and/or residential led development. Many of these areas have high levels of vacancy, poor environmental quality and fragmented land ownerships. These lands are serviced and offer significant potential for more intensive forms of enterprise and/or residential led development.

3.0 Description of Proposed Scheme

The development site is located in the Tallaght town centre adjacent to Belgard Square North. The proposed development comprises:

- The extension of the existing Cookstown Road to connect with Belgard Square North
- A new signalised junction where the Belgard Sq North – Cookstown Link Road connects to the Belgard Square North.
- Improvements to pathways, cycleways and crossings and improvements to the quality of the public realm locally.
- Upgraded public lighting

4.0 Alternatives Considered

The route corridor proposed for the Belgard Sq North – Cookstown Link Road is very constrained due to adjacent developments. Therefore, all alternative alignments considered for this scheme were substantially the same and differed only in the area of land required.

5.0 Traffic

The South Dublin County Council Development Plan (SDCC DP) changed the zoning of the Cookstown area to REGEN (To facilitate enterprise and/or residential lead regeneration). The Six-Year Roads Programme incorporates new roads to be built in the area as follows:

- Airton Road Extension
- Belgard Square Extension
- Belgard Sq North – Cookstown Link Road
 - **Included in this part 8**

The traffic modelling has indicated that the proposed Belgard Sq North – Cookstown Link Road will operate satisfactorily in the Opening Year and continue operate satisfactorily in the 2022 and 2032 using high traffic growth rates for Dublin Region.

6.0 Impact on Human Beings

The area adjacent to the proposed road is a mix of brown field, commercial, open space and institutional land uses. Most existing development consists of warehouse type developments. Future population growth in the area is an objective of the South Dublin County Council Development Plan (SDCC DP) where the area has been zoned for REGEN (To facilitate enterprise and/or residential lead regeneration). Improvements to the local transportation infrastructure as set out in the SDCC DP are a prerequisite to support the anticipated population growth in the area.

7.0 Environmental Issues

7.1 Noise and Vibration

During the construction phase of the project there will be some small impact on nearby properties due to noise emissions from site traffic and other activities. The transient nature of construction works, the application of binding noise limits and hours of operation, along with implementation of appropriate noise control measures, will ensure that noise impact is kept to a minimum.

The predicted noise level generated by the proposed road development during the operational phase is not expected to represent a significant increase on current noise levels in the area.

Ground vibrations produced by road traffic are unlikely to cause perceptible structural vibration in properties located near to well-maintained and smooth road surfaces.

7.2 Air Quality and Climate

The air quality in the vicinity of the Belgard Sq North – Cookstown Link Road will not be significantly affected by vehicle exhaust emissions.

7.3 Hydrology and Hydrogeology

The proposed scheme will have no impact on water quality. Attenuation measures will be installed to comply with sustainable urban drainage systems (SUDS) best practice.

7.4 Soil

The Belgard Sq North – Cookstown Link Road will have no impact on the soil along the scheme.

8.0 Ecology

There is no feature of significant interest in the flora and fauna of the site as all species are typical of the habitats and are very wide spread in similar areas.

9.0 Landscape and Visual Impacts

The proposed scheme will not have an adverse impact in its setting as the proposed road will marry the existing Belgard Square North with the Belgard Sq North – Cookstown Link Road

10.0 Material Assets

The proposed scheme will require a permanent land area of approximately 0.15 hectares.

11.0 Architectural, Archaeological and Cultural Heritage

All works will take place, with only minor surface effects, either within the corridor of the existing road or directly adjacent to the existing road in land that is zoned for future development. Consequently there are no predicted impacts on architectural, archaeology and cultural heritage.

Archaeological monitoring will be undertaken during the earthworks activities.

12.0 Construction Phase

The construction of the road scheme will cause an increase in noise during working hours, but contract conditions will limit this noise to acceptable levels. Working hours will be limited, thereby avoiding the potential for disturbance of residents at night. The Contract will include requirements for appropriate measures to prevent an accidental spillage of pollutant materials into watercourses. The Contractor will be obliged to ensure that the surrounding roads are kept free from dirt. Construction traffic for the scheme will be directed to use main roads to access the site and residential areas will not be affected.

13.0 Mitigation Measures

The following is a summary of the mitigation measures that will be undertaken to reduce the potential environmental impacts of the proposed Belgard Sq North – Cookstown Link Road scheme:

- Noise control measures during construction will minimise disturbance to local residents.
- Machinery and compounds will be positioned, where possible, to avoid undue disruption.
- Pollution control measures will be taken to protect the surface water drainage system during construction.
- The contractor will be required to prevent dirt from being released onto public roads.
- Archaeological monitoring will be undertaken during the earthworks activities

14.0 Further Information

Copies of the full Part 8 Environmental report may be inspected at the following locations: -

South Dublin County Council,
County Hall,
Tallaght,
Dublin 24,
D24 YNN5

15.0 Planning Process

Section 179 of the Planning and Development Act 2000 as amended, and Part 8 of the Planning and Development Regulations, 2001 to 2011 set out the process to be used for planning approval of local authority projects that are not subject to a requirement for a formal Environmental Impact Statement under other relevant legislation. The planning approval process will involve a period of public consultation after which South Dublin County Council will review any submissions made by the public. The proposed scheme will be presented to the Elected Members where it may accepted, either with or without amendments, and if so will proceed. Alternatively the Elected Members may reject the scheme in which case the proposed scheme will not proceed.

Chapter 1: Introduction

1.1 Introduction

This Environmental Report (ER) has been prepared by South Dublin County Council (SDCC) to accompany a planning application for the proposed Belgard Sq North – Cookstown Link Road, Dublin 24.

The South Dublin County Council Development Plan (SDCC DP) changed the zoning of the Cookstown area to REGEN (To facilitate enterprise and/or residential lead regeneration). The Six-Year Roads Programme incorporates the Belgard Sq North – Cookstown Link Road.

The proposed road will facilitate better connect potential future residential and commercial development in the Cookstown/Tallaght area by allow greater access for vehicles, pedestrians and cyclists to Tallaght mitigating congestion that would otherwise arise on the existing road network.

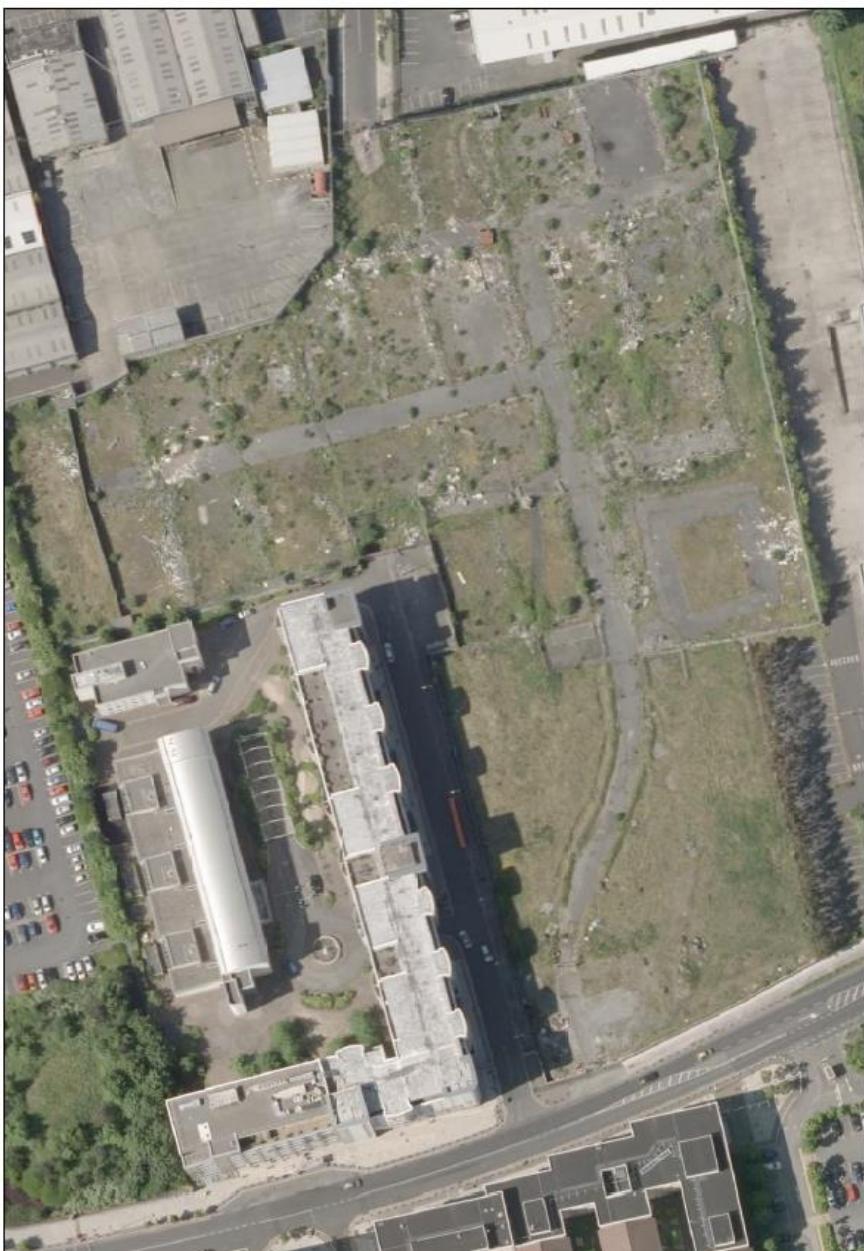


Figure 1.1 - Proposed Extension connects Cookstown Road with Belgard Square North

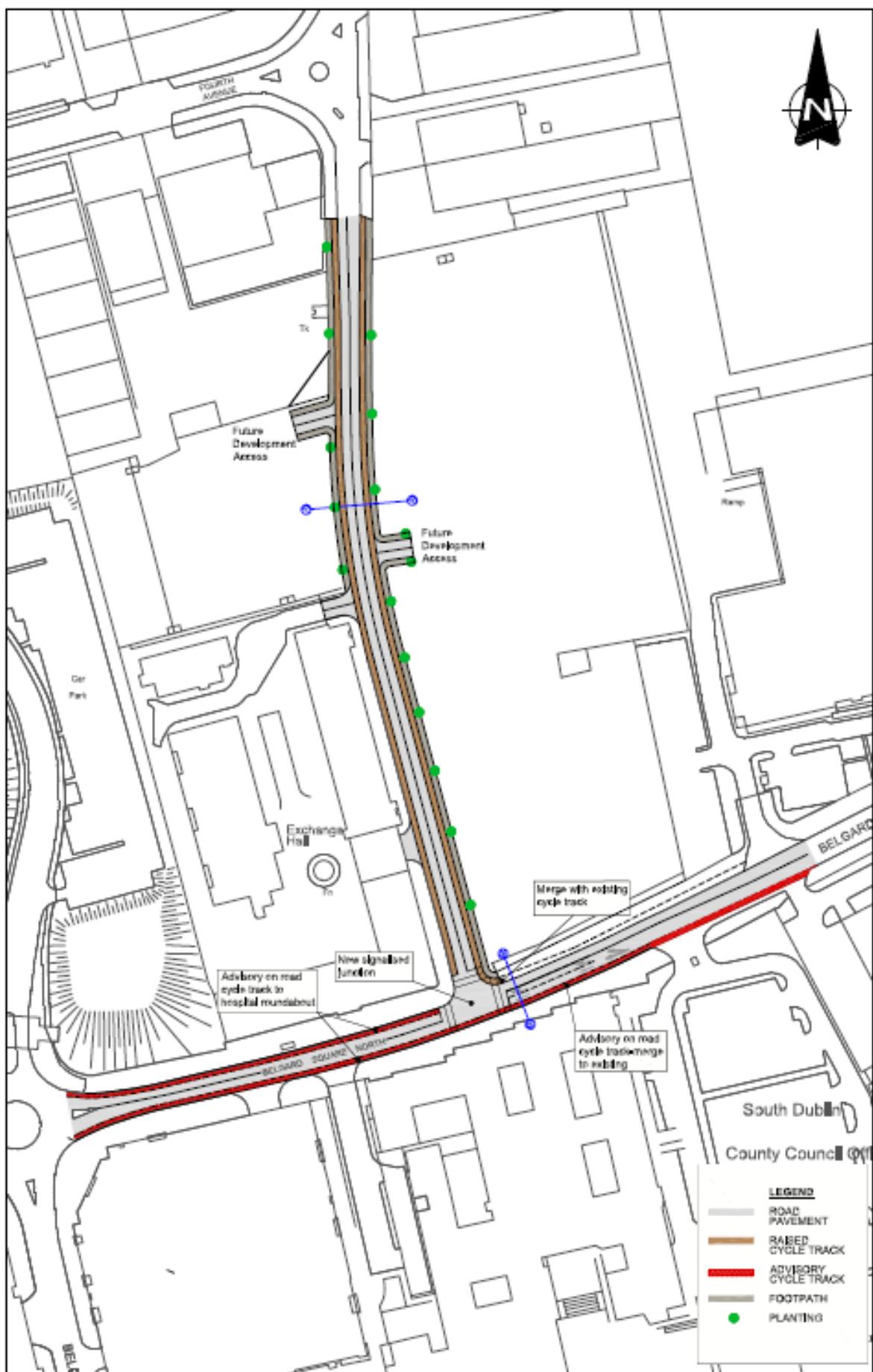


Figure 1.2 – Proposed Link Road

1.2 Planning Process

The planning for the proposed improvement scheme is undertaken in accordance with the legislative requirement in Part XI, Section 179 of the Planning & Development Act, 2000 as amended. Part 8 of the Planning and Development Regulations, 2001 to 2011 details the class of development that is prescribed for the purposes of Section 179 of the Act and the relevant class for the proposed scheme is as follows:

“Construction of a new road or widening or realignment of an existing road, where the length of the new road or of the widened or realigned portion of the existing road, as the case may be, would be – in the case of a road in an urban area, 100 metres or more,”

Under Part 8 of the Regulations, the Local Authority is required to make details of the proposed road development available for public inspection and comment and to prepare a report in relation to the proposal for consideration by the elected members of the local authority. This Environmental Report (ER) contains information on the potential environmental impacts of the proposed scheme. It has been prepared in accordance with the information requirements of the Planning and Development Act (2000) and Planning and Development Regulations (2001).

The purpose of the ER is to identify the potential impacts the proposed scheme will have on the environment and to propose measures to avoid, reduce or remedy undesirable potential impacts as appropriate.

1.3 Legislative Requirement for an Environmental Impact Report

Article 8 of the Roads Regulations 1994 prescribes the types of proposed road development that require the preparation of an Environmental Impact Assessments as:
Construction of a motorway.

- Construction of a new road of four or more lanes, or the realignment or widening of an existing road so as to provide four or more lanes, where such new, realigned or widened road would be 8km or more in length in a rural area or 500m or more in length in an urban area.
- Construction of a new bridge or tunnel, which would be 100m or more in length.

The proposed Belgard Sq North – Cookstown Link Road will involve the provision of a 12 metres length of 10m to 14m wide single carriageway road with cycle track and footpaths and as such does not require the preparation of an Environmental Impact Statement under the relevant legislation. However it was decided by South Dublin County Council to prepare an Environmental Report for this scheme to the standard of a full Environmental Impact Statement.

The ER is prepared having regard to the requirements of Section 50 of the Roads Act 1993 as amended.

Section 50 of the Roads Act and the Environmental Impact Assessment Regulations require that the following information be included in an EIS

“A description of the proposed road development comprising information on the site, design and size of the proposed road development;

- *A description of the measures envisaged in order to avoid, reduce and, if possible remedy significant adverse effects;*

- *The data required to identify and assess the main effects which the proposed road development is likely to have on the environment;*
- *An outline of the main alternatives studied by the road authority concerned and an indication of the main reasons for its choice, taking into account the environmental effects;*
- *A summary in non-technical language of the above information.*
- *An environmental impact statement also requires, in addition to and by way of explanation or amplification of the specified information referred to above further information on the following matters:*
- *A description of the physical characteristics of the whole proposed road development and the land-use requirements during the construction and operational phases,*
- *An estimate, by type and quantity, of the expected residues and emissions (including water, air and soil pollution, noise, vibration, light, heat and radiation) resulting from the operation of the proposed road development.*
- *A description of the aspects of the environment likely to be significantly affected by the proposed road development, including in particular-*
- *Human beings, fauna and flora,*
- *Soil, water, air, climatic factors and the landscape,*
- *Material assets, including the architectural and archaeological heritage, and the cultural heritage,*
- *The inter-relationship between the above factors; ”*

The Environmental Report has been prepared with regard to the above requirements. The format used in this Environmental Report document seeks to allow the reader to access the issues of interest to them as easily as possible.

Chapter 2: Background to Scheme

2.1 Objectives of the Proposed Road

The Council seeks to support and facilitate the regeneration of underutilised industrial lands that are proximate to town centres and transport nodes to provide for a more intensive mix of enterprise and/or residential led development. Many of these areas have high levels of vacancy, poor environmental quality and fragmented land ownerships. These lands are serviced and offer significant potential for more intensive forms of enterprise and/or residential led development. A Regeneration Zoning Objective is applied to these areas:

ECONOMIC AND TOURISM (ET2): REGEN ‘(To facilitate enterprise and/or residential led regeneration)

Enterprise and/or Residential Led Development in Regeneration Zones. It is the policy of the Council to facilitate and support the regeneration of underutilised industrial areas that are proximate to urban centres and transport nodes and to promote and support more intensive compatible employment and/or residential led development in regeneration zones.

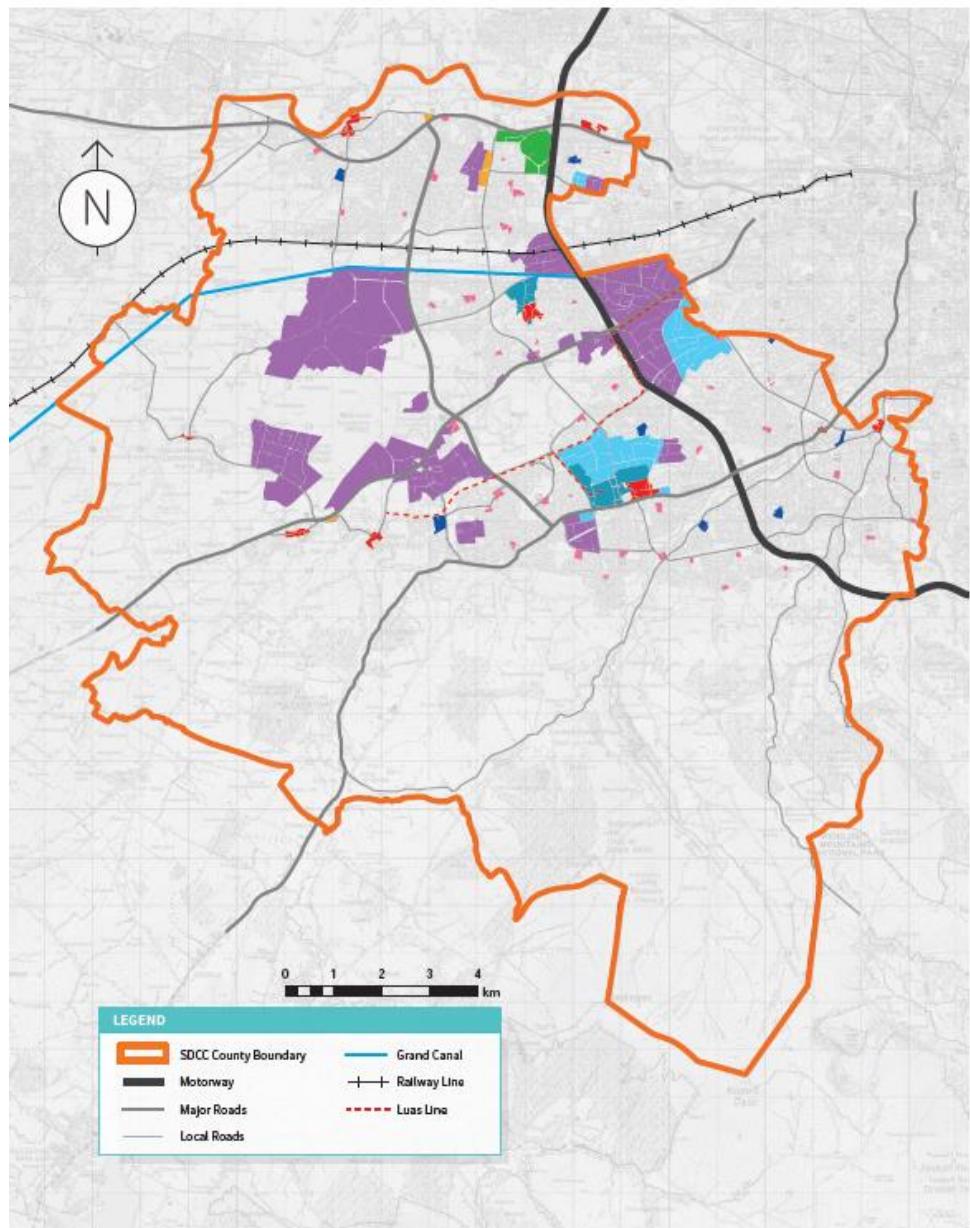


Figure 1.3 REGEN areas (Light Blue)

2.2 Recent Developments

The South Dublin County Council Development Plan (SDCC DP) changed the zoning of the Cookstown area to REGEN (To facilitate enterprise and/or residential lead regeneration). The Six-Year Roads Programme incorporates the Belgard Sq North – Cookstown Link Road.

The construction of the proposed scheme is considered essential to facilitate the future development within the Cookstown.

2.3 Objectives of the Belgard Sq North – Cookstown Link Road

The key objectives of the Bracken Link Road are as follows:

- To improve accessibility to the Cookstown area.
- To provide direct alternative access route to and from the Cookstown to Tallaght.
- To facilitate and support the future residential and commercial development in the Cookstown/Tallaght area by allowing greater access for vehicles, pedestrians and cyclists to Tallaght mitigating congestion that would otherwise arise on the existing road network.

Chapter 3: Description of Proposed Scheme

3.1 Road Layout

The route of the proposed Belgard Sq North – Cookstown Link Road is shown in the figure below on a background of OS map. The proposed road will connect Cookstown Road with Belgard Square North. The southern section of Cookstown Road will be realigned to connect with the new Belgard Square North at a T-junction.

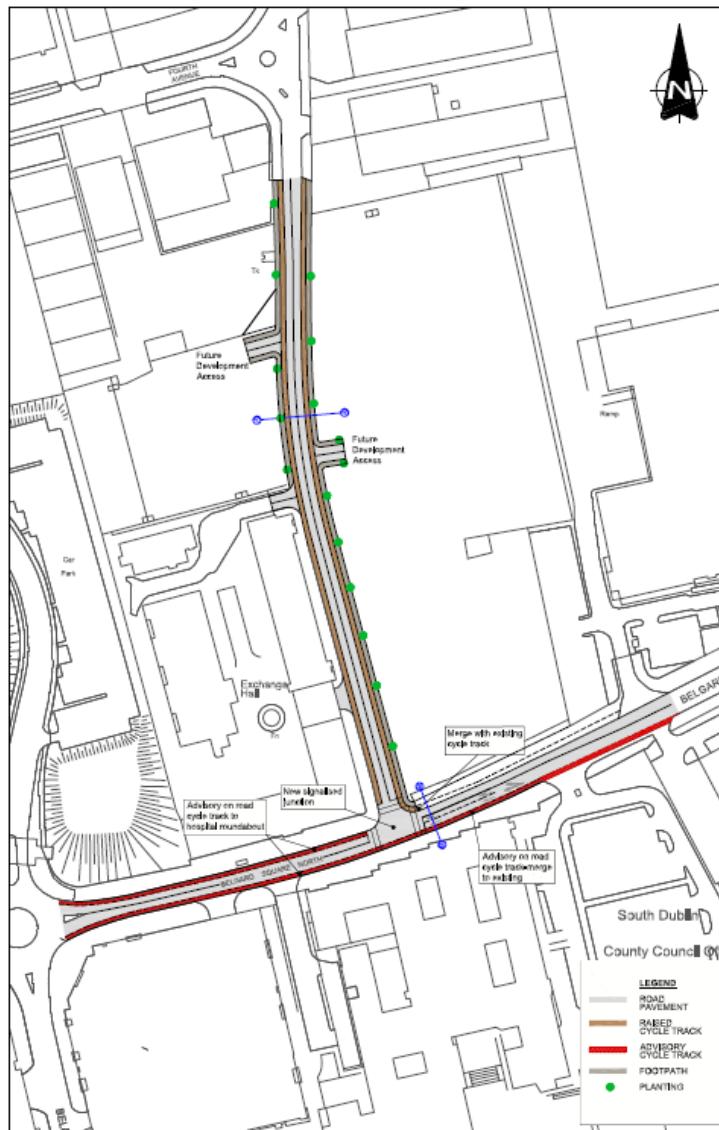


Figure 1.4 – Proposed Link Road

The proposed road scheme is approximately 102 metres in length. The road will be a single two-lane carriageway with 50km/h design speed. The overall road reservation will be 14 metres wide.

3.2 Cycling and Walking Facilities

The South Dublin County Council Development Plan Policy TM1, TM3 & TM4 is to promote cycling and walking through the provision of cycle and pedestrian facilities in the design of public transport routes and road schemes.

The proposed road will facilitate better connect potential future residential and commercial development in the Cookstown/Tallaght area by allow greater access for vehicles, pedestrians and cyclists to Tallaght mitigating congestion that would otherwise arise on the existing road network.

3.3 Public Lighting

The public lights along the eastern side of the existing will be upgraded as part of the scheme. The details of the new lighting will be considered at the detailed design stage.

3.4 Drainage

The drainage for the scheme will tie into the existing system locally. The details of the new drainage arrangements will be considered at the detailed design stage.

3.5 Cross Sections

A typical cross section of the proposed road is shown in the figure below. The road will consist of two 3 metre general traffic lanes, provision for 2.0 metre wide cycle lane and 2.0 metre wide footpaths on either side of the proposed link road.

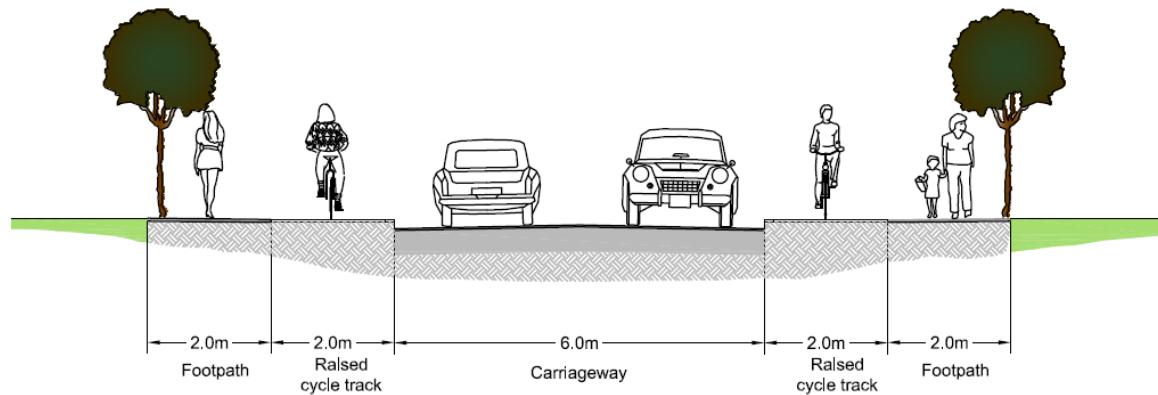


Figure 1.5 – Proposed Cross section

Chapter 4: Alternatives Considered

4.1 Alternatives Considered

The route corridor proposed for the Belgard Sq North – Cookstown Link Road is very constrained due to adjacent developments. Therefore, all alternative alignments considered for this scheme were substantially the same and differed only in the area of land required.

The do nothing scenario presents an alternative to the proposed scheme, however this alternative would not facilitate any future development within the Cookstown.

Chapter 5: Traffic Impacts

5.1 Required Improvements

The proposed Belgard Sq North – Cookstown Link Road will provide an alternative access/egress for traffic into Cookstown area. The junction will be signal controlled catering for left in / left out traffic.

5.2 Traffic Model

At this point in time the opening year is predicted to be 2018. The traffic modelling has indicated that the proposed Belgard Sq North – Cookstown Link Road will operate satisfactorily in the Opening Year and continue operate satisfactorily in the 2022 and 2032 using high traffic growth rates for Dublin Region.

The anticipated traffic flows on the proposed Belgard Sq North – Cookstown Link Road during the AM/PM 2022 and 2032 peak hour when full development has been completed are indicated below:

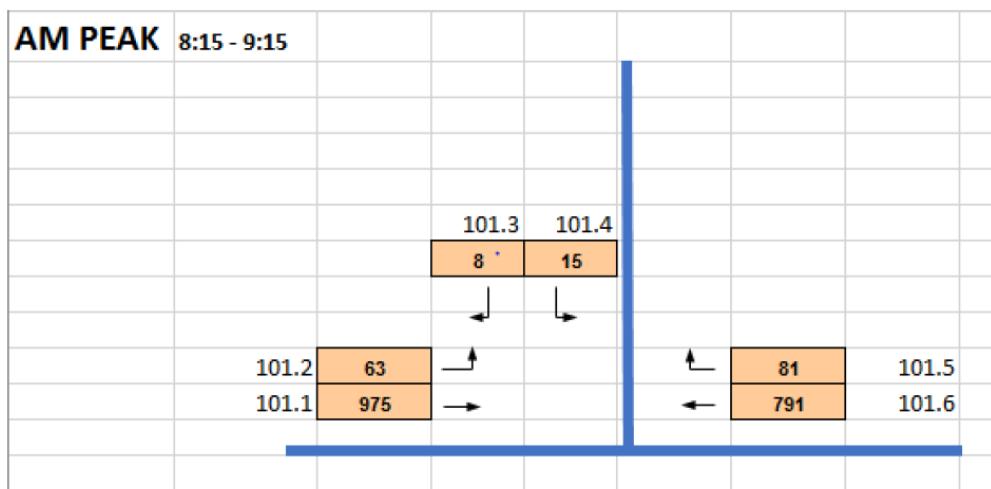


Figure 1.6 – 2022 AM Peak Hour Flows

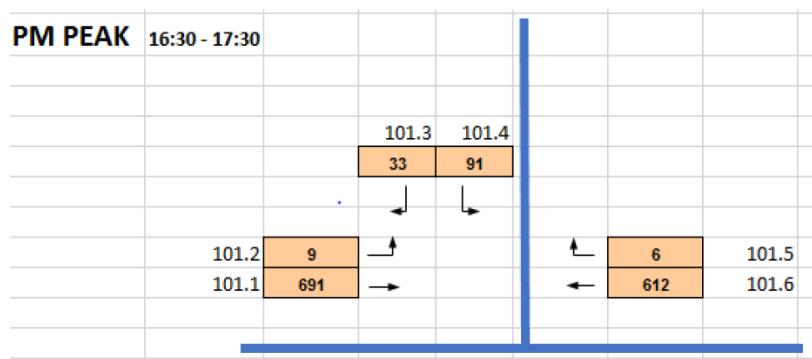


Figure 1.6 – 2022 AM Peak Hour Flows

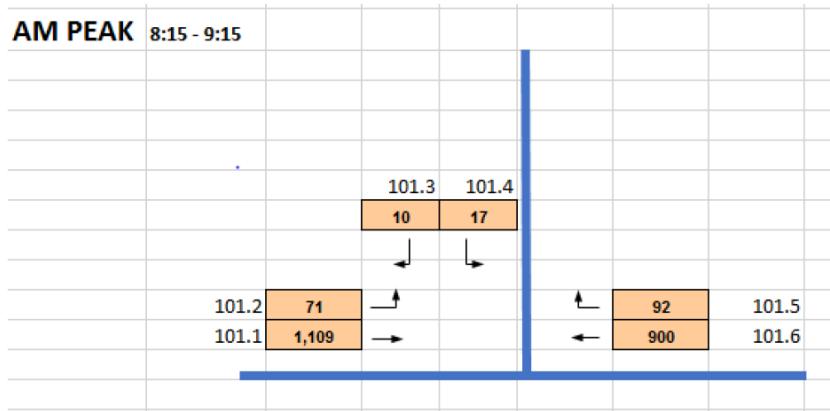


Figure 7 : 2032 AM Peak Hour Flows

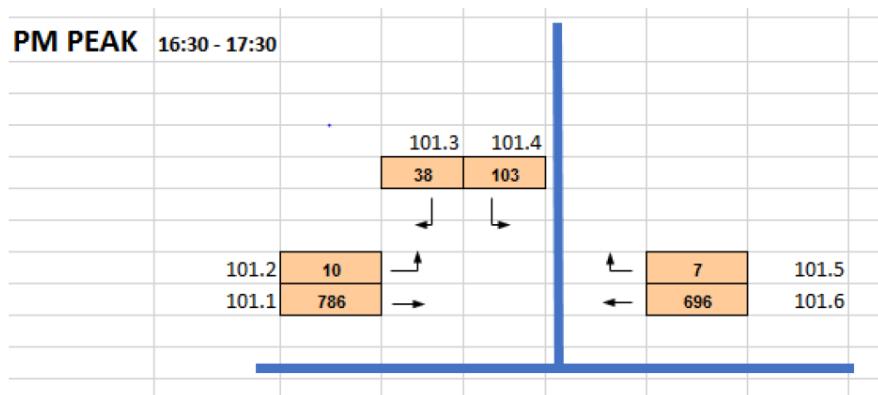


Figure 8 : 2032 PM Peak Hour Flows

The anticipated junction efficiency on the proposed Belgard Sq North – Cookstown Link Road during the AM/PM 2022 and 2032 peak hour when full development has been completed are indicated below:

Scenario	Cycle time	Practical Reserve Capacity (PRC) (%)	Delay (pcu/Hr)	Degree of Saturation
+5yr AM peak	90s	13.4	8.43	79.4% (West Arm)
+5yr PM peak	90s	52.9	6.78	58.9% (West Arm)
+15yr AM peak	90s	-0.3	13.58	90.2% (West Arm)
+15yr PM peak	90s	34.4	8.51	66.9% (West Arm)

Table 2 : Summary of Junction Analysis

Chapter 6: Impact on Human Beings

6.1 Introduction

This chapter of the Environmental Report describes the impact of the proposed Belgard Sq North – Cookstown Link Road on the “human environment” in terms of population, employment and community impacts.

6.2 Population

Receiving Environment for Population:

The area adjacent to the proposed road is a mix of brown field, commercial, open space and institutional land uses. Most existing development consists of warehouse type developments. Future population growth in the area is an objective of the South Dublin County Council Development Plan (SDCC DP) where the area has been zoned for REGEN (To facilitate enterprise and/or residential lead regeneration). Improvements to the local transportation infrastructure as set out in the SDCC DP are a prerequisite to support the anticipated population growth in the area.

Predicted Impact of Scheme for Population:

The proposed road will facilitate further residential and commercial development in the Cookstown/Tallaght area by allow greater access for vehicles, pedestrians and cyclists to Tallaght mitigating congestion that would otherwise arise on the existing road network.

6.3 Employment

The predicated impacts on employment due to the various stages of the scheme are outlined below:

Construction Phase:

The construction phase of the roads scheme will generate construction employment on site in addition to jobs in support industries e.g. builders suppliers, local retailers etc.

Operational Phase:

The development of the scheme, in conjunction with other transportation initiatives for the area will insure that the area of Cookstown will become an attractive location for business and housing in the future, owing to its location within a regional multi-modal transportation network. This will result in the increased demand for commercial/residential developments within the Cookstown area.

Do Nothing Impact:

If the road is not constructed there will be an increase in traffic congestion on the local road network and the potential for future commercial and residential development in the area of Cookstown will be curtailed.

6.4 Community Impact

Receiving Environment:

Cookstown Road is a cul de sac. Constructing the extension will create an alternative route for traffic to access/egress this section of Cookstown Industry Estate.

Predicted Impact of Proposed Community Impacts:

No additional severance will arise between communities because of the proposed road. There will be a beneficial community impact arising from the provision of an additional route for traffic, cyclists and pedestrians.

Chapter 7: Environmental Issues

7.1 Introduction

This chapter outlines the effects of the scheme and proposes mitigation measures required to ameliorate these effects, under the following headings: -

- A. Noise & Vibration
- B. Air Quality and Climate;
- C. Hydrology & Hydrogeology
- D. Soil

7.2 Noise & Vibration

7.2.1 Noise

There is unlikely to be significant noise impact as part of the construction phase of the scheme. Due to the nature of the scheme any noise nuisance will be temporary and localised. Standard limitations for noise will apply as laid out in the Transport Infrastructure Ireland (TII) publication Guidelines for the treatment of Noise and Vibration, which sets out limits for construction activities.

Construction Impacts and Mitigation Measures for Noise

A variety of items of plant will be in use, such as excavators, lifting equipment, dumper trucks, compressors and generators. There will be vehicular movements to and from the site that will make use of existing roads.

The contract documents will clearly specify that the Contractor undertaking the construction of the works will be obliged to take specific noise abatement measures and comply with the recommendations of BS 5228: Part 1 and the European Communities (Noise Emission by Equipment for Use Outdoors) Regulations, 2001. These measures will ensure that:

- No plant used on site will be permitted to cause an ongoing public nuisance due to noise.
- The best means practicable, including proper maintenance of plant, will be employed to minimise the noise produced by on site operations.
- All vehicles and mechanical plant will be fitted with effective exhaust silencers and maintained in good working order for the duration of the contract.
- Compressors will be attenuated models fitted with properly lined and sealed acoustic covers which will be kept closed whenever the machines are in use and all ancillary pneumatic tools shall be fitted with suitable silencers.

- Machinery that is used intermittently will be shut down or throttled back to a minimum during periods when not in use.
- Any plant, such as generators or pumps that is required to operate before 08:00hrs or after 18:00hrs will be surrounded by an acoustic enclosure or portable screen.

During the course of the construction programme, supervision of the works will include ensuring compliance with the limits detailed in Table 8.9 using methods outlined in BS 5228 “Noise and Vibration Control on Construction and open sites”, Annex E. It should be noted that BS 5228 does not detail any specific noise limits in relation to construction noise.

Working Hours

Normal working times will, in general, be during daylight hours 08:00 to 18:00hrs Monday to Saturday. Works other than the pumping out of excavations, security and emergency works will not be undertaken outside these working hours without the written permission of the Engineer. However some limited night-time working will be required for the proposed new junction works. This permission, if granted, can be withdrawn at any time should the working regulations be breached.

Works other than the pumping out of excavations, security and emergency works will not be undertaken at night and on Sundays without the written permission of the Engineer.

Construction Phase

During the construction phase of the project there will be some small impact on nearby properties due to noise emissions from site traffic and other activities. The transient nature of construction works, the application of binding noise limits and hours of operation, along with implementation of appropriate noise control measures, will ensure that noise impact is kept to a minimum.

Operational Phase

The predicted noise level generated by the proposed road development during the operational phase is not expected to represent a significant increase on current noise levels in the area.

7.2.2 Vibration

Potential Vibration Impacts – Operational Phase

As a vehicle travels along a road, vibration can be generated in the road and subsequently propagate towards nearby buildings. Such vibration is generated by the interaction of a vehicle’s wheels and the road surface and by direct transmission through the air of energy waves. Some of these waves arise as a function of the size, shape and speed of the vehicle, and others from pressure fluctuations due to engine, exhaust and other noises generated by the vehicle. Ground vibrations produced by road traffic are unlikely to cause perceptible structural vibration in properties located near to well-maintained and smooth road surfaces. Problems attributable to road traffic vibration can therefore be largely avoided by maintenance of the road surface.

Potential Impacts – Construction Phase

The potential for vibration at sensitive locations during construction is typically limited to demolition, excavation works, rock-breaking operations and lorry movements on uneven road surfaces. The more significant of these is the vibration from excavation and rock-breaking operations; the method of which will be selected and controlled to ensure there is no likelihood of structural or even cosmetic damage to existing neighbouring dwellings.

7.3 Air Quality & Climate

7.3.1 Air Quality

Construction Phase

There is the potential for a number of emissions to the atmosphere during the construction of the scheme. In particular, the construction activities may generate quantities of dust. If a satisfactory dust minimisation plan is implemented, the effect of construction on air quality will not be significant.

The Contractor will be obliged by the local authority and the relevant legislation to ensure that the surrounding roads are kept free from dirt. In dry weather conditions, the Contractor will be required to minimise airborne dust from the site through spraying of exposed earthworks with water.

Operational Phase

Although some increase in pollutant concentrations may occur as a result of the proposed road development, it is considered that no significant increase in pollutant levels will occur. Therefore the road scheme will result in an imperceptible impact on air quality in the operational phase.

7.3.2 Climate Impact

In terms of climate, Ireland ratified the Kyoto Protocol in May 2002 agreeing to limit the net growth of the six greenhouse gases to 13% above the 1990 level over the period 2008 to 2012. Traffic flows on the proposed road will be a source of greenhouse gas emissions. However, these will be insignificant in terms of Ireland's obligations under the Kyoto Protocol.

7.4 Hydrology and Hydrogeology

The surface water runoff for the proposed road extension will be directed into the existing storm water network. The attenuation measures required for the proposed road are currently at preliminary design stage but will be designed in accordance with best practice and will be designed to attenuate the 1% AEP storm event (including a climate change factor) and sized using calculated green-field run off rates.

No historical flood events have been recorded on OPW's FloodMaps.ie in the Cookstown Industrial Estate. However, South Dublin County Council County Council Drainage Department indicated that there had been incidents of the drainage network surcharging in the vicinity of the proposed roadway.

The Guidelines recommend identifying flood zones which show the extent of flooding for a range flood event probabilities. The Guidelines identify three levels of flood zones:

- Flood Zone A – where the probability of flooding from rivers and the sea is highest (greater than 1% or 1 in 100 for river flooding or 0.5% or 1 in 200 for coastal flooding).
- Flood Zone B – where the probability of flooding from rivers and the sea is moderate (between 0.1% or 1 in 1000 and 1% or 1 in 100 for river flooding and between 0.1% and 0.5% or 1 in 200 and 1 in 100 for coastal flooding).
- Flood Zone C – where the probability of flooding from rivers and the sea is low (less than 0.1% or 1 in 1000 for both river and coastal flooding). Flood Zone C covers all areas of the plan which are not in zones A or B.

7.5 Soil

This proposed Belgard Sq North – Cookstown Link Road will have no significant impact on soils along the proposed route.

Chapter 8: Flora and Fauna

There is no feature of significant interest in the flora and fauna of the site as all species are typical of the habitats and are very wide spread in similar areas.

Chapter 9: Landscape & Visual Impacts

The Belgard Sq North – Cookstown Link Road will be constructed on a mix of brown field and existing road sites. The road has been designed to link the level of the existing Cookstown Road with the Belgard Square North. As a result the visual impact of the road scheme will not be significant.

As noted in chapter 3 section 3.1 Road Layout: The proposed road will connect Cookstown Road with Belgard Square North. The southern section of Cookstown Road will be realigned to connect with the Belgard Square North at a signal controlled T-junction.

The proposed boundary treatment will be subject to agreement between the Council and the respective landowners.

Chapter 10: Impact on Material Assets

The proposed scheme will require a permanent land area of approximately 0.34 hectares including existing roadway which will be realigned. The impacts of the proposed road for each of the affected landowners will be as follows:

- The proposed road traverses a site in the ownership of South Dublin County Council, dividing the site into two portions one 0.46 hectares and one 1.80 hectares. Approximately 0.15hA is to be permanently acquired. The site of the proposed road is zoned for REGEN (To facilitate enterprise and/or residential lead regeneration. At present there are no buildings on this site.
- The proposed road alignment is parallel to the existing road access to Exchange Hall. The kerb line on the west of the existing road will remain in place. The centre line of the new road will be moved east to accommodate cycle track construction. There will be permanent accessions of lands belonging to the owners of Exchange Hall

Chapter 11: Architectural, Archaeological and Cultural Heritage

11.1 General

All works will take place, with only minor surface effects, either within the corridor of the existing road or directly adjacent to the existing road in land that has been subject to recent development. There are two protected structures within 1000m of the proposed scheme. All works will take place outside the boundary and curtilage of the protected structure of “The Priory”, Tallaght and “St. Mary’s Dominican Church”, Tallaght. Consequently there are no predicted impacts on architectural, archaeology and cultural heritage.

11.2 Impacts on Monuments and Places

A review was undertaken of the Record of Monuments and Places, which is compiled and updated by the National Monuments Service. There are no known sites within the footprint of the scheme.

11.3 Impacts on Cultural Heritage

Any development that includes topsoil and subsoil stripping, reduction of ground levels and excavation can potentially have a negative impact on archaeological and cultural remains both recorded and unrecorded. The proposals will not directly impact on any recorded archaeological monuments. There is no predicted impact on known archaeological remains.

11.4 Mitigation Measures for Cultural Heritage

Archaeological assessment is not required because this area has been subject to previous ground disturbance that would have removed any archaeological features and deposits should they have been present. However, an archaeologist should be retained for monitoring of the earthworks activities.

Chapter 12: Construction Phase

12.1 Introduction

This chapter of the Environmental Report outlines, the significant environmental effects that may arise during the construction phase. Furthermore the proposed ameliorative measures, which are generally considered in the previous chapters, are also outlined. This chapter deals with the issue of the timescale for construction, locations and operation of the site compounds and details temporary impacts, not previously described, on residents, road users, pedestrians and cyclists.

12.2 Time Scale for Construction

The period of time to complete the proposed road scheme is estimated at 9 months.

12.3 Site Compounds

A site compound will be required in a location to suit the construction activities. This compound will provide office and canteen facilities as well as providing a space for storage of materials and construction plant.

12.4 Impact of Construction Activities

Construction Noise: The construction of the road scheme will cause an increase in local noise levels during working hours. No particularly high noise generating activities such as blasting are anticipated. Contract conditions will limit working hours to daytime, thereby avoiding the potential for disturbance of residents at night. However some night-time operations may be required to complete the road connection and new signal controlled junction at Belgard Square North.

Pollution of Watercourses: Accidental spillages into the watercourses and drainage systems could lead to pollution. The Contract will include requirements for appropriate measures to prevent an accidental spillage of pollutant materials. Measures will be adopted to prevent discharge of suspended solids into the watercourses during construction phase. The road drainage run-off will be treated before discharging to the receiving waters.

Dirt and Dust: The Contractor will be obliged by the local authority and the relevant legislation to ensure that the surrounding roads are kept free from dirt. In dry weather conditions, the Contractor will be required to minimise airborne dust from the site through spraying of exposed earthworks with water.

Construction Traffic: There will be traffic associated with the construction phase of the proposed Belgard Sq North – Cookstown Link Road. However as the earthworks are limited, construction movements will not be significant.

Chapter 13: Interrelationships

13.1 Introduction

Each of the various environmental and related topics has been separately discussed in the previous chapters of the Environmental Report. In this chapter the impacts that the Belgard Sq North – Cookstown Link Road will have on the existing environment have been identified as follows: -

In the table below the shaded boxes indicate inter-relationships between different aspects of the environmental impacts of the scheme.

Receptor	Traffic	Community	Noise & Vibration	Air Quality	Landscape / Visual	Ecology	Soils	Climate	Water	Archaeology	Architecture
Activity											
Traffic	*	*	*		*		*				
Community											
Noise & Vibration	*					*					
Air Quality	*					*		*	*		
Landscape / Visual	*	*									
Ecology					*		*	*	*		
Soils			*								
Climate						*				*	
Water					*						
Archaeology											
Architecture											

Figure 13.1 Environmental Impact Matrix

Chapter 14: Summary of Mitigation Measures

14.1 Noise & Vibration

- Low noise road surfacing will be provided on the proposed road.

- The application of BS 5228:1997 “Noise Control on Construction and Demolition Sites” should minimise disturbance to locals,
- Machinery and compounds will be positioned, where possible, to avoid undue disruption.

14.2 Archaeology and Cultural Heritage Construction Phase for Archaeology

- An archaeologist should be retained for the duration of the relevant earthworks, in accordance with current best practice;
- The cessation of machine work must occur as soon as archaeological material has been uncovered.

14.3 Construction Phase

- All measures shall be taken to ensure that surface water runoff is free from suspended solids and other pollutants,
- All storage areas should be in bunded compounds away from watercourses,
- Regular maintenance and servicing of machinery and plant will be required,
- The contractor must set up systems to prevent dirt from being released onto public roads. In the event that site traffic does dirty the roads, then the contractor will be required to clean all the roads affected,
- Control of the release of suspended solids into the public drainage systems will be done through the use of interceptors or traps,
- Contract conditions will require that the contractor prevents silt laden water from discharging into the watercourse,
- On site temporary toilet facilities shall be serviced and maintained by a specialist contractor.

APPENDIX 1: Appropriate Assessment Screening Report

APPENDIX 2: Ecological Impact Assessment

APPENDIX 3: Scheme Drawings