

Collins Avenue Station: Environmental Assessment Report of the Options

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2020/02/06

This report was provided to members of public, who requested it after the submission of the railway order application.

While this report was not finalised, it did inform the conclusions of the EIAR that there was no reasonable alternative to the station location identified at the Emerging Preferred Route stage, owing the lack of open space elsewhere in this area, which would constrain the provision of a station or (in the event the Collins Avenue Station were moved to Albert College Park) the construction of an intervention shaft between Ballymun and Albert College Park.



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1. Introduction

This report presents the robust decision-making process that led to the location of the proposed station at Collins Avenue. The identification of a preferred location was achieved by employing a four-stage assessment process as outlined below:

- Stage 1: Review of the receiving environment;
- Stage 2: Identification and description of potential station locations;
- Stage 3: Preliminary analysis; and
- Stage 4: Multi Criteria Assessment

1.1 Proposed Study Area

The study area extends 200m around the various options. All options are within an area close to DCU, within or close to Ballymun Road and Collins Avenue.

1.2 Background to MetroLink

Dublin Metro North (DMN) was the project name of the original proposal for a metro railway system connecting Swords and Dublin Airport with Dublin City Centre at St Stephen's Green. This scheme was developed by the Railway Procurement Agency and granted a Railway Order by An Bord Pleanála (ABP) in 2010. The global economic downturn intervened, and in 2011 the Government postponed the Dublin Metro North project.



The National Transport Authority's (NTA) Transport Strategy for the Greater Dublin Area, 2016-2035 (NTA 2016) identified a Metro service as the preferred public transport mode to address the transport needs of the Swords-Airport-City Centre corridor. It also envisaged the upgrading of the existing Luas Green Line between Ranelagh and Sandyford to a Metro level of service.

Project Ireland 2040 included the National Development Plan (2018-2027) (DHPLG 2017), which combined those two projects to form MetroLink. MetroLink will provide a fast, high capacity, high frequency, modern and efficient public transport service for people travelling along the Swords/Airport to City Centre corridor. In addition, the Scheme will ultimately interchange with the existing Luas Green Line in the South City area. The route length is approximately 19km and the completed system will have 15 new stations, 3,000 Park and Ride spaces, and a journey time of approximately 25 minutes from the City Centre to Swords.

The NTA/TII commissioned Arup Consulting Engineers to undertake an assessment of route options for the proposed Project (TII 2016). The objective of the study was to carry out a comprehensive route selection to identify an Emerging Preferred Route (EPR) for the Scheme. The study was completed at the end of February 2018 and it included a Concept Design for the EPR.

In January 2018, the NTA/TII commissioned Jacobs and Idom joint venture (Jacobs/Idom) to

provide ongoing engineering design services through to scheme completion. As the design developed, it became apparent that the construction phase of the project would result in significant disruption to the Luas Green Line. In order to mitigate this impact a decision was made to defer the upgrade of the Green Line to a later date and that the MetroLink project would comprise the development of the section between Swords and Charlemont.

1.3 Structure of this Report

This report is structured to build on work undertaken which identified the area of Collins Avenue / Dublin City University as an appropriate area for a station. A number of potential locations within the study area were analysed in order to identify the preferred specific location. This document is therefore structured as follows:

- Section 2 provides presents the assessment methodology:
- Section 3 provides a description of the potential locations;
- Section 4 includes the Environmental MCA of locations;



• Section 5 References.

2. Methodology

2.1 Environmental Multi-Criteria Assessment Methodology

2.1.1 Assessment Criteria

The MCA has regard to all the environmental sub-criteria identified in Table 1 below. As identified in Table 1, some criteria were not considered to differentiate between options as the environmental impacts were deemed similar across all the options (EMI/EMC, Resource & Waste Management and Accidents and Disaster) or not applicable (agronomy):

Table 1: Environmental MCA Criteria

Environmental Factor	Included as a sub-criterion	Rationale	Assessment
Human Health	Yes	Human Health impacts may arise from a combination of effects on air quality, noise, dust and access to opportunities for physical activity.	The assessment brought together the findings of the air quality and noise assessments, together with a review of mapping showing sporting facilities that may be affected. A qualitative assessment was then made.
Socio-Economics	Yes	Socio-economic effects may arise from works that would require the closure or restricted access to business premises or to facilities used by community groups.	The assessment involved a qualitative classification of negative impacts, largely during the construction phase. An assessment of the operational benefits was also undertaken.
Electromagnetic Interference / Compatibility	No	Potential for electromagnetic interference at nearby receptors.	Identify any EMI-sensitive receptors within 50m
Noise	Yes	It is not considered that the project will have a significant impact in terms of noise during the operational phase of the project due to modal shift from private vehicles to the MetroLink and the resultant reduction in noise. However, there is potential for impacts on sensitive receptors during the construction phase.	Sensitive receptors within 100m of each station box location were identified and assessed to identify potential impacts.
Vibration	Yes	It is not considered that the project will have a significant impact in terms of vibration during the operational phase of the project due to modal shift from private vehicles to the MetroLink and the	Sensitive receptors within 40m of each option were identified and assessed to identify potential impacts.

Environmental Factor	Included as a sub-criterion	Rationale	Assessment
		resultant reduction in noise. However, there is potential for impacts on sensitive receptors during the construction phase.	
Biodiversity	Yes	Construction works have the potential for both temporary and permanent effects on biodiversity, through vegetation clearance, which may reduce available habitat, or through noise, air quality, lighting and disturbance, which may affect protected species.	Records of sensitive habitats and species in the study area were checked, including records from surveys carried out for the project. A qualitative assessment was then made of the potential for the options to affect biodiversity, as a result of construction and operation.
Air Quality	Yes	It is considered that the project will have a largely positive impact on air during the operational phase of the project due to modal shift from private vehicles to the MetroLink and the resultant reduction in emissions. However, there is potential for impacts on sensitive receptors during the construction phase due to emissions. Emissions of relevance during this phase include NOx and Particulate Matter (PM10).	Sensitive receptors within 50m of each station box location were identified and considered and assessed to identify potential impacts.
Climate	Yes	It is considered that the project will have a largely positive impact on climate during the operational phase of the project due to modal shift from private vehicles to the MetroLink and the resultant reduction in emissions. However, there is potential for impacts on sensitive receptors during the construction phase due to emissions from plant and from embedded carbon in construction materials.	Options were considered in terms of their size (as an indicator of the comparative amount of materials needed, and hence of embedded carbon) and, where possible, the duration of construction (as an indicator of the comparative use of plant and machinery)/
Flooding	Yes	Construction within a flood plain could increase the risk of flooding on neighbouring land, or could put the development itself at risk of flooding.	Flood maps were checked and interpreted in order to understand the potential for the options to affect flood risk or to be affected by the risk of flooding.
Hydrology	Yes	Surface water flows and quality could be affected either by construction works in a channel, causing an obstruction or change in channel morphology, or by	Connectivity between the options and nearby watercourses was identified with reference to appropriate mapping.

Environmental Factor	Included as a sub-criterion	Rationale	Assessment
		accidental spillages which could lead to water pollution.	
Hydrogeology	Yes	Inner protection areas extend up to 300m from groundwater abstraction points, with outer protection zones extending to 1km. Works within those areas could have adverse effects on the quality of abstracted water. Excavations and underground construction can affect groundwater flows in underground aquifers.	Relevant mapping was checked for the presence of aquifers and wells or springs. A qualitative assessment was made of the risks associated with the options.
Land use, Soils and Geology	Yes	Options in close proximity to each other are likely to encounter the same ground conditions, although localised areas of contaminated land (e.g. former landfill sites) may mean that the risks of mobilising contaminants differ between options.	Reference was made to geological mapping and to earlier reports for the project, which had identified sources of contaminated land.
Properties	Yes	Potential for direct impacts on a number of land holdings and properties.	Properties likely to be affected directly, by land- take, or indirectly, by disruption to access, were identified with reference to mapping.
Agronomy	No	The locations of the options are within a built urban environment. Hence agronomy has been scoped out.	Not applicable.
Resource Use and Waste Management	No	The resources required and the waste generated would be similar for each option. Hence not a differentiator and scoped out.	Not applicable
Archaeological Heritage	Yes	Potential for direct impacts on known and unknown archaeological remains during the construction of the options.	National and local archaeological records were accessed online to identify known archaeological remains in the study area. A qualitative assessment was then made of the potential for remains to be affected by each option.
Architectural Heritage	Yes	Buildings and structures of archaeological merit exist in close proximity to the Metrolink route. There is	A qualitative assessment of potential direct impacts from on elements of architectural



Environmental Factor	Included as a sub-criterion	Rationale	Assessment
		the potential for both direct, physical effects during construction, and for indirect effects on setting through both construction and operation.	heritage from each option and associated construction works.
Landscape and Visual	Yes	Potential for significant impacts on landscape/townscape and visual amenity, particularly during construction.	Assessment involved the qualitative assessment of visual impacts on nearby receptors and changes to the local landscape character.
Accidents and Disasters	No	It is assumed that safety measures will all achieve the same standard, regardless of the option, so this is not a differentiator.	Not applicable.

2.1.2 Multi-Criteria Assessment

The environmental MCA assessment considered each environmental factor during both construction and operation, and scored them in turn, using a refined, seven-point scale, as shown in Table 2. The scores for each topic are included in section 4 of this report, with full details of the assessment findings provided in Appendix A.

Table 2: MCA Scoring Key

Assessment Score for Individual Environmental Factors	Significance
7	Major or Highly Positive
6	Moderately Positive
5	Minor or Slightly Positive
4	Not significant or neutral
3	Minor or Slightly negative
2	Moderately Negative
1	Major or Highly Negative

3. Identification and Description of Potential Station locations

3.1 Introduction

Feasible station location options were developed for Collins Avenue and the detail of these options are presented here.

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3.2 Outline Construction Methodology

The proposed construction methodology is as follows:

- Establishment of the works area/site, site offices, compounds and security required;
- Site preparation including vegetation clearance required within the construction area;
- Diversion of utilities;
- Excavation and construction of the station box;
- Construction of associated structures such as lifts, escalators and sky lights;
- Installation of railway tracks;
- Installation of operating equipment;
- Fitting out of station; and
- Finishing and landscaping including the reinstatement of railings, bollards, lamp posts etc and planting of trees.

The primary construction activity is to create an underground station box into which the tunnel connects, with an entrance located at the surface above the station. The station box would be constructed using the "top-down" cut and cover method. Cut and cover involves excavating the area required for the station from ground level down to the desired level before constructing the station and reinstating the ground level to the desired finish.

3.3 Station Description

For all locations considered in this report the station would consist of the following design elements:

- A station box at 113.5m long by 24.5m wide and 24.3m deep from street level to TOR level;
- Total gross area of 6,813m²
- Platforms would be 6.2m wide on each side of the tracks;
- Three main levels in line with the typical underground station design, concourse, mezzanine and platform levels;

3.4 Summary of Proposed Station Options

This report covers the environmental MCA of the options for stations only. Whilst it is noted that some options would require route alignment changes, and at least one may require an intervention shaft to address distances to the next station along the line, those are beyond the scope of this assessment.

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3.4.1 Option 1: EPR and PR location (Our Lady of Victories church grounds)

EPR and PR options are considered together as they are both located on Ballymun Road (R108) in front of Our Lady of Victories Church as shown in Figure 3-1

Figure 3-1: EPR and PR Location



3.4.2 Option 2: Metro North - DCU Ballymun Road (North Option)

This option would be located on the eastern side of Ballymun Road, opposite the junction with St. Pappins Road, as shown in Figure 3-2

Figure 3-2: Metro North - DCU Ballymun Road (North Option) Location



3.4.3 Option 3: Metro North - DCU Ballymun Road (South Option)

This option would be located further south along the R108, at the edge of Albert College Park, as shown in Figure 3-3.



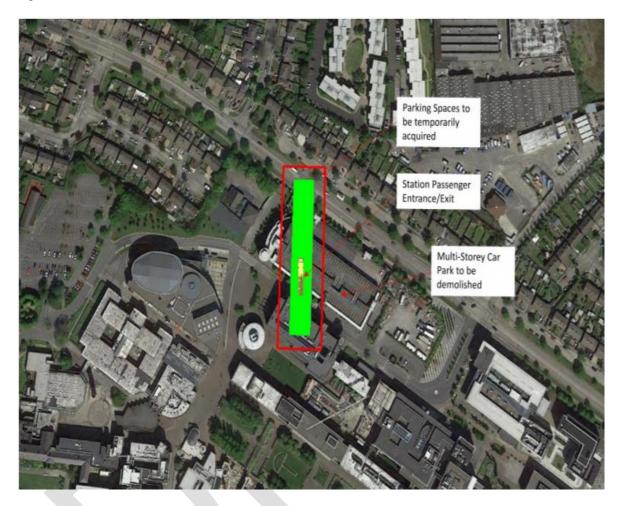
Figure 3-3: Metro North - DCU Ballymun Road (South Option) Location

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3.5.1 Option 4: Metro North DCU Campus Collins Avenue

This option would be adjacent to the main entrance to DCU on Collins Avenue in the vicinity of Shanowen Avenue, to the east of the Helix Theatre, as shown in Figure 3-4.

Figure 3-4: Metro North DCU Collins Avenue West Location



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3.6.1 Option 5: Metro North DCU Collins Avenue Junction

This Option would be located in the median of the Ballymun Road at the junction with Collins Avenue., as shown in Figure 3-5.

Figure 3-5: Metro North DCU Collins Avenue Junction Location





4. Environmental Multicriteria Analysis

4.1 Introduction

The options described in Section 3 have been through a multi-criteria analysis to identify the potential environmental impacts of each option in line with the methodology described in Section 2. The full results of the MCA are presented in Appendix A, and a summary table of the results is provided in Section 4.2.3.

4.2 Appraisal of Options

4.2.1 Option 1: EPR and PR Location

A station at this location would be requiring temporary and permanent land take from Our Lady of Victories Church grounds. There would be potential direct impacts of noise, visual and dust disturbances during the construction phase on sensitive receptors such as the abovementioned church, nearby schools and residents etc. There could be disruption to traffic along R108 during construction thereby causing access impacts to local population. There is the potential for impacts on the setting of buildings with architectural heritage value, and potential for damage to possible buried archaeological assets during construction. The location is within an urban area with some roadside vegetation of limited biodiversity value. This option avoids the significant traffic disruption associated with some of the other options. The location is not within a floodzone or close to any surface waterbodies; however there is a historic river running north-south beneath the church building, although no impacts are predicted.

4.2.2 Option 2: Metro North – DCU Ballymun Road opposite St. Pappin's Road

This option is close to a number of sensitive residential receptors as well as facilities such as College Gate dental clinic which is located across Ballymun Road, all of which could experience access restriction during construction activities at this location. would have a direct impact to a property operating as a pre-school/after-school club. There would also be temporary and permanent land take from the green space/verge immediately east of Ballymun Road and north of Albert College Park, which is assumed not to be in private ownership. Whilst the station box would be beneath the verge, the construction area may extend into the road, leading to traffic disruption.

4.2.3 Option 3: Metro North – DCU Ballymun Road within Albert College Park

This option would be within an existing park and would involve significant vegetation removal, hence there would be impacts on local biodiversity, landscape and visual amenity. The landscape impact of felling matured trees would be have an effect until replanted vegetation matured. This location is also close to other sports ground, hence construction work at this site may reduce the amenity and disrupt access for the users for these grounds. No properties are anticipated to be demolished for this option and impacts on traffic are also less compared to other options as it is not on the main road. The number of sensitive receptors close to this site is also less than the other options, hence the overall impact on environment is less.

4.2.4 Option 4: Metro North –DCU Campus Collins Avenue

This location would be within the DCU campus and would involve the demolition of a multi-storey carpark. A number of residential receptors are within close vicinity and could be exposed to construction noise, dust and visual impacts. Students and staff visiting the DCU campus would also be experiencing these impacts. There could be access restrictions in the adjacent local roads which would impact businesses nearby. Helix Theatre, an active venue within the DCU campus, is adjacent to the construction site, which could be affected by noise, vibration and disruption during construction. There is a historic watercourse beneath the site, which could be directly affected, thus flows would be likely to need to be diverted. There are no green space or sports ground likely to be impacted by this option..

4.2.5 Option 5: Metro North - DCU Collins Avenue Junction

Construction work in this location would have a significant impact on traffic and access to surrounding facilities, as it would be within the carriageway of the R108, at its in the junction with Collins Road. This would require significant traffic management arrangements to be in place during construction. Similar to the EPR/PR option, there are a number of sensitive receptors in the close proximity which can be impacted from construction noise, dust, visual impacts and access restrictions. These include Our Lady of Victories church, a number of schools, a library and residential properties. The northern end of the construction site would be very close to a historic watercourse, presumed now to be in culvert, which could be directly impacted. Three residential properties would require demolition for construction of a station at this location.

4.2.6 MCA Outcome

Table 4 shows the summary results of the environmental multi-criteria analysis. The full table, including descriptions of the potential impacts, is provided in Appendix A.

		Options				
Environmental Factors		1	2	3	4	5
Human Health	Construction	2	3	4	3	3
	Operation	5	5	5	4	4
Population	Construction	2	1	3	3	1
	Operation	4	4	4	4	4
EMI/EMC	Construction	4	4	4	4	4
	Operation	4	4	4	4	4
Noise	Construction	1	1	2	1	1
	Operation	4	4	4	4	4
Vibration	Construction	3	3	3	3	3
	Operation	4	4	4	4	4
Biodiversity	Construction	3	3	2	4	3
	Operation	4	4	4	4	4
Air Quality	Construction	2	2	3	3	2
	Operation	4	4	4	4	4
Climate	Construction	4	4	4	4	4
	Operation	4	4	4	4	4
Flooding	Construction	4	4	4	4	4
	Operation	4	4	4	4	4
Hydrology	Construction	4	4	3	2	2
	Operation	4	4	4	4	4
Hydrogeology	Construction	3	3	3	3	3
	Operation	4	4	4	4	4
Land Use, Soils and	Construction	3	4	3	3	3
Geology	Operation	4	4	4	4	4
Properties	Construction	2	1	3	1	1
	Operation	3	1	3	4	4
Archaeological Heritage	Construction	2	4	4	4	4
	Operation	4	4	4	4	4
Architectural Heritage	Construction	4	4	4	4	3

Table 3: MCA Summary Table



		Options				
Environmental Factors		1	2	3	4	5
	Operation	4	4	4	4	4
Landscape/Townscape	Construction	2	2	1	3	2
and Visual Amenity	Operation	4	4	2	3	4

4.2.7 Summary of Findings

Although all the options are located within an area with numerous sensitive receptors, Options 1, 2 and 5 are much closer to these than Option 3 and 4 and hence could affect more human receptors. All options would also require temporary and permanent land take, although Options 2, 4 and 5 would also require demolition of properties. While Option 5 would require the demolition of three private dwellings, Option 2 would require the demolition a pre-school club, and Option 4 would require the demolition of a multi-storey car park. An existing dental clinic facility may potentially be affected by access restrictions during construction of Option 2.

A historic watercourse flows under the footprint of Options 4 and 5 and very close to Option 3, requiring possible diversion.

Although all the options are situated in an urban setting, Option 3 would be situated within a park, requiring the removal of mature trees, thereby affecting biodiversity and landscape. Option 3 is also the only option that completely avoids construction within a highway, and hence would cause least disruption of traffic.

Option 5 would be entirely within the R108 Ballymun Road, so the associated traffic disruption during construction would be significant.

Whilst Option 3 appears to score well, it is noted that, should the station be constructed this far south, an intervention shaft would need to be constructed to the north, because of the extended distance between stations. This intervention shaft would potentially be close to the junction of Collin's Avenue and Ballymun Road. In contrast, the PR option has the station further north, but an intervention shaft in Albert College Park. All options would require an intervention shaft to be built in addition, because of the distance between Ballymun and Griffith Park, and the safety requirement for ventilation and evacuation facilities to be available at 1km distances along the rout.



5. References

ARUP (on behalf of the NTA) (2018). New Metro North - Alignment Options Report.

Department of Housing, Planning and Local Government (DHPLG) (2017); Project Ireland 2040: National Planning Framework.

Department of Transport, Tourism and Sport (DTTAS) (2016); Common Appraisal Framework for Transport Projects and Programmes.

European Union (2014). Directive 2014/52/EU of the European Parliament and of the Council of 16 April 2014 amending Directive 2011/92/EU on the assessment of the effects of certain public and private projects on the environment (EIA Directive)

Jacobs Idom (2019); Preferred Route Design Development Report.

National Transport Authority (NTA) (2016); Transport Strategy for the Greater Dublin Area 2016-2035.

Office of Public Works (OPW) (2015) Draft St Stephen's Green Park Conversation Management Plan

Transport Infrastructure Ireland (TII) (2016); Project Appraisal Guidelines for National Roads Unit 7.0 - Multi Criteria Analysis.

Appendix A. Multicriteria Analysis Table

AlternationAlternati	Alternation Alte	ACTIVITY NAME	Numan Mealth	Population	5341/5340	Noire	Mination	Disduscrity	Air Dualbu	Cienta	Election	Ludenberg	Lutronalos	Land Soil Geology	Properties	Arronomy	Parourre 8. Marte Mont	Archaeology and Cultural	Architectural Haritana	Landreane & Micual	Accident Dirarter
Name	And	EPR and PR - both at Eastern Co Side of R108, in front of of	Construction Impacts: There are a number	Construction Impacts: Disruption to traffic			Construction Impacts: Vibration may be felt at the Church at times. Suitable	Construction Impacts: This location is within an urban area of limited	Construction Impacts: Construction dust bar the potential to impact constitue	Construction Impacts: Comparable impact for all the station options: bence this is no	Construction Impacts: The construction		Construction Impacts: The bedrock Geology is Vicens limertone & calcuratory shale of		Construction Impacts: No demolition or damage to building: anticapted during		Construction Impacts: Resources used and	Construction Impacts: There are two	Construction Impacts: There are two protected structurer in within 200m of the	Construction Impacts: As per Corine 2018, C	Construction Impacts: It is assumed that construction risks would be appropriately
State in the	MARKAR 	Church of Our Lady of stu	study area. These include visitors to the	to the church and surrounding open space	site	impact the number of sensitive receptors	mitigation measures would be taken for	biodiversity interest. The nearest	receptors in the vicinity of the site. There	a differentiator.	hence no impacts on flooding	a historic river running north-south	Palaeozoic, Carboniferous, Mississippian age.	landfill sites within the vicinity. There is	construction of the station. Small amount	No impacts	be similar and hence not a differentiator	distance of approximately 750m	site. Former Albert College (now DCU)	Discontinuous urban fabric. Construction	managed and this is not a differentiator.
Market and set and se	And statistical And statis	victories cn stu	students and staff of a number of schools.	there would be potential disruption to access		adjacent to the church, and there are two	church so that they don't get damaged du	e Demesne which is a Protected Site as a	within 50m of the construction site, as			physical impact on this culverted	Aquifer which is Moderately Productive only in	alignment, where there was a pump and	Church ground is expected, potentially			impact on settings on these structures are	whereas another RPS within DCU is	the number of residential receptors which	
Marchard March	Ansatz Ansatz <td>res</td> <td>accommodation just south of the church,</td> <td>There would be temporary and permanent</td> <td></td> <td>The construction site would be within a</td> <td>Furthermore, there could be some amoun</td> <td>t from the site. There are a number of</td> <td></td> <td></td> <td></td> <td>watercourse is predicted.</td> <td>immediate study area. The [overall]</td> <td>contamination source (last indicated 113</td> <td>more temporarily during construction.</td> <td></td> <td></td> <td>intervening built environment. A Bronze</td> <td>Road. No significant impact to settings are</td> <td>construction site.</td> <td></td>	res	accommodation just south of the church,	There would be temporary and permanent		The construction site would be within a	Furthermore, there could be some amoun	t from the site. There are a number of				watercourse is predicted.	immediate study area. The [overall]	contamination source (last indicated 113	more temporarily during construction.			intervening built environment. A Bronze	Road. No significant impact to settings are	construction site.	
Marchard March	Andread	an Th	and the residents on both sides of the site. The provision of a station at this location	 land take during construction from the church ground and the adjacent housing 		residential area, including assisted-living residences south of the church	of vibration experienced by the number of residential recentors within 50m of the	f roadside trees and other vegetation. A number of breeding birds like robin and a						years ago, located at Stormanstown House Anartments) low notential for pollution				Bridle Bit found within 100m of the site has been recorded in National Meusum of	envisaged for either of the RPS assets due to the intervening built environment		
Markard Markard Markard Markard 	And a	we	would result in potential impacts to the	estate on Albert College Drive. The			scheme option, including some assisted-	potential mammal burrow have been					groundwater has been indicated to be of L -	Additionally, at 210 m east of				Ireland's Find Database (as per Heritage	· · · · · · · · · · · · · · · · · · ·		
Image: state in the state	Marker Mar	no	noise, vibration and dust during	stop entrances and all associated features.			living properties.	scheme at the Church ground. The site is					however any underground excavation/	Building) and a current potential source,				bridge on Ballymun Road, opposite the			
Image: bioline interm Image: bioline inte	And All	co	effective mitigation. Construction works					could be requirement to remove					the aquifer by reducing the water quality.	measures should be taken to contain the				survives above ground though it is possible			
Mathematical	Axact		could also partially disrupt the use of the					vegetation in the construction footprint.					Dewatering may also affect groundwater	contaminated soil, if any.				that some remains survive beneath the			
Normal Normal </td <td>Market Market Mar</td> <td>op</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>could potentially be impacted by the noise</td> <td>e,</td> <td></td> <td></td> <td></td> <td>quanty and the mater table.</td> <td></td> <td></td> <td></td> <td></td> <td>that unexplored archaeological assets</td> <td></td> <td></td> <td></td>	Market Mar	op						could potentially be impacted by the noise	e,				quanty and the mater table.					that unexplored archaeological assets			
Alternation Particular Particular <	AnswerAnswe	an	area.					dust, light and vioration.										could be disturbed during construction.			
Arrowski Arrow	Anderson Anderson <td></td> <td>Operation Impacts: Operation of the</td> <td>Operation Impacts: The key trip attractor for</td> <td>Operation Impacts: None</td> <td></td> <td></td> <td></td> <td></td> <td>Operation Impacts: It is assumed that the</td> <td>Operation Impacts: The site and</td> <td>Operation Impacts: There are no surface</td> <td>Operation Impacts: Permanent pathways may</td> <td>Operation Impacts: Ground conditions are</td> <td>Operation Impacts: Operation of the</td> <td>Operation Impacts: No impacts</td> <td></td> <td></td> <td>Operation Impacts: No further impact.</td> <td>Operation Impacts: Most of the</td> <td>Operation Impacts: It is assumed that saf</td>		Operation Impacts: Operation of the	Operation Impacts: The key trip attractor for	Operation Impacts: None					Operation Impacts: It is assumed that the	Operation Impacts: The site and	Operation Impacts: There are no surface	Operation Impacts: Permanent pathways may	Operation Impacts: Ground conditions are	Operation Impacts: Operation of the	Operation Impacts: No impacts			Operation Impacts: No further impact.	Operation Impacts: Most of the	Operation Impacts: It is assumed that saf
And a	Adder being b	ad	adverse impact to human health. A station	n This will provide an additional access for the		station should not cause any significant noise effects.	station should not generate any significan vibration.	it mitigation planting would be incorporated into the project, and this planting would	d station should not cause any air quality effects.	operation of a station in any location would have similar operational emissions.	surrounding area is not in a flood risk zone. No impacts.	watercourse sections are present. No	groundwater, although the risk of	operation of the station. Suitable design	the number of properties and educational					above the station and there would be	evacuation procedures would be implemented. This is not a differentiator
A.M.	Ar <	at	at this location would make access to the nearby sports facilities easier.	students of DCU. However this is applicable to all the options and hence not a				mature during the operational phase.				impacts are predicted. No discharge of	contamination from operation of the station would be low and expected to be mitigated							opportunity to landscape the ground. No new landscape or visual effects	
Horse	Image: And the and the and the and the and the angle angle and the angle and the angle angle and the angle angl			differentiator.									through design. There are no wells in the immediate study area and no on-ening	contaminated land.	grounds.					anticipated.	
Image: state	And <td></td> <td>dewatering activities. No significant</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>												dewatering activities. No significant								
Image: start startImage: start start startImage: start start start startImage: start sta	Note-												of treated water below EU Objs. SI limits for								
Mark	AlternationAlternati												groundwater and/ or surface water.								
And State	Name Participant Parti	00	Construction Score: 2	Construction Score: 2		Construction Score: 1												Construction Score: 2			
Market	And the state is a sta	Option 2: Metro North - DCU Co	Construction Impacts: The location of the	Construction Impacts: Disruption to traffic	Construction Impacts: No EMC sensitive	Construction Impacts: There are a number	r Construction Impacts: No vibration	Construction Impacts: Santry Demesne is	s Construction Impacts: In the absence of	Construction Impacts: Comparable for all	Construction Impacts: The construction	Construction Impacts: There are no	Construction Impacts: The bedrock Geology is	Construction Impacts: Ballymun Road,	Construction Impacts: Demolition of a	Construction Impacts: Not on any	Construction Impacts: Resources used and	Construction Impacts: No sites of	Construction Impacts: Former university	Construction Impacts: The location of the	Construction Impacts: It is assumed that
And a	Marken Marken <td>underground station which will of</td> <td>of Albert College Park. Any construction</td> <td>disruption to residential accesses during</td> <td>receptors within 50m of the construction site</td> <td>proximity to the of the construction site.</td> <td>Nearby residents, including those of St.</td> <td>no other ecologically important area in the</td> <td>e potentially impact nearby receptors.</td> <td>the station options, hence this is not a differentiator.</td> <td></td> <td>a historic river running north-south</td> <td>Palaeozoic, Carboniferous, Mississippian age.</td> <td>made ground. A petrol pump is located</td> <td>school club. There would be temporary</td> <td>agricultural land and none in the vicinity. No impacts</td> <td></td> <td></td> <td>Dublin County Council RPS is located</td> <td>residential and educational institutes in</td> <td></td>	underground station which will of	of Albert College Park. Any construction	disruption to residential accesses during	receptors within 50m of the construction site	proximity to the of the construction site.	Nearby residents, including those of St.	no other ecologically important area in the	e potentially impact nearby receptors.	the station options, hence this is not a differentiator.		a historic river running north-south	Palaeozoic, Carboniferous, Mississippian age.	made ground. A petrol pump is located	school club. There would be temporary	agricultural land and none in the vicinity. No impacts			Dublin County Council RPS is located	residential and educational institutes in	
Ansatz	Name Nam Name Name Name <		work at this location could potentially reduce amenity in the playing grounds					 proximity. A number of breeding birds like Robin, Starling, goldcrest and swift have 	e										site. However impact to setting is not	shows the land cover around the site to be	
Image: And the second sec	MANUAR Manual Manual <td>Ballymun Road opposite the wi</td> <td>with Albert College Park. This can</td> <td>and potential access impacts to facilities</td> <td></td> <td></td> <td></td> <td>been noted within the Albert College park</td> <td></td> <td></td> <td></td> <td></td> <td>Local Zones. There are no wells in the</td> <td>source of contamination with possibility of</td> <td>Road and north of Albert College Park,</td> <td></td> <td></td> <td></td> <td>anticipated during construction works due</td> <td>Discontinuous urban fabric. Residents of</td> <td></td>	Ballymun Road opposite the wi	with Albert College Park. This can	and potential access impacts to facilities				been noted within the Albert College park					Local Zones. There are no wells in the	source of contamination with possibility of	Road and north of Albert College Park,				anticipated during construction works due	Discontinuous urban fabric. Residents of	
Image: state in the stat	Since in the series Since in the ser	Figure A6.1.36: fai	facilities, thereby impacting physical					site. There are also a number of roadside					groundwaterbody WFD status [2013-2018] for	pump is a historical potential source (last					and built environment. Other than this,	students of DCU would have temporary	
Image: Source in the state in the sta	Number of the second		of residential properties surrounding the					tree trail in Albert College Park which is					groundwater has been indicated to be of L -	and located 420m to the south west from					approximately 600m to the south east	could be a temporary landscape impact on	
Image: Solution of the state of the stat	· · · · · · · · · · · · · · · · · · ·	co dis	disturbances would potentially impact					Contruction works would be within a					however any underground excavation/	disturbing contaminated soil is negligible					Hillside Farm are 750m to the south east.	Avenue as the works would be located on	
Image: Solution of the state of the stat	Normalization Norm	the	these sensitive receptors in terms of their health.	-					af .				construction work could potentially impact on the aquifer by reducing the water quality.						Impacts on settings of these RPSs from the construction work are not anticipated due	a green amenity area bordering these properties.	
Image: state in the state	Number of the state Numbe							vegetation. Light, sound and dust from the	e				Dewatering may also affect groundwater						to the distance.		
Normalization Norm	Markar Markar <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>biodiversity.</td> <td></td> <td> </td> <td></td> <td></td>							biodiversity.													
Normalization Norm	Markar Markar <td></td> <td> </td> <td></td> <td></td>																				
Normalization Norm	Markar Markar <td></td> <td>Oneration Impacts: No consistent subcome</td> <td>Operation Impacts: No potential adverse</td> <td>Oneration Impacts: Noon</td> <td>Operation Impacts: The operation of the</td> <td>Operation Impacts: No viberation would be</td> <td>Diserction Impacts: It is accumed that</td> <td>Operation instarts: The operation of the</td> <td>Operation Impacts: It is service and then the</td> <td>Operation Impacts: The site and</td> <td>Operation Impacts: There are no confirm</td> <td>Operation Impacts: Remasked extreme</td> <td>Operation Impacts: Suitsble device - bould</td> <td>Operation Impacts: Permanent loss of so-</td> <td>Operation Impacts: No impacts</td> <td>Operation Impacts: Works and materials</td> <td>Operation Impacts: No impact</td> <td>Operation Impacts: No impacts</td> <td>Operation Imparts: All temporary land</td> <td>Operation Impacts: It is assumed that saf</td>		Oneration Impacts: No consistent subcome	Operation Impacts: No potential adverse	Oneration Impacts: Noon	Operation Impacts: The operation of the	Operation Impacts: No viberation would be	Diserction Impacts: It is accumed that	Operation instarts: The operation of the	Operation Impacts: It is service and then the	Operation Impacts: The site and	Operation Impacts: There are no confirm	Operation Impacts: Remasked extreme	Operation Impacts: Suitsble device - bould	Operation Impacts: Permanent loss of so-	Operation Impacts: No impacts	Operation Impacts: Works and materials	Operation Impacts: No impact	Operation Impacts: No impacts	Operation Imparts: All temporary land	Operation Impacts: It is assumed that saf
Answer Answer <td>Status Status <</td> <td>im</td> <td>impact on playing facilities during</td> <td>impacts during operation. Access to the</td> <td>operation impacts. None</td> <td>station should not cause any significant</td> <td>generated during operation of the station.</td> <td>mitigation planting would be incorporated</td> <td>d station should not cause any air quality</td> <td>operation of a station in any location</td> <td>surrounding area is not in a flood risk</td> <td>waters in the study area but culverted</td> <td>be created for contamination of aquifers or</td> <td>be able to avoid permanent cross</td> <td></td> <td>operation impacts. No impacts</td> <td>would be limited, associated with routine</td> <td>operation impacts. No impact</td> <td></td> <td>take would be reinstated. No further</td> <td>evacuation procedures would be</td>	Status <	im	impact on playing facilities during	impacts during operation. Access to the	operation impacts. None	station should not cause any significant	generated during operation of the station.	mitigation planting would be incorporated	d station should not cause any air quality	operation of a station in any location	surrounding area is not in a flood risk	waters in the study area but culverted	be created for contamination of aquifers or	be able to avoid permanent cross		operation impacts. No impacts	would be limited, associated with routine	operation impacts. No impact		take would be reinstated. No further	evacuation procedures would be
Markanes Marka	HATT Participant Partite participant Participant Par	loc	location would make access to the nearby	and open space at Albert College Park and		noise effects.		and this planting would mature during the	l, effects. e	would have similar operational emissions.	zone. No impacts.	to the east. No impacts are predicted. No	contamination from operation of the station				maintenance. Not a differentiator.			nursery school building would not have a	implemented. This is not a differentiator
Markanes Marka	HATT Participant Partite participant Participant Par	sp du	sports facilities easier. No further noise, dust or visual impact on the nearby	residential poperties will be improved. pre- school/after-school club premises would be				operational phase.				discharge of treated water anticipated, but if required will be below EU Obis. SI limits	would be low and expected to be mitigated through design. There are no wells in the								
Harman Harman <td>Name Name Name<</td> <td>re</td> <td>residential receptors</td> <td>permanently lost, but it is expected that</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>for groundwater and/ or surface water.</td> <td>immediate study area and no on-going</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	Name Name<	re	residential receptors	permanently lost, but it is expected that								for groundwater and/ or surface water.	immediate study area and no on-going								
Processe	NAMENA			available. The key trip attractor for a station									operational impact is predicted. No discharge								
NormalizationNorma	Aless Aless <th< td=""><td></td><td></td><td>provide an additional access for the students</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>			provide an additional access for the students																	
Markate Markate <t< td=""><td>MAXMA</td><td></td><td></td><td>or DCU. However this is applicable to all the options and hence not a differentiator.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	MAXMA			or DCU. However this is applicable to all the options and hence not a differentiator.																	
Contraction Contraction<	And the second sec		Construction Score: 3 Operation Score: 5	Construction Score: 1 Operation Score: 4		Construction Score: 1 Operation Score: 4									Construction Score: 1 Operation Score: 1						
Contraction Cont	And Market	Option 3: Metro North - DCU Co Ballymun Road: This is an sta	Construction Impacts: The location of the	Construction Impacts: Disruption to traffic	Construction Impacts: No EMC sensitive	Construction Impacts: The site is within	Construction Impacts: No vibration	Construction Impacts: Santry Demesne is	s Construction Impacts: In the absence of	Construction Impacts: Comparable for all	Construction Impacts: The construction	Construction Impacts: There is a historic	Construction Impacts: The bedrock Geology is	Construction Impacts: A petrol pump is		Construction Impacts: Not on any	Construction Impacts: Resources used and	Construction Impacts: Two	Construction Impacts: Hampstead House,	Construction Impacts: The location of the C	Construction Impacts: It is assumed that
Image: State in the state	Anderson Anderson <td>underground station which will the</td> <td>the grounds of the Albert College</td> <td>impacts during construction, affecting access</td> <td>site</td> <td>properties beyond the park to the west</td> <td>Nearby resident could experience</td> <td>no other ecologically important area in the</td> <td>e potentially impact nearby receptors,</td> <td>differentiator.</td> <td></td> <td>immediately to the east of the</td> <td>Palaeozoic, Carboniferous, Mississippian age.</td> <td>and is a current potential source of</td> <td>Permanent and temporary land take is</td> <td>No impacts</td> <td></td> <td>Monuments are located within 500m of</td> <td>the west from the construction site while</td> <td>and is seperated from Ballymun Road by n</td> <td>managed and this is not a differentiator.</td>	underground station which will the	the grounds of the Albert College	impacts during construction, affecting access	site	properties beyond the park to the west	Nearby resident could experience	no other ecologically important area in the	e potentially impact nearby receptors,	differentiator.		immediately to the east of the	Palaeozoic, Carboniferous, Mississippian age.	and is a current potential source of	Permanent and temporary land take is	No impacts		Monuments are located within 500m of	the west from the construction site while	and is seperated from Ballymun Road by n	managed and this is not a differentiator.
And services S	Alternational State Alternatin state Alternatin state </td <td>be located at the edge of Pa Albert College Park on the on</td> <td>Park/Albert College park (i.e. west of DCU, on Ballymun Road, close to St. Canice's</td> <td>I, to residential properties on Hampstead Avenue (including the Elmhurst Nursing</td> <td></td> <td></td> <td>construction vibration at times.</td> <td>Robin, Starling, goldcrest and swift have</td> <td>with no immediate neighbours.</td> <td></td> <td></td> <td>culvert. There is the potential to affect</td> <td>Aquifer which is Moderately Productive only in</td> <td>/ spills. Another area, housing a pump is a</td> <td>anticipated from the grounds of Albert College Park.</td> <td></td> <td></td> <td>DU04416 (A circular ring-ditch visible as a</td> <td>Farm are 450m to the east. Impacts on</td> <td>types of landcovers adjacent to the site</td> <td></td>	be located at the edge of Pa Albert College Park on the on	Park/Albert College park (i.e. west of DCU, on Ballymun Road, close to St. Canice's	I, to residential properties on Hampstead Avenue (including the Elmhurst Nursing			construction vibration at times.	Robin, Starling, goldcrest and swift have	with no immediate neighbours.			culvert. There is the potential to affect	Aquifer which is Moderately Productive only in	/ spills. Another area, housing a pump is a	anticipated from the grounds of Albert College Park.			DU04416 (A circular ring-ditch visible as a	Farm are 450m to the east. Impacts on	types of landcovers adjacent to the site	
Market Rander Standard	And a	eastern side of the Ballymun Ro Road opposite St. Canices the	Road), with a possibility of being within the road boundary. Any construction work	Home & Day Hospital) and Ballymun Road (This will suffice if there is no impact to DCI)				been noted within the Albert College park				water quality and flows.	Local Zones. There are no wells in the	historical potential source (last indicated	-			crop mark on an aerial photograph) and	settings of these RPSs from the	(Discontinuous urban fabric on the west	
Party State June June </td <td>Answer Answer Answer<td>Road. Fig A6.1.45 at</td><td>at this location could potentially restrict</td><td>Sports Campus and/or Glasnevin Lawn</td><td></td><td></td><td></td><td>site. There are also a number of roadside</td><td></td><td></td><td></td><td></td><td>groundwaterbody WFD status [2013-2018] for</td><td>located 285m to the west from the site.</td><td></td><td></td><td></td><td>Poor Clare convent, a round-topped</td><td>to the presence of intervening vegetation</td><td>vegetation land on north and east).</td><td></td></td>	Answer Answer <td>Road. Fig A6.1.45 at</td> <td>at this location could potentially restrict</td> <td>Sports Campus and/or Glasnevin Lawn</td> <td></td> <td></td> <td></td> <td>site. There are also a number of roadside</td> <td></td> <td></td> <td></td> <td></td> <td>groundwaterbody WFD status [2013-2018] for</td> <td>located 285m to the west from the site.</td> <td></td> <td></td> <td></td> <td>Poor Clare convent, a round-topped</td> <td>to the presence of intervening vegetation</td> <td>vegetation land on north and east).</td> <td></td>	Road. Fig A6.1.45 at	at this location could potentially restrict	Sports Campus and/or Glasnevin Lawn				site. There are also a number of roadside					groundwaterbody WFD status [2013-2018] for	located 285m to the west from the site.				Poor Clare convent, a round-topped	to the presence of intervening vegetation	vegetation land on north and east).	
Market Market <td>Absended Absended Absended<td>pla</td><td>playing grounds with Albert College Park,</td><td>amended if they may be impacted).</td><td></td><td></td><td></td><td>tree trail in Albert College Park which is</td><td></td><td></td><td></td><td></td><td>groundwater has been indicated to be of L -</td><td></td><td></td><td></td><td></td><td>are screened from the construction site by</td><td>and built environment.</td><td>Road and students of DCU would have</td><td></td></td>	Absended Absended <td>pla</td> <td>playing grounds with Albert College Park,</td> <td>amended if they may be impacted).</td> <td></td> <td></td> <td></td> <td>tree trail in Albert College Park which is</td> <td></td> <td></td> <td></td> <td></td> <td>groundwater has been indicated to be of L -</td> <td></td> <td></td> <td></td> <td></td> <td>are screened from the construction site by</td> <td>and built environment.</td> <td>Road and students of DCU would have</td> <td></td>	pla	playing grounds with Albert College Park,	amended if they may be impacted).				tree trail in Albert College Park which is					groundwater has been indicated to be of L -					are screened from the construction site by	and built environment.	Road and students of DCU would have	
MARK	Alternative Alte	wt	which is located within close proximity.	anticipated from the Albert College Park					nt												
Image: Constraint of the section o	under state	Th	This can discourage people to use these	playing grounds.				to remove vegetation within Albert College Park grounds, Light, ground and dust from	pe -				construction work could potentially impact on							within Albert College Park could have a	
Image: Source in the state	under statistic under under statistic under	hu	human health. Furthermore, there are a					the construction site could impact the					Dewatering may also affect groundwater							landscape of this ground. There could be a	
Normalization Norm	And a	Ba	Ballymun Road and St Canices Road, close	2				biodiversity.					quality and the water table.							adjoining Albert Park ground which is	
Normalization Norm	····································	an	and visual disturbances would potentially																	vegetated.	
Normalization Norm	And statistical statistic		impact these sensitive receptors in terms of their health.																		
Normalization Norm	ADM Service A																				
Image: And standing and sta	adder state with a state wi				Operation Impacts: None	Operation Impacts: The operation of the station should not cause any similicant	Operation Impacts: No vibration would be	 Operation Impacts: It is assumed that mitiration planting would be incorporated 	Operation Impacts: The operation of the	Operation Impacts: It is assumed that the	Operation Impacts: The site and					Operation Impacts: No impacts					Operation Impacts: It is assumed that saf
Image: second state Image: second st	characterization characterization <td>be</td> <td>be removed and hence no adverse impact</td> <td>t nearby educational institutes and residential</td> <td></td> <td>noise effects.</td> <td>generated during operation of the station.</td> <td>into the project (if vegetation loss occurs),</td> <td>, effects.</td> <td></td> <td>zone. No impacts.</td> <td>of treated water anticipated, but if</td> <td>groundwater, although the risk of</td> <td>contamination with the nearby</td> <td>and entrance.</td> <td></td> <td></td> <td>mentioned above</td> <td></td> <td>impacts on landscape. No further impacts in</td> <td>implemented. This is not a differentiator</td>	be	be removed and hence no adverse impact	t nearby educational institutes and residential		noise effects.	generated during operation of the station.	into the project (if vegetation loss occurs),	, effects.		zone. No impacts.	of treated water anticipated, but if	groundwater, although the risk of	contamination with the nearby	and entrance.			mentioned above		impacts on landscape. No further impacts in	implemented. This is not a differentiator
Name Nam Name Name Name	Distance	the	the station. A station at this location would	Id attractor for a station in this area is Dublin					e				would be low and expected to be mitigated	contaminated land.							
Description	Normal biase N	m: ea	easier. No further noise, dust or visual	access for the students of DCU. However this									immediate study area and no on-going							matured.	
Name Name <th< td=""><td>Name Same <th< td=""><td>im</td><td>impact on the nearby residential receptors</td><td>is applicable to all the options and hence not a differentiator.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>dewatering activities. No significant operational impact is predicted. No discharge</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<></td></th<>	Name Same Same <th< td=""><td>im</td><td>impact on the nearby residential receptors</td><td>is applicable to all the options and hence not a differentiator.</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>dewatering activities. No significant operational impact is predicted. No discharge</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></th<>	im	impact on the nearby residential receptors	is applicable to all the options and hence not a differentiator.									dewatering activities. No significant operational impact is predicted. No discharge								
Normalization Normalinity in thinin thin thin thin thin thin thin	Image: series of the seri	Co	Construction Score: 4	Construction Score: 1									Construction Score: 3							Construction Score: 1	Operation Score: 4
Mining <	Address Address <t< td=""><td>Option 4: Metro North - DCU Co</td><td>Construction Impacts: Dust and noise from</td><td>m Construction Impacts: Potential access</td><td>Construction Impacts: No EMC sensitive</td><td>Construction Impacts: There are more</td><td>Construction Impacts: No vibration</td><td>Construction Impacts: Apart from the</td><td>Construction Impacts: In the absence of</td><td></td><td></td><td></td><td></td><td></td><td></td><td>Construction Impacts: Not on any</td><td>Construction Impacts: Resources used and</td><td>Construction Impacts: There are no</td><td></td><td>Operation Score: 2 Construction Impacts: The location of the C</td><td>Operation Score: 4 Construction Impacts: It is assumed that</td></t<>	Option 4: Metro North - DCU Co	Construction Impacts: Dust and noise from	m Construction Impacts: Potential access	Construction Impacts: No EMC sensitive	Construction Impacts: There are more	Construction Impacts: No vibration	Construction Impacts: Apart from the	Construction Impacts: In the absence of							Construction Impacts: Not on any	Construction Impacts: Resources used and	Construction Impacts: There are no		Operation Score: 2 Construction Impacts: The location of the C	Operation Score: 4 Construction Impacts: It is assumed that
Name Nam Name Name	All				receptors within 50m of the construction	than 20 residential properties within 100m from the approximate location of the	n sensitive receptors within 50m of the site. Nearby residents could experience	 roadside vegetation along Collins Avenue, there are no ecologically sensitive areas 	mitigation, construction dust could potentially impact nearby residential	the station options, hence this is not a differentiator.					construction a multi-storey car park on the site would be demolished. It is unclear	e agricultural land and none in the vicinity. No impacts		archaeologically important site within 450m of the site			
And with strate st	Image: Single sing	Collins Avenue in the vicinity an	and students at the DCU campus, although	h Collins Avenue and the parallel residential		construction site. Additionally, a number	construction vibration at times.	close to the site, the nearest being Santry	receptors. The DCU campus is not				The site is on a Locally Important Bedrock	historical and current source of	whether or not replacement parking				However it is not anticipated that there	establishments. CORINE 2018 data shows	
Image: status in the status	A Restanting Restantin Restanting Restanting <	proposed station is is is	is not anticipated that this location would	Business Centre, Ballark community training		within 200m of the site. Noise generated		the north. There are no record of any	-				Local Zones. There are no wells in the	presence of dense built environment in the	woold be provided.				asset due to the presence of intervening	Industrial or commercial units but also	
Image: series in the series	Image: Since Sinc	Theatre. Figure A6.1.60 los	restrict access to any sports facility in the locality.	community facilities to the north of Collins		impact the number of sensitive receptors			5				groundwaterbody WFD status [2013-2018] for	contamination is very low.					buit environment.	Urban fabric on the west and east.	
And statistic statistat statistic statistic statistic statisti	Image: Single state s			Garda Station, student accommodation,		in the vicinity of the site.							groundwater has been indicated to be of L -							cause temporary visual impacts to the	
Mining <	Image: Single state s																			residents along Collins Avenue and the students and staff visiting DCU campus.	
Nm <	Image: Note of the second s												construction work could potentially impact on							Not significant impact on landscape is	
And the service of the servi	MARCE			theatre).									Dewatering may also affect groundwater							anocipineo.	
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Image: series of the seri	and the de	sta	Operation Impacts: Operation of the station is not expected to have any	the DCU campus, providing improved access.	Uperation Impacts: None	station should not cause any significant		on biodiversity is anticipated from		uperation Impacts:	surrounding area is not in a flood risk	surface waters in the study area. No	be created for contamination of aquifers or	be able to avoid permanent cross	any properties. Following construction of	uperation Impacts: No impacts	would be limited, associated with routine	uperation Impacts: No Impacts.	of the RPS during operation of the station.	take would be reinstated. No further	Operation Impacts: It is assumed that saf evacuation procedures would be
Image: splice	Image: series Image: series </td <td>ad</td> <td>adverse impact to human health.</td> <td>Some permanent land-take and loss of facilities.</td> <td></td> <td>noise effects.</td> <td></td> <td>operation of the station.</td> <td>effects.</td> <td></td> <td>zone. No impacts.</td> <td>impacts are predicted. No discharge of treated water anticipated, but if required</td> <td>groundwater, although the risk of contamination from operation of the station</td> <td>contamination with the nearby</td> <td>the station the plot of land above the station in DCU lands would be available for</td> <td>r</td> <td>maintenance. Not a differentiator.</td> <td></td> <td></td> <td>impacts on landscape. Permanent change in</td> <td>implemented. This is not a differentiator</td>	ad	adverse impact to human health.	Some permanent land-take and loss of facilities.		noise effects.		operation of the station.	effects.		zone. No impacts.	impacts are predicted. No discharge of treated water anticipated, but if required	groundwater, although the risk of contamination from operation of the station	contamination with the nearby	the station the plot of land above the station in DCU lands would be available for	r	maintenance. Not a differentiator.			impacts on landscape. Permanent change in	implemented. This is not a differentiator
Number Name	Name Nam Name Name Name <											will be below EU Objs. SI limits for	would be low and expected to be mitigated		redevelopment, incorporating the access					buildings.	
Contraction fores 1 Contraction fores 3	Option In I											· · · · · · · · · · · · · · · · · · ·	immediate study area and no on-going								
Name Operation of work Operation operation Operation operation operation Operation operation <	def def de la feit de		Construction Score: 3	Construction Score: 1	Construction Score: 4	Construction Score: 1	Construction Score: 3	Construction Score: 4	Construction Score: 3	Construction Score: 4	Construction Score: 4	Construction Score: 2		Construction Score: 3	Construction Score.1	Construction Score: 4	Construction Score: 4	Construction Score: 4	Construction Score: 4	Construction Score: 3	Operation Score: 4
n is in constraint was a generation was in the same was a generation was a	constraint constra		Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 4	Operation Score: 3	Operation Score: 4
ID ID ID ID ID ID </td <td>decision Contraction Contraction</td> <td>Option 5: Metro North - DCU Co Collins Avenue Junction: This fro</td> <td>from construction could affect residents in</td> <td>in this location would have a significant impact</td> <td>receptors within 50m</td> <td>than 20 residential properties within 100m</td> <td>n sensitive receptors within 50m of the site.</td> <td>roadside vegetation along Collins Avenue.</td> <td>mitigation, construction dust could</td> <td>the station options, hence this is not a</td> <td>site is not located within any floodzone,</td> <td>of the construction site would be very</td> <td>Visean limestone & calcareous shale of</td> <td>a potential source (last indicated 113</td> <td>properties on Ballymun Road, Nos. 163-</td> <td>agricultural land and none in the vicinity.</td> <td>waste generated for all the options would</td> <td>archaeological record is the site of the</td> <td>architectural heritage asset is 'DCU An</td> <td>site is at a road junction with a number of</td> <td>construction risks would be appropriately</td>	decision Contraction Contraction	Option 5: Metro North - DCU Co Collins Avenue Junction: This fro	from construction could affect residents in	in this location would have a significant impact	receptors within 50m	than 20 residential properties within 100m	n sensitive receptors within 50m of the site.	roadside vegetation along Collins Avenue.	mitigation, construction dust could	the station options, hence this is not a	site is not located within any floodzone,	of the construction site would be very	Visean limestone & calcareous shale of	a potential source (last indicated 113	properties on Ballymun Road, Nos. 163-	agricultural land and none in the vicinity.	waste generated for all the options would	archaeological record is the site of the	architectural heritage asset is 'DCU An	site is at a road junction with a number of	construction risks would be appropriately
dec database Main fraienting calling database Main fraienting database Applar abase in Stabase Applar abase in Stabase Applar abase A	er socket om fange er socket and er socket a	is an underground station the which will be located in the the	the number of properties in the vicinity of the junction, although mitigation	f to the surrounding facilities as it would be in the junction of three main roads. Moreover		from the approximate location of the construction site. The site is adjacent to	Nearby residents could experience	Ballymun Road and Glasnevin Avenue, there are no ecologically sensitive areas	potentially impact the sensitive receptors identified under Noise Column.	differentiator.	hence no impacts on flooding	close to a historic watercourse, presumed now to be in culvert. Direct impacts would	Palaeozoic, Carboniferous, Mississippian age. The site is on a Locally Important Bedrock	years ago, located at Stormanstown House Apartments) for contamination and is	167, may need to be acquired to facilitate	No impacts	be similar and hence not a differentiator	option and located adjacent to the site.	construction site. There could be minor	facilities in the close vicinity. CORINE 2018	managed and this is not a differentiator.
pertage for constructions as the present of the construction is the present of the con	Large construction a model (a model construction (a model constructi	median of the mi	measures would be in place. Additionally,	the construction works would be be built		Helix Theatre and construction noise could	d	close to the site, the nearest being Santry				be possible.	Aquifer which is Moderately Productive only in	located 50m from the construction site.				Apart from that there are two records	impact to settings as the only intervening	data shows landcovers adjacent to the site	
Impute the submer of choles, study to be trained with the submer of the subme	ghits bind where is a subject to find the states a strate where is the strate is a strate where is the strate is the strate is a strate where is the strate is the s	Ballymun Road at the junction	restrict access to the Setanta GA fields	requiring significant traffic management		generated from construction has the		the north. Breeding birds like robin and a					immediate study area. The [overall]	disturb contaminated land, unless suitable				north, which are records of 17th century		of properties around the junction would	
control diparted free free and adjumuitability inclution control parted free free and adjumuitability inclution control parted free free and adjumuitability parted free free and adjumuitability parted free free and adjumuitability parted free free free and adjumuitability parted free free free free and adjumuitability parted free free free free free free free fr	currentcurrentsubjectto the law of a labilitysubjectto the law of a labilitysubjectto the law of a labilitysubject <td>Ballymun Road at the junction an with Collins Avenue. Figure re:</td> <td>which are located within 100m of the site, although this should be managed.</td> <td>There are a number of schools, a church, a</td> <td></td> <td>sensitive receptors in the vicinity of the</td> <td></td> <td>observed in the grounds of the Church</td> <td></td> <td></td> <td></td> <td></td> <td>this area is identified to be Good. The</td> <td>mugation measures are adopted.</td> <td></td> <td></td> <td></td> <td>on the site of Stormanstowne House.</td> <td></td> <td>construction. Due to being located on a</td> <td></td>	Ballymun Road at the junction an with Collins Avenue. Figure re:	which are located within 100m of the site, although this should be managed.	There are a number of schools, a church, a		sensitive receptors in the vicinity of the		observed in the grounds of the Church					this area is identified to be Good. The	mugation measures are adopted.				on the site of Stormanstowne House.		construction. Due to being located on a	
csrbst aut with 7.50m of the state. gal 200m to the north. memory and wadd serpander.	generalization and status and status	Ballymun Road at the junction an with Collins Avenue. Figure re: A6.1.77 wf		library, DCU Campus, credit union, youth centre, adult education centre and shonning		site. Additionally, a church is located adjacent to the site and Ballymun Library		which is adjcent to the construction site. It is not known whether any vezetation	R.				groundwater has been indicated to be of L - Low vulnerability potential to contamination					Construction work in vicinity of the bridge is unlikely to disturb undetected assets (as		junction, significant traffic management arrangement would be implemented.	
Image: space	Image: series Image: series	Ballymun Road at the junction an with Collins Avenue. Figure re: A6.1.77 wf				at 300m to the north.		removal would be required. Local					however any underground excavation/							thereby requiring traffic through	
Operation lings:1: Nor experison lings:1: Noreexperison lings:1: Nor	Image: select sel	Ballymun Road at the junction an with Collins Avenue. Figure re: A6.1.77 wf						dust and lighting from the construction					the aquifer by reducing the water quality.							increase in traffic through the adjcent	
Operation inspart: To explore any strate or	Applies <	Ballymun Road at the junction an with Collins Avenue. Figure re: A6.1.77 wf						wolftb.												impact.	
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Instance Catalon hould not cause any significant anticipated be generated during operation of the scheme. Station hould not cause any significant Instance hould not cause any significant Monitorial during operation of the scheme. Station hould not cause any significant Station hould not cause any significant Station hould not cause any significant Instance hould not cause any significant Station houid not cause any significa	states and de formation of guiders and the fo	Ballymun Road at the junction an with Collins Avenue. Figure re: A6.1.77 wf				Operation Impacts: The operation of the	Operation Impacts: No vibration are	Operation Impacts: No impact anticipated	d Operation Impacts: The operation of the			Operation Impacts: There are no at grade	Operation Impacts: Permanent pathways may	Operation Impacts: Suitable design should	Operation Impacts: No new impacts on	Operation Impacts: No impacts	Operation Impacts: Waste and materials		Operation Impacts: No further impact	Operation Impacts: Any temporary	Operation Impacts: It is assumed that saf
attractor for a station in this area is Dublin constructions.	visual impact of the ratio construction for a station in finis area B. Delition in a processing of the station of the statio	Ballymm Road at the junction an with Collins. Avenue. Figure reader of the A61.77 at t	Operation Impacts: A station at this	Operation Impacts: Once operational thir	Operation Impacts: None		anticipated be generated during operation	n from operation of the scheme.	station should not cause any air quality	operation of a station in any location	surrounding area is not in a flood risk	surface waters in the study area. No	be created for contamination of aquifers or	be able to avoid permanent cross	properties. There may be the potential to		would be limited, associated with routine	settings of archaeological and cultural	during operation.	landtake would be reinstated during e	evacuation procedures would be
will be below BU Obje. SI limits for would be low and expected to be mitigated	a case for the tablest of DUL However this is the advector and for surface water. If through decign, There are no wells, in the indexpanding and and one poping advector and provide the tablest of the superiod decision of	Ballymm Road at the junction an with Collins. Avenue. Figure energy of the second seco	location would make access to the nearby	station would not have any access impacts to	Operation Impacts: None	station should not cause any significant					sants mempelilit.		contamination from operation of the station		web temporarily during						
proundwater and or surface water. through design. There are no wells in the	a differentator.	Ballymun Road at the junction and with Collins. Avenue. Figure re A6.1.77 at the figure of the figur	location would make access to the nearby sports facilities easier. No further noise, dust or visual impact on the nearby	y station would not have any access impacts to the facilities mentioned above. The key trip attractor for a station in this area is Dublin	Operation Impacts: None	station should not cause any significant						will be below F1 81 - 51			construction.		mannenance. Hot a circitentator.				
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Long Long Construction Score: 4 Construction Score: 3 Construction Score: 3 Construction Score: 4 Construction Score: 4 Construction Score: 4 Construction Score: 3 Construction Score: 3 Construction Score: 3 Construction Score: 4 Construction Score: 3 Construction Score: 4 Constru		Ballymun Road at the junction and with Collins. Avenue. Figure re A6.1.77 at	location would make access to the nearby point facilities easier. No further noise, duit or visual impact on the nearby residential receptors	I tation would not have any access inpact to the facilities memore above. The key trip attractor for a station in this area is Dubin OUV University. This will provide an additional access for the students of PLUL However this is applicable to all the options and hence not a differentiator. Executación biology 1	Construction Score: 4	station should not cause any significant noise effects.	of the station.		Construction Score: 2 Construction Score: 4			will be below EU Obje. SI limits for groundwater and/ or surface water.	through design. There are no wells in the immediate study area and no on-going dewatering activities. No significant operational impact is predicted. No discharge of treated water below EU Objs. S limits for groundwater and/ or surface water. Construction Score: 3		construction.		Construction Score: 4	Construction Score: 4	Construction Score: 3	landscape and visual.	Operation Score: 4
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