

Active Travel Scheme

WP-01 – Ballyloughane Road & Renmore Avenue - Section 38 Report

Galway City Council

October 2021



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1. Introduction

1.1. Project Description

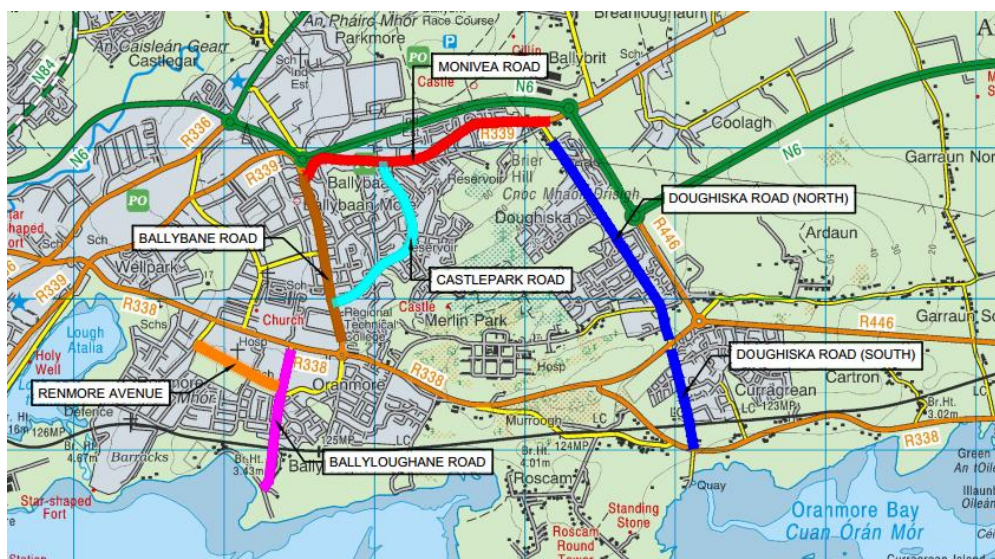
The Galway Cycle Network Phase 1 scheme has been commissioned to Atkins by Galway City Council (GCC) in October 2019. The scheme is to receive funding from the National Transport Authority (NTA) and the Urban Regeneration and Development Fund (URDF). The scheme is being constructed under the NTA's Consultancy Services framework (2016) and has been developed in consideration of current GCC policies included in the Galway Transport Strategy (GTS) (August 2016).

The Galway Cycle Network Phase 1 consists of 5 routes located to the east of Galway City, as shown in Figure 1. These routes are corridors along existing roads and have been identified within the GTS and within the scope of this commission as follows:

- Ballybane Road between Skerritt roundabout and Monivea Road junction, excluding the N6 and Dublin Road junctions.
- Doughiska Road (North¹ and South) extending between the start of the Sean Bhaile estate to the north and Coast Road to the South, excluding the junction with the Dublin Road.
- Ballyloughane Road (full extent excluding the junction with the Dublin Road)
- Castlepark Road (full extent)
- Monivea Road extending from the Ballybane Road and terminating at the start of the ghost island junction to the west of the Clayton Hotel entrance²

The purpose of this report is to present Work Package 01 (WP-01) of the Galway Cycle Network Phase 1 Scheme, which is to be progressed in accordance with Section 38 of the Road Traffic Act 1994³. WP-01 comprises Ballyloughane Road and Renmore Avenue. Renmore Avenue was included in WP-01 following the completion of the Option Selection stage, with an aim to improve active travel along the route.

Figure 1 - Proposed Galway Cycle Network Phase 1 Routes



¹ Progression of Doughiska Road (North) has been paused, due to the overlap of the proposed Galway BusConnects scheme.

² Progression of Monivea Road has been paused, due to the overlap of the proposed Galway BusConnects scheme.

³ Section 46(2) of the Public Transport Regulation Act 2009 amends Section 179(6) of the Planning and Development Act of 2000 (Exemptions) to make provision for the enhancement of public bus services and/or to improve facilities for cyclists under Section 38 of the Road Traffic Act 1994.

For information regarding the project background, aims, objectives and the scheme context please refer to the Option Selection Report (Atkins Ref: 5193732DG0086).

1.2. Route Specific Objectives

The Route-specific objectives for Ballyloughane Road and Renmore Avenue include the following:

- **School Users:** To provide for improvements for school users in terms of active travel facilities along Ballyloughane Road and Renmore Avenue, particularly in the vicinity of the entrance to Gaelscoil Dara and Scoil Chaitríona.
- **Beach & GAA Club Users:** To provide for improvements for those active travel users accessing the beach and Liam Mellows GAA club (accessed from Ballyloughane Road).
- **Public Transport:** To provide for improvements to bus stop infrastructure for the existing bus services on Ballyloughane Road.
- **Other Schemes:** To allow for future tie-ins to other proposed schemes (i.e. the proposed Dublin Road multi-model transport model, the proposed Galway to Athlone Greenway and the proposed Ballyloughane to City Centre Greenway; and thereby the proposed Clifden Greenway and the proposed City Centre to Silver Strand Greenway). As noted in the GTS the existing cycle path south of the railway on Ballyloughane Road may form part of, or connect to, the proposed Greenway, and so will be retained as part of the Galway Cycle Network scheme.

1.3. Project Related Policies

1.3.1. Smarter Travel, A Sustainable Transport Future 2009 - 2020

Smarter Travel, a sustainable Transport Future 2009 - 2020 is a transport policy paper that examines Ireland's current and future transport trends and how the transport system may be made more efficient to cope with an increasing population and associated increasing demands on the system. The document sets out how to improve efficiencies in the existing network and how to build in efficiencies into new pieces of transport infrastructure by utilising a series of actions described in the document.

The policy sets out five key goals:

- to reduce overall travel demand;
- to maximise the efficiency of the transport network;
- to reduce reliance on fossil fuels;
- to reduce transport emissions and
- to improve accessibility to transport.

To achieve the above goals, the policy notes the following targets of relevance to this scheme:

- *"500,000 more people will take alternative means to commute to work to the extent that the total share of car commuting will drop from 65% to 45%" - which represents the national target in terms of modal shift.*
- *"Alternatives such as walking, cycling and public transport will be supported and provided to the extent that these will rise to 55% of total commuter journeys to work."*
- *"A reduction will be achieved on the 2005 figure for greenhouse gas emissions from the transport sector."*

1.3.2. Sustainable Mobility Policy Review - Background Paper 2 - Active Travel

This background paper has been prepared by the Department of Transport to inform a public consultation on Ireland's sustainable mobility policy (currently ongoing). The purpose of this paper is to review the previous and current role of active travel modes (walking and cycling) in the context of the wider transport network while raising some issues for consideration in developing future policy.

The paper notes the following benefits in relation to Active Travel:

- **Environmental:** *reduced levels of carbon emissions and greenhouse gases; improved air quality levels in towns and cities including lower levels of harmful particulates; reduced noise levels due to lower vehicle volumes / speeds; reduced environmental impacts due to reduced levels of energy and materials used in car manufacturing.*

- **Health:** improved levels of fitness and public health generally from increased activity. Improved air quality in towns and cities as a result of traffic management measures and reduced car volumes.
- **Safety:** increased levels of cycling tends to lead to lower accident rates for cyclists overall through a “safety in numbers” effect, although there are alternative views that the effect is more properly described as “numbers through safety”. Increased levels of active travel can also stimulate the increased provision of quality footpaths and cycle paths by public authorities, further increasing safety generally.
- **Economic:** increased active travel usage can lead to reduced congestion levels and improved accessibility in urban areas. The space and infrastructure required for large numbers of pedestrians and cyclists are often significantly more economical to provide when compared to the costs associated with new roads or railways, for example.
- **Social:** increased provision for active travel modes can drive improved transport equity. Although environmental considerations are increasingly at play in consumer choices about transport, it is still the case that low levels of private car ownership and use can be an indicator of lower income levels. Increasing the provisions for active travel modes can improve accessibility and mobility for lower income groups, while improved active travel infrastructure (e.g. high quality footpaths) can also increase accessibility for people with mobility impairments or disabilities.

1.3.3. Climate Action Plan 2019

The Climate Action Plan sets out a course of action over the coming years to address climate disruption, which is acknowledged as having diverse and wide-ranging impacts. The document outlines the aims for each sector of industry in Ireland. Electricity, Transport, Built Environment, Industry, Agriculture and waste have all been assessed in the document with a roadmap laid out to deliver a reduction of emissions in each of these sectors between 2021 and 2030.

1.3.4. Regional Spatial and Economic Strategy (2020 – 2032)

The Regional Spatial and Economic Strategy (RSES) provides a roadmap for effective regional development identifying key strategic assets, opportunities and challenges and sets out policy responses to ensure the people’s needs are met. The document delivers a combination of response, design and innovation; in how the Northern & Western Region does business, delivers homes, builds communities and values land-use – creating healthy places and promoting sustainable communities. The RSES introduces the concept of a Growth Framework to achieve this integration as it is considered that regional growth cannot be achieved in linear steps.

1.3.5. Metropolitan Area Strategic Plan 2019

The Galway Metropolitan Area Strategic Plan (MASP) is used to form part of the RSES. The plan sets out a strategy to help identify the key change parameters for the Galway area, work out a sequence for infrastructure prioritisation and helps deliver compact regeneration and growth. The plan supports employment, population growth and a high quality of life in the Galway region. The MASP specifically mentions the provision of core, primary, secondary and feeder cycle networks and safe crossing pedestrian facilities.

1.3.6. Galway City Development Plan (2017 – 2023)

The Galway City Development Plan 2017-2023 sets out to promote and facilitate movement within and to the City through the integration of land use with a sustainable transport system, with priority given to public transport, walking and cycling. There are several relevant chapters in the Development Plan which relate to Active Travel. The main objectives relevant to this scheme are summarised below:

- Ensure facilities for pedestrians and cyclists are designed in accordance with national standards.
- Consider the introduction of reduced speed limits in the city centre and residential areas of the city.
- Implement a structured programme of improvements across the whole city pedestrian network and at road crossings.
- Promote, facilitate and maintain maximum connectivity and permeability for pedestrians and cyclists in the design of new developments and in upgrading existing developments in accordance with the *Design Manual for Urban Roads and Streets* (2013) and *Permeability a Best Practice Guide*, NTA (2015).
- Continue to encourage an increase in the use of sustainable transport modes including public transport through targeted promotion.

1.3.7. Galway Transport Strategy (GTS)

The GTS notes that the City and its suburbs enjoy a high walking mode share (approximately 23%) which “a prominent and sustainable walking culture can be fostered”. Whilst the vast majority of the pedestrian network in the city and suburbs is noted by the GTS of being “of reasonably good quality”, there are locations where the offering is “limited, with sub-standard footpaths, a lack of crossing facilities and low priority provided for pedestrians”.

In the suburban areas, the GTS promotes an emphasis to be given to:

- increasing permeability within the suburban residential areas;
- improving and updating the pedestrian network;
- increasing pedestrian safety; and
- maximising pedestrian accessibility to the public transport network.

The GTS sets out the following aims (as per GTS Table 7.4):

- To provide improvements for pedestrians along city centre public transport corridors.
- To increase priority given to pedestrians over road traffic.
- To increase legibility and wayfinding.
- To increase the quality, comfort and safety of the pedestrian facilities.

The GTS sets out that it will ensure that “the needs of pedestrians, including the mobility impaired and disabled, are fully considered in the design of all new facilities and upgrades of existing facilities.”

1.3.8. Parkmore Area Strategic Transport Framework

The Parkmore Area Strategic Transport Framework is a transport framework for the Parkmore area of Galway City which looks at enabling the efficient movement of people and goods. The Parkmore area is a key area of the City with high employment numbers. The Framework notes that over 2,500 employees in the Parkmore Area live within 5km of their place of work. Ballyloughane Road and Renmore Avenue are within this catchment.

The aim of the strategy is to increase the number of people commuting to and from the area while reducing single car journeys and travel time in the area. Of relevance to this Active Travel scheme for Ballyloughane Road and Renmore Avenue, the following has been set out as an objective of the strategy:

- Enhancement of existing cycling and walking facilities.
- Improved junction design, with acceptable pedestrian and cycling provisions for both signalised and non-signalised junctions.
- Continuity of footpaths and cycle tracks along routes.

2. Existing Transport Network

2.1. Ballyloughane Road

The existing Ballyloughane Road is a Local Road extending between Ballyloughane Strand to the south and the R338 Dublin Road to the north. It serves as a main access road to Ballyloughane beach to the south. It is set mainly in a residential area, with recreational and community facilities to the west and a primary school to the east. A railway underpass is located to the south of this route, approximately 250m from the coast. In line with DMURS Table 3.1 Ballyloughane Road is a Local Road. The length of this route is circa 0.95km.

2.1.1. Road Network

Ballyloughane Road is a single carriageway road with kerb-to-kerb measurement varying between 6-7.5m and total width approximately 10m including footpaths either side of the carriageway. An example of the cross section is shown in Figure 2. This road is generally bounded by property walls on both sides with the exception of the Renmore playing fields site where there is no boundary wall to the back of the footpath. Beneath the railway bridge the carriageway narrows to one lane, (with a yield system in place), and continues as approximately 5m wide road south of the underpass, an example of this cross section is shown in Figure 3.

Figure 2 - 10m wide carriageway along Ballyloughane Road



Figure 3 - Road cross section south of the railway line



Existing speed ramps and rumble strips installed either side of the underpass suggest that speed and safety are of concern in this area.

There are no loading areas along this road. There are 4 parking bays, (including one disabled bay), on the southbound side of the carriageway starting approximately 110m from the Dublin Road junction. Informal on-street parking is evident elsewhere.

A traffic survey was carried out over the course of a week in December 2019 along Ballyloughane Road. The results showed that the AADT of the road is 3,735 and the 85%ile speed along the route is 47km/h. 4.7% of traffic is comprised of Heavy Goods Vehicles. The speed limit on this route is 50km/h.

2.1.2. Junctions

There are seven junctions along Ballyloughane Road; three of these are with other Local Roads, i.e. Renmore Avenue, Murrough Avenue and Fuchsia Drive. The existing junctions have wide junction mouths and radii. Gaelscoil Dara access is located circa 170m south of junction with the Dublin Road. There are 42 residential, (predominately single-unit), entrances onto Ballyloughane Road.

2.1.3. Public Transport

There are 4 bus stops along this Route serving the 402 City-service, all are in-line and without shelters. The 402 service travels for 500m on Ballyloughane Road from the Dublin Road down as far as Fuchsia Drive.

2.1.4. Pedestrian and Cycling Facilities

There are no formal cycling facilities to the north of the Railway Underpass along this road; currently cyclists must cycle on the carriageway with vehicular traffic.

The existing footpaths on both sides of the road, (starting from Dublin Road), terminate at an uncontrolled pedestrian crossing north of the railway underpass. A pedestrian facility continues south from here as an on-road facility shared with the traffic through the underpass. To the south of the underpass this transitions to a kissing-gate at the start of the approximately 1.5m wide off-road shared pedestrian/cycle facility extending up to Ballyloughane Strand. This facility is narrowed further by precast concrete barriers which are in place behind a stone wall.

Two uncontrolled crossings with yellow box marking across Ballyloughane Road are provided south of the Gaelscoil Dara access junction and north of Renmore Avenue junction. Uncontrolled pedestrian crossings with dropped kerbs and buff tactile paving are provided at all junctions along Ballyloughane Road.

2.2. Renmore Avenue

2.2.1. Road Network

Renmore Avenue is a single carriageway road, with kerb-to-kerb measurement varying between 6 – 7m and a total width exceeding 12m in the majority of locations along the route due to large existing verges. An example of the existing Renmore Avenue cross section is shown in Figure 4. There are no loading bays along this road. There is no formal on-street parking bays along Renmore Avenue, however on-street parking alongside the kerb has been observed.

Figure 4 - Existing Renmore Avenue Cross Section



2.2.2. Junctions

There are 3 junctions along Renmore Avenue; one priority T-junction at each end, (Renmore Road, and Ballyloughane Road), and one priority cross-roads, (Rowan Avenue / Melody's Court (Cuirt Mhaoileidigh)).

Scoil Chaitríona's accesses are located circa 250m and 290m from the Ballyloughane Road junction. St Oliver Plunkett Church's accesses are 350m and 450m from the Ballyloughane Road junction. The Bon Secours Hospital access is located circa 520m from the Ballyloughane Road junction. There are no direct residential entrances/driveways onto Renmore Avenue.

2.2.3. Public Transport

There are no existing bus stops or public bus services located along Renmore Avenue.

2.2.4. Pedestrians and Cycling Facilities

There are no formal cycling facilities along Renmore Avenue, currently cyclists must cycle on the carriageway with vehicular traffic.

There is an existing footpath on the northern side of Renmore Avenue. Overall the footpath is in relatively good condition and provides a safe and continuous facility for pedestrians, albeit they must cross entrances at-grade. A controlled pedestrian crossing is located outside Scoil Chaitríona and provides a pedestrian link to Rowan Avenue, and this is the only location on the southern side of the road where a footpath is present and it is circa 45m in length.

3. Options Assessment Process

3.1. Options Assessment

An Option Selection Report, (Atkins document ref. 5193732DG0086), was compiled by Atkins with the following aims and objectives:

- To consider the context of the scheme in terms of Local and Regional Planning Policy.
- To identify significant engineering and environmental constraints.
- To set out the route options considered and to summarise their feasibility and relative ranking in terms of various relevant criteria.
- To appraise the route options and make a recommendation in relation to a preferred concept route option.

3.2. Methodology for Options Assessment

Initially progressed predominantly as a cycle-scheme, Ballyloughane Road was assessed with various cross section and junction options using a Multi-Criteria Analysis based on their performance in terms of the needs of the cyclist and impacts on the community and environment.

Each option was assessed in a comparative manner to each other and the highest ranked option carried forward to become part of the Preferred Option. The full detail of this options assessment process is included in the Option Selection Report for WP-01 (Atkins document ref. 5193732DG0086). The following options were assessed in the report:

1. Do Nothing
2. Shared Street
3. Advisory Cycle Lane
4. Raised Adjacent Cycle Lane
5. Raised Cycle Track

3.3. Preferred Option

The emerging preferred option for Ballyloughane Road was concluded to be Option 2 (Shared Street).

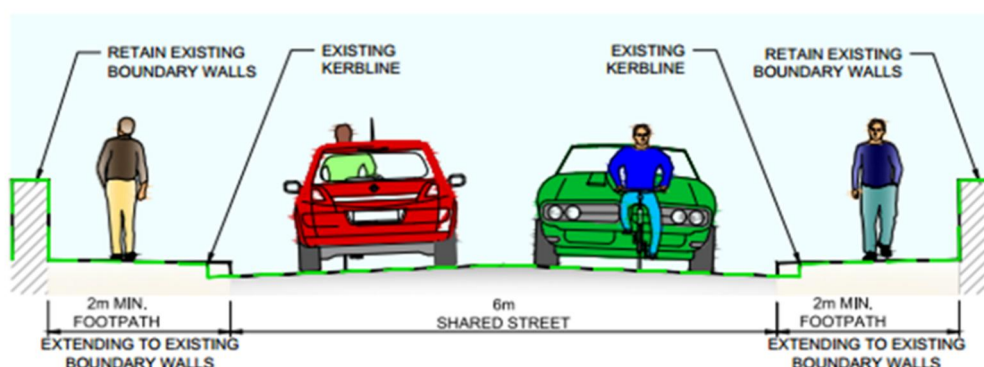
This Shared Street option was found to meet the requirements as laid out in the GTS, and the National Cycle Manual (NCM) guidance, in terms of traffic volumes and speeds. Traffic calming measures, (build-outs, raised tables and raised entry treatments), and signage is proposed to be introduced to reduce speed and provide crossing facilities for pedestrians. Existing road humps are proposed to be replaced in a more strategic manner to maximise the reduction in speeds along the route.

In tandem with the traffic calming measures proposed, a 30km/h speed limit would be applied along the route as part of this Emerging Preferred Option, in accordance with Section 7.3.2 of the Department of Transport *Guidelines for Setting and Managing Speed Limits in Ireland*. 30km/h signage, (combined with Slow Zone signage), would be applied.

As part of this Emerging Preferred Option, it is proposed that cyclists would utilise the carriageway, which is in accordance with the NCM, considering the combination of the proposed traffic management measures and the associated speed reduction.

A typical shared street cross section is shown in Figure 5.

Figure 5 - Shared street cross section



South of the railway bridge, as part of this Emerging Preferred Option, the cross-section will remain as per the existing, with two-way vehicular traffic on the road (approx. 5.5m wide), as per the National Cycle Manual “Narrow Shared Street” link type, as per Figure 6. Pedestrians will continue to use the existing Shared Path on the west side of the road.

Figure 6 - Narrow Shared Street (NCM 4.3.1)



3.4. Post Option Selection Recommendations

The existing traffic volumes along the busiest section of Ballyloughane Road are 3,735 AADT, and the 85th percentile speed is 47km/h, as noted during traffic surveys undertaken in December 2019. It is noted that this traffic volume is reflective of the section between Dublin Road and Renmore Avenue only, (approximately 30% of the total route length). South of Renmore Avenue, (approximately 70% of total route length), the traffic volume reduces significantly, to approximately 2,560 AADT. These traffic values are reflective of the observation that, aside from school traffic, at peak times traffic uses Ballyloughane Road and Renmore Avenue as a means to avoid some of the signalised junctions on Dublin Road.

As part of the Emerging Preferred Option traffic speeds would be reduced through the implementation of appropriate traffic calming measures, (e.g. vertical and horizontal deflection in the form of build-outs and ramps, and carriageway narrowing). In tandem with these measures, a 30km/h speed limit would be applied along the route as part of this Emerging Preferred Option, in accordance with Section 7.3.2 of the Department of Transport *Guidelines for Setting and Managing Speed Limits in Ireland*. As such the use of a Shared Street is suitable as per the current National Cycle Manual Section 7.1.

In July 2021, the NTA advised that the next revision of the National Cycle Manual, (as yet unpublished), will likely change the guidance for Shared Streets, such that the maximum traffic volumes permissible will be 3,000 AADT with a 30km/h traffic speed. The resultant impact of this on the Emerging Preferred Option is that further targeted measures are deemed to be required by the NTA to reduce the traffic volumes along the route.

In order to comply with the guidance of the next revision of the National Cycle Manual, with regards the advisable traffic volumes on Shared Streets, the following proposals for Work Package 01 were recommended⁴, in developing it from the Phase 2 Emerging Preferred Option, into the Phase 3 Preliminary Design proposal:

- Traffic calming measures should be introduced on Renmore Avenue, with additional footpath and pedestrian crossing provision, which will be based on the School Zone proposals developed at a concept-level by Galway City Council (in the vicinity of Scoil Chaitríona). This will provide for a safer street at the school, and also act as a means of slowing traffic (and so it aims to dissuade non-essential traffic, thus reducing volumes).
- Signalised pedestrian crossings should be installed at each end of Renmore Avenue, at its junctions with Renmore Road and Ballyloughane Road. This will provide for enhanced pedestrian safety, and as a result of the installation of traffic signals will increase journey times for traffic (therefore dissuading non-essential traffic and thus reducing volumes).
- School Zone signage/markings should be installed on Ballyloughane Road, at Gaelscoil Dara, to provide for a safer street at the school, and act as a means of slowing traffic and therefore dissuading non-essential traffic.
- With the above measures in place, a period of monitoring (approximately 6-18 months⁵) will be required to determine whether the traffic volumes are reduced below 3,000 AADT in line with the next revision of the NCM. If yes, then Ballyloughane Road will be designated as a Shared Street (with the applicable road markings and signage as per NCM guidance).

The above recommendations have been taken account of in the Preliminary Design, as outlined in the next Chapter.

⁴ Refer to Atkins doc. ref. 5193732DG0186.

⁵ The monitoring period may depend on COVID-19 restrictions and the impact it has had on lowering traffic volumes nationally. A settling period, post-COVID restrictions, may be required to allow traffic volumes stabilise for the purposes of determining representational values.

4. Preliminary Design

Atkins prepared a Preliminary Design & Appraisal Report for the scheme (document ref. 5193732DG0171), which contains the full details of the proposals. The preliminary design was subject to a Stage 1 Road Safety & User Audit (Atkins, document ref. 5193732DG0184).

The following sections summarise the Preliminary Design features. The Preliminary Design Drawings are contained in Appendix A.

4.1. Link Design

As noted in Chapter 3, the Preferred Options is an Active Travel scheme. The proposed designs for Renmore Avenue and Ballyloughane Road incorporate school zones outside Scoil Chaitríona and Gaelscoil Dara, in addition to this carriageway widths are reduced and raised crossings provided to help and reduce speeds along both routes.

The desirable widths (as per DMURS) for the trafficked and pedestrian areas are achieved at a minimum, unless noted otherwise within the Preliminary Design Drawings, these being 3.0m for each traffic lane and 2m (min. 1.8m if constrained) for footpaths.

4.2. Pedestrian Crossings

The existing controlled pedestrian positions are to be retained/repositioned where applicable and raised tables added where appropriate. Additional controlled facilities are to be included along the route as denoted within the Preliminary Design Drawings. All controlled crossings will be signalised or zebra crossings.

Uncontrolled pedestrian crossing facilities are proposed across all side road junctions and also at raised table crossings not proposed as signalised.

Given the location of the scheme (i.e. outside of city centre locations which would have high pedestrian and cyclist activity) the widths of crossings will be as per the minimum required within DMURS (Section 4.3.2) and the Traffic Sign Manual (Section 7.16):

- 2.4m wide for controlled crossings (2m is the min; however, 2.4m is “normally provided”, as noted in Traffic Signs Manual 7.16);
- 2m at all other pedestrian crossings.

The locations of crossings are generally based on the principle of providing “mid-block” crossings (as per DMURS Section 3.3.2 and 4.3.2). For this scheme this is deemed most appropriate, given the frequency of junctions.

4.3. Public Transport

All four existing bus stops along Ballyloughane road are to be upgraded as part of the works. All the existing bus stops have been assessed to determine the ideal position to ensure the location is practical. New bus shelters will be provided at all bus stops along the route. All bus stops will have kassell kerbs along their length, to improve accessibility for those with mobility impairments and to reduce the risk of vehicles mounting the kerb.

Bus stops will be 18m in length, as per NCM guidelines, unless constrained by adjacent immovable features, whereby they will be min. 12m in length as permissible in the Traffic Signs Manual Chapter 7.

The railway line into Galway City crosses Ballyloughane Road and its existing infrastructure (i.e. railway overbridge) is not impacted by the scheme.

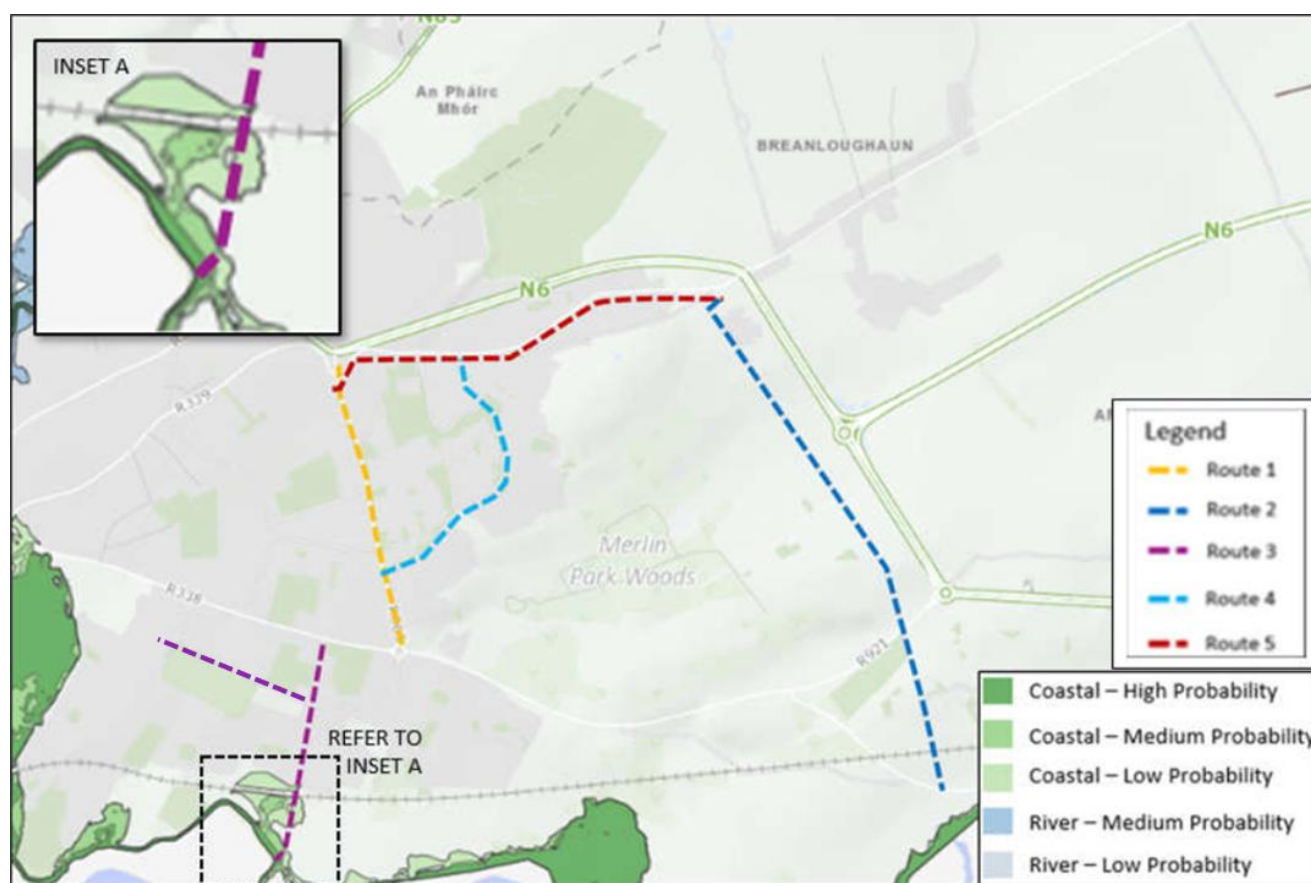
4.4. Drainage

Typically, drainage will be provided using new gullies and existing or new storm drainage pipes where appropriate. The new facilities will generally slope towards the road in order to minimise the need for additional drainage collection measures. In some areas, where this may not be possible, additional channels or measures may be required.

A strategic flood risk assessment (Stage 1 and Stage 2) was completed as part of the GTS (refer to Appendix K of the GTS). This recommended that a “*Stage 3 site specific detailed flood risk assessment should be carried out at the detailed design stage to ensure sustainable development in flood risk areas*”.

Following a review of the OPW flood maps (2020) it is noted that a localised section of Ballyloughane Road ("Route 3") is within a flood risk area, as shown in **Figure 7**.

Figure 7 - Flood risk within vicinity of the Galway Cycle Network Phase 1



4.5. Pavements

Ballyloughane Road and Renmore Avenue will be resurfaced to ensure a smooth ride surface and suitable skid resistance is achieved.

The exact construction depth for the footpaths and pavements is subject to detailed design.

4.6. Services

At the outset of the project, utility companies were contacted seeking information relating to their plant and ducting within the route corridor. The following information was received, as contained in Table 1.

Table 1 - Summary of Utility Companies' Infrastructure

Service Provider	Services Present
ESB	Yes – Numerous underground lines, and overhead lines
Virgin Media	Yes – underground network.
Irish water	Yes – Watermain present, and network of foul water services
GNI	Yes – Medium pressure gas mains.
ENet	No
BT	Yes – Services on Ballyloughane Road.

A Ground Penetrating Radar (GPR) and utility survey, including slit trenches for verification, will be carried out during the detailed design stage to determine the location of services to the most accurate extent possible. Any service diversions or protection works will be determined at that stage. Given the nature of the scheme, which is contained within the existing boundary extents for the majority of the length of the routes, service diversions are expected to be minimal.

4.7. Land Take

At this preliminary design stage there are no proposals for acquiring private lands as part of the proposals for this route.

4.8. Proposals for Tree Removal and Planting of new trees

A tree survey has been undertaken (in 2021) by an independent arboriculturist, which has determined the value, age and condition of all trees along the proposed route and any mitigation required where affected. At this preliminary design stage there are no proposals for removing trees as part of the proposals for this route.

5. Summary & Conclusion

5.1. Active Travel User Benefits

The new routes will provide a safe, accessible and attractive route for pedestrians with minimum 2m wide footpaths for all areas where new paths are to be provided. New and improved crossings will allow pedestrians to cross all of the roads within the scheme extents in a safe manner. The location of many of these crossings will improve access and permeability for pedestrians to residential, educational and commercial areas throughout the scheme as well as bringing improvements in accessing bus stops along the scheme.

The provision of improved active travel facilities along the route will be very beneficial to active travel users throughout the east of the city, and provide interlinkage to other schemes, which in turn will link to the city centre to the west, and towards Athlone to the east via the proposed Galway to Athlone Greenway.

The provision of this high-quality active travel infrastructure will provide an attractive route for a number of residential, recreational and educational areas. In particular along Renmore Road and Ballyloughane Road, where both Gaelscoil Dara and Scoil Chaitríona will gain a more attractive and safer facility for active travel users. The proposed reduction in traffic speeds and volumes and the provision of school zones will help improve the movements and experience of active travel users.

5.2. Vehicular Impacts

There will be impacts to the existing vehicular traffic on the surrounding road network, given the nature of the proposals (e.g. addition of signalised crossings, reduction in carriageway width, reduction in junction radii, installation of build-outs and an increase in uncontrolled pedestrian crossings). As a result, there will be a slowing of traffic speeds compared to the existing, and therefore some increase in journey time. This however is a necessity in order to provide a scheme which is safe and in line with best practice and guidelines, and is intended to dissuade non-essential vehicular movements through this area. These proposals will help to reduce the likelihood of conflicts between all road users.

5.3. Environmental Impacts

5.3.1. Environmental Impact Assessment Screening

As part of the Preliminary Design Phase an Environmental Impact Assessment Screening Report was prepared (Atkins ref. 5193732DG0096, as contained within Appendix B). The purpose of this report is to determine whether the project requires the preparation of an Environmental Impact Assessment Report (EIAR), the key findings of which were as follows;

- Due to the limited nature of the works it is considered that there will be no significant cumulative impacts with other developments in the general area;
- Limited noise, vibration and dust emissions may be generated during construction; however, this is anticipated to be minimal in effect and will cause no significant impact;
- Soil and waste may be generated during construction; however, this is not anticipated to have significant effect;
- There will be no land take for this proposed scheme;
- There will be no significant impact on biodiversity, groundwater, surface water or traffic; and,
- There will be no impact on recorded monuments or historic features;

In summary, no significant adverse impacts to the receiving environment will arise as a result of the proposed development.

Accordingly, it is considered that the preparation of an EIAR is not required for the Galway Cycle Network Phase 1 scheme.

5.3.2. Screening for Appropriate Assessment

As part of the Preliminary Design Phase a Screening for Appropriate Assessment Report was undertaken (Atkins ref. 5193732DG0098, as contained within Appendix C). The purpose of the Screening for Appropriate Assessment Report is to determine the likelihood of significant effects, if any, that the proposed project could have on Natura 2000 sites either alone or in combination with other plans or projects.

The report determined that due to the scope and nature of the proposed project, it is considered that the proposed project, either alone or in combination with other plans or projects, will not result in likely significant effects on the Galway Bay Complex SAC or Inner Galway Bay SPA, or any other European site, in view of their conservation objectives.

Thus, it is recommended that it is not necessary for the proposed project to proceed to Appropriate Assessment, (Stage 2).

5.3.3. Trees

A tree survey has been undertaken (in 2021) by an independent arboriculturist, which has determined the value, age and condition of all trees along the proposed route and any mitigation required where affected. At this preliminary design stage there are no proposals for removing trees as part of the proposals for this route.

5.4. Preliminary Cost Estimates

Details of the Primary Cost Estimates are summarised in Table 2.

Table 2 - Preliminary Cost Estimate Summary

	Ballyloughane Road	Renmore Avenue	Total
Length(m)	940	630	1570
Construction	€827,049	€371,686	€1,198,734
Prep. & Admin	€82,705	€37,169	€119,873
Traffic Mgmt.	€82,705	€37,169	€119,873
Land & Property	€-	€-	€-
Adjustments	€463,453	€208,282	€671,735
Total (Ex VAT)	€1,455,912	€654,304	€2,110,216
(per km rate)	€1,548,842	€1,038,579	€1,344,087
Total (Inc. VAT)	€1,660,317	€746,167	€2,406,483
(per km rate)	€1,766,294	€1,184,391	€1,532,792

5.5. Indicative Procurement Strategy

The procurement strategy for this Work Package is subject to change at this Phase, however it is envisaged that a Contractor will be appointed from a Framework to be established by Galway City Council, or alternatively, via an existing Local Authority Framework (run through the Dynamic Purchasing System).

- In the case that a new Framework is established, it is envisaged that this will include the other Work Packages that make up the Galway Cycle Network Phase 1 scheme, plus other similar schemes, including Galway Cycle Network Phase 2. The Framework is to be established in accordance with the Public Works Framework Agreement (PW-CF9), with the call-off Contracts being to PW-CF3 (*Public Works Contract for Civil Engineering Works designed by the Employer*), due to the combined value of the works.
- In the case that the existing Local Authority Framework is utilised, the call-off Contracts, which may be on an individual Work Package basis, will be to PW-CF5 (*Public Works Contract for Minor Building & Civil Engineering Works designed by the Employer*), which has a contract value limit of €5 million. The current Cost Estimate for this Work Package is below this limit.

Details on the Procurement Strategy will be reviewed and updated as the project progress.

5.6. Conclusion

The preliminary design for the scheme has been undertaken in line with DMURS, developing the preferred option as outlined in the Option Selection Report, and the subsequent recommendations (as noted in Section 3.4). The proposals will improve safety for all road users by providing facilities which will be designed in accordance with current design standards and best practice. They will provide quality infrastructure for all active travel users including those with mobility or visual impairments.

The proposed improvements realised as part of the scheme align with the aims and objectives, as follows:

- The potential for conflicts will be reduced through the provision of formalised crossing facilities throughout.
- Vulnerable road users will be catered for through formalised crossing facilities, footways and the provision of kerbing and tactile paving in line with best practice.
- The provision of the proposed facilities will bring enhancements in active travel, thereby promoting physical activity, particularly for those travelling to the adjacent Gaelscoil Dara, Scoil Chaitríona, Bon Secours Hospital, Ballyloughane Beach and Liam Mellows GAA club.
- Likewise, accessibility and social inclusion will be improved for all forms of active travel.
- Improvements for public transport users will be brought about through the proposed enhancements to the existing bus stop facilities along the route.
- The impact on the environment will be minimal.

The proposed scheme will provide increased opportunity for the residents of the surrounding areas to engage in physical activity through the provision of these facilities. This will assist in encouraging modal shift from the private vehicle to healthier and more sustainable modes of travel; and will also improve permeability to the existing public transport facilities in the area.

Appendix A. Preliminary Design Drawings

A.1. Ballyloughane Road

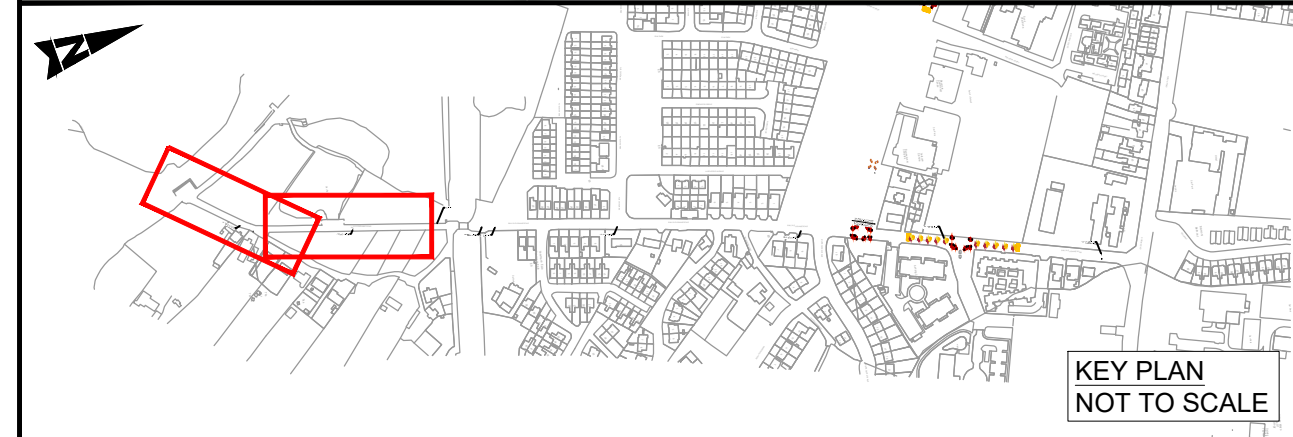
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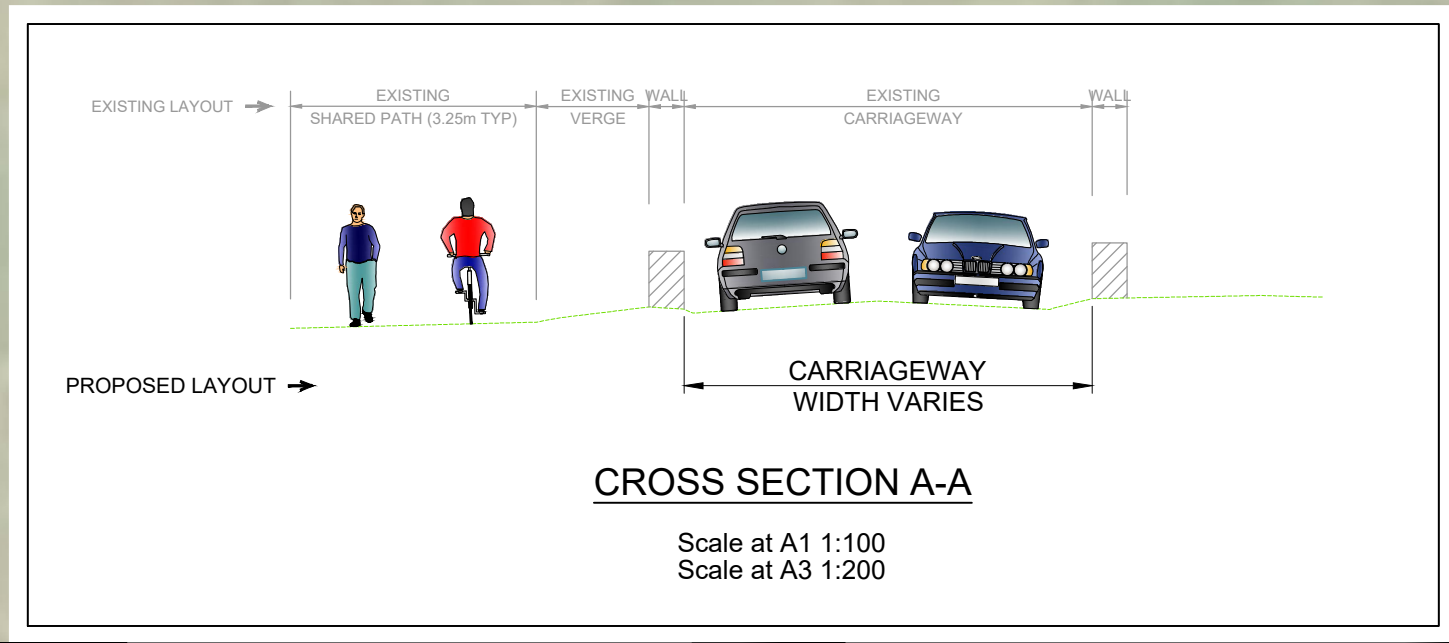
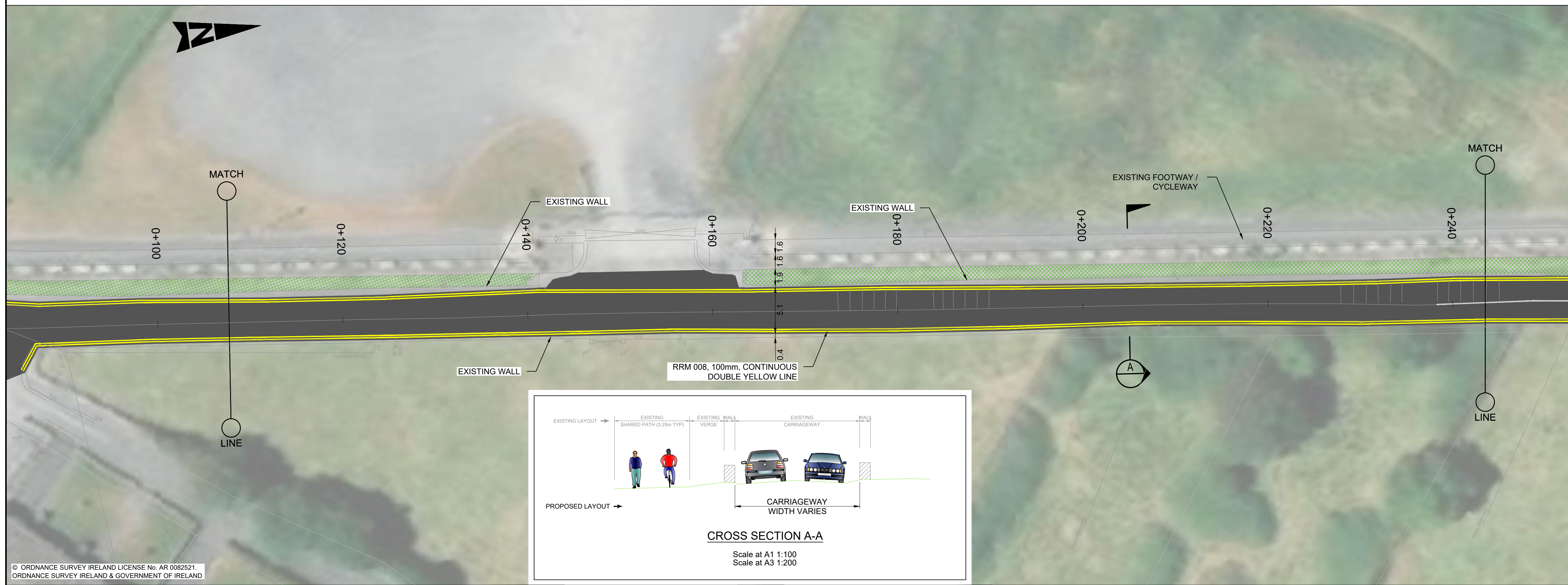
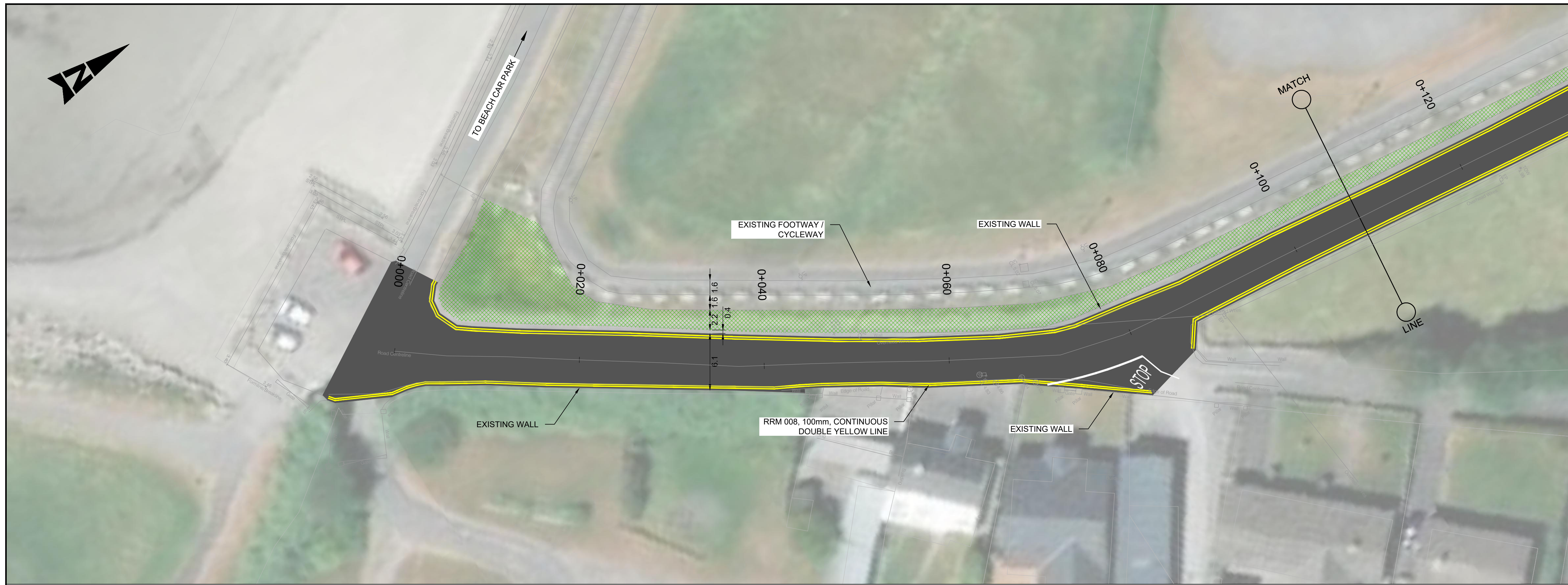
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Client	GALWAY CITY COUNCIL		
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Title BALLYLOUGHANE ROAD ACTIVE TRAVEL SCHEME PRELIMINARY DESIGN SHEET 1 OF 4			
Original Scale 1:250 @ A1 1:500 @ A3	Design/Drawn DB Date 20.03.20	Checked ST Date 20.03.20	Authorised KB Date 20.03.20
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CROSS SECTION A-A

Scale at A1 1:100
Scale at A3 1:200

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- ALL COORDINATES ARE IN METRES AND ARE TO IRISH TRANSVERSE MERCATOR
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LEGEND:

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- 50mm CONCRETE KERB
- 50mm BEVELLED KERB
- 75mm CONCRETE KERB
- 100mm CONCRETE KERB
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- FLUSH KERB
- CARRIAGEWAY
- PROPOSED FOOTPATH
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- PROPOSED TREES (LOCATION INDICATIVE)
- DELINEATOR POSTS

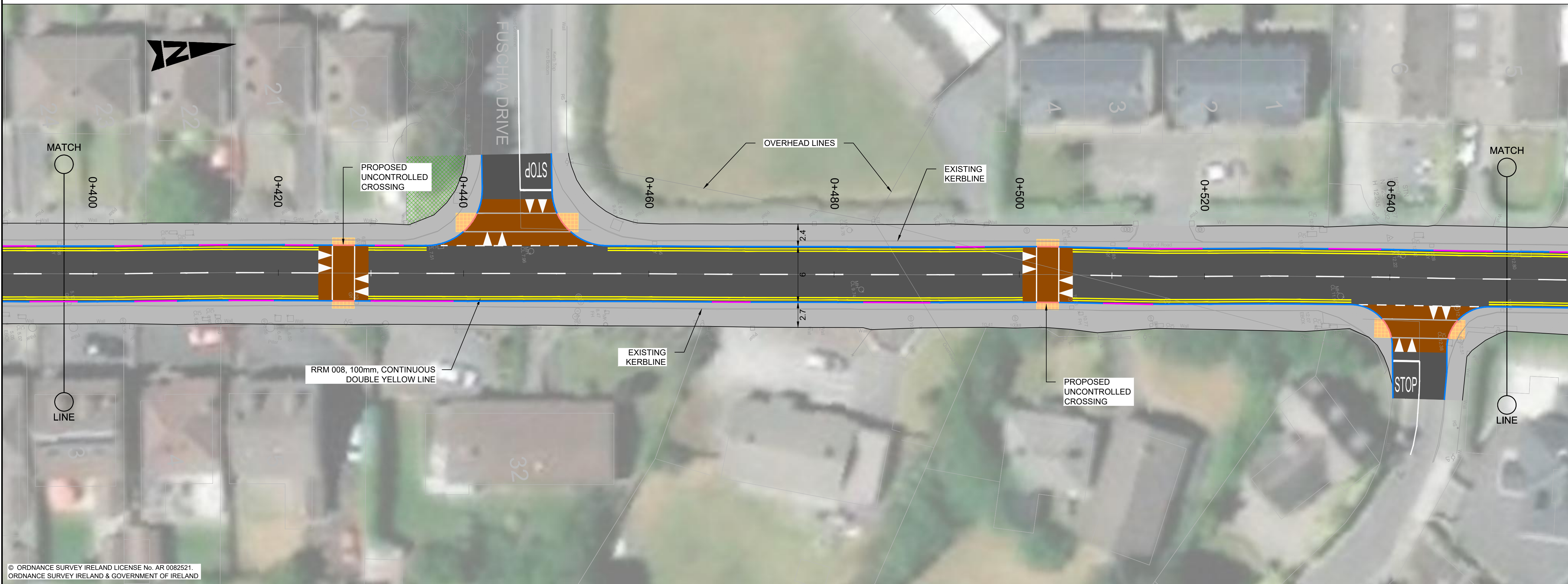
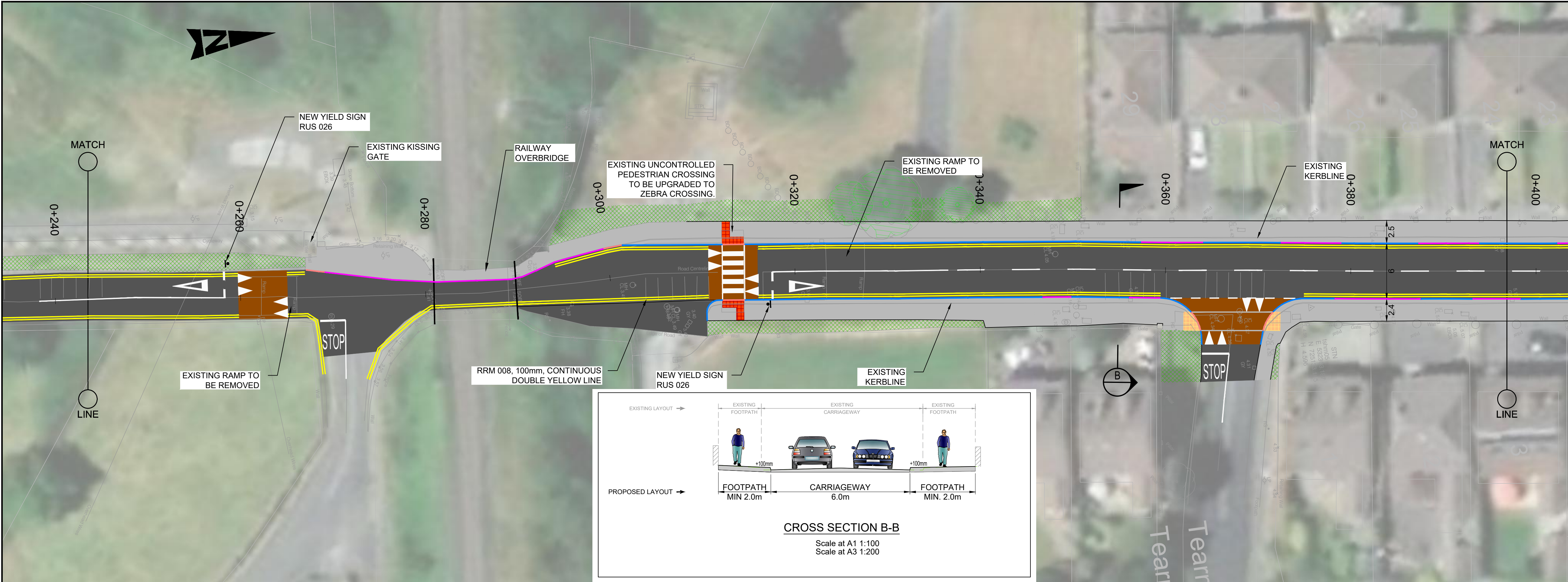
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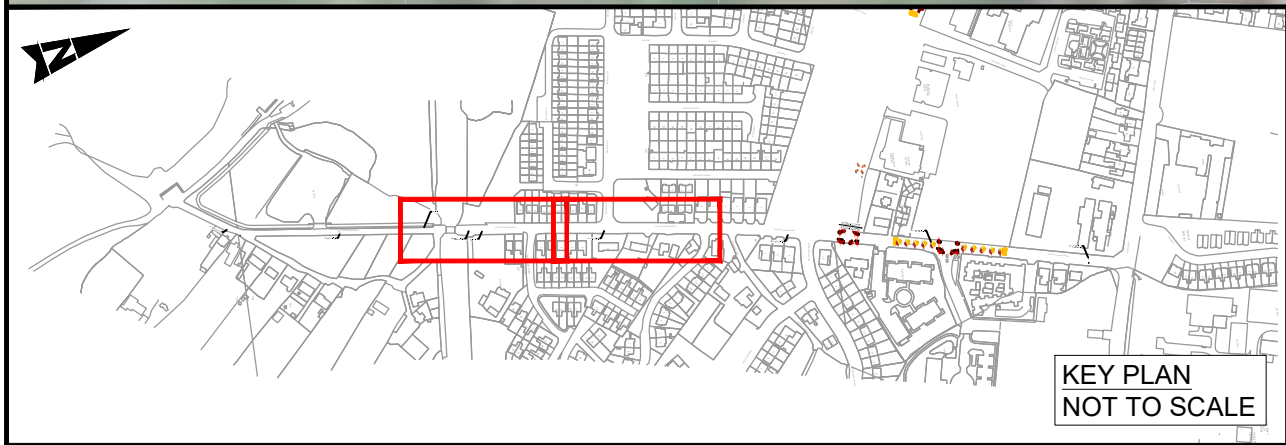
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- DELINEATOR POSTS

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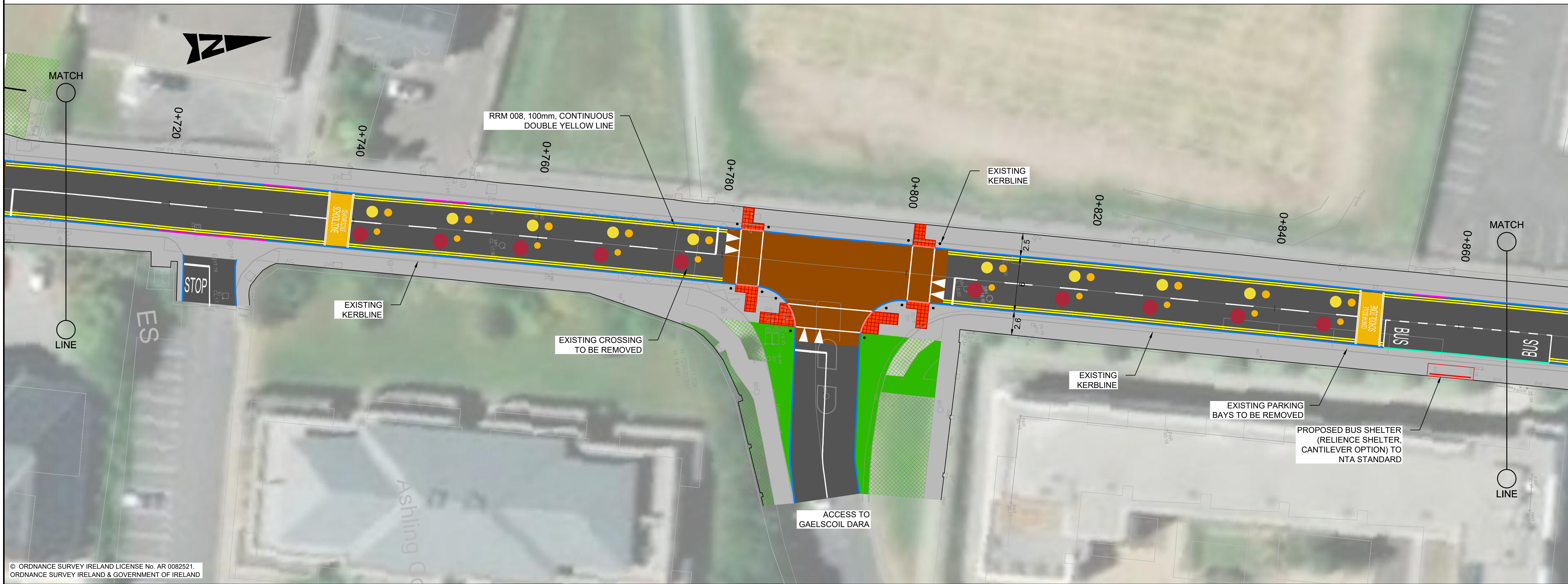
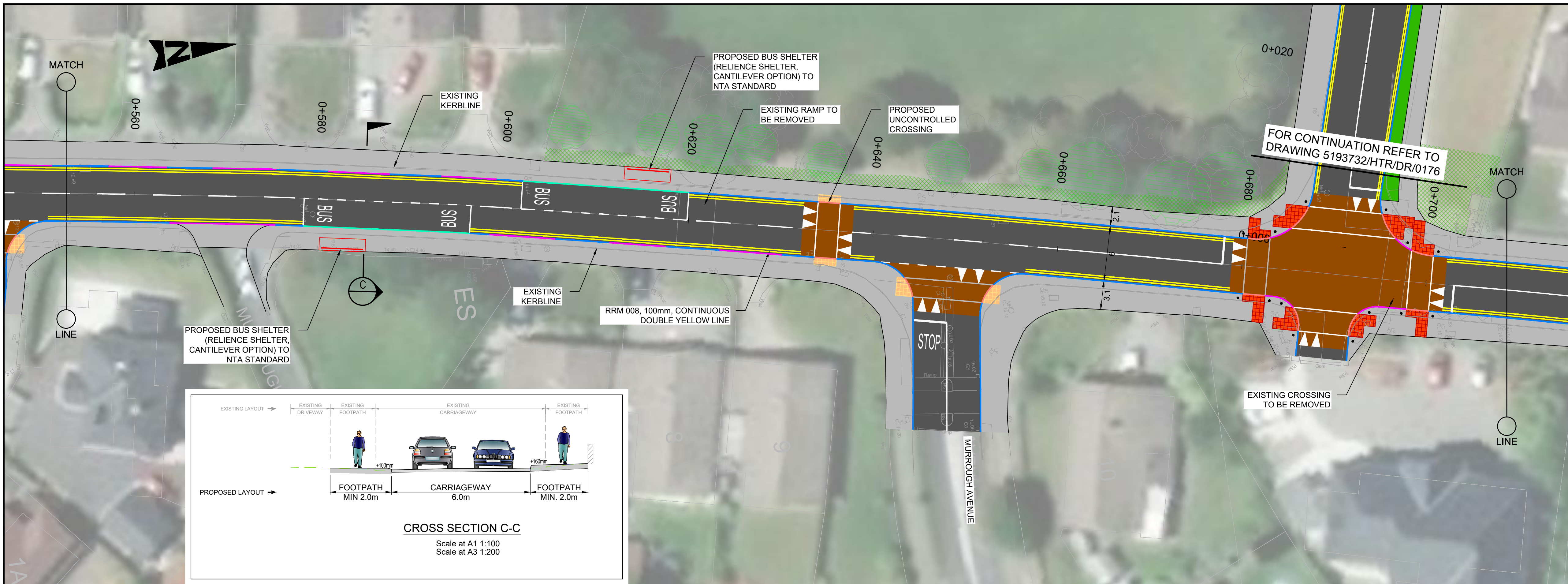
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Date	20.03.20	Date	20.03.20	Date	20.03.20	Date	20.03.20
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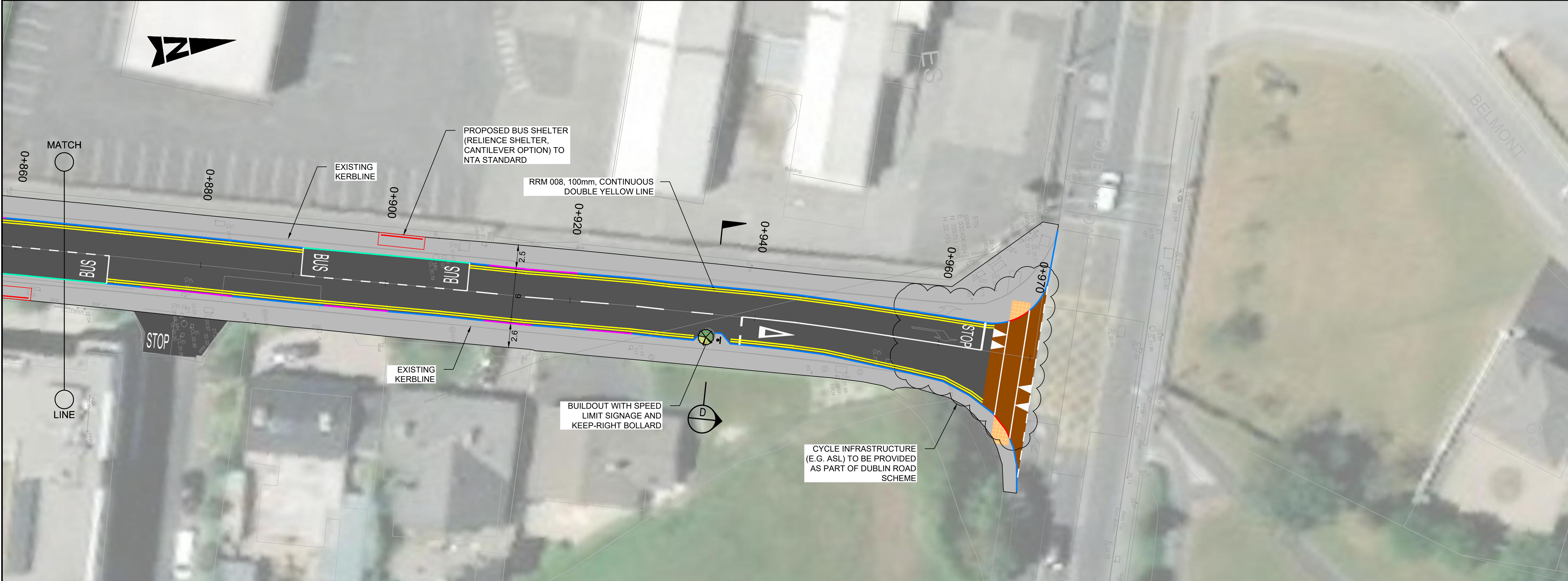
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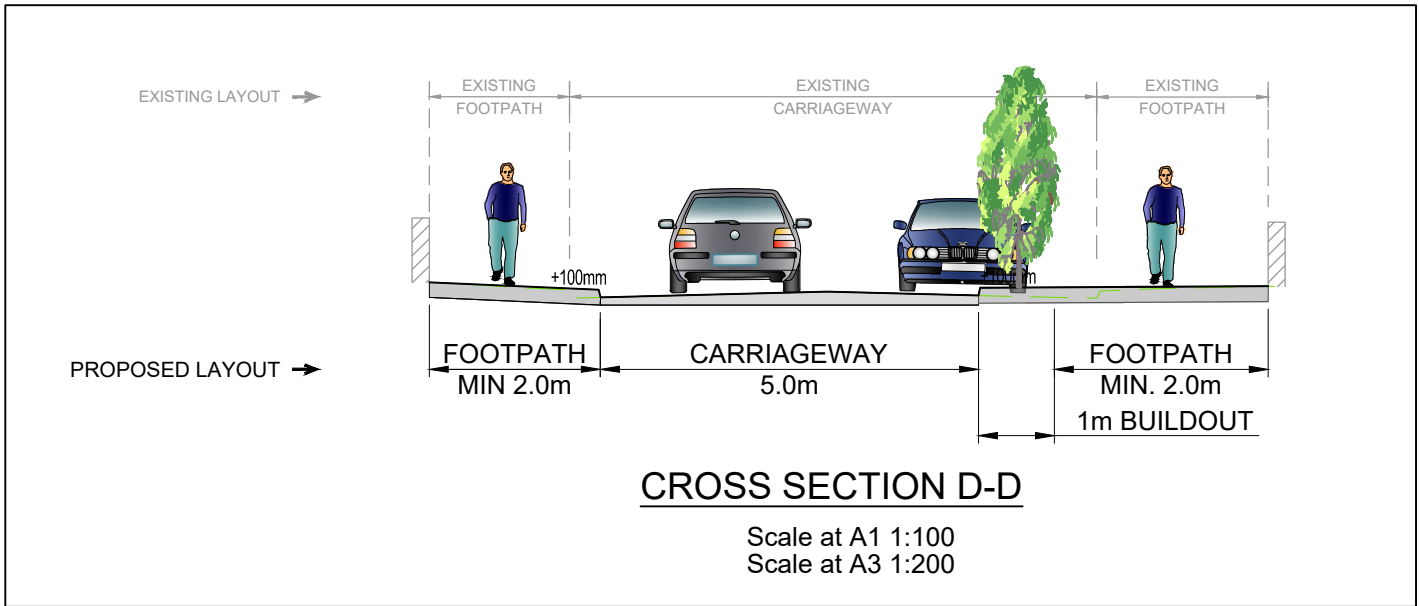
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Status	I	5193732 / HTR / DR / 0174				Date 20.03.20	Date 20.03.20	Date 20.03.20
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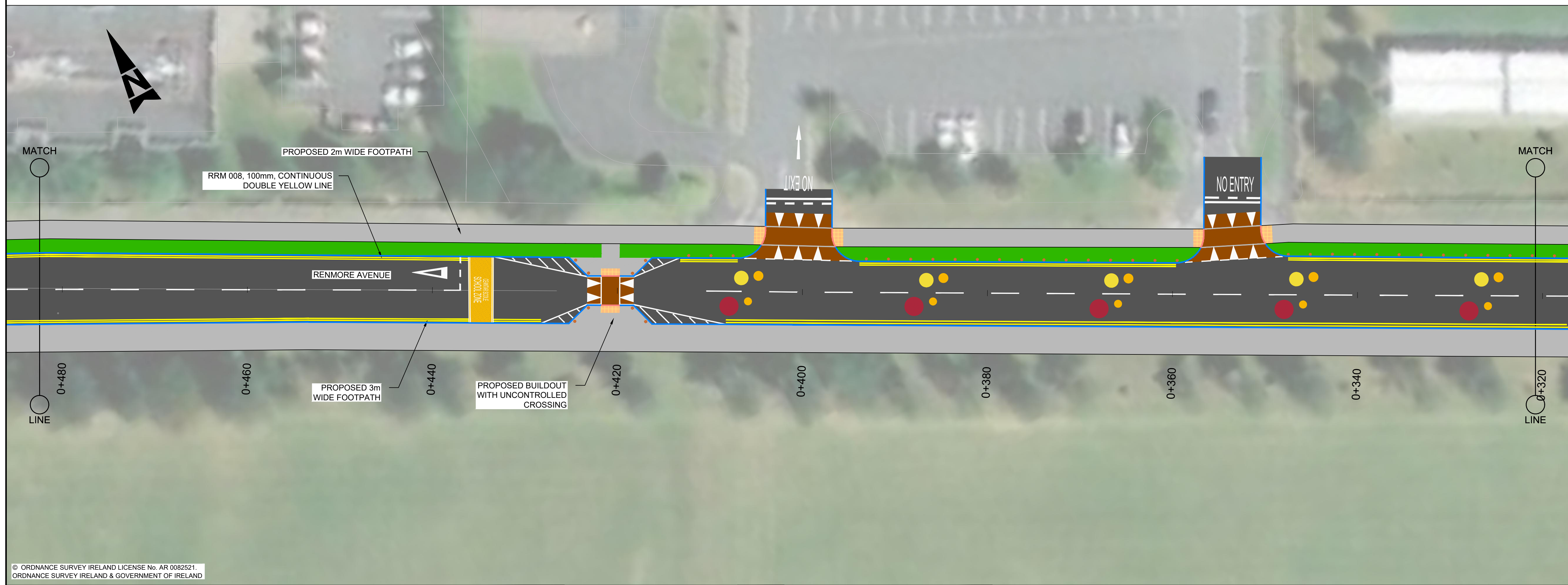
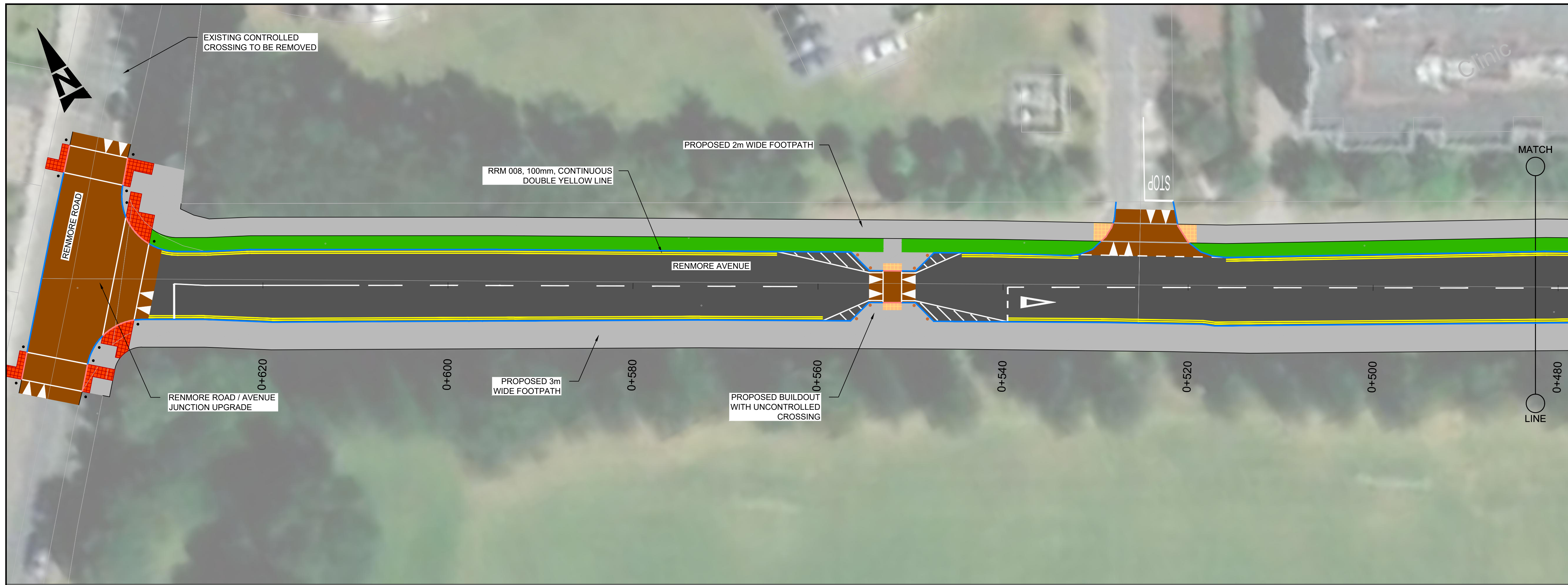
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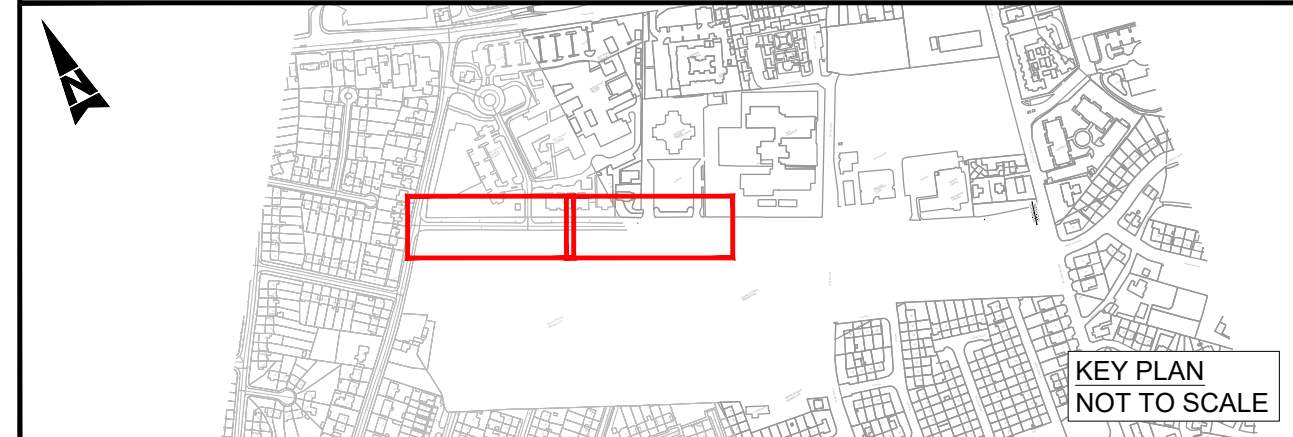
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NOTES :

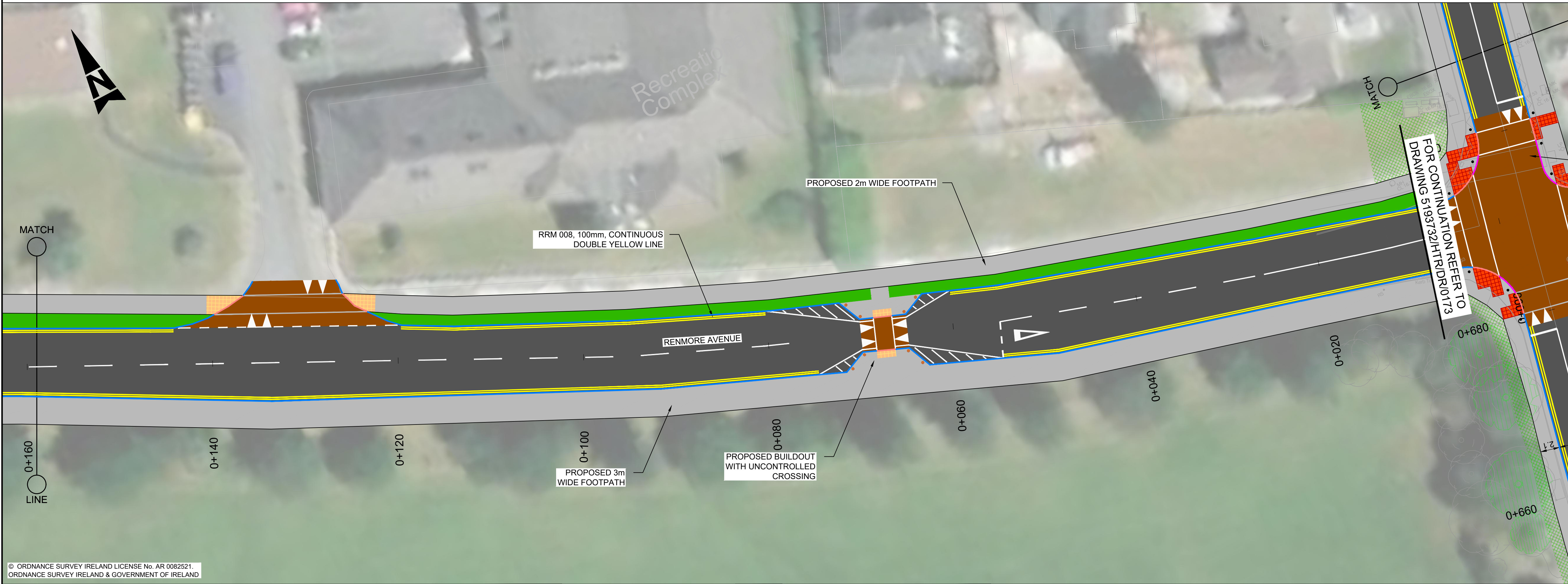
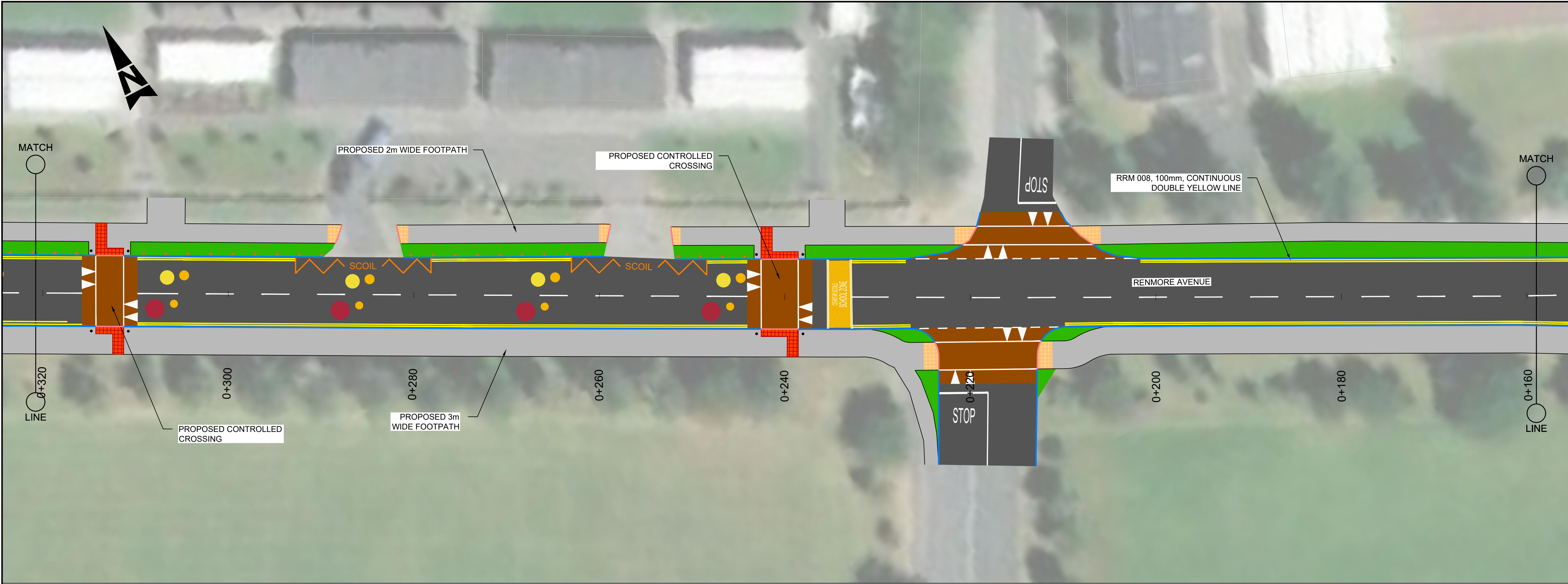
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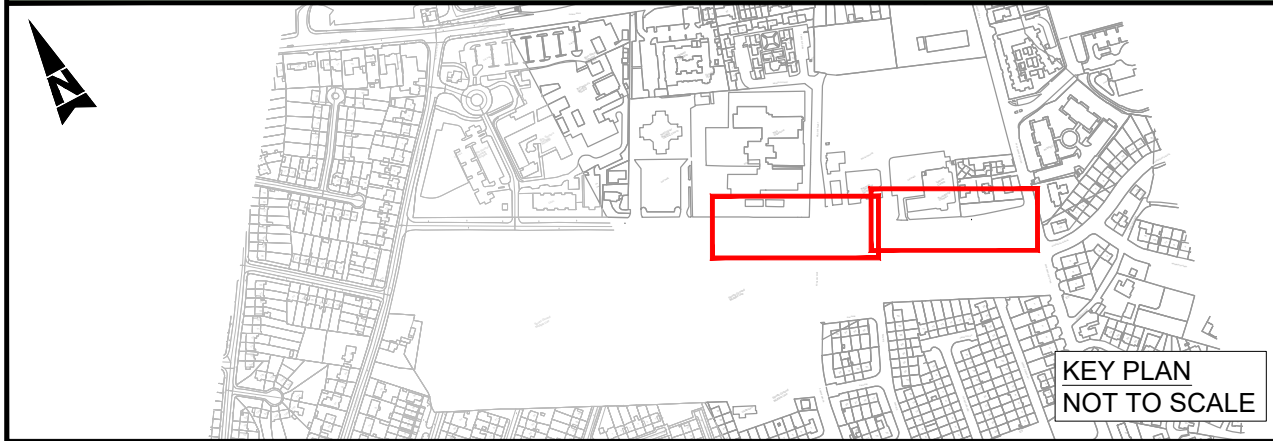
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Client	GALWAY CITY COUNCIL
Project	GALWAY CYCLE NETWORK PHASE 1

INFORMATION			
Title RENMORE AVENUE ACTIVE TRAVEL SCHEME PRELIMINARY DESIGN SHEET 2 OF 2			
Original Scale 1:250 @ A1 1: 500 @ A3	Design/Drawn DB Date 28.07.21	Checked ST Date 28.07.21	Authorised KB Date 28.07.21
Status I	Drawing Number 5193732 / HTR / DR / 0176	Rev B	

- GENERAL NOTES
1. ALL DIMENSIONS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
 2. ONLY WRITTEN DIMENSIONS SHALL BE USED. NO DIMENSIONS SHALL BE SCALED FROM THE DRAWINGS
 3. ALL LEVELS ARE IN METRES AND ARE TO MALIN HEAD DATUM
 4. ALL COORDINATES ARE IN METRES AND ARE TO IRISH TRANSVERSE MERCATOR
 5. DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATION

- LEGEND:
- EXISTING KERBLINE TO BE RETAINED
 - 25mm CONCRETE ENTRANCE KERB
 - 50mm CONCRETE KERB
 - 50mm BEVELLED KERB
 - 75mm CONCRETE KERB
 - 100mm CONCRETE KERB
 - KASSEL KERB
 - FLUSH KERB
 - CARRIAGEWAY
 - PROPOSED FOOTPATH
 - PROPOSED SHARED SPACE
 - PROPOSED RAISED CYCLE TRACK / LANE
 - PROPOSED ON ROAD CYCLE LANE
 - PROPOSED RAISED TABLE / ENTRY TREATMENT
 - PROPOSED TACTILE PAVING (CONTROLLED)
 - PROPOSED TACTILE PAVING (UNCONTROLLED)
 - PROPOSED TACTILE PAVING (CORDUROY PAVING)
 - PROPOSED GRASS VERGE
 - EXISTING GRASS VERGE TO BE RETAINED
 - EXISTING SHRUB TO BE RETAINED
 - EXISTING FOOTWAY / CYCLEWAY
 - AREA OF LANDTAKE
 - PROPOSED BUS SHELTER
 - EXISTING TREES TO BE REMOVED
 - EXISTING TREES TO BE RETAINED
 - PROPOSED TREES (LOCATION INDICATIVE)
 - DELINEATOR POSTS

- NOTES :
1. DO NOT SCALE FROM DRAWING.
 2. PROPOSED CYCLE TRACKS, CYCLE LANES AND FOOTWAYS SHALL BE MIN. 2m WIDE UNLESS NOTED OTHERWISE

Appendix B. Environmental Impact Assessment Report

Active Travel Scheme

WP-01 Ballyloughane Road and Renmore Avenue - Environmental Impact Assessment Screening

Galway City Council

October 2021



Notice

This document and its contents have been prepared and are intended solely as information for Galway City Council and use in relation to EIA Screening of the Active Travel Scheme - WP-01.

WS Atkins Ireland Limited assumes no responsibility to any other party in respect of or arising out of or in connection with this document and/or its contents.

This document has 28 pages including the cover.

Document history

Revision	Purpose description	Originated	Checked	Reviewed	Authorised	Date
Rev 0	Draft for Client Comment	JL/AMc	AMc	DL	ST	27/05/21
Rev 1	Final	JL/AMc	AMc	DL	ST	17/06/21
Rev 2	Revised Final (Renmore Ave added)	JL/AMc	AMc	DL	ST	15/09/21
Rev 3	Revised Final	JL/AMc	AMc	DL	ST	12/10/21

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1. Introduction

The Galway Cycle Network Phase 1 scheme has been commissioned to Atkins by Galway City Council (GCC) in October 2019, under the National Transport Authority's (NTA) Consultancy Services framework (2016) and has been developed in consideration of current GCC policies included in the Galway Transport Strategy (GTS) (August 2016).

The Galway Cycle Network Phase 1 consists of a number of routes located to the east of Galway City, as shown in Figure 1-1. These routes are corridors along existing roads and have been identified within the GTS and within the scope of this scheme as follows:

- Ballybane Road between Skerrit roundabout and Monivea Road junction, excluding the N6 and Dublin Road junctions;
- Doughiska Road extending between the start of the Sean Bhaile estate to the north and Coast Road to the South, excluding the junction with the Dublin Road;
- Ballyloughane Road (full extent excluding the junction with the Dublin Road), with associated works to Renmore Avenue (full extent);
- Castlepark Road (full extent); and,
- Monivea Road extending from the Ballybane Road and terminating at the start of the ghost island junction to the west of the Clayton Hotel entrance.

This report refers to the assessment of Work Package 01 (WP-01) of the Galway Cycle Network Phase 1 Scheme which is the Active Travel Scheme on Ballyloughane Road and Renmore Avenue (hereafter referred to as the proposed project or project). Refer to Figure 1-1 for the location of the proposed project.

1.1. Purpose of this Report

This report has been prepared to support a Section 38 Planning Application by Galway City Council in relation to Active Travel routes located to the east of Galway City. The purpose of this report is to determine whether the project requires the preparation of an Environmental Impact Assessment Report (EIAR). The project has been screened to generate a summarised overview of the potential impacts on the receiving environment, and in the context of relevant statutory requirements.

A Stage 1 Screening for Appropriate Assessment has also been prepared (Atkins, 2021). The project has been assessed with regards to the likely significant effects of the project on European sites within the zone of influence of the proposed project. The project has been screened out at Stage 1 Screening for Appropriate Assessment, and therefore it has been determined that the project does not require the preparation of a Natura Impact Statement (NIS).

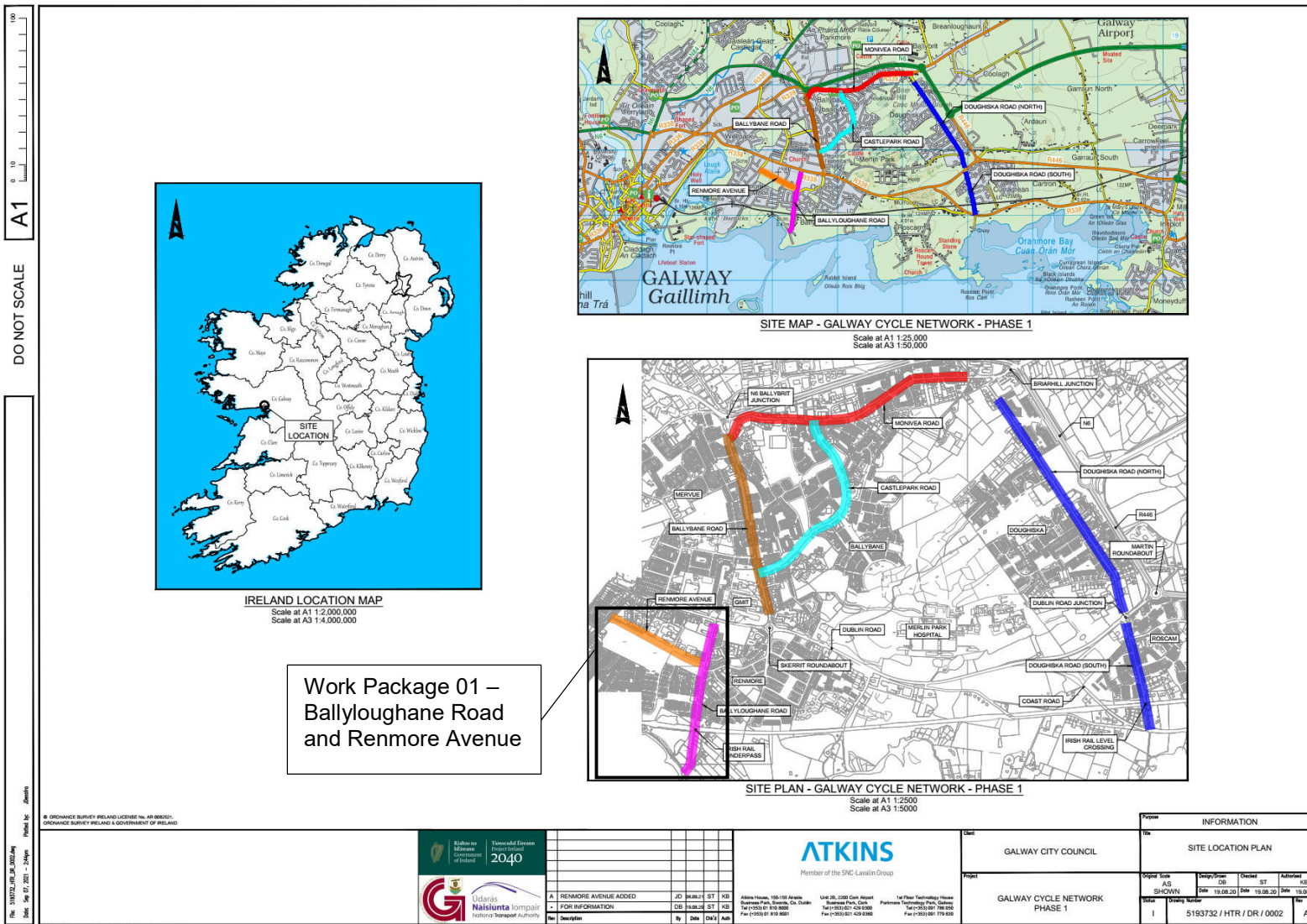


Figure 1-1: Proposed Galway Cycle Network Phase 1 Routes, with WP-01 shown in Magenta and Orange

2. Methodology

This project has been screened in accordance with Section 3.2 of the *'Guidelines on the Information to be contained in Environmental Impact Assessment Reports – Draft'* (EPA, 2017), the Environmental Impact Directive (85/337/EEC) and all subsequent relevant amendments, Planning and Development regulations (2001-2021), including S.I. No. 296 of 2018 - European Union (Planning and Development) (Environmental Impact Assessment) Regulations 2018, which came into operation on 1st September 2018. The project had been screened in accordance with the Roads Act, 1993-2021 and the European Union (Roads Act 1993) (Environmental Impact Assessment) (Amendment) Regulation 2019 S.I. No. 279 of 2019.

As set out under the relevant legislation (detailed further in Section 2.1 of this report), there are three key steps when carrying out EIA screening for a particular project:

- **Step 1** is to determine if the proposed infrastructure works represent a project as understood by the Directive and if a mandatory EIAR is required. Such projects are defined in Article 4 of the EIA Directive and set out in Annexes I and II. Projects requiring a mandatory EIAR are included under Section 50 of the Roads Act (1993-2021), S.I. No. 279 of 2019 amendments and the prescribed projects listed in Section 8 of the Roads Regulations, 1994 (S.I. No. 119 of 1994).
- **Step 2** is to determine if the project is likely to have significant effects on the receiving environment. Section 50 (1)(b) of the Roads Act (1993-2021) states that *'if An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment it shall direct that the development be subject to an environmental impact assessment.'*

Section 50 (1)(c) of the Roads Act (1993-2021) states that *'where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development.'*

Section 50 (1)(e) of the Roads Act (1993-2021) states *'where a decision is being made pursuant to this subsection on whether a road development that is proposed would or would not be likely to have significant effects on the environment, An Bord Pleanála, or the road authority or the Authority concerned (as the case may be), shall take into account the relevant selection criteria specified in Annex III.'* Annex III as has been transposed into Irish Legislation via Schedule 7 of the Planning and Development Regulations 2001-2021.

There are no exacting rules as to what constitutes "significant" in terms of environmental impacts. The responsibility is on Planning Authorities to carefully examine every aspect of a development in the context of characterisation of the project; location of the project and type and characteristics of potential impacts. It is generally not necessary to provide specialist studies or technical reports to complete this screening process, rather to investigate where further studies may be required, and where risks, if any, to the integrity of the receiving environment may lie.

For the purposes of screening sub-threshold development for EIA, all of the relevant information as presented within EIA Planning and Development Regulations 2018 (Schedule 7A) has been provided on behalf of the applicant, Galway City Council. The potential for the project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed in the Planning & Development Regulations, 2001, and EIA Planning and Development Regulations 2018 (Schedule 7).

The findings of the EIA screening assessment prepared for the project has informed our professional opinion as to whether an EIAR is warranted for the proposed project, with due regard to all relevant statutory requirements and technical guidance. However ultimately it is the responsibility of the relevant planning authority to make a determination as to whether an EIAR is required for a particular project, based on screening conducted by the planning authority.

Figure 2-1 provides a summary of the main steps involved in the EIA screening process.

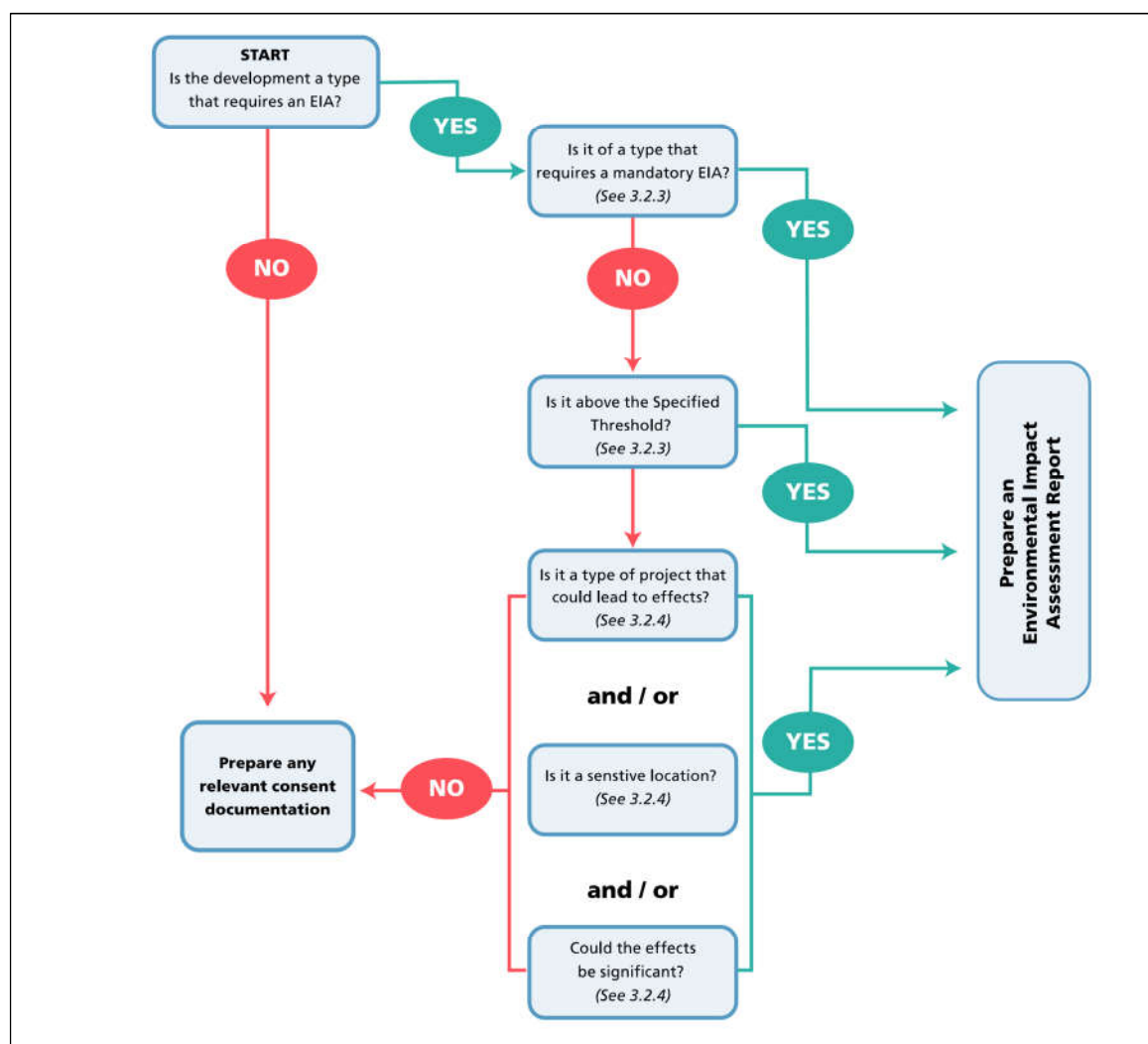


Figure 2-1 - EIA Screening Process (Source: ‘Guidelines on the Information to be contained in Environmental Impact Assessment Reports – Draft’ (EPA, 2017)).

2.1. Relevant Legislation

The Environmental Impact Directive (85/337/EEC) was brought into force in 1985. Subsequent amendments were made with the following pieces of legislation - 97/11/EC, 2003/35/EC, 2009/31/EC, 2011/92/EU and 2014/52/EU. The Directive was originally transposed into Irish Law by the European Communities (Environmental Impact Assessment) Regulations, 1989 (S.I. No. 349/1989). This amended the Local Government (Planning and Development Act) 1963 and introduced the requirement for an Environmental Impact Assessment in certain specified circumstances. The most recent amendment to the Directive is focused on clarifying and simplifying the process of EIA. The screening criteria have been updated, and Member States have a mandate to simplify their assessment procedures. EIA reports are to be made more readily understandable to members of the general public. Section 50 of the Roads Acts 1993 and the 2021 amended Regulation outlines certain categories of roads projects which require an EIAR.

New EIA Regulations ((Planning and Development) Environmental Impact Assessment) Regulations 2018 (S.I. No. 296 of 2018)) transposing the 2014 EIA Directive were recently adopted and came into operation on 1st September 2018. These regulations amend the Planning and Development Regulations 2001 (S.I. No.600 of 2001); they seek to transpose EIA Directive 2014/52/EU and to give further effect to the 2011 Directive, as follows;

- An EIAR is required as a matter of course on specified large-scale projects which have a high likelihood of impacting on the receiving environment. These projects are listed in full within the Planning & Development Regulations (2001-2021), Schedule 5, Part 1 – Development for the purposes of Part 10.
- Each EU Member State has discretionary consideration for the requirement of an EIA in relation to various processes and activities. These projects are listed in full within the Planning & Development Regulations

(2001-2021), Schedule 5, Part 2 – Development for the purposes of Part 10. If the proposed project is listed under Schedule 5, Part 2, but does not exceed the relevant stated thresholds, it is considered to be sub-threshold. Part 10, article 92 of the Planning & Development Regulations, 2001 as amended states “sub-threshold development’ means development of a type set out in Part 2 of Schedule 5, which does not equal or exceed, as the case may be, a quantity, area or other limit specified in that Schedule in respect of the relevant class of development”. Any sub-threshold developments should be evaluated to determine if the project is likely to have a significant impact on the environment.

- Criteria to evaluate whether significant impacts on the receiving environment will arise from a proposed development are listed under Schedule 7 of the relevant Planning & Development Regulations (2001-2021). A list of the relevant information to be provided by the applicant or developer for the purposes of sub-threshold EIA screening is presented in Schedule 7A of the Regulations, and summarised below;
 1. A description of the proposed development, including in particular:
 - a. a description of the physical characteristics of the whole proposed development and, where relevant, of demolition works; and,
 - b. a description of the location of the proposed development, with particular regard to the environmental sensitivity of geographical areas likely to be affected.
 2. A description of the aspects of the environment likely to be significantly affected by the proposed development.
 3. A description of any likely significant effects, to the extent of the information available on such effects, of the proposed development on the environment resulting from:
 - a. the expected residues and emissions and the production of waste, where relevant: and,
 - b. the use of natural resources, in particular soil, land, water and biodiversity.
 4. The compilation of the information at paragraphs 1 to 3 shall take into account, where relevant, the criteria set out in Schedule 7.

3. Environmental Impact Assessment Screening

3.1. Step 1 - Mandatory Screening for EIA

The project has been screened against the criteria outlined in Section 50(1)(a) of the Roads Act 1993-2021¹ and Article 8 of S.I. No. 119/1994- Roads Regulations, 1994². This project does not fall within any category of development requiring a mandatory EIA; hence the preparation of an EIAR is not required under Section 50 (1)(a).

3.1.1. Sub-threshold Development Likely to Have Significant Effects on the Environment

The scheme has been screened against the criteria outlined in Section 50(1)(b) of the Roads Act 1993-2021, as follows;

Section 50(1)(b) – ‘If An Bord Pleanála considers that any road development proposed (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment it shall direct that the development be subject to an environmental impact assessment.’

Section 50(1)(c) – ‘Where a road authority or, as the case may be, the Authority considers that a road development that it proposes (other than development to which paragraph (a) applies) consisting of the construction of a proposed public road or the improvement of an existing public road would be likely to have significant effects on the environment, it shall inform An Bord Pleanála in writing prior to making any application to the Bord for an approval referred to in section 51(1) in respect of the development.’

Therefore, it is considered that the scheme should undergo an EIA screening to determine if an EIAR would be required in accordance with Section 50(1)(b) and 50(1)(c) of the Roads Act 1993-2021.

3.2. Step 2- Determining if the project is likely to have significant effect on the receiving environment.³

All relevant information as required under Schedule 7A has been provided on behalf of Galway City Council and is presented within this screening report. The potential for this project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed in the Planning & Development Regulations, 2001, and EIA Planning and Development Regulations 2018 (Schedule 7), as presented within this screening report.

3.2.1. Description of the Proposed Development (Schedule 7A (1))

A description of the Physical Characteristics of the Whole Proposed Development and Where Relevant of Demolition Works (Schedule 7A (1) (a))

Drawings of the preliminary design are shown in Appendix A. A description of the proposed scheme is as follows;

Ballyloughane Road and Renmore Avenue

The proposed scheme along this route will consist of an Active Travel Scheme. This includes narrowing the existing carriageway to 6m and the provision of a minimum 2m wide footpath either side of the road.

The construction of the proposed works on Ballyloughane Road involves the following:

- The removal of existing kerbing and footways, and the construction of new kerbs and footways, to provide for a narrower road width (which encourages lower traffic speeds).
- Formalised pedestrian crossings (controlled and uncontrolled) will be added.
- The existing road will be resurfaced.

¹ <http://www.irishstatutebook.ie/eli/2021/si/12/made/en/print>

² <http://www.irishstatutebook.ie/eli/1994/si/119/made/en/print>

³ Pursuant to Schedule 7(A) of the Planning and Development Regulations as amended 2001-2018

- South of the railway bridge will predominantly remain as per the existing, with two-way vehicular traffic on the carriageway and pedestrian/cyclists utilising the existing shared use path (behind the existing boundary wall). Pedestrians will access this facility from north of the bridge via a Zebra crossing and utilising the existing shared-area allocated through the bridge.
- Junction treatment is to be applied throughout the route, to narrow the junctions, and provide a signalised crossing at the junction with Renmore Avenue.

This route has a railway line which crosses over the route (chainage 280). It is proposed to keep the existing facilities in place at this point.

The construction of the proposed works on Renmore Avenue involves the following:

- The installation of traffic calming measures, including horizontal deflections (i.e. build-outs) and ramps.
- The installation of signalised pedestrian crossings along the route and at the junctions with Renmore Road and Ballyloughane Road.
- The installation of a 3m wide footpath on the south side of the road.

Construction Methodology

Works will commence with the clearance and off-site removal of redundant road signage, boundary treatment, surface materials and topsoil. The works will be undertaken using a combination of operatives using hand tools, mechanical excavators and small dumper trucks. To facilitate the main works, underground utilities which conflict with the main works will be uncovered using mechanical excavators and hand digging where appropriate. A utility survey, including slit trenches for verification, will be carried out during the detail design stage to determine the location of services to the most accurate extent possible. Any service diversions or protection works will be required at that stage. This is likely to be restricted to locations where the proposed facilities cross or interface with public roads.

Following the diversion of utilities, the initial paved areas construction phase will be undertaken. This will include the excavation and removal of the existing stone, soil, concrete and bitumen materials along the route followed by the installation of new paved area base materials, or their retention, where proposed levels and material conditions allow. Any excavations will be largely undertaken by mechanical means, with any spoil arisings to be removed off site or reused locally where testing confirms its suitability. The base layers of the paved areas, where required, are to be made of compacted stone materials.

Drainage works, likely to run in tandem with the pavement construction phase, are considered to be minimal and restricted to areas where the scheme interfaces with the public road. Drainage for the proposed scheme will be provided using new gullies and, new or existing storm drainage pipes where appropriate. The new paved areas for non-motorised users will generally slope towards the road in order to minimise the need for additional drainage collection measures. In some areas, where this may not be possible, additional channels or measures may be required.

The works will also involve constructing the civil engineering elements required to facilitate the commissioning of the traffic signals (including Zebra crossing belisha beacons) and the public lighting elements at the latter stages of construction once all the heavy civil engineering works have been executed. Service chambers and underground duct sets will be laid within trenches and backfilled with granular material. Signal poles (including Zebra crossing belisha beacon poles) and public lighting columns will be erected, and duct connections will be made to the base of each pole unit. The final pavement surface course will be laid using an asphalt paving machine followed by compaction using a vibrating roller.

For soft landscaping areas topsoil profiles will be graded to tie into the new pavement levels followed by grass seeding. The top soiling and seeding will be undertaken using a combination of mechanical excavator, tractor unit drawing a rotavator / rake / seed spreader and also operatives using hand tools for areas where machinery access is unavailable.

A Description of the Location of the Proposed Development, with Particular Regard to the Environmental Sensitivity of Geographical Areas Likely to be Affected (Schedule 7A(1)(b)).

The project will be constructed within the city of Galway, along the existing Ballyloughane Road and Renmore Avenue which is maintained by Galway City Council.

Under the Galway City Development Plan (GCDP) 2017-2023 there are a number of zoning objectives adjacent to the footprint of the proposed project:

- The surrounding area is zoned as 'Residential', 'Recreational and Amenity' and 'Community, Cultural and Institutional' with the southern portion of Ballyloughane Road zoned as 'Low Density Residential'.

Under the Galway City Development Plan (FDP) 2017-2023 there are a number of specific objectives adjacent to the footprint of the proposed project:

- Ballyloughane Road has a specific objective as a 'Primary Cycle Network' (to be progressed as a separate proposed scheme, subsequent to this Active Travel Scheme), with a small portion at the underpass of the bridge assessed as 'Indicative Greenway Cycle Network'. The south of Ballyloughane road towards the Galway Bay / Atlantic has been assessed for 'Views and Prospects'. There are no specific objectives along Renmore Avenue.

The following objectives have been defined for each zone under the Galway City Development Plan 2017-2023:

- Residential: *'To provide for residential development and for associated support development, which will ensure the protection of existing residential amenity and will contribute to sustainable residential neighbourhoods';*
- Recreational and Amenity: *'To provide for and protect recreational uses, open space, amenity uses and natural heritage';*
- Low Density Residential: *'To provide for low-density residential development which will ensure the protection of existing residential amenity';* and,
- Community, Cultural and Institutional: *'To provide for and facilitate the sustainable development of community, cultural and institutional uses and development of infrastructure for the benefit of the citizens of the city'.*

The Galway City Development Plan 2017-2023 sets out to promote and facilitate movement within and to the County through the integration of land use with a sustainable transport system, with priority given to public transport, walking and cycling. There are several relevant chapters in the Development Plan which relate to Active Travel. Policy 3.6 Cycling and Walking within the Galway City Development Plan highlight policies relating to the proposed project, as follows:

- *Implement a structured programme of improvements across the whole city pedestrian network and at road crossings.*
- *Promote accessibility for all users including persons with disabilities and reduced mobility and have regard to best practice guidance from the National Disability Authority (NDA).*
- *Promote, facilitate and maintain maximum connectivity and permeability for pedestrians and cyclists in the design of new developments and in upgrading existing developments in accordance with the Design Manual for Urban Roads and Streets (2013) and Permeability a Best Practice Guide, NTA (2015).*
- *Promote the implementation of a Wayfinding Scheme with provision of directional information and signage at appropriate locations across the city as part of a greater public realm strategy.*
- *Ensure facilities for pedestrians and cyclists are designed in accordance with national standards.*
- *Support and promote initiatives such as Park and Stride, Green Schools Programme and the concept of having safe routes to school.*
- *Consider the introduction of reduced speed limits in the city centre and residential areas of the city.*
- *Continue to encourage an increase in the use of sustainable transport modes including public transport through targeted promotion."*

It is considered that the proposed project is fully compatible with the zoning requirements of the Galway City Development Plan, providing a social amenity and pedestrian access, and complementing the residential, commercial, industrial, and community nature of the area. The proposed project is in line with policy 3.3 of the Galway City Development Plan 2017-2023 to *'continue to progress a sustainable transport solution for the city through the implementation of measures included in the GTS and required supporting projects in particular the N6 GCRR project'.*

Designated Conservation Area

The proposed project is located north of Galway Bay, with the southern part of the proposed project finishing at Ballyloughane Beach car park at the coastline at the Corrib Estuary (EPA Code: IE_WE_170_0700)

The proposed project does not intersect any surface water features. An unnamed stream is the closest watercourse to the proposed project, followed by the Terryland River. The unnamed stream is located ca. 1.1km west of the project and it flows in a general northern direction from a wetland area towards Lough Atalia which subsequently flows into Corrib Estuary. The Terryland River is located ca. 1.5km north west of the project. The Terryland River flows in a south westerly direction to the west of the proposed project to join the Corrib River (EPA Code: IE_WE_30C020600) before discharging into the Corrib Estuary (EPA Code: IE_WE_170_0700) and subsequently to Galway Bay (Inner Galway Bay North) (EPA Code: IE_WE_170_0000) (EPA, 2021).

There are 11no. European designated sites within 15km of the proposed project; 7no. Special Areas of Conservation (SACs) and 4no. Special Protection Areas (SPAs). The proposed project does not lie within, nor does it intersect with any designated conservation area. The proposed project is located ca. 8-10m north of 2no. designated European sites at its starting/terminating point; Galway Bay Complex SAC (Site Code: 000268) and Inner Galway Bay SPA (Site Code: 004031). There is an existing pedestrian/cycle route in the vicinity of the European sites in Galway Bay and as such there will only be minimal upgrade works in this area. There are no surface water features crossed by the proposed project and no hydrological link has been identified between the proposed project and any internationally designated conservation sites.

There will be no land take from any of the designated sites within 15km of the proposed project and, based on the findings of the Stage 1 Appropriate Assessment Screening report (Atkins, 2021) there will be no potential significant adverse effects to European sites arising from the proposed project.

The proposed project does not lie within a nationally designated conservation area. There are 9no. proposed Natural Heritage Areas (pNHAs) and 2no. Natural Heritage Areas (NHA) within 15km of the proposed project. The proposed project directly borders the Galway Bay Complex pNHA (Site Code: 000268) which is encompassed in the SPA and SAC mentioned previously. There are no hydrological links to any of these NHAs.

There are no Geological Heritage Areas within the project site or its immediate vicinity. The closest Geological Heritage Area from the site is Two Mile Ditch Quarry (Site Code: GY132) which is located ca. 2.9km north of the project (GSI, 2021). According to the GSI, 2021 *'this quarry is a very large working quarry'* with its geological importance reported by GSI (2021) as *'the site is a good representative for the Carboniferous Limestone geology of east Galway'*.

Hydrogeology

1no. GSI registered well is potentially located along the proposed project route or within its immediate vicinity. This well is reported to a locational accuracy of 1km and therefore the exact location is unknown at this stage. There is a well use of 'other' reported by GSI (2021).

There are no Public Drinking Water Supply and Source Protection Zones within 10km of the proposed scheme (GSI, 2021). The closest Public Drinking Water Supply or Source Protection Zone is the Group Scheme Preliminary Source Protection Area for Brockagh Lisduff located ca. 14.2km east of the proposed project (GSI, 2021). Taking account of the distance of this public water supply there is no residual risk to regional potable supplies.

The proposed project is underlain entirely by a regionally important bedrock aquifer which is karstified (GSI, 2021). Groundwater vulnerability beneath the proposed project has been classified by GSI (2021) predominately as 'high' and 'moderate' groundwater vulnerability with a small portion of 'extreme' and 'rock at or near surface or karst' within vicinity of the railway crossing. The proposed project is within the Clarinbridge groundwater body (EPA Code: IE_WE_G_0008).

Geology

The proposed project is primarily underlain by *'Till derived from limestones'* with *'Urban'* soils directly adjacent to the proposed route within vicinity of the Renmore Avenue junction with Renmore Road. Additionally, a minor portion within the vicinity of the railway crossing is reportedly underlain by *'Karstified bedrock outcrop or subcrop'*.

There are 2no. karst features within 1km of the proposed project; a Spring located ca. 0.7km east and a Swallow Hole located ca. 0.8km east of the proposed project. Given the nature of the bedrock aquifer and groundwater vulnerability within the general area and proximity of the of karst features there is a strong likelihood that unidentified karst features may be within vicinity of the proposed project. The presence of such karst features indicate that groundwater and surface water interactions are likely to exist and are therefore both vulnerable to contamination. No recorded landslides, landslide susceptibility or historic mines have been reported within the vicinity of the proposed project (GSI, 2021).

Flooding

The majority of the proposed project is reported by OPW (2021) as having a low probability of coastal flooding or a 1-in-a-1000 chance of flooding occurring or being exceeded in any given year, with the very southern portion of the project having a reported high probability of coastal flooding or a 1-in-a-10 chance of occurring or being exceeded in any given year. The lands to the west and south of the project location are also at risk of coastal flooding. The nature, along with the location of the proposed scheme, is unlikely to give rise to any potential flood risk. No flooding or storm water management issues related to the proposed site are identified as warranting further investigation.

Biodiversity

Merlin Park Woodlands covers a large area ca. 700m east of Ballyloughane Road and this park contains a wide range of habitats including native oak-ash-hazel woodland, mixed broadleaf woodland, conifer woodland, limestone pavement, wet grassland and scrub. Lesser Horseshoe bats (*Rhinolophus hipposideros*) have been recorded within Merlin Park. The proposed project does not intersect with this area of urban woodland and as such impacts on the habitats found within the woodlands are not anticipated.

A number of bird species which have been designated for protection under the Wildlife Acts and European Birds Directive have been identified within the vicinity of the proposed project from the National Biodiversity Data Centre Maps (<https://maps.biodiversityireland.ie/>), including Northern Lapwing (*Vanellus vanellus*), Herring Gull (*Larus argentatus*), Black-headed Gull (*Larus ridibundus*), Common Redshank (*Tringa totanus*), Eurasian Curlew (*Numenius arquata*), and Northern Shoveler (*Anas clypeata*) amongst others.

A number of protected mammal species including the Badger (*Meles meles*), Red Squirrel (*Sciurus vulgaris*), Lesser Horseshoe Bat (*Rhinolophus hipposideros*) and Soprano Pipistrelle (*Pipistrellus pygmaeus*) were also recorded by the NBDC within close vicinity of the proposed route.

According to National Biodiversity Data Centre 2021, floral invasive species Japanese knotweed (*Fallopia japonica*) has been recorded at Ballyloughane Beech in 2018 within ca. 50m south of the proposed project. There is already an existing cycle route present at this location and therefore there will be minimal upgrade works. The proposed project site was surveyed for invasive plant species listed on the third schedule of the EC (Birds and Natural Habitats) Regulations 2011 S.I. No. 477/ 2011. Species surveyed for included Japanese knotweed (*Fallopia japonica*) and associated hybrids, Giant hogweed (*Heracleum mantegazzianum*), Himalayan Balsam (*Impatiens glandulifera*), and Three cornered garlic (*Allium triquetrum*) (note this is a non-exhaustive list). No evidence of third schedule invasive plant species was recorded within the extents of the project site.

Archaeology and Cultural Heritage

The proposed project is located within an area which has numerous National Inventory of Architectural Heritage (NIAH) and Sites and Monuments Record (SMR) features within the surrounding area including Merlin Park House and Merlin Park Castle to the east of the project site. The railway bridge that crosses the proposed project is an NIAH feature (Reg. No. 30409419). A late 18th / Early 19th Century house (Reg. No. 30409420) is located 80m east of the proposed project route. The Zone of Notification (ZoN) of a Ringfort-rath (SMR feature) (Reg. No. GA094-059----) is adjacent to Renmore Avenue, but is not crossed by the proposed project. There are no other NIAH or SMR features within 100m of the proposed project.

The environmental sensitivity of geographical areas likely to be affected by the proposed development are evaluated further within Section 3.3.2 of this report ('Location of proposed development - The environmental sensitivity of geographical areas likely to be affected by the proposed development') as required under Schedule 7 of the relevant regulations.

3.2.2. Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Development (Schedule 7A (2)).

The proposed project directly borders the Galway Bay Complex SAC / pNHA (Site Code: 000268) and Inner Galway Bay SPA (Site Code: 004031) at its starting / terminating point. However, the Active Travel arrangements south of the railway bridge within the vicinity of the European sites / pNHA sites will remain as is with only minimal upgrade works proposed. The proposed project does not lie within any Nature Reserves or Natural Heritage Areas (detailed in Section 3.3.1 of this report). There are 11no. European sites within 15km of the site. It is not anticipated that there will be a significant impact on any conservation areas.

The proposed project will be entirely within the existing road corridor and the exiting cycle/pedestrian path to the south of the railway bridge. This railway bridge is a protected structure but will not be impacted as the existing shared-area allocated through the bridge will be utilised for the proposed scheme. Therefore, it is anticipated that it is unlikely that there will be a significant impact on archaeological or cultural heritage features.

Additionally, it will be the responsibility of the Contractor to determine a suitable location for the site compound within the proposed development area, but away from any identified environmental sensitive receptors so as to avoid potential impacts to the environment and the general public. The exact location will be subject to a review of all potential environmental receptors by the Contractor, once appointed, which will be documented within the Contractors Detailed Construction Environmental Management Plan (CEMP). The final proposed site compound location will be subject to Client approval. The only other relevant aspects of the environment (including human health), which could potentially be significantly affected by the proposed project are receiving groundwater environment, surface water environment, air quality environment, the receiving noise and vibration environment, and the receiving traffic environment, during the construction phase.

The works will mainly involve excavations to an anticipated maximum depth of 0.5m bgl along the existing road networks, the exact construction depth for the footpath / pavements is subject to the outcome of ground investigations. GSI (2021) have reported a 'high', 'extreme' and 'rock at or near surface or karst' vulnerability rating beneath the proposed project route indicating that the groundwater beneath the vicinity of the proposed project may be vulnerable to contamination.

The proposed project directly borders the Galway Bay Complex SAC/pNHA and Inner Galway Bay SPA. However, the project at this point will require minimal work and therefore significant impacts are not anticipated. Due to the nature and scale of the project it is anticipated that the construction works, and operation of the proposed project will not have a significant impact on surface water and groundwater quality.

The proposed scheme lies within an urban area and there are sensitive receptors adjacent to the scheme i.e. residential properties. Dust may be generated during the construction phase. Construction will require the use of machinery such as dump trucks, loading shovels etc. The presence of such machines may result in a temporary increase in noise and dust. The air quality at the proposed project is 'good' (EPA, 2021). However, management of dust will be in line with relevant best practice measures such as those set out in '*Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes*' (NRA, 2011). Due to the nature and scale of the project it is anticipated that the construction works will not have a significant impact on air quality. It is anticipated that the operational phase will likely have a positive impact on air quality.

Noise levels will not exceed the indicative levels of acceptability for construction noise in an urban environment as set out in the NRA guidance '*Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes*' (NRA, 2014). It is anticipated that the works will be scheduled during day-time hours. The Contractor will also be obliged to prepare a project specific CEMP prior to commencement of the proposed project, which will include specific control measures in accordance with standard industry best practice to be implemented to fully address any potential air quality / dust emissions, noise / vibration nuisance, and onsite noise / vibration monitoring should this be necessary. Construction contractors will be required to comply with the requirements of the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 as amended in 1990 and 1996 (S.I. No. 320 of 1988, S.I. No. 297 of 1990 and S.I. No. 359 of 1996), and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations, 2006 (S.I. No. 371 of 2006). Due to the nature and scale of the project it is anticipated that the construction works, and operation of the proposed project will not have a significant impact on noise.

Due to the scale and nature of the project it is anticipated that there may be impacts on traffic volumes during the construction phase of the project. The roadworks will be carried out on a phased basis. A traffic light system will be maintained throughout the works area to ensure that traffic is controlled and continues to flow during the construction phase. It is considered that there will be no significant negative impact on traffic during the construction and operational phase of the project.

3.2.3. A Description of Any Likely Significant Effects (To the Extent of The Information Available on Such Effects) of The Proposed Development on The Environment (Schedule 7A(3)).

The Expected Residues and Emissions and the Production of Waste where relevant (Schedule 7A (3)(a)).

The proposed project may give rise to air, noise, water emissions and waste. However, the proposed project will be designed in order to minimise any potential impacts as a result of these emissions during the operational phase. Standard mitigation measures will be implemented by the Contractor to address potential air and noise emissions during the construction phase. The Contractor will ensure that onsite storm water management during the construction phase is carried out in accordance with relevant best practice measures as set out in Construction Industry Research and Information Association (CIRIA) guidance '*C532 - Control of Water Pollution from Construction Sites*'.

During the construction phase the following waste streams will be generated: construction and demolition (C&D) waste, mixed municipal waste (MMW), recyclables such as plastic wrapping, wooden pallets, paper and/or waste electrical and electronic equipment (WEEE). All waste generated will be disposed of by the Contractor in accordance with all relevant waste management legislation. The Contractor will be responsible for segregating each waste type as per the relevant List of Waste (LoW) (also referred to European Waste Catalogue (EWC) code). All waste materials must be removed offsite by a suitably permitted waste haulage contractor who holds a current valid waste collection permit issued by the National Waste Collection Permit Office (NWCPO).

Waste Policy 9.12 within the Galway City Development Plan (2017-2023) will be implemented during the construction of the routes:

‘Continue to promote waste prevention and minimisation.’

The Contractor will be obliged to prepare a project specific Construction and Demolition (C&D) Waste Management Plan (WMP) prior to commencement of the proposed development in accordance with the relevant guidelines ‘*Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects*’ prepared by the DoEHLG.

The operational phase of the project should be accompanied by an increase in Active Travel and an associated reduction in vehicular traffic. The proposed scheme is not likely to have a significant environmental effect with regard to expected residues and emissions and the production of waste.

The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b)).

During the construction of the proposed project natural resources in the area will not be required to facilitate the provision of this project. There will be no land take for this section of the project as it will be entirely within the existing road network and pedestrian / cycle path to the south of the railway crossing.

Soil will be excavated to an anticipated maximum depth of 0.5m bgl to facilitate the foundation for the proposed footpaths / pavements and the ducting for the signalling associated with the scheme. Soils may be reused onsite where suitable. Engineering grade fill material (hardcore or similar) will be imported to the site during the proposed works. The contractor shall employ soil stabilisation measures if required to minimise the quantity of remaining material being disposed offsite. All soil requiring disposal offsite will require testing against the EPA “Determining if Waste is Hazardous” criteria, and (EPA, 2015), and the waste acceptance criteria (WAC) for the receiving facilities before being moved offsite to an appropriate, licenced, permitted or registered facility. The use of other natural resources with respect to soils and land will not be required arising from the proposed project.

Therefore, based on the environmental setting, and taking account of the nature, scale and location of the proposed project other than standard construction materials, the proposed project (during both construction and operational phases) will not have a significant impact on natural resources.

3.2.4. The Compilation of The Information at Paragraphs 1 To 3 Shall Take into Account, where Relevant, the Criteria set out in Schedule 7 (Schedule 7A(4)).

All relevant criteria set out in Schedule 7 of the Regulations is presented in Section 3.2 (*‘Criteria for Determining Whether Development Listed in Part 2 of Schedule 5 Should be subject to an EIA’*) of this screening report.

During the preparation of Sections 3.3.1 to 3.3.3 (i.e. Schedule 7A (1) to (3)) all pertinent Schedule 7 information has been taken account of as required, with specific details presented in the following section of this report (Section 3.4).

3.3 Criteria for Determining Whether Development Listed in Part 2 of Schedule 5 Should be subject to an EIA

3.3.1 Characteristics of proposed development (Schedule 7(1))

The size and design of the whole of the proposed development (Schedule 7(1)(a))

Refer to Section 3.2.1 under 'A description of the Physical Characteristics of the Whole Proposed Development and Where Relevant of Demolition Works (Schedule 7A (1) (a))'.

Cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(1) (b))

Committed Development

A search of Galway City Planning records has been undertaken for the applications submitted within the past 5 years. This search identified over 100no. developments, given the urban location of the proposed project. The majority of these developments have already been constructed or are of small scale in nature (i.e. extension works, or property retention works) or are considered to be a reasonable distance from the proposed works) and have therefore not been considered further. 5no. relevant developments have been further evaluated with respect to cumulative impacts with the proposed Ballyloughane Road and Renmore Avenue project (WP-01), as follows;

- **Galway Mayo Institute of Technology. Extension of Duration for the development of 2-storey multi-functional sports building, (1876). Granted 13/3/2018**

This development will be constructed adjacent to the proposed project and accessed off Ballyloughane Road along which the proposed project is aligned. This planning permission is an extension of duration from a previous planning application for the same development. There may be a cumulative impact on traffic, dust and noise; however due to the nature and scale of the project it is not anticipated that these impacts will be significant. The contractor for the proposed project will provide a traffic management plan for the works along to ensure minimal impact on traffic. The Contractor will also be obliged to prepare a project specific CEMP prior to commencement of the proposed development, which will include specific control measures in accordance with standard industry best practice to be implemented to fully address any potential air quality / dust emissions, noise / vibration nuisance, and onsite noise / vibration monitoring should this be necessary. No significant cumulative impacts are anticipated.

- **Welcorrib Limited & Trigo Property Company. Extension of Duration for the demolition of the existing hotel structure (1517). Granted 28/1/2015**

This demolition project will be located ca. 0.4km east of the proposed project. This demolition project was granted extension of duration in 2015 for the demolition of the existing hotel structure, this structure is still not demolished and it is unlikely that this project will occur at the same time as the Galway Cycle Network Phase 1 scheme. Thus, this project it is not likely to have a significant impact on the proposed development.

- **Galway Mayo Institute of Technology. Construction of a new stem building (19299). Granted 20/12/2019**

This development will be constructed ca. 0.3km from the proposed project. There may be a cumulative impact on traffic, dust and noise; however due to the nature and scale of the project it is not anticipated that these impacts will be significant. The contractor for the proposed project will provide a traffic management plan to ensure minimal impact on traffic. The Contractor will also be obliged to prepare a project specific CEMP prior to commencement of the proposed scheme, which will include specific control measures in accordance with standard industry best practice to be implemented to fully address any potential air quality / dust emissions, noise / vibration nuisance, and onsite noise / vibration monitoring should this be necessary. No significant cumulative impacts are anticipated.

- **Liam Mellows GAA Club. Extension of Duration for the construction of a new playing pitch and public walkway/cycleway (1785). Granted 30/05/2017.**

This development is located ca. 0.4km west of the proposed project and will be accessed via. the Ballyloughane Road along which the proposed project will be located. An NIS was submitted as part of the planning application which noted that this development 'will not create a significant loss of habitat on site and that there will be no significant pollution of the areas outside of the development site' (Planning Report No.

11.284. 2012). Works along the Ballyloughane Road will be minimal for the proposed project and therefore it is not anticipated that the proposed project will act in combination to cause significant environmental impacts. Additionally a CEMP and Traffic Management Plan will be implemented during the construction works of the proposed project.

- **Gaelscoil Dara. Planning Permission for two storey handball pen and associated works (2014). Granted 29/07/2020.**

This development will be located within the grounds of the existing school development and will be separated from the proposed project via. the existing school buildings. This site will be accessed off the Ballyloughane Road along which the proposed project will be aligned. However, given the scale of the proposed project it is not anticipated to act in combination with this development to create significant environmental impacts. Additionally a CEMP and Traffic Management Plan will be implemented during the construction works of the proposed project.

- **The Brothers of Charity Services. Planning Permission for a single storey special school, ancillary storage shed and associated site works (18398). Granted 25/04/2019.**

This development is located ca. 0.2km west of the proposed project. There may be a cumulative impact on traffic, dust and noise; however due to the nature and scale of the project it is not anticipated that these impacts will be significant. The contractor for the proposed project will provide a traffic management plan to ensure minimal impact on traffic. The Contractor will also be obliged to prepare a project specific CEMP prior to commencement of the proposed scheme, which will include specific control measures in accordance with standard industry best practice to be implemented to fully address any potential air quality / dust emissions, noise / vibration nuisance, and onsite noise / vibration monitoring should this be necessary. No significant cumulative impacts are anticipated. The Galway Cycle Network Phase 1 scheme is to be undertaken in a phased basis with different routes being constructed at separate times on separate roadways (i.e. in individual Work Packages). There is no direct or indirect connectivity between Ballyloughane Road and Renmore Avenue (WP-01) and the other Work Packages and no significant impacts are anticipated, during either their construction or operation, given the scale, nature and locations of these projects.

The remaining Work Packages forming Phase 1 of the Galway Cycle Network are scheduled to be constructed subsequent to the proposed project. The proposed project may be partially or wholly in operation whilst construction of these other cycleway network routes are being progressed. These other sections of cycleways are entirely along the urban roadways of Galway City. Given the nature, scale and location of these other proposed Work Packages, and as no significant impacts are anticipated from the proposed project, it is considered the proposed Ballyloughane Road and Renmore Avenue project will not act in combination to give rise to any cumulative impacts.

3.3.1.1 The nature of any associated demolition works (Schedule 7(1)(c))

Refer to Section 3.2.1 under 'A description of the Physical Characteristics of the Whole Proposed Development and Where Relevant of Demolition Works (Schedule 7A (1) (a))'. No demolition works are proposed as part of the proposed project.

3.3.1.2 The use of natural resources, in particular land, soil, water and biodiversity (Schedule 7(1)(d))

Refer to Section 3.2.3 under 'The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b))'. The proposed project is not likely to have a significant environmental effect with regard to the production of waste.

3.3.1.3 The production of waste (Schedule 7(1)(e))

Refer to Section 3.2.3 under 'The Expected Residues and Emissions and the Production of Waste where relevant (Schedule 7A (3)(a))'. All waste will be removed to an appropriately licenced/ permitted waste disposal/ recovery facility.

3.3.1.4 Pollution and nuisances (Schedule 7(1)(f))

Refer to Section 3.2.2 under 'Description of Aspects of the Environment Likely to be Significantly affected by the Proposed Development (Schedule 7A (2))'. There will be minimal impact on the Galway Bay Complex SAC/pNHA and Inner Galway Bay SPA due to the limited nature of works proposed to be carried out and all works will be completed on the existing road networks. The Contractor will also be obliged to prepare a project specific CEMP prior to commencement of the proposed project, which will include specific mitigation measures to be implemented to fully address any potential surface water impacts and monitoring as necessary. No significant impacts from pollution or nuisances are anticipated from the proposed project.

3.3.1.5 The risk of major accidents, and/or disasters which are relevant to the project concerned, including those caused by climate change, in accordance with scientific knowledge (Schedule 7(1)(g))

There are 2no. Seveso (COMAH) establishments within 15km of the proposed project. Cold Chon (Galway) Ltd in Oranmore and Circle K Galway Terminal at Galway Harbour, both Upper Tier Seveso sites. Cold Chon (Galway) Ltd is located ca. 5.6km east of the proposed project and Circle K Galway Terminal is located ca. 1.6km west of the proposed project. Due to the distance of Cold Chon (Galway) Ltd and Circle K Galway Terminal from the proposed project, the proposed scheme is not located in a high-risk area with respect to major accidents/disasters and is outside the consultation distance as per Table 2 of the Schedule 8 of the Planning and Development Regulation, 2001 (S.I. No. 600/2001). Due to the nature and scale of the proposed project, along with the control procedures to be implemented, it is not anticipated that there will be a significant impact on this Seveso site.

The potential for flooding within the proposed scheme has been reviewed. A Strategic Flood Risk Assessment (FRA) (consisting of Stage 1 and Stage 2 FRA) was undertaken as part of the Galway Transport Strategy (2016), Appendix K, which recommended that for areas with the potential for coastal flooding, which applies to the section of Ballyloughane Road south of the railway: *'A stage 3 site specific detailed flood risk assessment should be carried out at the detailed design stage to ensure sustainable development in flood risk areas'*.

Refer to 3.3.1 under *'A Description of the Location of the Proposed Development, with Particular Regard to the Environmental Sensitivity of Geographical Areas Likely to be Affected (Schedule 7A(1)(b)).'*

3.3.1.6 The risks to human health (for example, due to water contamination or air (Schedule 7(1)(h)) pollution)

Dust may be generated during the construction phase. However, management of dust will be in line with best practice such as that set out in 'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (NRA, 2011).

Noise levels during the construction phase, will not exceed the indicative levels of acceptability for construction noise in an urban environment as set out in the NRA guidance *'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes'* (NRA, 2014). The Contractor will be required to comply with the requirements of the European Communities (Construction Plant and Equipment) (Permissible Noise Levels) Regulations, 1988 as amended in 1990 and 1996 (S.I. No. 320 of 1988, S.I. No. 297 of 1990 and S.I. No. 359 of 1996), and the Safety, Health and Welfare at Work (Control of Noise at Work) Regulations, 2006 (S.I. No. 371 of 2006). No significant impact on human health due to noise pollution is anticipated to occur during the operational phase of the project.

There are no reported public drinking water supplies within a 2km radius of the project (GSI, 2021). It has been noted that the proposed project is underlain by a regionally important karstified aquifer with portions of 'High', 'Extreme' and 'Rock at or near Surface or Karst' groundwater vulnerability ratings indicating that groundwater is shallow. However, due to the nature and scale of the proposed project it is not anticipated to have a significant impact on groundwater.

Given the location, nature and scale of the proposed project, the overall risk to human health is low.

3.3.2 Location of proposed development - The environmental sensitivity of geographical areas likely to be affected by the proposed development (Schedule 7(2))

The existing and approved land use (Schedule 7(2)(a))

The project will be constructed within the urban setting in the city of Galway along the existing Ballyloughane Road and Renmore Avenue which is maintained by Galway City Council. The proposed project and surrounding area are primarily dominated by land use zoned as 'residential', 'recreational and amenity', 'community cultural and institutional' and 'low density residential'.

The location of the proposed project has been detailed previously in Section 3.3.1 under Schedule 7A (1)(a).

The relative abundance, availability, quality and regenerative capacity of natural resources (including soil, land, water and biodiversity) in the area and its underground (Schedule 7(2)(b))

Refer to Section 3.2.3 under *The Use of Any Natural Resources in particular soil, land, water and biodiversity (Schedule 7A (3)(b)).*

During the construction of the proposed project natural resources will not be required to facilitate the provision of this project.

The absorption capacity of the natural environment, paying particular attention to the following areas (Schedule 7(2)(c)):

(i) Wetlands, riparian areas, river mouths

There are 2no. wetlands reported within vicinity of the proposed project; Inner Galway Bay SPA Wetland and Galway Bay Complex SAC (Galway) Wetland, both of which are encompassed within the aforementioned SAC and SPA. These Wetland sites have both been assigned an internationally important rating. These wetland habitats are vulnerable to changes in hydrology, hydrogeology and water quality. These habitats are bordered by the proposed project at its starting/terminating point. However, there will be minimal works carried out in this area as part of the proposed project as there is an existing cycle/pedestrian path currently in situ which will be utilized, and the works will be limited on the existing road (i.e. surfacing and road markings). Therefore, there are no significant impacts to these wetland sites anticipated as a result of the proposed project.

(ii) Coastal zones and the marine environment

The proposed project is adjacent to the Galway Bay / Atlantic coast via the southernmost section. It is anticipated that works in this area will be minimal as the existing cycle/pedestrian path to the south of the railway bridge that may be subject to small refurbishment works and/or existing carriageway will be utilised within the existing bounds.

Due to the nature and scale of the proposed project it is not anticipated that it will have a significant impact on the coastal zone or marine environment.

(iii) Mountain and forest areas

There are no mountain areas within 2km of the proposed project and therefore no impacts on this habitat type.

There are areas of Broadleaved Woodland to the east of the proposed project within the grounds of Merlin Park University Hospital.

(iv) Nature reserves and parks

There are no nature reserves or national parks located within 15km of the proposed project.

(v) Areas classified or protected under legislation, including Natura 2000 areas designated pursuant to the Habitats Directive and the Birds Directive

There are 11no. European designated sites within 15km of the proposed project; 7no. Special Areas of Conservation (SACs) and 4no. Special Protection Areas (SPAs). The proposed project is located ca. 8-10m north of 2no. designated European sites at its starting/terminating point; Galway Bay Complex SAC (Site Code: 000268) and Inner Galway Bay SPA (Site Code: 004031). There is an existing cycle route in the vicinity of the European sites and therefore there will be minimal upgrade works in this area. There are 9no. proposed Natural Heritage Areas (pNHAs) and 2no. Natural Heritage Areas (NHA) within 15km of the proposed project. Galway Bay Complex pNHA (Site Code: 000268) is the closed pNHA located within the same area as Galway Bay Complex SAC and Inner Galway Bay SPA

The risk from the direct link between the proposed project and the Galway Bay Complex SAC, Inner Galway Bay SPA and Galway Bay Complex pNHA is negated due to the scale and nature of the proposed scheme and fundamentally as the lands made available for the works have been identified within the existing street boundaries.

No hydrological links have been established between the proposed project and any of these designated conservation sites. The proposed project will not impact any designated conservation sites through surface pathways given the lack on connectivity.

The excavations associated with the construction of the project will be relatively shallow (ca. <500mm) and therefore no significant impacts on groundwater are likely. As such there are no indirect impacts anticipated through hydrogeological pathways, either during the construction or operation of the project, on any internationally or nationally designated conservation sites.

It is considered that the proposed project will not give rise to significant effects on Galway Bay Complex SAC, Inner Galway Bay SPA and Galway Bay Complex pNHA. There is no anticipated potential for significant impact on areas classified or protected under legislation.

(vi) Areas in which there has already been a failure to meet the environmental quality standards laid down in legislation of the European Union and relevant to the project, or in which it is considered that there is such a failure.

The proposed project lies within the Clarinbridge groundwater body (GWB) (EPA Code IE_WE_G_0008) which has a 'good' ecological status for the period of 2013-2018 (EPA, 2021). The risk of the Clarinbridge GWB not achieving 'good' ecological status in accordance with the EU Water Framework Directive (WFD) is currently 'not at risk'. Due to the nature and scale of the works the proposed project is not anticipated to significantly impact groundwater quality.

The Terryland River (EPA Code: E_WE_30T010500) flows in a south westerly direction to the west the proposed project and joins the Corrib River (EPA Code: IE_WE_30C020600) before discharging to Corrib Estuary (EPA Code: IE_WE_170_0700) and subsequently into the Galway Bay (Inner Galway Bay North) (EPA Code: IE_WE_170_0000) (EPA, 2021). An un-named Stream is also located to the west of the proposed project, which flows into Lough Atalia and subsequently discharges to Galway Bay. The Terryland River has been assigned 'moderate' ecological status under the WFD for the period of 2013-2018; and is 'at risk' of failing to meet the relevant WFD objectives. The Corrib River has been assigned 'good' ecological status under the WFD and is 'not at risk' of failing to meet the relevant WFD objectives. Corrib Estuary has been assigned 'good' ecological status under the WFD for the period of 2013-2018 and is 'not at risk' of failing to meet the relevant WFD objectives. The unnamed stream has not been assigned a status or risk objective by the EPA (2021). Galway Bay (Inner Galway Bay North) has been assigned 'good' ecological status under the WFD for the period of 2013-2018 and is 'not at risk' of failing to meet the relevant WFD objectives. It is considered that due to the nature and scale of the project the works will not have a significant impact on baseline surface water quality.

Air quality in the area is reported as 'good' (EPA, 2021). Dust may be generated during the construction phase which has the potential to impact on human health. However, management of dust will be in line with best practice such as that set out in 'Guidelines for the Treatment of Air Quality During the Planning and Construction of National Road Schemes' (NRA, 2011). Due to the nature and scale of the project it is anticipated that there will be no significant impact on air quality.

It is anticipated that during construction there may be an increase in noise volumes. The Contractor will be required to prepare a CEMP and implement standard construction control measures to minimise noise levels associated with construction works. Noise levels shall not exceed the indicative levels of acceptability for construction noise in a rural environment as set out in the TII guidance 'Good Practice Guidance for the Treatment of Noise during the Planning of National Road Schemes' (TII, 2014).

It is considered that due to the nature and scale of the works there will be no significant impact on baseline air and water quality from the proposed project.

(vii) Densely populated areas

The proposed project will be constructed within the city of Galway which is a densely populated area. The project will be constructed within the Ballyloughane Road and Renmore Avenue road corridor. Galway City has a population of 79,934 (CSO, 2016). The Contractor will be required to prepare a CEMP and implement standard construction control measures to minimise noise level dust levels and interaction with the general population. It is anticipated that there will be no significant negative impact on densely populated areas during construction. The creation of the Active Travel scheme will reduce the volume of vehicular traffic using the route will improve air quality and noise levels and provide additional social and recreational infrastructure. It is considered therefore that the proposed project will potentially have a positive impact on this densely populated area during the operational phase.

(viii) Landscapes and sites of historical, cultural or archaeological significance

Refer to 3.3.2 under 'A Description of the Location of the Proposed Development, with Particular Regard to the Environmental Sensitivity of Geographical Areas Likely to be Affected (Schedule 7A(1)(b)).'

The proposed project will be constructed predominantly within the footprint of the existing Ballyloughane Road and Renmore Avenue. According to the Galway City Development plan the end of Ballyloughane Road is a view of special amenity value and interest

Policy 4.5.3 Community Spaces: Protected Views of Special Amenity Value and Interest within the Galway City Development Plan 2017-2013 states the following objectives:

- *'Protect views and prospects of special amenity value and interest, which contribute significantly to the visual amenity and character of the city through the control of inappropriate development.'*
- *'Require landscaping schemes as part of planning applications to have regard to such views and limit any planting which could have a detrimental impact on the value of protected views.'*

The proposed project will adhere to and comply with this policy, as the Active Travel scheme will attract people to the viewing areas. It is considered that due to the nature and scale of the works there will be no significant impact on landscapes and sites of historical, cultural or archaeological significance from the proposed project.

3.3.3 Types and characteristics of potential impacts (Schedule 7(3))

The likely significant effects on the environment of the proposed project have been evaluated taking into account the following specific criteria.

The magnitude and spatial extent of the impact (for example, geographical area and size of the population likely to be affected) (Schedule 7(3)(a))

The spatial extent of potential impacts is limited to the localised footprint of the proposed project (refer to Figure 1-1). Based on the location, current site setting, and the nature of the proposed project, any potential impacts (during the installation and operational phases) are not likely to be significant in magnitude.

The nature of the impact (Schedule 7(3)(b))

There will be no significant impact on the receiving environment arising from the proposed project (during the construction or operational phases).

The transboundary nature of the impact (Schedule 7(3)(c))

There is no potential for transboundary impacts as a result of the proposed project (during the construction or operational phases).

The intensity and complexity of the impact (Schedule 7(3)(d))

There will be no significant impact on the receiving environment arising from the proposed project (during the construction or operational phases).

The probability of the impact (Schedule 7(3)(e))

The probability of impacts on the receiving environment is low given the following considerations:

- The receiving environment is not considered to be at risk of significant impact due to the nature and scale of the proposed project;
- The Contractor will be obliged to implement standard best practice procedures prior to commencement of the proposed project including all environmental control measures for the onsite management of any pollution / nuisance issues which could arise during the construction phase;
- The Contractor will be obliged to prepare a project specific CEMP prior to commencement of the proposed project which will clearly set out all environmental control measures for the onsite management of any pollution / nuisance issues, which could arise during the construction phase;
- The Contractor will be obliged to prepare and implement a Traffic Management Plan for the construction phase in order to minimise impacts on the local traffic routes as far as possible during the construction phase; and,
- The Contractor will be obliged to prepare a project specific Construction and Demolition (C&D) Waste Management Plan (WMP) prior to commencement of the proposed development in accordance with the relevant guidelines 'Best Practice Guidelines on the Preparation of Waste Management Plans for Construction and Demolition Projects' prepared by the DoEHLG.

The expected onset, duration, frequency and reversibility of the impact (Schedule 7(3)(f))

The probability of impacts on the receiving environment is considered to be low, as previously outlined. Therefore, there shall be no requirement for the reversibility of the impacts caused by this project (during the construction or operational phases).

The cumulation of the impact with the impact of other existing and/or development the subject of a consent for proposed development for the purposes of section 172(1A)(b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(3)(g))

As previously detailed no significant cumulative impacts associated with the project (during the construction or operational phases) have been identified, arising from other existing and/or approved projects. Refer to Section 3.3.1 under '*Cumulation with other existing development and/or development the subject of a consent for proposed development for the purposes of section 172(1A) (b) of the Act and/or development the subject of any development consent for the purposes of the Environmental Impact Assessment Directive by or under any other enactment (Schedule 7(1) (b))*'.

The possibility of effectively reducing the impact (Schedule 7(3)(h))

Significant effects on the receiving environment are not anticipated as a result of the provision of the proposed project (during the construction or operational phases). A project specific CEMP will be prepared by the appointed Contractor prior to the works commencing which will clearly set out all environmental control measures for the onsite management of any pollution / nuisance issues which could arise during the construction phase.

3.4 Potential for Significant Effects on the Receiving Environment

All relevant information as required under Schedule 7A has been provided on behalf of Galway City Council and is presented within Section 3.1 of this screening report. The potential for this project to pose a significant impact to the receiving environment has also been evaluated in accordance with criteria listed in the Planning & Development Regulations, 2001 and EIA Planning and Development Regulations 2018 (Schedule 7), as presented within Section 3.2 of this screening report.

Based on the information provided within Section 3.3.1- 3.3.3 of this report, and summarised below, it is considered that due to the size, nature, and characteristics of the proposed development, no significant effects on the receiving environment are expected; hence the preparation of a sub-threshold EIAR is not required.

3.5 Screening Conclusion

This EIA screening report has been carried out in accordance with the Planning and Development Regulations as amended 2001- 2021 (which give effect to the provisions of EU Directive 2014/52/EU), and the Roads Acts 1993-2021. The report assessed the impact of the Galway Cycle Network Phase 1 Active Travel project (Work Package 01), in conjunction with committed developments in the surrounding area.

Based on all available information, and taking account of the scale, nature and location of the proposed project it is our opinion that the preparation of an EIAR is not a mandatory requirement (under Section 50 of the Roads Acts 1993-2021). The project is deemed a sub-threshold development; hence the potential for significant environmental effects arising as a result of the proposed project has been evaluated, in accordance with the requirements of Schedule 7A and Schedule 7 of the Planning and Development Acts 2001-2021.

Key findings are summarised as follows;

- Due to the limited nature of the works it is considered that there will be no significant cumulative impacts with other developments in the general area;
- Limited noise, vibration and dust emissions may be generated during construction; however, this is anticipated to be minimal in effect and will cause no significant impact;
- Soil and waste may be generated during construction; however, this is not anticipated to have significant effect;
- There will be no land take required for the proposed project;
- There will be no significant impact on biodiversity, groundwater, surface water or traffic; and,
- There will be no impact on recorded monuments or historic features;

In summary, no significant adverse impacts to the receiving environment will arise as a result of the proposed project.

Accordingly, we consider that the preparation of an EIAR is not required for the Galway Cycle Network Phase 1 Work Package 01 (Ballyloughane Road and Renmore Avenue).

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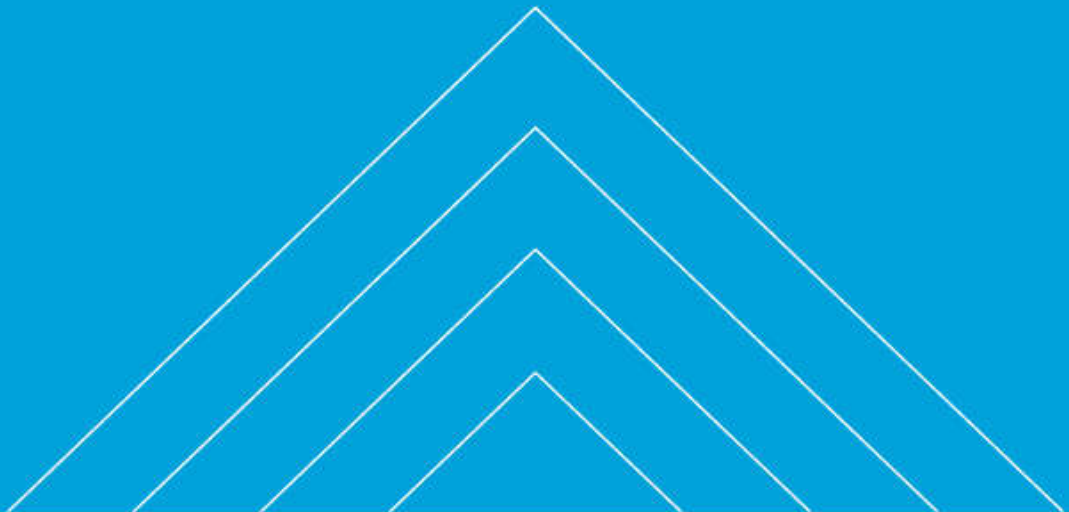
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Appendices



Appendix A. Drawings

[refer to Section 38 Report Appendix A]

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Appendix C. Screening for Appropriate Assessment Report

Active Travel Scheme

WP-01 Ballyloughane Road and Renmore Avenue:
AA Screening

Galway City Council

13/10/2021



Notice

This document and its contents have been prepared and are intended solely as information for Galway City Council and use in relation to Active Travel Scheme WP-01 Ballyloughane Road and Renmore Avenue.

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1. Introduction

Galway City Council (GCC) propose to deliver several high-quality cycle and Active Travel routes within the east side of Galway City. The proposed Galway Cycle Network Phase 1 scheme will aim to deliver a minimum level of service in line with the National Cycle Manual (NCM).

Atkins were commissioned to develop routes for the scheme by Galway City Council (GCC) in October 2019 under the National Transport Authority's (NTA) Consultancy Services Framework (2016). The proposed routes were developed in line with current GCC policies included in the Galway Transport Strategy (GTS) (August 2016).

The Galway Cycle Network Phase 1 scheme is proposed to be constructed in a number of Work Packages, which includes Work Package 01 Ballyloughane Road and Renmore Avenue, to be progressed as an Active Travel scheme.

Galway City Council appointed Atkins (Ireland) Ltd. to prepare a Screening for Appropriate Assessment report for the following developed route of the proposed scheme; Galway Cycle Network Phase 1 – Work Package 01 Ballyloughane Road and Renmore Avenue.

1.1. Project details

The Galway Cycle Network Phase 1 consists of 5 routes located to the east of Galway City, as shown in Figure 1-1 below. These routes are corridors along existing roads and have been identified within the GTS and within the scope of the scheme as follows: -

- Ballybane Road: between Skerrit Roundabout and Monivea Road junction, excluding the N6 and Dublin road junctions.
- Doughiska Road (excludes Dublin Road junction):
 - Doughiska Road North extends between the start of the Sean Bhaile estate (north end of route) to Old Dublin Road (south end of route).
 - Doughiska Road South extends between Old Dublin Road (north end of route) to Coast Road (south end of route).
- **Ballyloughane Road (full extent excluding the junction with the Dublin Road) and Renmore Avenue (full extent) (progressed as an Active Travel scheme);**
- Castlepark Road: full extent
- Monivea Road: full extent between the Ballybane Road and terminating at the start of the ghost island junction to the west of the Clayton Hotel entrance.

The purpose of this report is to assess Work Package 01 (WP-01) of the Galway Cycle Network Phase 1 Scheme which is the Active Travel Scheme on Ballyloughane Road and Renmore Avenue.

The alignment of the proposed route (shown in Magenta/Orange) is illustrated in Figure 1-1 below.

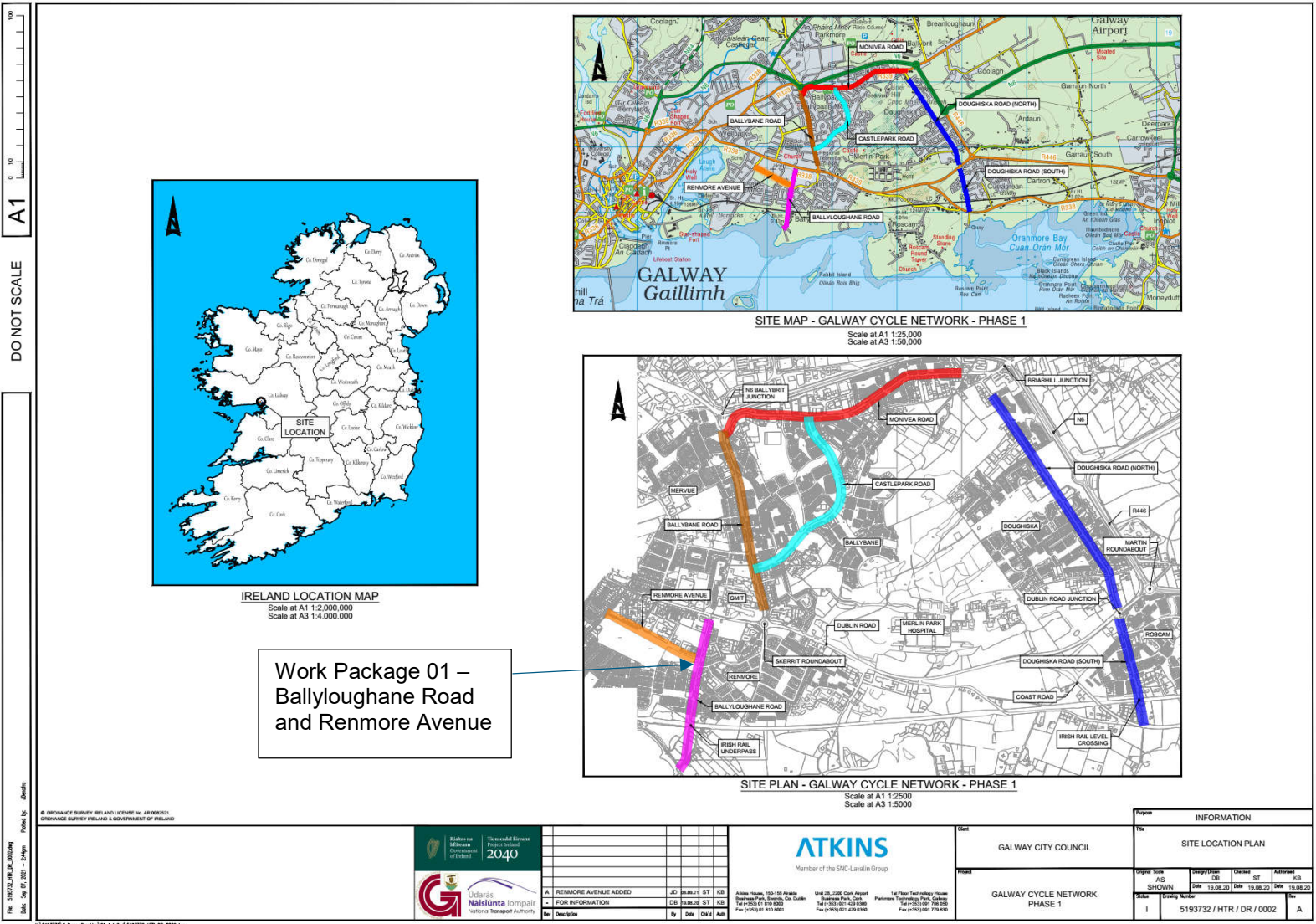


Figure 1-1 Proposed Galway Cycle Network Phase 1 Routes with Ballyloughane Road and Renmore Avenue (shown in Magenta & Orange).

1.2. Proposed Scheme

The proposed scheme along this route (Work Package 01) will consist of an Active Travel Scheme. This includes narrowing the existing carriageway to 6m and the provision of a minimum 2m wide footpath either side of the road.

The construction of the proposed works on Ballyloughane Road involves the following: -

- The removal of existing kerbing and footways, and the construction of new kerbs and footways, to provide for a narrower road width (which encourages lower traffic speeds).
- The existing road will be resurfaced.
- South of the railway bridge will predominantly remain as per the existing, with two-way vehicular traffic on the carriageway and pedestrian/cyclists utilising the existing shared use path (behind the existing boundary wall). Pedestrians will access this facility from north of the bridge via a Zebra crossing and utilising the existing shared-area allocated through the bridge.
- Junction treatment is to be applied throughout the route, to narrow the junctions, and provide a signalised crossing at the junction with Renmore Avenue.

This route has a railway line which crosses over the route (chainage 280). It is proposed to keep the existing facilities in place at this point.

The construction of the proposed works on Renmore Avenue involves the following: -

- The installation of traffic calming measures, including horizontal deflections (i.e. build-outs) and ramps.
- The installation of signalised pedestrian crossings along the route and at the junctions with Renmore Road and Ballyloughane Road.
- The installation of a 3m wide footpath on the south side of the road.

1.3. Construction Details

The construction period for Ballyloughane Road and Renmore Avenue is estimated to be undertaken within 12 months (dependent on the procurement strategy) and can be summarised as follows: -

- The Contractor will commence the construction phase by mobilising the construction team on site. This will involve setting up a site compound in an area which will minimise potential impacts to the environment and public, whilst providing a suitable location from a construction logistics and safety viewpoint;
- Works will commence with clearing and removing (off site) all redundant items such as road signage, boundary treatment, and the temporary storage of topsoil. The works will be completed using a combination of operatives using hand tools and also mechanical excavators, dumper trucks and other plant typical to road construction schemes;
- To facilitate the main works, underground utilities which conflict with the main works will be uncovered using mechanical excavators (and hand digging where appropriate) and identified.
- Site compound location – Location to be confirmed at Tender/Construction stage; there could be multiple satellite compounds for each route as each Work Package progresses given the 'spread out' nature of the overall Galway Cycle Network Phase 1 scheme. While

the location of the site compound is not known, the works compound for Ballyloughane Road and Renmore Avenue is to be located outside the SAC and approved by GCC at Construction Stage prior to acceptance. The Contractor will establish the site area, including site compound, set down area for vehicles, works areas, temporary set-down areas for material removed etc. prior to commencing work on the project. The Contractor will determine an appropriate location for the site compound in agreement with GCC. The compound will provide for parking, welfare facilities, canteen, site offices, storage areas and temporary utilities / services. These areas will be fenced to keep the public out of the work area and secured as appropriate to prevent pollution risk. Once appointed the Contractor will be obliged to take account of the content of this report when deciding on the fixed location of the site compound. The compound will be located away from sensitive areas such as designated conservation areas (such as Galway Bay European sites), ecologically sensitive areas (such as Merlin Park Woodlands), watercourses, hedgerows / treelines which are considered important wildlife corridors, archaeological / architectural features, identified Japanese knotweed locations (*Fallopia japonica*) (outside of the red line boundary) and adjacent private properties. Accordingly, the positioning of the site compound will be chosen so as to have no adverse environmental impacts during the construction phase. The temporary construction compound will be removed upon completion of the construction phase. Such areas are to be reinstated and all construction waste and / or scrapped building materials are to be removed from site on completion of the construction phase. Oil, fuel etc. storage areas are to be decommissioned on completion of the construction phase. Any remaining liquids are to be removed from site and disposed of at an appropriately licenced facility.

- With the utilities safely identified and diverted (if required), the initial construction phase will be ready to commence in that area. This will include removal of existing kerbs, footways and road pavement (where required), and the excavation and removal of soil to proposed design levels along the scheme – which are envisaged to be minor in nature for this scheme and will predominantly involve regrading work. The excavation will be largely undertaken by mechanical excavator, with spoil arisings loaded into HGV tipper trucks for removal off site or reuse on the scheme where testing confirms its suitability;
- Pavement construction will be undertaken by mechanical means, using excavators to lay sub-base, graders, rollers and pavement laying machines for asphalt materials;
- Road sign poles will be erected to carry the scheme road signage. This will include statutory signage, warning signage and information signage. With the poles erected, the signs will be mounted by hand and cleaned to complete the signage installation;
- The finished surface course will be swept using a mechanical road sweeper and immediately followed by the application of road markings, which are likely to be applied using a vehicle mounted road marking machine. The individual Stop, Yield and other markings are likely to be laid by hand.

1.3.1. Drainage

All drainage for the scheme will utilise the existing road drainage network. Drainage for the routes will be provided using new gullies and existing or new storm drainage pipes where appropriate. The new facilities will generally slope towards the road in order to minimise the need for additional drainage collection measures. In some areas, where this may not be possible, additional channels or measures will be required.

2. Scope of Study

The aim of this report is to provide supporting information to assist the competent authority to carry out an AA determination with respect to the proposed project.

2.1. Legislative Context

Directive 92/43/EEC on the Conservation of Natural Habitats and Wild Fauna and Flora, known as the 'Habitats Directive' provides legal protection for habitats and species of European importance. Article 2 of the Directive requires the maintenance or restoration of habitats and species of European Community interest, at a favourable conservation status. Articles 3 – 9 provide the legislative means to protect habitats and species of Community interest through the establishment and conservations of an EU-wide network of sites known as European sites. European sites are Special Areas of Conservation (SACs) designated under the Habitats Directive and Special Protection Areas (SPAs) designated under the Conservation of Wild Birds Directive (79/409/EEC).

Articles 6(3) and 6(4) of the Habitats Directive set out the decision-making tests for plans or projects that could potentially affect European sites. Article 6(3) establishes the requirement for Appropriate Assessment: -

“Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site's conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.”

Article 6 (4) deals with the steps that should be taken when it is determined, as a result of Appropriate Assessment, that a plan or project will adversely affect a European site. Alternative solutions, imperative reasons of overriding public interest (IROPI) and compensatory measures need to be addressed in this case. Article 6(4) states: -

“If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.”

Where the site concerned hosts a priority natural habitat type and/or a priority species, the only considerations which may be raised are those relating to human health or public safety, to beneficial consequences of primary importance for the environment or, further to an opinion from the Commission, to other imperative reasons of overriding public interest.”

2.2. Appropriate Assessment Process

Guidance on the AA process was produced by the European Commission (EC, 2001; 2018), which was subsequently used to develop guidance for Ireland by the Department of Environment, Heritage and Local Government in 2009 (DEHLG, 2009), National Parks and Wildlife Service in 2018¹ (NPWS 2018) and the Office of the Planning Regulator (2021). These guidance documents set out a staged approach to complete the AA process and outline the issues and tests at each stage. The stages outlined below are taken from the guidance document Appropriate Assessment of Plans and Projects in Ireland –

¹ <https://www.npws.ie/development-consultations>

Guidance for Planning Authorities (DEHLG, 2009) and Office of the Planning Regulator; *Appropriate Assessment Screening for Development Management* (2021).

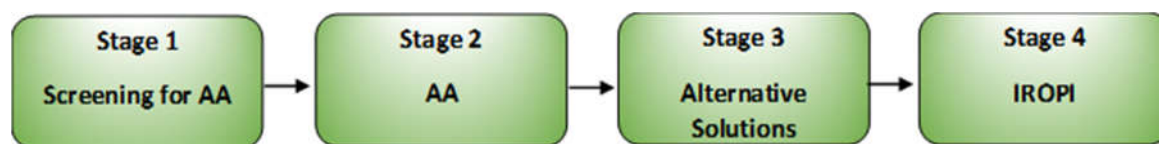


Figure 2.1 Appropriate Assessment Process (Source: DEHLG, 2009)

2.2.1. Screening for Appropriate Assessment

Screening is the process that addresses and records the reasoning and conclusions in relation to the first two tests of Article 6(3): -

- i. Whether a plan or project is directly connected to or necessary for the management of the site, and
- ii. Whether a plan or project, alone or in combination with other plans and projects, is likely to have significant effects on a European site in view of its conservation objectives.

If the effects are deemed to be significant, potentially significant, or uncertain, then the process must proceed to Appropriate Assessment.

2.2.2. Appropriate Assessment

Appropriate Assessment considers whether the plan or project, alone or in combination with other projects or plans, will have adverse effects on the integrity of a European site, and includes any necessary mitigation measures.

The competent authority can only agree to the plan or project after having ascertained that it will not adversely affect the integrity of the site(s) concerned. If this cannot be determined, and where sufficient mitigation cannot be achieved, the alternative solutions need to be considered and the process proceeds to the consideration of alternative solutions.

2.2.3. Alternative Solutions

This examines any alternative solutions or options that could enable the plan or project to proceed without adverse effects on the integrity of a European site. The process must return to AA as alternatives will require assessment in order to proceed. Demonstrating that all reasonable alternatives have been considered and assessed, and that the least damaging option has been selected, it is necessary to examine whether there are imperative reasons of overriding interest (IROPI).

2.2.4. IROPI

This examines whether there are imperative reasons of overriding public interest for allowing a plan or project that will have adverse effects on the integrity of a European site to proceed in cases where it has been established that no less damaging alternative solution exists. Compensatory measures must be proposed and assessed, of which the Commission must be informed.

The AA process only progresses through the full process for certain plans and projects. For example, for a project not connected with the management of a European site and where no likely significant effects on a European site in view of its conservation objectives are identified, the process stops at Screening for AA. Throughout the process the precautionary principle must be applied, which requires that the conservation objectives of Natura 2000 should prevail where there is uncertainty (EC, 2001; 2018).

3. Methods

3.1. Guidance documents

The Screening for Appropriate Assessment was prepared with reference and due consideration to the following documents and case law, including but not limited to: -

- Council Directive 92/43/EEC of 21 May 1992 on the conservation of natural habitats and of wild flora and fauna (Habitats Directive);
- Statutory Instrument No. 477/2011 — European Communities (Birds and Natural Habitats) Regulations 2011;
- European Commission (2018). Managing Natura 2000 sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC;
- European Commission (2001). Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC;
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- Department of the Environment, Heritage and Local Government (2009). Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities; and,
- Case C-323/17 People Over Wind & anor. V. Coillte, Kelly v An Bord Pleanála & anor [2019] IEHC 84 and other relevant court rulings and case law.
- Office of the Planning Regulator (2021), Appropriate Assessment Screening for Development Management, OPR Practice Note PN01.

3.2. Desk Study

A desk study was carried out to collate information available on European sites in the vicinity of the proposed project. These areas were viewed using Google Earth, Google maps² and Bing maps³ (last accessed on 11/10/2021).

The National Parks and Wildlife Service (NPWS) and National Biodiversity Data Centre (NBDC) online databases were reviewed concerning European sites and their features of interest in the vicinity of the proposed project.

The Environmental Protection Agency (EPA) mapping⁴ system was used to identify any hydrological connection between the proposed project and European sites.

Locations and boundaries of all European sites within 15km of the proposed projects were identified and reviewed using the NPWS online map viewer. Boundary shapefiles were also downloaded from this site to facilitate the preparation of project graphics.

² <https://www.google.ie/maps>

³ <http://www.bing.com/maps/>

⁴ <https://gis.epa.ie/EPAMaps/>

Desktop information on relevant European sites were reviewed on the NPWS website, including the site synopsis for each SAC/SPA, the conservation objectives, the site boundaries as shown on the NPWS online map viewer, the standard Natura 2000 Data Form for the SAC/SPA which details conditions and threats of the sites, and published information and unpublished reports on the relevant European sites.

Relevant planning information for the surrounding area was reviewed using the planning enquiry systems of Galway City Council. Search criteria were implemented to determine whether such projects or plans would be relevant to this study and this information was used to determine potential cumulative impacts from other plans / projects with the proposed project.

3.3. Site Visit

Site visits were undertaken within the Galway Cycle Network Phase 1 scheme during May 2021. The findings of site surveys have been used to inform this report. Site photographs are presented below.

3.4. Statement of Authority

The Screening for Appropriate Assessment report was prepared by Colin Wilson and Paul O'Donoghue provided peer review and support.

Colin Wilson (Atkins Dublin) has a BSc (Hons) in Environmental Science. He has over 12 years working in the fields of ecology and environmental management. He is a Senior Ecologist with experience in ecological surveying, environmental assessment, on-site ecological supervision and mitigation. He has experience on multiple road projects regarding all elements of surface and groundwater management, monitoring, sampling and associated reporting. Colin also has a broad range of experience in invasive species management, biosecurity and control. Colin has prepared AA screening reports, Natura Impact Statements and has also been involved in the development of Environmental Operating Plans and Construction Environmental Management Plans for a number of national infrastructure projects.

Paul O'Donoghue has a BSc (Zoology), MSc (Behavioural Ecology) and a PhD in avian ecology and genetics. Paul is a chartered member of the Society for the Environment (CEnv) and a full member of the Chartered Institute of Ecology and Environmental Management (MCIEEM). Paul has over 18 years' experience in ecology; including extensive experience in the preparation of Habitat Directive Assessments / Natura Impact Statements (i.e. Appropriate Assessment under Article 6(3) of the EU Habitats Directive). Paul carried out the technical review of this report.

4. Existing Environment

The proposed Active Travel route is located entirely within the existing footprint of the road network to the east of Galway City Centre. These lands have historically been sub-urban in nature and have continued to expand as urban development areas within recent times. Ballyloughane Road and Renmore Avenue proposed works are aligned entirely along roadways and associated pathways and does not encroach into any protected habitats. Renmore Avenue also adjoins an area of parkland and playing pitches (St. James GAA / Renmore Playing Pitches).

The proposed project is within the Water Framework Directive (WFD) Carrowmoneash [Oranmore] subcatchment (SC_010). All surface hydrological features within the vicinity of the project are assumed to follow topography and flow in a general southern direction towards the coast. A review of geological features⁶ identified a number of karst formations within the wider area, however, none are within or adjacent to the alignment of the route.

The project site was reviewed for the presence of watercourses or surface water features. A review of EPA datasets⁵ did not identify any watercourses within the project site.

Merlin Park Woodlands covers a large area ca. 700m east of Ballyloughane Road and this park contains a wide range of habitats including native oak-ash-hazel woodland, mixed broadleaf woodland, conifer woodland, limestone pavement, wet grassland and scrub⁶. Lesser Horseshoe bats (*Rhinolophus hipposideros*) have been recorded within Merlin Park. The proposed Ballyloughane Road and Renmore Avenue project does not intersect with this area of urban woodland and as such impacts on the habitats found within the woodlands are not anticipated. There will be no significant changes to street lighting levels along the proposed route nor within the vicinity of Merlin Park (some light poles positions may be moved within existing footpaths to accommodate the proposals) and as such no significant impact on foraging routes of bats is anticipated.

A review of Annex I habitat within the study area⁶ details Limestone pavements [8240], Lowland hay meadows [6510] and Semi-natural dry grasslands [6210] are found to the east of the Galway Cycle Network routes (Ardaun area). Ballyloughane Road and Renmore Avenue route is remote from these annexed habitats, and there is no direct or indirect connectivity, and as such impacts on these protected sites are not anticipated.

The proposed project site was surveyed for invasive plant species listed on the third schedule of the EC (Birds and Natural Habitats) Regulations 2011 S.I. No. 477/ 2011. Species surveyed for included Japanese knotweed (*Fallopia japonica*) and associated hybrids. Surveys were undertaken during May 2021 which is within the seasonally appropriate window to assess the project site for the presence of invasive plant species. No evidence of third schedule invasive plant species were recorded within the extents of the project site.

Plates 4-1 to 4-1 below depict the site of the proposed Ballyloughane Road section of the project.

⁵ <https://gis.epa.ie/EPAMaps/>

⁶ ARUP (2015). Annex I Habitat Mapping. N6 Galway City Transport Project.



Plate 4-1 Ballyloughane Road southern section; existing shared path.



Plate 4-2 Ballyloughane Road / Railway intersection



Plate 4-3 Ballyloughane Road left, Nolan Park right.



Plate 4-4 Ballyloughane Road north section; walled premises.

5. Appropriate Assessment Screening

5.1. Connectivity of Works Area to European Sites

The ‘*zone of influence*’ (Zol) for a project is the area over which ecological features may be subject to significant effects as a result of the proposed project and associated activities. This is likely to extend beyond the project site, for example where there are ecological or hydrological links beyond the site boundaries. The zone of influence will vary for different ecological features depending on their sensitivity to an environmental change (CIEEM, 2019).

A distance of 15km is recommended in the case of plans, as a potential zone of influence and this distance is derived from UK guidance (Scott Wilson et al., 2006). However, for projects the distance could be much less, and in some cases less than 100m. National Parks and Wildlife Service and Office of the Planning Regulator guidance⁷ advises that this must be evaluated on a case-by-case basis with reference to the nature, size and location of the project, the sensitivities of the ecological receptors, and the potential for in-combination effects.

Thus, given the nature, scale and extent of the proposed project, the potential zone of influence will consider European sites with regard to the location of a European site, the QIs of the site and their potential mobility outside that European site, the Cause-Pathway-Effect model and potential environment effects of the proposed project.

The proposed project site does not lie within any European site; however, the southern extents of the Ballyloughane Road section terminates ca. 8-10m from the boundary of Galway Bay Complex SAC and Inner Galway Bay SPA.

There are 11 no. European sites within the potential zone of influence of the project; 7 no. SACs and 4 no. SPAs (2 no. of which are adjacent to the proposed project).

Table 5-1 details the European sites that are within the potential Zol of the proposed project, which lists their associated qualifying interests and specifies if the European site is within the Zol of the proposed project or not.

Figures 5-1 and 5-2 illustrate the locations of the European sites within the potential Zol of the proposed project.

⁷ DoEHLG (2009). *Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities*. Department of Environment, Heritage and Local Government, Dublin, Ireland.
OPR (2021) Appropriate Assessment Screening for Development Management. OPR Practice Note PN01. Office of the Planning Regulator. Dublin, Ireland.

Table 5-1 European sites within potential Zone of Influence of the proposed project.

Site Name and Code	Approximate distance from project	Features of Interest	Within the Zol
Galway Bay Complex SAC (000268)	Adjacent to the project	• Mudflats and sandflats not covered by seawater at low tide [1140] • Coastal lagoons [1150] • Large shallow inlets and bays [1160] • Reefs [1170] • Perennial vegetation of stony banks [1220] • Vegetated sea cliffs of the Atlantic and Baltic coasts [1230] • Salicornia and other annuals colonising mud and sand [1310] • Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] • Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] • Turloughs [3180] • <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] • Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] • Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion davallianae [7210] • Alkaline fens [7230] • Limestone pavements [8240] • <i>Lutra lutra</i> (Otter) [1355] • <i>Phoca vitulina</i> (Harbour Seal) [1365]	Yes The proposed project starts / ends on the coastline of Galway Bay and therefore is adjacent to the Galway Bay Complex SAC. This site is discussed further below.
Lough Corrib SAC (000297)	2.7km	• Oligotrophic waters containing very few minerals of sandy plains (<i>Littorelletalia uniflorae</i>) [3110] • Oligotrophic to mesotrophic standing waters with vegetation of the <i>Littorelletea uniflorae</i> and/or <i>Isoeto-Nanojuncetea</i> [3130] • Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140]	No There is no direct overlap between the proposed works and Lough Corrib SAC nor is there any hydrological link between the project site and this SAC. The qualifying interest species; Lesser horseshoe bats are highly mobile and have the potential to range outside of the SAC site extents. Impacts of bat species associated with the SAC are not anticipated as the proposals are aligned along the existing road network and there will be no changes to

Site Name and Code	Approximate distance from project	Features of Interest	Within the ZOI
		- Water courses of plain to montane levels with the <i>Ranunculus fluitans</i> and <i>Callitriche-Batrachium</i> vegetation [3260] - Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] - Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caerulea</i>) [6410] - Active raised bogs [7110] - Degraded raised bogs still capable of natural regeneration [7120] - Depressions on peat substrates of the Rhynchosporion [7150] - Calcareous fens with <i>Cladium mariscus</i> and species of the Caricion davallianae [7210] - Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] - Alkaline fens [7230] - Limestone pavements [8240] - Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in the British Isles [91A0] - Bog woodland [91D0] <i>Margaritifera margaritifera</i> (Freshwater Pearl Mussel) [1029] <i>Austropotamobius pallipes</i> (White-clawed Crayfish) [1092] <i>Petromyzon marinus</i> (Sea Lamprey) [1095] <i>Lampetra planeri</i> (Brook Lamprey) [1096] <i>Salmo salar</i> (Salmon) [1106] <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] <i>Lutra lutra</i> (Otter) [1355] <i>Drepanocladus vernicosus</i> (Slender Green Feather-moss) [1393] <i>Najas flexilis</i> (Slender Naiad) [1833]	lighting levels or semi-natural habitats along these urban roadways. The location, scale and duration of proposed project is such that they will not contribute to direct, indirect or in-combination impacts on habitats and species for which the SAC has been designated and do not have the potential to affect the conservation objectives of these habitats and species. This site is not considered further.
Rahasane Turlough SAC (000322)	15km	Turloughs [3180]	No

Site Name and Code	Approximate distance from project	Features of Interest	Within the ZoI
			There is no direct overlap between the proposed works and Rahasane Turlough SAC nor is there any hydrological or hydrogeological link between the project site and this SAC. The location, scale and duration of proposed project is such that they will not contribute to direct, indirect or in-combination impacts on habitats for which the SAC has been designated and do not have the potential to affect the conservation objectives of these habitats. This site is not considered further.
Lough Fingall Complex SAC (000606)	11.7km	• Turloughs [3180] • Alpine and Boreal heaths [4060] • <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] • Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] • Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] • Limestone pavements [8240] • <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303]	No There is no direct overlap between the proposed works and Lough Fingall Complex SAC nor is there any hydrological or hydrogeological link between the project site and this SAC. The location, scale and duration of proposed project is such that they will not contribute to direct, indirect or in-combination impacts on habitats and species for which the SAC has been designated and do not have the potential to affect the conservation objectives of these habitats and species. This site is not considered further.
Castletaylor Complex SAC (000242)	15km	• Turloughs [3180] • Alpine and Boreal heaths [4060] • <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] • Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] • Limestone pavements [8240]	No There is no direct overlap between the proposed works and Castletaylor Complex SAC nor is there any hydrological or hydrogeological link between the project site and this SAC. The location, scale and duration of proposed project is such that they will not contribute to direct, indirect or in-combination impacts on habitats for which the SAC has been designated and do not have the potential to affect the conservation objectives of these habitats. This site is not considered further.
Kiltarnan Turlough SAC (001285)	14.8km	• Turloughs [3180]	No There is no direct overlap between the proposed works and Kiltarnan Turlough SAC nor is there any hydrological or hydrogeological link between the project site and this SAC.

Site Name and Code	Approximate distance from project	Features of Interest	Within the ZOI
			The location, scale and duration of proposed project is such that they will not contribute to direct, indirect or in-combination impacts on habitats for which the SAC has been designated and do not have the potential to affect the conservation objectives of these habitats. This site is not considered further.
East Burren Complex SAC (1926)	13.8km	• Hard oligo-mesotrophic waters with benthic vegetation of <i>Chara</i> spp. [3140] • Turloughs [3180] • Water courses of plain to montane levels with the <i>Ranunculus fluitantis</i> and <i>Callitriche-Batrachion</i> vegetation [3260] • Alpine and Boreal heaths [4060] • <i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] • <i>Calaminarian</i> grasslands of the <i>Violetalia calaminariae</i> [6130] • Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (* important orchid sites) [6210] • Lowland hay meadows (<i>Alopecurus pratensis</i>, <i>Sanguisorba officinalis</i>) [6510] • Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] • Petrifying springs with tufa formation (<i>Cratoneurion</i>) [7220] • Alkaline fens [7230] • Limestone pavements [8240] • Caves not open to the public [8310] • Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i>, <i>Alnion incanae</i>, <i>Salicion albae</i>) [91E0] • <i>Euphydryas aurinia</i> (Marsh Fritillary) [1065] • <i>Rhinolophus hipposideros</i> (Lesser Horseshoe Bat) [1303] • <i>Lutra lutra</i> (Otter) [1355]	No There is no direct overlap between the proposed works and East Burren Complex SAC nor is there any hydrological or hydrogeological link between the project site and this SAC. The location, scale and duration of proposed project is such that they will not contribute to direct, indirect or in-combination impacts on habitats for which the SAC has been designated and do not have the potential to affect the conservation objectives of these habitats. This site is not considered further.

Site Name and Code	Approximate distance from project	Features of Interest	Within the ZOI
Inner Galway Bay SPA (004031)	Adjacent to the project	- Black-throated Diver (<i>Gavia arctica</i>) [A002]⁸ - Great Northern Diver (<i>Gavia immer</i>) [A003] - Cormorant (<i>Phalacrocorax carbo</i>) [A017] - Grey Heron (<i>Ardea cinerea</i>) [A028] - Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] - Wigeon (<i>Anas penelope</i>) [A050] - Teal (<i>Anas crecca</i>) [A052] - Red-breasted Merganser (<i>Mergus serrator</i>) [A069] - Ringed Plover (<i>Charadrius hiaticula</i>) [A137] - Golden Plover (<i>Pluvialis apricaria</i>) [A140] - Lapwing (<i>Vanellus vanellus</i>) [A142] - Dunlin (<i>Calidris alpina</i>) [A149] - Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] - Curlew (<i>Numenius arquata</i>) [A160] - Redshank (<i>Tringa totanus</i>) [A162] - Turnstone (<i>Arenaria interpres</i>) [A169] - Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] - Common Gull (<i>Larus canus</i>) [A182] - Sandwich Tern (<i>Sterna sandvicensis</i>) [A191] - Common Tern (<i>Sterna hirundo</i>) [A193] - Wetland and Waterbirds [A999]	Yes. The Inner Galway Bay SPA is designated for a range of wintering waterbirds and wildfowl that frequent wetland habitats. This SPA is located immediately adjacent to the termination point of Ballyloughane Road and Renmore Avenue and therefore the bird species for which this site has been designated could be negatively impacted by the proposed project. Potential impacts on this European site will be discussed below.
Cregganna Marsh SPA (004142)	5.7km	Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395]	No. The Cregganna Marsh SPA is designated for Greenland White-fronted Goose. This species can feed within arable and grassland fields in the wider landscape (i.e. away from the SPA), however, the proposed project is aligned within the footprint of the existing road network and associated verges (and occasional private garden) and as such there are no

⁸ In 2019 Black-throated Diver (*Gavia arctica*) was added to the list of Qualifying Interests of Inner Galway Bay SPA, while Shoveler (*Anas clypeata*) was removed. While this is reflected on the NPWS web cover page, the documents attached do not as yet reflect this change (as of 11th October 2021).

Site Name and Code	Approximate distance from project	Features of Interest	Within the ZOI
			suitable habitats that would provide for suitable field foraging sites for geese. This site is not considered further.
Rahasane Turlough SPA (004089)	15km	- Whooper Swan (<i>Cygnus cygnus</i>) [A038] - Wigeon (<i>Anas penelope</i>) [A050] - Golden Plover (<i>Pluvialis apricaria</i>) [A140] - Black-tailed Godwit (<i>Limosa limosa</i>) [A156] - Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] - Wetland and Waterbirds [A999]	No. Rahasane Turlough SPA is designated for a range of wintering waterbirds and wildfowl that frequent estuarine and coastal habitats. There is no direct overlap between the proposed project and the SPA. There is no connectivity in the form of hedgerows, treelines or watercourses between the project site and this SPA. The works area is sufficiently remote that there is no risk of disturbance to waders and wildfowl using the SPA. The location, scale and operation of the proposed project is such that they will not contribute to direct, indirect or in-combination impacts on the wintering waterbird species for which the SPA has been designated and does not have the potential to affect the conservation objectives of this species. This site is not considered further.
Lough Corrib SPA (004042)	7.3km	- Gadwall (<i>Anas strepera</i>) [A051] - Shoveler (<i>Anas clypeata</i>) [A056] - Pochard (<i>Aythya ferina</i>) [A059] - Tufted Duck (<i>Aythya fuligula</i>) [A061] - Common Scoter (<i>Melanitta nigra</i>) [A065] - Hen Harrier (<i>Circus cyaneus</i>) [A082] - Coot (<i>Fulica atra</i>) [A125] - Golden Plover (<i>Pluvialis apricaria</i>) [A140] - Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] - Common Gull (<i>Larus canus</i>) [A182] - Common Tern (<i>Sterna hirundo</i>) [A193] - Arctic Tern (<i>Sterna paradisaea</i>) [A194] - Greenland White-fronted Goose (<i>Anser albifrons flavirostris</i>) [A395] - Wetland and Waterbirds [A999]	No. Lough Corrib SPA is designated for a range of wintering waterbirds and wildfowl that frequent estuarine and coastal habitats. There is no direct overlap between the proposed project and the SPA. There is no connectivity in the form of hedgerows, treelines or watercourses between the project site and this SPA. The works area is sufficiently remote that there is no risk of disturbance to waders and wildfowl using the SPA. The location, scale and operation of the proposed project is such that they will not contribute to direct, indirect or in-combination impacts on the wintering waterbird species for which the SPA has been designated and does not have the potential to affect the conservation objectives of this species. This site is not considered further.

Figure 5-1 SACs within potential zone of influence of the project.

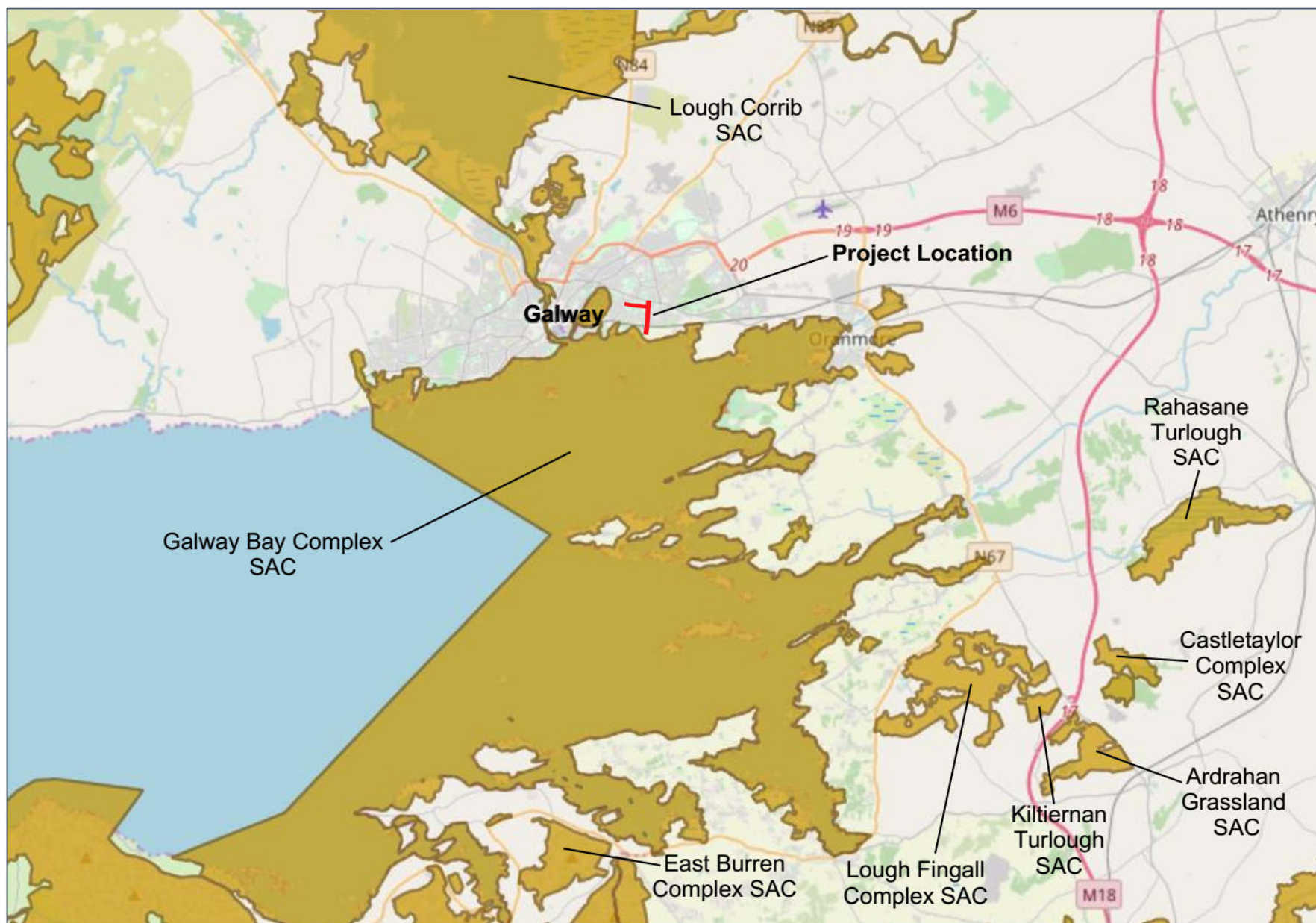
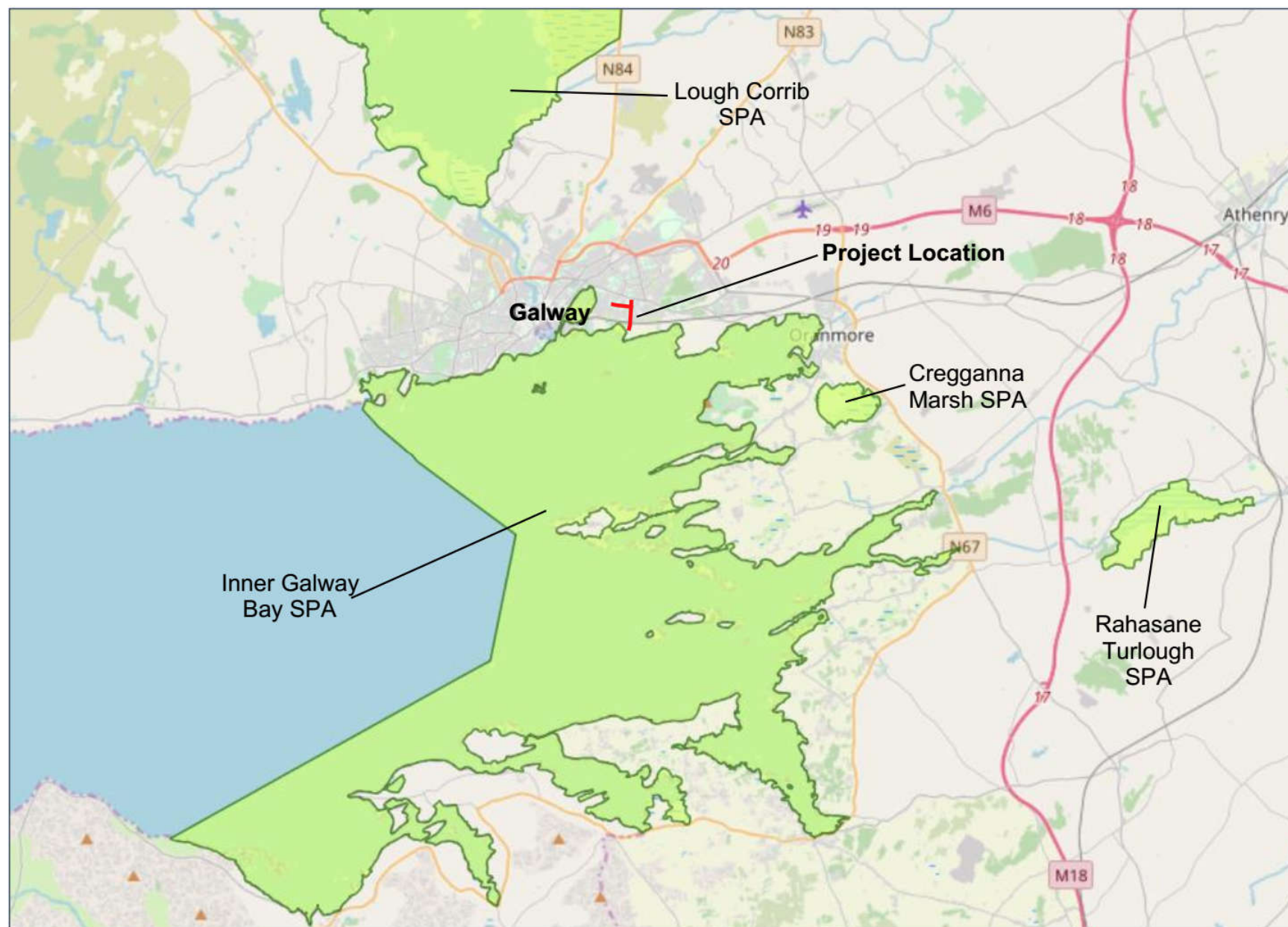


Figure 5-2 SPAs within potential zone of influence of the project.



5.1.1. Brief Description of Galway Bay Complex SAC

A synopsis of the SAC, as detailed by NPWS, is as follows ⁹: -

“The Galway Bay Complex is a very large, marine-dominated, site situated on the west coast of Ireland. The inner part of the south bay is protected from exposure to Atlantic swells by the Aran Islands and Black Head. Subsidiary bays and inlets (e.g. Poul-na-clough, Aughinish and Kinvara Bays) add texture to the patterns of water movement and sediment deposition, which lends variety to the marine habitats and communities. The terraced Carboniferous (Visean) limestone platform of the Burren sweeps down to the shore and into the sublittoral. West of Galway city, the bedrock geology is granite. The long shoreline is noted for its diversity, with complex mixtures of bedrock shore, shingle beach, sandy beach and fringing salt marshes. Other habitats which occur in small amounts include lagoon, fen, turlough, dry grassland, wet grassland and deciduous woodland.

The site has very important and good quality examples of large shallow inlets and bays, intertidal mud and sandflats, and reefs. The area has the country's only recorded example of the littoral community characterized by Fucus serratus with sponges, ascidians and red seaweeds on tide-swept lower eulittoral mixed substrata. Sublittorally, the area has Ireland's only reported piddock bed, an extensive maerl bed of Phymatolithon calcareum, an oyster bed, and seagrass beds. A host of rare marine organisms occur, including the sea urchin Paracentrotus lividus, the sponge Mycale contarenii, the red algae Phyllophora sicula and Rhodymenia delicatula. Lagoons are particularly well represented and varied in type, size and salinity. Of especial importance are the rare karstic rock lagoons, of which the site holds all but one of the examples known from the mainland of Ireland. Good quality salt marshes of both Atlantic and Mediterranean types are well represented and occur along with perennial vegetation of stony banks. A very good, though limited, example of calcareous grassland rich in orchids occurs, and there are examples of alkaline fen and Juniperus communis scrub of moderate quality. Two Red Data Book stoneworts occur, Chara canescens and Lamprothamnium papulosum, and also two Red Data Book vascular plants - Crambe maritima and Hyoscyamus niger. The site has one of the largest populations of Phoca vitulina in the country and provides optimum habitat for Lutra. Galway Bay is a very important ornithological site, with an internationally important wintering population of Branta bernicla hrota and regular nationally important populations of a further 16 species, including Gavia immer, Gavia arctica, Pluvialis apricaria and Limosa lapponica. Breeding birds of note are Phalacrocorax carbo, Sterna sandvicensis and Sterna hirundo.”

5.1.1.1. Conservation Objectives

The Habitats Directive defines when the conservation status of the listed habitats and species is considered as favourable. The definitions it uses for this are specific to the Directive. In summary, they require that the range and areas of the listed habitats, and the range and population of the listed species, should be at least maintained at their status at the time of designation. Site-specific conservation objectives aim to define favourable conservation conditions for a particular habitat or species at that site.

Article (1) of the Habitats Directive (92/43/EEC) describes favourable conservation status for habitats and species as follows.

Favourable conservation status of a habitat is achieved when: -

- Its natural range, and area it covers within that range, are stable or increasing, and
- The specific structure and functions which are necessary for its long-term maintenance exist and are likely to continue to exist for the foreseeable future, and

⁹ <https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF000268.pdf>

- The conservation status of its typical species is favourable.

The favourable conservation status of a species is achieved when: -

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats, and
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The conservation objectives for Galway Bay Complex SAC, to maintain the favourable conservation for each of the qualifying interests of the site, were published by NPWS (2013) Version 1.0; 16/04/2013.

5.1.2. Brief Description of Inner Galway Bay SPA

A synopsis of the SPA, as detailed by NPWS, is as follows¹⁰: -

“Galway Bay SPA is a very large, marine-dominated, site situated on the west coast of Ireland. The inner bay is protected from exposure to Atlantic swells by the Aran Islands and Black Head. Subsidiary bays and inlets (e.g. Poul-na-clough, Aughinish and Kinvarra Bays) add texture to the patterns of water movement and sediment deposition, which lends variety to the marine habitats and communities. The terraced Carboniferous (Viséan) limestone platform of the Burren sweeps down to the shore and into the sublittoral. The long shoreline is noted for its diversity, with complex mixtures of bedrock shore, shingle beach, sandy beach and fringing salt marshes. Intertidal sand and mud flats occur around much of the shoreline, with the largest areas being found on the sheltered eastern coast between Oranmore Bay and Kinvarra Bay. Seagrass beds lie off Finavarra Point. A number of small islands composed of glacial deposits are included, such as Deer Island, along with some rocky islets.

Galway Bay is one of the most important ornithological sites in the western region. It supports internationally important wintering populations of Gavia immer and Branta bernicla hrota and regularly occurring nationally important populations of an additional 16 species, most notably Mergus serrator (6.7% of national total), Charadrius hiaticula (3.3% of total), Anas clypeata (2.9% of total) and Limosa lapponica (2.5% of total). It supports the largest and the most regular population of Gavia arctica in the country. The bay is an important wintering site for gulls, and is of national significance for at least Larus canus. Breeding birds of note are Phalacrocorax carbo, Sterna sandvicensis and Sterna hirundo. The site provides both feeding and roost sites for most of the species, though some birds commute to areas outside of the site. The birds of Galway Bay have been monitored annually since 1980/81. The site has one of the largest populations of Phoca vitulina in the country.”

5.1.2.1. Conservation Objectives

The Conservation Objectives for Inner Galway Bay SPA are to maintain the favourable conservation condition of the bird species as Special Conservation Interests for this SPA.

The favourable conservation status of a species is achieved when: -

¹⁰ <https://www.npws.ie/sites/default/files/protected-sites/natura2000/NF004031.pdf>

- Population dynamics data on the species concerned indicate that it is maintaining itself on a long-term basis as a viable component of its natural habitats,
- The natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and
- There is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long-term basis.

The conservation objectives for non-breeding birds of Inner Galway Bay SPA are summarised in Table 5-3 below.

Table 5-3 Conservation Objectives for Inner Galway Bay SPA.

Objective 1: To maintain the favourable conservation condition of the non-breeding waterbird Special Conservation Interest species listed for the SPA, which is defined by the following list of attributes and targets:			
Parameter	Attribute	Measure	Target
Population	Population Trend	Percentage change as per population trend assessment using waterbird count data collected through the Irish Wetland Bird Survey and other surveys	The long-term population trend should be stable or increasing.
Range	Distribution	Range, timing or intensity of use of areas used by waterbirds, as determined by regular low tide and other waterbird surveys	There should be no significant decrease in the range, timing or intensity of use of areas by the waterbird species of Special Conservation Interest other than that occurring from natural patterns of variation.
Objective 2: To maintain the favourable conservation condition of the wetland habitat at the SPA as a resource for the regularly-occurring migratory waterbirds that utilise it, which is defined by the following list of attributes and targets:			
Parameter	Attribute	Measure	Target
Area	Wetland habitat	Area (Ha)	The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 13,267 Ha, other than that occurring from natural patterns of variation.

As noted above, in 2019 Black-throated Diver (*Gavia arctica*) was added to the list of Qualifying Interests of Inner Galway Bay SPA, while Shoveler (*Anas clypeata*) was removed. While this is reflected on the NPWS web cover page, the documents attached do not as yet reflect this change (as of 11th October 2021).

5.2. Likelihood of Potential Impacts on European Sites

The available information on the European Sites within the potential ZOI of the proposed project was reviewed to establish whether or not the proposed Galway Cycle Network project is likely to have a significant effect on the conservation objectives of these SACs/SPAs. The likelihood of impacts on the features of interest of European Sites identified in this report is based on information collated from the desk study, site plans and other available existing information.

The likelihood of impacts occurring are established in light of the type and scale of the proposed works, the location of the proposed works with respect to European sites and the features of interest and conservation objectives of the European sites.

This screening report is prepared following the Cause – Pathway – Effect model. The potential impacts are summarised into the following categories for screening purposes.

- Direct impacts refer to habitat loss or fragmentation arising from land-take requirements for development or agricultural purposes. Direct impacts can be as a result of a change in land use or management, such as the removal of agricultural practices that prevent scrub encroachment.
- Indirect and secondary impacts do not have a straight-line route between cause and effect. It is potentially more challenging to ensure that all the possible indirect impacts of the plan/project – in combination with other plans and projects - have been established. These can arise, for example, when a development alters the hydrology of a catchment area, which in turn affects the movement of groundwater to a site and the qualifying interests that rely on the maintenance of water levels. Deterioration in water quality can occur as an indirect consequence of development, which in turn changes the aquatic environment and reduces its capacity to support certain plants and animals. The introduction of invasive species can also be defined as an indirect impact. Disturbance to fauna can arise directly through the loss of habitat (e.g. displacement of roosting bats) or indirectly through noise, vibration and increased activity associated with construction and operation.

5.3. Identification of Potential Impacts on European Sites

The Galway Bay Complex SAC covers a significant geographical area and the qualifying habitats and species for which they are designated are also spread widely throughout. An Appropriate Assessment screening, under Article 6(3) of the Habitats Directive, should be appropriate to assess the potential level of impact, the likely receptors, and in the case of water quality, connectivity between the site and the SAC. Therefore, designated SAC features which have no potential of being impacted by the proposed project, either because they do not occur within the area likely to be affected or because of distance from the works areas of the proposed project, are listed as such below. Table 5-3 below presents an overview of the potential for impacts on the habitats and species listed as features of interest within the SAC.

Inner Galway Bay SPA is designated for a range of wintering waterbirds and wildfowl that frequent estuarine and coastal habitats. There is no overlap of the proposed route with the Inner Galway Bay SPA site and as such direct impacts on the foraging or roosting sites within the SPA are not anticipated. The proposed footprint of the project does not accommodate suitable foraging habitats, such as open waters, sand flats or mudflats, which the majority of the SPA bird species forage within.

Certain bird species associated with the SPA, such as Oystercatcher, Curlew, Light-bellied Brent Geese and Lapwing, do on occasion feed in arable and grassland fields within the wider landscape; however the proposed project is located within the existing footprint of the road network in Galway City and as such there are no greenfield sites within the project footprint suitable for field foraging bird species.

Breeding Bird species; Common tern and Sandwich tern have nesting colonies within Galway Bay which are remote from the alignment of the route and as such no impacts on SPA nesting birds is anticipated.

Where the route of the proposed project comes in closest proximity to Inner Galway Bay SPA is at the southern extents of Ballyloughane Road (Figure 1-1). Ballyloughane Road terminates at the amenity grassland and car park area of Ballyloughane Strand (beach). An off road / standalone shared cycle path and footpath of ca. 240m in length already exists in the southern section of Ballyloughane Road. This shared cycle and footpath is aligned from the railway bridge crossing to an amenity grassland area adjacent to Galway Bay coastline at Ballyloughane Strand. This existing facility will remain, and the existing section of Ballyloughane Road south of the railway shall be re-surfaced with new road markings and signage, and no other works or construction activities are required and as such disturbance related impacts on bird species during the construction phase of the proposals in this area are not anticipated. The area of Ballyloughane Strand is historically a busy recreational area and as such significant disturbance related impacts on bird species, through an increase in cyclists/human presence, when the proposed facilities are in use is not considered likely.

The route is aligned along Renmore Avenue and adjacent to Renmore Avenue are areas of amenity grassland, namely Nolan Park / Renmore Playing Fields. The Irish Wetland Bird Survey (I-WeBS) undertake seasonal waterbird counts at key wetland sites around Ireland which do on occasion include terrestrial sites (such as fields and parklands) if they are known to accommodate populations of waterbirds on a regular basis. Playing fields away from the shore, such as Nolan Park, are generally not included I-WeBS count sectors.

As noted above, certain SPA waterbird species will utilise grassland areas outside of the SPA boundary for foraging and / or roosting. A review of National Biodiversity Data Centre (NBDC) datasets¹¹ does not identify the well managed grassland areas of Nolan Park as accommodating large or regular numbers of wintering waterbirds. NBDC records identify 1 no. Curlew (*Numenius arquata*) and 1 no. Oystercatcher (*Haematopus ostralegus*) as having been noted within these playing fields during both 2016 and 2017.

Wintering bird surveys were undertaken within a range of terrestrial sites / grassland areas within Galway City and environs as part of the ecological studies associated with the N6 Galway City Ring Road Scheme¹². These wintering bird surveys included the Nolan Park amenity grassland areas with wintering bird counts being undertaken during 2014/2015. Results of wintering bird surveys are given in Table 5-2 below. The surveys identified small numbers of Black-headed gull and small numbers of Curlew as having been recorded within the Nolan Park playing fields. Black-headed gull are a qualifying interest species (QI) of Inner Galway Bay SPA and Lough Corrib SPA. Curlew is a QI species of Inner Galway Bay SPA. The peak number of Black-headed gull is noted to be 31 and the peak number of Curlew recorded is noted to be 9 birds.

Given that Nolan Park is within a densely populated and busy residential area, bird species using Nolan Park playing fields will likely have become acclimatised and habitualised to human activity to a certain degree considering the usage of the playing fields by the local population. Given the relatively low numbers of bird species counted within the park and given the levels of human activity that already occurs within the park, the installation and usage of a cycleway on Renmore Avenue (adjacent to the park) will not likely lead to disturbance or displacement of significant or large numbers of QI waterbird species. It is considered that the installation and usage of the cycleway along Renmore Avenue will not lead to impacts on the waterbird species of Inner Galway Bay, or any other European site, in view of their conservation objectives.

¹¹ <https://maps.biodiversityireland.ie/Map>

¹² <http://www.n6galwaycityringroad.ie/>

Table 5-2 Wintering bird survey; species and counts for Nolan Park.

Nolan Park Site Code	Date	Species Common Name	Count	SPA Qualifying Interest species
WB29	25/09/2014	Black-headed gull	9	Inner Galway Bay SPA, Lough Corrib SPA
WB29	03/12/2014	Black-headed gull	25	Inner Galway Bay SPA, Lough Corrib SPA
WB29	28/01/2015	Black-headed gull	13	Inner Galway Bay SPA, Lough Corrib SPA
WB29	12/03/2015	Black-headed gull	4	Inner Galway Bay SPA, Lough Corrib SPA
WB29	25/02/2015	Black-headed gull	31	Inner Galway Bay SPA, Lough Corrib SPA
WB29	03/12/2014	Curlew	7	Inner Galway Bay SPA
WB29	28/01/2015	Curlew	9	Inner Galway Bay SPA
WB29	25/02/2015	Curlew	2	Inner Galway Bay SPA
WB29	22/10/2014	Hooded Crow	10	No
WB29	03/12/2014	Hooded Crow	8	No
WB29	22/10/2014	Jackdaw	55	No
WB29	03/12/2014	Oystercatcher	17	No
WB29	28/01/2015	Oystercatcher	52	No
WB29	12/03/2015	Oystercatcher	1	No
WB29	25/02/2015	Oystercatcher	9	No
WB29	03/12/2014	Starling	33	No

It is considered that the location, scale and operation of the proposed project is such that it will not contribute to impacts on bird species for which the Inner Galway Bay SPA has been designated.

Galway Bay Complex SAC is designated for the protection of a range of estuarine and coastal habitats such as intertidal mudflats, sand flats, coastal lagoons, inlets, bays, reefs and areas where halophytic vegetation has colonised the mud, sand (salt meadows and *Salicornia*). The SAC is also designated for the protection of terrestrial habitats which include limestone pavements, turloughs, grasslands and wetlands. There are also 2 no. of protected species detailed as the qualifying interest of the SAC; Otter and Harbour Seal.

The NPWS Conservation Objective documentation for the SAC was reviewed to determine the location of qualifying interest habitats, such as Perennial vegetation on stony banks [1220], within the vicinity of Ballyloughane Strand and site documentation does not record any qualifying interest habitats within the area of the public beach.

The proposed route alignment actively avoids intersecting with Galway Bay Complex SAC. The alignment of the proposed route does not encroach into any of the qualifying interest habitats associated with the SAC nor does it encroach on habitats that would be utilised by otters or seals. As such there will be no direct impacts, such as loss of SAC habitat, as a result of the construction of the project on the qualifying interest habitats and species of the SAC.

The construction of the route will result in an increase in numbers of cyclists trafficking the coastal area of Galway Bay at Ballyloughane Strand, this increase in numbers of people in the general

area of the beach is considered unlikely to have any significant impact on the SAC as the route is remote from any qualifying interest habitats.

Surface water drainage from the hard standing areas of the route will utilise the existing road drainage network. The alignment of the route is along existing roadways and footpaths (with occasional land take of roadside grass verges) and as such significant impacts on surface water drainage flows are not anticipated from the construction of the route. Similarly, no significant pollution related impacts are anticipated on the road drainage system from cycle or pedestrian usage of the Active Travel route. The proposed project is located within the Clarinbridge groundwater body (EPA Code: IE_WE_G_0008). However, the excavations associated with the construction of the proposals will be relatively shallow (ca. <500mm) and therefore no significant impacts on groundwater are likely. As such there are no indirect impacts through hydrological or hydrogeological pathways anticipated, either during the construction or operation of the route, on Galway Bay Complex SAC.

The construction of the route will involve shallow excavations (ca <500mm) to facilitate path formation and as such significant impacts on local groundwater are not anticipated, therefore impacts on Galway Bay through hydrogeological pathways is precluded.

Given the nature, scale and location of the proposed route it is considered that the construction and operation of the proposed project will not have a likely significant effect on the qualifying interest habitats and species of Galway Bay Complex SAC and Inner Galway Bay SPA.

Table 5-3 Screening of SAC qualifying habitats for Galway Bay Complex SAC.

Habitat / Species	Comment	Screening Statement
Galway Bay Complex SAC		
- Mudflats and sandflats not covered by seawater at low tide [1140] - Coastal lagoons [1150] - Perennial vegetation of stony banks [1220] - Salicornia and other annuals colonising mud and sand [1310] - Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>) [1330] - Mediterranean salt meadows (<i>Juncetalia maritimi</i>) [1410] - Large shallow inlets and bays [1160] - Reefs [1170] - Vegetated sea cliffs of the Atlantic and Baltic coasts [1230]	The alignment of the proposed route is dominated by hard standing areas such as roadways and pathways. Coastal and Estuarine habitats do not occur with the proposed sites for the route. Given the nature, scale and location of the proposed project, it is not considered likely that the proposed project will impact either directly or indirectly on these habitats.	Screened out.
<i>Juniperus communis</i> formations on heaths or calcareous grasslands [5130] - Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>) (*important orchid sites) [6210] - Limestone pavements [8240]	The alignment of the proposed route is dominated by hard standing areas such as roadways and pathways. Grassland and pavement habitats do not occur with the proposed sites for the route. Given the nature, scale and location of the proposed project, it is not considered likely that the proposed project will impact either directly or indirectly on these habitats.	Screened out.

- Turloughs [3180] - Calcareous fens with <i>Cladium mariscus</i> and species of the <i>Caricion davallianae</i> [7210] - Alkaline fens [7230]	The alignment of the proposed route is dominated by hard standing areas such as roadways and pathways. Wetland habitats do not occur with the proposed sites for the route. Given the nature, scale and location of the proposed project, it is not considered likely that the proposed project will impact either directly or indirectly on these habitats.	Screened out.
<i>Lutra</i> (Otter) [1355]	The alignment of the proposed route is dominated by hard standing areas such as roadways and pathways. There are no watercourses capable of accommodating otters within the project site. Given the location scale and nature of the project there is no risk of disturbance to otters during either the construction or operation of the proposed route. Given the nature, scale and location of the proposed project, it is not considered likely that the proposed project will impact either directly or indirectly on otters.	Screened out.
<i>Phoca vitulina</i> (Harbour Seal) [1365]	The alignment of the proposed route is dominated by hard standing areas such as roadways and pathways. There are no waterbodies within the project site. Given the nature, scale and location of the proposed project, it is not considered likely that the proposed project will impact either directly or indirectly on seals.	Screened out.
Inner Galway Bay SPA		
- Black-throated Diver (<i>Gavia arctica</i>) [A022] - Great Northern Diver (<i>Gavia immer</i>) [A003] - Cormorant (<i>Phalacrocorax carbo</i>) [A017] - Grey Heron (<i>Ardea cinerea</i>) [A028] - Light-bellied Brent Goose (<i>Branta bernicla hrota</i>) [A046] - Wigeon (<i>Anas penelope</i>) [A050] - Teal (<i>Anas crecca</i>) [A052] - Red-breasted Merganser (<i>Mergus serrator</i>) [A069] - Ringed Plover (<i>Charadrius hiaticula</i>) [A137] - Golden Plover (<i>Pluvialis apricaria</i>) [A140] - Lapwing (<i>Vanellus vanellus</i>) [A142] - Dunlin (<i>Calidris alpina</i>) [A149] - Bar-tailed Godwit (<i>Limosa lapponica</i>) [A157] - Curlew (<i>Numenius arquata</i>) [A160]	The alignment of the proposed route is dominated by hard standing areas such as roadways and pathways. There are no sites within the alignment of the routes suitable as foraging or nesting sites for bird species associated with the SPA. Given the nature, scale and location of the proposed project, it is not considered likely that the proposed project will impact either directly or indirectly on the qualifying interest bird species of Inner Galway Bay SPA.	Screened out.

• Redshank (<i>Tringa totanus</i>) [A162] • Turnstone (<i>Arenaria interpres</i>) [A169] • Black-headed Gull (<i>Chroicocephalus ridibundus</i>) [A179] • Common Gull (<i>Larus canus</i>) [A182] • Sandwich Tern (<i>Sterna sandvicensis</i>) [A191] • Common Tern (<i>Sterna hirundo</i>) [A193] • Wetland and Waterbirds [A999]		
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5.4. In-combination Impacts

Galway City Development Plan (GCDP) 2017-2023 sets out policies and objectives for the development of Galway City. The Plan aims to promote the sustainable development and improvement of the economic, environmental, cultural and social aspects of Galway. Throughout the preparation of the GCDP, the Appropriate Assessment process was integrated into the various stages of the plan process and has guided preparation of development scenarios for the city. A Natura Impact Report accompanied the Draft GCDP and addressed Stage 1 Appropriate Assessment and Stage 2 Natura Impact Report.

The findings of the NIR are as follows: -

'The NIR findings are that the Plan implementation has the potential to result in impacts to the integrity of European sites, if unmitigated. The risks to safeguarding the integrity of the qualifying interest and conservation objectives of the European sites have been addressed by the inclusion of measures that will prioritise the avoidance of impacts in the first place and the mitigation of impacts where they cannot be avoided. In addition, all lower level plans and projects arising through the implementation of the Plan will be themselves be subject to the Appropriate Assessment process.'

'An assessment of the potential cumulative impacts and in-combination effects of the Draft Plan concluded that through the implementation of the overarching policies and objectives of the Plan no negative in-combination effects for other plans and projects to European sites are expected through the implementation of the Plan. Having incorporated the mitigation measures, the NIR concluded that it is considered that the GCDP 2017-2023 will not have a significant adverse effect on the integrity of European sites.'

Ardaun is an area to the east of Galway City and the Draft Ardaun Local Area Plan 2018-2024 outlines as a strategic goal; *'to create a high quality, mixed use, urban village that will support a strong and sustainable neighbourhood and facilitate access to a range of services and community facilities'*. The Draft Plan was subject to the Appropriate Assessment process which concludes; *'...based on objective scientific information, the proposed Ardaun LAP, individually or in combination with other plans or projects, will not have a significant effect on any European sites'*.

The Galway Cycle Network Phase 1 is to be undertaken in a phased basis with different cycleway and Active Travel routes being constructed at separate times on separate roadways. Outside of Ballyloughane Road and Renmore Avenue, the remaining routes forming Phase 1 of the Galway Cycle Network are scheduled to be constructed subsequent to the proposed project. The proposed project will likely be in operation whilst construction of these other cycleway network routes is being progressed. These other sections of cycleways are entirely along the urban roadways of Galway City. Given the nature, scale and location of these other proposed cycleway projects, and as no impacts on any European site are anticipated from the proposed project, it is considered the proposed Ballyloughane Road and Renmore Avenue project will not act in combination to give rise to any cumulative impacts on any European site.

The N6 Galway City Ring Road scheme and the Port of Galway Redevelopment project were also considered. The aforementioned projects are subject to the appropriate assessment process and are remote from the proposed Active Travel route and as such it is considered they will not act in combination with the proposed route to give rise to in-combination impacts on the European sites associated with Galway Bay.

A search of the Galway City Council Planning Finder was conducted in October 2021 to determine if there are any granted developments within the vicinity of the proposed project which could act in combination with the proposed project to create cumulative impacts. This search identified in excess of 100 no. granted developments since 2015, the majority of which are small scale developments such as single residential properties, and extension works. A number of granted developments within vicinity of the proposed project include;

- Galway Mayo Institute of Technology. Extension of Duration for the development of 2-storey multi-functional sports building, (1876). Granted 13/3/2018. This development will be constructed north of the proposed project and accessed off Dublin Road (with which Ballyloughane Road terminates) and Ballybane Road. This planning permission is an extension of duration from a previous planning application for the same development.
- Welcorrib Limited & Trigo Property Company. Extension of Duration for the demolition of the existing hotel structure (1517). Granted 28/1/2015. This demolition project will be located ca. 0.4km east of the proposed project. This demolition project was granted extension of duration in 2015 for the demolition of the existing hotel structure,
- Galway Mayo Institute of Technology. Construction of a new stem building (19299). Granted 20/12/2019. This development will be constructed ca. 0.3km from the proposed project.
- Liam Mellows GAA Club. Extension of Duration for the construction of a new playing pitch and public walkway/cycleway (1785). Granted 30/05/2017. This development is located ca. 0.4km west of the proposed project and will be accessed via. the Ballyloughane Road along which the proposed project will be located.
- Gaelscoil Dara. Planning Permission for two storey handball pen and associated works (2014). Granted 29/07/2020. This development will be located within the grounds of the existing school development and will be separated from the proposed project via. the existing school buildings.
- The Brothers of Charity Services. Planning Permission for a single storey special school, ancillary storage shed and associated site works (18398). Granted 25/04/2019. This development is located ca. 0.2km west of the proposed project.

Given the scale and nature of the proposed project and the fact that significant impacts are not anticipated on any European site, the proposed project will not act in combination with these granted developments to create significant impacts.

NPWS site documents outline the main high threats and pressures on the European sites within the Zol of the proposed project as being from shipping lanes, ports, marine constructions, pollution to surface waters from household sewage, waste waters, agricultural and forestry activities, sea defence or coast protection works, tidal barrages, industrial ports, discharges, urbanised areas, human habitation and reclamation of land from sea, estuary or marsh. It is considered unlikely that the proposed project will act in combination with the threats and pressures identified in the NPWS site documents to give rise to significant effects on the European sites within the Zol of the proposed project.

Thus, in summary, no proposed projects or plans were identified that would, in-combination with the proposed project, have likely significant effects on the European sites within the Zol of the proposed project, or any other European site.

5.5. Likelihood of Significant Effects on European Sites

Due to the scope and nature of the proposed project, it is considered that the proposed project, either alone or in combination with other plans or projects, will not result in likely significant effects on the Galway Bay Complex SAC or Inner Galway Bay SPA, or any other European site, in view of their conservation objectives.

5.6. Consideration of Findings

This Screening for Appropriate Assessment report is based on the best available scientific information. It is concluded by the authors of this report that the proposed Galway Cycle Network Phase 1 – Work Package 01 Ballyloughane Road and Renmore Avenue project, either alone or in combination with other plans or projects, does not pose likely significant effects on European sites.

Thus, it is recommended that is it not necessary for the proposed project to proceed to Appropriate Assessment.

Should the scope, nature or extent of the proposed project change, a new Screening for Appropriate Assessment report shall be required.

6. Appropriate Assessment Screening Matrix

Table 6-1 Screening Matrix.

1. Description of the project or plan	
Location	Galway Bay Complex SAC Inner Galway Bay SPA
Distance from designated site	Adjacent to the proposed project
Brief Description of the project or plan	See Section 1.1
Is the plan directly connected with or necessary to the site management for nature conservation?	No

2. Brief Description of the European site(s)	
Name	Galway Bay Complex Inner Galway Bay
Site designation status	SAC SPA
Qualifying interests	See Table 4-1
Unit size	14402.77ha (89.58% Marine) 13267.57ha (94.23% Marine)

3. Assessment Criteria	
Other plans or projects which may have a cumulative impact	There are no likely impacts arising from the proposed works on the European sites and there are no other plans or projects ongoing at the same time that would contribute to a cumulative impact on the European sites. Therefore, cumulative impacts with other projects will not occur.
Describe the individual elements of the project (either alone or in combination with other plans or projects) likely to give rise to impacts on the European sites.	See Section 1.1 for description of the proposed project.
Describe any likely direct, indirect or secondary impacts of the project (either alone or in combination with other plans or projects) on the European site by virtue of: Size and scale	The location and scale of the proposed project is such that direct or indirect impacts are not considered likely.

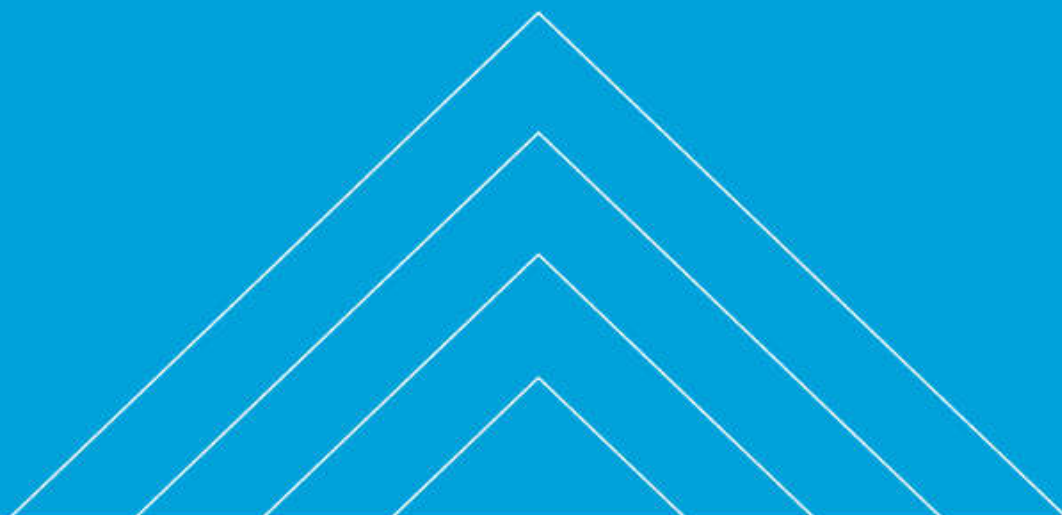
3. Assessment Criteria	
Land-take Distance from European site or key features of the site Resource requirements Emissions Excavation requirements Transportation requirements Duration of construction, operation etc. Others	
Describe any likely changes to the site arising as a result of: Reduction of habitat area Disturbance of key species Habitat or species fragmentation Reduction in species density Changes in key indicators of conservation value Climate change	There are no likely changes to the site as a result of the proposed works. There shall be no reduction of habitat area within European sites as a result of the proposed project. There shall be no habitat or species fragmentation or reduction in species density as a result of the works.
Describe any likely impacts on the European site as a whole in terms of: Interference with the key relationships that define the structure of the site Interference with key relationships that define the function of the site.	There are no likely changes to the site as a result of the proposed project works with respect to the key relationships that define the structure or function of the SAC/SPA.
Provide indicators of significance as a result of the identification of effects set out above in terms of: Loss Fragmentation Disruption Disturbance Change to key elements of the site	There is no potential for impact to qualifying interests of the SAC/SPA given the nature and scale of the works.
Describe from the above those elements of the project or plan, or combination of elements, where the above impacts are likely to be significant or where the scale of magnitude of impacts is not known.	No significant impacts are likely as a result of the proposed works.

Data collected to carry out the assessment			
Who carried out the assessment	Sources of data	Level of assessment completed	Where can the full results of the assessments be accessed and viewed?
Atkins 150 Airside Business Park Swords Co. Dublin	Desktop data derived from the NPWS – Natura 2000 form, site synopsis, SAC/SPA reports etc. National Biodiversity Data Centre online data. EPA Envision Mapping system; Google maps; Bing Maps etc. Galway City Council Planning Enquiry System	Screening	Atkins 150 Airside Business Park Swords Co. Dublin

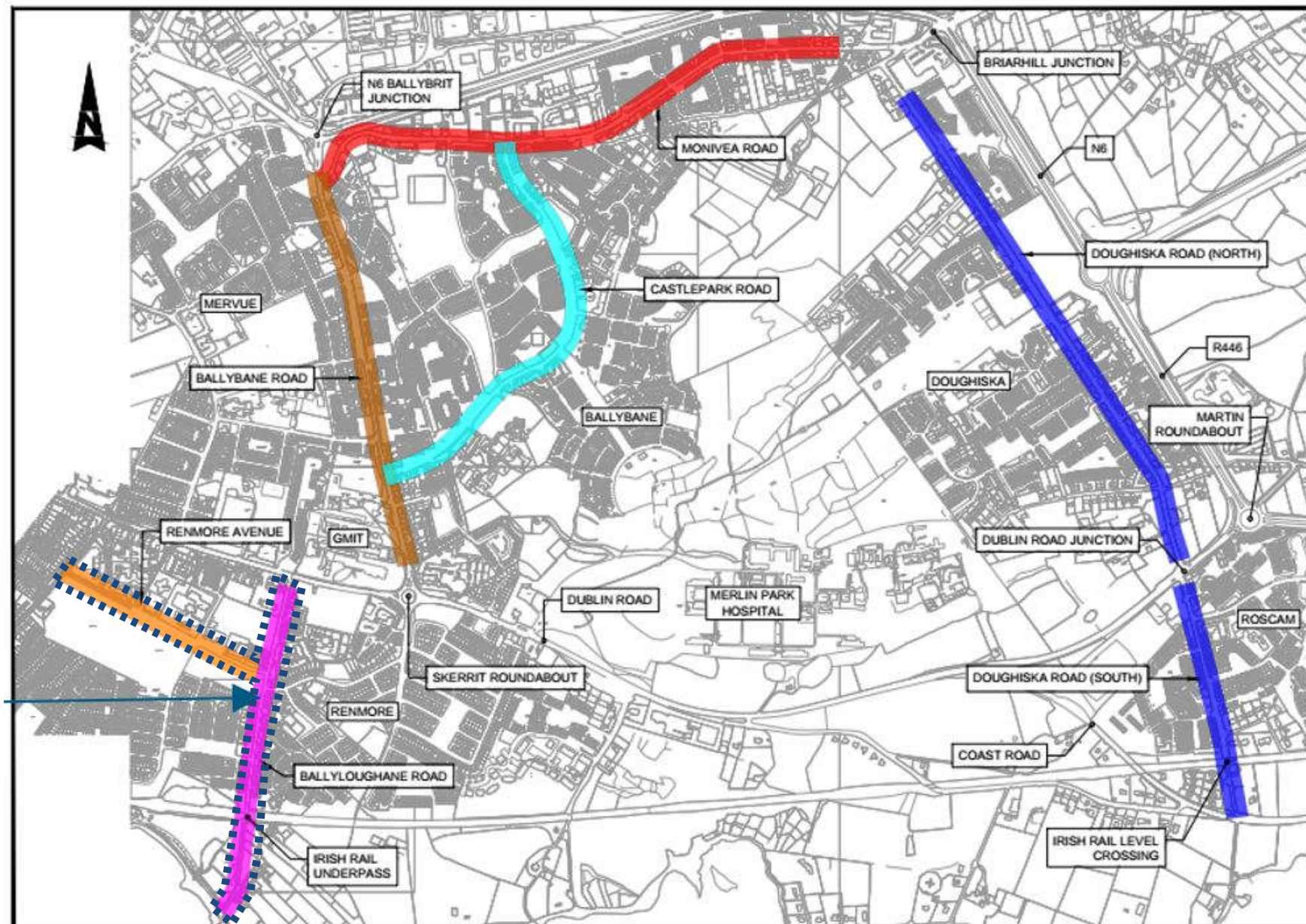
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- N6 Galway City Ring Road Scheme – EIAR (2018) - <http://www.n6galwaycityringroad.ie/>

Appendices



Appendix A. Project Site Extents



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