



DART+ West

PUBLIC CONSULTATION BROCHURE

EMERGING PREFERRED OPTION



TABLE OF CONTENTS

1. Introduction to DART+ Programme	1
2. DART+ West	5
3. Public consultation process	7
4. Current design status	10
5. Key infrastructural elements of DART+ West	12
6. Benefits of DART+ West	16
7. Option selection process	19
8. The emerging preferred option	21
• General linear works	21
• City centre enhancements (Connolly Station & Spencer Dock Station)	22
• City centre to Phibsborough / Glasnevin	23
• Phibsborough / Glasnevin to Clonsilla station	25
• Clonsilla Station – Maynooth	31
• Clonsilla Station – M3 Parkway	33
9. Transport integration	35
10. Issues to consider	37
11. Next steps	40
12. How to engage	42
13. Alignment figures	43



01

Introduction to
DART+ Programme

1. Introduction to DART+ Programme

DART+ is a transformative programme of projects that aims to modernise and improve existing rail services in the Greater Dublin Area (GDA). It will provide a sustainable, electrified, reliable and more frequent rail service, improving capacity on rail corridors serving Dublin.

The current DART network is 50km long, extending from Malahide / Howth to Greystones. The DART+ programme will increase the length of the DART network to 150km of railway corridor through the electrification and upgrade of existing lines transforming commuter train travel in the Greater Dublin Area (GDA).

The DART+ Programme also includes the purchase of new train fleet.

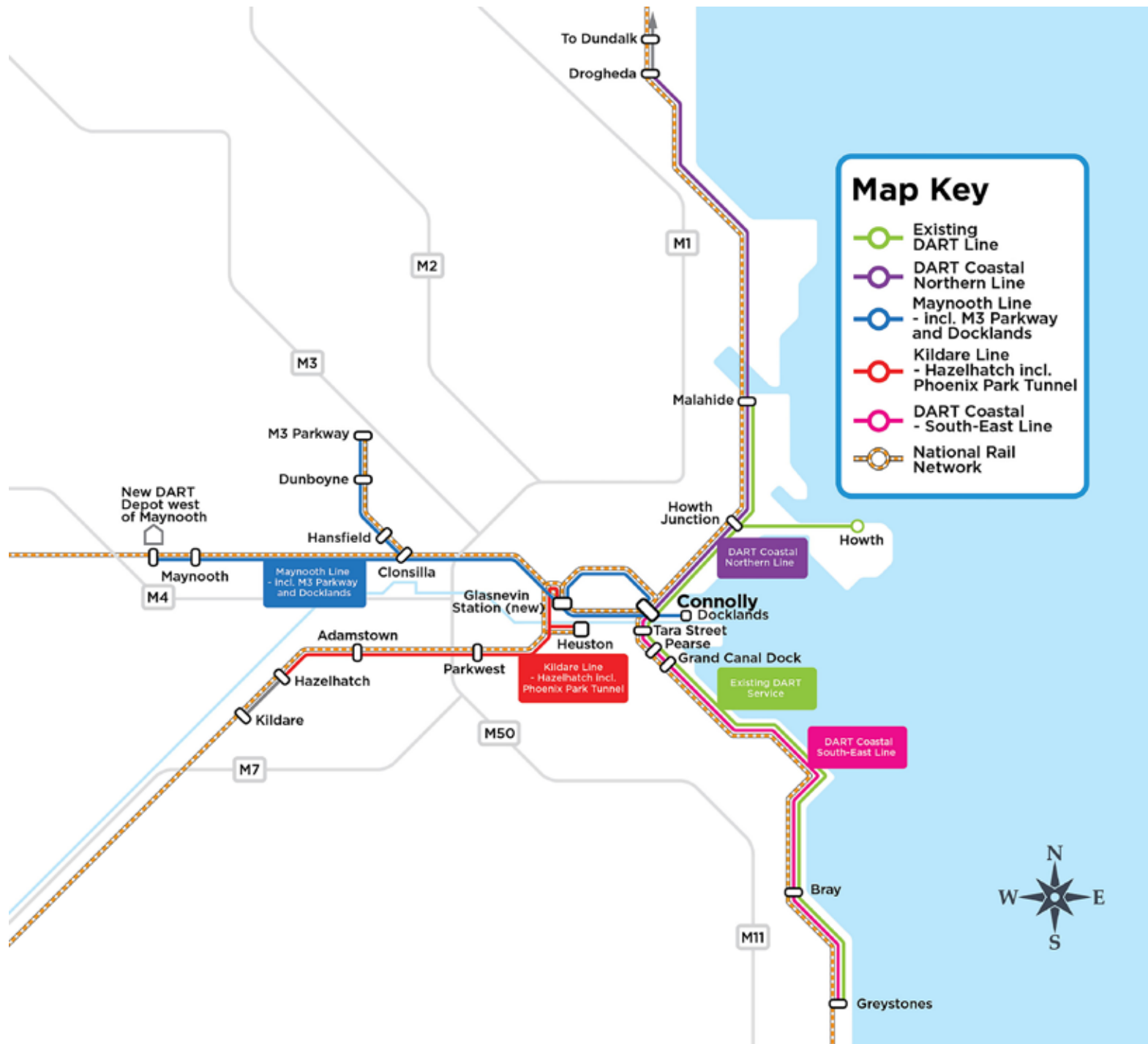
The DART+ Programme will deliver frequent, modern, electrified services **from Dublin City Centre (Connolly & Spencer Dock) to:**

- Maynooth, M3 Parkway
- Hazelhatch & Celbridge
- Drogheda; and
- Greystones

DART+ is a key transportation improvement to form a high quality and integrated public transport system. It will have benefits for the residents of the Greater Dublin Area and also those living in the other regions. It will assist in providing a sustainable transport system and a societal benefit for current and future generations.

DART+ will seek to maximise use of the existing railway corridors and implement a modernisation programme to achieve the capacity increase necessary to meet current and future demands.





Schematic diagram of DART+ Programme extent

Why investment in DART+ Programme is needed

Provides Sustainable Transport Options

- Over-reliance on private car use and increasing congestion in GDA.
- DART+ is more sustainable and cleaner than current diesel trains.

Achieve Climate Change Targets

- Will help reduce the transport sector greenhouse gas emissions which continue to rise
- Supporting the Government's Climate Action Plan



Supporting Economic and Population Growth

- Congestion in GDA is increasing
- Cost of Time Lost in the Dublin Region is ~ €350million/annum and forecast to rise to €2,000million/annum by 2033]
- Sustainable public transport infrastructure (pedestrian, cycling, bus and rail) will sustain economic and population growth while reducing emissions

Integration of Land-use & Transport Planning

- Co-ordination and integration of spatial planning with rail transport
- Supporting compact growth and increased densities in the GDA
- Supports the implementation of the 'Project Ireland 2040 and the National Planning Framework

Facilitates Integration with other modes of transport

- Improves integration of rail services with all modes of travel (Car/P&R, cycling, walking)
- Enables greater cross-modal journeys through improved integration with other modes – Bus, Luas, MetroLink.



02

DART+ West

2. DART+ West

The first of the infrastructural projects of the DART+ programme to be delivered will be the DART+ West project.

DART+ West is seeking to significantly increase rail capacity on the Maynooth Line. This can be achieved by changing to electrified, high

capacity DART trains and increasing the frequency of trains. This will assist in Ireland reducing greenhouse gas emissions from transport and help combat climate change.

The electrification of the rail line will predominantly follow the existing railway corridor. Interventions outside of Iarnród Éireann lands will be



capacity DART trains and increasing the frequency of trains.

Delivery of this project will support the existing communities along the railway and support future sustainable development. It will serve all existing stations along the railway corridor between Maynooth Station and M3 Parkway Station to Connolly Station and Spencer Dock Station using electrical power that has a lower carbon footprint than the existing diesel trains. The frequency and quality of service that will be provided will provide a viable transport alternative to communities along the route and help

required at a number of locations for some of the scheme elements such as:

- Level crossing replacements;
- Proposed depot;
- Construction of substations (to facilitate the provision of power to the line); and
- Use of land for temporary construction/storage compounds and all ancillary works required for the project.



03

**Public consultation
process**

3. Public consultation process

Public participation during the design process is a key element to the delivery of major infrastructure projects such as DART+ West.

This project will have a two stage non statutory Public Consultation process. The current consultation is seeking feedback on the 'Emerging Preferred Option'. As the design process advances and the designs are further developed and matured another public consultation will take place.

This consultation is our way of asking you, as potential users of the improved services or those likely to be affected by its development, for your views on our plans, whilst the design process is active. Your local knowledge and comments will inform the emerging preferred design and help us improve the project and ensure it will be a success for you and the communities it will serve.

Public participation is welcomed and encouraged throughout the design development process, however, there will be three main project consultation stages which will provide you with the opportunity to learn about the design development and provide feedback which will inform the next stage as

appropriate. The main public participation/feedback stages as part of the project development is illustrated in graphical form below and include:

- Public Consultation No.1 Emerging Preferred Option (Q3 2020 - Current Stage)
- Public Consultation No.2 Preferred Option (Q4 2020)
- Statutory Consultation Period as part of the Railway Order application process (Q2 2021)

Public feedback will be accepted during all stages of the design development and can be submitted through the project website, e-mail address, phoneline or by written correspondence. For further details see the 'How to engage' section.

Iarnród Éireann invites the public to engage in the design process and all feedback is welcome.

COVID 19

Due to the COVID-19 restrictions the first consultation event will be predominantly a digital Public Consultation on the Emerging Preferred Option. As restrictions ease it is envisaged that the

second public consultation will be a full public information (physical roadshow) event to present the Preferred Option to the public in Autumn 2020.



Graphic showing public participation as part of the option selection, design and Railway Order Application process



04

**Current design
status**

4. What is the current design status of the project?

This brochure explains the current design status of the project, its benefits, potential impacts, and how you can send us your queries, thoughts and ideas.

The design and environmental impact assessment process for the DART+ West has commenced, and we are at a key stage in the project.

Before we proceed any further, we would like your views on the DART+ West 'Emerging Preferred Option' which is being put forward by Iarnród Éireann as part of this public consultation process No.1.

The 'Emerging Preferred Option' is the preferred combination of design options that have been identified at this stage of the project development. Studies are still ongoing in this regard and therefore some site-specific design aspects have yet to be concluded. These studies will be progressed with your

local knowledge and will inform the design and help us to improve the project and ensure it will be a success for you and the communities the project will serve.

Following these further studies, assessments, design development and a review of your feedback, the 'Emerging Preferred Option' will be refined, and the 'Preferred Option' will be presented at Public Consultation No.2 due to take place in late Autumn 2020.

The project will culminate with a Railway Order Application to An Bord Pleanála, in accordance with the Transport (Railway Infrastructure) Act 2001 (as amended). This is essential to secure building consent. It is currently anticipated that the Railway Order Application will be submitted to An Bord Pleanála for approval in mid 2021.

Your participation and feedback is an essential part of the design and assessment process. Therefore, we are interested in gaining your feedback and comments at this stage in the design process.





Maynooth
University

O'Iscoil
Mhá Nuad

05

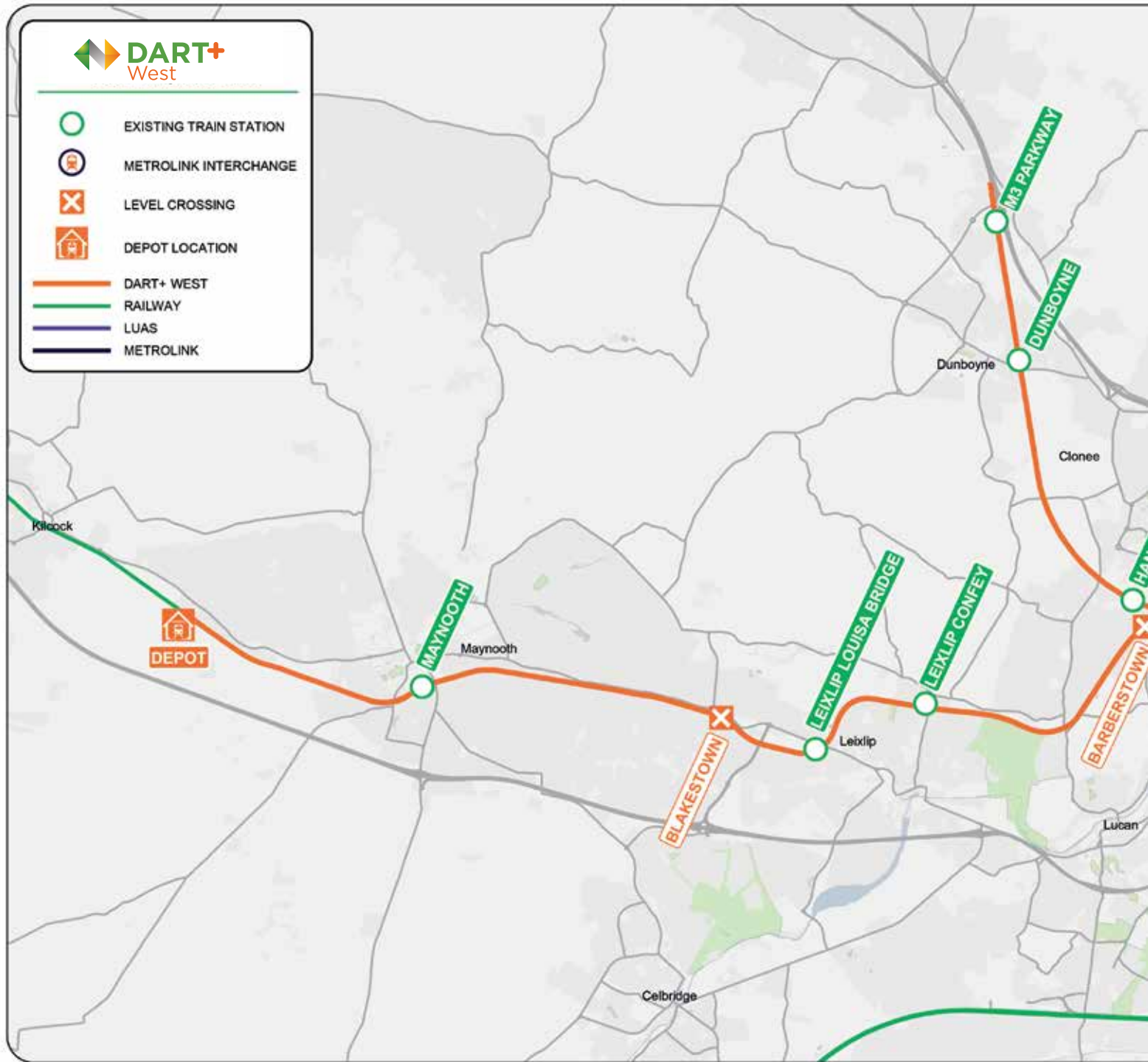
Key infrastructural
elements

5. Key infrastructural elements of DART+ West


The following is a high-level summary of the key infrastructural elements of the DART+ West project:

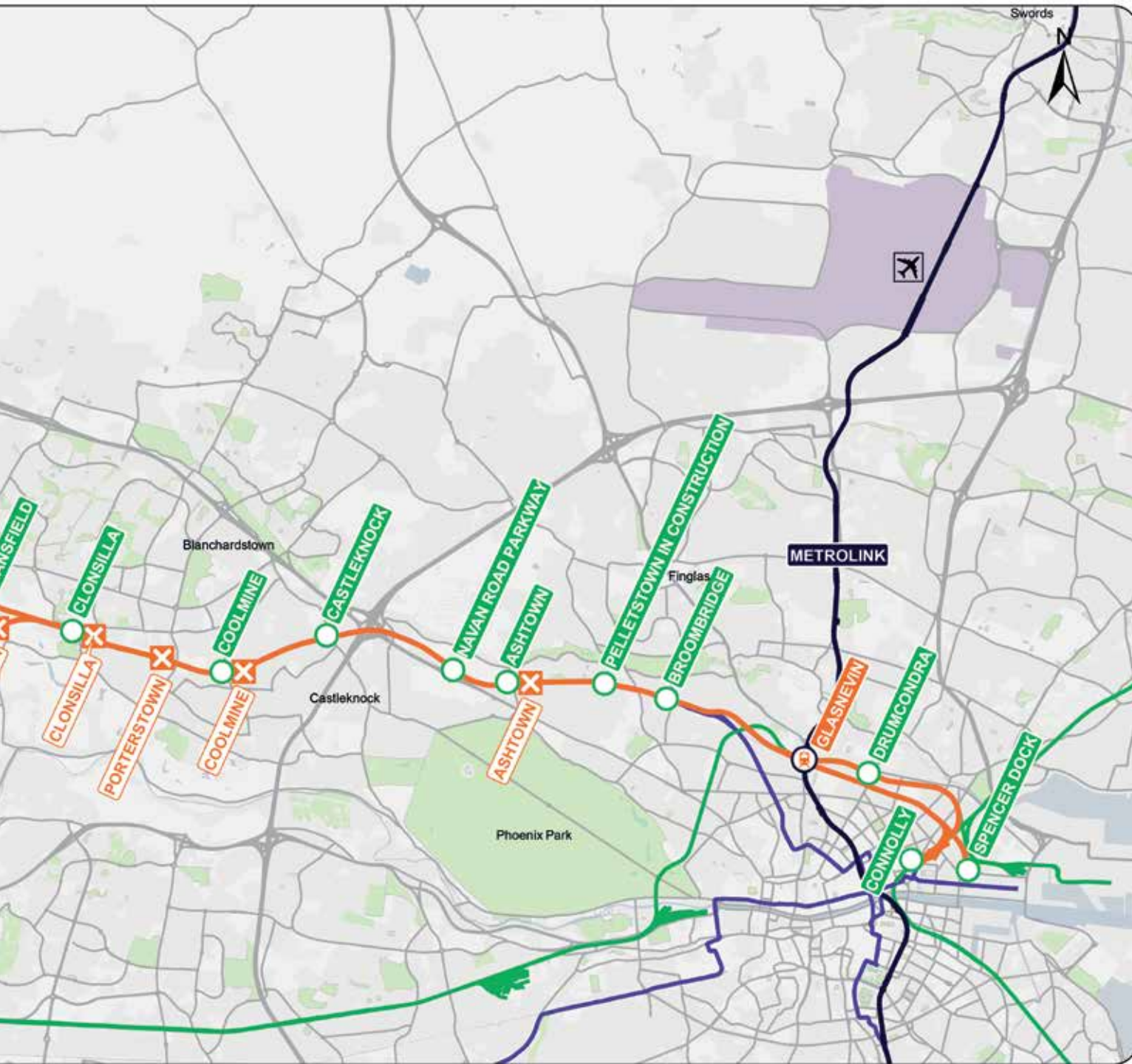
- Electrification and re-signalling of the Maynooth and M3 Parkway line from City Centre to Maynooth (approximately 40km in length).
- Capacity enhancements at Connolly Station (to include modifications to platforms, junctions & the station) to facilitate increased train numbers.
- Capacity enhancements of Spencer Dock Station. This will take place at its current location or the station will be relocated, to better serve all routes entering the city centre and to improve interchange with Luas (further studies required).
- Closure of existing level crossings & provision of replacement crossings where required.
- Construction of a new DART depot facility west of Maynooth Station for the maintenance and parking (stabling) of trains.
- Development of a DART MetroLink interchange station at Glasnevin.
- All civil and bridge works and ancillary works as necessary to accommodate the project.





DART+
West

-  EXISTING TRAIN STATION
-  METROLINK INTERCHANGE
-  LEVEL CROSSING
-  DEPOT LOCATION
-  DART+ WEST
-  RAILWAY
-  LUAS
-  METROLINK





06

Benefits of
DART+ West

6. What are the benefits of DART+ West

The DART+ West project will have far reaching positive transportation effects for communities along the railway corridor. It will facilitate increased train and passenger capacity that is currently constrained on the network. It will transport passengers in high quality trains that are designed to best suit the needs of growing communities, providing all day capacity, but most especially during peak AM and PM commuter periods.

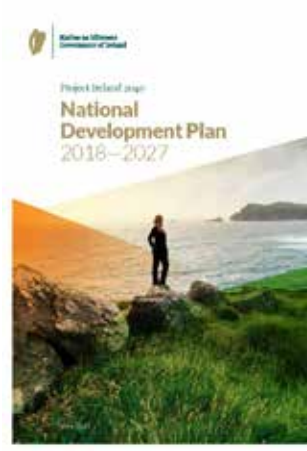
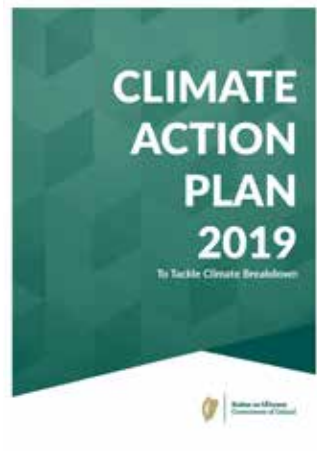
The project will link good quality public transport to sustainable land use management and can also assist in local regeneration, economic development and support the development of new communities along the route. This is a key objective of Project Ireland 2040 and the National Planning Framework. The integration of public transport with sustainable land use planning will reduce the dependency on private car use and ultimately support reductions in greenhouse gas emissions from the transport sector.

Availability of good quality rail transport, which is integrated with other public

transport modes (Bus, Luas and the future MetroLink) as well as walking and cycling infrastructure will have a positive effect on transport patterns and lifestyle factors. The provision of sustainable transport network supports sustainable options for where people live, work, study and access services and amenities. It can promote more active and healthy modes of travel by supporting people to walk or cycle to public transport links for onward transfer to their end destinations.

The DART+ Programme is consistent with Project Ireland 2040, the National Development Plan 2018 to 2027, the National Planning Framework Transport Strategy for the Greater Dublin Area 2016-2035 and the Climate Action Plan 2019.

DART+ is a key deliverable measure in the Climate Action Plan 2019 and supports the achievement of targets for mode shift from private car to public transport.



National Policy drivers

Benefits of DART+ West



Increased passenger capacity from 4,500 to 13,750 passengers per hour per direction on the Maynooth Line and train frequency (subject to demand); facilitating fast and reliable transport to existing communities along the Maynooth Line.



Easier travel opportunities for work, education, or leisure purposes.



Facilitate the development and future growth of existing and new communities that will greatly benefit from the connectivity that DART+ will deliver along the line.



Alleviation of road congestion, particularly at the level crossings.



Building a Sustainable and connected City region. Supporting the transition to a low carbon and climate resilient society.



Facilitating people to make sustainable travel choices by encouraging a move away from private cars to reliable, efficient and safer public transport network.



Improve multimodal transport connectivity through interchange with the Luas at Spencer Dock Station and with the MetroLink at Glasnevin/Phibsborough.



Improve journey time reliability.



07

Option selection
process

7. Option selection process

The process to determine the Emerging Preferred Option for the DART+ West project was through following a multi criteria analysis (MCA) process. This is a process for evaluating a number of different options in a methodical manner, which is informed by the standardised “Common Appraisal Framework Guidelines for Transport Project and Programmes” published by the Department of Transport Tourism and Sport.

Development of Options

The engineering design is centred on enhancing the existing railway network to meet the DART+ train capacity requirements, necessary to cater for current and future projected passenger demand. In addition to end to end options assessment for the project, many elements of the scheme require option assessment at a local level prior to incorporation into the end to end assessment.

Options were developed for the individual components to include the following:

- Replacement infrastructure required to facilitate the removal of level crossings;
- Station enhancements;
- The proposed depot;
- Permanent way design;
- Signalling, Electricity and Telecoms (SET); and
- Assessment of Overhead line electricity clearances required at existing rail bridge structures.

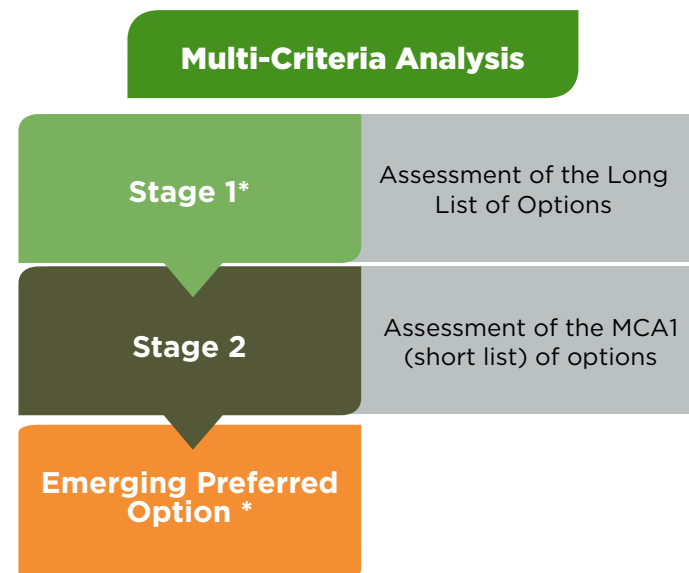
Assessment Criteria

The options were assessed according to the six appraisal criteria set out in the Common Appraisal Framework (CAF), namely: economy, safety, integration, environment, accessibility & social inclusion, and physical activity.

Assessment methodology

Multi-Criteria Analysis can be used to describe any structured approach to determine overall preferences among alternative options and is an objective based method of assessment. The MCA methodology involved comparing each option against a set number of criteria to assess the advantages/strengths and disadvantages/weaknesses in comparison to each other.

In this options assessment process, a two stage multi-criteria analysis is generally used; MCA1 developed a long list of options which were assessed and sifted to create a short list of options. For some aspects of the proposed project a Stage 1 assessment was deemed to be sufficient and resulted in arriving at an Emerging Preferred Option (EPO). For those elements that required further analysis the short-listed options from the Stage 1 MCA progressed to Stage 2 MCA resulting in a more detailed comparative assessment to determine at an Emerging Preferred Option.



* Note: For some aspects of the proposed project a Stage 1 assessment was deemed to be sufficient and resulted in arriving at an Emerging Preferred Option (EPO)



08

**The Emerging
Preferred Option**

8. The Emerging Preferred Option

An important point to highlight is that the 'Emerging Preferred Option' is to upgrade the existing railway corridor and maintain all works, insofar as is possible, within the current railway corridor. This would be considered more sustainable and would have less impact on the environment than the development of a brand new transport corridor.

The preliminary options assessment studies have led to the identification of the Emerging Preferred Option for each element of the project. For the purpose of describing the project, general linear works, that are applicable to the existing rail network are described with the route then divided into sections, describing the project in an east west direction in the following sections, as follows:

1. General linear works
2. City Centre Enhancements (Connolly Station & Spencer Dock Station)
3. City Centre to Phibsborough / Glasnevin
4. Phibsborough / Glasnevin - Clonsilla Station
5. Clonsilla Station - DART+ depot (west of Maynooth)
6. Clonsilla Station - M3 Parkway

8.1 General linear works

The project will require modernisation and modifications to the existing railway line/linear works in all sections of the project. Some of the key infrastructural works that will be required include.

Overhead electrification equipment along the full extent of the railway line. This will be similar in style to that currently used on the existing DART network:

- Substations will be required at intervals along the rail line to provide power to the network.
- Signalling upgrades and additional signalling will be required to the upgraded infrastructure.
- Interfaces with existing utilities, boundary treatments, drainage works, vegetation management and other ancillary works will be required along the length of the project.
- Works required at existing rail overbridges. A number of options are being considered at existing rail overbridges that do not provide the necessary clearance/headroom for the provision of the overhead power lines, these include:
 - Modification of the existing bridge structure
 - Lowering the rail track under the bridge
 - Provision of specialist electrical solutions with reduced clearance;
 - Removal of the existing structure and provision of alternative structure at the same, or alternative location;



View of typical section of twin track electrified rail line

8.2 City Centre Enhancements (Connolly Station & Spencer Dock Station)

Connolly Station

Connolly Station is one of the main railway stations in Dublin and Ireland and is a focal point for the Iarnród Éireann network. The station caters for trains converging on the City Centre on the Sligo/Maynooth Line, the Belfast/Drogheda Line and the Rosslare/Greystones Line. Due to the number of trains converging on the station the management and movement of trains into a limited number of platforms is complex. Also, the rail capacity is constrained and requires upgrade to meet future passenger demands.

This project is seeking to modify and upgrade track layouts at Connolly Station, within the existing railway viaduct boundary, to improve the efficiency and increase the capacity.

The proposed upgrades include:

- Track reconfiguration immediately to the north of Connolly Station; and
- Platform upgrades and any other station improvement to facilitate increased passenger throughput



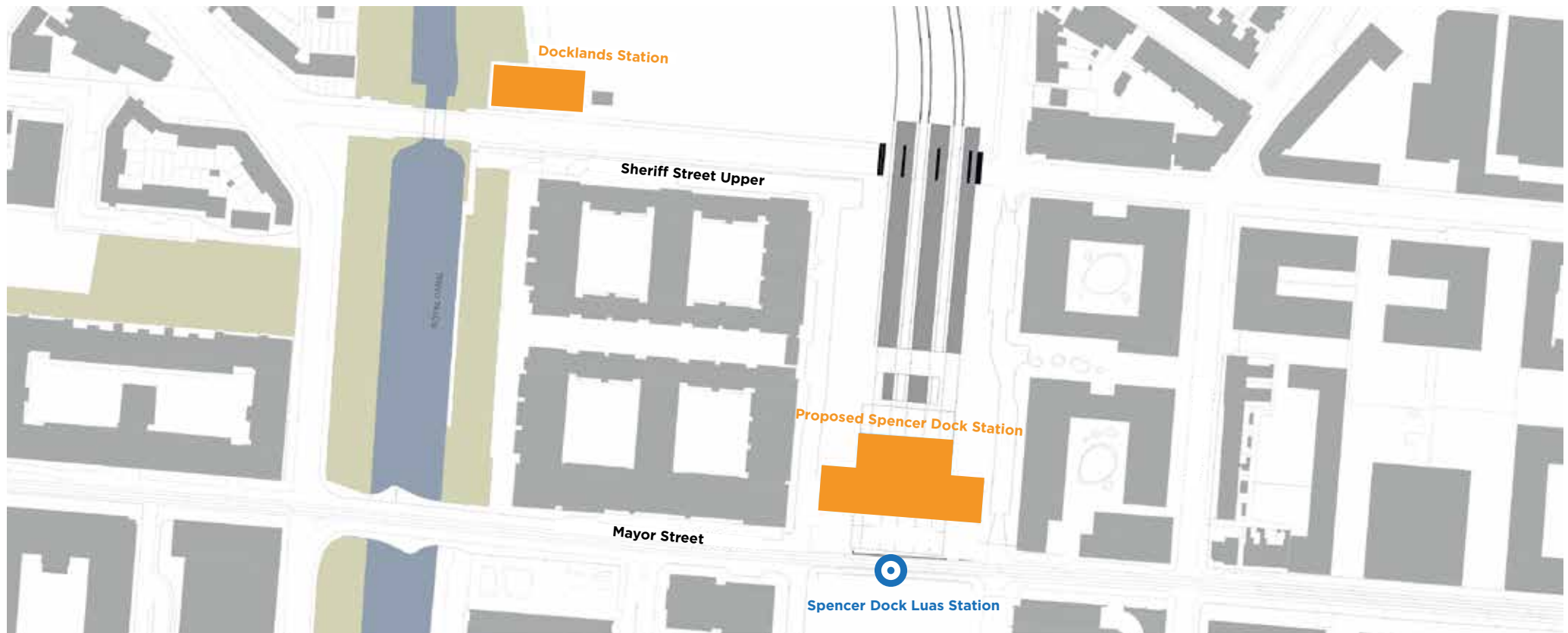
Spencer Dock

Docklands Station is located southeast of Connolly Station and operates as an overflow terminus station to Connolly Station in the morning and evening peak times. DART+ works is seeking to make more beneficial use of Spencer Dock Station, so that both Connolly and Spencer Dock Station work in a more efficient manner together to cater for the planned increased frequency of services that will benefit all GDA routes.

Docklands station currently operates in the morning and evening to ease congestion on Connolly Station. Subject to further assessment, DART+ is seeking to relocate Docklands Station to Spencer Dock adjacent the Luas Stop to increase the overall rail capacity in the City Centre, to better serve the Docklands area and to maximise the interchange potential with Luas.

Spencer Dock Station will be connected to the Northern, Maynooth and Phoenix Park Tunnel lines so that passenger services can be scheduled throughout the day to a greater distribution of destinations. Also, DART+ will provide better passenger interchange between Irish Rail services and Luas services. The project is currently evaluating if expanding Docklands Station at its current location or relocating it to Spencer Dock Station to directly face onto Spencer Dock Stop best meets the project objectives.





Location of potential Spencer Dock Station at Mayor Street

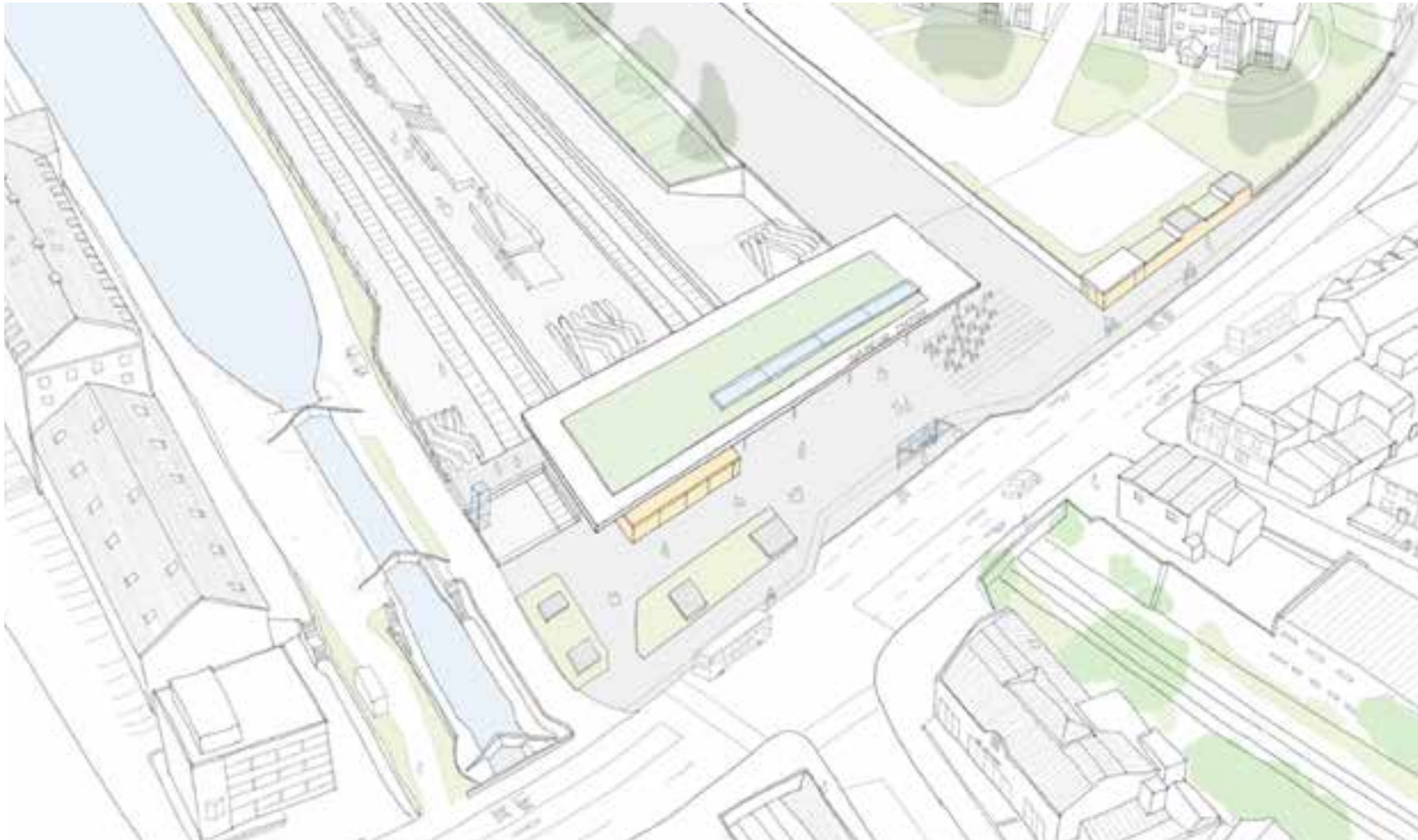
8.3 City Centre to Phibsborough / Glasnevin

It is proposed that both of the existing lines between Connolly and Docklands to Phibsborough / Glasnevin will be electrified with the installation of overhead electrical equipment, associated upgrades, re-signalling, telecoms, electricity substations and parapet heightening as required.

The two rail lines are the Midland Great Western Railway (MGWR) line which lies next to the Royal Canal and the Great Southern and Western Railway (GSWR) line which runs to the north of Croke Park and through Drumcondra Station. Both of these lines converge at Phibsborough/Glasnevin, to the west of Cross Guns Bridge.

At Phibsborough / Glasnevin, a new fully integrated station serving both the DART+ West project and the proposed MetroLink project is proposed. Iarnród Éireann and Transport Infrastructure Ireland (TII) are collaborating to provide this new station which will comprise:

- DART+ surface station. The station will have an east- west orientation on both Iarnród Éireann lines (GSWR & MGWR);
- MetroLink underground station will have a north- south orientation;
- A shared concourse with full passenger integration; and
- Street level access and public realm improvements.



Artists impression of proposed Glasnevin Station (at Phibsborough) (image Source www.MetroLink.ie)

Works required at existing rail overbridges

Rail overbridges such as at Newcomen Bridge on the North Strand Road has been identified as having insufficient clearance to accommodate the overhead electrical equipment. A number of options are currently being

considered at these locations such as bridge modifications which are subject to further studies. All other bridges along this section are currently being assessed to confirm clearances and required works at those locations.

8.4 Phibsborough / Glasnevin to Clonsilla Station

Between Phibsborough / Glasnevin and Clonsilla Station the Maynooth line runs alongside the Royal Canal. The line passes through Broombridge Station, where it interfaces with the Luas. Travelling in a westerly direction the line along this section includes the following stations: Ashtown Station, Navan Road Parkway Station, Castleknock Station, Coolmine Station and Clonsilla Station.

Works required at existing rail overbridges

Rail overbridges at Castleknock and Broombridge have been identified as having insufficient clearance to accommodate the overhead electrical equipment. A number of options are currently being considered at these locations, such as bridge height modifications, which are subject to further studies. All other bridges along this section are currently being assessed to confirm clearances.

Level Crossing Replacements

The level crossings along this section of the railway corridor have constrained train capacity on the railway corridor by having to share road capacity with vehicles, pedestrians and cyclists. In order to provide a modern transportation network and to achieve the required increase in train capacity it is proposed to permanently close the four level crossings along this section.

It is not possible to retain the level crossings in their current form.

The permanent closure of these level crossings will improve train efficiencies, safety and remove road interfaces. Their closure will also remove the periodic blockages on the road system, which is currently very pronounced in this area especially in the morning and evening peak commuter periods. For example Coolmine Level Crossing is closed for approximately 40 minutes between 08.00-09.00 each weekday. The permanent closure is necessary to achieve the proposed increased train frequency proposed by DART+.

New bridge crossings will be provided at appropriate locations in lieu of the level crossing closure, to maintain roads traffic flows across the railway corridor, for pedestrians, cyclists and vehicles.

Following an option selection process, that included developing and assessing a number of options/alternatives at each level crossing, the Emerging Preferred Option was established. The description of the level crossing replacements along this section of the Maynooth line, are described in the following sections for Ashtown, Coolmine, Portersown and Clonsilla level crossings.



Ashtown level crossing

It is proposed to close the Ashtown level crossing and provide a vehicular road bridge with pedestrian and cycle facilities. The Emerging Preferred

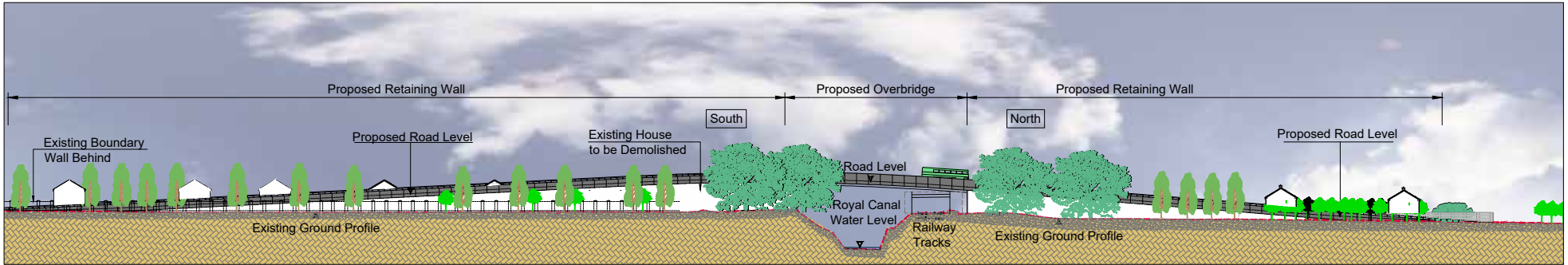
Option provides a new road bridge under the existing railway and the Royal Canal that will be located west of the existing Ashtown Level Crossing predominantly following the route of the existing Mill Lane.



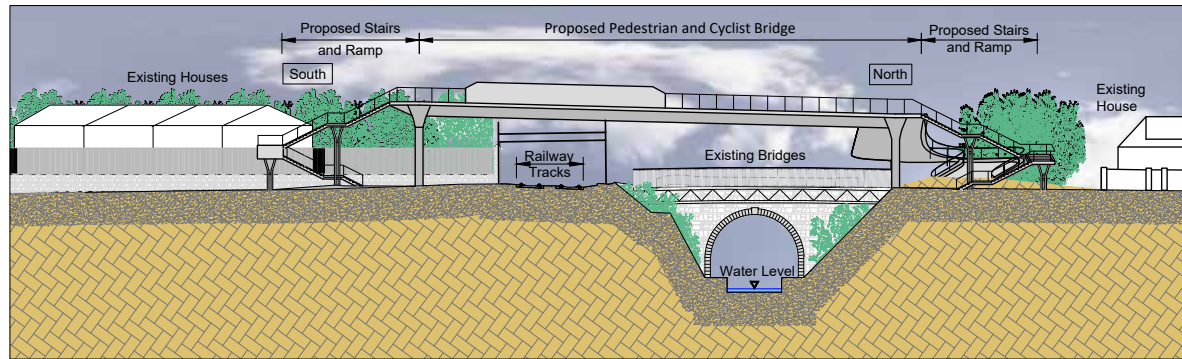
Coolmine level crossing

It is proposed to close the Coolmine level crossing and provide a vehicular road bridge with a separate pedestrian and cyclist bridge. The Emerging Preferred Option provides a new road bridge crossing over the railway line

and Royal Canal that will connect St. Mochta's Grove / Station Court located to the north with Riverwood Court Road to the south. A new standalone pedestrian and cycle bridge will be provided over the railway line and Royal Canal immediately adjacent to Coolmine Station.



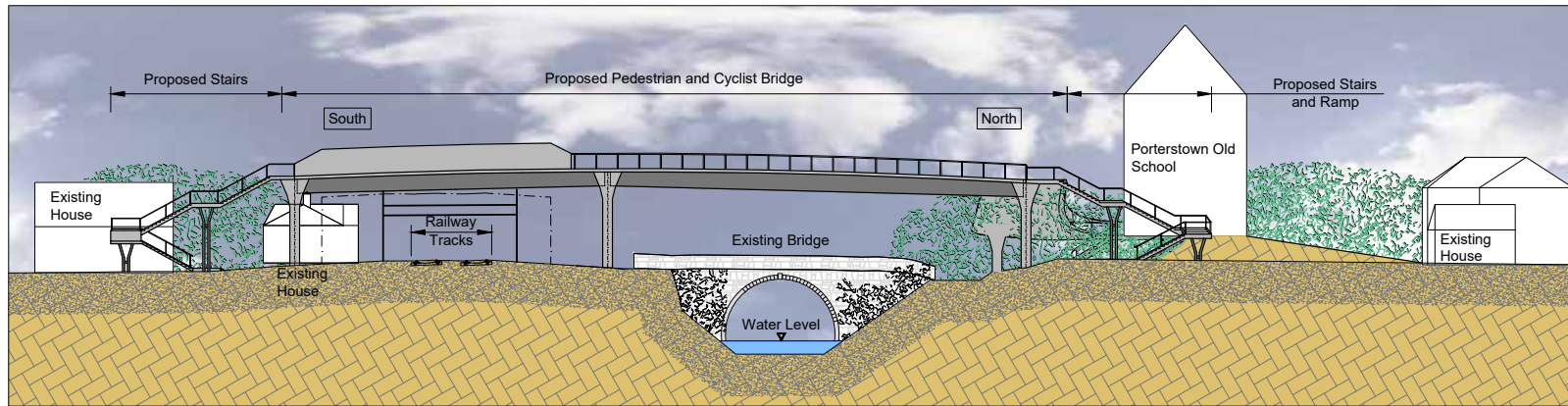
Coolmine pedestrian and cycle bridge



Porterstown level crossing

The Emerging Preferred Option includes the closure of Porterstown level crossing and the provision of a new pedestrian and cycle bridge over the rail

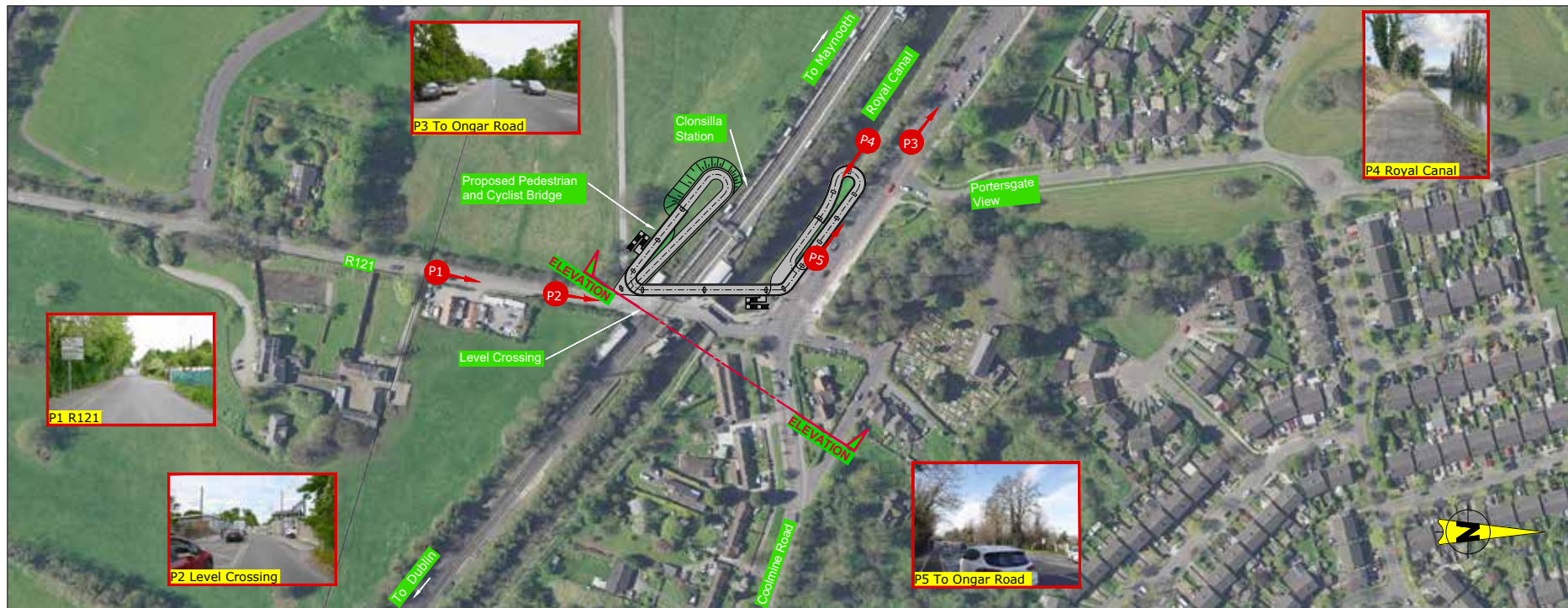
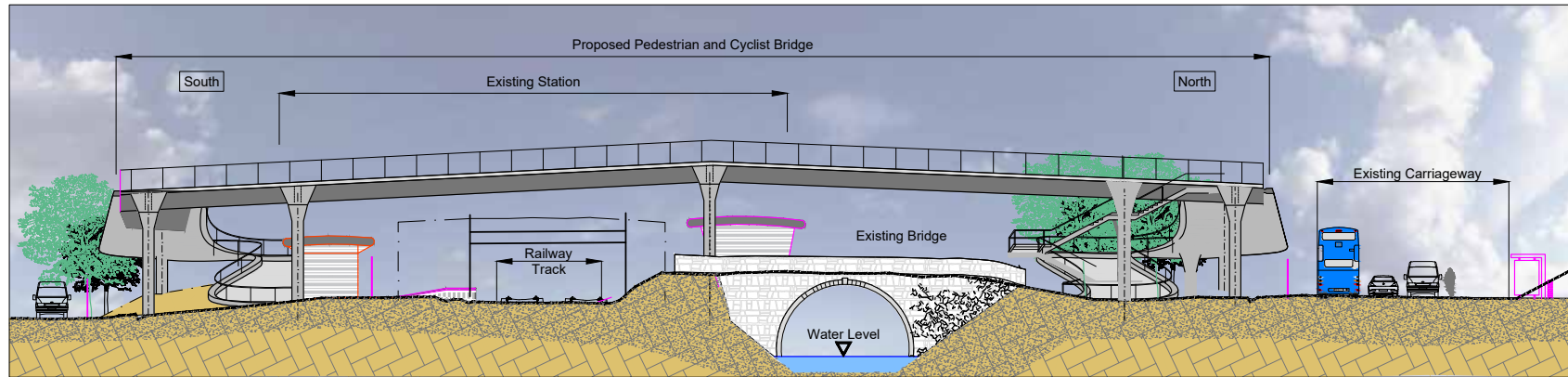
line at the existing crossing. It is proposed that vehicular traffic will utilise the existing local road network including the Diswellstown Road (R121 at Dr. Troy bridge).



Clonsilla level crossing

The Emerging Preferred Option provides for the closure of Clonsilla level crossing and the provision of a new pedestrian and cycle bridge over the railway to the west of the existing level crossing. Given the low traffic flows

utilising the existing level crossing, combined with the proposed new road bridge at Barberstown to the west and the Diswellstown Link Road to the east of the crossing a pedestrian and cyclist bridge is considered to be the optimal solution at this location.



8.5 Clonsilla Station – Maynooth

Immediately west of Clonsilla Station, the railway diverges, with the mainline continuing westwards to Maynooth & Sligo, and a branchline continuing northwards towards Dunboyne & M3 parkway. Both the Maynooth Line and M3 Parkway branchline will be electrified as part of this project. It is proposed to provide a new DART+ depot facility to the west of Maynooth. This depot will cater for the maintenance and stabling areas for DART+ fleet.

Level crossing replacements

There are two level crossings, at Barberstown and Blakestown, along this rail section which require closure. The Emerging Preferred Option for each of these level crossings is outlined in the following sections.

Barberstown level crossing

The Emerging Preferred Option is the closure of Barberstown Level Crossing and the provision of a new road bridge over the railway line and Royal Canal. The replacement vehicular access will be located south of the current level crossing and will connect the existing R121 to the east of the rail line with Barberstown Lane located to the west of the rail line as shown in the diagram below.



Emerging Preferred Option Barbartown Level Crossing Replacement

Blakestown level crossing

The Emerging Preferred Option is to close the Blakestown level crossing with no alternative access infrastructure. Current studies have shown that access and diversions can be facilitated via the local road network and the R449 to the east of the crossing.

Works required at existing rail overbridges

Rail overbridges such as at Jackson's Bridge (a protected structure) on the L5041 road west of Maynooth have been identified as having insufficient clearance to accommodate the overhead electrical equipment. A number of options are currently being considered such as bridge modifications which is subject to further studies. All other bridges are currently being assessed to confirm clearances and the potential works required works at those locations.

Depot west of Maynooth

The proposed depot will be located to the west of Maynooth, parallel and to the south of the rail line and Royal Canal. It will be used for train maintenance and train parking (stabling) associated with the new and existing fleet of trains.

The proposed depot and will comprise a depot building, maintenance shed, offices and administrative building, train washing and cleaning facilities as well as other maintenance facilities. It will include a test track, stabling for trains, storage, an electrical a substation, staff parking and welfare facilities for staff. Between Maynooth and the proposed Depot the current single-line tack will be upgraded to a double-track section. This new track will be located parallel to, and to the north of the existing single line track.



Proposed depot location in Maynooth West

Depot access route

The Emerging Preferred Option for providing access to the Depot will utilise the existing road network for the majority of route with only minor modifications required. The access will be from the R148 which will require the demolition of the existing private agricultural overbridge (OBG24)

and the construction of a replacement new wider bridge over the double tracks to facilitate vehicular access. The proposed bridge enables a new connection to the R148 crossing the Royal Canal and the rail line providing the required access to the proposed depot.



Emerging preferred access route to proposed depot

8.6 Clonsilla Station – M3 Parkway

West of Clonsilla Station the line divides northwards towards M3 Parkway Station passing through Hansfield Station and Dunboyne Station before terminating at M3 Parkway Station which lies to the north of Dunboyne and west of Junction 5 off the M3 Motorway.

The project will see this line electrified through the installation of overhead electrical equipment, associated upgrades of signals and communications,

and the provision of electrical substations as required.

A number of rail bridges are currently being assessed for potential options to provide the necessary clearance for the overhead electrical equipment with a number of options being considered which are subject to further studies.



09

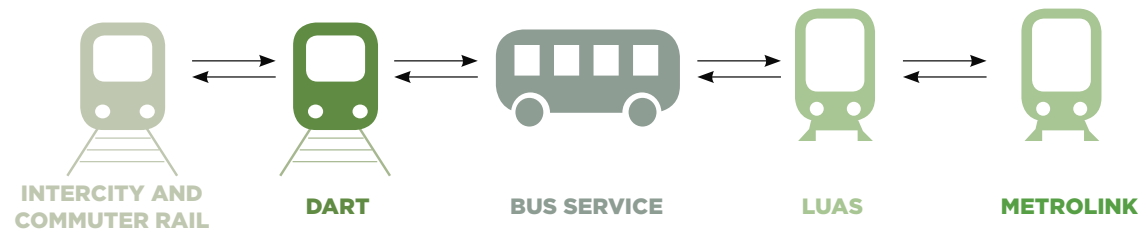
Transport
integration

9. Transport integration

DART+ West project is a proposed capacity enhancement project which will provide high frequency electrified railway transit services running from Maynooth and M3 Parkway to Connolly Station and Spencer Dock Station.

The project will link Iarnród Éireann, DART, Dublin Bus, Luas and MetroLink services to create a fully integrated public transport system in the Greater Dublin Area.

As well as linking major transport hubs such as the M3 Parkway Park and Ride the project will provide public transport interchanges at: Connolly to the Luas Red line, at Docklands to the planned DART Underground, at Glasnevin/Phibsborough to the proposed MetroLink and Bus Connects schemes, and at Broombridge to the Luas Cross City.



Public Transport Integration

Public Transport Links

DART+ West is planned to enhance access and movement of pedestrian and cyclists and reduce reliance on private car. DART+ will integrate with the Metropolitan Cycle Network where potential interfaces are identified.

The project is seeking to increase rail capacity to provide high frequency and high quality electrified railway transit services from Maynooth Station and M3 Parkway Station to Connolly Station and Spencer Dock Station .

Iarnród Éireann will form a high capacity spine of a fully integrated public transport system in the Greater Dublin Area and links with the other public transport modes, including Dublin Bus, Bus Eireann, BusConnects, Luas and

MetroLink.

As well as linking with major transport hubs such as the M3 Parkway Park and Ride site, the project will provide interchanges at Connolly to the Luas Red line, at Broombridge and Docklands to the existing Luas, at Glasnevin/Phibsborough to the proposed MetroLink.

The project will also secure enhanced passenger access for students to St. Patricks National University of Ireland - Maynooth, Croke Park, Dublin City University and Technical University Dublin.



Increase passenger capacity from 4,500 to 13,750 passengers per hour per direction on the Maynooth Line





10

Issues to consider

10. We would like your view on the following issues

All possible efforts will be made to sensitively address issues and challenges associated with the project at the earliest stages of the design process and public consultation. Several potential issues are detailed below, and the

public consultation and stakeholder engagement phases will help us to better understand some of the issues and challenges we face.



Property Acquisition

DART+ West will predominantly consist of works within the existing railway corridor. However, where interventions and modifications are required outside of the existing corridor (such as at the level crossings, new substations and the proposed Depot) some land acquisition will be required. We are now embarking on an extensive program of consultations with the potentially affected property owners and if your property is likely to be directly affected by the works you should already have heard from us. Our Community Liaison Officer will be available throughout the process to ensure you are regularly updated on the current proposals and your views are taken into consideration as we progress to the preferred option.

Environmental Impacts



The project will involve changes to the local environment during both the construction and operation stages. These will be both temporary and permanent impacts to the environment and communities. The design process will make every effort to ensure that negative impacts are avoided, reduced or mitigated as far as practicable, and positive effects are maximized.



Level Crossing Replacements

The closure of the existing level crossings and the provision of replacement crossings (where required) will involve environmental impacts such as changes to the landscape/public realm, impacts on biodiversity particularly along the Royal Canal, a proposed Natural Heritage Area, traffic and transport changes, while also positive effects such as reducing greenhouse gas emissions.

Temporary construction works are likely to impact on sensitive receptors particularly residential areas due to noise, dust, landscape changes as a result of the temporary construction works some of which will take place during the night time to facilitate daytime rail services to meet our existing customer demand. A number of sites of architectural and archaeological heritage significance have been identified in the study area. Further studies are ongoing to ensure these impacts are avoided, reduced and/or mitigated.

All potential environmental impacts will be considered and assessed as part of the Environmental Impact Assessment Report which will be published as part of the Railway Order application documents.



Electrification of the Line

Overhead line electrification equipment will be required to provide electrical power to the DART+ network to power the trains. This will involve considerations such as:

- The supply of power from the grid which will need to be agreed and assessed as part of the Railway Order application process.
- The development of substations along the line to provide the power over the proposed 40km electrification. The substations are likely to require land acquisition and access from the public road network.
- The additional space required for the development of overhead electrification equipment to provide the power to the lines and associated landscape and visual impacts.
- The equipment carrying the power lines require certain vertical clearances from the trains. Several bridges on the existing line have been identified as having insufficient clearance for this electrical equipment.

A range of options are being considered at these locations some of which include modifications to protected structures.

- Boundary walls and fencing along the existing railway may need to be changed. Where necessary wall heights may need to be increased to ensure public safety and the railway is maintained. This is especially relevant due to the erection of overhead electrical line, to prevent any potential that the public could come in contact with electricity.

Depot

The proposed depot will require acquisition of agricultural lands west of Maynooth and the access to the proposed Depot from the R148 will require the demolition OBG23 and construction of a replacement bridge. The depot site is a major piece of infrastructure vital to the whole DART+ Programme extending over 2.5km in length. Potential impacts associated with the construction and operation of the proposed depot will be addressed in the EIAR and will be informed by consultation with the relevant stakeholders.



A hand is pointing to a chalkboard. On the chalkboard, three arrows are drawn in white chalk, all originating from a single point on the left and pointing towards the right. The top arrow points up and right, the middle arrow points straight right, and the bottom arrow points down and right. The background is dark, and the chalk lines are bright white. In the bottom left corner, there is a graphic overlay consisting of a dark blue triangle and a green triangle. A white circle with the number '11' is positioned on the dark blue triangle. Below the circle, the text 'Next steps' is written in white on the green triangle.

11

Next steps

11. Next steps

Further design development & option selection

The preliminary options selection and design development that has been undertaken has led to the development of the Emerging Preferred Option which is the focus of this public consultation stage.

Once the public consultation process is complete all feedback and submissions received will be reviewed and assessed as part of the next stage of the design development. Following a full appraisal of the feedback, a public consultation report will be prepared to document this process and it will be incorporated into the Options Selection Report.

Further studies, assessments and consultations will lead to development of the Preferred Option which will be presented to the public at Public Consultation in Autumn 2020.

All information gathered by the project team will be used to inform the design development of the project which will be the subject of the Environmental Impact Assessment (EIA) and Appropriate Assessment (AA) (if required), and ultimately the Railway Order application will be submitted to An Bord Pleanála.

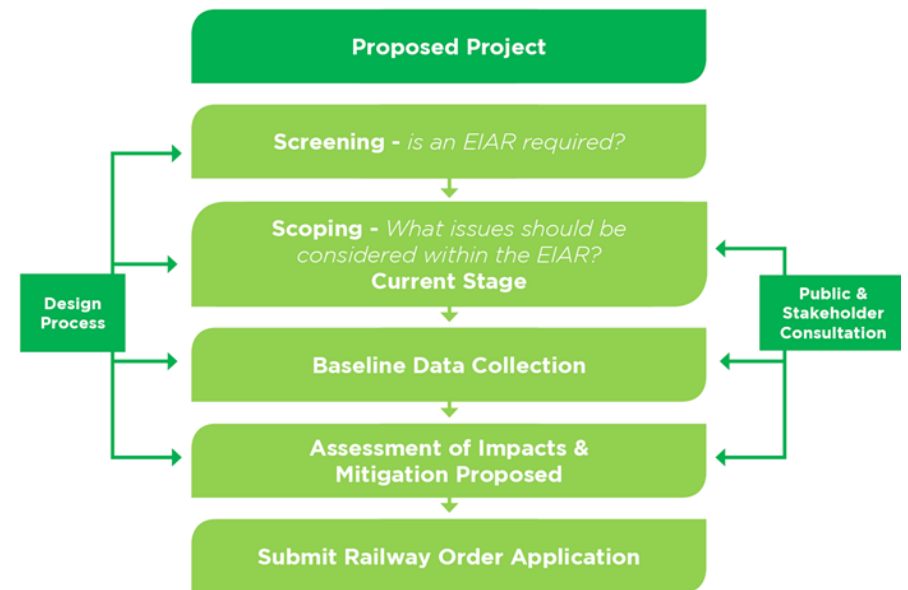
The Railway Order process

The application to An Bord Pleanála for a Railway Order is broadly similar to the planning process with which most people are familiar.

The Railway Order application process is set out in the Transport (Railway Infrastructure) Act 2001 (as amended) and the application will be made to An Bord Pleanála. The EIA will detail the nature and extent of the proposed project and identify and describe the impacts on the environment. It will also detail measures which will be taken to avoid, reduce and/or monitor these impacts. Following the submission of the Railway Order Application to An Bord Pleanála, the public are invited through public notices to make submissions which will be duly considered by An Bord Pleanála as part of the decision making process.

We expect that An Bord Pleanála will conduct an oral hearing, to allow the public to provide further participation in the decision making process for this project. At an oral hearing the Iarnród Éireann project team will provide responses to submissions and will be available for questioning. Any person or body may make a submission or observation in writing to the Board in relation to the Railway Order application including the Environmental Impact Assessment Report and the Compulsory Purchase land requirements.

We expect to make the application to An Bord Pleanála in mid 2021.



The EIA Process leading to submission of Railway Order to An Bord Pleanála



12

How to engage

12. How to engage in process

This consultation is our way of asking you, as potential users of the service or those likely to be affected by its development, for your views on our plans. Your local knowledge will inform the emerging

design, help us to improve the scheme and ensure it will be a success for you and the communities the route will serve.

The consultation period is now open, full details are available on the project website.

Please contact us via the following means:

Website | www.irishrail.ie/DARTMaynooth

Email | DARTMaynooth@irishrail.ie

Phoneline | (01) 8235127

Postal Address

If you would prefer to write to us, please send it or any correspondence to:

Community Liaison Officer

DART+ Maynooth

Iarnród Éireann

Inchicore Works

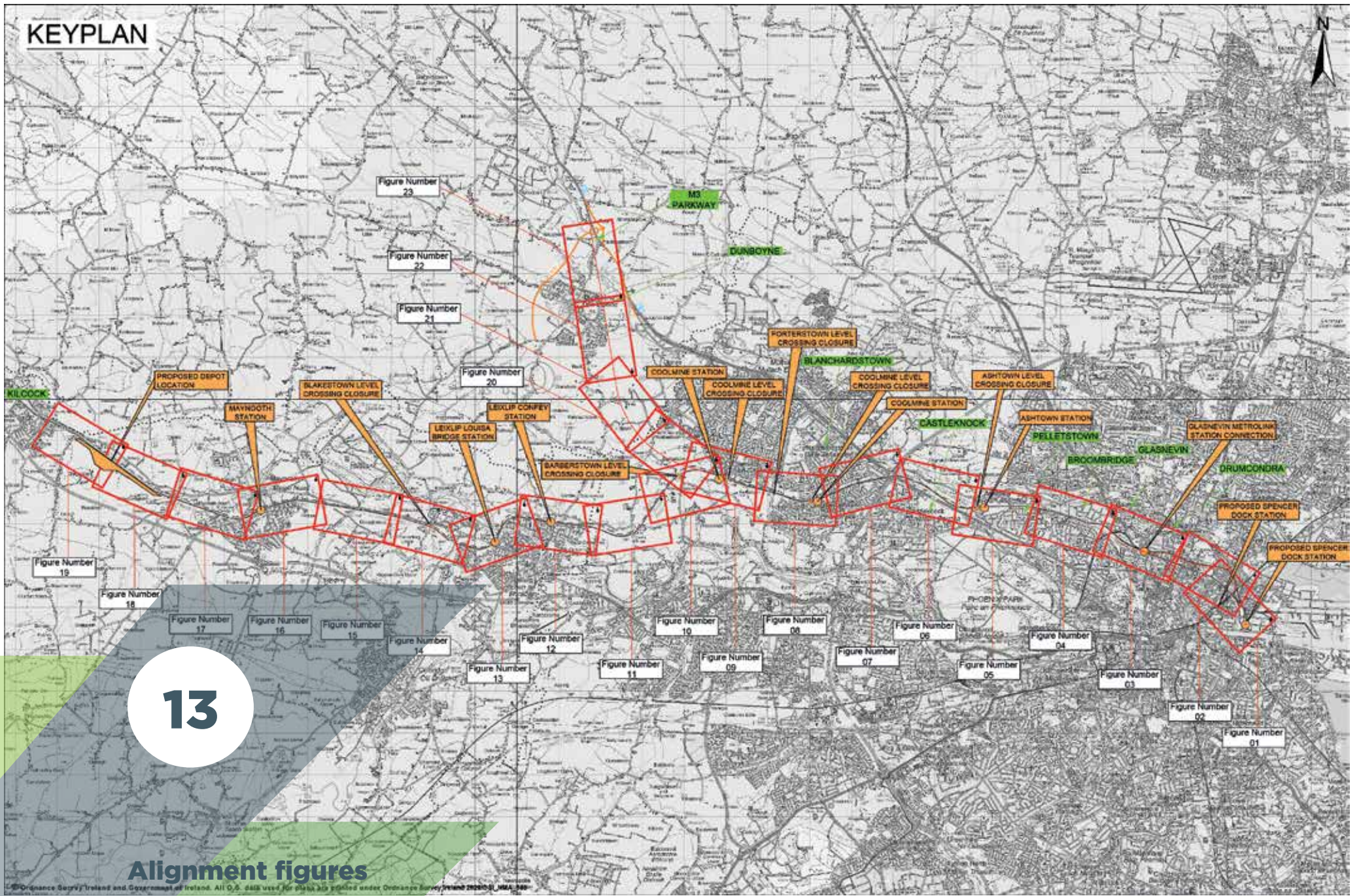
Inchicore Parade

Dublin 8

D08K6Y3



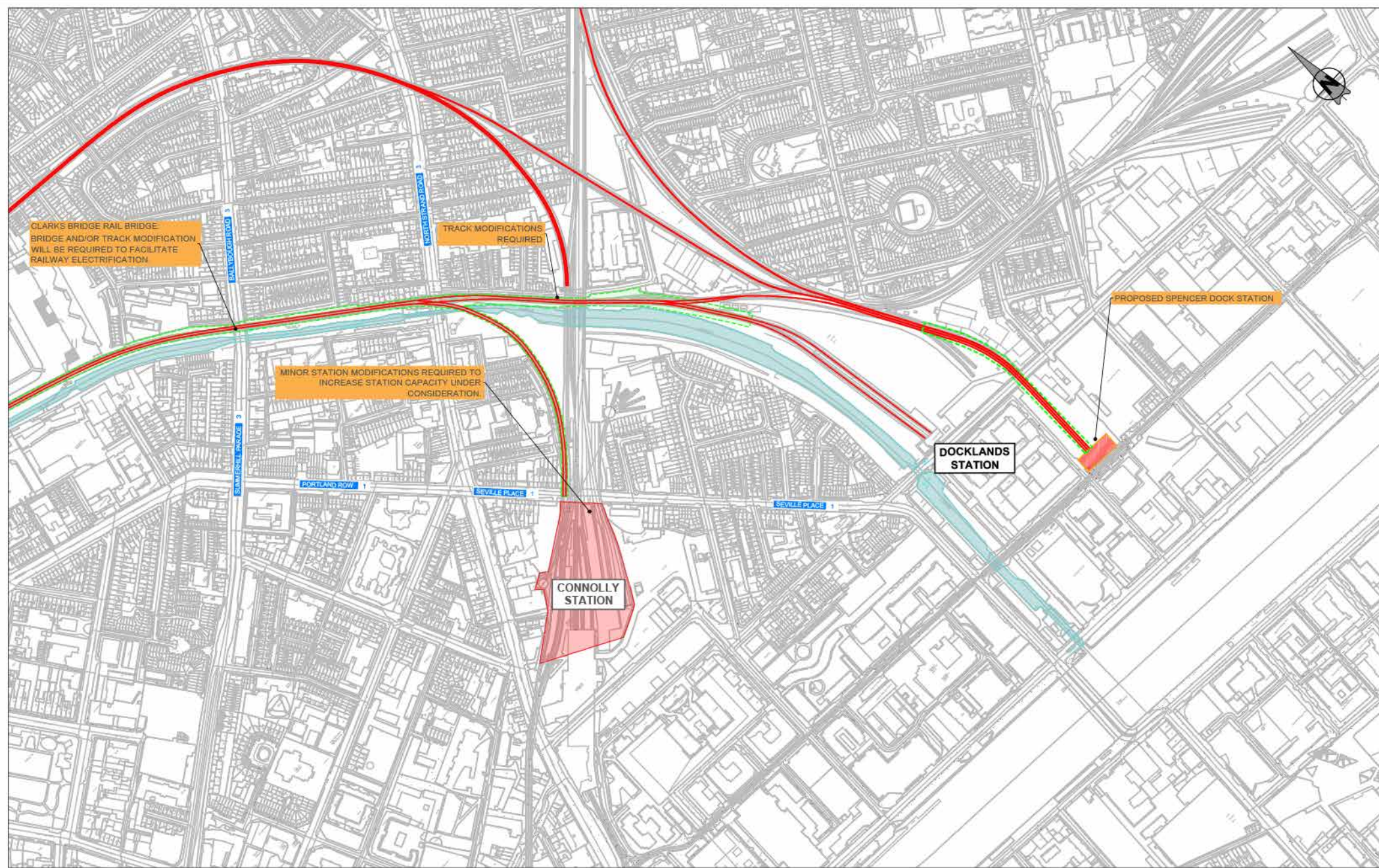
KEYPLAN



13

Alignment figures

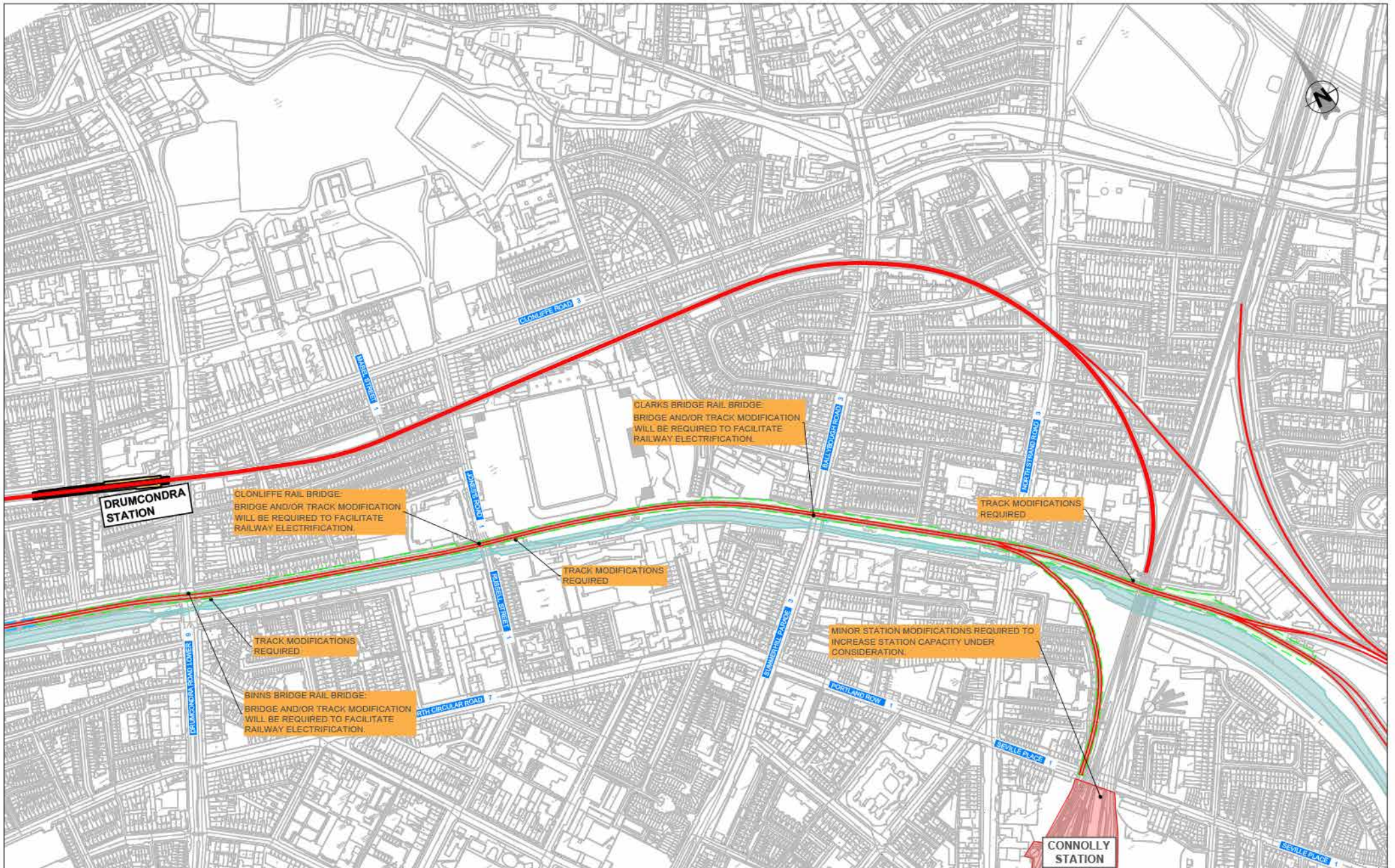
© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plan is published under Ordnance Survey Licence 2020/03. USA 200



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

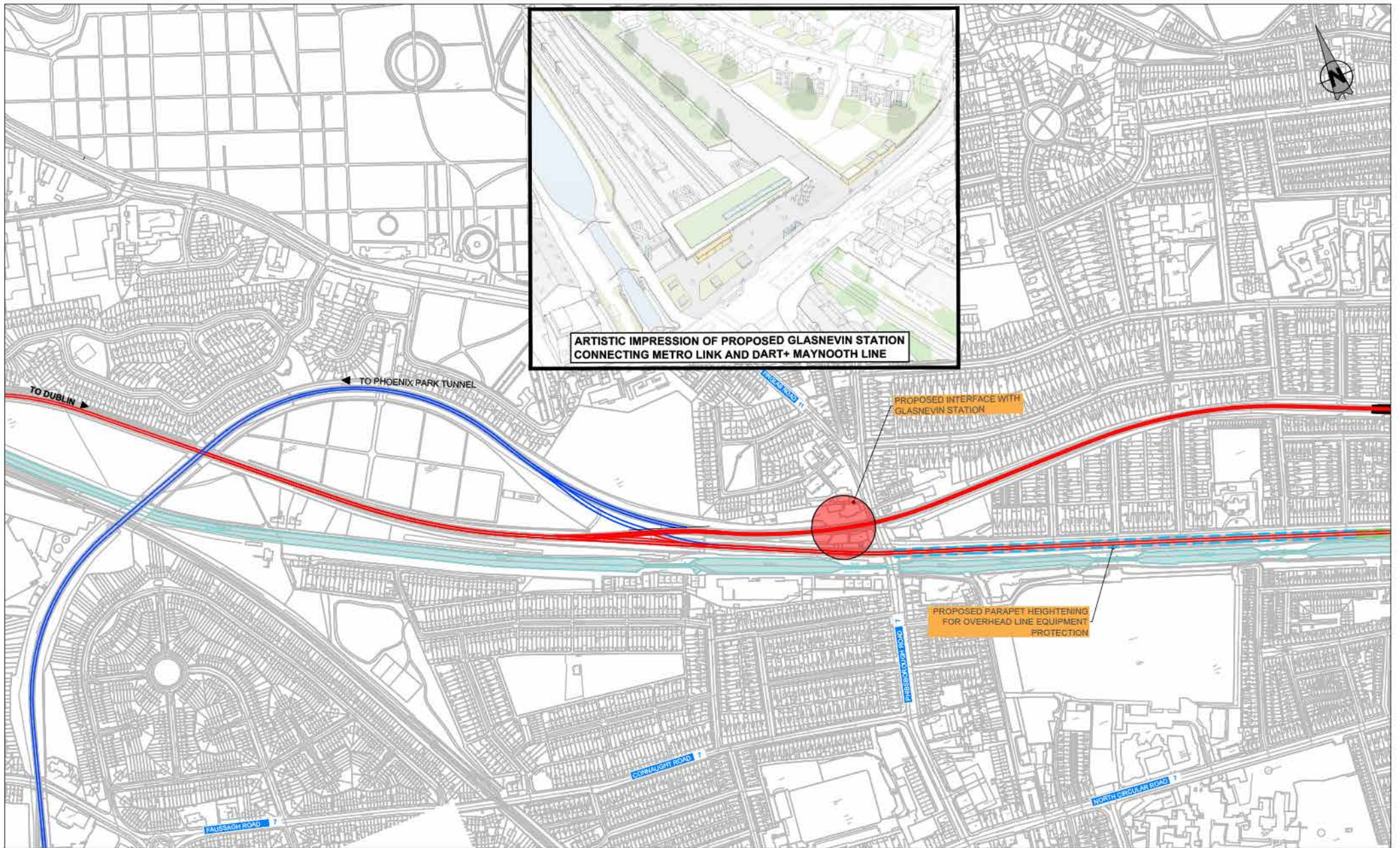
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.

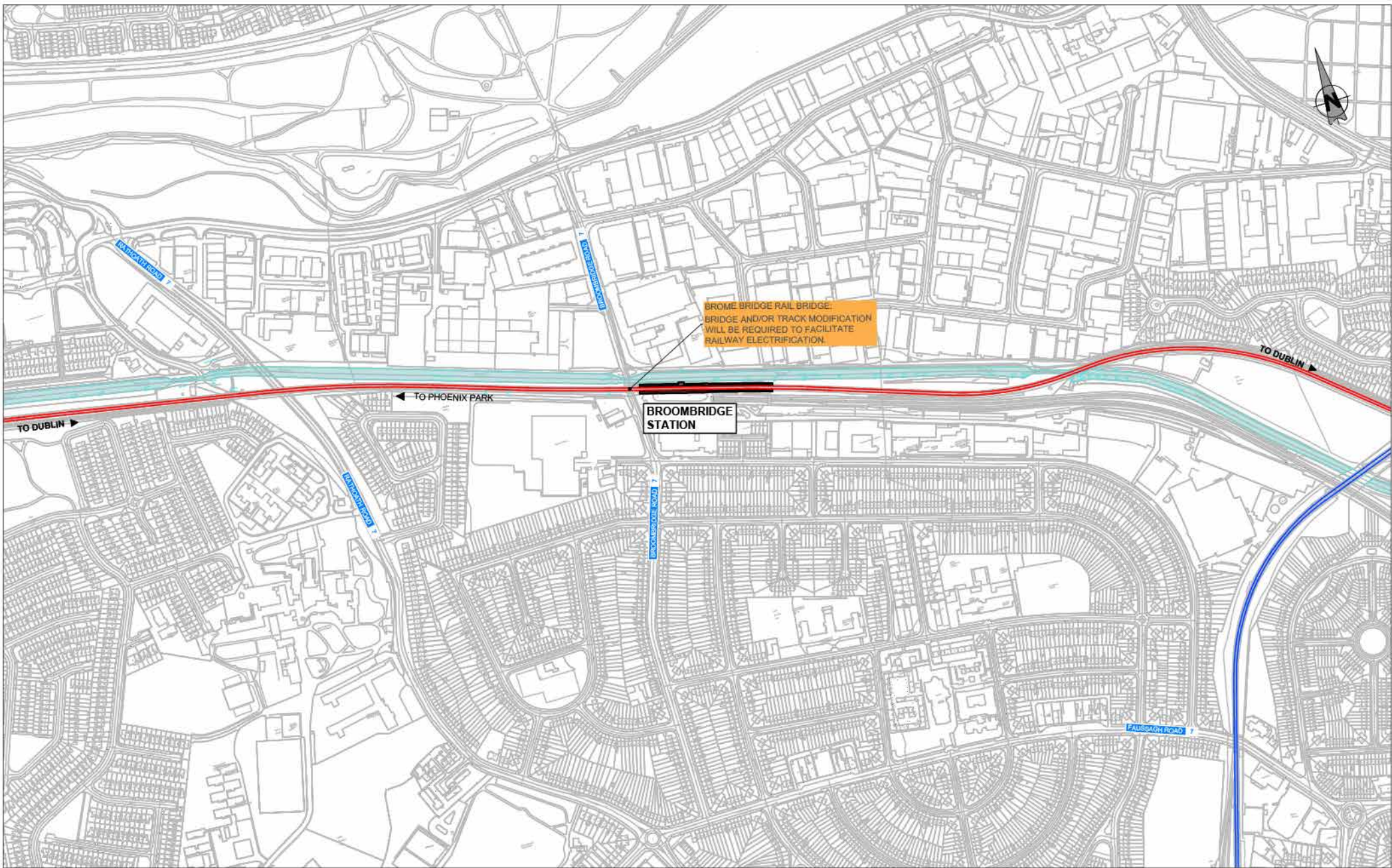


ARTISTIC IMPRESSION OF PROPOSED GLASNEVIN STATION
CONNECTING METRO LINK AND DART+ MAYNOOTH LINE

LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL
BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.

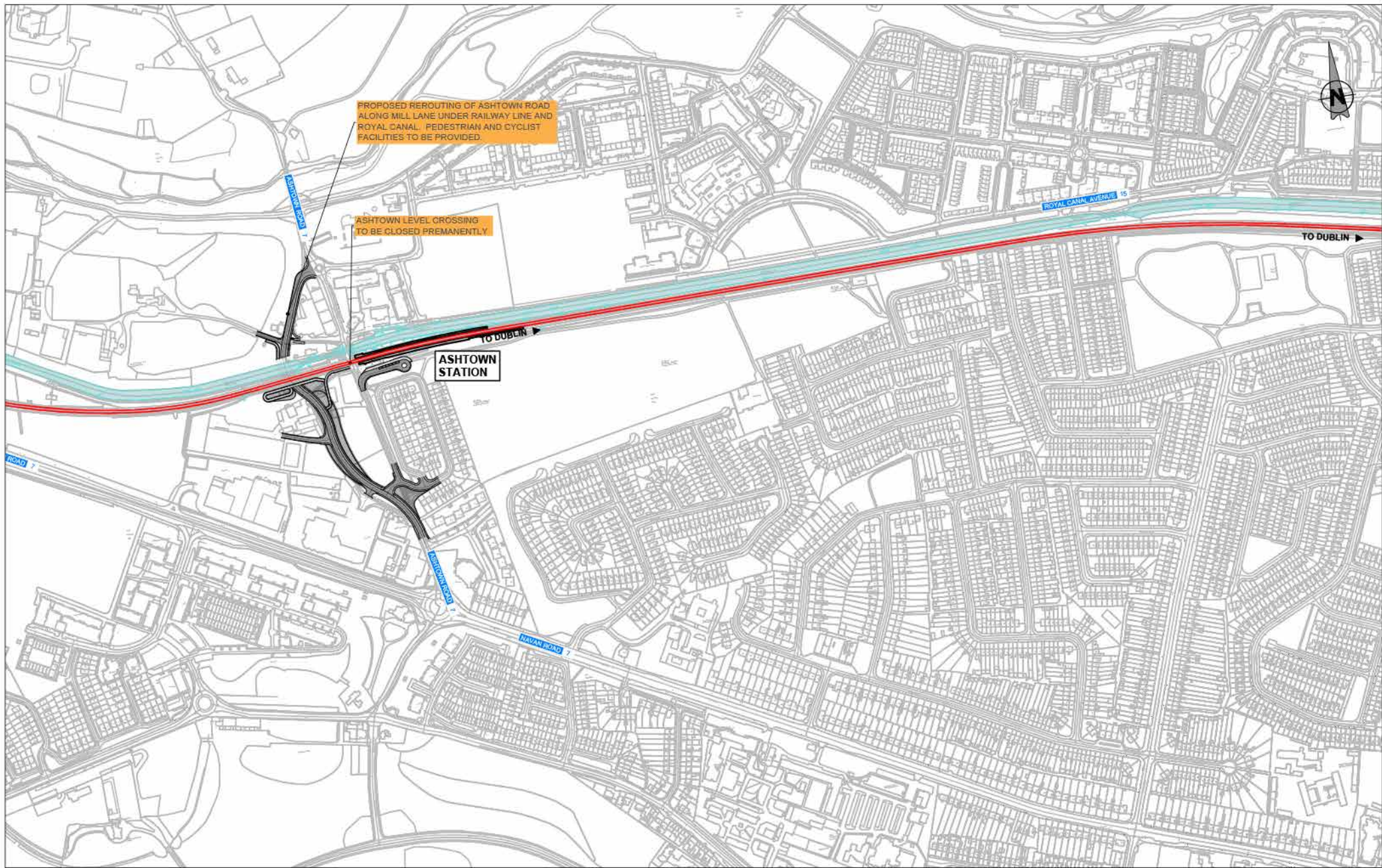


LEGEND:

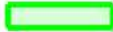
- GENERAL TRACK WORKS
- EXISTING BRIDGE WORKS

EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:



GENERAL TRACK WORKS

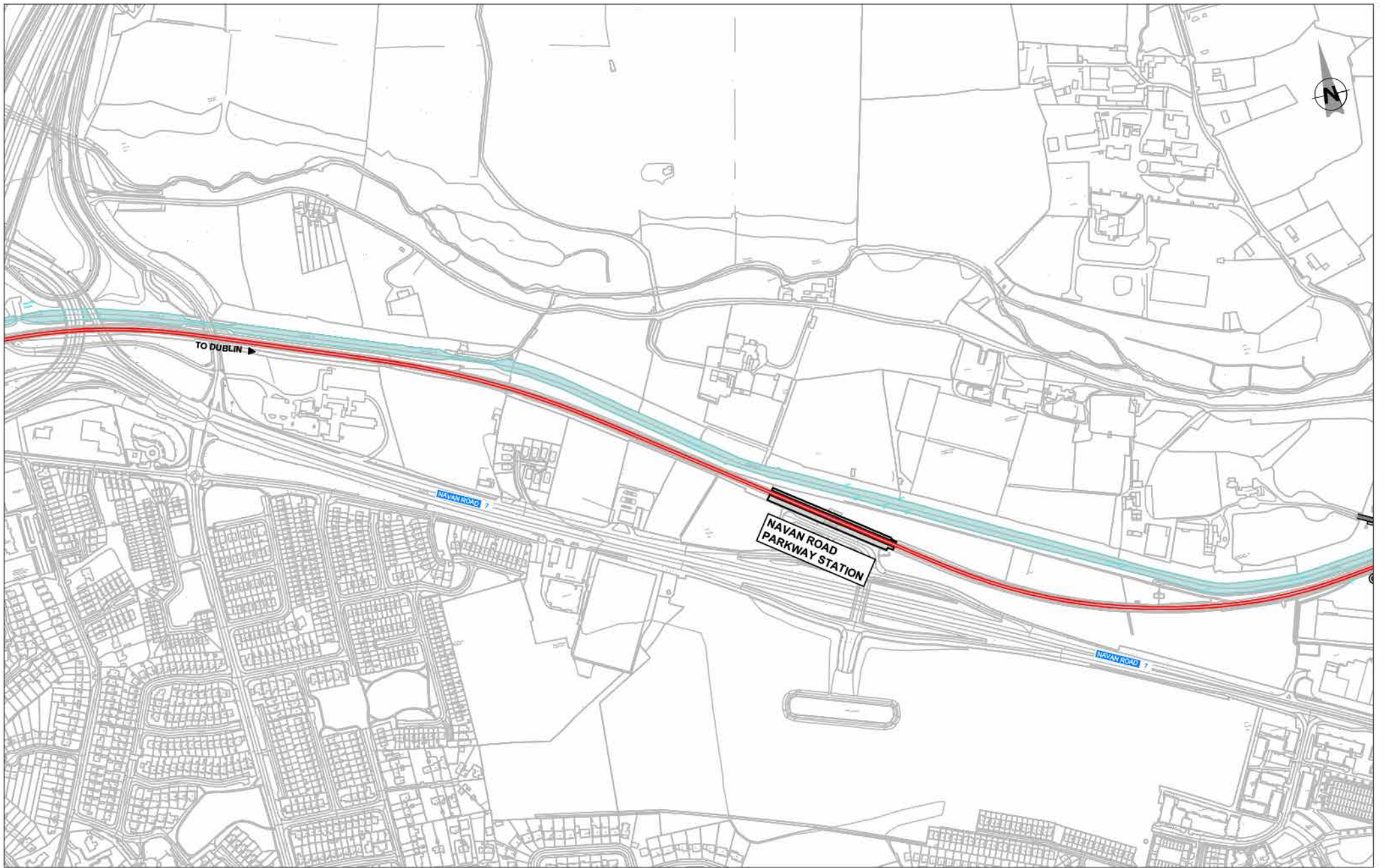


EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES



EXISTING BRIDGE WORKS

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.

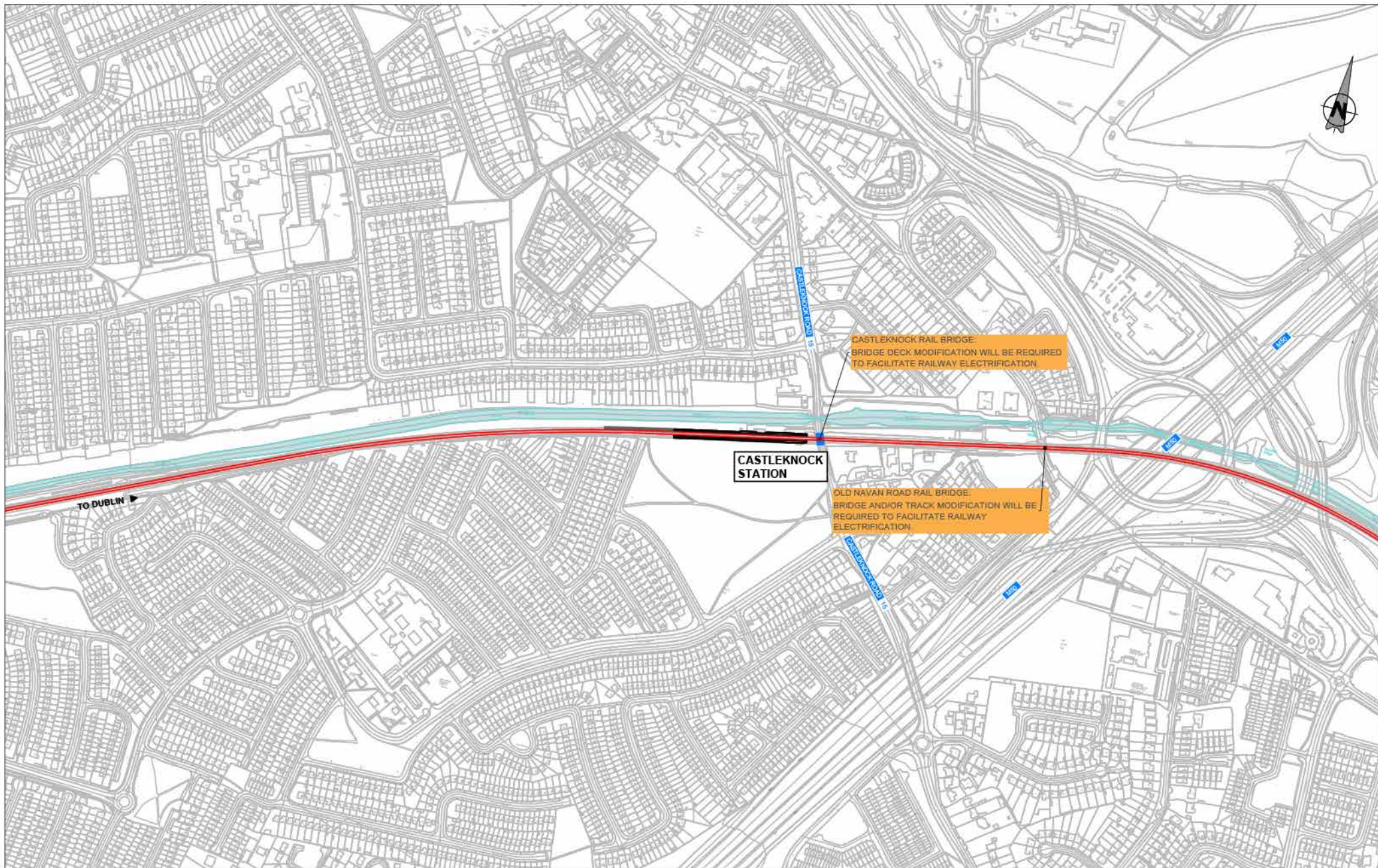


LEGEND:

-  GENERAL TRACK WORKS
-  EXISTING BRIDGE WORKS

 EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES

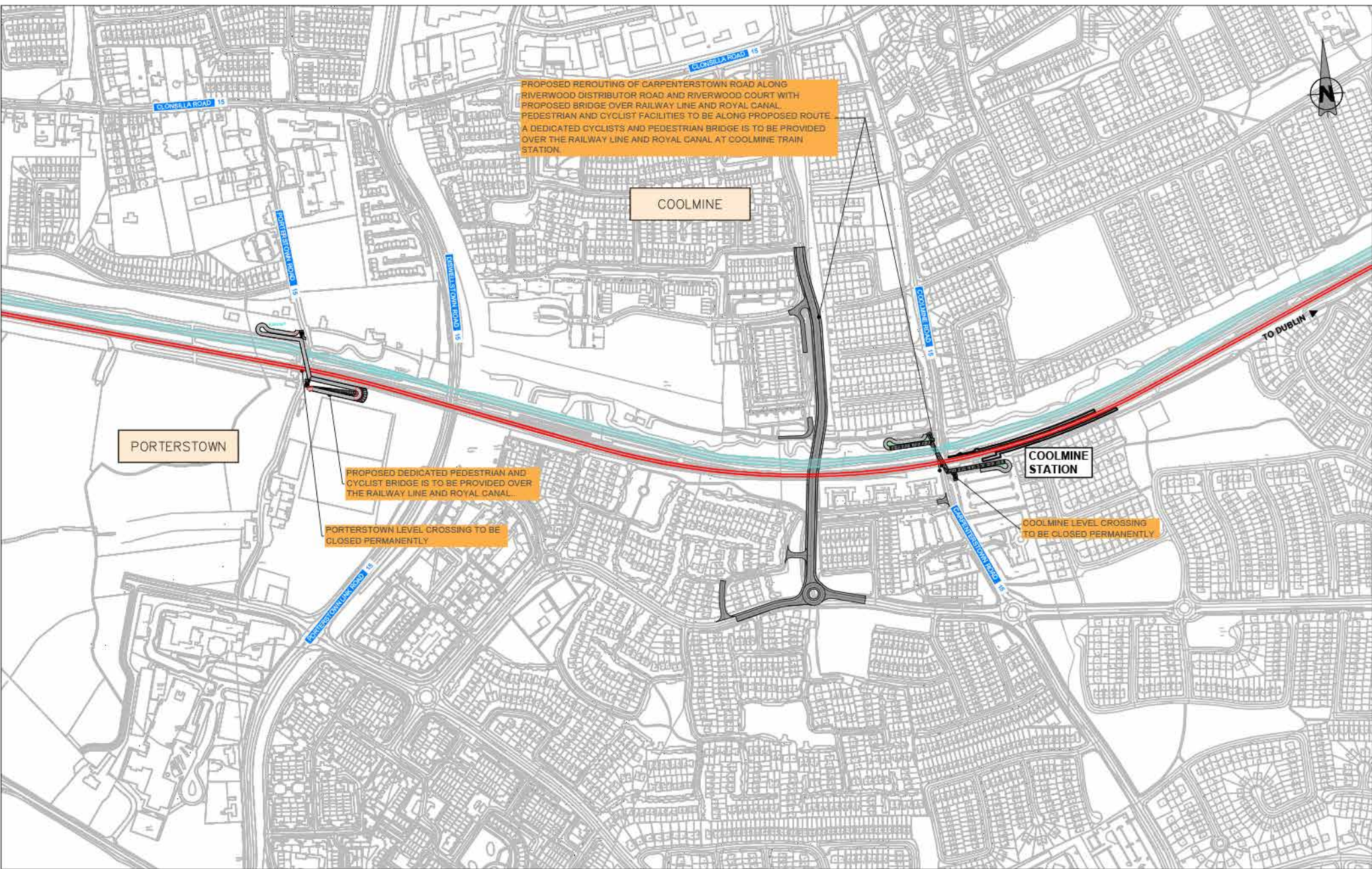
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

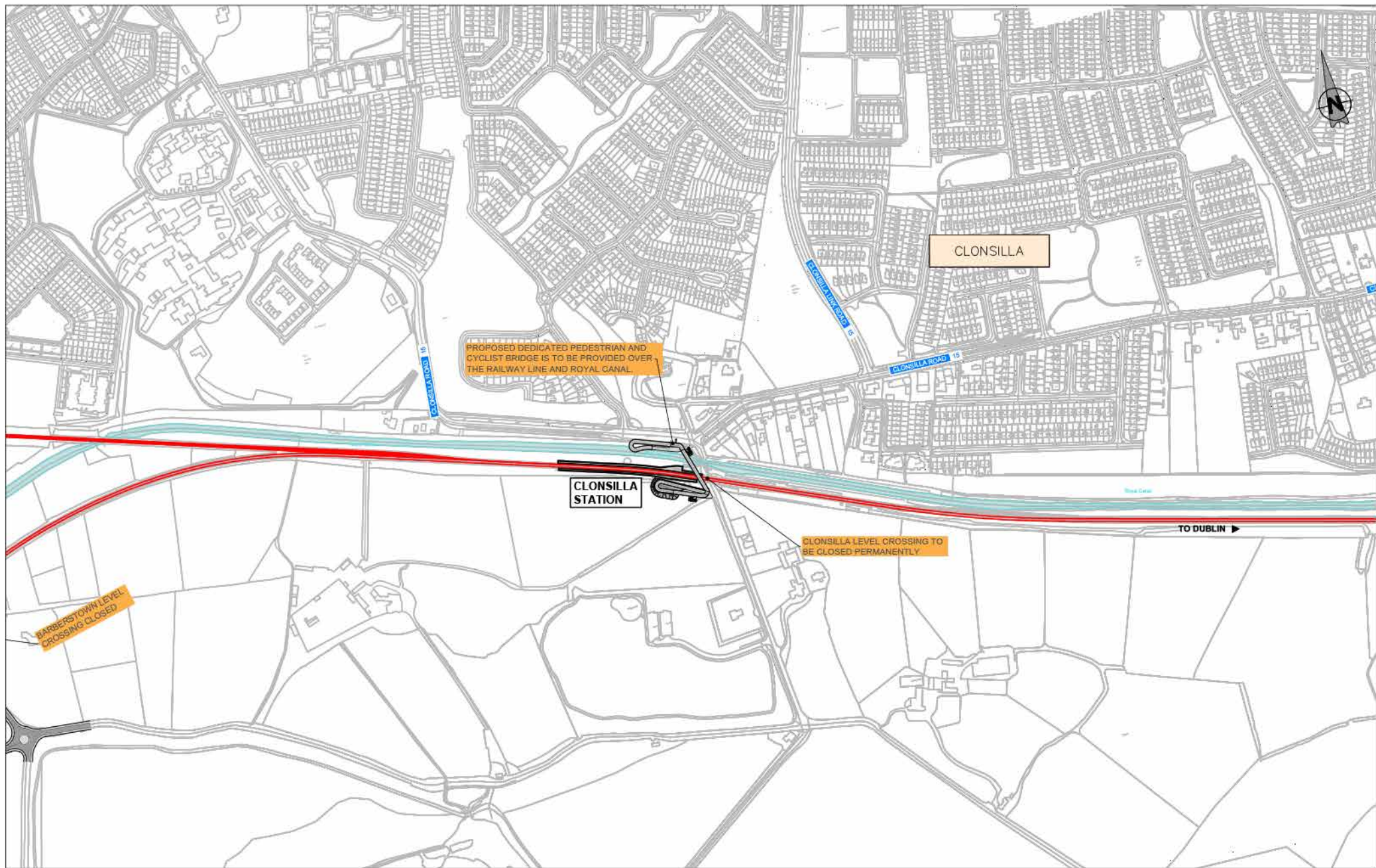
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

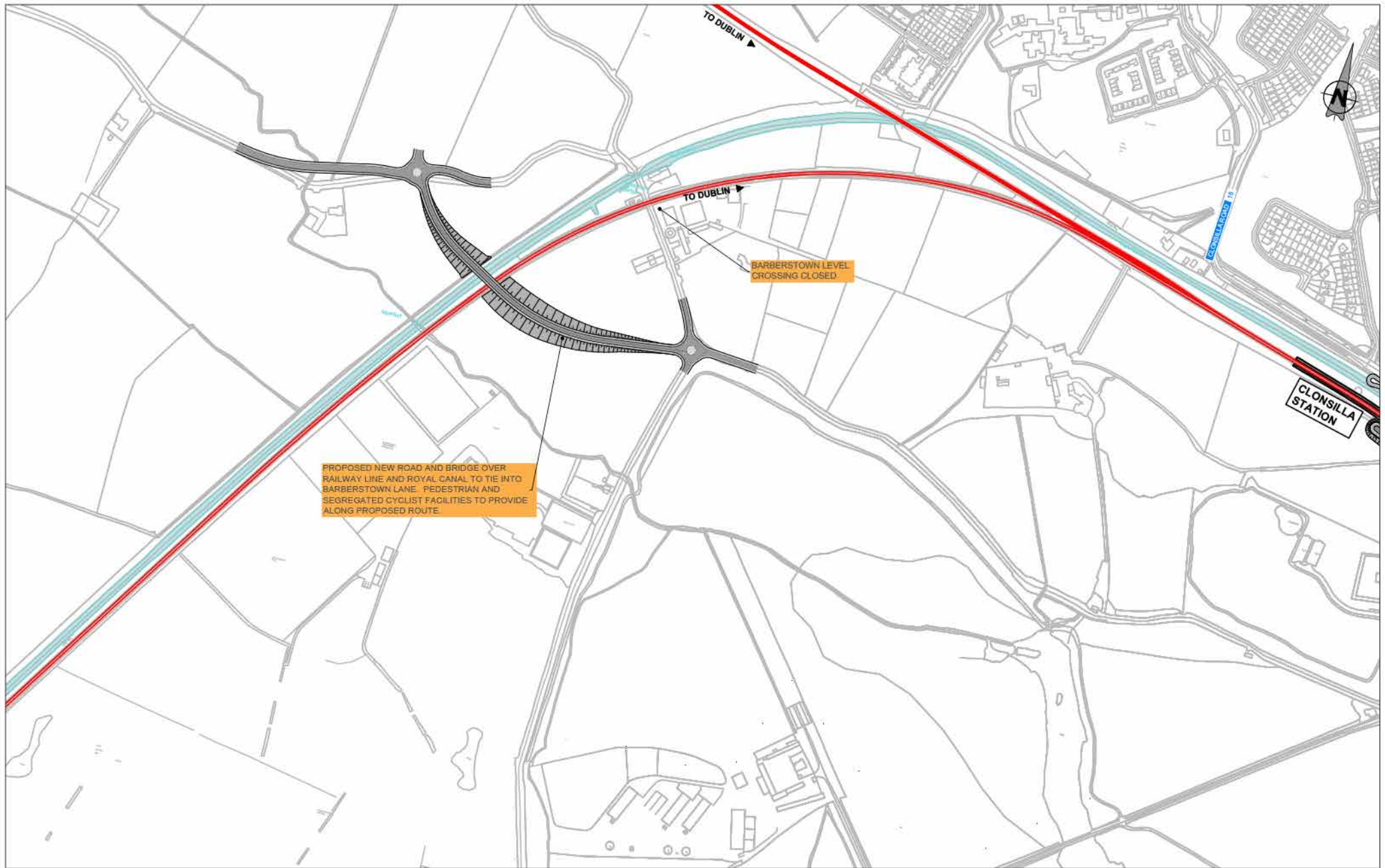
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



PROPOSED NEW ROAD AND BRIDGE OVER RAILWAY LINE AND ROYAL CANAL TO TIE INTO BARBERSTOWN LANE. PEDESTRIAN AND SEGREGATED CYCLIST FACILITIES TO PROVIDE ALONG PROPOSED ROUTE.

BARBERSTOWN LEVEL CROSSING CLOSED

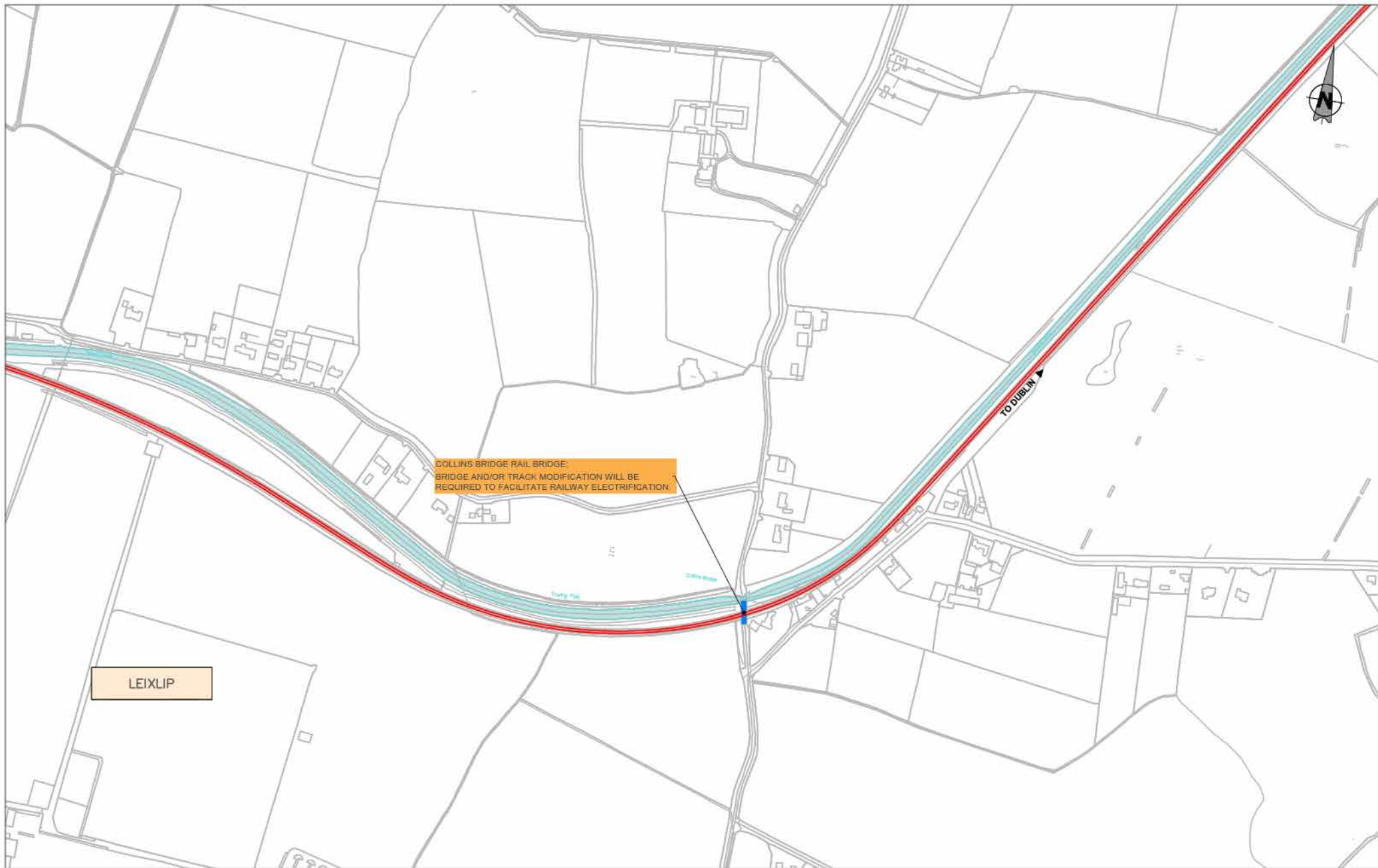
CLONSILLA STATION

LEGEND:

- GENERAL TRACK WORKS
- EXISTING BRIDGE WORKS

EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES

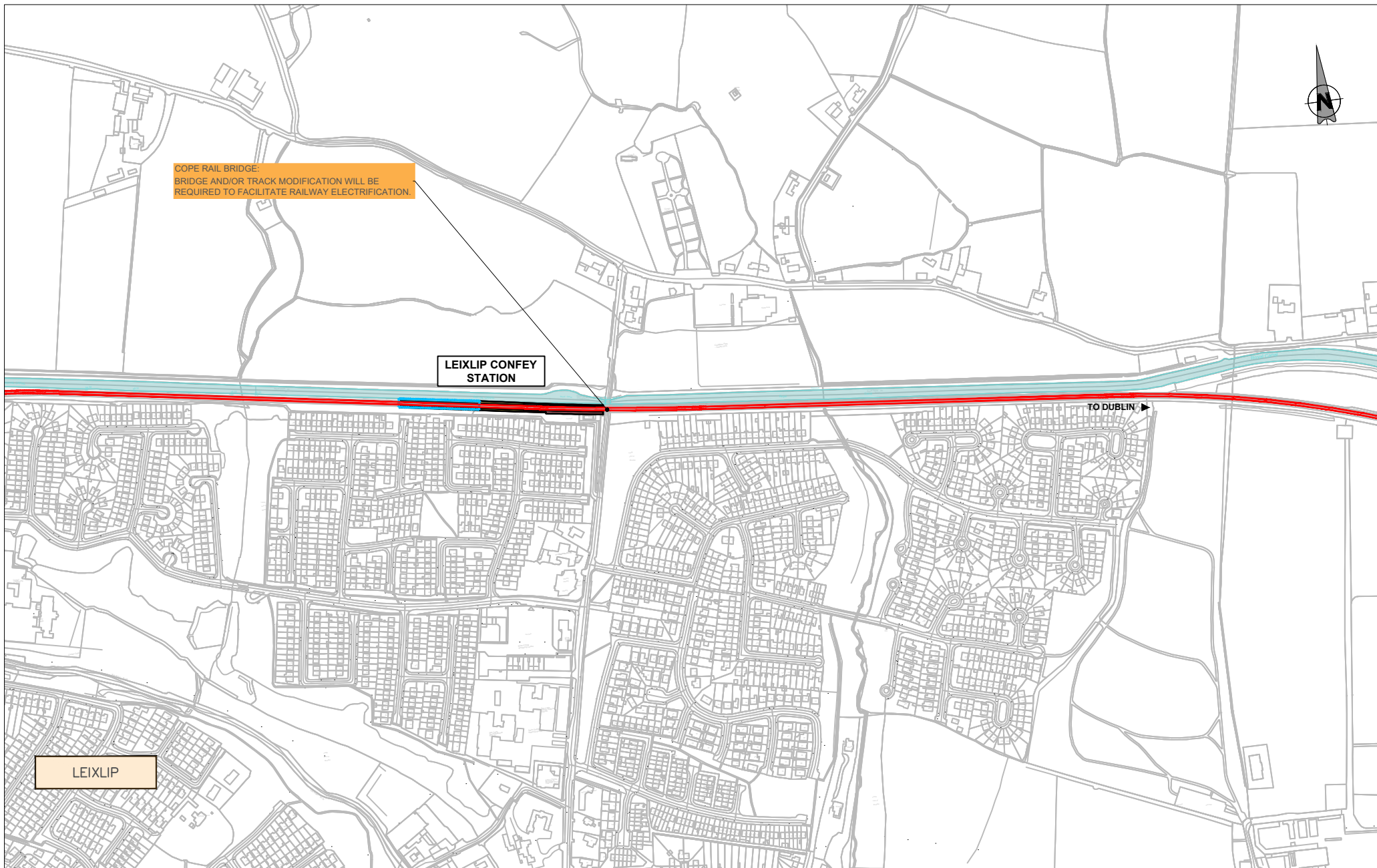
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

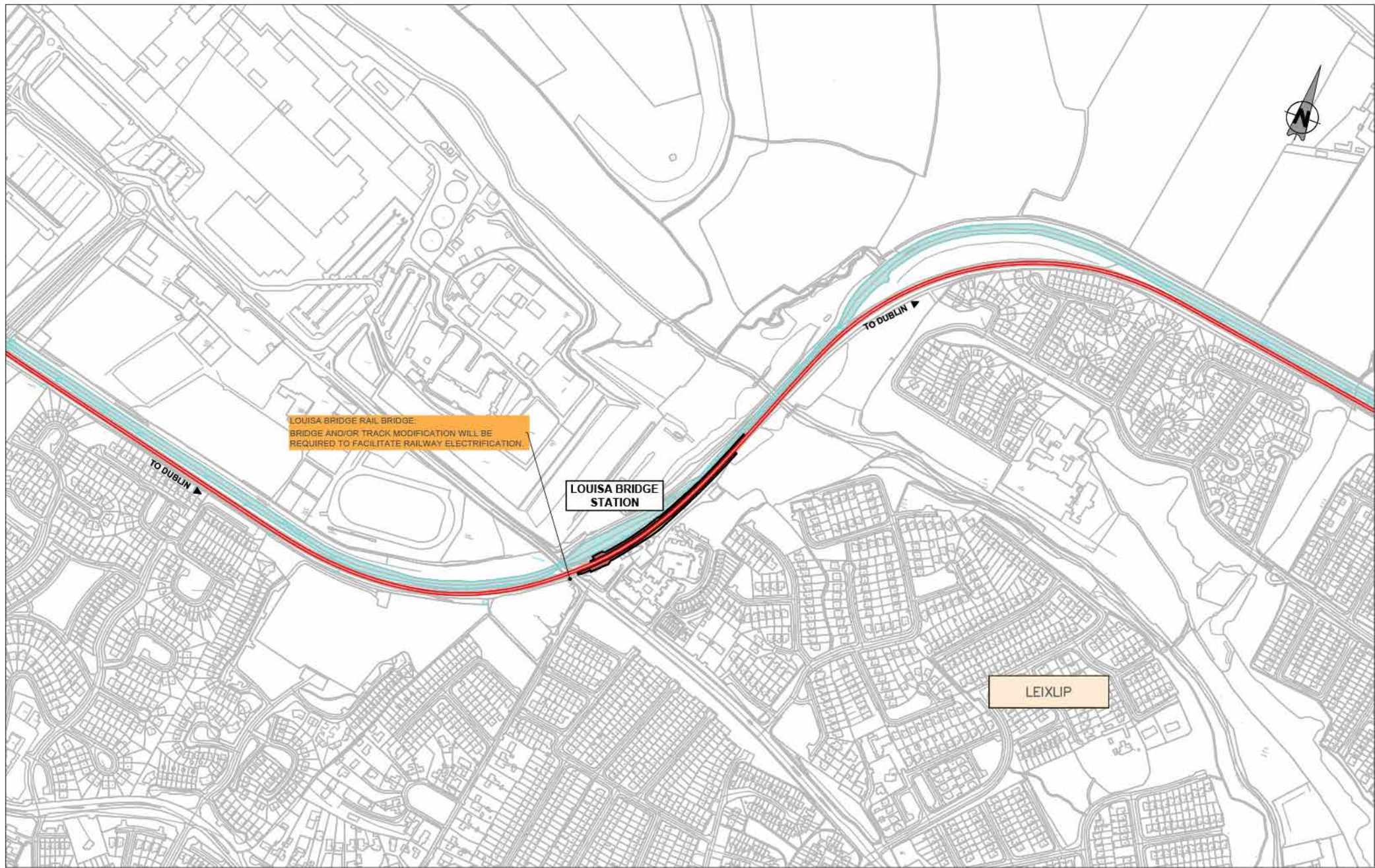
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL
BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

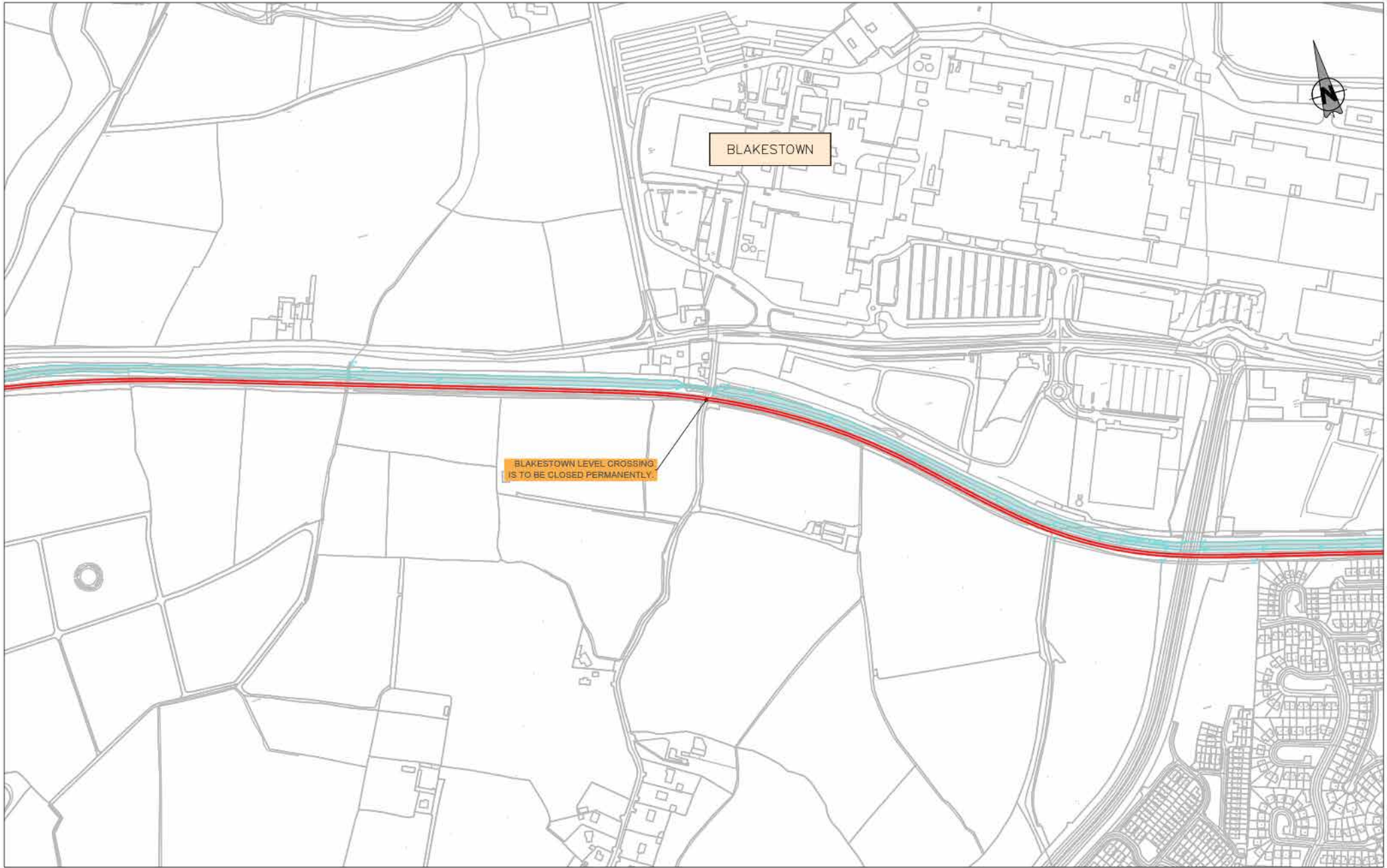
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.




BLAKESTOWN

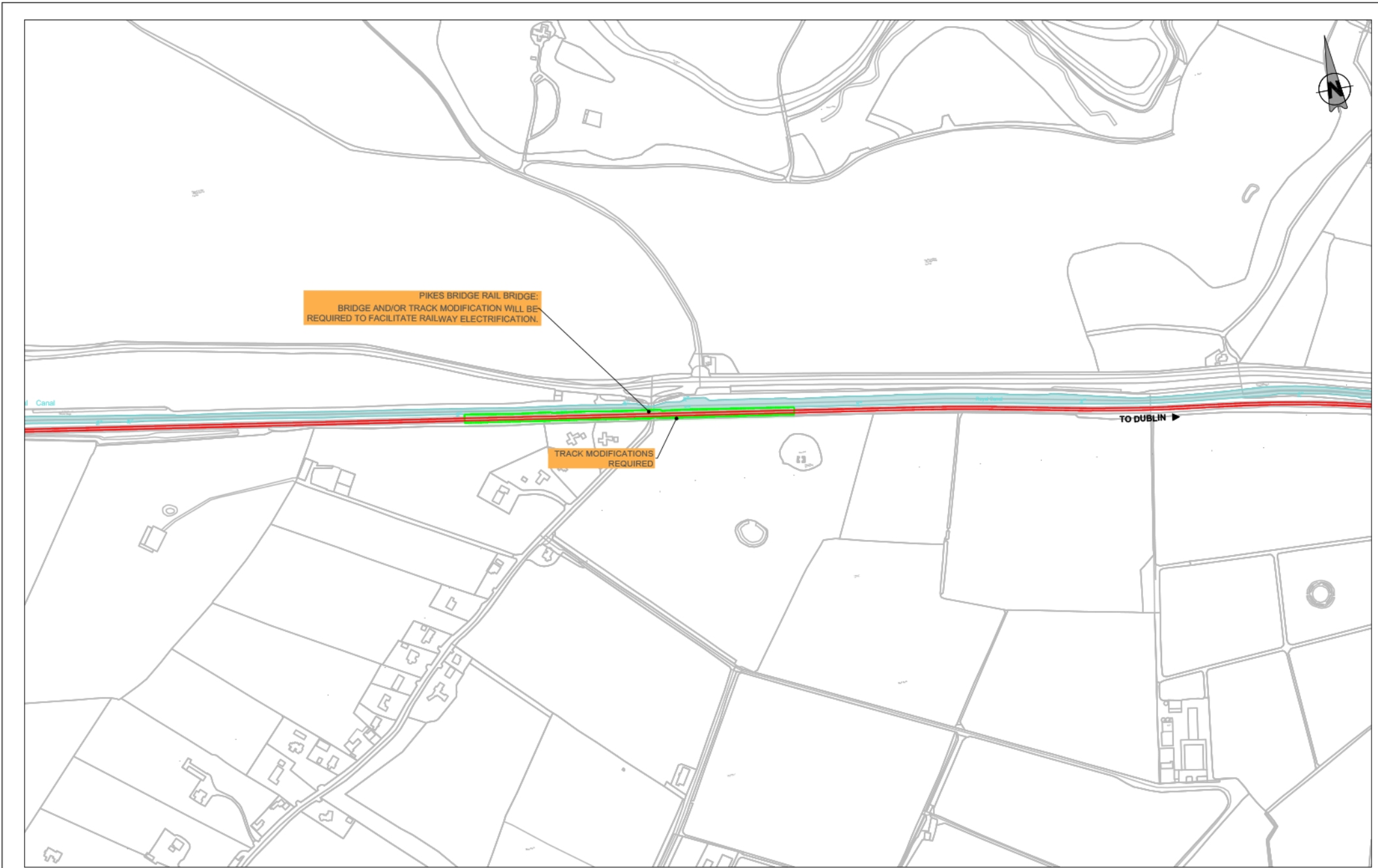
BLAKESTOWN LEVEL CROSSING IS TO BE CLOSED PERMANENTLY.

LEGEND:

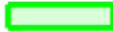
-  GENERAL TRACK WORKS
-  EXISTING BRIDGE WORKS

 EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:



GENERAL TRACK WORKS

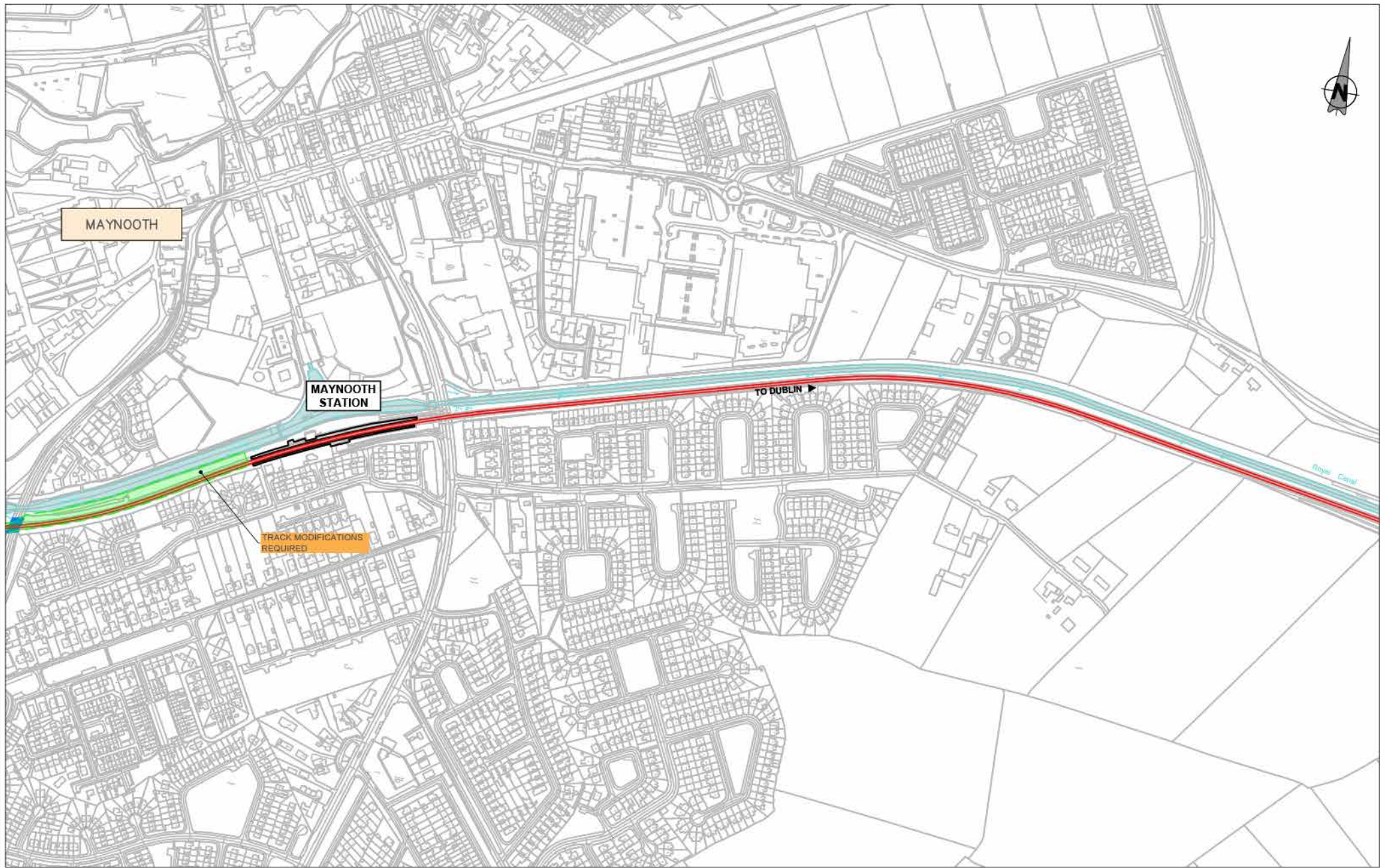


EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES



EXISTING BRIDGE WORKS

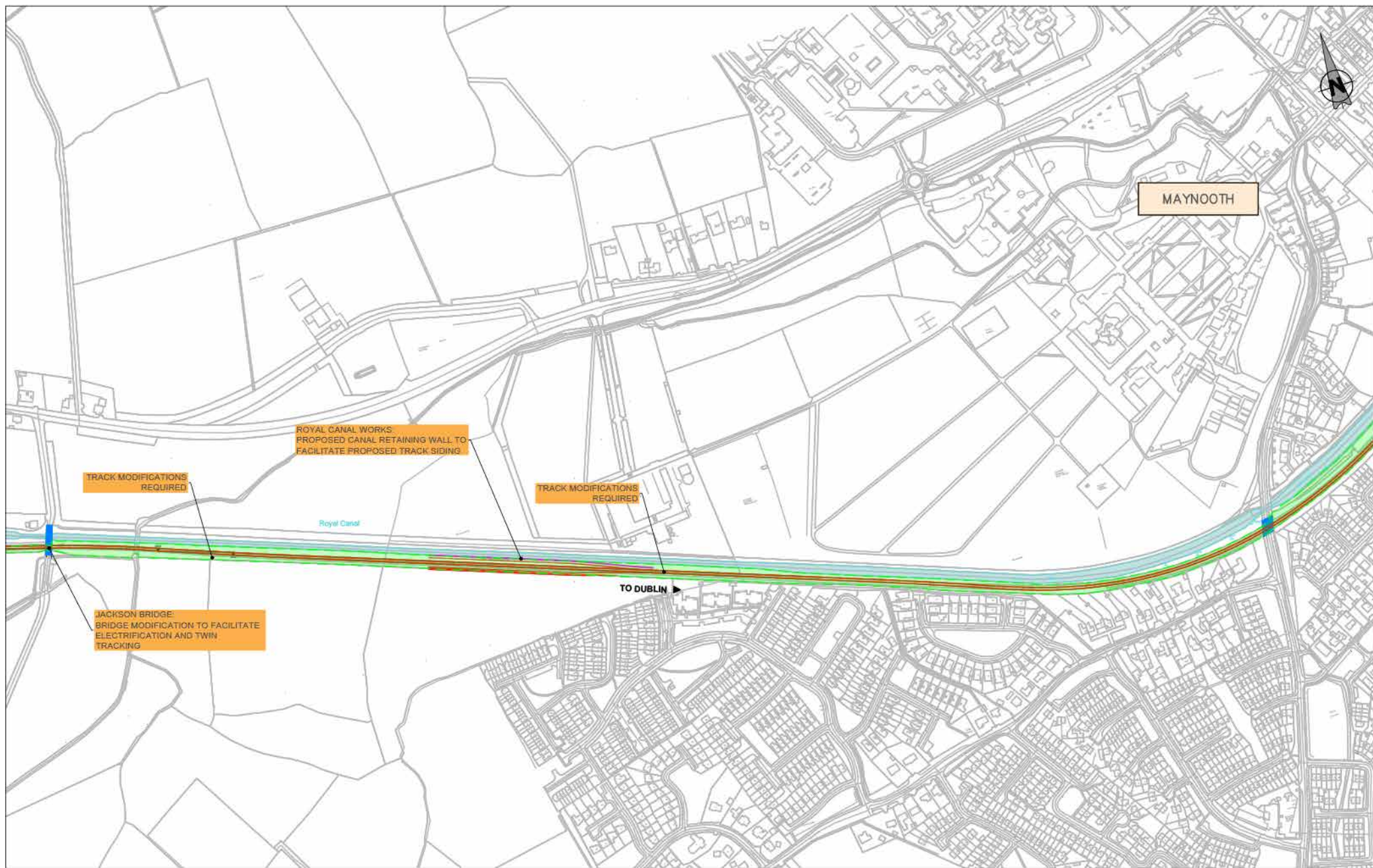
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

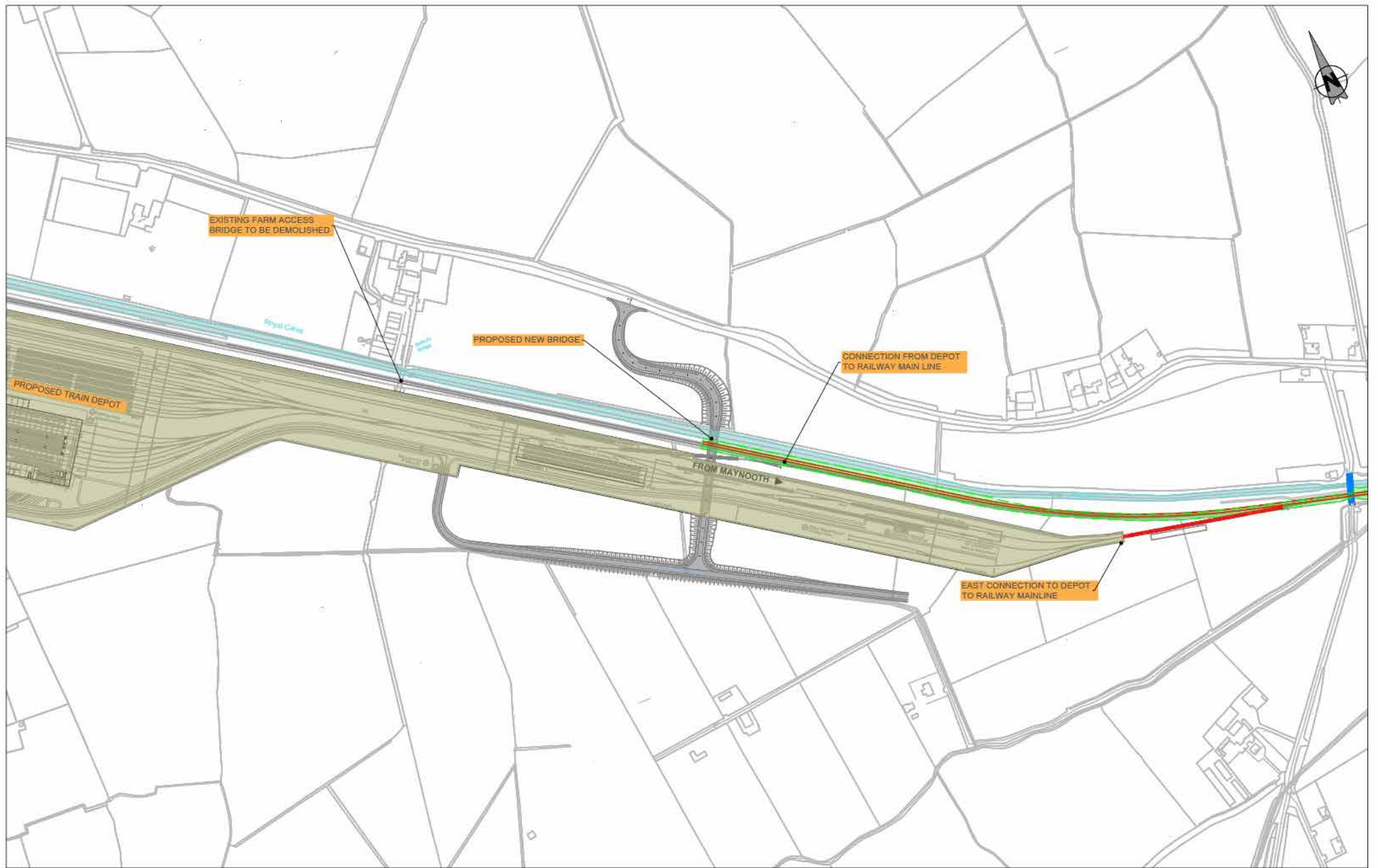
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.

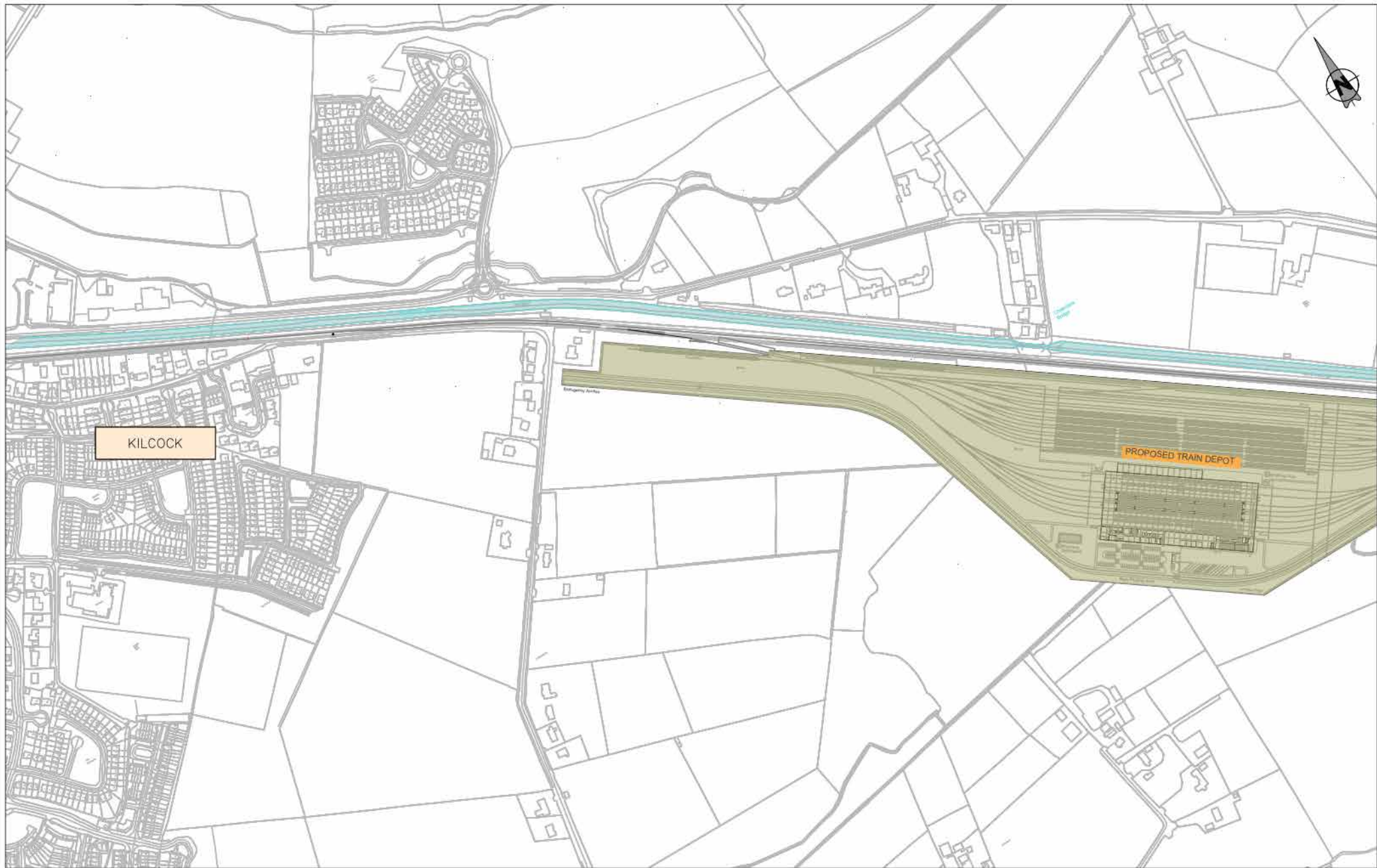


LEGEND:

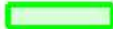
- GENERAL TRACK WORKS
- EXISTING BRIDGE WORKS

EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:



GENERAL TRACK WORKS

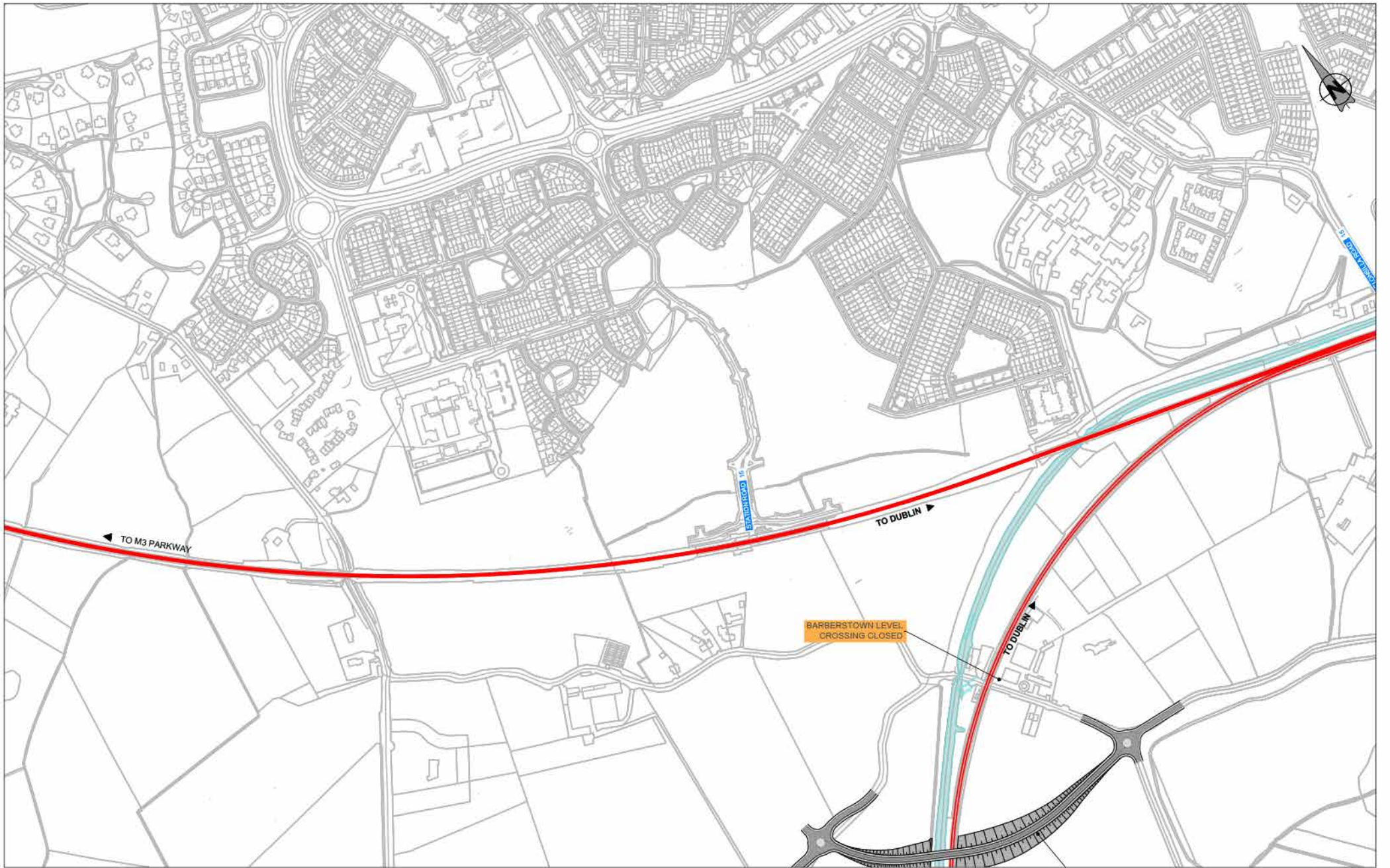


EXISTING RAILWAY LINE TO BE
ELECTRIFIED WITH OVERHEAD LINES



EXISTING BRIDGE WORKS

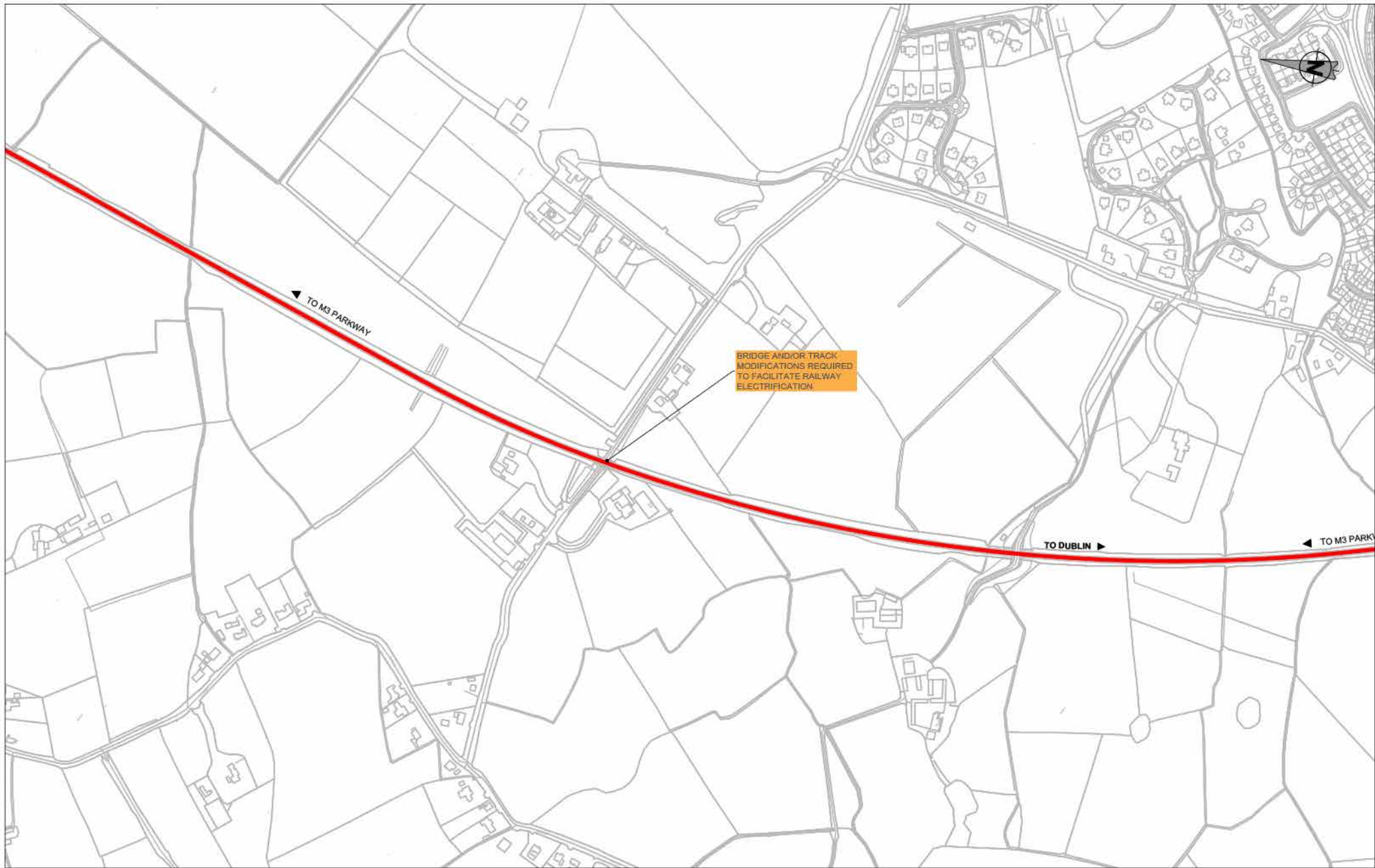
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL
BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

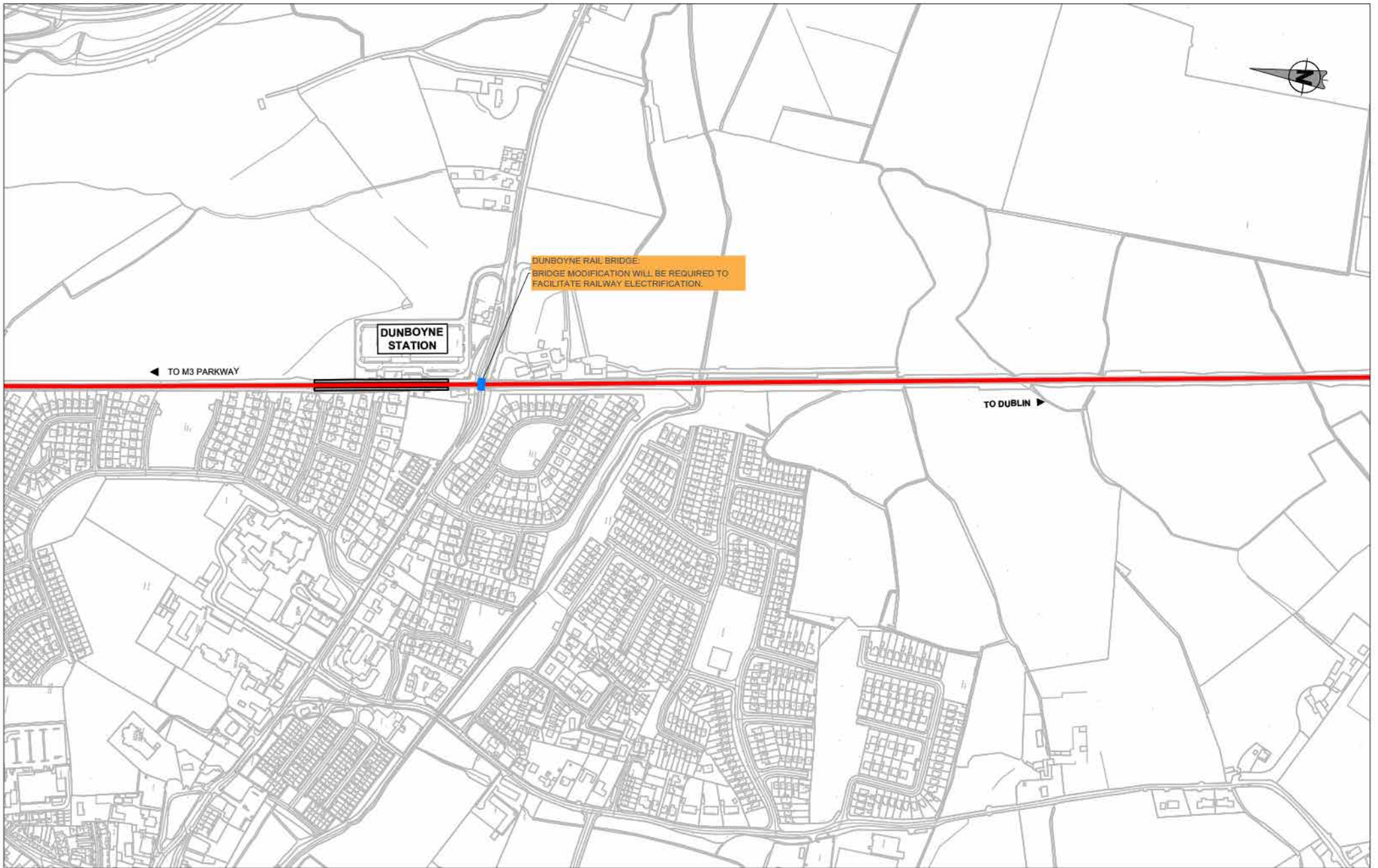
NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:

- GENERAL TRACK WORKS
- EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES
- EXISTING BRIDGE WORKS

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.

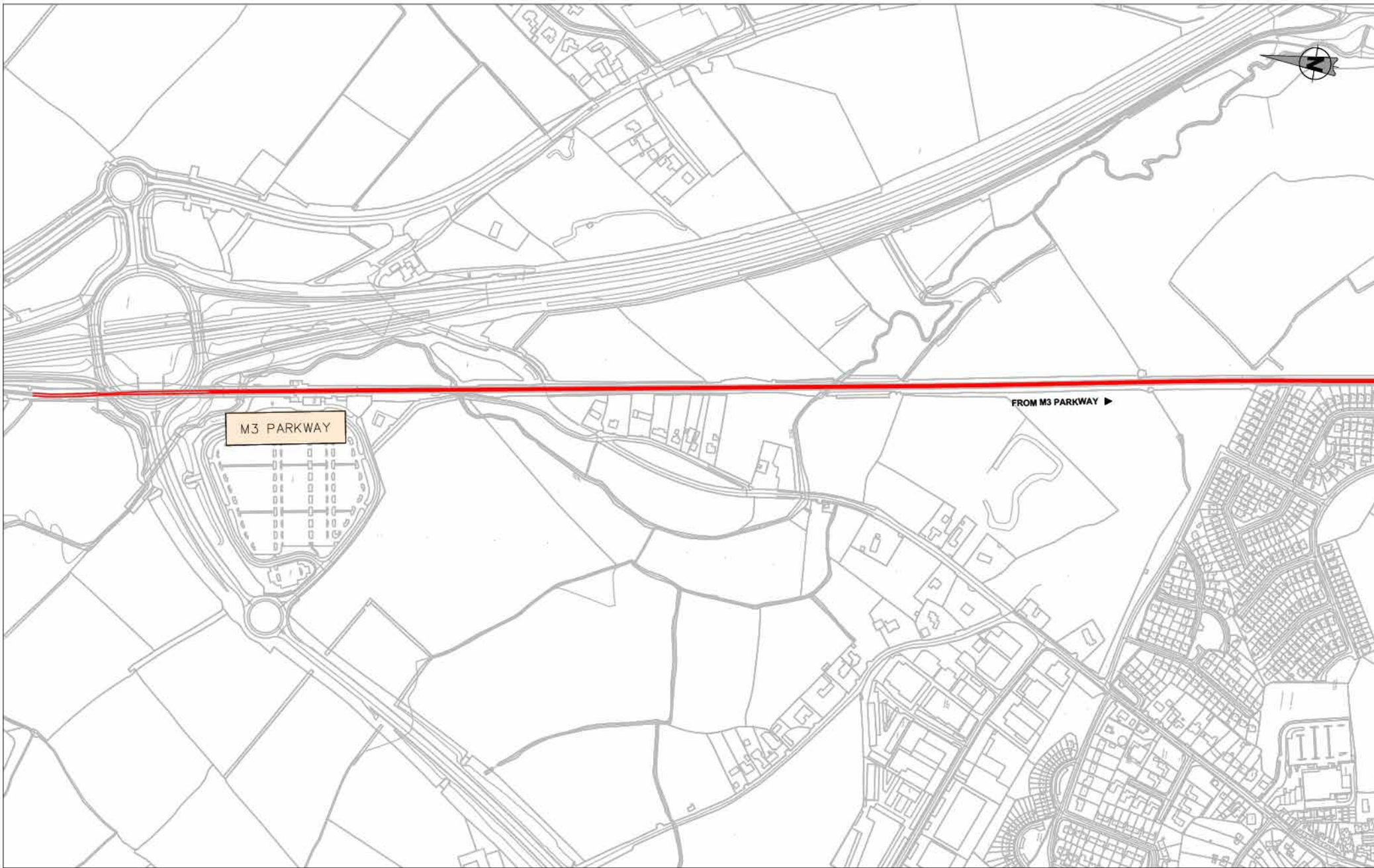


LEGEND:

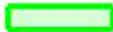
- GENERAL TRACK WORKS
- EXISTING BRIDGE WORKS

EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



LEGEND:



GENERAL TRACK WORKS



EXISTING RAILWAY LINE TO BE ELECTRIFIED WITH OVERHEAD LINES



EXISTING BRIDGE WORKS

NOTE:
PARAPET HEIGHTENING WORKS REQUIRED AT ALL BRIDGES FOR OVERHEAD LINE EQUIPMENT PROTECTION.



Email | DARTMaynooth@irishrail.ie

