

The Secretary  
An Bord Pleanála,  
64 Marlborough Street,  
Dublin 1

Date: 16<sup>th</sup> January 2023  
Our Ref: BC 22039

Dear Sir or Madam,

**RE: SUBMISSION ON THE METROLINK ON BEHALF OF SAINFOIN PROPERTY COMPANY LIMITED REGARDING LANDS AT DARDISTOWN, CO. DUBLIN.**

**ABP Ref. NA29N.314724**

**Description - MetroLink Railway Order – Estuary through Swords, Dublin Airport, Ballymun, Glasnevin and City Centre to Charlemont, Co. Dublin**

**Submission on behalf of:** Sainfoin Property Company Limited, with an address of Leixlip Centre, Leixlip, Kildare, Ireland

## Introduction

Our client, Sainfoin Property Company Limited, by far the largest land acquisition on the proposed Metrolink with approximately 40 ha. been acquired (25 hectares permanently) welcomes the opportunity to make a submission on the Railway Order for the MetroLink line with respect to their property at Dardistown on which it is proposed to locate the depot.

Our client has a number of observations and concerns in relation to the Railway Order. This submission is broken down under the following headings:

1. Engagement with TII
2. Masterplan for the Site
3. Basis for selection of Dardistown
4. Impacts of the Current Proposal
5. Potential Severance of the access route
6. Temporary Land take
7. Relocation of the Depot
8. Amendments to the Current Proposal

Our clients' lands are impacted as shown in the below extract which proposes to provide for the Dardistown station and depot on these lands. It is also proposed to provide rail connections between the station and the depot through the Opportunity Site and Gateway site to the west and southwest of the site as identified in the Dardistown Local Area Plan

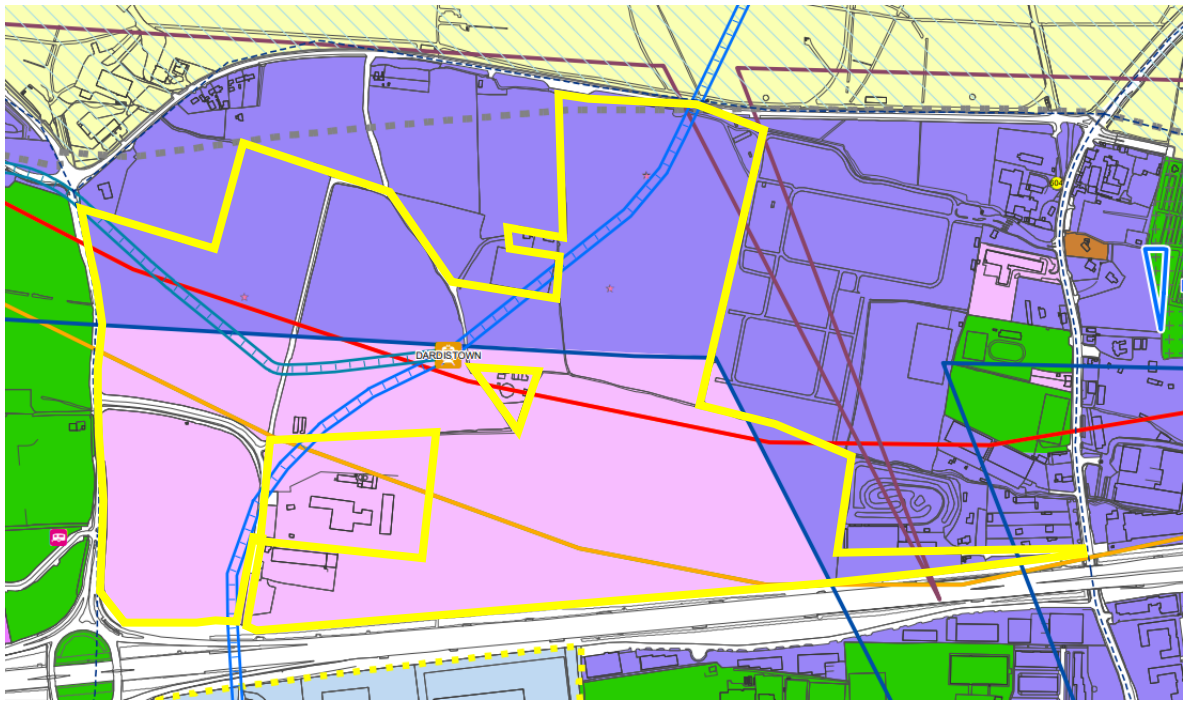
2013. Our client's lands account for 56 hectares of the total LAP area (154 ha). However, the vast majority of the development opportunities within the LAP are located in the lands owned by Sainfoin.

Our clients' lands are approximately outlined below:



**Figure 1: Aerial View of Site with client's ownership approximately outlined in red (Source: Google)**

The lands are zoned for 'General Employment' to the north of the site and 'High Technology' to the west and southwest in the Fingal County Development Plan 2017-2023 and the Draft Fingal County Development Plan 2023-2029.



**Figure 2: Proposed Zoning in Draft Fingal County Development Plan 2023-2029 (site outlined approximately in yellow)**

Our clients also wish to request that an Oral Hearing is held in respect of the Railway Order application so that the points raised within this submission can be further clarified and addressed at the hearing for the benefit of all parties. The proposal is of both national and local significance and accordingly warrants an Oral Hearing.

We enclose the fee of €50.00 in respect of this submission (although we note that no fee is payable for landowners affected) a further fee of €50.00 in respect of the Oral Hearing request is also enclosed.

The following is enclosed with this submission:

- Appendix 1 – Overview of Foster + Partners Masterplan
- Appendix 2 – Tobin Consulting Engineers Letter including Metrolink Depot Site High Level Assessment Report
- Appendix 3 – Letter to TII
- Appendix 4 – Dardistown Depot Rail Analysis
- Appendix 5 – Comparative Analysis prepared by McGreevy Property Consultants
- Fee of €100 (submission and oral hearing request)
- CD copy of this submission

## Engagement to Date with TII

Our client and their advisors have undertaken extensive engagement with TII to date, as summarised in the following table:

| Date   | Topic of Discussion  |
|--------|--|
| Jun-18 | Outlined concerns of proposed Depot  |
| Mar-19 | Update from TII - Outlined concerns for Depot location   |
| Apr-19 | Presented Foster and Partners Plan   |
| Jul-19 | Outlined concerns for proposed depot in light of Masterplan                                      |
| Sep-19 | Outlined concerns of proposed Depot  |
| Oct-19 | Presentation from Tobins on Engineering - outlined concerns for Depot Location                   |
| Nov-19 | TII, NTA present - outlined concerns for Depot location  |
| Dec-19 | Outlined concerns for proposed Depot   |
| Jan-20 | Outlined concerns for proposed Depot   |
| Feb-20 | Outlined concerns for proposed depot   |
| Mar-20 | Presentation from Tobins on Engineering - outlined concerns for Depot Location                   |
| Dec-20 | Outlined concerns for proposed depot   |
| Jan-21 | Outlined concerns for proposed Depot   |
| Mar-21 | Outlined concerns for proposed depot   |
| Jun-21 | Presentation from TII on Daridstown - no change in Depot   |
| Jul-21 | Outlined concerns for proposed Depot   |
| Nov-21 | Outlined concerns for proposed location. Verbal offer made to relocate on lands offered for free |
| Nov-21 | Outlined concerns for proposed depot   |
| Jan-21 | Offer made in writing  |
| Jul-21 | TII reject proposal  |
| Nov-21 | Outlined concerns for proposed depot   |
| Mar-22 | Outlined concerns for proposed depot   |
| Oct-22 | Outlined concerns for proposed depot   |



## Masterplan for the Site

Foster and Partners (“F+P”), one of the world’s leading Architects and Master-Planners were requested to assess the potential of this site and to create a sustainable, collaborative, multi-dimensional employment based but mixed-use campus to meet the evolving requirements of the modern-day end user and attract world-class companies and businesses.

F+P looked at similar circumstanced lands and potential Business Parks on a global scale including Airport Cities, Modern Business Parks and mixed-use developments in close proximity to Airports including:

- Central Park – Sandyford
- Research Triangle Park – North Carolina
- Schipol Airport Park - Amsterdam
- Zuidas – Amsterdam
- Western Sydney – Aerotropolis Core Area
- San Diego – Where there is substantial development up to the airport boundary.



**Figure 3: CGI showing development potential of subject site (Source: Foster + Partners)**

In summary F+P came up with a mixed-use scheme of approx. 14.5m sq. ft. – the largest development site in Ireland and potentially one of the largest in Europe. The scheme devised and envisaged by F+P is a world class development of 4th generation, sustainable buildings with excellence in Architecture creating a unique addition to the Irish Urban environment.

The Draft Masterplan indicates that site can accommodate:

- large scale 1m+ sq. ft. Tech Campus based on the Apple HQ in the US.
- 40 acre - 5.4m sq. ft. business park fronting the M50 in landmark buildings
- Innovation centre with collaboration with the universities
- Cultural and life sciences park of 1.3m sq. ft.

Benefits arising from the masterplan were noted as:

- €9bn Gross Development Value
- 90,000 + high value jobs in an innovative development creating a new location for FDI with the city centre nearing capacity
- Potential to generate €9bn to Gross Domestic Product
- Additional 50,000 passengers on the Metro
- Upto 20,000 construction workers
- €50m/yr min revenue on commercial rates for Fingal

Further extracts of the masterplan are included in Appendix 1.

## Basis for Selection of Dardistown

Two previous Railway Order applications were approved by An Bord Pleanála for the previous Metro North scheme which has been superseded by the MetroLink project.

### Metro North – ABP Ref.: NA.0003

The original proposal for the Metro North scheme would connect the townland of Belinstown, to the north of Swords town centre, with Dublin City Centre. The depot for the original Metro North scheme was proposed to be located in the townland of Belinstown, between the M1 and Batter Lane. The depot was to be located with the park and ride facilities to provide for consolidated development at the line end. The applicant at the time, The Railway Procurement Agency, had considered other locations to provide the depot including Dardistown, however, was considered less appropriate give the development costs required for this location.



**Figure 4: Proposed Depot Location at Belinstown (Source: Google Maps)**



Lissenhall / Estuary, which is the line end for the MetroLink, was also considered as a proposed location for the depot, however, wasn't chosen due to the site's designation for the future expansion of Swords. The Inspector's Report indicates that Lissenhall / Estuary would be the preferred location for the depot stating that *"there is no statutory basis for the conclusion drawn on the undesirable siting of the depot where it appears to have been originally proposed at Lissenhall."*



**Figure 5: Depot Location at Lissenhall (Source: Google Maps)**

The Inspector's Report notes that *"Given that Dardistown is proposed to be the tie-in location for Metro West with Metro North, this location should have warranted serious consideration as a combined depot site in the interests of proper planning and sustainable strategic development"*. The Inspector's Report also goes on to state the following:

*"Consideration should have been given to the siting of a depot at Dardistown, on strategic planning grounds, which would have allowed for a combined depot facility with the future introduction of Metro West."*

Condition 1 of the granted Railway Order by ABP stated:



*“1. The Railway Order is granted from the Estuary Stop in words to St. Stephen’s Green. The following components of the proposed development shall not be carried out in accordance with the submitted Railway Order application drawings and documentation:*

- (a) The depot, stop and strategic park and ride facility at Belinstown;*
- (b) The disposal of waste at Belinstown;*
- (c) The stop at Lissenhall;*
- (d) The rail line or ancillary works north of chainage 2300.*

*Consequent on this this modification, the following requirements are set out:*

*An application for a Railway Order shall be made to An Bord Pleanála for the following:*

- (i) A re-located depot (and associated infrastructure) which shall be situated in the general vicinity of Dardistown, that is between the M50 motorway and Dublin Airport. The revised proposal shall consider possible synergies with the proposed Metro West light rail order, which it is proposed would tie-in with Metro North at this location.*
- (ii) A revised scheme for the management of spoil from the construction phase, which scheme shall take into account the policies of the regional waste management plan in relation to beneficial use of spoil. Consideration may be given to a temporary storage location for spoil, or a solution in co-operation with the aggregates industry. (Alternative authorisation for this aspect could be sought by means of an application submitted to Am Bord Pleanála in accordance with the provisions of section 37E of the Planning and Development Act 2000, as amended).”*

The Board’s reasoning for the location of the depot at Dardistown was primarily based on providing a combined facility for the Metro North and Metro West lines. However, as the Metro West scheme is no longer proposed by Government and is not included in the National Development Plan or the Draft Greater Dublin Area Transport Strategy 2022-2042, there is no longer a need for a depot at this location to serve both Metro lines. The rationale for a depot at Dardistown is therefore no longer applicable given the abandonment of the Metro West scheme and requires reconsideration. Additionally, in the eventuality of a future Metro West scheme being progressed, the benefits of co-location of a depot for both lines in a single location is questioned.

#### Metro North – ABP Ref.: NA.0007

A second application was submitted to An Bord Pleanála by The Railway Procurement Agency to provide for a depot to support the operation of the permitted Metro North railway. The application was in response to Condition No. 1 of Ref.: NA.0003 which required the depot for the Metro North project to be located at Dardistown in order for it to tie-in with the Metro West project. The Inspector’s report states:

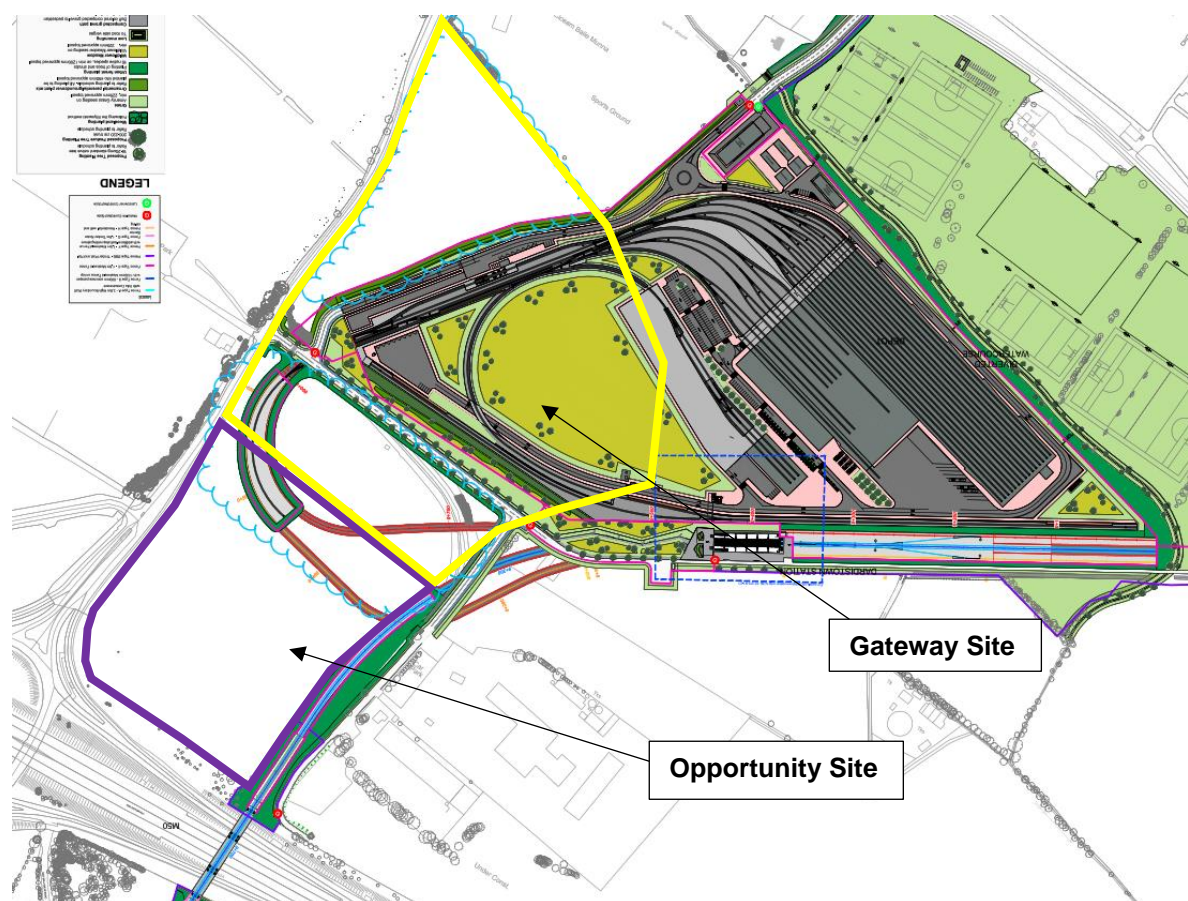
*“Locating two separate depots on adjoining sites could produce modest synergies by reducing land take and, if access facilities can be shared, costs. Little or no operational benefits would arise from co-locating depots.”*

The Inspector states that synergies could be produced from co-locating the depot for the Metro North and Metro West, however, as stated previously, these “modest” synergies are not likely to be realised as the Metro West project is not being pursued by Government. Therefore, there would be no significant benefits from persisting with providing the depot for MetroLink at this location.

## Impacts of the Current Proposal

The current proposal as identified in Figure 3 below involves a very extensive land take from our client's property at Dardistown. It makes the potential development of the opportunity site to the southwest and the gateway site to the west significantly less viable. Indeed, the viability of the entire development of this prime land bank is severely compromised by the location of the proposed depot. It will create a high level of fragmentation of our client's landholding, significantly diminishing the development potential of these lands.

The two primary areas directly affected are intended to act as a gateway to develop to entirety of our client's lands at Dardistown, however, given the reduced size and restricted nature of these sites, any significant development of these areas is less viable. The lines connecting the Dardistown station to the depot are not proposed to be covered and therefore development cannot take place. It is sought that these lines are cut and covered to allow for landscaping to be incorporated above these lines which would enable ground level connectivity between buildings across appropriately landscaped areas in future development of this key opportunity site and allow for placemaking as opposed to fragmentation.



**Figure 6: Proposed layout of Dardistown depot (Source: TII)**

The Dardistown Local Area Plan states that it is *“important to set a sense of place. Develop a gateway area on the Naul Road and to develop character / hub areas as part of the Local Area Plan for Dardistown.”* It is proposed in the LAP to provide *“a high profile and high-quality mixed-use gateway development to the LAP lands along the Naul Road (R108)”*

The LAP defines the gateway site as the following:

*“Gateway - The principal entrance along the existing western site frontage and new internal bus corridor route. This area is of strategic importance and development on either side of the entrance will be characterised by buildings of a high standard of architectural design.”*

The following objectives in the LAP are considered relevant:

***“DIMP1:*** *The initial development of the LAP lands shall deliver a high-quality mixed-use gateway development on the western parts of the LAP comprising Phase 1A in Figure 8.1 plus Opportunity Site 1 and Opportunity Site 2 fronting to and accessed from the Naul Road (R108), leveraging on the proposed QBC and subject to a maximum employment level of 1500 employees. This shall be paralleled by development sites fronting to the Swords Road (R132) comprising Phase 1c in Figure 8.1.*

The Metrolink proposals would allow for considerable uplift in public transport capacity beyond that provided by the QBC proposal.

***DIMP3:*** *Opportunity Sites 1 & 2 (Figure 8.1) represent strategic development opportunities with the potential to deliver significant economic and urban design benefits. The roll out of these sites shall be determined by market conditions. The quantum of development delivered on these sites shall be subject to the overall maximum employment level of 1500 as per DIMP1 above.”*

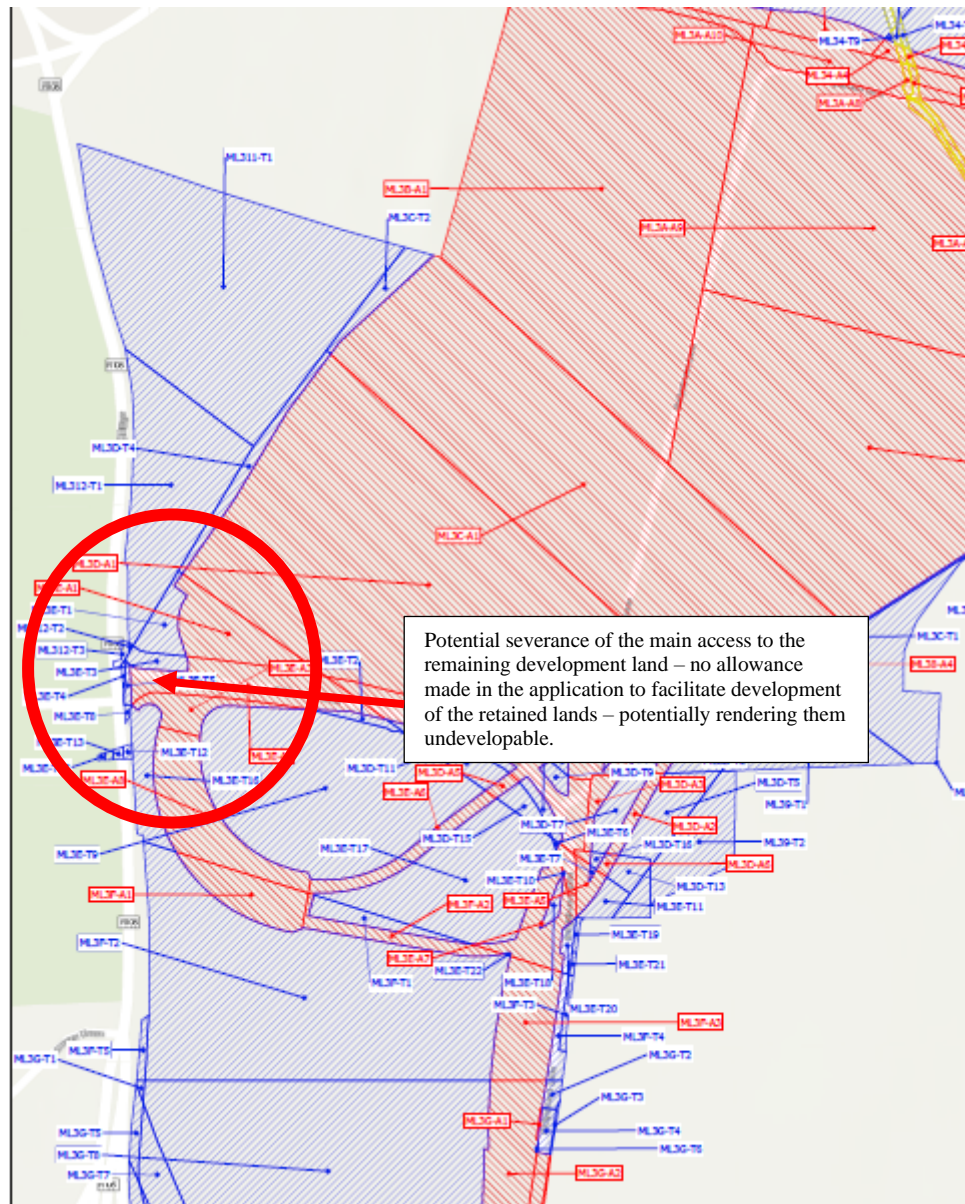
The LAP defines an opportunity site as the following:

*“Prominent sites with frontages onto the M50, the Naul Road and the Metro North, which naturally accommodate landmark element(s) that could include taller more prominent buildings of high-quality design.”*

Figure 6 above identifies the impact the depot and connecting lines will have on the site. The gateway site to the west is now significantly reduced and fragmented as a result of the railway lines connecting the depot with Dardistown station. As these lines are not proposed to be covered, it will result in significant barriers to movement, adverse impacts on future development, adverse noise impacts at operational stage resulting in significantly reduced potential for creating a coherent urban form and placemaking appropriate to an urban context and integration between blocks on the gateway site. The fragmentation has also resulted in significantly reduced plot sizes which will reduce their developable potential. This area of the LAP lands is intended to provide a gateway into the entire area, however, as a result of the MetroLink depot at this location, the site’s developability is significantly less viable and is less likely to act as a gateway to the entire lands, as provided for in the statutory Local Area Plan for Dardistown.

The delivery of the gateway site would be a key consideration in the viability of a station at Dardistown.

## Potential Severance of an appropriate development access.



**Figure 7: Potential Land Take (Source: TII)**

The proposal allows for permanent and temporary acquisition of lands at the interface of the lands with the Naul Road. This is the current access point for the lands and the location has been identified as the most appropriate for an appropriate access to facilitate the proposed large-scale development.

The proposal is silent on this hugely important issue. There is no design or co-ordination allowed for between the route selection and access to the remaining lands.

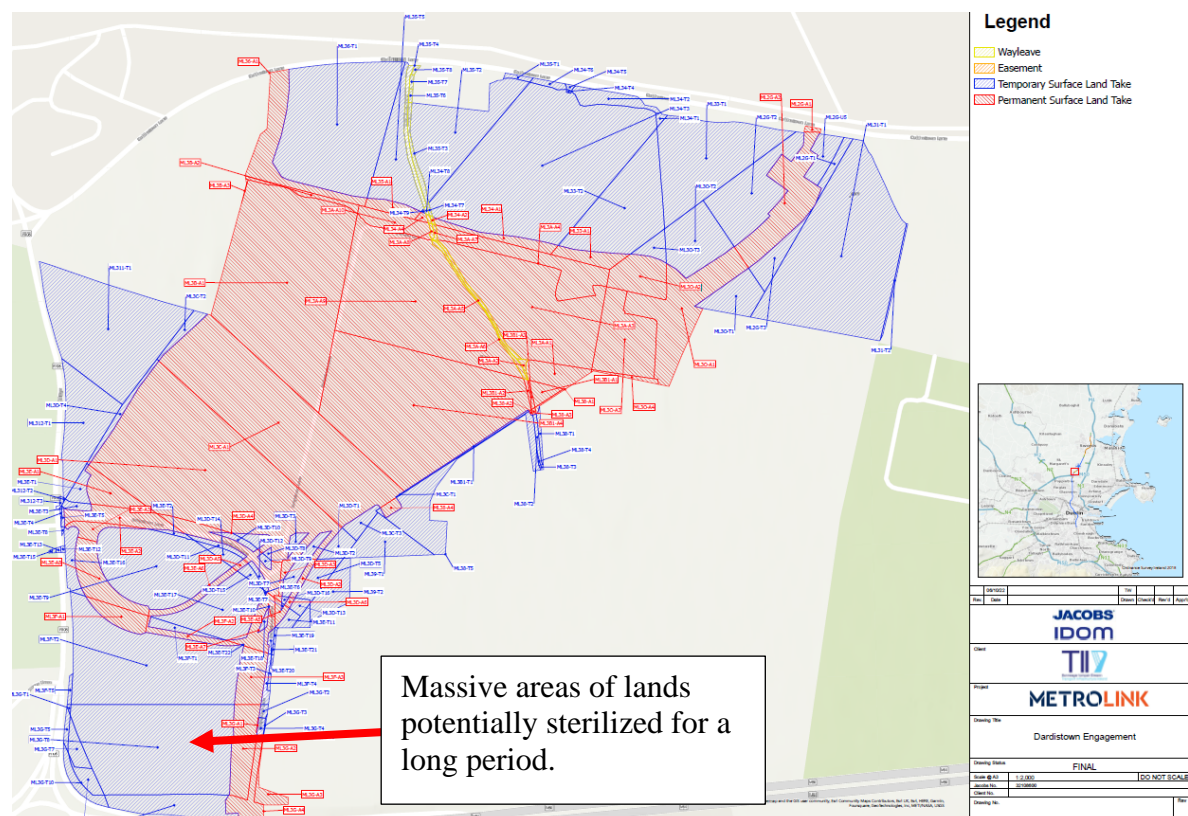
The proposal cannot proceed unless an appropriate access road is facilitated as part of the development.



## Temporary Land Take

### Temporary Land Take

- The proposed scheme provides for a very substantial temporary land take at this location including an approx. 8-hectare site identified as “Opportunity site” within the LAP.
- There is no defined timeframe for completion of the scheme - it could be up to 2034.
- The temporary / permanent acquisitions effectively sterilize the entire lands for any development until such time as the Metro is completed. This uncertainty is at a huge cost both to the landowner and the taxpayer.
- The sterilization of lands identified as “Opportunity site” is of particular concern. According to the Master Plan prepared by Foster and Partners these lands are capable of delivering 5m sq. ft and are identified in the initial phases of the masterplan.
- Should the scheme proceed at this location as per the submission:
  - 1) The temporary land take needs to be substantially reduced.
  - 2) The opportunity site needs to be excluded and if temporary lands are required other lands are identified.
  - 3) There is a longstop date on when these lands will be ceded back to the landowner.



## Relocation of the Depot Off Site

The Metrolink Promoters claim that the proposed scheme is modelled on similar schemes in similar cities and cites the example of Barcelona and Copenhagen as successful schemes. However, one glaring difference is the location of the depot. It is best international practice, for a variety of reasons, to located depots at the end of the Metros – in lands less viable and not capable of delivering development the scale of which could be accommodated at Dardistown. However, in this instance and bizarrely it is proposed to locate the depot in the middle of the route selection on Prime development lands.

As stated previously, the location of the depot at Dardistown was originally intended to serve both the Metro North and Metro West lines. However, as the Metro West project is no longer progressing, the depot will only serve to MetroLink (formerly Metro North) and should therefore be situated at an alternative location. The accompanying letter prepared by Tobin Consulting Engineers (Appendix 2) provides assessments of alternative locations for the depot and responds to the Railway order documentation with respect to the justification for the location of the depot on our clients' lands, and the selected option within the lands. The letter appends a previous report undertaken with respect to the location of the depot on these lands, submitted to TII. Much of the points raised are still of particular relevance and briefly summarised in the following.

### Lissenhall / Estuary

The site at Lissenhall / Estuary was the original location proposed for the depot as part of the Metro North scheme. The Estuary stop is the most northerly on the MetroLink line and is located to the north of Swords town centre. The site is located adjacent to the M1 motorway and it is proposed to provide a park and ride facility at this location under the Proposed Material Alterations to the Draft Fingal County Development Plan 2023-2029 (PA SH 8.4). The previous depot with park and ride facility proposed for this site had the capacity to cater for 3,000 no. cars. It is considered that a park and ride facility at this location would remove significant traffic from the M1 and R132 through Swords as well as a reduction in traffic along the M50.

As set out in the accompanying engineering observations:

*“Document Appendix A7.6, Dardistown Depot location Options Report by Jacobs Idom, from the Environment Impact Assessment report volume 5; has been provided to Tobin for review. The executive study in Appendix A7.6 references a letter received from Comer Group Ireland which expressed an opinion that the Lissenhall area would have been a better location for the depot. The Jacobs Idom response to that was ‘this is not supported by earlier JI studies because it does not deliver efficient train operations and for this reason it is not considered further in this review’. Appendix A7.6 does not expand on the why it does not deliver efficient train operations, nor does it reference or provide a location where those earlier studies can be found for review and consideration as part of a robust and comparable multi criteria analysis.*

*In addition to considering the operational aspects of the depot location at Lissenhall, the other criteria of the Multi Criteria Analysis carried out for Dardistown, does not seem to have been considered for Lissenhall. The Dardistown location was previously selected assuming that there would be a link to Metro West which is no longer planned to progress.*

*To provide a fair and informed review of the TII documentation relating to the location of the depot, Tobin will require the following be provided for review:*

- A copy of the ‘earlier JI studies’ referenced above.
- A multi-criteria analysis (MCA) for the option at Lissenhall for the other aspects of the MCA applied to the Dardistown option.”

Tobin Consulting Engineers have included a small table which compares Dardistown and Estuary as a location for a depot.

| Location/Constraint                    | Dardistown | Estuary | Commentary  |
|--|------------|---------|---|
| Comparable Schemes                     |            |         | Depot locations align to Estuary                                  |
| Technical/Constructability/Operational |            |         | All are N/A or impact less at Estuary than Dardistown             |
| Cost & Resourcing                      |            |         | All are N/A or impact less at Estuary than Dardistown             |
| Land Usage                             |            |         | Assumed no comparably significant developments planned at Estuary |

**Figure 8: Summary of comparable aspects of Dardistown vs Estuary depot location sites**

A supporting document prepared by CPMS is included in Appendix 2 of this submission. In relation to the location of a depot at Dardistown, the report states that *“With the removal of the link to Metro West and the fact this is no longer planned to be progressed in the foreseeable future, the argument for an end of line depot is strengthened. The previous Estuary site has no obvious characteristics from a rail perspective that make a depot location there unfeasible.”*

The report also analyses the difficulties in providing the depot at Dardistown as opposed to Estuary, and the cost and resource implications:

*“The Dardistown location, proposed flyover of the M50 and proximity of Dublin Airport all present technical compliance and construction challenges that will result in additional costs. The operational disadvantages further support the case to avoid such a location for the main train depot for the route. The proposed service pattern and frequency also mean a loop/turnback facility will be required at each end of the line and this could potentially be incorporated into the depot footprint at Estuary in a more efficient manner than a separate depot at Dardistown. Major disruption to the M50 would also be avoided due to the removal of the requirement for a flyover structure south of Dardistown.*

*A depot at Estuary would reduce the number of tunnel portals (estimated to cost €25-70m each) from four to two. Economies of scale would also be facilitated due to the single tunnel approach as opposed to the two-tunnel approach which is unavoidable if the depot is at Dardistown. There is a strong case that Estuary also provides a more accessible, more demographical suitable location for a base of operations, particularly when considering the planned development of the Dardistown site.”*

*The overwhelming reason for relocating the depot site to Lissenhall is the lost opportunity on the Dardistown LAP area. These lands are potentially one of the most strategic sites in Europe with then potential to deliver €bn’s of euro per annum to the taxpayer through a best-in-class development commensurate with the some of the most successful developments on a global scale.*

Finally, there does not appear to be a transparent or clear rationale included within the application as to the selection of Dardistown over Lissenhall/Estuary; and on this basis it is respectfully submitted that the location of the depot at Dardistown should be reconsidered.

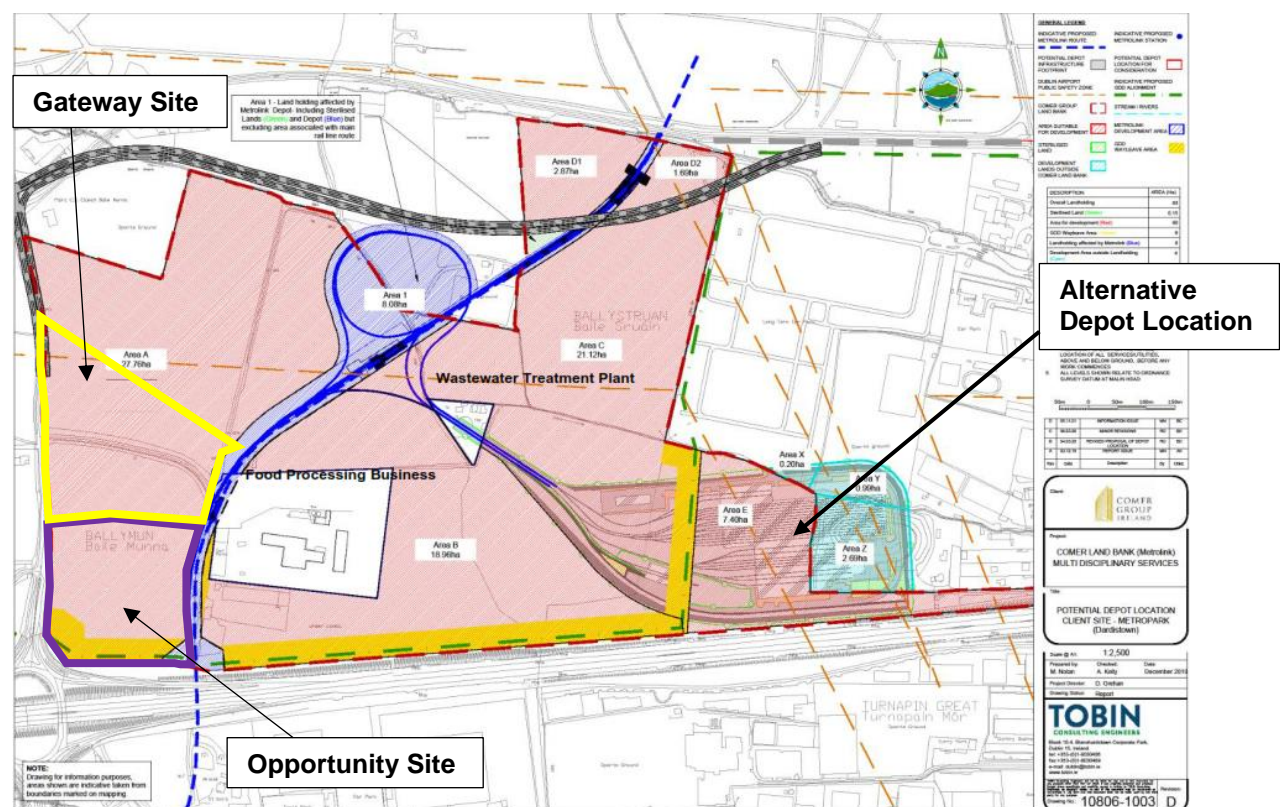
## Alternative Location within the Site

As part of the extensive engagement set out with TII, the following alternative location (referenced by TII as Option 10) has previously been put forward to TII prior to the submission of the Railway Order.

Such is the destruction of the proposed Depot location our client is proposed this alternative location for the MetroLink depot at Dardistown in order to reduce the impact on the gateway site and opportunity site to the west and southwest of the area. The depot can be accommodated in the 'GE – General Employment' zoned area and in the 'HT – High Technology' zoned area of the site in the southeast corner of the site. This area of our client's lands also has good access to the M50 and is also located in close proximity to the M1 to the east.

Our client has offered the land for our clients preferred option if the depot is to be located on their landholding without cost to the Metrolink proposal; however, this offer was rejected. This letter of offer is dated 17<sup>th</sup> January 2021 and is included in Appendix

This site is considered more appropriate for the depot as it will have a reduced impact on the economic viability of the site as a whole and will result in less fragmentation of the site. The gateway and opportunity sites can be developed to their full potential which will have positive impacts for the rest of the lands. These lands are currently occupied by a go-kart track and a car dealership.



**Figure 9: Alternative Location within the Dardistown LAP lands (Source: Tobin Consulting Engineers)**

Whilst it is noted in the Railway Order documentation that the alternative option put forward by our client shown on the drawing was not of the scale now required for the depot, the option would easily be extended to ensure it is of the scale now required.



The rationale in the submitted documentation for not progressing our clients preferred option within the lands also include reference to the Dublin Airport outer Public Safety Zone. We would note the draft Fingal Development Plan 2023-2029 includes for a review of the public safety zones, as per Objective DA020:

*“Support the review of Public Safety Zones associated with Dublin Airport and implement the policies to be determined by the Government in relation to these Public Safety Zones.”*

Therefore, the consideration of the development of low intensity uses within a public safety zone may change.

Additionally, please refer to Appendix 2 for commentary from Tobin Consulting Engineers with respect to the comparison between Option 8A (which forms the Railway Order proposal) and Option 10 (put forward by our client) undertaken by TII. In summary it is set out that Option 10 is a feasible option.

### **Dardistown Depot Location Options**

In the submission document TII referenced 9 other potential locations in Dardistown using a multi criteria analysis, however, and most significant no regard was had to

1. Destruction in value of this prime development site
2. The residual site developability

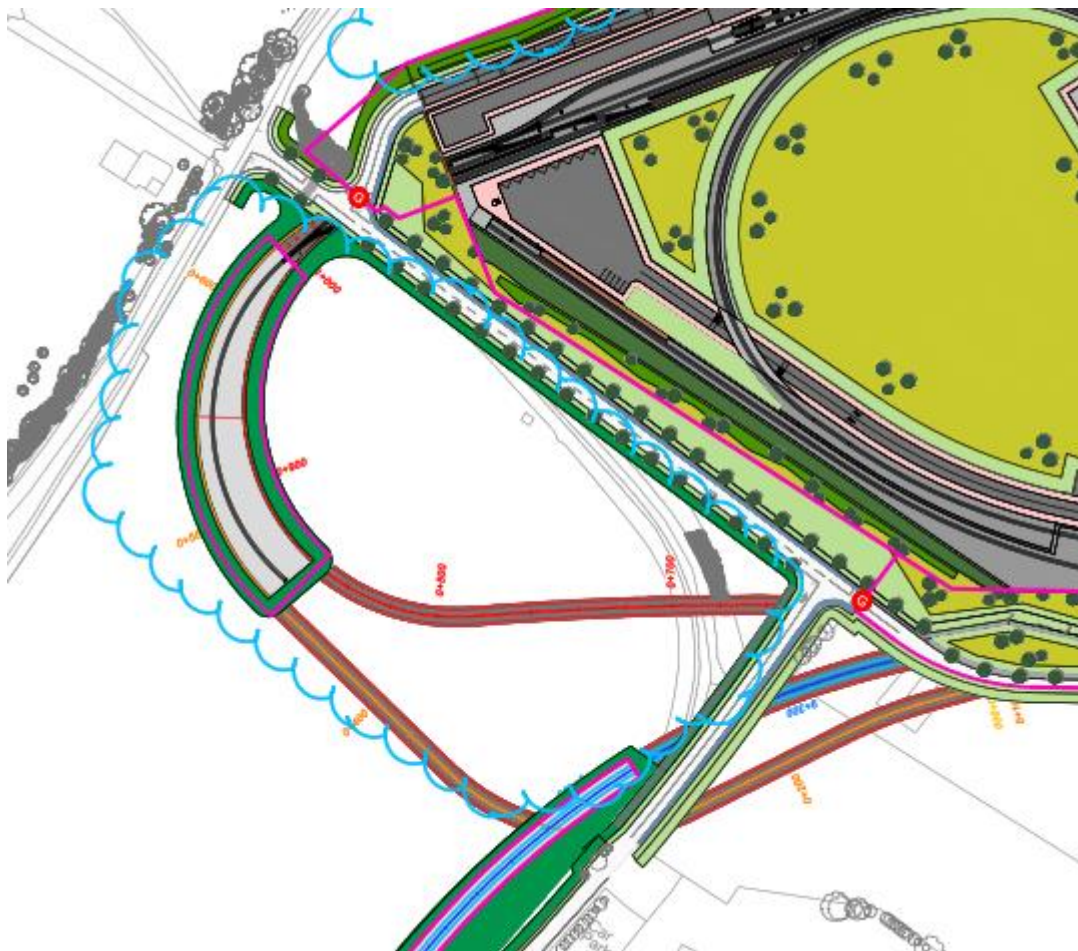
In development and planning terms, the depot is cited in the 2<sup>nd</sup> worst possible location in the site identified as a “gateway” site in the LAP. This site is capable of facilitating the development of a large-scale campus – akin to the Apple Campus in the US with potential for over 10,000 high value jobs.

For reference attached please find an in depth multi criteria analysis of each site – incorporating their development capacity, value and the true lost opportunity to the taxpayer.

## Amendments to Current Proposal

Whilst it is submitted that the depot should be located in an alternative location outside our client's landholding, or in an alternative location to the south east area of our clients land for the reasons outlined above; should the Board nonetheless consider that Dardistown is the most suitable location for the depot, our client would like to propose the following amendments to the scheme to reduce the impact on the viability of the subject lands delivering on their planning objectives, without prejudice to our client's preferred location.

1. A proposal on a development access is designed and built as part of the scheme so as not to landlock this important development opportunity
2. That there is a change to the temporary land take acquisition as per Figure 7 above i.e. that lesser lands are included in the temporary land take and that the lands zoned "opportunity" are removed.
3. It is requested that the portion of the tracks which connects the depot to Dardistown station are cut and covered sufficiently to allow for landscaping to take place above. This will allow development between the lines to feel more connected and ensure the economic viability of the gateway and opportunity sites. Alternatively, it is requested that the track layout is amended in order to reduce the level of fragmentation to the gateway site. The current proposal breaks the gateway site into significantly smaller land holdings which will have a significant adverse impact on their developability. This will lead to a disconnect between the various buildings in this location and will have a negative impact on the functionality of a gateway site.



**Figure 10: Tracks connecting Dardistown station with the depot (Source: TII)**

## **Concluding Comments**

Our client welcomes the submission of the Railway Order and the sustainable transport benefits which would be delivered. Our client acknowledges that a scheme of this scale will result in significant impacts however these should be carefully managed to minimise the effects on the surrounding landholdings.

It is primarily considered that the MetroLink depot should be relocated from the proposed location at Dardistown given that this location was chosen to serve both the Metro North and Metro West lines. This is one of the most strategic sites left in Ireland and locating a low value use such as a depot is bad in planning particularly As the Metro West line is no longer being progressed. It is therefore obvious that the depot would better serve the MetroLink at Lissenhall/Estuary where the depot and park and ride facilities can be consolidated together and would be a more efficient use of land.

Should the depot be provided for at the proposed location, it is requested It is relocated elsewhere within the lands – away from the two prime areas zoned Gateway and Opportunity sites to lesser value locations and salvage some of the better locations for long term sustainable development. However, if either of the suggestions above are needlessly resisted - then at a minimum the current proposal should be amended to cut and cover the tracks connecting the depot with Dardistown station. This will allow for landscaping to be incorporated in the gateway site above the tracks which would reduce the proposed disjointed nature of the site. Alternatively, a realignment of the tracks is requested in order to reduce the fragmentation of land at this location. The current proposal may prohibit the development of our client's land.

Our client reserves the right to elaborate further on these issues as necessary should the Board decide to hold an oral hearing or require any clarification and would welcome any responses from the applicant. Our client also reserves the right to ensure that the development potential above and below ground of the lands in question is not compromised by the MetroLink proposal.

We trust this submission will be taken into consideration in assessing the proposals.

The assessment of compensation would not be limited to the content of this submission.

Yours sincerely,



---

**John Spain Associates**

## **APPENDIX 1: OVERVIEW OF FOSTER + PARTNERS MASTERPLAN**



Dublin's Metropark  
One of Europe's Most Strategic Sites  
Overview Foster + Partners Masterplan





# Site Overview

- ✓ Key driver in the Irish Economy for next 50 years
- ✓ Potential for upto 15m sq. ft.
- ✓ 80,000 office workers
- ✓ GDV €9bn
- ✓ Potentially Europe's largest redevelopment site
- ✓ Large Scale Campus of over 1m sq. ft. to attract “super scale” employers
- ✓ Best in class mixed use development with key focus on design, placemaking, sustainability and efficiency
- ✓ 4<sup>th</sup> generation buildings with world class design



Swords

Dublin Airport

Proposed  
Metro North  
Stop

M1

Swords Rd  
R132

Naul Rd  
R108

METROPARK

M50

Tesco Distribution  
Centre

Junction 4  
M50

IKEA















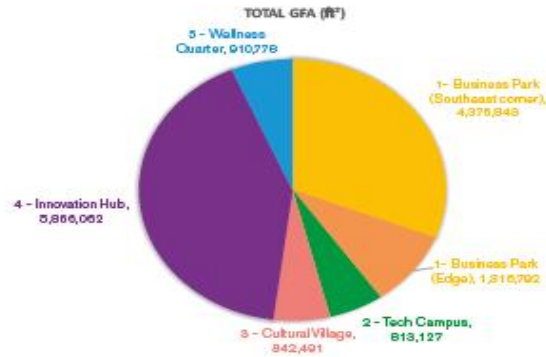
## Design development

### 3D Massing



## DEVELOPMENT BRIEF

### Dardistown Master Plan, Dublin



#### 2 - Tech Campus

High Technology (HT)  
813,127  
Parking  
67,761

**Total GFA**  
813,127

**FAR**  
1.9

#### 1 - Business Park (Southeast corner)

General Enterprise (GE)  
3,202,489  
Private Rental Area  
758,242  
Retail  
77,952  
Hotel  
338,159  
Parking  
756,841

**Total GFA**  
4,376,843

**FAR**

#### 3 - Cultural Village

General Enterprise (GE)  
280,637  
Retail  
237,721  
Hotel  
39,095  
Culture  
285,028  
Parking  
114,137

**Total GFA**  
842,491

**FAR**  
1.0

#### 5 - Wellness Quarter

General Enterprise (GE)  
570,401  
High Technology (HT)  
340,376  
Parking  
85,405

**Total GFA**  
910,778

**FAR**  
1.2

#### 4 - Innovation Hub

General Enterprise (GE)  
2,292,444  
Private Rental Area  
3,020,622  
Hotel  
25,833  
High Technology (HT)  
345,522  
Parking  
1,026,110

**Total GFA**  
5,866,062

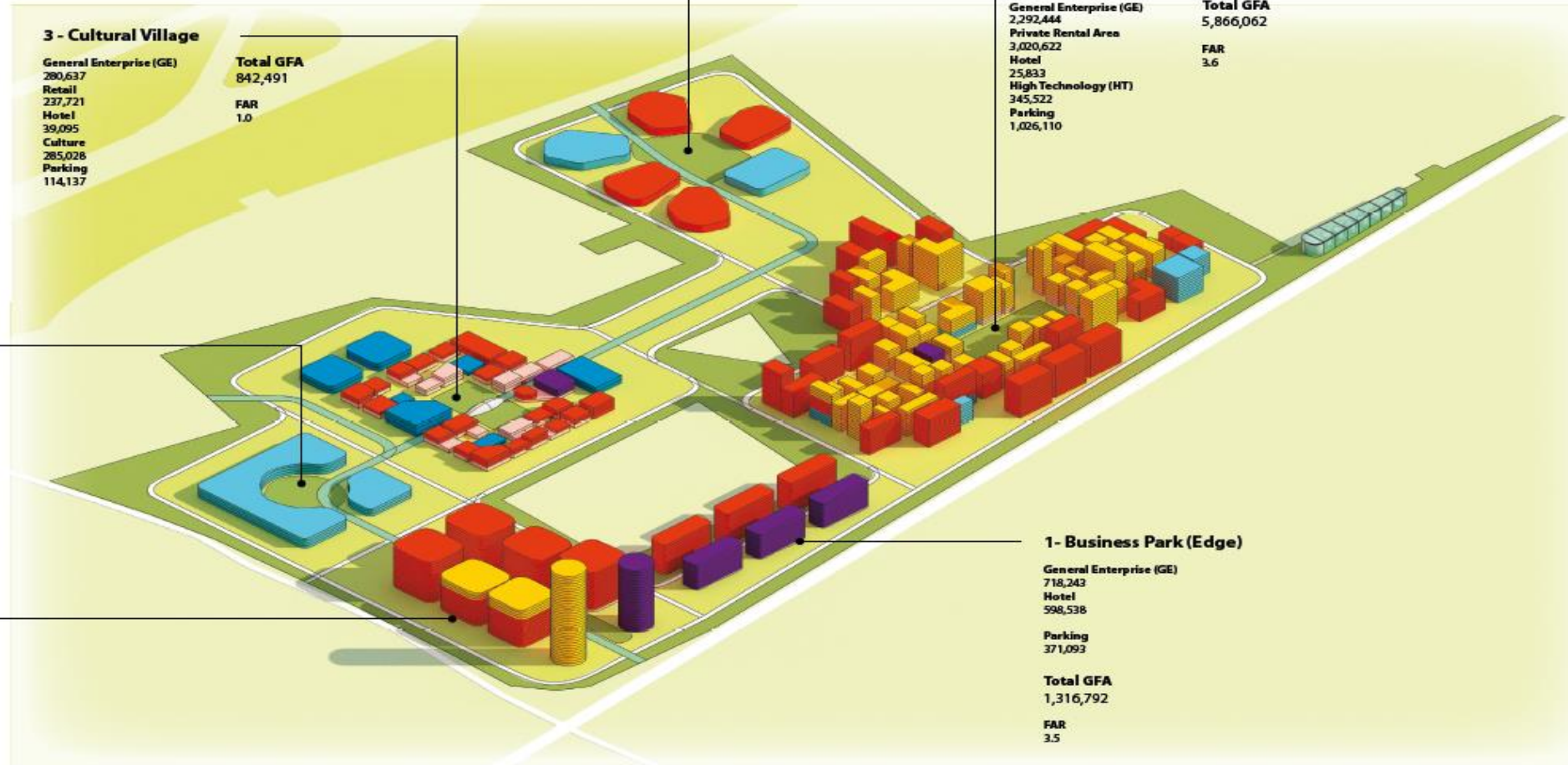
**FAR**  
3.6

#### 1 - Business Park (Edge)

General Enterprise (GE)  
718,242  
Hotel  
598,538  
Parking  
371,093

**Total GFA**  
1,316,792

**FAR**  
3.5



**Design development**  
Digital model











**APPENDIX 2: TOBIN CONSULTING ENGINEERS LETTER INCLUDING METROLINK  
DEPOT SITE HIGH LEVEL ASSESSMENT REPORT**



Fairgreen House  
Fairgreen Road  
Galway  
H91 AXK8  
Tel: +353 (0)91 565211  
Email: [info@tobin.ie](mailto:info@tobin.ie)

Block 10-4,  
Blanchardstown Corporate Park  
Dublin  
D15 X98N  
Tel: +353 (0)1 8030401  
Email: [info@tobin.ie](mailto:info@tobin.ie)

Market Square  
Castlebar  
Mayo  
F23 Y427  
Tel: +353 (0)94 9021401  
Email: [info@tobin.ie](mailto:info@tobin.ie)

Ducart Suite  
Castletroy Commercial Campus  
Limerick  
V94 Y6FD  
Tel: +353 (0)61 574 413  
Email: [info@tobin.ie](mailto:info@tobin.ie)

**Our Ref:** 10806

24/11/2022

## RE: Metrolink Depot Location Dardistown – Submission, Sainfoin Property Company Limited

Tobin Consulting Engineers (Tobin) have been instructed by our client, Sainfoin Property Company Limited to review Transportation Infrastructure Ireland (TII) proposal to locate the depot and stabilising facilities associated with the proposed Metrolink rail project located lands at Dardistown, North Dublin and to access the potential for the depot to be in an alternative location.

Tobin produced a high-level assessment report in 2019 for Comer Group Ireland (CPI) identifying several alternative sites for the proposed depot which is appended to this letter. The conclusion of that report was that Lissenhall (the original preferred location) was a viable alternative to the Dardistown location. In 2018, the Alignment Options Study Report by Arup considered that the best and most appropriate location for the depot on the new Metro North (now Metrolink), was Estuary / Lissenhall as the track was at grade at this location and there was adequate space to accommodate the facilities. Depots are traditionally located at the end of the line for various reasons including operational benefits particularly with high frequency trains. Two examples of similar rail lines where the depot was at the end of the line are Barcelona and Copenhagen.

Document Appendix A7.6, *Dardistown Depot location Options Report* by Jacobs Idom, from the Environment Impact Assessment report volume 5; has been provided to Tobin for review. The executive study in Appendix A7.6 references a letter received from Comer Group Ireland which expressed an opinion that the Lissenhall area would have been a better location for the depot. The Jacobs Idom response to that was *'this is not supported by earlier JI studies because it does not deliver efficient train operations and for this reason it is not considered further in this review'*. Appendix A7.6 does not expand on the why it does not deliver efficient train operations, nor does it reference or provide a location where those earlier studies can be found for review and consideration as part of a robust and comparable multi criteria analysis.

In addition to considering the operational aspects of the depot location at Lissenhall, the other criteria of the Multi Criteria Analysis carried out for Dardistown, does not seem to have been considered for Lissenhall. The Dardistown location was previously selected assuming that there would be a link to Metro West which is no longer planned to progress.

**Directors:** M. Shelly (Chairman) C. McGovern (Managing Director) E. Connaughton (Company Secretary)  
B.J. Downes D. Grehan M. McDonnell J. McGrath  
B. Carroll S. Kelly S. Tinnelly

**Technical Directors:** B. Gallagher B. Heaney C. Kelly

**Associate Directors:** M. Casey P. Cloonan P. Cunningham E. Fenton N. Gibbons G. Gibson L. Kennedy T. Mackey D. Meade P. O'Connor  
J. O'Flaherty B. Rudden

To provide a fair and informed review of the TII documentation relating to the location of the depot, Tobin will require the following be provided for review:

- A copy of the 'earlier JI studies' referenced above.
- A multi-criteria analysis (MCA) for the option at Lissenhall for the other aspects of the MCA applied to the Dardistown option.

Appendix A7.6 uses a Multi Criteria Analysis to compare two locations within the Dardistown area. Option 8A (TII preferred location) is located to the Northwest Corner of the site and Option 10 (location previously proposed by CGI) is located as shown on drawing 10806 – 1003-D appended to this letter to the Southeast corner of the site. In response to the Multi Criteria Analysis carried out for Dardistown, Tobin have reviewed Option 10 in Appendix A7.6 with input from a rail and transport consultant from an Environmental, Roads & Utilities and functionality perspective. The following are our high-level comments.

#### Environmental comments

- Appendix A7.6 table 6-3 : MCA assessment of options 8A and Option 10, does not include note 5 of section 6.2.1 – A burnt mound has been found within the area for option 8A. This will require careful excavation in this area and has the potential to cause delay.
- The colour coded table shows both options being amber concluding that both options are equal from an environmental perspective however, the TII Metrolink environmental impact assessment report volume 2 chapter 7, pg 55; says that 'option 10 is marginally better than option 8A when considering it from an environmental perspective'. Option 10 should therefore be shown in green indicating it has advantages over Option 8A.

#### Roads & Utilities

- The Greater Dublin Drainage Scheme is currently still in the planning process and a slight diversion on the site could still be agreed at this point, which would avoid any conflict with the depot as proposed in option 10. Alternatively, an engineered solution is feasible to work around the GDD.
- Option 8A does have more direct access from the M50 however travelling an extra 1km would be negligible in the scheme of this project.
- Keeping the depot further away from the station may be safer for pedestrians and vulnerable road users (VRU).
- Since depot staff and drivers will start / stop working at unsociable hours, parking facilities should be provided for them. Plant and deliveries would be required to and from the depot. This would be better provided away from the station to avoid congestion.

#### Functionality

- Appendix A7.6 highlights that option 8A has already progressed to preliminary stage. This is used in the MCA as an advantage over option 10 in terms of functionality. The functional



layout of the depot should be assessed on the potential for the proposed site and not the design progress for one option over another.

- Mainline Connections - Option 10 offers enhanced connectivity to the mainline vs Option 8A that serves Up service only.
- Planned Movements – Option 10 provides comparable Up entry distances to Option 8A but offers potential advantages for Down mainline connections as this is not offered by Option 8A.
- Emergency Movements – Option 10 Up and Down movements to the depot offer a potential advantage over Option 8A.

In respect of the various options on the Dardistown site, the current preferred option of Option 8A requires a comprehensive assessment review and to that end, we will require a full suite of drawings, calculations and provisions of operational modelling information.

To provide a comprehensive locational analysis, Tobin would recommend that Lissenhall be compared to Dardistown assessing all the criteria used in the Multi Criteria Analysis for the different options on the Dardistown site.

If after the Multi Criteria Analysis, Dardistown is deemed the preferred site; it is Tobin Consulting Engineer's opinion that option 10 is a feasible location for the depot.

Yours sincerely



Amanda Connors

**For and on behalf of TOBIN Consulting Engineers**

amanda.connors@tobin.ie

cc: Morgan Casey & Brian Carroll

Appended to this letter are the following.

- Appendix 1 – Metrolink Depot Site High Level Assessment Report
- Appendix 2 – Drawing 10806-1003-D



## Appendix 1 – Metrolink Depot Site High Level Assessment Report





## Metrolink Depot Site High Level Assessment Report



| Document Control Sheet |  |
|------------------------|--|
| Document Reference     | Metro park – Metrolink Depot assessment Report – Dardistown site |
| Report Status          | Issued to Client   |
| Report Date            | November 2019  |
| Current Revision       | A  |
| Client:                | Stanfoin Property Company Limited                                |
| Client Address:        | C/O Comer Group<br>Leixlip Centre<br>Leixlip<br>Co. Kildare      |
| Project Number         | 10806  |
|                        |  |

|   |  |  |
|---|--|--|
| Galway Office<br>Fairgreen House,<br>Fairgreen Road,<br>Galway,<br>H91 AXK8,<br>Ireland.<br><br>Tel: +353 (0)91 565 211 | Dublin Office<br>Block 10-4,<br>Blanchardstown Corporate Park,<br>Dublin 15,<br>D15 X98N,<br>Ireland.<br>Tel: +353 (0)1 803 0406 | Castlebar Office<br>Market Square,<br>Castlebar,<br>Mayo,<br>F23 Y427,<br>Ireland.<br><br>Tel: +353 (0)94 902 1401 |
|---|--|--|

| Revision | Description      | Author:           | Date    | Reviewed By: | Date       | Authorised by: | Date     |
|----------|------------------|-------------------|---------|--------------|------------|----------------|----------|
| A        | Issued to Client | AK/TG/LK/RM/BC/BC | various | AK/BC        | 18.11.2019 | DG             | 29/11/19 |
|          |                  |                   |         |              |            |                |          |
|          |                  |                   |         |              |            |                |          |
|          |                  |                   |         |              |            |                |          |
|          |                  |                   |         |              |            |                |          |
|          |                  |                   |         |              |            |                |          |

| TOBIN Consulting Engineers  |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| <b>Disclaimer</b><br>This Document is Copyright of TOBIN Consulting Engineers Limited. This document and its contents have been prepared for the sole use of our Client. No liability is accepted by TOBIN Consulting Engineers Limited for the use of this report, or its contents for any other use than for which it was prepared. |  |  |  |  |  |  |  |



## Table of Contents

|       |   |           |
|-------|---|-----------|
| 1.0   | Executive Summary.....  | 1         |
| 2.0   | Introduction .....  | 2         |
| 2.1   | Overview.....   | 2         |
| 2.2   | The Site – Metropark.....   | 3         |
| 2.3   | Alternative Sites Considered.....                                     | 4         |
| 2.3.1 | <i>Site 1 – Sillogue (Off St. Margaret’s Road).....</i>               | <i>4</i>  |
| 2.3.2 | <i>Site 2 – Na Fianna/Ballymun Site .....</i>                         | <i>4</i>  |
| 2.3.3 | <i>Site 3 – Fosterstown (West of R132) .....</i>                      | <i>4</i>  |
| 2.3.4 | <i>Site 4– Nevinstown – (East of R132).....</i>                       | <i>4</i>  |
| 2.3.5 | <i>Site 5– Lissenhall.....</i>  | <i>5</i>  |
| 3.0   | Planning History .....  | 6         |
| 3.1   | Metro North – ABP Ref: NA.0003 .....                                  | 6         |
| 3.1.1 | <i>ABP Inspector Assessment of Depot Location.....</i>                | <i>6</i>  |
| 3.1.2 | <i>ABP Order and Explanation for Variation from Inspector .....</i>   | <i>7</i>  |
| 3.2   | Metro North – Dardistown Depot & Spoil Scheme – ABP Ref: NA.0007..... | 8         |
| 4.0   | Planning and strategic Policy .....                                   | 10        |
| 4.1   | National Planning Framework: Project Ireland 2040.....                | 10        |
| 4.2   | Eastern & Midlands Regional Spatial & Economic Strategy (RSES) .....  | 10        |
| 4.3   | Fingal County Development Plan 2017-2023.....                         | 11        |
| 4.3.1 | <i>Economic Development &amp; Employment.....</i>                     | <i>12</i> |
| 4.3.2 | <i>Residential and Housing.....</i>                                   | <i>12</i> |
| 4.3.3 | <i>Movement &amp; Infrastructure.....</i>                             | <i>13</i> |
| 4.4   | Dardistown Local Area Plan – January 2013.....                        | 14        |
| 5.0   | The Current Proposal – Metrolink.....                                 | 16        |
| 5.1   | Alignment Options Study Report – June 2018.....                       | 16        |
| 5.2   | Preferred Route Report – March 2019 .....                             | 16        |
| 5.3   | Preferred Route Design Development Report – March 2019 .....          | 18        |
| 5.4   | Metrolink – The Proposal .....  | 19        |
| 5.5   | Comparable Schemes .....  | 19        |
| 6.0   | Metropark – Development Potential.....                                | 23        |
| 7.0   | Site Assessments .....  | 26        |
| 7.1   | Proposed Dardistown Depot Site .....                                  | 26        |
| 7.1.1 | <i>Zoning &amp; Planning Context.....</i>                             | <i>26</i> |
| 7.1.2 | <i>Environmental.....</i>   | <i>26</i> |
| 7.1.3 | <i>Roads &amp; Traffic.....</i>                                       | <i>27</i> |
| 7.1.4 | <i>Flooding.....</i>  | <i>28</i> |
| 7.1.5 | <i>Rail.....</i>  | <i>28</i> |
| 7.2   | Site 1 – Land off St. Margaret’s Road - Sillogue .....                | 32        |
| 7.2.1 | <i>Planning Policy .....</i>  | <i>32</i> |
| 7.2.2 | <i>Environmental.....</i>   | <i>33</i> |
| 7.2.3 | <i>Roads and Traffic.....</i>   | <i>33</i> |
| 7.3   | Site 2 – Na Fianna GAA /Ballymun Kickham’s GAA Site .....             | 34        |
| 7.3.1 | <i>Planning Policy .....</i>  | <i>34</i> |



|       |   |    |
|-------|---|----|
| 7.3.2 | Environmental.....                            | 34 |
| 7.3.3 | Roads and Traffic.....                        | 35 |
| 7.3.4 | Rail.....                                     | 35 |
| 7.4   | Site 3 – Fosterstown (West of R132) .....     | 36 |
| 7.4.1 | Planning Policy .....                         | 36 |
| 7.4.2 | Environmental.....                            | 36 |
| 7.4.3 | Roads and Traffic.....                        | 36 |
| 7.4.4 | Flooding.....                                 | 37 |
| 7.4.5 | Rail.....                                     | 37 |
| 7.5   | Site 4 – Nevinstown (Land East of R132) ..... | 38 |
| 7.5.1 | Planning Policy .....                         | 38 |
| 7.5.2 | Environmental.....                            | 38 |
| 7.5.3 | Roads and Traffic.....                        | 38 |
| 7.5.4 | Rail.....                                     | 38 |
| 7.6   | Site 5 – Lissenhall/Estuary .....             | 39 |
| 7.6.1 | Planning Policy .....                         | 39 |
| 7.6.2 | Environmental.....                            | 39 |
| 7.6.3 | Roads and Traffic.....                        | 40 |
| 7.6.4 | Flooding.....                                 | 41 |
| 7.6.5 | Rail.....                                     | 41 |
| 8.0   | Conclusion.....                               | 43 |

## Table of Figures

Figure 1- Extract from Preferred Route report March 2019- Dardistown site

Figure 2 - Uses Classes Related to Zoning Objective

Figure 3- Extract Dardistown LAP

Figure 4- Preferred Route overview

Figure 5- Outline Depot Design on the Metropark site

Figure 6: Barcelona – Depot @ Pratenc/Can Zam:

Figure 7: Copenhagen – Depot @ Vestamager:

Figure 8 - DLR Depot – North Woolwich/Beckton, London

Figure 9 - Eurostar Depot – Temple Mills, London:

Figure 10: Integrated schematic of existing and proposed Dublin rail routes

Figure 11 - Masterplan Overview imagery

Figure 12 - Development potential as outlined in the Foster and Partners Feasibility and Master plan Report

Figure 13- Development potential reduced as a result of the potential depot located on these lands.

Figure 14: Dardistown Zoning

Figure 15- Dublin Airport Surface Access

Figure 16: Dardistown Flooding Map

Figure 17- View North from the M50

Figure 18- View South from Dublin Airport

Figure 19- Estimated Topographical Layout (source: [www.topographic-map.com](http://www.topographic-map.com))

Figure 20- Typical route layouts and operational arrangements for high frequency metro service



*Figure 21 - Single track pinch point on the route in/out of the proposed Dardistown Depot*

*Figure 22- Previous single tunnel proposal showing the route through Dardistown and beyond as underground*

*Figure 23: Sillogue Zoning Fingal County Development Plan 2017-2023*

*Figure 24 – Na Fianna/Ballymun GAA Site - Zoning Fingal County Development Plan 2017-2023*

*Figure 25 – Flooding overview*

*Figure 26– Overview of sites at Lissenhall and Estuary*

*Figure 27– Swords Western Relief Road & Estuary Relief Road (Draft Fingal Development Plan: Map 8 Swords)*

*Figure 28: Lissenhall Flooding Map*

## **Table of Tables**

1. *Table No. 1 – Extract from Chapter 2, Core Strategy Fingal Development Plan - \*TOBIN Update based on Census 2016*
2. *Table 2- Loss of site area (land with development potential) as a result of the current preferred route*
3. *Table 3 - Summary of comparable aspects of Dardistown vs Estuary depot location sites*

## **Appendices**

**Appendix A – Drawings**

**Appendix B – Foster and Partners Feasibility Study**

**Appendix C – Masterplan Summary**





## 1.0 EXECUTIVE SUMMARY

Tobin Consulting Engineers, hereafter TOBIN, have been instructed by their client, Comer Group Ireland Limited (Comer Group) to review the current Transport Infrastructure Ireland (TII) proposal to locate the depot and stabling facilities associated with the proposed Metrolink rail project on their strategically located lands at Dardistown

The Metropark Site, (the site) is one of the most significant privately owned landbanks in the country and has the potential to make a considerable contribution to both the provision of employment and housing in Fingal and the greater Dublin area.

The Metrolink scheme, in its latest form, proposes a rail depot at the Dardistown site south of Dublin airport, on land owned by our Client who has engaged us to assess that decision from a rail perspective. Within this commission, we have studied the proposals from an operational, financial, construction and technical perspective (Planning policy, Environmental, Rail, roads and services). We have also made comparisons with characteristics of alternative Metro schemes around the UK and beyond.

One of the critical considerations impacting the location of the depot at Dardistown appears to be the previous intention to tie in with the Metro West scheme when Metrolink was known as Metro North. The decision has since been made to cancel the Metro West scheme, however the decision to relocate the depot to Dardistown does not appear to have been re-visited to any significant degree. Indeed, the emerging preferred route (Public Consultation Report 2018) for Metrolink indicated that the depot would be located at the Estuary or Lissenhall terminus point. However, following public consultation during the Metro link consultation process and a significant number of submissions on the location of tunnelling infrastructure on recreational grounds to the south of the line, it would appear to have resulted in the selection of Dardistown as the preferred location for the depot.

When assessing the decision to locate the depot at Dardistown in the context of the latest Metrolink proposals, the argument against this location from a rail perspective is consistent across all criteria. Operationally, it is not the optimal location for a depot, a view that is supported by the location of depots on other Metro routes of a similar length, location and frequency of service. Construction methodologies and technical compliance will be constrained and challenged to a greater extent at Dardistown than they would be elsewhere. Budget implications are also negative with regards to increased and avoidable costs due to the decision to locate at Dardistown.

When the criteria applied to Dardistown are applied to the previous location (Estuary), the rail-based argument to reverse the decision and return the depot to that location is clear. The previous strategic decision to re-locate to Dardistown due to the link to Metro West no longer applies and therefore, the decision in our view is no longer justifiable, and should be re-visited and re-assessed. This is particularly relevant when the wider social and economic and strategic potential for the Dardistown site is considered in the context of the wider Dublin area. The proposed depot at this location will undoubtedly have a significant and detrimental effect on what is one of the few remaining substantial land banks in close proximity to the strategic infrastructures of the M50 and Dublin Airport and a potential Metrolink stop that could potentially be surrounded by high density residential and mixed development.

This report therefore, ultimately demonstrates that there are alternative locations for the depot to be sited that would not conflict with a number of policy documents and thus in the wider context would offer a much greater opportunity for the development of a strategic development (high density mixed use with suitable transport links) as the Metropark site.

## 2.0 INTRODUCTION

### 2.1 Overview

Tobin Consulting Engineers, hereafter TOBIN, have been instructed by their client, Comer Group Ireland Limited (Comer Group) to review the current Transport Infrastructure Ireland (TII) proposal to locate the depot and stabling facilities associated with the proposed Metrolink rail project on their strategically located lands at Dardistown, north Dublin and to assess the potential for the depot to be located on alternative sites.

TOBIN engaged the expertise of CPMS Consultants from the UK in order to feed into this report from a rail perspective. CPMS are experts in delivering rail projects, originally large scale complex electrification schemes. They offer a holistically programme or project manage as well as provide individual services such as design, engineering, construction and commercial. They have significant experience in the Rail sector and have assisted TOBIN in the preparation of this report from a Rail perspective.

The Metropark Site, (the site), as identified in **Dwg, 10806-1001 and 1003 at Appendix A**, is one of the most significant privately owned landbanks in the country and has the potential to make a significant contribution to both the provision of employment and housing in Fingal and the greater Dublin area. Based on the Masterplan prepared by Foster & Partners, the site has the potential to provide circa 15 million sq.ft of mixed use development, comprising approximately 4,300 residential units and 40,000 jobs. Further details and a high-level breakdown will be provided in later sections of this report.

The report at Section Three examines the planning history of Metro North, the predecessor of Metrolink and other relevant development proposals in the surrounding area. The planning history of Metro North and the rationale for certain decisions are relevant to the current proposal in light of the evolving policy framework since that original decision and how the current policy framework provides an opportunity to reconsider the location of the depot to what is considered a more appropriate location given the nature of the land use and in light of the highly strategic location of the Metropark lands.

Section Four of the report sets out the planning policy framework within which both Metrolink and the potential development of the Metropark site and the Metro Economic Corridor will take place. It is considered that there has been significant evolution in policy in the last number of years, together with an ever increasing emphasis on sustainable development, increased density of development, maximising accessibility to public transport, reduction in reliance on the private car and indeed, the development of Dublin Airport as an airport city region.

Section Five sets out the current TII proposal for Metrolink and for the depot site while Section Six provides an overview of the very significant potential of the Comer Group's site as evidenced in the Masterplan developed by Foster & Associates. What will be clear following this overview is the very significant potential of the site which is one of the largest land parcels in single ownership in Dublin and with potential to make a major contribution to housing and employment provision in Fingal and the greater Dublin area.

Section Seven will examine a number of alternative locations that are potentially more suitable for the location of the depot and where there will not be such a detrimental impact on a site with such strategic and indeed nationally important development potential. The alternative sites will be assessed broadly under the following headings where applicable:

- Planning Policy
- Environmental
- Roads and Traffic
- Flooding
- Rail & Engineering

A detailed assessment of archaeology was not undertaken as part of this report, however, where obvious archaeological constraints were identified these were noted and referenced in the report.

A summary and conclusion will be provided at Section Eight.

## 2.2 The Site – Metropark

The Metropark site is a strategically located landbank located to the north of Dublin City and at the southern end of Fingal County Council between the towns of Swords and Ballymun. The site comprises an area of c.83 hectares (ha) (206 acres) and is currently active farmland with a portion of the site in the southwest corner currently operating as a quarry/sand pit.

The site is located immediately adjacent to the southern boundary of Dublin Airport to the north, and the M50 Motorway which bounds the southern part of the site. The R108 runs along the western boundary of the site while the Old Airport Road bounds the site to the north. There are a number of other land-uses adjacent to the site including car parking, go-karting, recreation and industrial. The M1 interchange is a short distance to the southeast of the site.

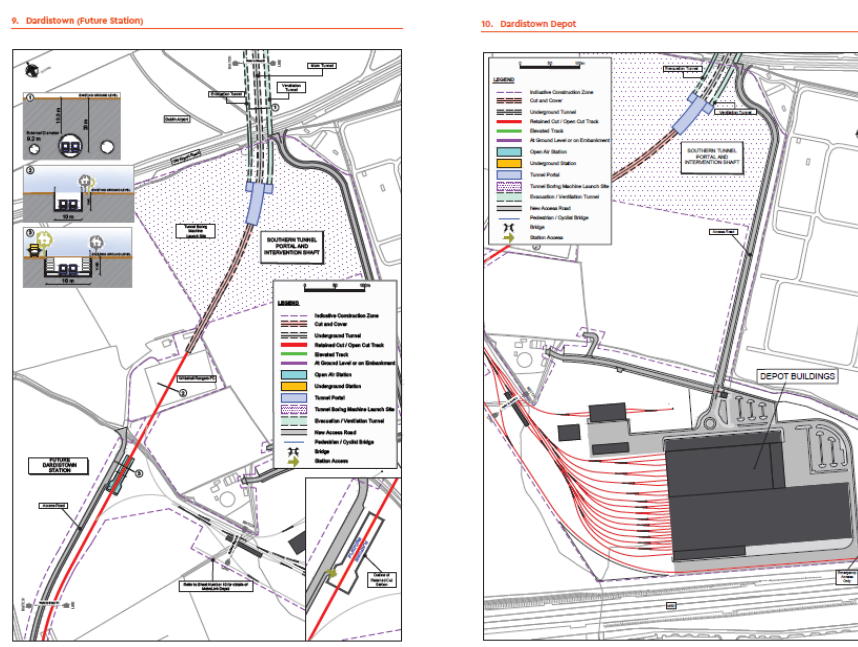
Ballymun GAA grounds and NA Fianna GAA grounds are located to the northwest/north of the site and Silogue Park Golf club is located on the western side of the R108.

The site is located 8km from Dublin City Centre and approximately 4km from Swords town centre and 1.8km from Ballymun.

Drawing No. 10806-1001 and 1003 attached at **Appendix A** provides an overview of the site location.

It is proposed as part of Metrolink that the line will travel through the Metropark site towards the airport and onto its final stop to the north of Swords. It is ultimately proposed to provide a new station, 'Dardistown Station' within the subject site.

**Figure 1** below provides an indication of the current Metrolink proposals in respect to the site and these are taken from the preferred Route report from March 2019.



**Figure 1- Extract from Preferred Route report March 2019- Dardistown site**

## 2.3 Alternative Sites Considered

This report identifies and assesses five sites as potential alternatives for the location of the depot and stabling facilities. The rationale for including these five sites is that they either were considered during the development of Metro North or, they appear to provide the capacity and space to accommodate a development of this nature. The five sites are identified in the following section with a high-level overview provided. Section 7 will then assess the suitability of these sites against a number of relevant criteria from a design perspective.

### 2.3.1 Site 1 – Sillogue (Off St. Margaret's Road)

The site is located on the southern side of the M50 motorway, adjacent to junction four, Ballymun and immediately to the east of what is now the IKEA/Decathlon site. St Margaret's Road runs along the southern boundary of the site and in total, 64 acres (approx.) of land remains undeveloped. **Drawings 10806-1004** provides an overview of the site.

In the current Fingal County Development Plan 2017-2023, the site is zoned 'HT' – High Technology. Under this zoning, the site is intended to provide for office, research and development and high technology/manufacturing type employment in a high quality built and landscaped environment.

The site is currently owned by Dublin City Council.

### 2.3.2 Site 2 – Na Fianna/Ballymun Site

The Na Fianna and Ballymun GAA playing pitches adjoin the Metropark site and are located to the north/northwest of the site and immediately south of the Airport boundary. **Drawing No. 10806-1005** provides an overview of the site.

Under the provision of the Fingal County Development Plan 2017-2023, the land is zoned for 'GE', General Enterprise and is designated for the provision of general enterprise and employment opportunities. The site comprises an area of 84 acres (approx.) and could accommodate a depot of the size required to service Metrolink, subject to appropriate siting, design and planning approval.

### 2.3.3 Site 3 – Fosterstown (West of R132)

This potential area is located north of Dublin airport to the east of the R132 in the townland of Fosterstown and to the North of the Naul road. **Drawings 10806-1006** provides an overview of the site.

The site is currently zoned for 'GB' – Green Belt under the provisions of the Fingal County Development Plan 2017-2023 and as such should be retained for the provision of Greenbelt. This site is currently in private/public ownership and is sufficiently large enough to cater for a potential depot of approx. 70 acres. However, given the zoning, there is an assumption that development of these lands will be difficult to achieve from a planning and environmental perspective.

### 2.3.4 Site 4 – Nevinstown – (East of R132)

This site is located north of Dublin airport to the west of the R132 in to the north of the Stockhole lane road. **Drawings 10806-1006** provides an overview of the site.

The site is currently zoned for 'GB' – Green Belt under the provisions of the Fingal County Development Plan 2017-2023 and as such should be retained for the provision of Greenbelt. This area is sufficiently large enough to cater for the depot of approx. 70 acres. However, given the zoning, there is an assumption that development of these lands will be difficult to achieve from a planning and environmental perspective.

Land to the north of this site are zoned for 'RW', Retail Warehousing and 'GE', General Employment. However, there appears to be a number of business and residential premises in this area and assimilating a site of sufficient size may be difficult to achieve.

### 2.3.5 Site 5- Lissenhall

The site considered at this location is located to the west of the R132 and adjacent to the proposed end stop of the Metrolink- which would also be adjacent to a proposed multi-storey carpark and park and ride facility. The area assessed is outlined in **Drawing 10806-1007** and given appropriate design would be sufficiently large enough to cater for the addition of the depot to the site.

It should be noted that this site would appear to have been the originally proposed location for the depot for Metro North. Indeed, the Planning Inspector in his consideration of Metro North considered that Lissenhall was a preferable location to that which was under review at Belinstown. However, the Board considered that Dardistown was the most appropriate location for the depot and this is discussed later in the report. Furthermore, as late as June 2018, the 'New Metro North – Concept Engineering Design Report prepared by ARUP indicated that the depot would be located at Lissenhall because;

'it is at the end of the proposed scheme in an area where the track is running at grade with green space available for construction' Under the provisions of the current Fingal County Development Plan 2017-2023, the site is zoned for 'ME' – Metro Economic Corridor which seeks to facilitate high density mixed use employment generating activity and commercial development, and support the provision of an appropriate quantum of residential development with the Metro Economic Corridor.

The vision for this zoning sets out the aspiration in more detail which includes, the provision of an area of compact, high intensity/density, employment generating activity with associates commercial and residential development which focuses on the Metro within a setting of exemplary urban design, public realm streets and places which are permeable, secure and within a high quality green landscape.

Chapter 11 of the Fingal County Development Plan 2017-2023 identifies the uses which are permitted in principle within this zoning and those which are not permitted. **Figure 2** below sets out the uses which are permitted in principle.

#### USE CLASSES RELATED TO ZONING OBJECTIVE

| Permitted in Principle            |  |                                    |
|-----------------------------------|--|------------------------------------|
| Betting Office                    | Childcare Facilities                   | Community Facility                 |
| Conference Centre                 | Cultural Facility                      | Dancehall/Nightclub                |
| Education                         | Exhibition Centre                      | Funeral Home/Mortuary              |
| Guest House                       | Health Centre                          | Health Practitioner                |
| Home-Based Economic Activity      | Hospital                               | Hotel                              |
| Office Ancillary to Permitted Use | Office ≤ 100sqm                        | Office > 100sqm and < 1,000sqm     |
| Office ≥ 1,000sqm                 | Open Space                             | Place of Worship                   |
| Public House                      | Public Transport Station               | Research and Development           |
| Residential                       | Residential Care Home/ Retirement Home | Residential Institution            |
| Restaurant/Café                   | Retail - Local < 150 sqm nfa           | Retail - Convenience ≤ 500 sqm nfa |
| Retail - Comparison ≤ 500 sqm nfa | Retail - Supermarket ≤ 2,500 sqm nfa   | Sheltered Accommodation            |
| Sustainable Energy Installation   | Taxi Office                            | Telecommunications Structures      |
| Training Centre                   | Traveller Community Accommodation      | Utility Installations              |
| Veterinary Clinic                 |  |                                    |

**Figure 2 - Uses Classes Related to Zoning Objective**



## 3.0 PLANNING HISTORY

This section of the report addresses the planning history of Metrolink's predecessor, Metro North and should be considered within the context of the decision to locate the depot for Metrolink at Dardistown

### 3.1 Metro North – ABP Ref: NA.0003

Metro North, as originally proposed, was a light rail system connecting the townland of Belinstown in north County Dublin to Dublin city centre. The route was proposed to serve a number of key destinations including the airport, hospitals, universities, retail centres and high density residential and employment hubs. The rail corridor proposed was 18km in length and would comprise sections of underground, at grade and elevated rail. It also proposed the locating of a depot and stabling facilities together with a park and ride on agricultural land to the north of Swords, to the west of the M1 motorway and east of Batter Lane. The site proposed comprised 36ha (89 acres).

Other depot locations were considered at Sillogue, Dardistown, Fostertown, and Lissenhall but were ruled out by the applicant (The Railway Procurement Agency) for the following reasons:

- Sillogue – least preferable based on operational and environmental reasons;
- Dardistown – performed well operationally but land costs and development plan designation rendered it unsuitable;
- Fostertown – performed well but was a greenbelt designation and level changes were required to avoid watercourses; and
- Lissenhall – various locations in Lissenhall were ruled out as they occupied land designated for the future expansion of Swords.

On 26<sup>th</sup> October 2010, An Bord Pleanála (ABP) made a decision to grant permission for the above described development with a number of alterations. These alterations are relevant to the current Metrolink proposal and provide potential reasoning for the proposed location of the depot at the Dardistown site. The sections at 3.1.1 and 3.2.2 below will examine the ABP Inspector's assessment of the scheme, with particular emphasis on the location of the depot, and the Boards final determination and rationale for deviations from the Inspector's recommendations.

#### 3.1.1 ABP Inspector Assessment of Depot Location

The Inspector considered that there were three primary factors when considering the location of the depot to include:

- Planning policy – how does the proposal comply with established strategies and objectives;
- Suitability of the site when due regard is had to planning and environmental constraints;
- Strategic planning – where the site would be best located in terms of proper planning and sustainable development.

The Inspector at the outset is clear that the latter determinant outlined above should be the most important factor to consider and that it should not be solely determined on economic cost. In this instance, it was considered that events overtook the siting of the depot which led to it being located further to the north than originally planned. The Inspector felt the Belinstown location was chosen on the basis of economic cost and not on the basis of sustainable planning.

The Inspector went on to state that;

*'The lands to the south where the depot appeared intended to be developed are not zoned lands and they are not serviced lands. There is no statutory plan for the development of these lands. There is evidently developer led intentions for these lands and the local authority has clearly supported the future development of these lands by opposing the development of the depot at that location. This is despite the lack of any plan led approach.... There is no statutory basis for the conclusion drawn on the undesirable siting of the depot where it appears to have been originally proposed at Lissenhall'.*

The Inspector goes on to state that:

*'The aspiration of development lands obviously has increased the costs of such a location, and this has pushed the site of the depot further north and further into the countryside away from any urban area.'*

Overall, the Inspector was of the view that in terms of proper planning and sustainable development, the depot should be located closer to Swords and generally in the vicinity of where it was originally proposed in Lissenhall, north east of Estuary roundabout.

In concluding comments, the Inspector notes that there has also been no strategic thinking given to the potential siting of a depot on the Metropark (Dardistown) site close to where the tie-in with Metro West will undoubtedly be. However, given that the Metropark location will be the tie-in point for both lines, he goes on to recommend that greater consideration be given to a joint depot at this location in the interests of proper planning and sustainable development.

Finally, in this regard, it is worth noting the Inspectors proposed conditions which confirm the opinions outlined above. At Condition No. 3, the Inspector proposed the removal of a number of elements of the proposed Metro North scheme including the depot, stop and strategic park and ride facility at Belinstown, together with the disposal of waste material at Belinstown and instead suggests that the depot and park and ride should be located southwards and should be developed in the vicinity of the Lissenhall stop area, closer to the Lissenhall Interchange of the R132 and the M1 Motorway. Alternatively, the Inspector suggested exploring Dardistown as a potential location, close to the tie-in with the proposed Metro West development. In this case, a turn back at Lissenhall should be provided.

What is clearly emerging from the above assessment is that the originally proposed site at Lissenhall for the location of a depot and park and ride was seen as preferable by the Inspector to lands further to the north. However, in the event that Lissenhall was not acceptable to the Board, then Dardistown should be considered as an alternative location, and in particular, given that it would be the tie-in point with the proposed Metro West. The merits of the tie in with Metro West are considered further in the following section.

### **3.1.2 ABP Order and Explanation for Variation from Inspector**

Following on from the Inspector's assessment of Metro North it is also worth noting the Board's Final Order in respect to the scheme. In particular, the Board ultimately decided not to approve certain elements of the scheme, namely the depot and ancillary facilities at Belinstown and the proposed line and stop at Lissenhall, but in Condition No. 1 of the Order directed the making of a New Railway Order application for the following;

- i. A re-located depot (and associated infrastructure) which shall be situated in the general vicinity of Dardistown, that is between the M50 Motorway and Dublin Airport. The revised proposal shall consider possible synergies with the proposed Metro West light rail scheme, which is proposed would tie-in with Metro North at this location.
- ii. A revised scheme for the management of spoil from the construction phase.

Again, further to the Inspector's recommendation/assessment, the Board are clearly of the view that the potential future tie-in with Metro West was an important strategic consideration and that a joint depot at Dardistown was in the interest of proper planning and sustainable development. In deciding not to accept the Inspectors recommendation to locate the depot at Lissenhall, the Board considered that they would not perform well in strategic transport terms compared to other alternatives available in the vicinity of the airport, being at the end of the line and more likely to result in inefficient empty running of metro vehicles and extended travel for staff.

What is clear from the Boards Order is that in the interests of proper planning and sustainable development, the locating of the depot and ancillary infrastructure at Dardistown was deemed to be more meritorious than any of the other locations assessed (Belinstown and Lissenhall) and that a particular driver for arriving at that conclusion was the potential for tie-in with Metro West at that location.

However, as is now clear and is discussed later in this report, Metro West is no longer in the development pipeline for the foreseeable future and currently, other more pressing land use considerations should be to the fore when it comes to deciding on the ultimate location of the depot.

### 3.2 Metro North – Dardistown Depot & Spoil Scheme – ABP Ref: NA.0007

The application for a revised Railway Order for the location of a depot and treatment of Spoil scheme arose out of Condition 1 of the Railway Order granted under Ref: NA.0003 for the Metro North scheme. That condition stated the following:

Modifications to the Railway Order

1. The Railway Order is granted from the Estuary Stop in Swords to St Stephen's Green. The following components of the proposed development shall not be carried out in accordance with the submitted Railway Order application drawings and documentation:

- a) The depot, stop and strategic park and ride facility at Belinstown;
- b) The disposal of waste material at Belinstown;
- c) stop at Lissenhall;
- d) rail line or ancillary works north of chainage 2300.

Consequent on this modification the following requirements are set out:

An application for a Railway Order shall be made to An Bord Pleanála for the following:

- i. A re-located depot (and associated infrastructure) which shall be situated in the general vicinity of Dardistown, that is between the M50 motorway and Dublin Airport. The revised proposal shall consider possible synergies with the proposed Metro West light rail order, which it is proposed would tie-in with Metro North at this location.
- ii. A revised scheme for the management of spoil from the construction phase, which scheme shall take into account the policies of the regional waste management plan in relation to beneficial use of spoil. Consideration may be given to a temporary storage location for spoil, or a solution in co-operation with the aggregates industry. (Alternative authorisation for this aspect could be sought by means of an application submitted to An Bord Pleanála in accordance with the provisions of section 37E of the Planning and Development Act 2000, as amended). With the exception of enabling works (such as heritage protection and utility diversions) work shall not commence on the scheme until approval such application has been granted.

**Reason:** In the interest of sustainable long-term transport development environmental protection, and as per the reasons and considerations set out in the Preamble of this Railway.

The Inspector, in his assessment of this scheme stated that;

*'the condition also required the revised proposal to consider possible synergies with the Metro West railway. The current project includes the construction of the rail junction between Metro West and Metro North, so that proposed depot for Metro North would use a short stretch of the mainline of Metro West. The project does not provide for a combined depot for Metros North and West, nor does it propose the relocation to Dardistown of the depot for the latter railway project (Metro West).'*

The Inspector goes on to state *that*;

*'the proposal before the Board for a depot that would allow co-location with a Metro West depot on adjoining land is therefore considered reasonable, although whether such colocation actually occurs would depend on the board's decision on the concurrent application NA0006. Thus, the revised proposal in this application has considered possible synergies with the proposed Metro West, as required by condition no. 1 of the Metro North order'.*

What is clear from the rationale applied to the Board's Order under Ref: NA.0003, from the Inspector's Assessment of the application under Ref: NA0007 and the Board's subsequent Order is that Metro West was a major factor in determining the location for the depot for Metro North. It was expected that Metro West, which was in planning at the time would benefit from synergies with Metro North, albeit a joint depot was not proposed due to procurement challenges.

It is clear that there has been many economic challenges since the making of this order and Metro West has now been cancelled and is no longer provided for in the National Planning Framework: Ireland 2040, or in the associated National Development Plan. Indeed, it is questionable why Metro West played such an important factor in the consideration of the depot location on Metro North when as stated by the Inspector in his assessment of NA.0007;

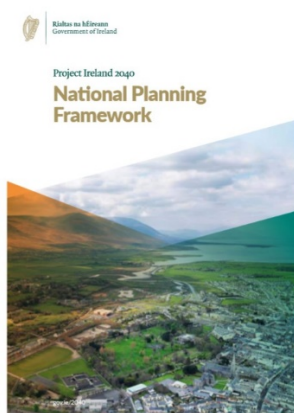
*'Little or no operation benefits would arise from co-location of depots.'*

Given the status of Metro West, the fact that it is unlikely to materialise in the next 20+ years, and both for economic and viability reasons, it is considered that there remains no exceptional reason for continuing with the location of the Metrolink depot at the Comer owned Dardistown site. As the following sections of this report will outline, comparable schemes referred to by TII, together with the availability of a suitable alternative site, all indicate that a location at the end of the line would be more appropriate and have less impact on a strategic landbank that has the potential to deliver a highly sustainable mixed use development.



## 4.0 PLANNING AND STRATEGIC POLICY

### 4.1 National Planning Framework: Project Ireland 2040



The National Planning Framework (NPF) is a national document that will guide at a high-level strategic planning and development for the country over the next 20+ years, so that as the population grows, that growth is sustainable (in economic, social and environmental terms).

The NPF alongside the ten-year National Development Plan will put together one plan to guide strategic development and infrastructure investment at national level.

The NPF with the National Development Plan will also set the context for each of Ireland's three regional assemblies to develop their Regional Spatial and Economic Strategies taking account of and co-ordinating local authority, County and City Development Plans in a manner that will ensure national, regional and local plans align.

As part of the NPF it sets out clear growth enablers for Dublin. Among these are the following:

- Identifying a number of ambitious largescale regeneration areas for the provision of new housing and employment throughout the city and metropolitan area and the measures required to facilitate them as integrated, sustainable development projects;
- Progressing the sustainable development of new greenfield areas for housing, especially those on public transport corridors, such as Adamstown, Cherrywood, Clonburris and Clongriffin;
- Determining a limited number of accessible locations for significant people-intensive employment to complement the city-centre and docklands areas;

The Metropark site clearly meets all of these growth enablers and is one of the primary large scale, deliverable sites with the potential to provide significant residential accommodation together with new employment opportunities. In conjunction with existing and future development at Dublin Airport, the site has a role to play in developing Dublin Airport into a truly modern 'Airport City Region'.

It is considered that the development on this site for a depot to service the Metrolink greatly diminishes if not indeed sterilises this potential and from a planning and sustainable development perspective would not adhere to the objectives of the NPF.

### 4.2 Eastern & Midlands Regional Spatial & Economic Strategy (RSES)



The Regional Spatial and Economic Strategy is a strategic plan and investment framework to shape the future development of our Region to 2031 and beyond and to '*to create a sustainable and competitive Region that supports the health and wellbeing of our people and places, from urban to rural, with access to quality housing, travel and employment opportunities for all*'.

The members of the Eastern and Midland Regional Authority agreed to make the RSES on 28<sup>th</sup> June 2019. However, a Ministerial Direction on 7<sup>th</sup> August 2019 is seeking to amend a part of the Plan is in place. All other parts of the RSES are considered to have been made.

The RSES ultimately provides a:

- **Spatial Strategy** – to manage future growth and ensure the creation of healthy and attractive places to live, work, study, visit and invest in.

- **Economic Strategy** – that builds on our strengths to sustain a strong economy and support the creation of quality jobs that ensure a good living standard for all.
- **Metropolitan Plan** – to ensure a supply of strategic development areas for the sustainable growth and continued success and competitiveness of the Dublin Metropolitan Area.
- **Investment Framework** – to prioritise the delivery of key enabling infrastructure and services by government and state agencies.
- **Climate Action Strategy** – to accelerate climate action, ensure a clean and healthy environment and to promote sustainable transport and strategic green infrastructure.

The principal statutory purpose of the RSES is to support the implementation of Project Ireland 2040 – National Planning Framework and National Development Plan 2019-2027 and the economic policies of the Government by providing a long-term strategic planning and economic framework for the development of the Regions.

The RSES will be implemented by way of a review by local authorities of all development plans and Local Economic and Community Plans (LECPs).

Within the context of the RSES, the potential for the provision of a high-quality mixed-use development at the Metropark site will deliver on many of the aspirations of the RSES, in particular when it comes to the integration of land use and planning. In fact, one of the guiding principles of the RSES set out in Chapter 8, Connectivity, states that for urban-generated development, the development of lands within or contiguous with existing urban areas should be prioritised over development in less accessible locations. Residential development should be carried out sequentially, whereby lands which are, or will be, most accessible by walking, cycling and public transport – including infill and brownfield sites – are prioritised.

It is considered that Metropark is an ideal opportunity site to deliver on this aspiration and through an effective, high quality design response can deliver a unique proposal that would greatly add to Dublin's urban environment. This potential is discussed in more detail in later sections of the report and a detailed masterplan and feasibility assessment has been prepared by *Foster and Partner Architect* for the clients and this is referenced at **Appendix B** of this document and discussed further below.

### 4.3 Fingal County Development Plan 2017-2023



Fingal County Development Plan covers the period from 2017-2023 and sets out the framework within which all development within the County will take place. The following sections will set out at a high level, planning policy aspirations in terms of the economic development, housing and movement and infrastructure. Some high-level strategic aims of the plan include the following:

- Consolidate urban areas to provide a vibrant, attractive environment for living and working, facilitating efficient movement by sustainable modes of transport throughout the County.
- Create a high-quality built environment integrating the conservation of Fingal's built heritage with best practice contemporary architecture and urban design.
- Ensure consistency with the Council's Core, Settlement and Housing Strategies to provide high quality housing of a sufficient scale and mix, located in optimum locations and aligned with adequate infrastructure, services and amenities.
- Make better use of key resources such as land, water, energy, waste and transportation infrastructure.

### 4.3.1 Economic Development & Employment

The Development Plan outlines the economic vision for the County over the coming Plan period with policies across a range of business and industry sectors, and specific objectives ensuring that sustainable economic activity and employment creation are supported and facilitated.

The strategy for Fingal's economic development over the coming Plan period has five core elements, which are summarised as follows:

- Achieving sustainable economic development, ensuring appropriate forms of employment are located proximate to residential developments, promoting economic clusters and regenerating obsolete or inefficient economic lands,
- Maximising the competitive advantages of being part of the Dublin City Region and the location of regionally and nationally important pieces of infrastructure,
- Identifying key economic sectors where opportunities exist for enterprise creation and employment growth, and focusing on those particularly relevant for Fingal,
- Growing and facilitating a highly skilled and educated workforce, and
- Ensuring proposals for economic development are served by high quality supporting infrastructure with sufficient capacity.

*The Plan goes on to state that the 'selection of appropriate locations for employment uses within Fingal is determined by the principles of proper planning and sustainable development, which is a core component of the economic strategy for the County. The Plan's policy and objectives associated with sustainable economic development are outlined in Section 6.2 and include appropriately locating intensive employment uses adjacent to public transport networks, and where appropriate, residential developments; encouraging existing economic clusters and developing new clustering opportunities; and, regenerating inefficiently performing business and industrial parks, land, and buildings'.*

The Metropark site offers significant employment generating potential, in the region of 40,000 jobs as is set out in the Masterplan prepared by Foster & Partners for Comer Group Ireland. The locating of these jobs along a proposed public transport network, in close proximity to Dublin Airport and with the potential to also provide a high quality residential environment, is undermined by the potential sterilisation of the site for the provision of a rail depot when other locations are potentially available.

### 4.3.2 Residential and Housing

Fingal is the third largest administrative county in Ireland. Nearly 6% of the state's population lives in the County with the population in the 2011 Census being 273,991 persons, or 21.5% of the total population of Dublin. The population of Fingal increased to 296,020 in the 2016 Census, or c.22% of the total population of Dublin. It is also noteworthy that Fingal's share of the Dublin population has been rising steadily since 1986.

The framework for Fingal's Settlement Strategy is set out in the Regional Planning Guidelines. The Strategy is based on a differentiation of towns within the Metropolitan Area of the County and those within the Hinterland Area (these areas being defined at regional level). The thrust of the Settlement Strategy is to consolidate urban areas around the Dublin Gateway and integrate investment in infrastructure, in particular public transport, with land use planning. **Table No.1** below, sets out in Chapter 2, Core Strategy of the County Development Plan sets out the population and housing targets for Fingal.



| Fingal          | Census 2006 | Census 2011 | Census 2016* | RPG target 2016 | RPG Target 2022 | Estimated RPG Target 2023 |
|-----------------|-------------|-------------|--------------|-----------------|-----------------|---------------------------|
| Population      | 239,992     | 273,992     | 296,020      | 287,547         | 309,285         |                           |
| Housing Stock   | 89,909      | 102, 793    | 104,851      | 118,646         | 142,144         | 145,340                   |
| Persons per hhd | 2.66        | 2.66        |              | 2.42            | 2.17            |                           |

**Table No. 1 – Extract from Chapter 2, Core Strategy Fingal Development Plan - \*TOBIN Update based on Census 2016**

The Core strategy goes on to state that ‘*while it is important to ensure that sufficient land is zoned, Fingal must have cognisance of the fact that current regional policy does not provide for any significant growth of the County’s share of the Dublin Region’s population or housing stock. Planning policy remains one of consolidation within the Metropolitan Area with expansion only happening in tandem with the planned, committed development of high quality heavy or light rail based public transport projects.*’

The linking of rail transport and the development of housing is clearly an important consideration for the Council. In light of this, it is considered that maximising the potential for residential development close to proposed rail stations is in the best interests of residents, the wider public and in proper planning and sustainable development. It is therefore important to protect sites where these opportunities exist. The development of a rail depot on a site where high-quality mixed-use development can be provided is not considered in keeping with the core strategies of the Development Plan.

#### 4.3.3 Movement & Infrastructure

It is the function of the transport system to cater for the travel needs of people and businesses, consistent with the broader policies of the Plan:

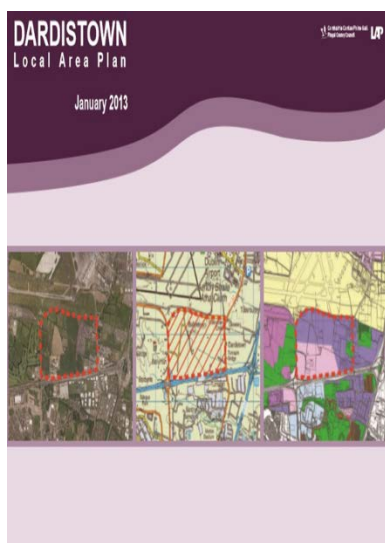
- Promote and facilitate movement to, from, and within the County of Fingal, by integrating land use with a high quality, sustainable transport system that prioritises walking, cycling and public transport.
- Provide an appropriate level of safe road infrastructure and traffic management, in particular to support commercial and industrial activity and new development.
- Work with all relevant stakeholders to seek a reduction in greenhouse gas emissions from transport.

A key objective of the plan is to develop an integrated land use and transportation system. To that end, Policy Objective MT05 states that it is the Council’s intention to ‘*Integrate land use with transportation by allowing higher density development along higher capacity public transport corridors.*’

The integration of land-use and transport involves locating trip intensive land uses (such as high-density housing, offices, and comparison retail) near high capacity public transport (such as DART, Metro, Luas, and Bus Rapid Transit). It benefits the land uses by providing high quality public transport for the greatest number of residents and employees. It benefits public transport by providing sufficient numbers of customers within its catchment to sustain the high cost of public transport infrastructure and services.

It is considered that the potential development of the Metropark site as envisaged by the land owners (as set out in the Concept Masterplan Study prepared by Foster & Partners for Comer Group Ireland) meets these objectives and to consider the locating of a rail depot and the inherent reduction of the development potential of this site, is not in the interest of proper planning and sustainable development.

## 4.4 Dardistown Local Area Plan – January 2013



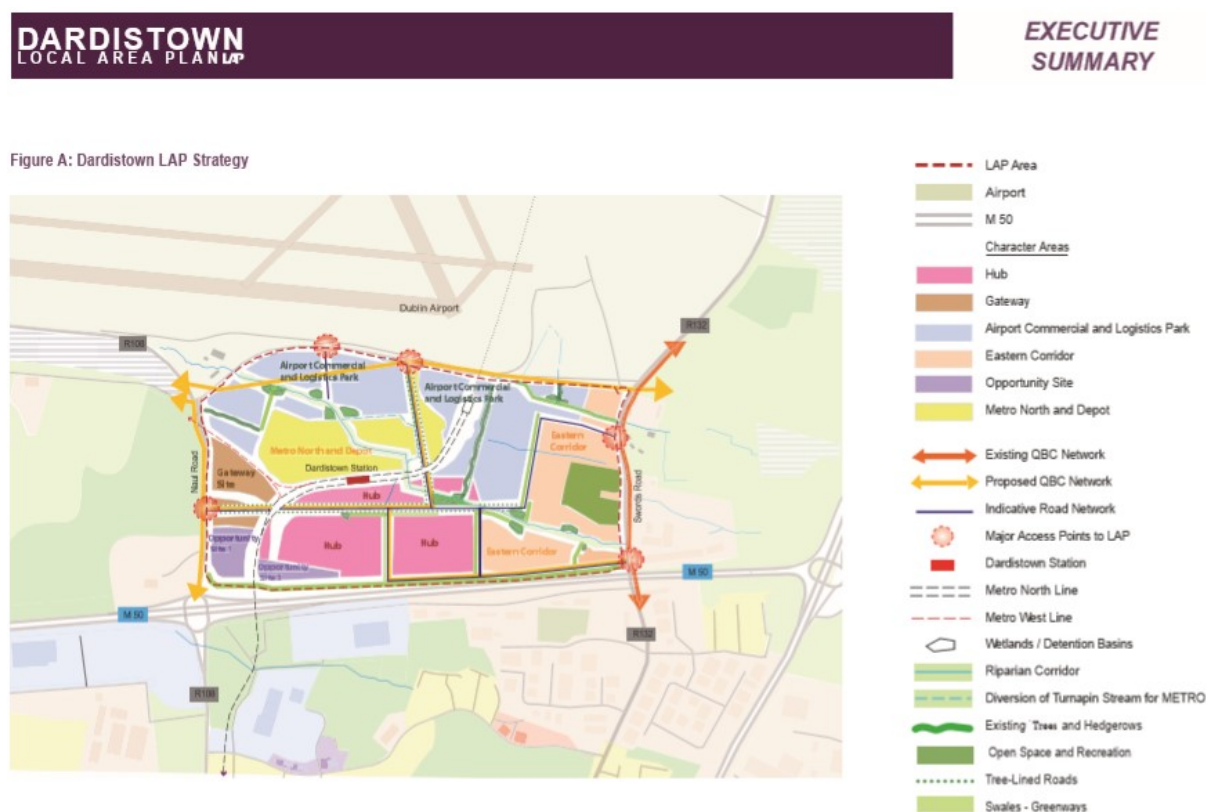
The Dardistown Local Area Plan (LAP) was adopted by Fingal County Council in December 2012 and seeks to facilitate and support the growth of the economy in Fingal through the development of this strategically located landbank between the City Centre and Dublin Airport. The land is primarily zone for general employment and high technology and the LAP provides an opportunity for the planned sustainable integration of land use, transportation and economic development.

The overarching vision of the LAP for the site is to:

*'provide for a strategic employment node, comprising inter alia, office research and development and high technology manufacturing, maximising opportunities presented by the lands strategic location well served by air, existing and planned high capacity public transport and the national road network, and all within high quality sustainable environment'.*

The strategy for the site is indicated in **Figure 3** below and indicates a number of uses on the Metropark site together with the adjoining lands. The strategy plan highlights an area for the proposed Metro North Depot site as approved by ABP under Railway Order PL6F.NA0007.

However, as Metrolink will be a new planning scheme, a new Railway Order and subsequent agreement with landowners will be required.



**Figure 3– Extract Dardistown LAP**

The LAP sets out the existing environmental context within which the site sits, followed by the setting of a strategic framework, movement strategy, sustainable development objectives, services and utilities required and finally, a phasing and implementation programme. The phasing and implementation

---

programme indicate that the entire LAP area which extends to c.154ha can provide approximately 7,265,639 sq ft of development at a plot ratio of 0.8.

Based on the feasibility study prepared by Foster and Partners (attached at **Appendix B**) on behalf of Comer Group, Metropark land, comprising some 86ha has the potential to provide up to 15,000,000 sq ft of development at a plot ratio of 1.5. This study or masterplan for the site therefore aligns with the strategy as set out in the Dardistown local area plan. Conversely and as indicated below, the provision of a maintenance depot on the Metroparks site would in our view go against or conflict with the core objectives of the plan.



## 5.0 THE CURRENT PROPOSAL – METROLINK

This section of the report provides an overview of the evolution of the Metrolink proposal to its current position, including an assessment of the Alignment Options Study Report 2018, Preferred Route Report 2019 and the Preferred Route Design Development Report 2019. Both of which were referenced from the Metrolink website and are available for download there, hence they are not included again here in this report or its appendices.

### 5.1 Alignment Options Study Report – June 2018

This report develops the concept engineering design for New Metro North (NMN) on the basis of the Emerging Preferred Route (EPR) that was identified during the NMN (now Metrolink) Alignment Options Study.

At Section 9 of the NMN Alignment Options Study the issue of a depot for the scheme is assessed. It states that a depot is required to store a fleet of vehicles which are not in use or which are being serviced. It sets out that:

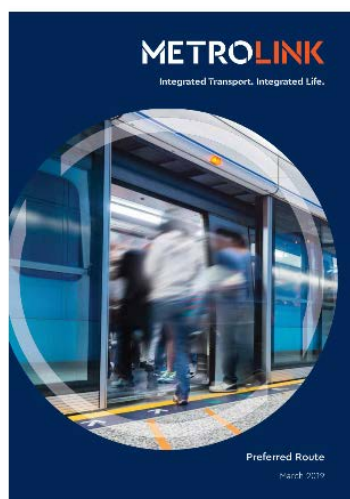
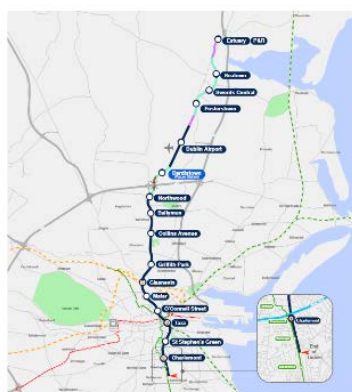
*‘The depot is located at the northern terminus of the NMN project. This location is chosen because it is located at the end of the proposed scheme in an area where the track is running at grade with green space available for construction.’*

The assessment goes on to set out all the functional requirements of the depot including sizing of components, power supply requirements and office and welfare facilities requirements.

Based on the above, it is considered that the northern end of the line was originally considered as the appropriate location for the depot, for the reason outlined but also, it would appear due to the fact that this is the normal approach on a metro development of this scale. Indeed, the comparable schemes referred to in Metrolink documents, namely Barcelona and Copenhagen, both have their depots at the end of the scheme. This is discussed in more detail later in the report.

Furthermore, the rationale for having the depot at the northern terminus of the development due to the fact that the track is at grade at this location would appear appropriate from both from a cost and environmental perspective as it minimises the need for additional tunnel entrance/exist shafts. Therefore, the location of the depot at Dardistown, where to facilitate the depot it is required to bring the scheme above ground, over the M50, through the Dardistown site before going back underground at the Airport would appear an unnecessarily complex and ultimately costly exercise when, clearly, the northern end of the scheme is seen as a viable option. This issue is discussed in more detail throughout the report.

### 5.2 Preferred Route Report – March 2019



The Preferred Route Report, March 2019 outlines that the National Transport Agency (NTA) and Transport Infrastructure Ireland (TII) confirmed the development of a north-south high frequency metro scheme for Dublin, essentially combining the Metro North scheme and the Metro South scheme. It confirms that consultation took place in March-May 2018 on the emerging preferred route and feedback provided has been taken on board, resulting in the publication of a preferred route. As part of the consultation it was indicated that a

number of significant design decisions remained under consideration, including the depot location and crossing the M50.

At Section 7.7 of the report, it confirms that the metro will now;

*'rise out of a tunnel after Dublin Airport and the whole alignment from Dardistown to Ballymun has moved slightly to the west.'*

The report goes on to state that;

*'Estuary was originally proposed as the site of the main train depot, but we now consider that Dardistown is a more efficient location for managing train storage. The area has been zoned for employment in the Local Development Plan and we propose to build the station when it is further developed.'*

Whether or not the Dardistown site is a more efficient location for the siting of the Depot is questionable based on comparable metro schemes, upon which Metrolink is based. Indeed, it is considered that the location of the depot along the route rather than at the end point is far less efficient and results in the running of empty trains between terminus points and the depot location.

It would appear that the zoning of land was also a factor in considering Dardistown a more appropriate location. However, land at Estuary where the depot was originally proposed is covered within the Metro Economic Corridor zoning and while logistics are not covered in the permitted in principle category for this zoning, there are significant other factors which would suggest that the alternative site at estuary is a very feasible and appropriate location for a facility of this nature, including cost, efficiency, impact on a strategic landbank and indeed proper planning and sustainable development.

Finally, at Section 7.7, the report states that;

*'This change informed the decision on whether to go under or over the M50 at the R108 interchange as was discussed during the Emerging Preferred Route consultation. Now that Dardistown is the site of the depot and the trains will be on the surface, it makes sense to cross over rather than under the M50.'*

Whilst being an applicable point, should the depot be located at Dardistown. It would no longer apply if the depot is relocated. The locating of the depot to an alternative site i.e Lissenhall or Estuary would facilitate numerous cost efficiencies in that the line could be kept underground through the Dardistown site save for the potential future Dardistown Metro stop. The rationale for the various cost efficiencies or inefficiencies in the current situation or proposal are detailed later in this report (see Section 7.1.8).

### 5.3 Preferred Route Design Development Report – March 2019



In 2018 a Public Consultation was held on Metrolink so that stakeholders could have the opportunity to make comments and submit ideas and concerns in relation to the project. Almost 8,000 submissions were received, the majority of which (5,297) related to the use of Na Fianna GAA grounds in Glasnevin as a tunnelling launch site.

The report at Section 1.4 identifies a number of changes that have taken place since the publication of the emerging preferred route. The preferred route retains a broadly similar corridor but does include specific changes including the relocation of the depot from Estuary to Dardistown and a different tunnel construction proposal, with two separate tunnels proposed, one under the airport and one driven southward from Northwood into the city.

There appear to be a number of reasons as to why Estuary is no longer the preferred location. At Section 6.1 it is stated that;

*'The location of the planned Swords Western Distributor Road (SWDR) would restrict opportunities for the depot at Estuary. If the depot was to be located north of the SWDR, then this road would need to pass over the rail link thereby potentially creating more difficult road access into the Estuary Station and associated Park and Ride. Alternatively, Metrolink would need to pass under the SWDR. If the depot was to remain south of the SWDR then the location of the depot would need to extend further west and would directly impact the Emmaus Centre.'*

This section goes on to confirm that Dardistown (which would be more central to the overall metro route) would provide associated benefits to the operation and maintenance of the metro such as:

- The depot at Dardistown reduces travel distance to establish the train start locations for daily operations.
- Dardistown reduces the empty kilometres for removing trains from service during inter-peak periods.
- Provides the ability to address operational issues more quickly.
- Removes the risk of an incident on track between Estuary and Dardistown blocking access to the maintenance depot for other trains.
- The more central location of Dardistown offers faster access to most areas of the route for maintenance activities, maximizing available working time on the route before scheduled services restart;
- A depot at Dardistown will reduce the total distance run by empty trains to establish start of daily services and conclude services in the evening with trains being stabled overnight, compared to a depot at Estuary. Although the difference in distance is not large, it does marginally benefit from a depot at Dardistown. The saving in distance travelled will also represent a small operational cost saving for the Operator.
- The Depot's location at Dardistown has less environmental impacts than the location at Estuary, with reduced potential for impacts on biodiversity and other sensitive receptors having regard to noise, air quality and water. Furthermore, there would be less impact on properties and a reduced potential for impact on traffic.
- From a planning perspective, both the Estuary and Dardistown locations fall within lands zoned for development.

Overall, it is considered that the benefits identified for choosing Dardistown over Estuary as the proposed site for the Metrolink depot are at best marginal given the relative proximity of both sites to each other. Furthermore, when considered within the context of the potential for development at Dardistown as detailed throughout this report, and the wider implications of the impact on the developability of a highly strategic site, then it is questionable as to the extent of the benefits of choosing Dardistown. Indeed, this is notwithstanding the fact that in order to facilitate the depot at Dardistown, two sections of tunnel need



to be constructed as opposed to the possibility of one tunnel section from north of the airport, south to Charlemount, in the event that the depot was located at Lissenhall.

## 5.4 Metrolink – The Proposal

MetroLink is a proposed high-capacity, high-frequency rail line running from Swords to Charlemont, linking Dublin Airport, Irish Rail, DART, Dublin Bus and Luas services, creating fully integrated public transport in the Greater Dublin Area. As well as linking major transport hubs, MetroLink will connect key destinations including Ballymun, the Mater Hospital, the Rotunda Hospital, Dublin City University and Trinity College Dublin.

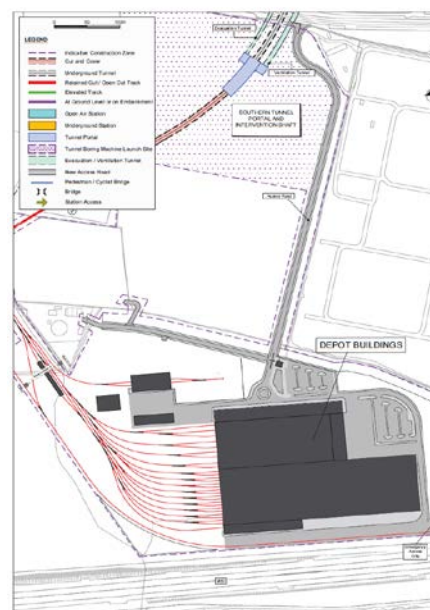
Much of the 19-kilometre route will run underground. It is proposed that MetroLink will carry up to 50 million passengers annually, cutting journey times from Swords to the city centre to 25 minutes.

**Figure 4** provides an overview of the entire route.



**Figure 4– Preferred Route overview**

- 9 lanes of 450m for stabling, 6 lanes of 350m into the maintenance building and 350m of track for maintenance vehicles and deliveries.
- building, 15m high with a floor area of c1,300m<sup>2</sup>.
- Infrastructure maintenance building, 13m high with a floor area of 3,000m<sup>2</sup>.
- Vehicle maintenance building, 13m high with an area of 10,000m<sup>2</sup>
- Inspection/sanding building 9m high with an area of 900m<sup>2</sup>.
- Radio antennae at the western end of the depot circa 30m in height.
- 180 parking spaces for staff, 300 car parking spaces for park and ride.
- **Figure 5** over provides an outline of the proposed depot on the Metropark site



**Figure 5– Outline Depot Design on the Metropark site**

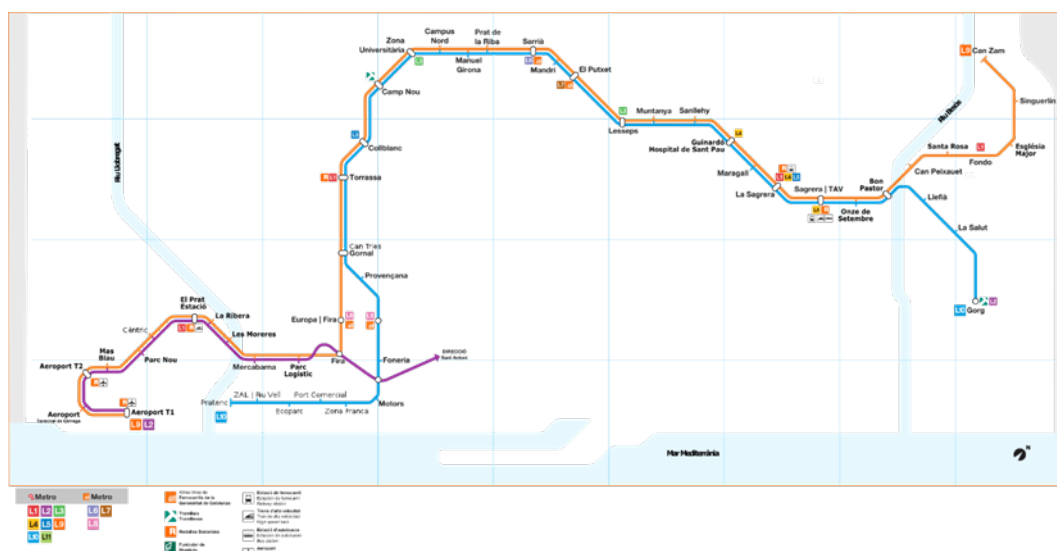
## 5.5 Comparable Schemes

In the context of reviewing Depot locations in comparable schemes we have along with CPMS identified multiple examples of comparable metro schemes to the proposed Dublin MetroLink, all of which have end of line depots and are similar in terms of:

- City based location

- Linear route layout
- Route length and/or number of stations
- Proposed service frequency

However, two of particular interest are Barcelona and Copenhagen (**Figure No. 6 and 7 below**), which are both named in the Emerging Preferred Route report as schemes which the Dublin Metro has been modelled on. Although it is noted this broad statement could relate to any number of characteristics of the two metro systems, it is worth noting that both of these have a depot at the end of the line for seemingly similar reasons that would justify the same arrangement on Metrolink.



*Figure 6: Barcelona – Depot @ Pratenc/Can Zam:*



*Figure 7: Copenhagen – Depot @ Vestamager:*

Depots are traditionally located at the end of the line for various reasons inclusive but not limited to (all of which can be deemed applicable to the proposed Dublin Metrolink scheme):

- Cheaper land often available away from the city/central section of the route
- Operational benefits particularly with high frequency of service
- Land availability for stabling of trains out of service

- Less restrictions to out of hours operations due to the proximity of sensitive noise receptors.

The final point made above is particularly important to the Metropark site, due to the future planned or potential strategic development into a mix of commercial and residential buildings. An operational depot at Dardistown is not only likely to result in high land sterilization (as referenced throughout this report) but will also result in significant restrictions on what can be built on the surrounding land. Examples of UK city-based train depots can be found below at **Figures 8 and 9**, where such buildings are not found nearby, primarily due to the reasons outlined above.



*Figure 8 - DLR Depot – North Woolwich/Beckton, London*

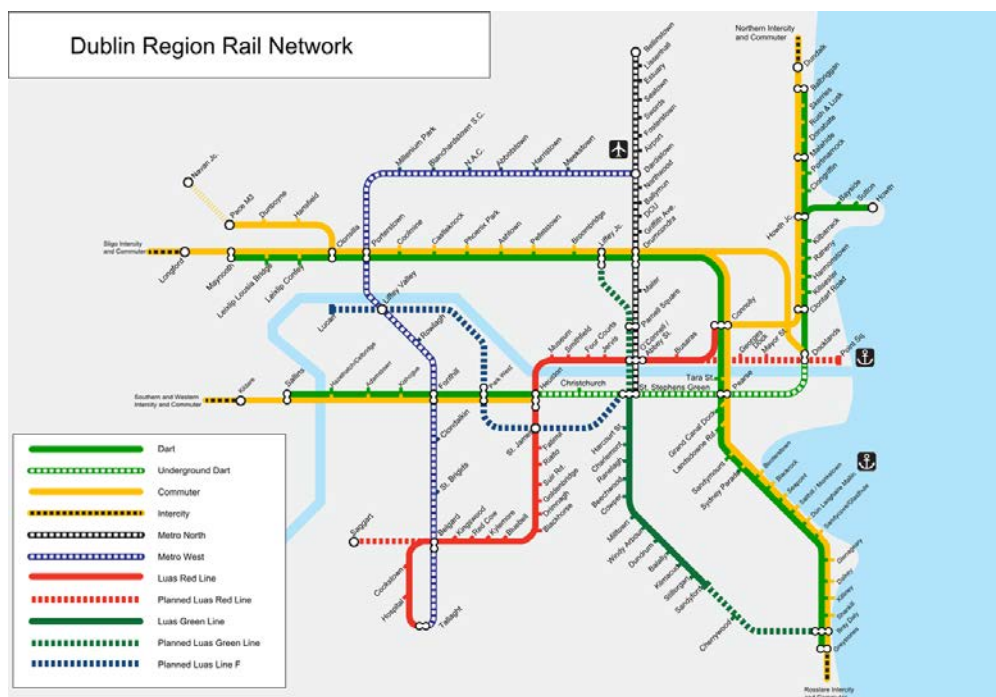


*Figure 9 - Eurostar Depot – Temple Mills, London:*

As is clear from the satellite images above, no significant development can be found within close proximity of the train depots. It is fair to consider there was none before and based on the central London location, that no development has been deemed feasible since. The impact of the Dardistown depot is likely to have a similar sterilization effect on the surrounding land.

The depot at Dardistown, and the original decision for re-location there, also appears to be linked to the once proposed future integration of Metro West into the scheme, as per the schematic below:

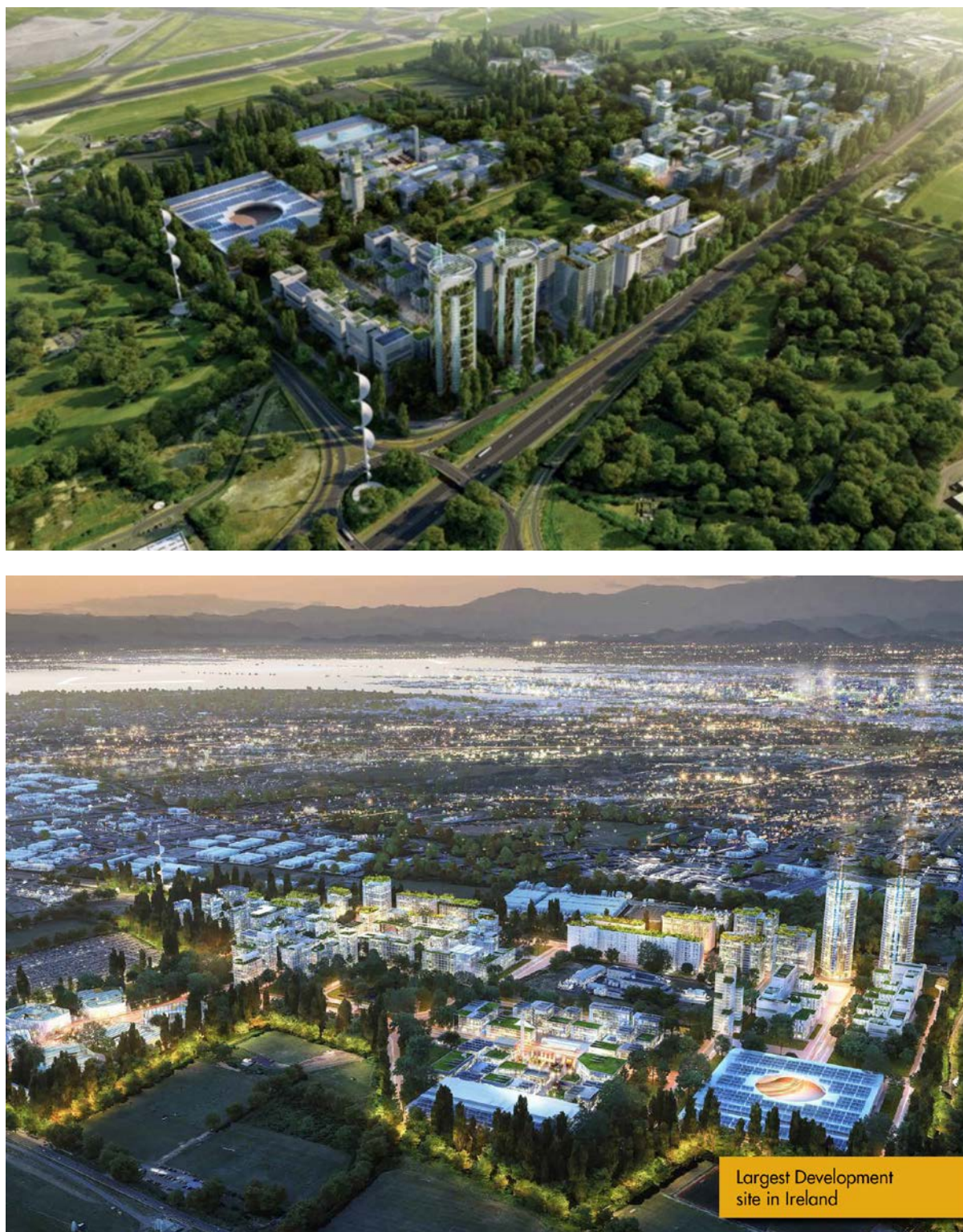




**Figure 10: Integrated schematic of existing and proposed Dublin rail routes**

In original planning documentation (see Section 3.1.2, ABP Report PL6F.NA0003), the significance of the Metro West scheme to the Dardistown depot location was highlighted as extremely important from a strategic perspective. However, critically, it also noted and was right to do so, that a combined depot without full approval for both schemes could result in greater contractual risk and shouldn't be progressed.

## 6.0 METROPARK – DEVELOPMENT POTENTIAL



*Figure 11 - Masterplan Overview imagery*

Metropark is considered to be one of the most strategic development sites within the greater Dublin region. It comprises 83ha (206 acres) of land in one ownership located in close proximity to Dublin City and immediately adjoins Dublin Airport, which is now, and will continue to develop into, a major international transport hub. Furthermore, the location of a station, at Dardistown, under the current



Metrolink proposals means the site has the potential to be one of the most strategically located and therefore sustainable, mixed use/multi-modal transport hubs in the country.

The development of such a flagship project, akin to Cherrywood in south Dublin, but arguably in a more strategic location, provides and unrivalled opportunity to provide high-quality mixed-use development incorporating residential, commercial, employment and recreational uses. Indeed, similar to other major airports around the world, the development has the potential to further enhance Dublin Airport as not just a commuter hub but turn it into a major 'Airport City Region'.

To this end, Comer Group engaged Foster + Partners to prepare a Concept Masterplan Study for their Dardistown site in order to provide an indication of the nature and scale of development that can be accommodated on the site, all the while being mindful of the particular constraints that exist in this location.

In summary, the study (**attached as Appendix B**) found that the following:

- The site, adjacent to Dublin Airport can accommodate large building plots and has the capacity to provide a number of distinct interlinked zones, including a tech campus, cultural quarter, wellness quarter, a business park and an innovation hub.;
- The development, if granted planning, would be the first view of Dublin/Ireland for arriving visitors and would make a strong impression;
- Constraints on the site require further investigation, but;  
The site has the potential to provide 15,000,000 sq ft of development, accommodate 4,400 people and provide employment space for 40,000.

A high-level indication of the potential breakdown of development on the site is included below and in summary at **Appendix C**.

## 2.5 Development brief breakdown

Detailed programme

| Cluster             | Block Area |            | General Enterprise (GE) |           | Private Rental Area |           | Social Housing |         | Retail |         | Proposed development brief |           | High Technology (HT) |           | Culture   |            | Total GFA |           | Plot Coverage |   | Plot Ratio |  |
|---------------------|------------|------------|-------------------------|-----------|---------------------|-----------|----------------|---------|--------|---------|----------------------------|-----------|----------------------|-----------|-----------|------------|-----------|-----------|---------------|---|------------|--|
|                     | sq ft      | sq m       | sq ft                   | sq m      | sq ft               | sq m      | sq ft          | sq m    | sq ft  | sq m    | sq ft                      | sq m      | sq ft                | sq m      | sq ft     | sq m       | sq ft     | sq m      | %             | % |            |  |
| 1- Business Park    | 134,749    | 12,561,148 | 223,820                 | 2,439,250 | 133,064             | 1,970,483 | 8,900          | 102,257 | 6,014  | 64,734  | 79,221                     | 8,227,238 |                      |           | 1,500     | 139,117    | 562,827   | 5,412,205 | 30            |   |            |  |
| 2- Tech Campus      | 51,828     | 5,007,725  |                         |           | 31,128              | 3,555,277 |                |         |        |         |                            |           | 65,811               | 6,139,999 | 1,281     | 139,138    | 196,007   | 1,145,154 | 30            |   |            |  |
| 3- Cultural Village | 69,097     | 7,909,341  | 17,873                  | 1,643,363 | 6,903               | 74,917    | 7,384          | 79,481  | 17,024 | 183,454 | 10,434                     | 1,122,338 | 31,535               | 2,932,778 | 55,014    | 5,145,196  | 1,373,273 | 8,136,443 | 28            |   |            |  |
| 4- Innovation Hub   | 191,891    | 17,600,389 | 197,721                 | 2,128,359 | 136,704             | 1,400,726 | 26,595         | 215,454 | 6,590  | 70,504  | 21,124                     | 2,272,377 | 92,878               | 8,642,996 | 3,800     | 35,179     | 477,277   | 5,136,443 | 28            |   |            |  |
| 5- Wellness Quarter | 750,037    | 6,950,759  | 34,323                  | 3,161,023 |                     |           |                |         |        |         |                            |           | 54,553               | 5,059,114 | 17,835    | 164,735    | 1,157,125 | 1,119,054 | 28            |   |            |  |
| TOTAL               | 1,178,502  | 11,446,349 | 475,716                 | 5,121,027 | 356,650             | 3,841,134 | 37,172         | 403,141 | 39,640 | 424,463 | 116,140                    | 1,100,539 | 243,774              | 2,245,427 | 1,543,780 | 14,464,349 |           |           |               |   |            |  |

GE = Based on LAP brief, Objective GE - 'Provide opportunities for general enterprise and employment'

HT = Based on LAP brief, Objective HT - 'Provide for office, research and development and high technology / high technology manufacturing type employment in a high quality built and landscaped environment'

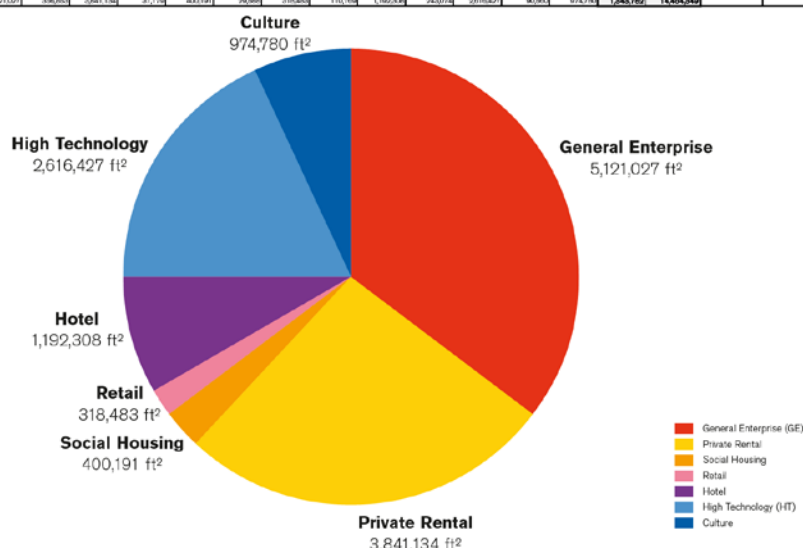
## Total GFA

14,464,349 ft<sup>2</sup>

## Total Plot Ratio

1.4

Note: These are initial gross external areas which should be verified by a Quantity Surveyor.



**Figure 12 - Development potential as outlined in the Foster and Partners Feasibility and Master plan Report**

Therefore, it is clear that the site offers significant potential, with a team of developers who are positioned and funded to deliver on this potential. The site benefits from a strategic location with a major piece of



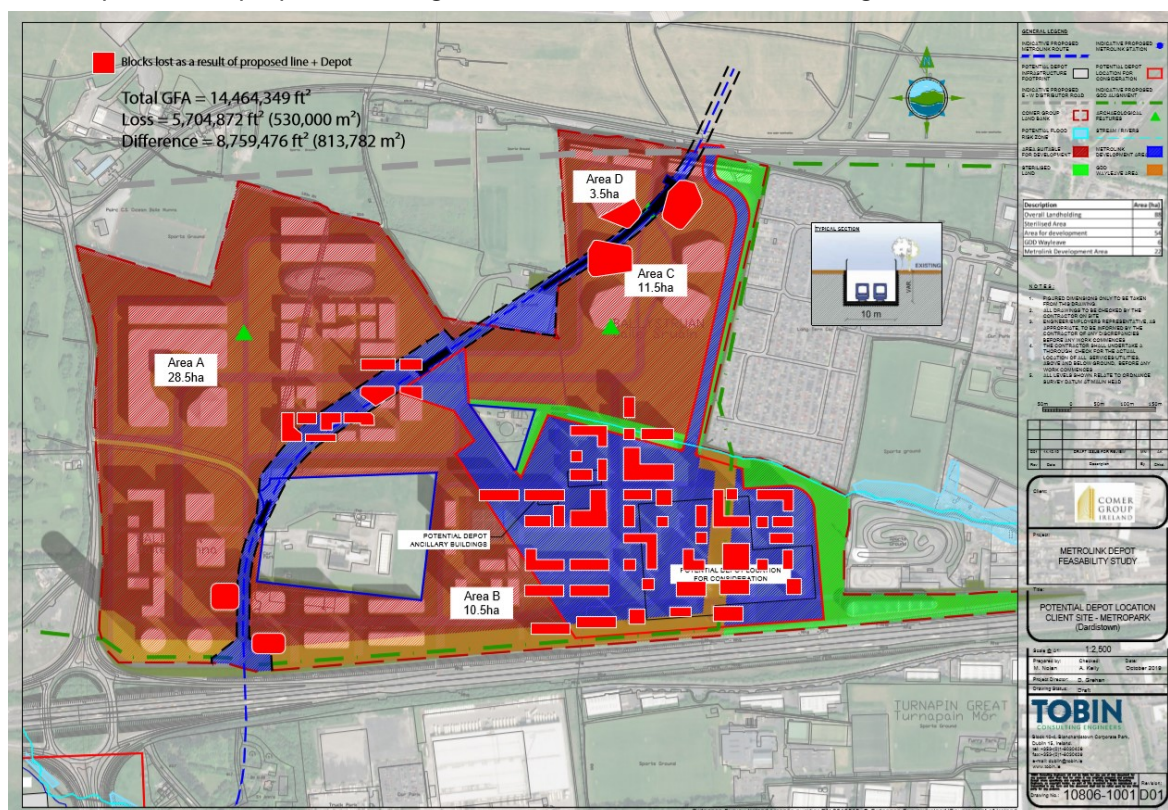
proposed public transport infrastructure due to traverse the site. Proper planning and sustainable development are an increasingly important concept in Dublin if it is to continue to grow sustainably, be competitive and be an attractive place to live and work.

A high-quality mixed-use development, at a major transport hub is therefore a rare opportunity not to be missed and every step should be taken to ensure the potential of this site is delivered on.

Indeed, the potential of the site has been earmarked for a number of years, including within successive Fingal County Development Plans and even more so in an Indecon study prepared for Fingal County Council in 2008, titled *'The Development of an Internationally Sustainable Airport City Region'*. The study recognises the importance of Dublin Airport and the unique opportunity that Metro North (now Metro Link) provides to ensure that the economic, cultural and social benefits that such a piece of infrastructure are delivered. The study makes specific reference to the Dardistown site (Metropark) and has a number of relevant recommendations including the following:

- i. To support the desired increase in population and employment in the Metro North Economic Corridor (MNEC), the Swords, Lissenhall, Dublin Airport, Eastlands and Metropark sites should each be targeted for future development;
- ii. Development at the Metropark site should be concentrated in high technology manufacturing, science and technology as well as other high value services.

Since the completion of the study, the shortage of housing and the need to further enhance our approach to sustainable development means the provision of residential accommodation at this location should not be overlooked. Ultimately, such a development will provide a return on investment to the State and any potential diluting of, or restriction of this potential by way of lesser value development in such a highly strategic location needs to be looked at closely. **Figure 13 (also included as Drawing 1008 at Appendix A)** below provides an indication of the possible impact of the depot on the development potential of the site. In summary of the potential 14,464,349 square feet of development some 40% would be lost as a result of the depot and the proposed above ground metro link in its current arrangement.



**Figure 13- Development potential reduced as a result of the potential depot located on these lands.**

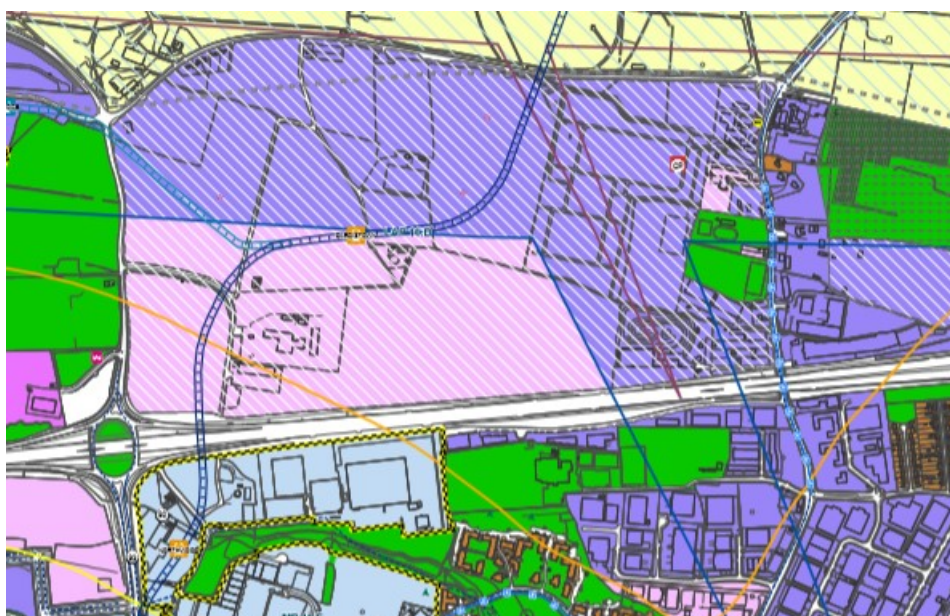
## 7.0 SITE ASSESSMENTS

This section of the report assesses the currently proposed site for the location of the depot at Dardistown, together with a number of other alternative sites as previously noted in the report, to the north and south of the existing location. Given the nature of the Metrolink depot, and the land required to accommodate the depot and ancillary facilities, a number of criteria were considered when examining viable alternatives. However, the primary requirement is the need for a suitable quantity of land in close proximity to the proposed metro line. It would not be viable to consider sites that are developed or in an urban setting.

### 7.1 Proposed Dardistown Depot Site

#### 7.1.1 Zoning & Planning Context

The Dardistown site is zoned within the Fingal County Development Plan 2017-2023 for General Employment and High Technology. These uses permit a wide range of employment generating development types including warehousing, logistics, petrol filling station, car sales, enterprise centre, office space and research and development. The site is also the subject of the Dardistown LAP 2013. **Figure 14** below provides an overview of the zoning of the site.



*Figure 14: Dardistown Zoning*

#### 7.1.2 Environmental

The Dardistown site is located within an urban environment, south of Dublin Airport. From a desktop study review the site appears to be dominated by arable crops. The land parcels are divided by treelines, hedgerows and/or roads or avenues. There are buildings and artificial surfaces immediately west of the site and there also appears to be a small active quarry to the south west, adjacent to the “Northside Test Centre”. The site is bordered by the M50 motorway to the south. To the north east of the site lies the “Quickpark” carpark for Dublin Airport.

There is one 1<sup>st</sup> order watercourse located along the northern boundary of the Dardistown site; Mayne Stream (Water Framework Directive [WFD] Name: Mayne\_010, European Code: IE\_EA\_09M030500). The WFD ecological status (2010-2015) of this watercourse is “poor”. It is located within the Liffey and Dublin Bay catchment and flows out to sea via the Baldoyle Estuary and Nature Reserve, approximately 7.5km east of the site. The Baldoyle Estuary and Nature Reserve forms part of the Baldoyle Bay Special Area of Conservation (SAC) (Site Code: 000199) and Baldoyle Bay Special Protection Area (SPA) (Site Code: 004016).



There are no protected sites within or adjacent to the site. The closest protected site is the Santry Demesne (Site Code: 000178) proposed Natural Heritage Area (pNHA) approximately 330m south of the Dardistown site. This pNHA comprises the remnants of a former demesne woodland. The primary importance of this pNHA is that it contains a legally protected plant species (Hairy St. John's Wort [*Hypericum hirsutum*]). The woodland, however, is of general ecological interest as it occurs in an area where little has survived of the original vegetation.

### 7.1.3 Roads & Traffic

The lands off the R108 and Old Airport Road/Collinstown Lane would likely be primarily accessed by the M50 and R132 roads to access a depot/park and ride facility at the Dardistown site. Both the R108 and Old Airport Roads/Collinstown Lane are typical type 2 single carriageway roads and any access to the park and ride/depot would be less than 1km from access onto or from the M50.

In order to facilitate the development of the park and ride/depot consideration would need to be given to upgrading both R104 and Old Airport Roads along with the junctions at either end of the Old Airport Road/Collinstown Lane. A 300 unit park and ride and catering for 50-100 staff at the depot location would have an impact on the traffic in the area based on the current arrangements and direct access to the site would also be an issue.

It should be noted that the Dublin Airport – Local Area plan 2019 currently has the Old Airport Road/Collinstown Lane listed as a Core Bus Corridor (CBC) Upgrade route indicating that proposed works are being considered in this area.

The South Fingal Transport Study does make some comments on the upgrade works;

*“An Alternative access into Dublin Airport via the R108 and Collinstown Lane may be a practical solution to the issue of over-reliance on the M1 Airport Spur. A good standard of peripheral road network is desirable from an airport planning perspective. However given the competing demands for road network capacity with possible shuttle bus services serving airport parking expansion in the west and from the planned CBC2 scheme on the R132, there are concerns regarding the ability of this route to cater for general traffic capacity related to 40-55mppa levels of demand. It is recommended that these constraints are considered as part of a more detailed evaluation of the feasibility of this route as a robust secondary Dublin Airport access.”*

Adding additional capacity to the R108 and Collinstown Lane in light of the above may cause significant issues unless full development of the N2 Airport Western Link is undertaken as per Dublin Airports draft Local Area Plan (Sept 2019).

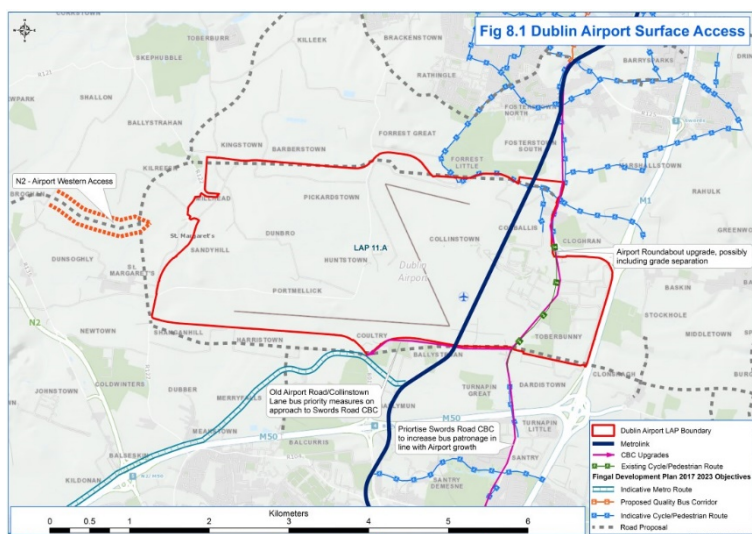
This Local Area Plan recommends a Western Access to accommodate future long-term parking expansion and any potential future 3rd terminal and would target Dublin Airports reliance on the M1/R132 link as demand continues to grow.

As per the South Fingal Transport Study above, the Airport Local Area Plan similarly intends that “the Western access would provide access to the car parks only, with the final leg of the trip i.e. from the car parks to the terminal building, being completed by shuttle bus.” This backs up the Core Bus Proposal route outlined in the South Fingal Transport Study and impacts the benefits of a park and ride at the Dardistown Site removing a key link to/from the east of the site.

As per the alternative Site 1 (Land off St. Margaret’s Road – Sillogue) which is outlined in Section 7.2 of this Report, an issue with the siting of a park and ride facility just off the M50 is that there would be no reduction in usage of the M50/M1 link and as such may not be utilised as drivers would be required to travel half the length of the overall metro scheme by car before reaching a park and ride facility



Adding additional capacity to the R108 and Collinstown Lane in light of the above may cause significant issues.

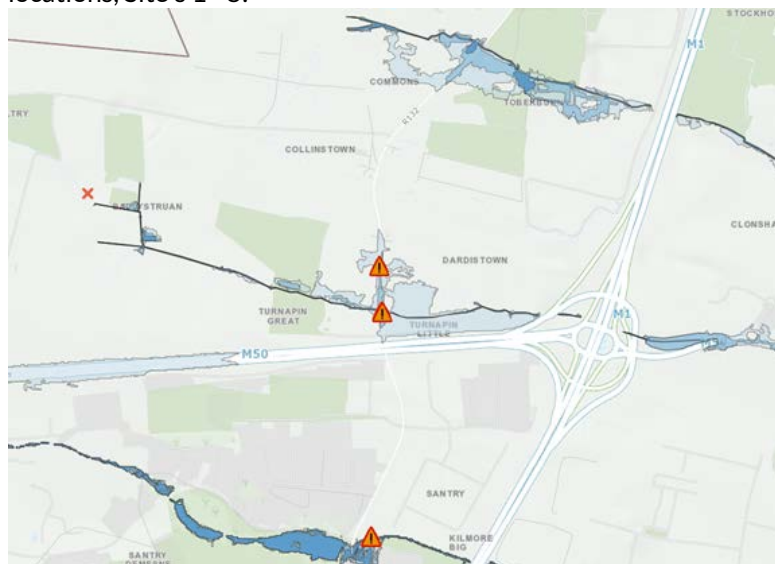


**Figure 15- Dublin Airport Surface Access**

### 7.1.4 Flooding

A tributary of the Moyne River runs through the proposed site in Dardistown. It runs adjacent to the North boundary of the proposed Metrolink Development Area. The tributary is indicated as having a medium risk of flooding on CFRAMS at the proposed Metrolink area.

There have been two flood events adjacent to the Dardistown site, as indicated in Figure 13 below. The incident at the Mayne M50 flyover, adjacent to the old Airport Road (R312), was low level flooding incident. Further North along the R312 a flooding incident occurred in November 2002, with localised flooding of the road. There is a residual risk of low-level flooding on the northern side of the M50 bordering the Dardistown site. There have been no recent recorded flood incidents at the alternative site locations, Site's 1 –5.



**Figure 16: Dardistown Flooding Map**

### 7.1.5 Rail

The Emerging Preferred Route specifies the tunnelled section surfacing south of Dublin Airport before continuing over the M50 via a flyover structure. The track is proposed to curve slightly creating a total

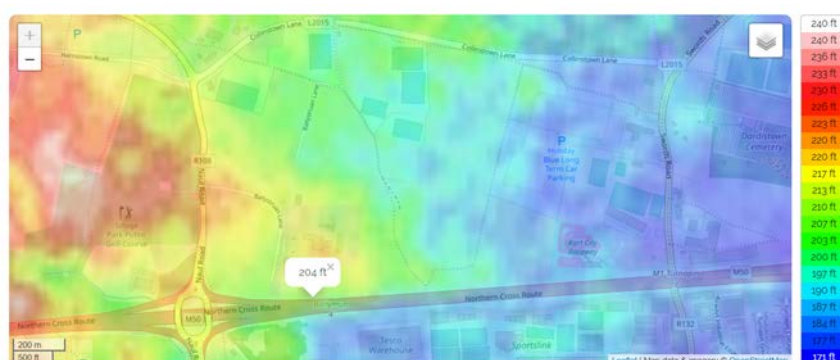
length of approximately 1,500m to travel through the 1,000m distance from the north to south border of the land in question.



**Figure 17- View North from the M50**



**Figure 18- View South from Dublin Airport**



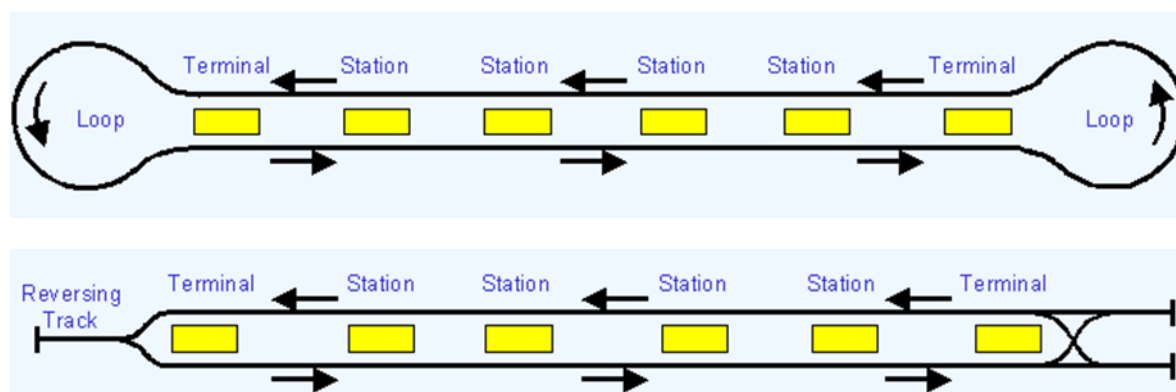
**Figure 19- Estimated Topographical Layout (source: [www.topographic-map.com](http://www.topographic-map.com))**

The current preferred route will present various technical compliance challenges, particularly with regards to gradient restrictions (both in open route and at the tunnel portal) whilst also having a direct impact on the required track length to maintain technical compliance. Emergency escape routes are likely to be required at the tunnel portal in addition to an allocated rescue point of a certain size (circa 500m<sup>2</sup> minimum) at the end of each escape route.

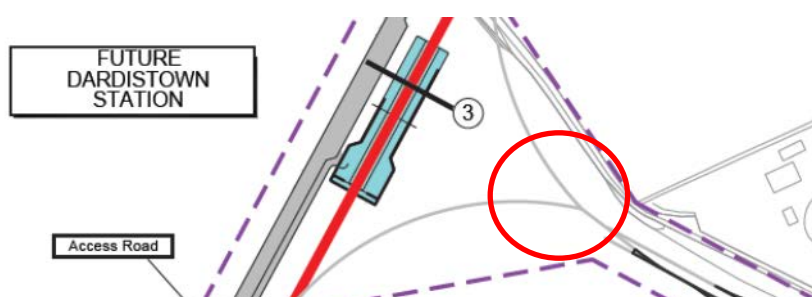
The tunnel portal proposed south of Dublin Airport will not only mean the tunnel boring machine (TBM) will need to be surfaced more often than originally proposed but will also result in an increase in land

usage due to the requirement for an additional TBM launch site. Disruption to the already extremely busy M50 is also unavoidable through the construction of a flyover structure.

Operationally, additional Empty Car Stock (ECS) movements may be required by placing the depot at Dardistown (as opposed to either end of the line) to get rolling stock in place for commencement of services, depending on the planned service pattern. A loop or crossover at each end will almost certainly be required (regardless of depot location, see Image 4) to achieve the desired service frequency. This is likely to result in a net higher land acquisition than would be required if the depot was located at the north end of the route. The route layout into the Dardistown also appears to narrow to a single track at one point which further constrains movements in and out of the depot (see Image 5). This also presents significant performance risk as there is no operational contingency measure/alternative should there be any issues with the infrastructure at this pinch point.



*Figure 20- Typical route layouts and operational arrangements for high frequency metro service*

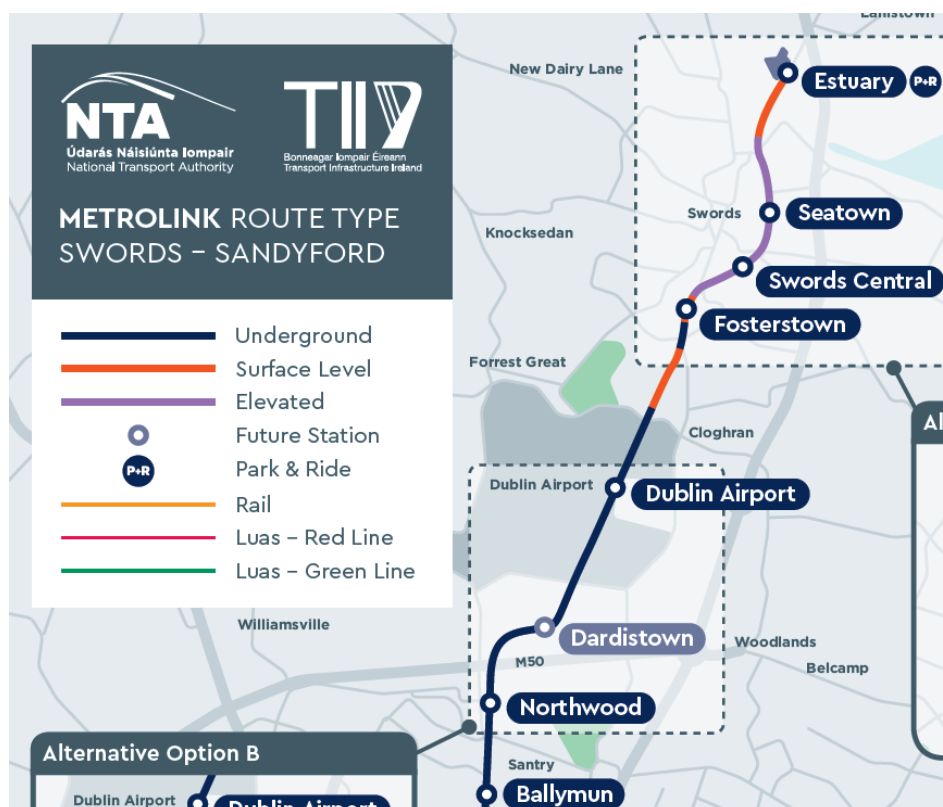


*Figure 21 - Single track pinch point on the route in/out of the proposed Dardistown Depot*

The Emerging Preferred Route will result in the requirement for 2 no. additional tunnel portals, which according to a recent HS2 tunnelling report (LWM-HS2-HY-PPR-000-000076-P02B – HS2 A Guide to Tunneling Costs), come at a cost of €25-70m each which is significantly higher than budgeted within the design development and tunnel optioneering reports. In addition to the cost of the portals, the creation of two separate tunnels to enable a depot at Dardistown will remove several economies of scale made possible by the single tunnel originally proposed.

In addition to the above, the proposed two tunnel approach also results in the requirement to surface and re-launch the TBM. Therefore, further additional construction methodology driven costs will also be incurred over and above the fixed costs of the additional portal assets detailed above.





*Figure 22- Previous single tunnel proposal showing the route through Dardistown and beyond as underground*

As stated in Section 4, to achieve gradient compliance for the route and the depot at Dardistown, a significant increase in track meterage may be required, which appears to be circa 500m according to the Emerging Preferred Route layout. Not only will there be the cost of the additional infrastructure, but also the cost of additional land acquisition to facilitate construction.

The operational implications of the proposed depot location at Dardistown is likely to result in a net higher operational expenditure than an end of the line depot location. Lessons learned from elsewhere demonstrate the cost of the required ECS movements can contribute significantly to the average cost per journey and would be unavoidable with a centrally located depot. Considerations should also be made to both the local demographic of the area in Dardistown and transport links to ensure ease of access for future staff.

Although difficult to quantify the additional costs without a full set of information to base estimates on, a number of key design principles aligned to minimising costs are contradicted or ignored with the proposal to construct a depot at Dardistown.

The intention of the Comer Group is to develop the site into a mix of residential and commercial buildings. The proposed depot will result in a significant negative and restrictive impact to these proposals due to the consequential sterilization of the land.

It is highly likely the land will not be able to be developed if the proposed scheme goes ahead, however a breakdown of the direct sterilization from the proposed layout has been detailed in **Table 2** below:

| Depot Component   | Estimated Loss of Land (m2) | Commentary   |
|---|-----------------------------|--|
| Depot Footprint   | 180,000                     | Based on drawings*/layout summary**                    |
| Route Track inc. Embankments  | 40,000                      | Based on drawings*/layout summary**                    |
| Access Roads  | 10,000                      | Based on drawings*/layout summary**                    |
| Noise/light/vibration pollution   | N/A                         | Large impact on adjacent buildings                     |
| Ancillary loss of usable areas as a result of the depot and overground line | 40,000                      |  |
| TBM launch site   | 60,000                      | Temporary loss   |
| Station construction  | 10,000***                   | Some would be temporary loss only<br>*** Estimate only |
| <b>Total</b>  | <b>340,000</b>              | Refer to Drawing 1008 for details of areas             |

\*As per Emerging Preferred Route – Individual Route & Station Maps

\*\* As per An Bord Pleanála Ref.: 06F. NA0007, 2011

**Table 2- Loss of site area (land with development potential) as a result of the current preferred route**

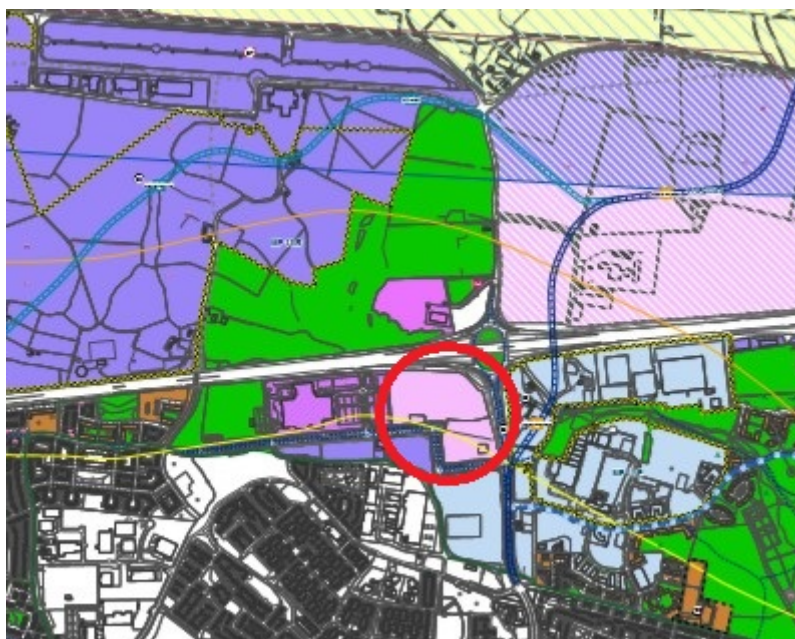
In addition to the physical loss of land from the depot proposals, it is highly likely significant restrictions will result as a consequence of an operational depot being located at Dardistown. It is highly undesirable for residential and commercial tenants/occupants to have a 24/7 operational train depot in close proximity to their property, and therefore demand for such property in this location is likely to be limited if the proposed depot at Dardistown goes ahead.

## 7.2 Site 1 – Land off St. Margaret’s Road - Sillogue

In the following sections we present a number of alternative sites for consideration for the development of a depot for Metrolink, the first of which is Site 1 located off St. Margaret’s Road in Sillogue as shown on **Figure 14. Drawing No. 10806-1004** indicatively highlights the site location.

### 7.2.1 Planning Policy

The site in question is currently owned by Dublin City Council and is zoned for ‘HT’ – High Technology. High Technology uses are generally uses that provide employment in the areas of research, technology and manufacturing in a high quality setting. As such, the provision of a depot for the purposed of serving Metrolink would not be in keeping with the zoning of the site and therefore it would be difficult to secure the relevant planning permission. See **Figure 15** which indicates the zoning of the site.



**Figure 23: Sillogue Zoning Fingal County Development Plan 2017-2023**

### **7.2.2 Environmental**

Similarly, to the Dardistown site, the Sillogue site off St. Margaret's Road is also located within an urban environment. It is situated south of the M50 motorway and east of an IKEA store and is bordered to the south by St. Margaret's Road. From a desktop study review, the site appears to be undulating and contains a mosaic of scrub, recolonising bare ground, and improved grassland habitats. There are also two mature treelines running through a lower section of the site, possibly bordering drainage ditches.

There is one 1<sup>st</sup> order watercourse crossing the north east corner of the site in question; Santry Stream (WFD Name: Sanrty\_010, European Code: IE\_EA\_09S010300). The WFD ecological status (2010-2015) of this watercourse is "poor". It is located within the Liffey and Dublin Bay catchment and flows out to sea via the North Bull Island SPA (Site Code: 004006) and North Bull Island SAC (Site Code: 000206), approximately 7.8km south east of the site.

There are no protected sites within or adjacent to the site. As was the case for the Dardistown site, the closest protected site is also the Santry Demesne (Site Code: 000178) pNHA which is located approximately 555m east of the St. Margaret's Road site. The Santry Stream which flows through the St. Margaret's Road site, continues to flow eastward from the site and through this pNHA.

### **7.2.3 Roads and Traffic**

The lands off the R104 St. Margaret's Road - Sillogue, adjacent to the IKEA/Decathlon development are facilitated by a significant urban link road to cater for future site development. The R104 from the junction with the R108 to the Hampton Woods development consists of a 2-lane urban dual carriageway with turning lane provision at junctions and separate cycle/pedestrian facilities and is served by bus routes.

The site has easy access both onto and from the M50 (less than 1km from any proposed entrance to a depot). A proposed 300-unit park and ride and catering for 50-100 staff at the depot location may have any significant impact on the traffic in the area in particular on the capacity of the R104/R108 junction and would require potential junction upgrade works to be assessed

The R104 St. Margaret's road would require an upgrade to provide for turning movements into and out of a proposed depot if an independent access was required. This could be easily accommodated by a



signalised junction. Alternatively, the Ikea/Decathlon entrance to the R104 could be upgraded and further developed to provide access to the depot/park and ride facility also.

- An issue with the siting of a park and ride facility just off the M50 is that there would be no reduction in usage of the M50/M1 link and as such may not be utilised as drivers would be required to travel half the length of the overall metro scheme by car before reaching a park and ride facility
- The site at Sillogue is relatively close to Dardistown and can simply be dismissed from a rail and engineering perspective due to the following:
  - Unlikely sufficient land area is available for the required depot footprint and surface route
  - Does not remove the requirement for two tunnels and therefore two additional tunnel portals, dual launch of the TBM and all associated costs
  - Does not remove the likely requirement for avoidable ECS movements and all associated costs
  - The impact on the local road network is likely to be substantial and there add significant additional cost to the proposal.

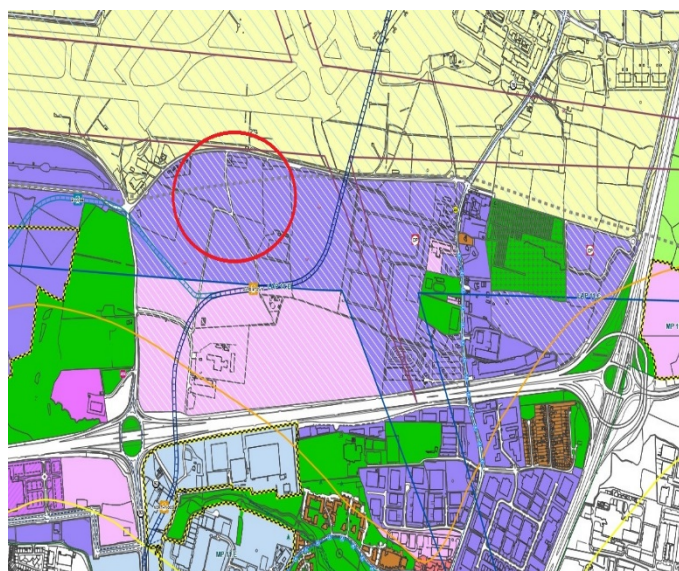
## 7.3 Site 2 – Na Fianna GAA /Ballymun Kickham’s GAA Site

### 7.3.1 Planning Policy

The site is currently occupied by Na Fianna GAA and Ballymun Kickham GAA grounds and is zoned under the provisions of the current Development Plan for General Employment which seeks to provide general enterprise and employment opportunities. See **Figure 24** below which provides an overview of the zoning of the site. **Drawing No. 10806-1005** indicatively highlights the site location.

Based on the provisions of the development plan and the fact that there is precedent for the siting of a rail depot in the vicinity, it is therefore a reasonable assumption that this is a viable location subject to the relevant permissions and agreements being in place.

The site is also the subject of the Dardistown LAP 2013 which is discussed in detail in previous sections of the report.



**Figure 24 – Na Fianna/Ballymun GAA Site - Zoning Fingal County Development Plan 2017-2023**

### 7.3.2 Environmental

The Na Fianna and Ballymun GAA site is located in close proximity to the Dardistown site, in an urban environment, south of Dublin Airport. From a desktop study review, the site appears to be made up of

arable crops, improved agricultural grassland, buildings and artificial surfaces, and amenity grassland. The land parcels are separated by treelines, hedgerows and/or roads or avenues. The site is bordered by the R108 road to the west and the Old Airport Road to the north.

There are no known watercourses within the boundaries of the site. The site likely drains to Mayne Stream, approximately 300m south east of the site. There are no protected sites within or adjacent to the Na Fianna and Ballymun site. The closest protected site is the Santry Demesne (Site Code: 000178) pNHA approximately 930m south of the Dardistown site.

### 7.3.3 Roads and Traffic

The lands off the R108 and Old Airport Road/Collinstown Lane would likely be primarily accessed by the M50 and R132 roads to access a depot/park and ride facility at the Na Fianna/Ballymun Kickhams site. Both the R108 and Old Airport Roads/Collinstown Lane are typical type 2 single carriageway roads and any access to the park and ride/depot would be less than 1km from access onto or from the M50.

In order to facilitate the development of the park and ride/depot consideration would need to be given to upgrading both R104 and Old Airport Roads along with the junctions at either end of the Old Airport Road/Collinstown Lane. A 300 unit park and ride and catering for 50-100 staff at the depot location would have an impact on the traffic in the area based on the current arrangements and direct access to the site would also be an issue.

As per the proposed Dardistown site, that the comments of the Dublin Airport – Local Area plan 2019 need to be considered. Currently this plan has the Old Airport Road/Collinstown Lane listed as a Core Bus Corridor (CBC) Upgrade route indicating that proposed works are being considered in this area.

The South Fingal Transport Study does make some comments on the upgrade works;

*“An Alternative access into Dublin Airport via the R108 and Collinstown Lane may be a practical solution to the issue of over-reliance on the M1 Airport Spur. A good standard of peripheral road network is desirable from an airport planning perspective. However given the competing demands for road network capacity with possible shuttle bus services serving airport parking expansion in the west and from the planned CBC2 scheme on the R132, there are concerns regarding the ability of this route to cater for general traffic capacity related to 40-55mppa levels of demand. It is recommended that these constraints are considered as part of a more detailed evaluation of the feasibility of this route as a robust secondary Dublin Airport access.”*

Adding additional capacity to the R108 and Collinstown Lane in light of the above may cause significant issues.

Again, as per both the proposed site and Site 1 above, site, an issue with the siting of a park and ride facility just off the M50 is that there would be no reduction in usage of the M50/M1 link and as such may not be utilised as drivers would be required to travel half the length of the overall metro scheme by car before reaching a park and ride facility

### 7.3.4 Rail

The site at Ballymun is also relatively close to the Dardistown site and although is more desirable to the Client, it will still result in the following implications on the construction and operation of the Metrolink:

- Does not remove the requirement for two tunnels and therefore two additional tunnel portals, dual launch of the TBM and all associated costs
- Does not remove the likely requirement for avoidable ECS movements and all associated costs
- Significant impact on the existing land users (sports clubs) and alternative facilities would need to be located for them if this site or area was to be a feasible option.
- Without also taking a portion of the Comer lands it is also unlikely that the areas identified as site No.2 on **Drawing No. 10806-1005** would have sufficient area.

## 7.4 Site 3 – Fosterstown (West of R132)

### 7.4.1 Planning Policy

The site at Fosterstown, to the West of the R132 and adjacent to Forrest Little Golf Club is currently zone Greenbelt under the provisions of the Fingal County Development 2017-2023. The aim of land zone for Greenbelt is to create a rural/urban greenbelt that permanently demarcates the boundary between rural and urban areas and to restrict the sprawl of urban areas and prevent settlements from coalescing.

In general, only limited types of development are permitted in principle in greenbelt areas and a use comprising the housing, storage and maintenance of rail stock would not be one of these. Therefore, it is considered that from a planning perspective it would be difficult to secure the consent required.

### 7.4.2 Environmental

The Fosterstown site is located in a less developed area (in comparison to the previous sites assessed), within a Greenbelt zone, partially surrounded by an urban environment in the wider environs (i.e. Swords to the north and Dublin Airport to the south). From a desktop study review, the site appears to be dominated by arable crops, with an area of improved agricultural grassland to the south. The land parcels are predominantly bordered by mature treelines, particularly to the west and south west of the site where they form a boundary with the “Forest Little Golf Club”.

The site is delimited by the Naul Road to the south. There is one 1<sup>st</sup> order watercourse flowing from west to east through the southern half of the Fosterstown site known as Sluice Stream (WFD Name: Sluice\_010, European Code: IE\_EA\_09S071100). The WFD ecological status (2010-2015) of this watercourse is “unassigned”. It is located within the Liffey and Dublin Bay catchment and flows out to sea via the Baldoyle Estuary and Nature Reserve, approximately 6.2km south east of the site. The Baldoyle Estuary and Nature Reserve forms part of the Baldoyle Bay SAC and Baldoyle Bay SPA.

There are no protected sites within or adjacent to the site. The closest protected site is the Feltrim Hill pNHA (Site Code: 001208) approximately 2km east of the Fosterstown site. This pNHA is situated less than 1km east of the M1 motorway and west of Portmarnock. It is a knoll-reef dating from the Carboniferous period. The site was previously known to contain two rare plant species, namely Spring Squill (*Scilla verna*) and Long-stalked Crane’s-bill (*Geranium columbinum*). Quarrying at Feltrim has now removed the greater part of the limestone structure and only marginal exposures remain.

### 7.4.3 Roads and Traffic

The Fosterstown site is located just North of the Airport in a Greenbelt land zone. Access to the site would be facilitated primarily by significant infrastructure via the existing R132 or M1 Airport Link road with possible usage via the R108 and Naul road.

Both the R132 and M1 Airport Links have proposed planned upgrades as part of the Dublin Airport Local Development Plans (2020 – 2026) and South Fingal Transport Study (2019). To deal with increasing passenger demand, the Airport link has a proposed grade separated upgrade as a recommendation to provide free flow traffic to the airport and would facilitate increased traffic demands associated with the park and ride facility and depot.

The existing Cloghran Roundabout would help ease any additional traffic flows. Direct access to a park and ride and depot off the Naul Road or Stockhole Lane would require upgrades to both roads from the existing single carriageways to provide for access to the site.

Similar to Sites 1 & 2, the siting of a park and ride facility at Fosterstown would require drivers to travel alongside the Metrolink for almost 25% of the length of the overall scheme to reach a park and ride facility which may put off drivers. The Fosterstown site would however remove traffic from the M50 with drivers turning off the M1 prior to reaching it.



Figure 39. Dublin Airport Surface Access Short Term Recommendations

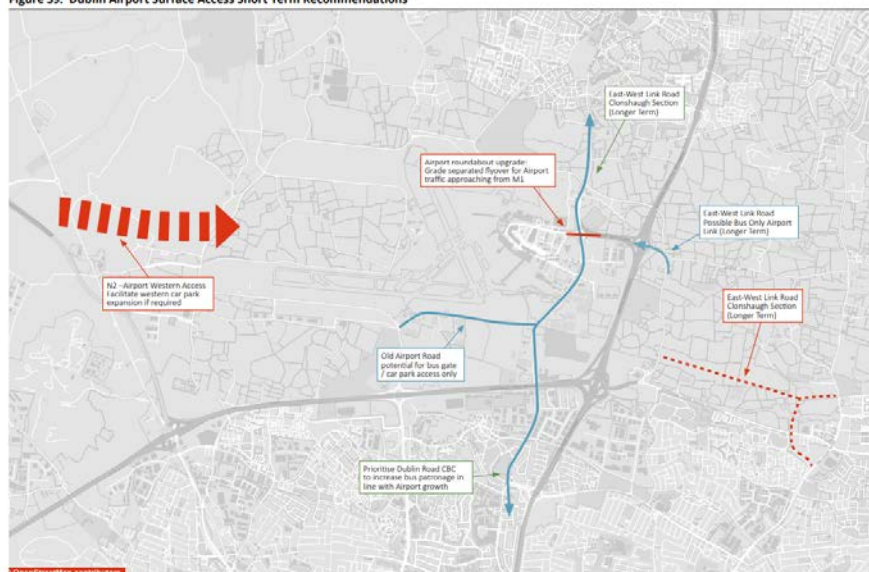


Figure 24 – South Fingal Transport Study 2019

#### 7.4.4 Flooding

Fosterstown has a minor stream splitting the western site in two. The stream is indicated as having a minor risk of flooding on CFRAMS at the proposed Metrolink Area on the west site. Unfortunately, presently the east side of the site is currently under review on CFRAMS and cannot be viewed. However previous Potential Flood mapping of the area can be. There doesn't appear to be any potential for flooding to the Eastern site. There are no past flood events documented near the proposed site.



Figure 25 – Flooding overview

#### 7.4.5 Rail

- The site at Fosterstown West is north of Dublin Airport, however due to it's location on the Metrolink route, it is likely to result in similar issues as Dardistown, namely:

- Does not remove the requirement for two tunnels and therefore two additional tunnel portals, dual launch of the TBM and all associated costs
- Does not remove the likely requirement for avoidable ECS movements and all associated costs

## 7.5 Site 4 – Nevinstown (Land East of R132)

### 7.5.1 Planning Policy

The site at Nevinstown, east of the R132 and south of the Airside Business Park is currently zoned Greenbelt under the provisions of the Fingal County Development 2017-2023. The aim of land zone for Greenbelt is to create a rural/urban greenbelt that permanently demarcates the boundary between rural and urban areas and to restrict the sprawl of urban areas and prevent settlements from coalescing.

In general, only limited types of development are permitted in principle in greenbelt areas and a use comprising the housing, storage and maintenance of rail stock would not be one of these. Therefore, it is considered that from a planning perspective it would be difficult to secure the consent required.

### 7.5.2 Environmental

Similarly to the Fosterstown site, the Nevinstown site is also located in a less developed area (in comparison to the previous sites assessed), within a Greenbelt zone, partially surrounded by an urban environment in the wider environs (i.e. Swords and Airside Business Park to the north and Dublin Airport to the south). From a desktop study review, the site appears to be dominated by improved agricultural grassland. The land parcels are separated by treelines, hedgerows and/or roads or avenues.

The site is bordered by the R132 road to the west and Stockhole Lane to the south. The “National Show Centre” conference centre is located to the north of the site. There are no known watercourses within the boundaries of the site. The site likely drains to Sluice Stream, approximately 300m north of the site. There are no protected sites within or adjacent to the site. The closest protected site is the Feltrim Hill pNHA approximately 1.5km east of the Nevinstown site.

### 7.5.3 Roads and Traffic

Similar to the Fosterstown site, the Nevinstown Site is located just North of the Airport in a Greenbelt land zone. The site would be facilitated primarily by significant infrastructure via the existing R132 or M1 Airport Link road with possible usage via the R108 and Naul road.

Both the R132 and M1 Airport Links have proposed planned upgrades as part of the Dublin Airport Local Development Plans (2020 – 2026) and South Fingal Transport Study (2019). To deal with increasing passenger demand, the Airport link has a proposed grade separated upgrade as a recommendation to provide free flow traffic to the airport and would facilitate increased traffic demands associated with the park and ride facility and depot.

The existing Cloghran Roundabout would help ease any additional traffic flows. Direct access to a park and ride and depot off the Naul Road or Stockhole Lane would require upgrades to both roads from the existing single carriageways to provide for access to the site.

Similar to Sites 1, 2 & 3 the siting of a park and ride facility at Nevinstown would require drivers to travel alongside the metrolink for almost 25% of the length of the overall scheme to reach a park and ride facility which may put off drivers. The Nevinstown site would however also remove traffic from the M50 with drivers turning off the M1 prior to reaching it.

### 7.5.4 Rail

The site at Nevinstown is north of Dublin Airport, however due to its location on the Metrolink route, it is likely to result in similar issues as Dardistown, namely:

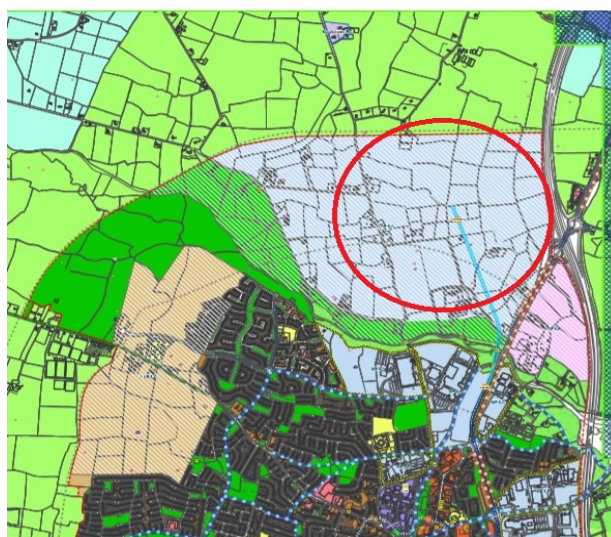
- Unlikely sufficient land area is available for the required depot footprint and surface route

- Does not remove the requirement for two tunnels and therefore two additional tunnel portals, dual launch of the TBM and all associated costs
- Does not remove the likely requirement for avoidable ECS movements and all associated costs

## 7.6 Site 5 – Lissenhall/Estuary

### 7.6.1 Planning Policy

The site at Lissenhall/Estuary which was originally proposed as the general area for the depot as part of Metro North and more recently as set out in the Route Alignment Report on Metrolink, is currently zone 'ME – Metro Economic Corridor'. The aim of this zoning is to facilitate opportunities for high-density mixed-use employment generating activity and commercial development and support the provision of an appropriate quantum of residential development with the Metro Economic Corridor. Whilst the uses permitted in principle do not provide for logistics use, it is considered that the provision of the depot at this location from a planning perspective meets the aims of the zoning. Indeed, sequentially it is considered that the development of the Dardistown site/Metropark for high density employment uses and/or mixed-use development is preferable to similar development at a location more remote to the City. **Figure 26** below provides an overview of the zoning at Lissenhall/Estuary.



**Figure 26– Overview of sites at Lissenhall and Estuary**

### 7.6.2 Environmental

The site at Lissenhall/Estuary is located in a semi-rural area, north of Dublin and adjacent to the M1 motorway. From a desktop study review the site appears to be dominated by arable crops and improved agricultural grassland. The land parcels are divided by treelines, hedgerows and/or roads or avenues. "Balheary Par 3 Golf Course" is located to the west of the site and "The Emmaus Centre", a spiritual events venue, is located to the south of the site. There is also a small number of residential properties around and within the site.

A 2<sup>nd</sup> order watercourse known as the Staffordstown Stream (WFD Name: Turvey\_010, European Code: IE\_EA\_08T020700) is located within the site and flows in a south easterly direction towards the Malahide Estuary SAC (Site Code: 000205) and Malahide Estuary SPA (Site Code: 004025). The WFD ecological status (2010-2015) of this watercourse is "unassigned". It is located within the Nanny-Delvin catchment and, as mentioned, flows out to sea via the Malahide Estuary, approximately 1.7km south east of the site.

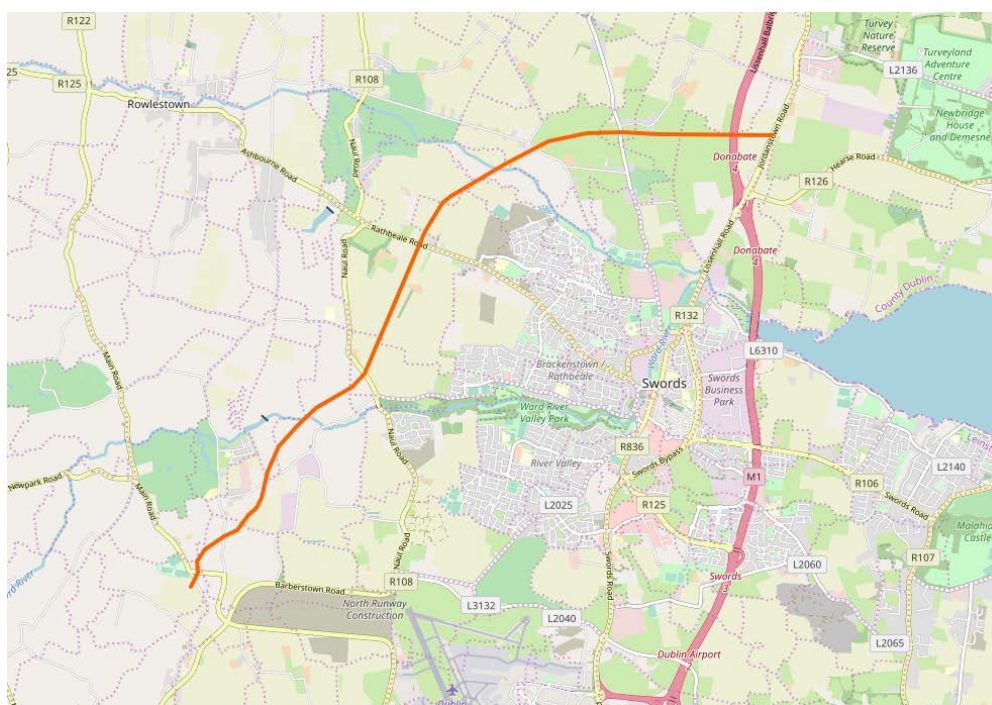
There are no protected sites within or adjacent to the site. The closest protected sites are the Malahide Estuary SAC and SPA which are located approximately 900m south and 1.1km south east, respectively. The inner estuary does not drain at low tide apart from the extreme inner part. Here, patches of saltmarsh



The Lisenhall/Estuary site situated at the end of the proposed metrolink line would be primarily facilitated by the M1 via junction 4 and R132 roads. Should the construction of the Swords Western Relief Road go ahead, this would also provide additional access. Prior to re-selection of the depot location, the proposed park and ride and depot site was selected at this location and consisted of a plan to provide for 3,000 park and ride spaces and depot staff.

This would have an impact on the R132 and junction 4 at this location particularly at peak times and likely cause some traffic issues at this location. However, siting a 3,000-spot park and ride facility at this location, which is situated close to the CBC corridor, would remove significant traffic from the M1 and R132 through Swords as well as a reduction in traffic along the M50.

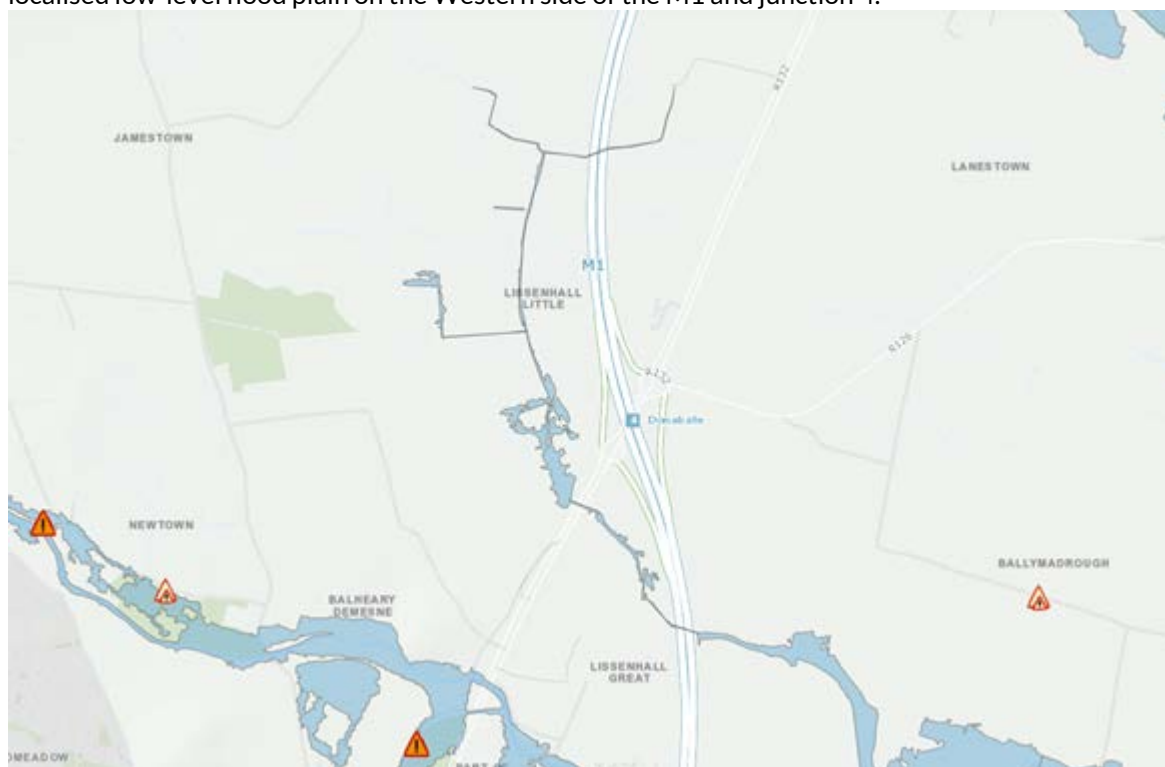
Upgrade works would need to be considered along the R132 to provide direct access to the park and ride facility and depot as well as the junction between the R132 and M1 slip to accommodate for the peak traffic demands.



**Figure 27– Swords Western Relief Road & Estuary Relief Road (Draft Fingal Development Plan: Map 8 Swords)**

### 7.6.4 Flooding

There have been no reported flood events adjacent to the Lissenhall site, see **Figure 28**, but there is a small localised low-level flood plain on the Western side of the M1 and junction 4.



**Figure 28: Lissenhall Flooding Map**

### 7.6.5 Rail

As detailed in historical documentation and prior to the publication of the Emerging Preferred Route, the location of the depot was detailed as Estuary – at the northern end of the Metrolink route. Using a simple comparison mechanism to summarise, it is clear that from a rail perspective, Estuary is a much more favourable location than Dardistown.

| Location/Constraint                    | Dardistown | Estuary | Commentary  |
|--|------------|---------|---|
| Comparable Schemes                     |            |         | Depot locations align to Estuary                                  |
| Technical/Constructability/Operational |            |         | All are N/A or impact less at Estuary than Dardistown             |
| Cost & Resourcing                      |            |         | All are N/A or impact less at Estuary than Dardistown             |
| Land Usage                             |            |         | Assumed no comparably significant developments planned at Estuary |

**Table 3 - Summary of comparable aspects of Dardistown vs Estuary depot location sites**

**Comparable Schemes** - All comparable schemes shown have an end of the line depot location. With the removal of the link to Metro West and the fact this is no longer planned to be progressed in the foreseeable future, the argument for an end of line depot is strengthened. The Estuary site has no obvious characteristics from a rail perspective that make a depot location there unfeasible.

**Technical/Constructability/Operational** - A depot at Estuary would reduce the number of tunnel portals (estimated to cost €25-70m each) from four to two. Economies of scale would also be facilitated due to

the single tunnel approach as opposed to the two-tunnel approach which is unavoidable if the depot is at Dardistown. There is a strong case that Estuary also provides a more accessible, more demographical suitable location for a base of operations, particularly when considering the planned development of the Dardistown site.



## 8.0 CONCLUSION

This section of the report provides a high-level summary and conclusion of the main considerations in the report. It is suggested that these will provide a clear indication that a viable alternative location for the depot associated with Metrolink is available. Furthermore, it has been demonstrated that by progressing Dardistown as the depot location, it seriously undermines the Metropark site, a site that is strategically located and has the potential to provide a high quality mixed use development, together with meeting many other development aspirations for Fingal and indeed the wider Dublin region.

The conclusions are set out as follows:

### Depot Location – Lissenhall/Estuary

- Lissenhall was initially considered as the preferred location for the depot and ancillary services associated with Metro North. The ABP Inspector in his consideration of the application for Metro North (NA.0003) suggested as much and was of the view that the location finally proposed under that application (Belinstown) was done so for economic purposes and without a plan led approach. In his conclusions, the Inspector recommended that a revised Railway Order be submitted for a new depot location at Lissenhall and potentially Dardistown if the Board considered it appropriate.
- The Board in their Order on NA.0003, Condition 1 requested that a new Railway Order application be made for a revised depot and spoil scheme at Dardistown. However, this decision paid significant regard to the development of Metro West and the fact that it was proposed to tie in with Metro North at Dardistown.
- Metro West is no longer a live consideration, does not appear in the National Planning Framework: Ireland 2040, nor does it appear in the National Development Plan. As Metro West is no longer considered viable, the rationale that was applied to locating the Depot at Dardistown, which in effect was the overriding rationale, is consequently no longer viable
- As late as June 2018, the Alignment Options Study Report considered that the best and most appropriate location for the depot on the new Metro North, now Metrolink, was Estuary/Lissenhall as the track was at grade at this location and there was adequate space to accommodate the facilities.
- The benefits outlined in the Preferred Route Design Development Report of March 2019 for choosing Dardistown as a location for the depot over Estuary are marginal and take no account of issues such as land value and development potential. In this light, it is considered that the benefits outlined should be reviewed further.

### Metropark – A Highly Strategic Location

- Metropark is considered to be one of the most strategic development sites within the greater Dublin region. It comprises 83ha (206 acres) of land in one ownership (the Comer Group) located in close proximity to Dublin City and immediately adjoins Dublin Airport.
- The development of such a flagship project, akin to Cherrywood in south Dublin, but arguably in a more strategic location, provides an unrivalled opportunity to develop a high-quality mixed-use development incorporating residential, commercial, employment and recreational uses. Indeed, similar to other major airports around the world, the development has the potential to further enhance Dublin Airport as not just a commuter hub but to turn it into a major 'Airport City Region'.
- The location of a depot on the Metropark site will essentially sterilise what is a prime development site and as shown in Drawing 10806-008 or Figure 13 above. Of the total 83ha available, 34ha will become lost to development potential due to the location of the depot and ancillary services, access roads and the metro line itself.
- The location of the depot at an alternative location, i.e. Lissenhall/Estuary can facilitate the continued tunnelling of the Metrolink from the southside of the M50 which is considered beneficial in terms of cost and in terms of realising the full potential of the Metropark site. It is suggested that developing Metropark to its full potential is in the interest of proper planning and sustainable development.
- The densification of Dublin City and the location of development at public transport nodes is considered the most appropriate and sustainable way of delivering the levels of residential and

employment development that is required over the coming years. To drastically reduce the potential of a site (i.e. the Comer site at Dardistown) to deliver on this is not in our opinion in the interest of proper planning and sustainable development.

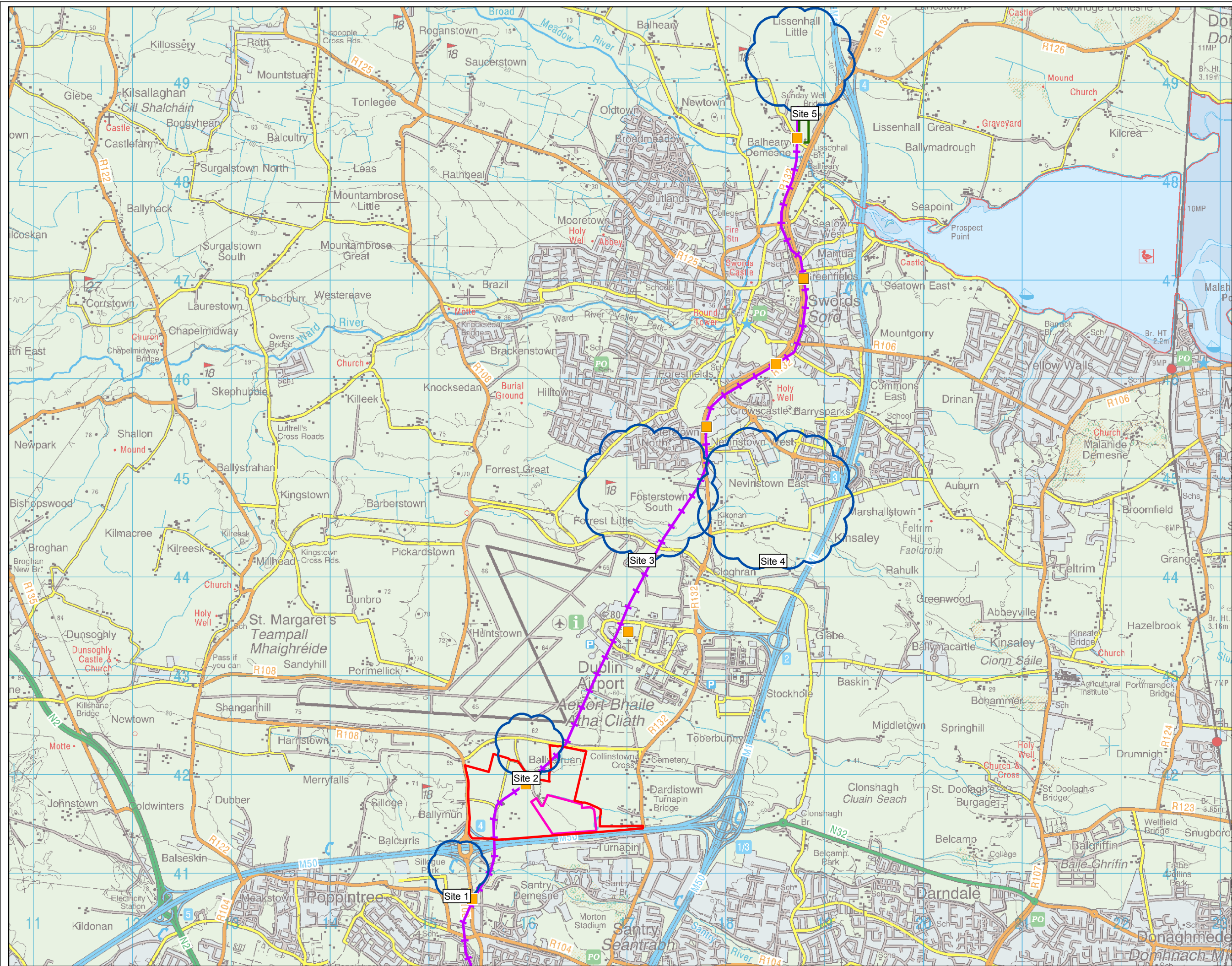
- An initial Concept Masterplan prepared on behalf of Comer Group by Foster & Partners outlines the significant potential of Metropark. In total the site has the capability to provide circa 15,000,000 sq ft of development including employment space for up to 40,000 people and residential accommodation for c.4,000 people, all on a highly accessible site and in close proximity to Dublin airport and the wider Dublin region. Locating the depot at the current location on the preferred route with the open above ground lines will result in the loss of approx. 6,000,000 sq. ft of this space which will be a significant loss to strategic land bank.

#### **Rail Conclusions:**

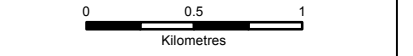
- Without Metro West, the justification for the depot at Dardistown is significantly weakened and results in a disproportionate impact on the Metrolink scheme as a whole.
- Based on the length of route, number of stations, linear nature and frequency of service, it is difficult to see why the depot is to be located at Dardistown, other than the potential link to the Metro West scheme (which is no longer a consideration). Various examples of comparable schemes have been provided that show an end of the line depot location.
- Relocation elsewhere, namely Lissenhall/Estuary, brings numerous constructability and operational benefits which in turn enable significant potential financial efficiencies.
- The Dardistown location, proposed flyover of the M50 and proximity of Dublin Airport all present technical compliance and construction challenges that will result in additional costs, social and environmental effects.
- The operational disadvantages further support the case to avoid such a location for the main metro depot for the route. The proposed service pattern and frequency also mean a loop/turnback facility will be required at each end of the line and this could potentially be incorporated into the depot footprint at Estuary/Lissenhall in a more efficient manner than a separate depot at Dardistown.
- Major disruption to the M50 would also be avoided due to the removal of the requirement for a flyover structure south of Dardistown.

## Appendix A – Drawings






- Legend**
- Proposed Station Locations
  - Proposed Site Locations
  - Comer Site Boundary
  - TII Proposed Depot Site Boundary
  - Lissenhall - Proposed Park and Ride Location
  - MetroLink Route



- NOTES**
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
  - ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
  - ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
  - ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

|       |          |             |      |       |
|-------|----------|-------------|------|-------|
|       |          |             |      |       |
|       |          |             |      |       |
| A     | Dec. '19 | Draft Issue | F.H. | A.K.  |
| Issue | Date     | Description | By   | Chkd. |

Client:  **COMER GROUP IRELAND**

Project: **Comer Group Ireland - Comer Land Bank (MetroLink) - Multi-Disciplinary Services**

Title: **Site Location Map**

|                             |                      |                        |
|-----------------------------|----------------------|------------------------|
| Scale @ A3: 1:35,000        |                      |                        |
| Prepared by:<br>F. Healy    | Checked:<br>A. Kelly | Date:<br>December 2019 |
| Project Director: D. Grehan |                      |                        |

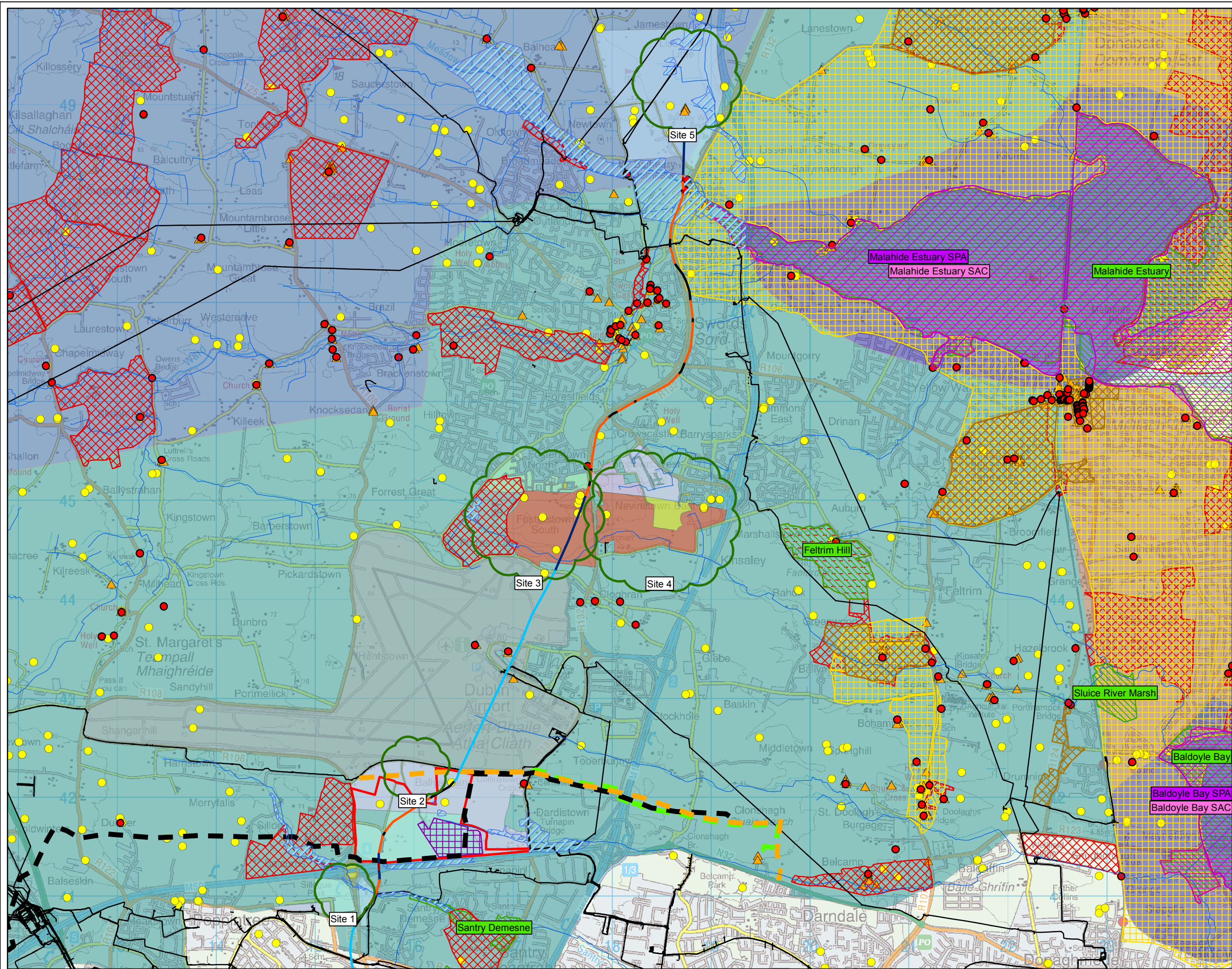
**TOBIN**  
CONSULTING ENGINEERS  
Consulting, Civil and Structural Engineers,  
Block 10-4, Blanchardstown Corporate Park,  
Dublin 15, Ireland.  
tel: +353-(0)1-8030406  
fax: +353-(0)1-8030409  
e-mail: info@tobin.ie  
www.tobin.ie

No part of this document may be reproduced or transmitted in any form or stored in any retrieval system of any nature without the written permission of Patrick J. Tobin & Co. Ltd. as copyright holder except as agreed for use on the project for which the document was originally issued.

Draft: **A**

**10806-1001-A**





**Legend**

- Proposed Site Locations
- Cut and Cover
- Elevated Track
- Retained Open Cut Track
- Surface Track
- Underground Tunnel
- Flood Risk Areas
- Rivers/Streams
- Indicative East-West Distributor Road
- Greater Dublin Drainage
- Belcamp Shelleybanks Route
- ESB Constraints
- Special Protection Area (SPA)
- Special Area of Conservation (SAC)
- proposed Natural Heritage Area (pNHA)
- Protected Structures
- Architectural Conservation Areas
- Geological Heritage Sites
- Highly Sensitive Landscape
- Nature Development Areas
- National Inventory of Architectural Heritage Sites
- National Monuments
- Metro Park Site Boundary
- TII Proposed Depot Site Boundary

**Land Zoning**

- Active open space
- Airport
- Conservation, amenity or buffer space, corridor/belt, landscape
- Existing residential
- Mixed Use, general development, opportunity/proposal site
- Mixed/general commercial/industrial/enterprise uses
- Office, business/technology park and related
- Retail warehouse

**Landscape Character**

- Coastal
- Estuary
- Low Lying Agricultural
- Rolling Hills with Tree Belts

\*No Natural Heritage Areas (NHA) present in this map area.\*

0 0.5 1  
Kilometres

**NOTES**

- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING
- ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
- ENGINEER TO BE INFORMED OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
- ALL LEVELS RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

| Issue | Date     | Description | By   | Chkd. |
|-------|----------|-------------|------|-------|
| A     | Dec. '19 | Draft Issue | F.H. | A.K.  |

**Client:**

**Project:**  
Metrolink Depot Feasibility Study

**Title:**  
Overview and Constraints Map

**Scale @ A3:** 1:35,000

|                                 |                            |                               |
|---------------------------------|----------------------------|-------------------------------|
| <b>Prepared by:</b><br>F. Healy | <b>Checked:</b><br>A.Kelly | <b>Date:</b><br>December 2019 |
|---------------------------------|----------------------------|-------------------------------|

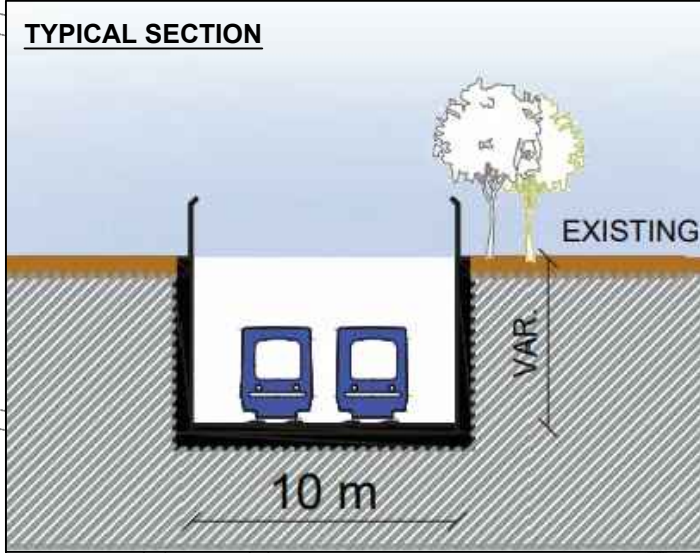
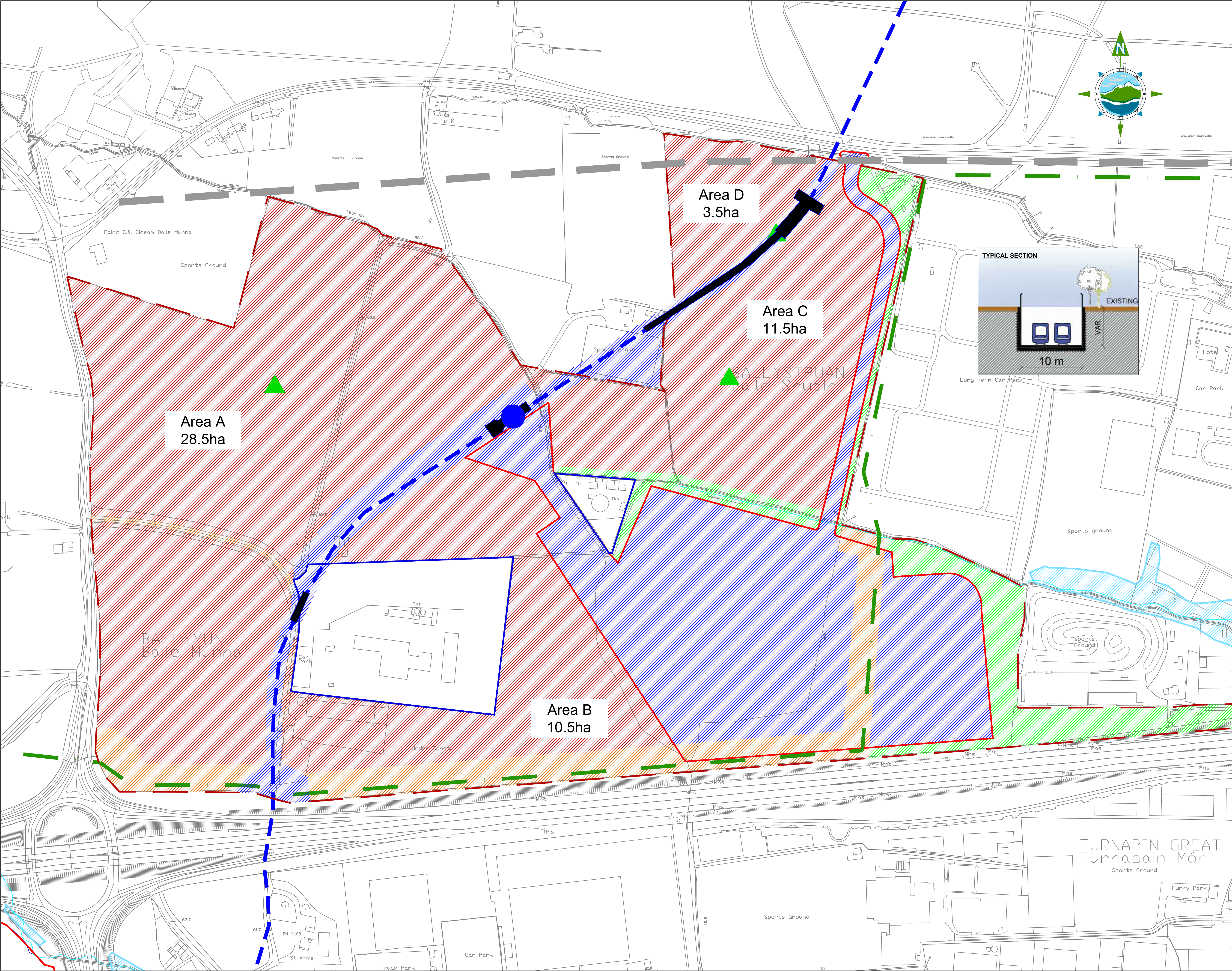
|                                    |  |  |
|------------------------------------|--|--|
| <b>Project Director:</b> B.Carroll |  |  |
|------------------------------------|--|--|

**TOBIN**  
CONSULTING ENGINEERS  
Consulting, Civil and Structural Engineers,  
Block 10-4, Blanchardstown Corporate Park,  
Dublin 15, Ireland.  
tel: +353-(0)1-8030406  
fax: +353-(0)1-8030409  
e-mail: info@tobin.ie  
www.tobin.ie

No part of this document may be reproduced or transmitted in any form or stored in any retrieval system of any nature without the written permission of Patrick J. Tobin & Co. Ltd. as copyright holder except as agreed for use on the project for which the document was originally issued.

|                     |                    |
|---------------------|--------------------|
| <b>10806-1002-A</b> | <b>Draft:</b><br>A |
|---------------------|--------------------|





- GENERAL LEGEND**
- INDICATIVE PROPOSED METROLINK ROUTE
- POTENTIAL DEPOT LOCATION FOR CONSIDERATION
- INDICATIVE PROPOSED E - W DISTRIBUTOR ROAD
- COMER GROUP LAND BANK
- POTENTIAL FLOOD RISK ZONE
- AREA SUITABLE FOR DEVELOPMENT
- STERILISED LAND
- INDICATIVE PROPOSED METROLINK STATION
- INDICATIVE PROPOSED GDD ALIGNMENT
- ARCHAEOLOGICAL FEATURES
- STREAM / RIVERS
- METROLINK DEVELOPMENT AREA
- GDD WAYLEAVE AREA

| Description                | Area (ha) |
|----------------------------|-----------|
| Overall Landholding        | 88        |
| Sterilised Area            | 6         |
| Area for development       | 54        |
| GDD Wayleave               | 6         |
| Metrolink Development Area | 22        |

- NOTES:**
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
  - ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
  - ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.
  - THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES.
  - ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD.

|     |          |              |      |       |
|-----|----------|--------------|------|-------|
| 50m | 0        | 50m          | 100m | 150m  |
|     |          |              |      |       |
|     |          |              |      |       |
| A   | 03.12.19 | REPORT ISSUE | MIN  | AK    |
| Rev | Date     | Description  | By   | Chkd. |

Client:

COMER GROUP IRELAND

Project:

COMER LAND BANK (Metrolink)  
MULTI DISCIPLINARY SERVICES

Title:

POTENTIAL DEPOT LOCATION  
CLIENT SITE - METROPARK  
(Dardistown)

|                          |                      |                        |
|--------------------------|----------------------|------------------------|
| Scale @ A1:              | 1:2,500              |                        |
| Prepared by:<br>M. Nolan | Checked:<br>A. Kelly | Date:<br>December 2019 |
| Project Director:        | D. Grehan            |                        |
| Drawing Status:          | Report               |                        |

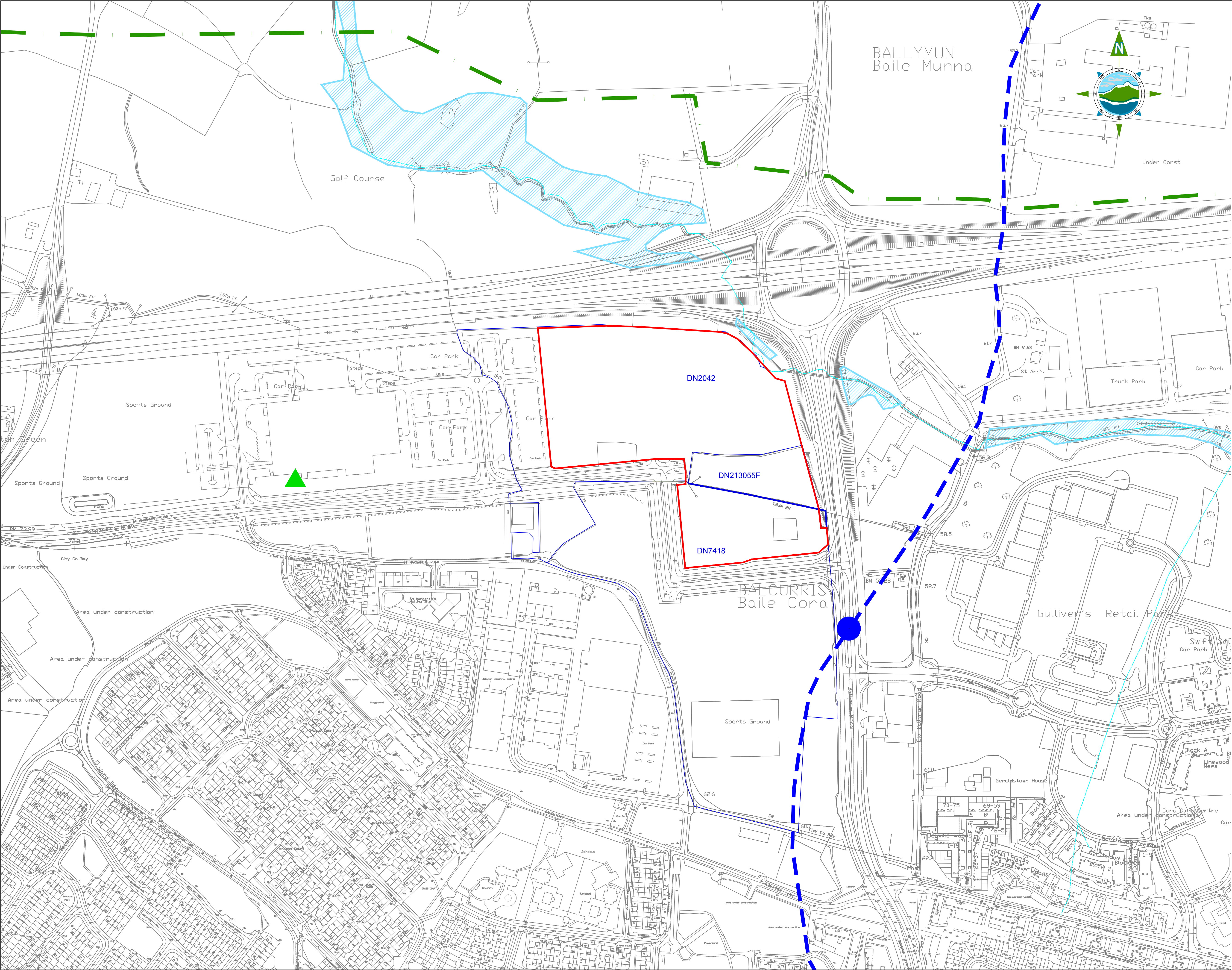
**TOBIN**  
CONSULTING ENGINEERS

Block 10-4, Blanchardstown Corporate Park,  
Dublin 15, Ireland.  
tel: +353-(0)1-8030406  
fax: +353-(0)1-8030409  
e-mail: dublin@tobin.ie  
www.tobin.ie

Revision:

Drawing No.: 10806-1003 A





**GENERAL LEGEND**

INDICATIVE PROPOSED METROLINK ROUTE

POTENTIAL DEPOT LOCATION FOR CONSIDERATION

LANDOWNER FOLIO BOUNDARY

POTENTIAL FLOOD RISK ZONE

ARCHAEOLOGICAL FEATURES

INDICATIVE PROPOSED METROLINK STATION

INDICATIVE PROPOSED GDD ALIGNMENT

STREAM / RIVERS

- NOTES:
1.

2.

3.

4.

5.
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.

ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE

ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES


THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES

ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

50m050m100m150m

|     |          |              |    |       |
|-----|----------|--------------|----|-------|
|     |          |              |    |       |
| A   | 03.12.19 | REPORT ISSUE | MN | AK    |
| Rev | Date     | Description  | By | Chkd. |

Client:



Project:

COMER LAND BANK (Metrolink)  
MULTI DISCIPLINARY SERVICES

Title:

POTENTIAL DEPOT LOCATION  
SITE 1 - BALLYMUN / NA FIANNA

Scale @ A1:

1:2,500

Prepared by:

M. Nolan

Checked:

A. Kelly

Date:

December 2019

Project Director:

D. Grehan

Drawing Status:

Report

**TOBIN**

CONSULTING ENGINEERS

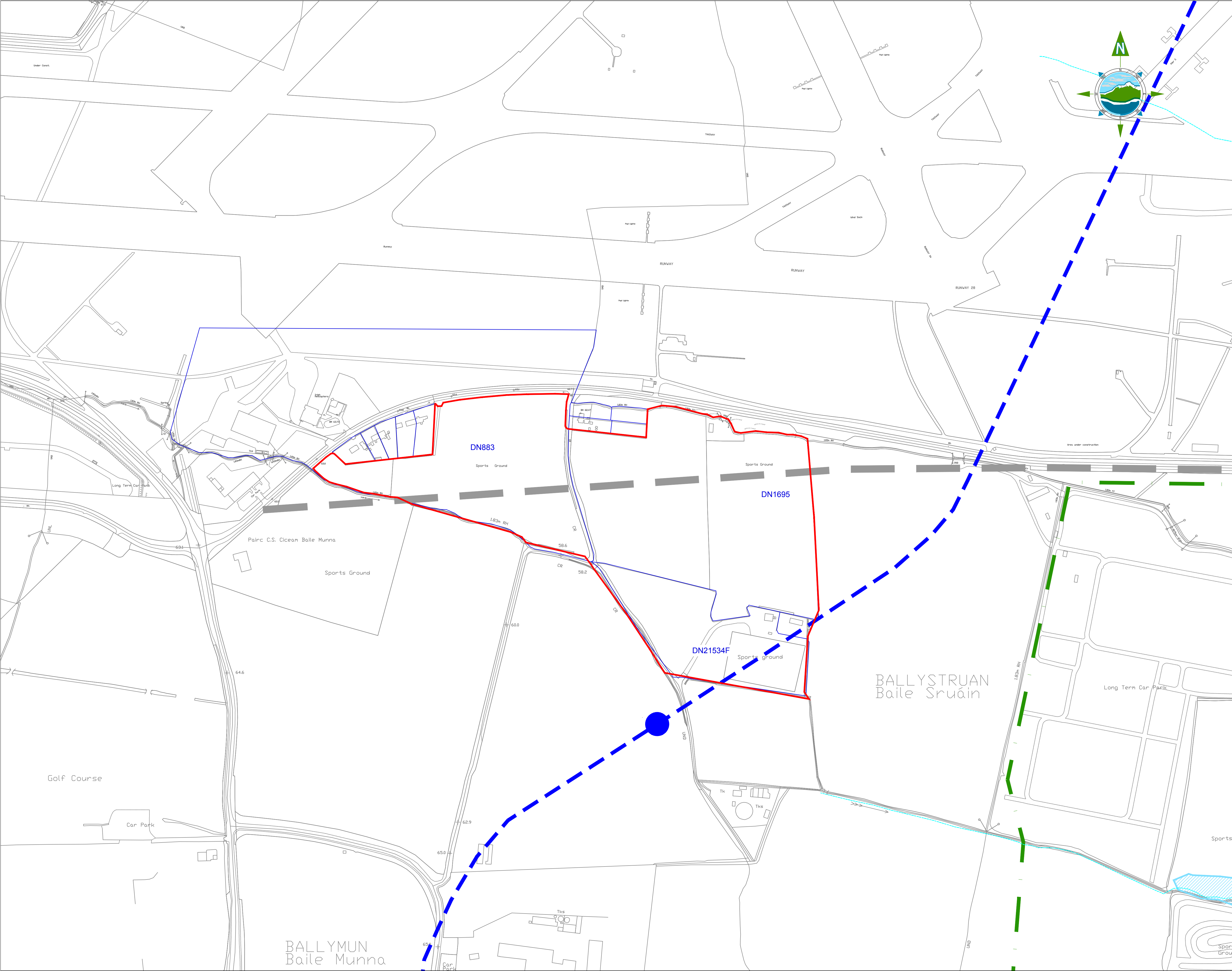
Block 10-4, Blanchardstown Corporate Park,  
Dublin 15, Ireland.  
tel: +353-(0)1-8030406  
fax: +353-(0)1-8030409  
e-mail: dublin@tobin.ie  
www.tobin.ie

Revision:

10806-1004A

Ordnance Survey Ireland Licence number EN 0016019. © Ordnance Survey Ireland/Government of Ireland





**GENERAL LEGEND**

INDICATIVE PROPOSED METROLINK ROUTE

INDICATIVE PROPOSED LOCATION FOR CONSIDERATION

INDICATIVE PROPOSED E - W DISTRIBUTOR ROAD

LANDOWNER FOLIO BOUNDARY

POTENTIAL FLOOD RISK ZONE

INDICATIVE PROPOSED METROLINK STATION

ARCHAEOLOGICAL FEATURES

STREAM / RIVERS

- NOTES:
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
  - ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
  - ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
  - THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES
  - ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD

50m050m100m150m

|     |          |              |     |       |
|-----|----------|--------------|-----|-------|
|     |          |              |     |       |
|     |          |              |     |       |
| A   | 03.12.19 | REPORT ISSUE | MIN | AK    |
| Rev | Date     | Description  | By  | Chkd. |

Client:

COMER GROUP IRELAND

Project:

COMER LAND BANK (Metrolink)  
MULTI DISCIPLINARY SERVICES

Title:

POTENTIAL DEPOT LOCATION  
SITE 2 - N. ST. MARGARET'S RD.

Scale @ A1:

1:2,500

Prepared by:

M. Nolan

Checked:

A. Kelly

Date:

December 2019

Project Director:

D. Grehan

Drawing Status:

Report

TOBIN CONSULTING ENGINEERS

Block 10-4, Blanchardstown Corporate Park,  
Dublin 15, Ireland.  
tel: +353-(0)1-8030406  
fax: +353-(0)1-8030409  
e-mail: dublin@tobin.ie  
www.tobin.ie

TOBIN Consulting Engineers will not be liable for any use of this document for any purpose other than that for which it was originally prepared and provided. Except where specifically and explicitly agreed in writing by TOBIN Consulting Engineers, its copyright holder, no part of this document may be reproduced or transmitted in any form and this document shall not be relied upon by any third party for any purpose.

Drawing No.:

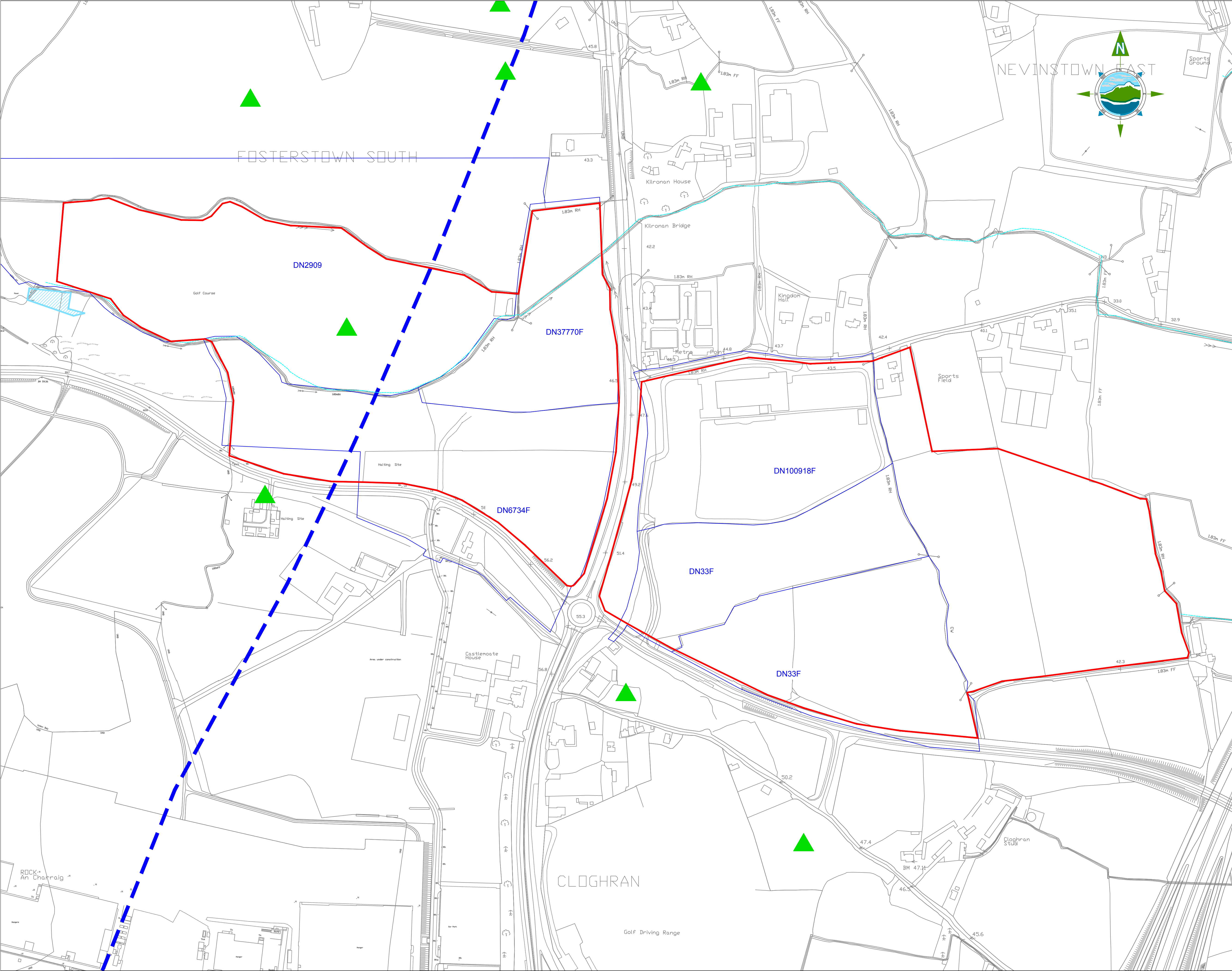
10806-1005

Revision:

A

Ordnance Survey Ireland Licence number EN 0016019. © Ordnance Survey Ireland/Government of Ireland





**GENERAL LEGEND**

INDICATIVE PROPOSED METROLINK ROUTE  
POTENTIAL DEPOT LOCATION FOR CONSIDERATION  
LANDOWNER FOLIO BOUNDARY  
POTENTIAL FLOOD RISK ZONE

INDICATIVE PROPOSED METROLINK STATION  
ARCHAEOLOGICAL FEATURES  
STREAM / RIVERS

- NOTES:**
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
  - ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
  - ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.
  - THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES.
  - ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD.

50m 0 50m 100m 150m

|     |          |              |    |       |
|-----|----------|--------------|----|-------|
|     |          |              |    |       |
| A   | 03.12.19 | REPORT ISSUE | MN | AK    |
| Rev | Date     | Description  | By | Chkd. |

Client: 

Project: **COMER LAND BANK (Metrolink) MULTI DISCIPLINARY SERVICES**

Title: **POTENTIAL DEPOT LOCATION SITE 3 - FOSTERSTOWN SITE 4 - CLOGHRAN**

|                   |           |               |
|-------------------|-----------|---------------|
| Scale @ A1:       | 1:2,500   |               |
| Prepared by:      | Checked:  | Date:         |
| M. Nolan          | A. Kelly  | December 2019 |
| Project Director: | D. Grehan |               |
| Drawing Status:   | Report    |               |

**TOBIN**  
CONSULTING ENGINEERS

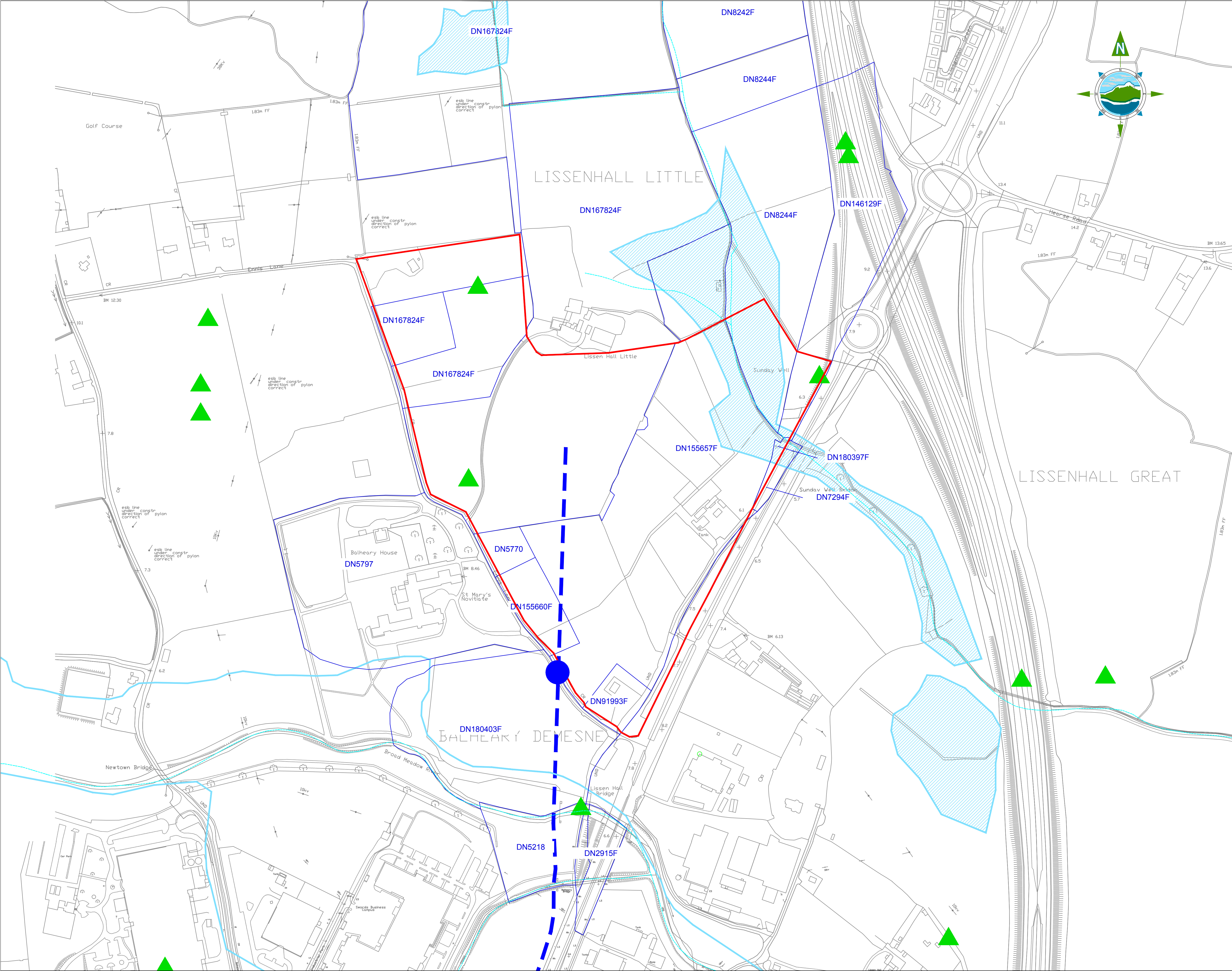
Block 10-4, Blanchardstown Corporate Park,  
Dublin 15, Ireland.  
tel: +353-(0)1-8030406  
fax: +353-(0)1-8030409  
e-mail: dublin@tobin.ie  
www.tobin.ie

Tobin Consulting Engineers will not be liable for any use of this document for any purpose other than that for which it was originally prepared and provided. Except where specifically and explicitly agreed in writing by Tobin Consulting Engineers, its copyright holder, no part of this document may be reproduced or transmitted in any form and this document shall not be relied upon by any third party for any purpose.

Drawing No.: **10806-1006**

Revision: **A**





**GENERAL LEGEND**

INDICATIVE PROPOSED METROLINK ROUTE  
— — — — —

POTENTIAL DEPOT LOCATION FOR CONSIDERATION  
[Red Square]

LANDOWNER FOLIO BOUNDARY  
[Blue Line]

POTENTIAL FLOOD RISK ZONE  
[Light Blue Hatched]

INDICATIVE PROPOSED METROLINK STATION  
[Blue Circle]

ARCHAEOLOGICAL FEATURES  
[Green Triangle]

STREAM / RIVERS  
[Light Blue Hatched]

50m 0 50m 100m 150m

|     |          |              |    |       |
|-----|----------|--------------|----|-------|
|     |          |              |    |       |
|     |          |              |    |       |
| A   | 03.12.19 | REPORT ISSUE | MN | AK    |
| Rev | Date     | Description  | By | Chkd. |

Client: 

Project: **COMER LAND BANK (Metrolink)  
MULTI DISCIPLINARY SERVICES**

Title: **POTENTIAL DEPOT AND  
PARK & RIDE STATION  
SITE 5 - LISSENHALL**

|                   |           |               |
|-------------------|-----------|---------------|
| Scale @ A1:       | 1:2,500   |               |
| Prepared by:      | Checked:  | Date:         |
| M. Nolan          | A. Kelly  | December 2019 |
| Project Director: | D. Grehan |               |
| Drawing Status:   | Report    |               |

**TOBIN**  
CONSULTING ENGINEERS

Block 10-4, Blanchardstown Corporate Park,  
Dublin 15, Ireland.  
tel: +353-(0)1-8030406  
fax: +353-(0)1-8030409  
e-mail: dublin@tobin.ie  
www.tobin.ie

Revision: **10806-1007 A**



Blocks lost as a result of proposed line + Depot

Total GFA = 14,464,349 ft<sup>2</sup>

Loss = 5,704,872 ft<sup>2</sup> (530,000 m<sup>2</sup>)

Difference = 8,759,476 ft<sup>2</sup> (813,782 m<sup>2</sup>)

Area A  
28.5ha

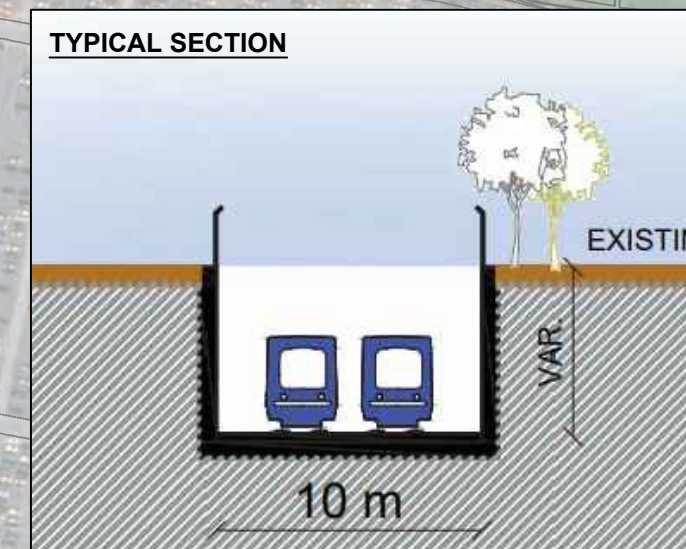
Area D  
3.5ha

Area C  
11.5ha

POTENTIAL DEPOT  
ANCILLARY BUILDINGS

Area B  
10.5ha

POTENTIAL DEPOT LOCATION  
FOR CONSIDERATION



| GENERAL LEGEND                             |  |
|--|--|
| INDICATIVE PROPOSED METROLINK ROUTE        | INDICATIVE PROPOSED METROLINK STATION      |
| POTENTIAL DEPOT INFRASTRUCTURE FOOTPRINT   | POTENTIAL DEPOT LOCATION FOR CONSIDERATION |
| INDICATIVE PROPOSED E - W DISTRIBUTOR ROAD | INDICATIVE PROPOSED GDD ALIGNMENT          |
| COMER GROUP LAND BANK                      | ARCHAEOLOGICAL FEATURES                    |
| POTENTIAL FLOOD RISK ZONE                  | STREAM / RIVERS                            |
| AREA SUITABLE FOR DEVELOPMENT              | METROLINK DEVELOPMENT AREA                 |
| STERILISED LAND                            | GDD WAYLEAVE AREA                          |

| Description                | Area (ha) |
|----------------------------|-----------|
| Overall Landholding        | 88        |
| Sterilised Area            | 6         |
| Area for development       | 54        |
| GDD Wayleave               | 6         |
| Metrolink Development Area | 22        |

- NOTES:
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
  - ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE.
  - ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES.
  - THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES.
  - ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD.

|     |          |              |      |       |
|-----|----------|--------------|------|-------|
| 50m | 0        | 50m          | 100m | 150m  |
| A   | 03.12.19 | REPORT ISSUE | MN   | AK    |
| Rev | Date     | Description  | By   | Chkd. |

Client: **COMER GROUP IRELAND**

Project: **COMER LAND BANK (Metrolink) MULTI DISCIPLINARY SERVICES**

Title: **POTENTIAL DEPOT LOCATION CLIENT SITE - METROPARK (Dardistown)**

Scale @ A1: **1:2,500**  
Prepared by: **M. Nolan** Checked: **A. Kelly** Date: **October 2019**  
Project Director: **D. Grehan**  
Drawing Status: **Draft**

**TOBIN**  
CONSULTING ENGINEERS  
Block 10-4, Blanchardstown Corporate Park,  
Dublin 15, Ireland.  
Tel: +353 (0)1-8030406  
Fax: +353 (0)1-8030409  
e-mail: dublin@tobin.ie  
www.tobin.ie

Revision: **10806-1008 A**







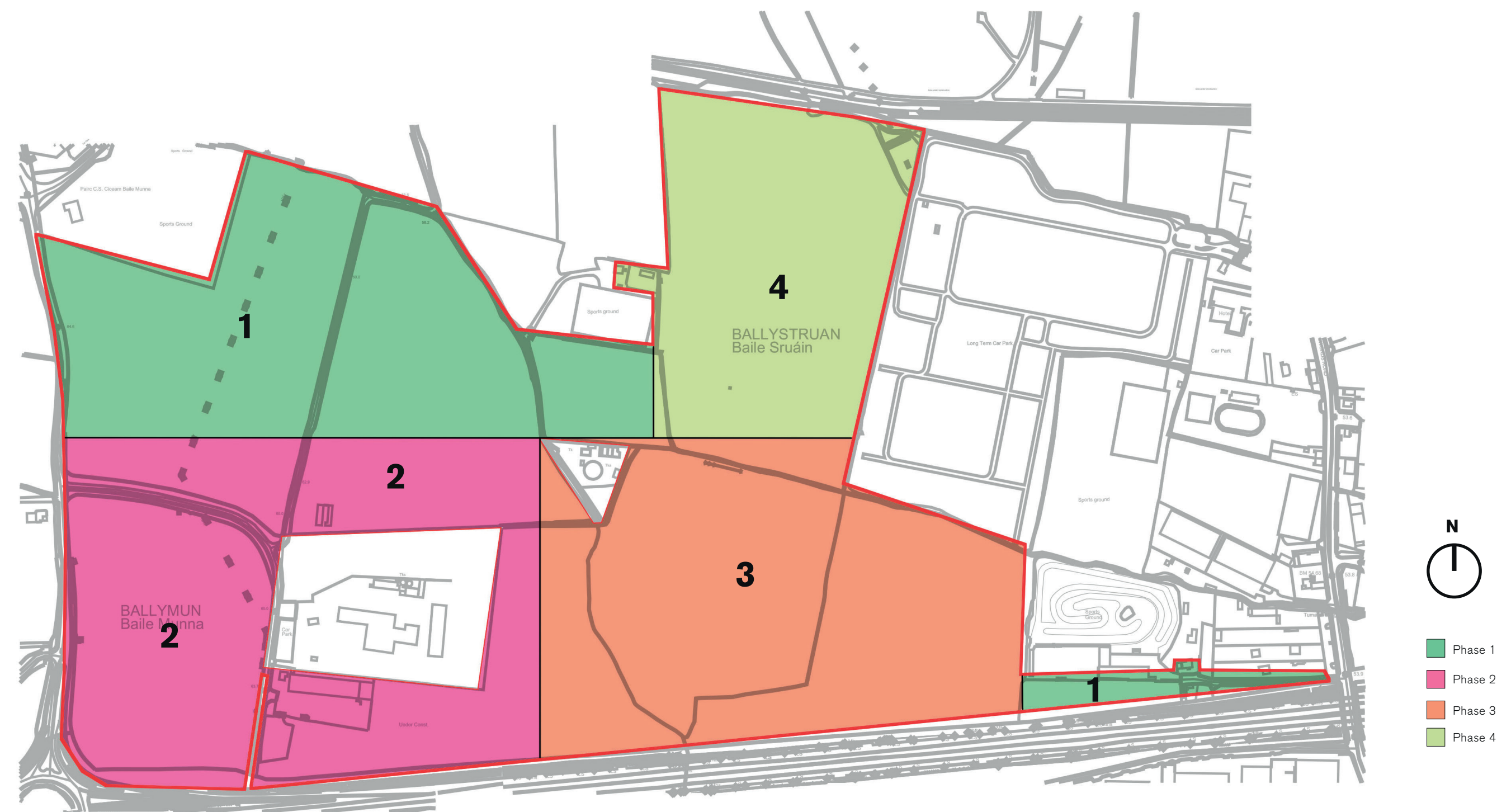
## Appendix B – Foster and Partners Feasibility Study





## Appendix C – Masterplan Summary

**2.9 Phasing strategy**  
Possible phasing strategy indicated by the client





2.8 Initial population and parking assumptions

Assumptions per cluster

| Cluster              |           |            | Population |        | Parking stalls | Parking area |           |
|----------------------|-----------|------------|------------|--------|----------------|--------------|-----------|
|                      | Total GFA |            |            |        |                | m²           | ft²       |
|                      | m²        | ft²        | Units      | Jobs   |                |              |           |
| 1- Business Park     | 502,827   | 5,412,385  | 2,140      | 16,023 | 3,558          | 106,730      | 1,148,836 |
| 2 - Tech Campus      | 106,667   | 1,148,154  | 346        | 1,478  | 711            | 21,318       | 229,469   |
| 3 - Cultural Village | 146,199   | 1,573,673  | 159        | 3,214  | 746            | 22,388       | 240,982   |
| 4 - Innovation Hub   | 477,377   | 5,138,443  | 1,733      | 15,798 | 3,301          | 99,042       | 1,066,081 |
| 5 - Wellness Quarter | 110,712   | 1,191,694  |            | 3,798  | 536            | 16,072       | 173,001   |
|                      |           |            |            |        |                |              |           |
| TOTAL                | 1,343,782 | 14,464,349 | 4,378      | 40,310 | 8,852          | 265,551      | 2,858,370 |

POPULATION ASSUMPTIONS

| Private Rental Accommodation | m²  | ft²   |
|------------------------------|-----|-------|
| Private Rental Units         | 90  | 969   |
| EMPLOYMENT                   | m²  | ft²   |
| General Enterprise           | 15  | 161   |
| Retail                       | 20  | 215   |
| Hotel                        | 100 | 1,076 |
| Culture                      | 150 | 1,615 |
| High Technology              | 45  | 484   |

| PARKING ASSUMPTIONS           | m²  | ft²   |
|-------------------------------|-----|-------|
| Area per stall                | 30  | 323   |
| Private Rental Area           | 90  | 969   |
| General Enterprise and Retail | 200 | 2,153 |
| Hotel                         | 300 | 3,229 |
| Culture                       | 250 | 2,691 |
| High Technology               | 200 | 2,153 |



Total units  
4,378



Total jobs  
40,310



Parking  
8,852 stalls

\* Parking standards from Dublin City Development Plan 2016–2022: Written Statement (Section 16.38 Car Parking Standards) <http://www.dublincity.ie/sites/default/files/content/Planning/DublinCityDevelopmentPlan/Written%20Statement%20Volume%201.pdf>



2.4 Development brief - Test of proposed massing options

**Final iteration** -The final iteration at this stage generated an embryonic concept of five distinct quarters or districts. Low density to the North, with areas which would be protected from noise, by multi-story car parking buildings, and two significant areas of development to the South where higher densities might be achieved. These would be built over underground parking basements. Each district is separated by a wood or parkland setting.

- Mix of uses
- General Enterprise (GE)
  - Private Rental
  - Retail
  - Hotel
  - High Technology (HT)
  - Parking





2.5 Development brief breakdown

Detailed programme

| Cluster              | Block Area |           | Proposed development brief |           |                     |           |                |         |        |         |         |           |                      |           |         |         |           |            |               |            |
|----------------------|------------|-----------|----------------------------|-----------|---------------------|-----------|----------------|---------|--------|---------|---------|-----------|----------------------|-----------|---------|---------|-----------|------------|---------------|------------|
|                      | m²         | ft²       | General Enterprise (GE)    |           | Private Rental Area |           | Social Housing |         | Retail |         | Hotel   |           | High Technology (HT) |           | Culture |         | Total GFA |            | Plot Coverage | Plot Ratio |
|                      |            |           | m²                         | ft²       | m²                  | ft²       | m²             | ft²     | m²     | ft²     | m²      | ft²       | m²                   | ft²       | m²      | ft²     | m²        | ft²        | %             |            |
| 1 - Business Park    | 114,749    | 1,235,148 | 223,828                    | 2,409,265 | 183,064             | 1,970,484 | 9,500          | 102,257 | 6,014  | 64,734  | 79,221  | 852,728   |                      |           | 1,200   | 12,917  | 502,827   | 5,412,385  | 30            | 4.4        |
| 2 - Tech Campus      | 51,628     | 555,723   |                            |           | 31,125              | 335,027   |                |         |        |         |         |           | 62,611               | 673,939   | 12,931  | 139,188 | 106,667   | 1,148,154  | 39            | 2.1        |
| 3 - Cultural Village | 68,687     | 739,341   | 17,873                     | 192,383   | 6,960               | 74,917    | 7,384          | 79,481  | 17,024 | 183,245 | 10,424  | 112,203   | 31,520               | 339,278   | 55,014  | 592,166 | 146,199   | 1,573,673  | 51            | 2.1        |
| 4 - Innovation Hub   | 191,881    | 2,065,386 | 197,731                    | 2,128,359 | 135,704             | 1,460,706 | 20,295         | 218,454 | 6,550  | 70,504  | 21,124  | 227,377   | 92,373               | 994,295   | 3,600   | 38,750  | 477,377   | 5,138,443  | 28            | 2.5        |
| 5 - Wellness Quarter | 79,037     | 850,752   | 36,327                     | 391,021   |                     |           |                |         |        |         |         |           | 56,570               | 608,914   | 17,815  | 191,759 | 110,712   | 1,191,694  | 35            | 1.4        |
| TOTAL                | 505,982    | 5,446,349 | 475,759                    | 5,121,027 | 356,853             | 3,841,134 | 37,179         | 400,191 | 29,588 | 318,483 | 110,769 | 1,192,308 | 243,074              | 2,616,427 | 90,560  | 974,780 | 1,343,782 | 14,464,349 |               | 1.4        |

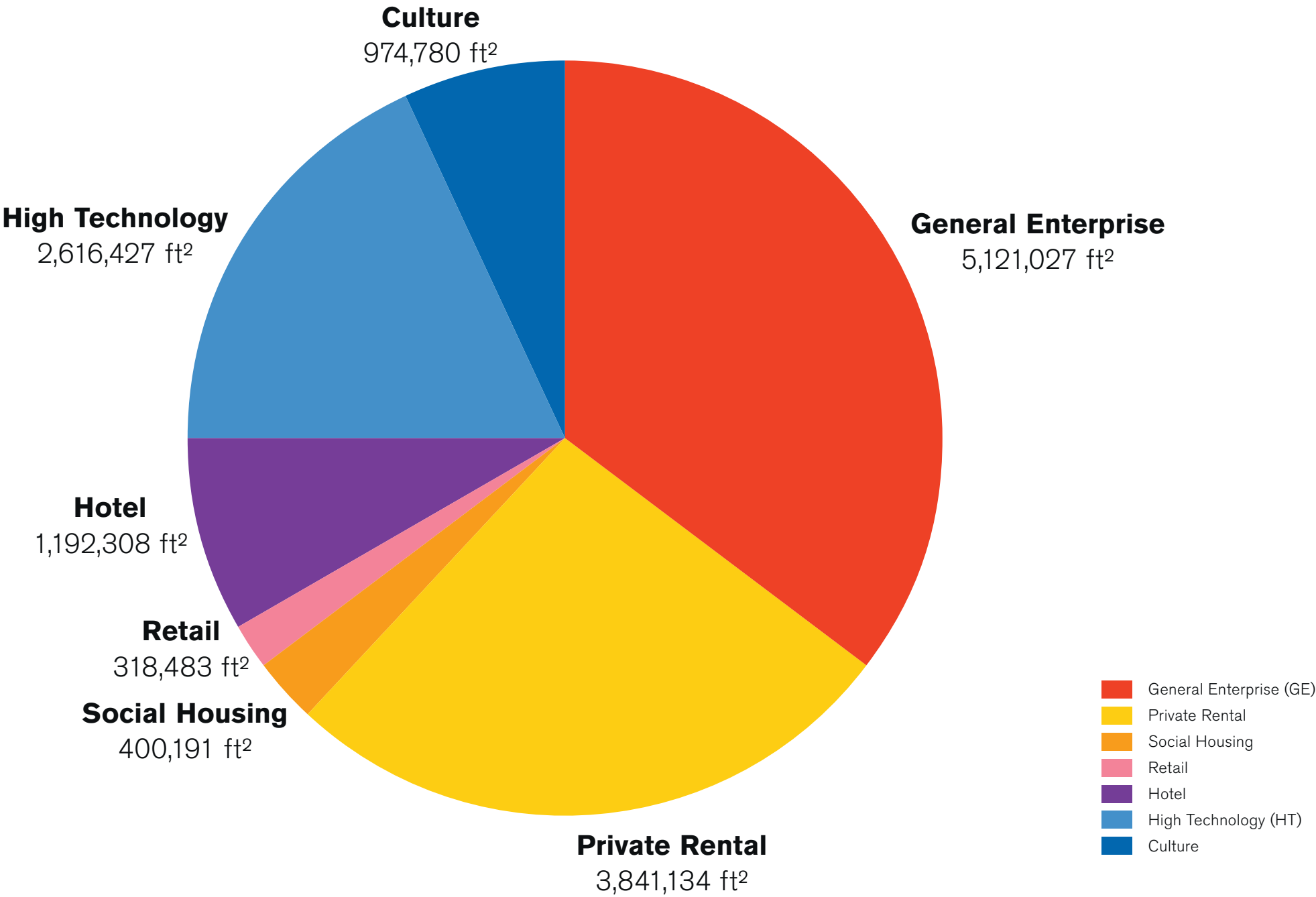
GE = Based on LAP brief, Objective GE - 'Provide opportunities for general enterprise and employment'

HT = Based on LAP brief, Objective HT - 'Provide for office, research and development and high technology / high technology manufacturing type employment in a high quality built and landscaped environment'.

Total GFA  
14,464,349 ft²

Total Plot Ratio  
1.4

Note: These are initial gross external areas which should be verified by a Quantity Surveyor.



2.6 Initial plan of general land use distribution

Each area is set out on a regular orthogonal grid to allow for future flexibility.

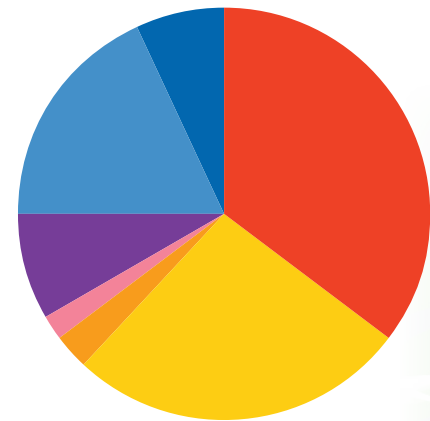




2.7 Possible development of land uses

Gross Floor Areas (GFA) assumptions per cluster, this three dimensional view illustrates the concept of private rental accommodation being protected by other uses from surrounding noise constraints. Buildings next to the motorway, and wherever needed, would have additional facades.

Total GFA breakdown

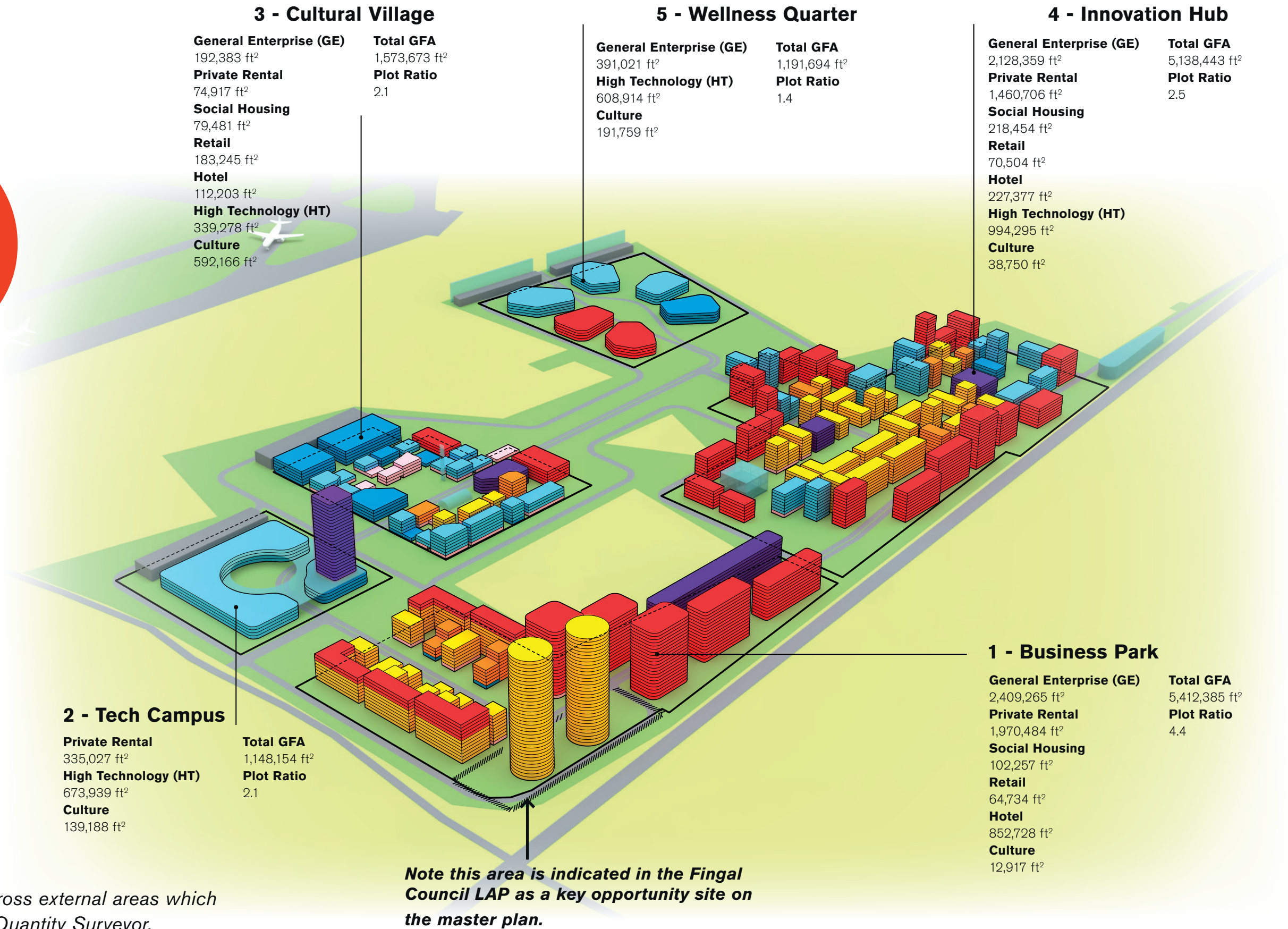


Total GFA

14,464,349 ft²

- General Enterprise (GE)
- Private Rental
- Social Housing
- Retail
- Hotel
- High Technology (HT)
- Culture
- Block areas per cluster

Note: These are initial gross external areas which should be verified by a Quantity Surveyor.







**www.tobin.ie**



**TOBIN Consulting Engineers**



**@tobinengineers**

**Galway**

Fairgreen House,  
Fairgreen Road,  
Galway,  
H91 AXK8,  
Ireland.  
Tel: +353 (0)91 565 211

**Dublin**

Block 10-4,  
Blanchardstown Corporate Park,  
Dublin 15,  
D15 X98N,  
Ireland.  
Tel: +353 (0)1 803 0406

**Castlebar**

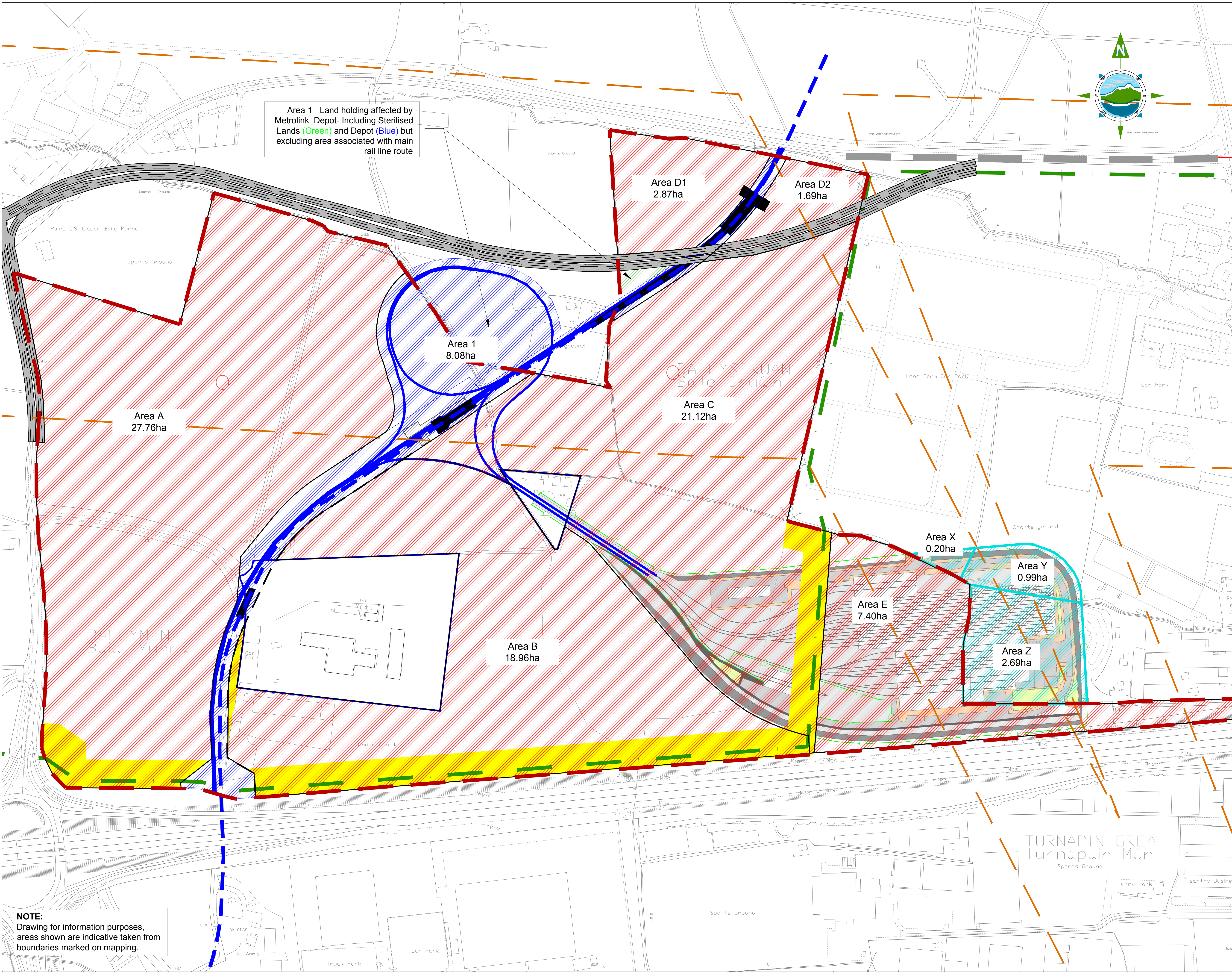
Market Square,  
Castlebar,  
Mayo,  
F23 Y427,  
Ireland.  
Tel: +353 (0)94 902 1401

**London**

17 Bowling Green Lane  
Clerkenwell  
London,  
EC1R 0QB,  
United Kingdom.  
Tel: (+44) (0)203 915 6301

## Appendix 2 – Drawing 10806-1003\_D





Area 1 - Land holding affected by Metrolink Depot- Including Sterilised Lands (Green) and Depot (Blue) but excluding area associated with main rail line route

**NOTE:**  
Drawing for information purposes, areas shown are indicative taken from boundaries marked on mapping.

**GENERAL LEGEND**

INDICATIVE PROPOSED METROLINK ROUTE

POTENTIAL DEPOT INFRASTRUCTURE FOOTPRINT

DUBLIN AIRPORT PUBLIC SAFETY ZONE

COMER GROUP LAND BANK

AREA SUITABLE FOR DEVELOPMENT

STERILISED LAND

DEVELOPMENT LANDS OUTSIDE COMER LAND BANK

INDICATIVE PROPOSED METROLINK STATION

POTENTIAL DEPOT LOCATION FOR CONSIDERATION

INDICATIVE PROPOSED GDD ALIGNMENT

STREAM / RIVERS

METROLINK DEVELOPMENT AREA

GDD WAYLEAVE AREA

| DESCRIPTION                                 | AREA (Ha) |
|---|-----------|
| Overall Landholding                         | 93        |
| Sterilised Land (Green)                     | 0.15      |
| Area for development (Red)                  | 80        |
| GDD Wayleave Area (Yellow)                  | 6         |
| Landholding affected by Metrolink (Blue)    | 8         |
| Development Area outside Landholding (Cyan) | 4         |

- NOTES:**
- FIGURED DIMENSIONS ONLY TO BE TAKEN FROM THIS DRAWING.
  - ALL DRAWINGS TO BE CHECKED BY THE CONTRACTOR ON SITE
  - ENGINEER/EMPLOYERS REPRESENTATIVE, AS APPROPRIATE, TO BE INFORMED BY THE CONTRACTOR OF ANY DISCREPANCIES BEFORE ANY WORK COMMENCES
  - THE CONTRACTOR SHALL UNDERTAKE A THOROUGH CHECK FOR THE ACTUAL LOCATION OF ALL SERVICES/UTILITIES, ABOVE AND BELOW GROUND, BEFORE ANY WORK COMMENCES
  - ALL LEVELS SHOWN RELATE TO ORDNANCE SURVEY DATUM AT MALIN HEAD



|     |          |                                    |    |       |
|-----|----------|------------------------------------|----|-------|
| D   | 05.11.21 | INFORMATION ISSUE                  | MN | BC    |
| C   | 06.03.20 | MINOR REVISIONS                    | RD | BC    |
| B   | 04.03.20 | REVISED PROPOSAL OF DEPOT LOCATION | RD | BC    |
| A   | 03.12.19 | REPORT ISSUE                       | MN | AK    |
| Rev | Date     | Description                        | By | Chkd. |

Client:

Project:

COMER LAND BANK (Metrolink)  
MULTI DISCIPLINARY SERVICES

Title:

POTENTIAL DEPOT LOCATION  
CLIENT SITE - METROPARK  
(Dardistown)

Scale @ A1: 1:2,500

Prepared by: M. Nolan      Checked: A. Kelly      Date: December 2019

Project Director: D. Grehan

Drawing Status: Report

Block 10-4, Blanchardstown Corporate Park,  
Dublin 15, Ireland.  
tel: +353-(0)1-8030406  
fax: +353-(0)1-8030409  
e-mail: dublin@tobin.ie  
www.tobin.ie

Drawing No.: 10806-1003

Revision: D



## **APPENDIX 3: LETTER TO TII**





Mr Aidan Foley  
Project Director MetroLink  
Transport Infrastructure Ireland  
Parkgate Business Centre  
Parkgate Street  
Dublin 8, Ireland

17th January 2022

**Re Location of Depot – Metrolink**

**Privileged and Confidential  
Strictly Without Prejudice**

Dear Aidan

I refer to our meeting of the 7th December last herein and formally set out below the background and our offer to TII.

**Background**

The 220 acre site formerly known as Metropark – located between Dublin Airport and the M50 is the most strategic site in Ireland and one of the most strategic sites in Europe with potential to add €8bn GDP to the Irish Economy. The current Metrolink proposal by TII (Subject to statutory approvals and confirmations) is to acquire 60 acres of this site for a depot for the Metrolink - in the best and most valuable location within this 220 acre site – desecrating it and causing €bns of damage to the taxpayer.

In order to prevent this needless commercial decision Comer Group are offering to gift 25 acres of lands – which we estimate to be worth over €150m **free of charge** to the state to locate this depot elsewhere on the site. Indeed it is our long held belief that this depot should be located on the northern end of the Metrolink - in Lissenhall – which is in line with best international practices and in much less strategic lands.

1. TII current proposal is nonsense and commercially flawed - necessitating the compulsory acquisition of nearly 60 acres of Prime Development land and thereby profoundly impacting Ireland's most strategic landbanks with potential to add multi-billion GDP to the domestic economy p.a. The strategic nature of the site and its existing commercial potential and value in the market has been recognised by many independent consultants including;
  - Foster and Partners masterplanners
  - Jones Lang LaSalle
  - Cushman and Wakefield
  - Tobin Consultant Engineers
  - John Spain Planners
  - CPMS / EGIS

All of these consultants are in agreement as to the profound impact of the decision of TII to proceed – needlessly with the current proposal for a Depot at this particular location.

2. If the Metrolink and depot, as currently proposed, is to proceed as per your current layout we estimate the immediate loss of over 2.6m sq. ft. of existing development potential and profound severance and injurious affection to the existing development potential and value of the retained site, and the cost to the taxpayer will in the €bns of euros.
3. A number of independent commercial property advisors have assessed the existing potential and value of Comer Group lands at Dardistown. We have furnished this independent information to you on a without prejudice basis.

Applying these Independent values to our proposal – as outlined in point 5 below – equates to Comer Group - **giving for free** - land worth potentially in excess of **€150m to TII**.

4. Any business case put forward to the Government/potential funders that continues to locate the depot where currently proposed is fundamentally flawed given the exposure for statutory compensation thereby undermining not only the viability of the Metrolink project in terms of the statutory compensation to be paid but also undermining the benefits to the local, regional and national economy of the full utilisation of this strategic site.
5. It is our proposal to offer to the State/TII approx 25 acres of lands towards the South Western Portion of our site – adjacent to the existing Go Kart and Royal College of Surgeons lands for the development of the proposed depot and this offer subject to the proviso that TII shall develop in full the station at Dardistown (currently only proposed) from the outset and will apply for statutory approval on this basis.

The proposed land take is outlined on Tobin Consultant Engineers drawing No: 10806-1003, copy attached.

Our consultants have reviewed our proposal and confirm that they can readily make this work as a far better location for the depot where

- a) You have 25 acres of lands for free
- b) The surrounding adjoining lands are low value uses and much less valuable than the site you are proposing

The land offer above is a serious attempt to address the profound implications of the current proposal of TII and its advisors and to address this viable alternative proposal in a timely manner and to engage collaboratively with TII as a statutory undertaker with a view to a full and final settlement of all issues between Comer Group and TII, for the benefit of the State and the wider economy.





The offer is made strictly on the basis that the proposal is acceptable as outlined above and only for this part of the site – adjacent to the Go Kart Track.

6. In the event that this offer is rejected and TII continue with the proposed depot location we will be left with no alternative but to object in the strongest possible terms to the proposed scheme and will fully engage in the statutory process.
7. For the avoidance of doubt, any correspondence or offer contained within this letter is strictly without prejudice. It does not in anyway compromise any future claims by or position adopted by any Comer Group entity. If this offer is rejected It shall not be used or relied upon in any future discussions.
8. Should you wish to discuss any of the above in greater detail please do not hesitate to contact us. We look forward to hearing from you as a matter of urgency.

**Luke Comer**

**Chairman Comer Group**

**cc**

- Taoiseach: **Micheál Martin**
- Tánaiste and Department of Enterprise, Trade and Employment: **Leo Varadkar**
- Department of the Environment, Climate and Communications; and Transport: **Eamon Ryan**
- Department of Finance: **Paschal Donohoe**
- Department of Public Expenditure and Reform: **Michael McGrath**

**Encl Tobin Drawing 10806-1003 Revision D**

## **APPENDIX 4: DARDISTOWN DEPOT RAIL ANALYSIS**



**DARDISTOWN DEPOT –  
RAIL ANALYSIS**

**TOBIN CONSULTING  
ENGINEERS**

**DUBLIN METROLINK**

October 2019 - DRAFT

## Contents

- 1.0 EXECUTIVE SUMMARY
- 2.0 SCHEME OVERVIEW
- 3.0 COMPARABLE METRO SCHEMES
- 4.0 TECHNICAL COMPLIANCE, CONSTRUCTION & OPERATIONAL RESTRICTIONS
- 5.0 COST & RESOURCING IMPLICATIONS
- 6.0 LAND USAGE IMPLICATIONS
- 7.0 NEARBY ALTERNATIVE DEPOT LOCATIONS
- 8.0 THE CASE FOR ESTUARY



## Document History

Project  
Number: **640128**

Document  
Reference:

| Revision | Purpose<br>Description | Originated | Checked | Reviewed | Comments | Date     | Authorised |
|----------|------------------------|------------|---------|----------|----------|----------|------------|
| 0.0      | DRAFT                  | BC         | DG      | DG/TG    | N/A      | 08/10/19 |            |
| 1.0      | DRAFT                  | BC         | DG      | DG/TG    | N/A      | 16/10/19 |            |
|          |                        |            |         |          |          |          |            |
|          |                        |            |         |          |          |          |            |

## **1.0 EXECUTIVE SUMMARY**

The Dublin Metrolink scheme, in its latest form, proposes a rail depot at the Dardistown site south of Dublin airport, on land owned by our Client who has engaged us to assess that decision from a rail perspective. Within this commission, we have studied the proposals from an operational, financial, construction and technical perspective. We have also made comparisons with characteristics of alternative Metro schemes around the UK and beyond.

The critical aspect of the depot at Dardistown appears to be the previous intention to tie in with the Metro West scheme when Metrolink was known as Metro North. The decision has since been made to cancel the Metro West scheme, however the decision to relocate the depot to Dardistown does not appear to have been re-visited.

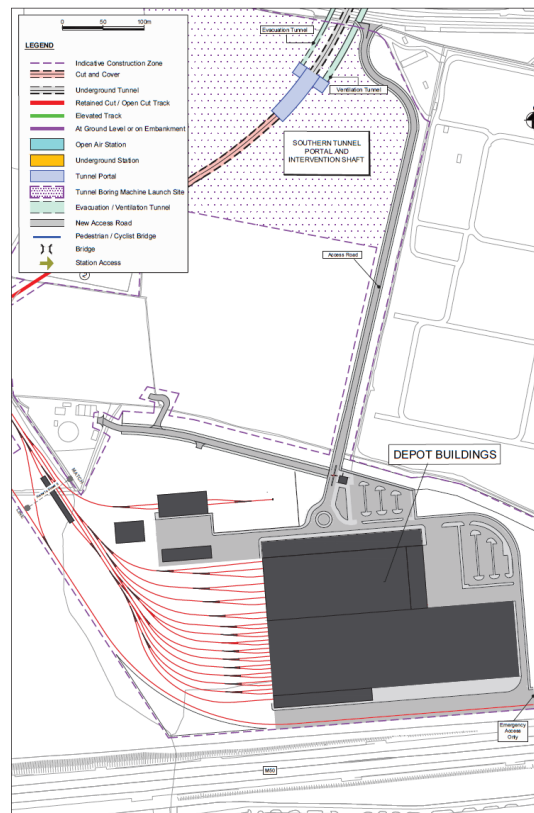
When assessing the decision to locate the depot at Dardistown, in the context of the latest Metrolink proposals, the argument against from a rail perspective is consistent across all criteria. Operationally, it is not the primary location for a depot, a view that is supported by the location of depots on other Metro routes of a similar length, location and frequency of service. Construction methodologies and technical compliance will be constrained and challenged to a greater extent at Dardistown than they would be elsewhere. Budget implications are also negative with regards to increased and avoidable costs due to the decision to locate at Dardistown.

When the criteria applied to Dardistown are applied to the previous location (Estuary), the rail-based argument is clear to reverse the decision and return the depot to that location. The previous strategic decision to re-locate to Dardistown due to the link to Metro West no longer applies and therefore on face value, the decision no longer makes sense, and should be re-visited and re-assessed.



## 2.0 SCHEME OVERVIEW

The Emerging Proposed Route for the forthcoming Dublin Metrolink scheme details a new train depot at Dardistown – see proposed layout below:



*Figure 1: Proposed depot layout at Dardistown*

For the purpose of this exercise, a previous high-level summary (*An Bord Pleanála Ref.: 06F. NA0007, 2011*) of the depot components has been utilised, which is as follows:

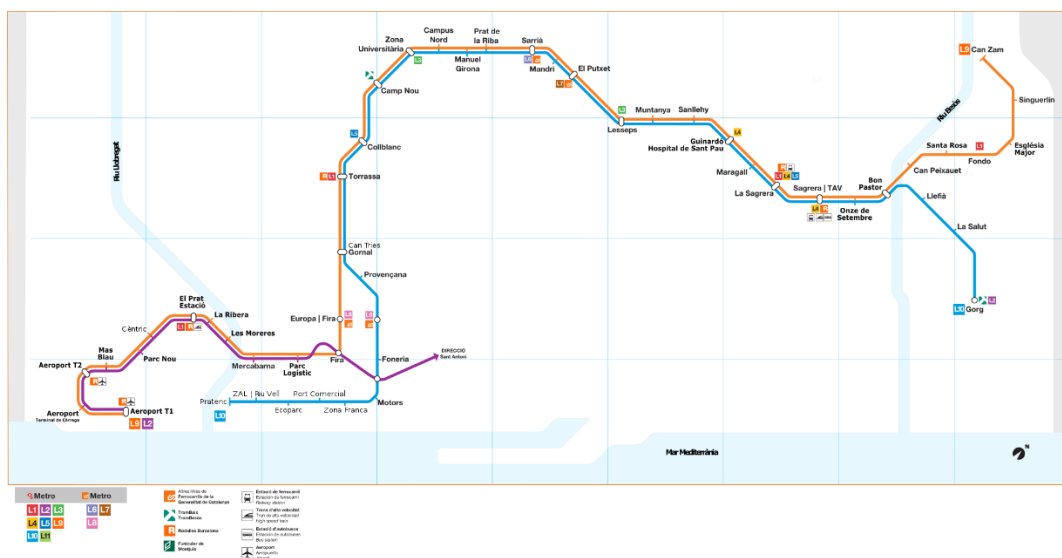
- 9 lanes of 450m for stabling, 6 lanes of 350m into the maintenance building and 350m of track for maintenance vehicles and deliveries.
- HQ building, 15m high with a floor area of c1,300m<sup>2</sup>.
- Infrastructure maintenance building, 13m high with a floor area of 3,000m<sup>2</sup>.
- Vehicle maintenance building, 13m high with an area of 10,000m<sup>2</sup>.
- Inspection/sanding building 9m high with an area of 900m<sup>2</sup>.
- Radio antennae at the western end of the depot circa 30m in height.
- 180 parking spaces for staff, 300 car parking spaces for park and ride.

### 3.0 COMPARABLE METRO SCHEMES

CPMS have identified examples of comparable metro schemes to the proposed Dublin Metrolink, all of which have end of line depots and are similar in terms of:

- City based location
- Linear route layout
- Route length and/or number of stations
- Proposed service frequency

*Barcelona (named in Preferred Emerging Route report) – Depot @ Pratenc/Can Zam:*



*Copenhagen (named in Preferred Emerging Route report) – Depot @ Vestamager:*





Thessaloniki – Depot @ Pylaia:

### Μετρό Θεσσαλονίκης Thessaloniki Metro

Τοπογραφικός Χάρτης - Γραμμές 1 & 2  
Topographic Map - Lines 1 & 2



Minneapolis – Depot @ Union:



Depots are traditionally located at the end of the line for various reasons inclusive but not limited to (all of which can be deemed applicable to the proposed Dublin Metrolink scheme):

- Cheaper land often available away from the city/central section of the route
- Operational benefits particularly with high frequency of service
- Land availability for stabling of trains out of service
- Lack of occupied buildings near to prevent restrictions on out of hours operations

The final point made above is particularly important to the landowner at Dardistown, due to the future planned development into a mix of commercial and residential buildings. An operational depot at Dardistown is not only likely to result in high land sterilization (see Section 6) but also have significant restrictions on what can be built on the surrounding land. Examples of other UK city-based train depots can be found below, where such buildings are not found nearby, primarily due to the reasons above.

*DLR Depot – North Woolwich/Beckton, London:*



*Eurostar Depot – Temple Mills, London:*





The depot at Dardistown, and the original decision for re-location there, also appears to be linked to the once proposed future integration of Metro West into the scheme, as per the schematic below:

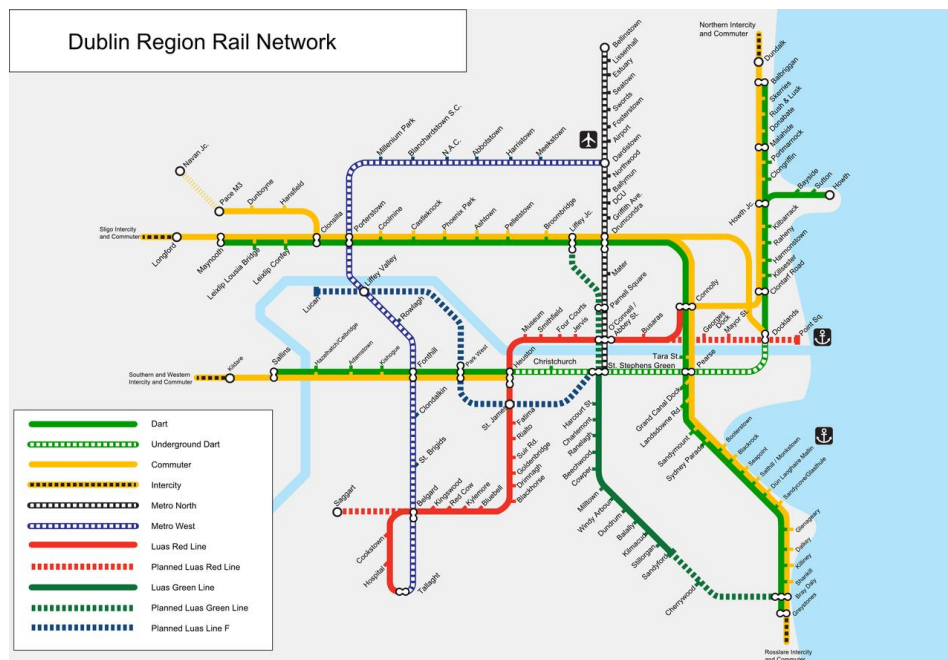


Figure 2: Integrated schematic of existing and proposed Dublin rail routes

In original planning documentation, the significance of the Metro West scheme to the Dardistown depot location was highlighted as extremely important from a strategic perspective. However, critically, it also noted and was right to do so, that a combined depot without full approval for both schemes could result in greater contractual risk and shouldn't be progress.

The study concluded that a combined depot was technically feasible and would provide financial and operational benefits. However, because they are two separate projects at different stages of development, it was considered to provide a combined depot would introduce greater life-long contractual risk to both projects and, therefore, this option was not progressed. I note that two options were considered at Dardistown for the development of a depot to serve this development alone. Given that this location will be the tie-in for Metro West with Metro North, it clearly was an issue that warranted greater consideration in the interests of proper planning and sustainable strategic development. An Bord Pleanala, PL6F.NA0003.

It has been widely reported that Metro West is no longer going ahead and is not included in any of the Irish government's planned infrastructure plans that cover planned infrastructure works during the next 2-3 decades. Without this integration, and in agreement with the initial report referenced above, the case for a depot at Dardistown is significantly weakened and needs to be reconsidered.

## 4.0 TECHNICAL COMPLIANCE, CONSTRUCTION & OPERATIONAL RESTRICTIONS

The Emerging Preferred Route specifies the tunnelled section surfacing south of Dublin Airport before continuing over the M50 via a flyover structure. The track is proposed to curve slightly creating a total length of approximately 1500m to travel through the 1000m distance from the north to south border of the land in question.



Image 1: View North from the M50



Image 2: View South from Dublin Airport

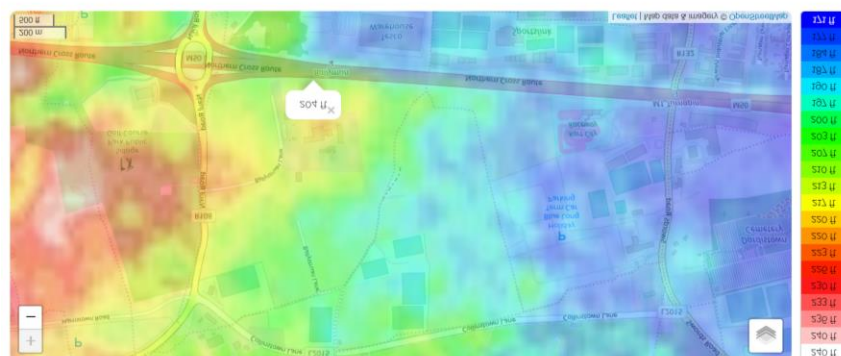


Image 3: Estimated Topographical Layout (source: [www.topographic-map.com](http://www.topographic-map.com))



The nominated route will present various technical compliance challenges, particularly with regards to gradient restrictions (both in open route and at the tunnel portal) whilst also having a direct impact on the required track length to maintain technical compliance. Emergency escape routes are likely to be required at the tunnel portal in addition to an allocated rescue point of a certain size (circa 500m<sup>2</sup> minimum) at the end of each escape route.

The tunnel portal proposed south of Dublin Airport will not only mean the tunnel boring machine (TBM) will need to be surfaced more often than originally proposed but will also result in an increase in land usage due to the requirement for an additional TBM launch site. Disruption to the already extremely busy M50 is also unavoidable through the construction of a flyover structure.

Operationally, additional Empty Car Stock (ECS) movements will be required by placing the depot at Dardistown to get rolling stock in place for commencement of services. A loop or crossover at each end will almost certainly be required (regardless of depot location) to achieve the desired service frequency – this is likely to result in a net higher land acquisition than would be required if the depot was located at the north end of the route. The route layout into the Dardistown also appears to narrow to a single track at one point which further constrains movements in and out of the depot. This also presents a significant performance risk as there is no operational contingency measure/alternative should there be any issues with the infrastructure at this pinch point.

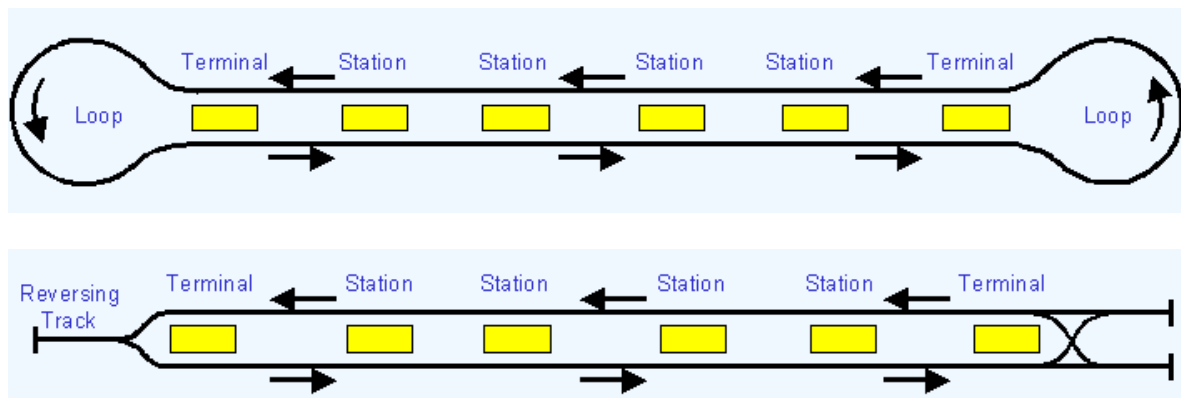


Image 4: Typical route layouts and operational arrangements for high frequency metro service

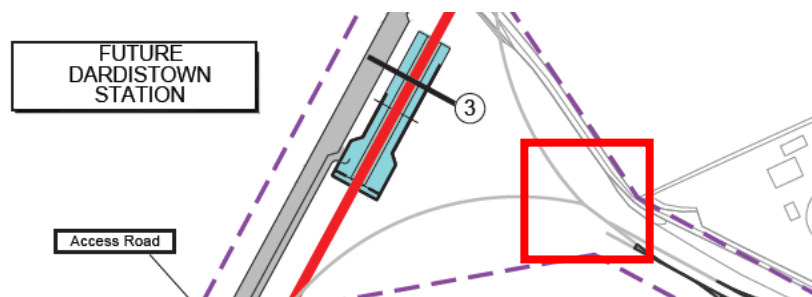


Image 5: Single track pinch point on the route in/out of the proposed Dardistown Depot

## 5.0 COST & RESOURCING IMPLICATIONS

The Emerging Proposed Route will result in the requirement for 2no. additional tunnel portals, which according to a recent HS2 tunnelling report (*LWM-HS2-HY-PPR-000-000076-P02B – HS2 A Guide to Tunneling Costs*), come at a cost of €25-70m each. In addition to the cost of the portals, the creation of two separate tunnels to enable a depot at Dardistown will remove several economies of scale made possible by the single tunnel originally proposed.

In addition to the above, the proposed two tunnel approach also results in the requirement to surface and re-launch the TBM. Therefore, further additional construction methodology driven costs will also be incurred over and above the fixed costs of the additional portal assets detailed above.

As stated in Section 4, to achieve gradient compliance for the route and the depot, a significant increase in track meterage may be required, which appears to be circa 500m according to the Emerging Preferred Route layout. Not only will there be the cost of the additional infrastructure, but also the cost of additional land acquisition to facilitate construction.

The operational implications of the proposed depot location at Dardistown is likely to result in a net higher operational expenditure than an end of the line depot location. Lessons learned from elsewhere demonstrate the cost of the required ECS movements can contribute significantly to the average cost per journey and would be unavoidable with a centrally located depot. Considerations should also be made to both the local demographic of the area in Dardistown and transport links to ensure ease of access for future staff.

Although difficult to quantify the additional costs without a full set of information to base estimates on, a number of key design principles aligned to minimising costs are contradicted or ignored with the proposal to construct a depot at Dardistown.

,



## 6.0 LAND USAGE IMPLICATIONS

The intention of the client is to develop the site into a mix of residential and commercial buildings. The proposed depot will result in a significant negative and restrictive impact to these proposals due to the consequential sterilization of the land, from a development perspective, of the Metrolink proposals.

It is highly likely the land will not be able to be developed if the proposed scheme goes ahead, however a breakdown of the direct sterilization from the proposed layout has been detailed below:

| Depot Component                 | Estimated Loss of Land (m2) | Commentary                          |
|---------------------------------|-----------------------------|-------------------------------------|
| Depot Footprint                 | 180,000                     | Based on drawings*/layout summary** |
| Route Track inc. Embankments    | 40,000                      | Based on drawings*/layout summary** |
| Access Roads                    | 10,000                      | Based on drawings*/layout summary** |
| Noise/light/vibration pollution | N/A                         | Large impact on adjacent buildings  |
| TBM launch site                 | 60,000                      | Temporary loss                      |
| Station construction            | 10,000                      | Some would be temporary loss only   |

\*As per *Emerging Preferred Route – Individual Route & Station Maps*

\*\* As per *An Bord Pleanála Ref.: O6F. NA0007, 2011*

In addition to the physical loss of land from the depot proposals, it is highly likely significant restrictions will result as a consequence of an operational depot being located at Dardistown. It is highly undesirable for residential and commercial tenants/occupants to have a 24/7 operational train depot in close proximity to their property, and therefore demand for such property in this location is likely to be limited if the proposals go ahead.

## 7.0 NEARBY ALTERNATIVE DEPOT LOCATIONS

As part of this commission, three alternative depot locations were requested for consideration. These are all located in close proximity to Dardistown, as detailed below:

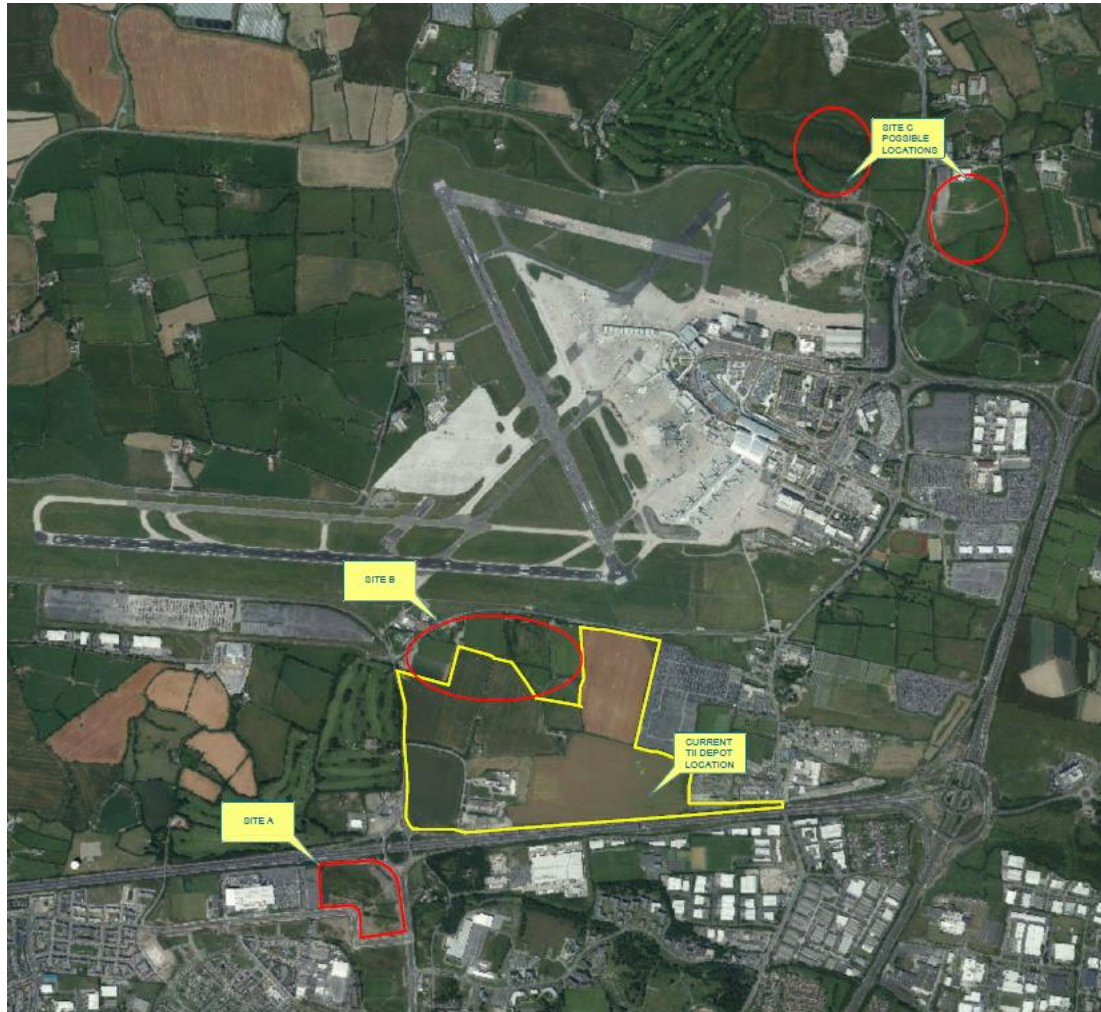


Figure 3: Alternative depot location proposals

From a rail perspective, all three of these alternative proposed locations will be affected by all of the same constraints as the current Dardistown location to a similar extent, as summarised in the table below, and therefore cannot be recommended as viable alternatives.

| Location/Constraint                    | Site A            | Site B         | Site C    |
|--|-------------------|----------------|-----------|
| Comparable Schemes                     | No change         | No change      | No change |
| Technical/Constructability/Operational | Minor improvement | No change      | No change |
| Cost & Resourcing                      | No change         | No change      | No change |
| Land Usage                             | Off site          | Reduced impact | Off site  |



## 8.0 THE CASE FOR ESTUARY

As detailed in historical documentation and prior to the publication of the Emerging Preferred Route, the location of the depot was detailed as Estuary – at the northern end of the Metrolink route. Using the same comparison mechanism above, it is clear that from a rail perspective, Estuary is a much more favourable location than Dardistown.

| Location/Constraint                    | Dardistown | Estuary | Commentary   |
|--|------------|---------|--|
| Comparable Schemes                     |            |         | Depot locations align to Estuary                       |
| Technical/Constructability/Operational |            |         | All are N/A or impact less at Estuary than Dardistown  |
| Cost & Resourcing                      |            |         | All are N/A or impact less at Estuary than Dardistown  |
| Land Usage                             |            |         | Assumed no significant developments planned at Estuary |

### Comparable Metro Schemes:

All comparable schemes shown have an end of the line depot location. With the removal of the link to Metro West and the fact this is no longer planned to be progressed in the foreseeable future, the argument for an end of line depot is strengthened. The previous Estuary site has no obvious characteristics from a rail perspective that make a depot location there unfeasible.

### Technical Compliance, Construction and Operational Restrictions:

The Dardistown location, proposed flyover of the M50 and proximity of Dublin Airport all present technical compliance and construction challenges that will result in additional costs. The operational disadvantages further support the case to avoid such a location for the main train depot for the route. The proposed service pattern and frequency also mean a loop/turnback facility will be required at each end of the line and this could potentially be incorporated into the depot footprint at Estuary in a more efficient manner than a separate depot at Dardistown. Major disruption to the M50 would also be avoided due to the removal of the requirement for a flyover structure south of Dardistown.

### Cost & Resource Implications:

A depot at Estuary would reduce the number of tunnel portals (estimated to cost €25-70m each) from four to two. Economies of scale would also be facilitated due to the single tunnel approach as opposed to the two-tunnel approach which is unavoidable if the depot is at Dardistown. There is a strong case

that Estuary also provides a more accessible, more demographical suitable location for a base of operations, particularly when considering the planned development of the Dardistown site.

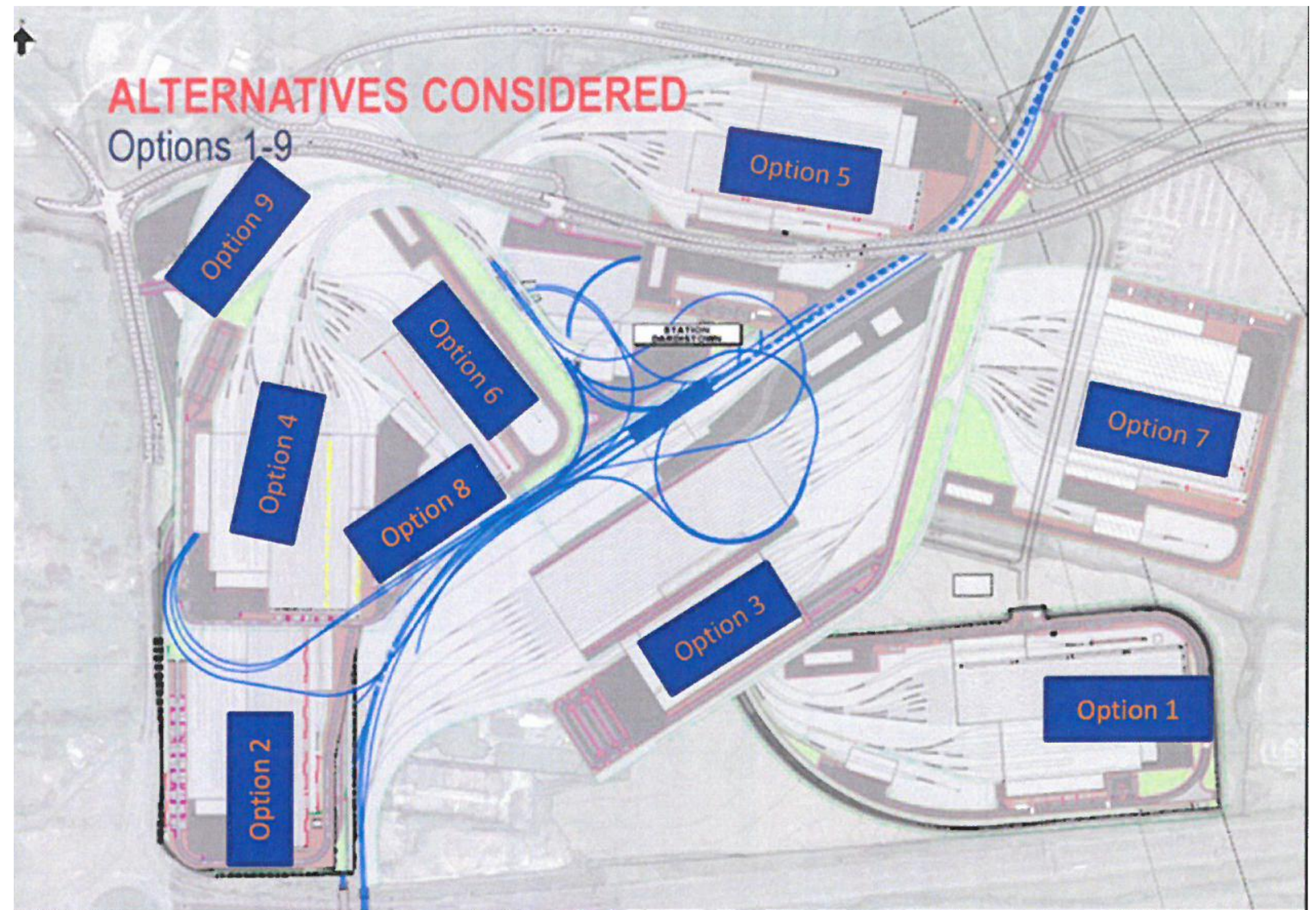
**Land Usage:**

Although the planned development of the Estuary site is unknown, it can be reasonably assumed that the scale of residential and commercial development (if any is planned at all) is at a lower scale than that planned at Dardistown.



**APPENDIX 5: COMPARATIVE ANALYSIS PREPARED BY MCGREEVY PROPERTY CONSULTANTS**

- Multi Criteria Assessment of Each Depot Alternative site considered.
- F+P masterplan considered.
- Inputs such as land usage, site capacity and constraints used to assess.
- Loss of development and long-term GDP loss considered.
- True assessment to the taxpayer
- The existing location ranks 2<sup>nd</sup> worst location.





| Analysis of Each Option as per the LAP and Foster and Partner   |   |  |  |   |   |  |   |  |   |   |
|---|---|--|--|---|---|--|---|--|---|---|
| Location/Constraint   | Site 1  | Site 2   | Site 3   | Site 4  | Site 5  | Site 6   | Site 7  | Site 8   | Site 9  | Site 10   |
| Comparable Schemes  | International Best Practice locates depot at end of the scheme  | International Best Practice locates depot at end of the scheme   | International Best Practice locates depot at end of the scheme   | International Best Practice locates depot at end of the scheme  | International Best Practice locates depot at end of the scheme  | International Best Practice locates depot at end of the scheme   | International Best Practice locates depot at end of the scheme  | International Best Practice locates depot at end of the scheme   | International Best Practice locates depot at end of the scheme  | International Best Practice locates depot at end of the scheme  |
| Cost & Resourcing   | Weaker Land Value within Daridstown   | Impacts opportunity and Gateway Site   | Centre of the site - not ideal but facilitates the development of the key opportunity and gateway sites  | Impacts opportunity and Gateway Site  | 2nd best location to facilitate the development of the remaining lands - this is a lower value location   | Impacts opportunity and Gateway Site   | Located in low value use area and facilitates the development of the remainder of the site  | Impacts opportunity and Gateway Site   | Located in low value use area and facilitates the development of the remainder of the site  | Offer the lands for free  |
| Land Usage & Planning   | Zoned "Hub" in the LAP Lower value use than Opportunity and Gateway . Identified as Innovation Hub in F+P masterplan  | Opportunity and Gateway Site. Would render the entire LAP undevelopable  | Partially Zoned Hub partially Depot  | Partially zoned depot but majority zoned gateway. Locates depot at entrance of LAP area, locates depot in prominent location and acquires the majority of the Gateway site - a major component in the LAP and F+P Plan  | Zoned airport and logistics park. Low value uses  | Primarily Zoned Depot in the LAP. Located in an area that facilitates the development of the remaining site  | Zoned Eastern Corridor and airport and logistics  | Partially zoned depot but majority zoned gateway. Locates depot at entrance of LAP area, locates depot in prominent location and acquires the majority of the Gateway site - a major component in the LAP and F+P Plan   | Zoned airport and logistics park. Low value uses  | Zoned "Hub" in the LAP Lower value use than Opportunity and Gateway   |
| Estimated Development Loss  | 5,800,000 sq. ft  | 6,400,000 sq. ft.  | 2,500,000 sq. ft.  | 3,500,000 sq. ft.   | 450,000 sq. ft.   | 850,000 sq. ft.  | Negligible  | 5,500,000 sq. ft,  | Negligible loss of playing fields that can be replaced in the LAP. Sainfoin willing to accommodate this   | 2,500,000 sq. ft,   |
| Residual Lands Developability   | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>The landowner would also argue that there is significant visual pollution to a depot which hinders future development.</p> <p>By locating the depot in the southwest corner facilitates the development of the overall site</p> | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>The landowner would also argue that there is significant visual pollution to a depot which hinders future development.</p> <p>This location would be catastrophic for future development of the site</p> | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>The landowner would also argue that there is significant visual pollution to a depot which hinders future development.</p> <p>This location in the centre of the site would facilitate the development of the Gateway and Opportunity site and would be less injurious than others</p> | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>The landowner would also argue that there is significant visual pollution to a depot which hinders future development.</p> <p>This location would be less damaging than option 8 however it is located at the entrance to the future development and is located on lands identified as a gateway site</p> | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>This location would be removed from the main development and could facilitate development of the remaining site</p> | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>The landowner would also argue that there is significant visual pollution to a depot which hinders future development.</p> <p>This location would be catastrophic for future development of the site</p> | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>This location would be removed from the main development areas and could facilitate development of the remaining site</p> | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>The landowner would also argue that there is significant visual pollution to a depot which hinders future development.</p> <p>This location would be catastrophic for future development of the site</p> | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>This location would be removed from the main development areas and could facilitate development of the remaining site</p> | <p>"the provision of a depot at this location would result in potential impacts in terms of noise, vibrations and dust during construction phase and or the operational phase"</p> <p>This location would be removed from the main development areas and could facilitate development of the remaining site</p> |
| Overall estimated loss to Taxpayer (GDP, Lost opportunity assume €100k per office worker GDP)                                     | €370m p.a.  | €6bn p.a.  | €2.5bn p.a.  | €3.5bn p.a.   | €100m p.a.  | €500m p.a.   | €50m p.a.   | €5bn p.a.  | €25m p.a.   | €1bn p.a.   |
| Ranking in terms of overall criteria for suitability including land use and long-term economic costs (1 most suitable - 10 Least) | 2   | 10   | 6  | 8   | 3   | 7  | 4   | 9  | 5   | 1   |