

Meath County Council Newtown Trim Active Travel Scheme

DMURS Quality Report (Including Stage 1/2 Road Safety Audit)





Tionscadal Éireann Project Ireland 2040



NEWTOWN TRIM ACTIVE TRAVEL SCHEME

DMURS Quality Audit (Including Stage 1/2 Road Safety Audit)

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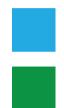




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1.0 INTRODUCTION

1.1 DESCRIPTION OF THE SCHEME

1.1.1 Background

TOBIN Consulting Engineers have been commissioned by Meath County Council to provide design consultancy services for the Newtown Road Trim Active Travel Scheme. This DMURS Quality Audit report aims to assess the scheme from the perspective of the Design Manual for Urban Roads and Streets on aspects of safety, accessibility and streetscape.

This project includes the provision of new/improved pedestrian facilities along the Newtown Road (L8017) and a section of the Old Lackanash Road (L8016) in Trim, connecting the R161 Navan Road to existing pedestrian infrastructure on the L8016 Old Lackanash Road. The proposed scheme will provide continuity of pedestrian facilities from the N161 to the R154 on the South and Eastern side of a large housing development on the outskirts of the town.

New infrastructure will aim to connect to existing on the R161 at the junction with the L8017 and will follow the L8017 south for a distance 470m. From this point the pedestrian facilities will be taken offline into a green field site on the Western side of the Newtown Road for a distance of 200m. The offline facilities will then connect into an existing path which provides pedestrian access to the Newtown Abbey Housing estate from the Old Lackanash Road. The total length of the scheme is approximately 675m (Figure 1-1).

Trim is a heritage town situated on the River Boyne and is noted for Trim Castle the largest Norman Castle in Ireland. The Trim community has a very strong pride of place having recently won the Irish Tidy Towns Competition 2022. Trim lies within easy reach of Navan and Dublin, located in the southwest of County Meath. The medieval walled town of Trim has immense heritage significance and is located circa 14km from Navan and 20km from Dunshaughlin. The town enjoys the benefits of being located in an attractive setting along the banks of the River Boyne. The town and Trim Castle attract over 100,000 visitors a year and is well known internationally. Trim is identified for inclusion in the Urban Regeneration and Development Fund due to the high level of employment in the town. A range of enterprises are present in a compact attractive town centre, supporting employment opportunities. There are also enterprise zones at Oaktree Business Park, Scurlockstown Business Park and employment lands to the south of the Navan Road.

This scheme will deliver high quality pedestrian facilities along a busy section of road that has no, or substandard pedestrian facilities. It will improve safety for pedestrians by the provision of dedicated walking facilities with public lighting. It will create a sustainable mode of active travel access to the primary and secondary schools in the town and to local amenities. It will provide improved linkages to public transport on the R161 and the R154 and will encourage walking as a sustainable mode of transport for workers in the Town Centre and the Trim Retail Park. It is envisaged that most of the new walking facilities can be accommodated in the road curtilage, but some additional lands may be required from private landowners.



1.1.2 The Scheme

The proposed development will consist of:

- Provision of pedestrian facilities along Newtown Road (L8017).
- Provision of pedestrian facilities along offline section on greenfield site North of the Old Lackanash Road (L8016)/Newtown Road (L8017) Junction.
- Provision of an earth retaining structure along the Newtown Road to provide crosssectional width for pedestrian facilities.
- All associated ancillary highway works relevant (drainage, utilities, public lighting, KFPA, signs and lines and pavement design).

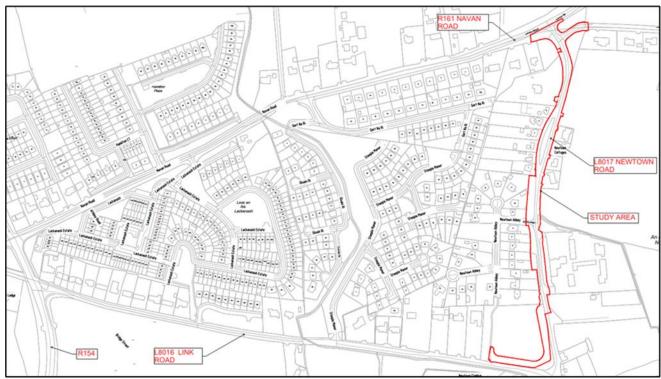


Figure 1-1 Proposed Scheme Extents



2.0 QUALITY AUDIT

Quality Audit is a defined process, independent of, but involving, the design team that, through planning, design, construction and management stages of a project provides a check that high quality places are delivered and maintained by all relevant parties, for the benefit of all end users. Quality Audit is a process, applied to urban roads, traffic management or development schemes, which systematically reviews projects using a series of discrete but linked evaluations and ensures that the broad objectives of place, functionality, maintenance and safety are achieved.

Quality Audit was introduced in the publication Design Manual for Urban Roads and Streets following concerns that in the design of new streets provisions made for motor vehicles frequently led to a poorly-designed public realm. In an urban area there is a high level of competing demand from different classes of road users. A well-balanced street should have minimal visual clutter and obstacles; incorporating durable materials and most importantly, will encourage a degree of negotiation between road users as they make their way through it.

Quality Audit involves various assessments of the impacts of a street scheme in terms of road safety, visual quality and the use of streets by the community. Access for people with additional needs, pedestrians, cyclists and drivers of motor vehicles is considered.

In the context of a Quality Audit, a road safety assessment is considered to be an appropriate method of examining road safety issues as it incorporates both the hazard identification techniques used in road safety audit (RSA) and formal risk assessment techniques. This allows the opportunity at an early stage for road safety issues to be considered in a more dynamic way within the design process, and to ensure that safety issues are considered as part of the design rather than after design work is completed.

The Quality Audit Team reports findings with suggestions for future action. It should be noted that, in a Quality Audit, it is not the intention that suggestions would be binding on the design team; they are offered for detailed consideration in the design process.

DMURS states that Quality Audits should consist of the following parts:

- DMURS Street Design Audit
- Individual Design Audits
- Quality Audit Report



3.0 METHODOLOGY

The Design Audit Team for the Quality Audit (Independent of the Road Safety Audit Team – Outlined in Chapter 5) was as follows:

Ronan Murtagh Chartered Engineer MIEI
 David McHugh Associated Engineer MIEI

Road safety, non-motorized users, visual quality, people with additional and functionality were considered in the Quality Audit. This exercise focused on issues such as:

- the design rationale as it related to vehicle, cycle and pedestrian movements;
- pedestrian desire lines both to and through the site;
- access requirements for all modes of transport;
- access requirements for disabled people and other vulnerable users;
- any road safety concerns associated with the scheme;
- the visual appearance of the scheme as it is experienced by those entering it and moving around within the street, including how this affects road user behavior; and
- any other issues considered relevant to each constituent element of the Quality Audit process.

Multiple Site Visits have been carried out by the Audit Team to enable the generation of the Quality Audit and the individual audits within. These site visits included:

• Assessment of existing infrastructure for Walkability, Accessibility and Cycle Audit

The documents provided for the audit were:

Drawing Number	Drawing Title
11587-2000	Location Map
11587-2001	Scheme Plan
11587-2002-2004	Area provided by employer
11587-2100-2102	Site Clearance
11587-2200-2202	Drainage Plan
11587-2300-2310	Geometric Design
11587-2420-2422	Kerbing and Paved Areas
11587-2500-2502	Traffic Signs and Road Markings
11587-2580-2582	Public Lighting
11587-2800-2802	Landscaping
11587-2900-2902	Earthworks

Copies of these audited drawings are contained in Appendix B of the Part 8 Particulars.

In accordance with DMURS Advice Note No. 4 May 2019 (contained on https://www.dmurs.ie/supplementary-material) a Quality Audit should always contain a DMURS Street Design Audit and Other Design Audits (as required). Section 4 of this report contains the Street Design Audit and Section 5 contains the Other Design Audits (Road Safety, Walking, Cycling, Accessibility). The Street Design Audit is in the format provided as a template on the DMURS website.



4.0 STREET DESIGN AUDIT

The use of DMURS in urban areas is mandatory and the DMURS Street Design Audit is an auditing tool that can be used to ensure that the relevant issues contained within DMURS have been duly considered.

The DMURS Street Design Audit is primarily concerned with four major aspects of street design:

- Connectivity
- Self-Regulating Street Environment
- Pedestrian and Cycling Environment
- Visual Quality

The Street Audit focuses on ensuring a place based / integrated approach to design has been incorporated and based around 4 core principles:

- 1. To support the creation of integrated street networks which promote higher levels of permeability and legibility for all users, and in particular more sustainable forms of transport. DMURS Chapter 3
- 2. The promotion of multi-functional, place-based streets that balance the needs of all users within a self-regulating environment DMURS Chapter 4
- 3. The quality of the street is measured by the quality of the pedestrian environment DMURS Chapter 4
- 4. Greater communication and co-operation between design professionals through the promotion of a plan-led, multidisciplinary approach to design DMURS Chapter 5

The DMURS Street Design Audits consists of a series of short tables that can be used to cross check a design against the principles, approaches and standards contained within DMURS. In doing so, it should be clear that:

- The issue is relevant or not relevant.
- The issue has been considered in accordance with the principles of DMURS.
- The issue is addressed in a more detailed design audit (see Section 3.2)
- The relevant approach or standard has been applied.
- Or if not, why not, and what mitigation measures have been applied (i.e. what is the alternative solution).

The Street Design Audit for the Newtown Trim Active Travel Scheme has been carried out using the template as provided from www.dmurs.ie and is shown below



Design Manual for Urban Roads and Streets Street Design Audit

Prepared in respect of: Newtown Road Active Travel Scheme

Prepared by: TOBIN Consulting Engineers



Date: 26/07/2023



Connectivity & Connected Networks

Key Issues	Key DMURS Reference.	Design Response
Strategic routes/major desire lines have been identified and are clearly being incorporated into the	3.1 – Integrated Street Network	This scheme will complete missing pedestrian connectivity along the Newtown Road (L8017) and Old Lackanash Road (L8016) in Trim, connecting the R161 to the R154 on the south and eastern side of a large housing development on the outskirts of the town. The Scope of the project is to provide updated junction arrangements that provide multiple controlled crossing points along the R147, including a signalised crossing at the R147 / The Dales to help significantly improve permeability.
design.	3.2.1 – Movement Function	This scheme will deliver high quality pedestrian facilities along a busy section of road that has no, or substandard pedestrian facilities. The scheme aims cater for the movement of a greater number of pedestrians.
	3.3.1 – Street layouts	The design will provide upgraded pedestrian facilities along the Old Lackanash Road (L8016) and complete missing sections of footpath along western side of the Newtown Road (L8017) making wayfinding easier and safer for vulnerable road users.
	3.3.4 - Wayfinding	Improved alignment and desire lines are being provided for pedestrians through improved alignments and upgrading existing footpaths.
Improvements to points of access are provided to the site/place, in particular for	3.3.1 – Street Layouts	No new points of access are being created as part of this design. The existing access points have been improved by realigned footpaths. A section of the proposed footway alignment is moved offline from the carriageway which will minimise potential conflict points with motorised road users and vulnerable road users.
sustainable modes.	3.3.3 - Retrofitting ¹	This project retrofits an existing urban street with new footpaths which will improve pedestrian connectivity between the R161 and the R154.

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¹ When connecting with existing communities a detailed analysis and extensive community consultation should be carried out to identify the optimal location for connections (refer also to the NTA Permeability in Existing Urban Areas: Best Practice Guide).



Accessibility throughout the site is maximised for pedestrians and cyclists, ensuring route choice.	3.3.1 – Street Layouts 3.3.2 – Block Sizes 3.4.1 – Vehicle Permeability	The provision of a new footpath and upgrade of existing sections will improve pedestrian connectivity along the Newtown Road (L8017) and Old Lackanash Road (L8016) in Trim. The continuation of footpath facilities and provision of a crossing point linking the carpark to the south of the Old Lackanash Road to the footpath on the Northerns side of the road will increase permeability. The design increases permeability and legibility by providing new a new designated footpath along the Northern side of Old Lackanash Road and Western side of the Newtown Road which currently does not exist making wayfinding easier and safer for vulnerable road users. Design has included raised tables, signage to help maintain low operational speeds. Vehicle permeability is retained to all private and public accesses however a much greater control has been placed on the access and egress points to the carriageway by limiting the junction radii to 6m and inclusion of raised table crossing points. Due to the limited space available an offline cycling provisions has not been provided on the scheme.
Through movements by private vehicles on local streets are discouraged by an appropriate level of traffic calming measures.	3.2.1 - Movement Function 3.2.3 - Place Context 3.4.1 - Vehicle Permeability	The development is the provision of a new footpath and upgrade of existing sections will improve pedestrian connectivity along the Newtown Road (L8017) and Old Lackanash Road (L8016) in Trim. The scheme is situated on the south and eastern side of a large housing development on the outskirts of the town. This scheme will complete missing pedestrian connectivity along the Newtown Road (L8017) and Old Lackanash Road (L8016) in Trim, connecting the R161 to the R154. Footpath realignments and material proposals aim to cater for the higher levels of pedestrian movements whilst focusing on design elements to calm traffic and increase ease of movement for more vulnerable road users.



Self-Regulating Street Environment & Multi-Functional Streets

Key Issues	Key DMURS Reference.	Design Response
A suitable range of design speeds have been applied with regard to context and function.	 3.2.1 - Movement Function. 3.2.2 - Place Context. 4.1.1 - A Balanced Approach to Speed² 	The scheme is situated on the south and eastern side of a large housing development on the outskirts of the town. Footpath realignments and material proposals aim to cater for the higher levels of pedestrian movements whilst focusing on design elements to calm traffic and increase ease of movement for more vulnerable road users.
The street environment will facilitate the creation of a traffic calmed environment via the use of 'softer' or passive measures. ³	4.2.1 – Building Height and Street Width 4.2.2 – Street Trees 4.2.3 – Active Street Edges	Introduction of a defined footpath width, kerbing and raised tables intend to reduce the current operational speed at junctions and complement existing traffic control measures i.e. speed ramps, vehicle activation signs and signalised crossings. Low corner radii will ensure vehicles entering or leaving public and private
	4.2.4 – Signage and Line Marking	accesses centre can only do so at low speed to again generate a softer traffic calmed environment.

² Refer also to the National Speed Limit Guidelines

³ In retrofit situations a detailed analysis should be carried out to establish what measures exist, what their likely effectiveness is and level of intervention required to achieve the designed design speed.



	4.2.7 - Planting 4.4.2 - Carriageway Surfaces 4.4.9 - On-Street Parking Advice Note 1 - Transitions and Gateways	
A suitable range of design standards/measures have been applied that are consistent with the applied design speeds.	4.4.1 - Carriageway Widths 4.4.4 - Forward Visibility 4.4.5 - Visibility Splays 4.4.6 - Alignment and curvature 4.4.7 - Horizontal and Vertical Deflections Advice Note 1 - Transitions and Gateways	Design standards as outlined in DMURS have been adopted to improve the existing carriageway widths, road geometry, forward and junction visibilities and horizontal and vertical deflections throughout the scheme.



Pedestrian and Cycling Environment

Key Issues	Key DMURS Reference.	Design Response
The built environment contributes to the creation of a safe and comfortable pedestrian environment.	4.2.1 – Building Height and Street Width 4.2.3 – Active Street Edges 4.2.5 – Street Furniture 4.4.9 - On-Street parking	Given constraints on cross sectional width and focus on providing pedestrian facilities along the L8017 Newtown Road where no pedestrian facilities are currently present, no offline cycle facility is being provided. Low operational speeds offer predictability will provide safety to cyclists using the carriageway. The dwellings along the scheme are set back from the carriageway edge with accesses off the street. The active street edges will take cognisance of pedestrians, cyclists and motorised users.
Junctions been designed to ensure the needs of pedestrians and cyclists are prioritised ⁴ .	4.3.2 - Pedestrian Crossings 4.3.3 - Corner Radii 4.4.3 - Junction Design 4.4.7 - Horizontal and Vertical Deflections	The pedestrian facilities are proposed with contrasting material finishes adjacent to the carriageway to deliver additional safety and visibility to pedestrians. No swept path analysis were provided but the design team appears to have tried to ensure that corner radii are kept low, but also facilitating delivery vehicles at priority junctions. There are natural vertical deflection along the approaches in towards the town centre, along with the low corner radii and high walls, force road users to slow their vehicles in order to comfortably navigate through the town.

⁴ Refer also to the National Cycle Manual (2011)



Footpaths are continuous and wide enough to cater for the anticipated number of pedestrian movements.	3.2.1 - Movement Function. 3.2.3 - Place Context. 4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips 4.3.2 - Pedestrian Crossings	Continuous footpaths are being provided as part of the proposed design across multiple vehicular access points including provision of a new offline section with amenity areas. Footways are typically 1.8m - 2.5m in width, widening to 2.5m in the offline sections. Benches and amenity areas will be provided along the offline pedestrian section.
The particular needs of visually and mobility impaired users been identified and incorporated in the design.	4.2.5 - Street Furniture 4.3.1 - Footways, Verges and Strips 4.3.2 - Pedestrian Crossings 4.3.4 - Pedestrianised and Shared Surfaces	The Designer has been cognisant of the use of tactile paving, kerbing at shared surfaces, pedestrian crossings and height changes between areas in the proposed design to consider needs of visually and mobility impaired users. The Designer is ensuring a fully accessible scheme featuring material changes that caters for all mobility impaired users throughout.
Cycling facilities will cater for cyclists of all ages and abilities. ⁵	3.2.1 - Movement Function.3.2.3 - Place Context.4.3.5 - Cycle facilities.	Given width constraints and the focus on prioritising pedestrian facilities, space is not available with in the scheme to provide an offline cycle facility. Cyclists will share the carriageway other wheeled road users. The low corner radii and footpath realignments and shared spaces will reduce the operational speeds and improve safety for cyclists.

Visual Quality

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⁵ Refer also to the National Cycle Manual (2011)



Key Issues	Key Considerations and DMURS Ref:	Design Response
The landscape plan responds to the street hierarchy and the value of the place.	3.2.1 - Movement Function. 3.2.3 - Place Context. 4.2.2 - Street Trees 4.2.7 - Planting Advice Note 1 - Transitions and Gateways	TOBIN Consulting Engineers are liaising with Meath County Council and will continue to do so with engaged stakeholders at detailed design stage to ensure that the landscape plan is in keeping with the Planning specifications of the area and all other proposed works in Trim to ensure the project takes cognisance of the cultural heritage and aesthetic value of the town.
Street furniture is orderly placed.	 3.2.1 - Movement Function. 3.2.3 - Place Context. 4.2.5 - Street Furniture. 4.3.1 Footways, Verges and Strips 	Street Furniture will be placed cognisant of pedestrian desire lines, footpath widths and likely use of the various zones within the scheme extents. Selection of Street furniture type at detailed design will be cognisant of the place profile and be in keeping with the existing environment.
The use of signage and line marking has been minimised.	3.2.1 - Movement Function. 3.2.3 - Place Context.	Signage and line markings have been minimised within the scheme extents in favour of using material and colour changes to inform all road users.



	4.2.4 - Signage and Line Marking.	
Materials and finishes used throughout the scheme have been selected from a limited palette and respond to the value of the place?	 3.2.1 - Movement Function. 3.2.3 - Place Context. 4.2.6 - Materials and Finishes 4.2.8 - Historic Contexts. 4.3.2 - Pedestrian Crossings 4.4.2 - Carriageway Surfaces Advice Note 2 - Materials and Specifications 	Materials and finishes will be chosen at detailed design stage in consultation with Meath County Council and following close consideration of the historic context of the area. Full consideration will be given to construction guidance as outlined in DMURS Advice Note 2 – Materials and Specifications to ensure that appropriate surface and sub surface materials and construction are implemented. TOBIN are engaging with Meath County Council Planning department along with planners to ensure a design in keeping with the area and in keeping with the long-term development and planning strategy for the town of Trim.

Additional Comments



Personnel Information						
	Name	Date	Signature			
Report Prepared By:	Ronan Murtagh C.Eng	26/07/2023				
Principle Designers	David McHugh	26/07/2023				



5.0 ROAD SAFETY AUDIT

A Stage 1/2 Audit has been carried out in accordance with the relevant sections of Transport Infrastructure Ireland Publication (Standards) "Road Safety Audit" GE-STY-01024 (December 2017). The team have examined and reported only on the road safety implications of the design submitted and has not examined or verified the compliance of the design to any other criteria.

The Road Safety Audit Report has been included in Appendix A to this report.



Appendix A - Stage 1/2 Road Safety Audit Report





comhairle chontae na mí meath county council meath county council

MEATH COUNTY COUNCIL

Newtown Road Trim Active Travel Scheme

Road Safety Audit - Stage 1-2



Document Cont	Document Control Sheet			
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1. INTRODUCTION

1.0 INTRODUCTION

This report describes the Stage 1-2 Road Safety Audit carried out for the detailed design of pedestrian facilities along the Newtown Road (L8017) and Old Lackanash Road (L8016) in Trim, Co. Meath. The scheme location is shown in Figure 1-1. The extent of the Road Safety Audit is shown in Figure 1-2.

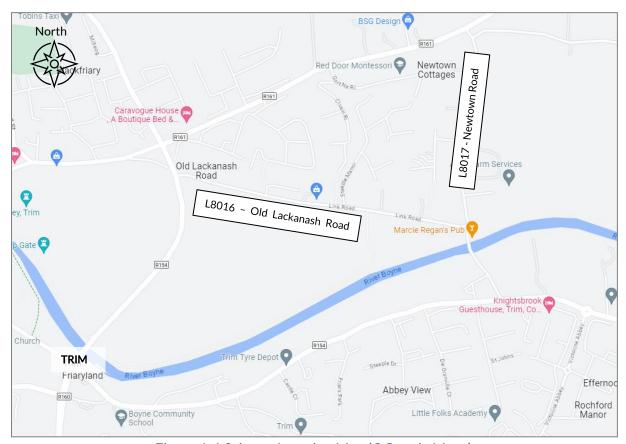


Figure 1-1 Scheme Location Map (©Google Maps)

1.1 PROPOSED SCHEME

The proposed scheme commences at the junction of the L8017 with the R161 and continues south on the L8017 to the junction of the L8016. The scheme also includes off-road footpaths in the vicinity of the L8017 / L8016 junction. The scheme is on the local roads, Newtown Road (L8017) and Old Lackanash Road (L8016). The scheme is urban within a 50 km/h speed limit with existing public lighting.

The active travel scheme will improve the existing footway width and junction treatments on the L8017 and provision of continuous footway on the R161 regional road. The scheme includes for all ancillary drainage, road marking and signage.



Figure 1-2 Extent of the Road Safety Audit

1.2 COLLISION DATA

Collision data has not been supplied with this scheme.

Road Collision Data is not currently available on the Road Safety Authority Database, and therefore the audit team has no access to the historical collision information for this site and / or adjacent roads.

1.3 AUDIT DETAILS

The audit took place in TOBIN Offices in May 2023. The audit comprised an examination of the documents provided by the Design Team and are listed in Appendix A. A site visit was carried out on Thursday, the 4^{th} of May 2023 between the hours of 15:15-16:20hr. During the site visit the weather was dry and the road surface was dry.

The audit team members were as follows, and are approved by TII, refer to Appendix B:

Audit Team Leader

 Laura Gaffney – MSc. Env. Eng., BEng (Hons) Civil Eng., CEng., MIEI. Senior Engineer for Roads & Transportation, TOBIN Consulting Engineers – TII Reference LG3386505

Audit Team Member

 Maria Rooney - BEng (Hons) Civil Eng., MEng, MIEI. Senior Engineer for Roads & Transportation, TOBIN Consulting Engineers. - TII Reference MR3384505

Audit Team Observer

 Gabriela Iha – BEng Civil Eng., MSc, MIEI. Design Engineer for Roads & Transportation, TOBIN Consulting Engineers.

This Stage 1/2 Audit has been carried out in accordance with the relevant sections of Transport Infrastructure Ireland Publication (Standards) "Road Safety Audit" GE-STY-01024 (December 2017). The team have examined and reported only on the road safety implications of the design submitted and has not examined or verified the compliance of the design to any other criteria. However, to clearly explain a problem or a recommendation, it may be necessary to refer to another Standard or Advice Note, but such reference will not conflict with the requirements of the above Terms of Reference.

The Design Team and Employer (Client) is reminded that the Road Safety Audit Feedback Form, in Appendix C, shall be completed and returned to the Road Safety Audit Team Leader for sign off.

2. ITEMS RESULTING FROM THIS ROAD SAFETY AUDIT

2.1 GENERAL

2.1.1 Problem

Sign Mounting

The Audit Team noted no mounting height details have been provided. The Audit Team are concerned pedestrians may collide with inappropriate mounted signage.

Recommendation

The design team should provide signage with suitable mounting height in accordance with the Traffic Signs Manual (TSM).

2.2 OLD LACKANASH ROAD L8016

2.2.1 Problem

Pedestrian Connectivity

The Audit Team note no link is proposed between the existing and proposed footway at the desired crossing point of the Old Lackanash Road. The Audit Team are concerned that pedestrians may jump from the proposed footpath onto the existing footway over the stone boundary wall. This dangerous behaviour, in close proximity to the live carriageway, may result in a collision between a VRU and a vehicle.

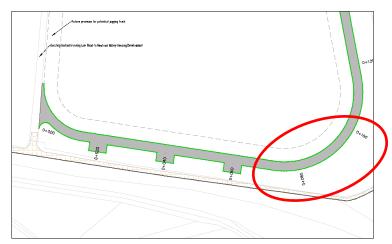


Figure 2-1 Pedestrian Desire Line with existing stone wall (Dwg No. 11587-2420-D02)

Recommendation

The design team should provide a link from the proposed footpath to the footway at the desire line.

2.2.2 Problem

Wheelchair Friendly Slope

The Audit Team noted an existing level difference between the Old Lackanash Road and Newtown Road. The audit team are concerned wheelchair users may have difficulty in traversing the incline between Ch. 80m to Ch. 100m without a level landing over the distance of the incline. This may result in loss of control of a wheelchair on the slope resulting in a fall / collision with boundary treatment.



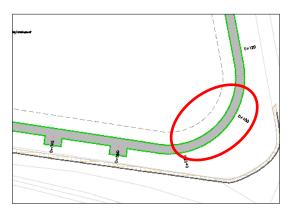


Figure 2-2 Old Lackanash Road/Newtown Road - Inclined Slope

Recommendation

The design team should provide a level landing on the inclined footway for those with mobility impairments.

2.3 NEWTOWN ROAD L8017

2.3.1 Problem

Footway Existing / Proposed Connectivity to Amenity

The Audit Team noted the proposed footpath does not link to the existing footway. The Audit Team observed the trip attraction of "Regans" on the opposite corner of the junction. The Audit Team are concerned that the pedestrians, in lieu of designated connection, will create a tracked and unpaved connection to the existing footway. This may result in a trip hazard for pedestrians.

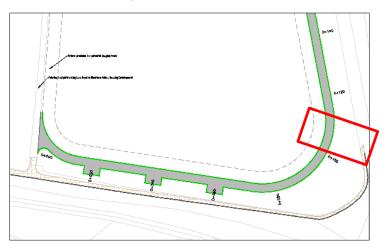


Figure 2-3 Existing / Proposed Footway (Dwg No. 11587-2420-D02)

Recommendation

The design team should provide a footpath on the desire line between the existing and proposed infrastructure.

2.3.2 Problem

End of Footway - Tactile Paving

The Audit Team noted at the end of the footway tactile paving is proposed. The Audit Team are concerned that the tactile provision is the blister buff tactile, which represents an uncontrolled crossing. Incorrect tactile paving may result in confusion to those with visual impairments. This may result in a VRU entering the carriageway in conflict with a vehicle / trip hazard within the grass verge.

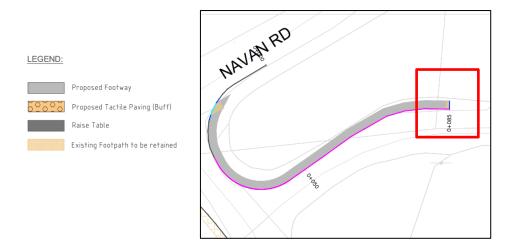


Figure 2-4 Termination of Footway - Incorrect Tactile Paving (Dwg No. 11587-2422-D02)

Recommendation

The design team should provide appropriate tactile paving at the termination of the footway.

3. AUDIT TEAM STATEMENT

We certify that we have examined the drawings and other information listed in Appendix A and visited the site during the day of the 4th of May 2023. We further certify that we are independent from the design team for the scheme. This examination has been carried out with the sole purpose of identifying any features of the design that could be removed or modified to improve the safety of the scheme. The problems that we have identified have been noted in the report, together with suggestions for improvement that in our opinion should be studied for implementation.

Signed: Lara Jathey

AUDIT TEAM LEADER

Name: Laura Gaffney

TII Reference: LG3386505 Date: 03/11/23

Position: Senior Engineer

Organisation: TOBIN Consulting Engineers

Address: Fairgreen House,

Fairgreen Road

Galway,

AUDIT TEAM MEMBER

Name: Maria Rooney Signed:

TII Reference: MR3384505 Date: 03/11/23

Position: Senior Engineer

Organisation: TOBIN Consulting Engineers

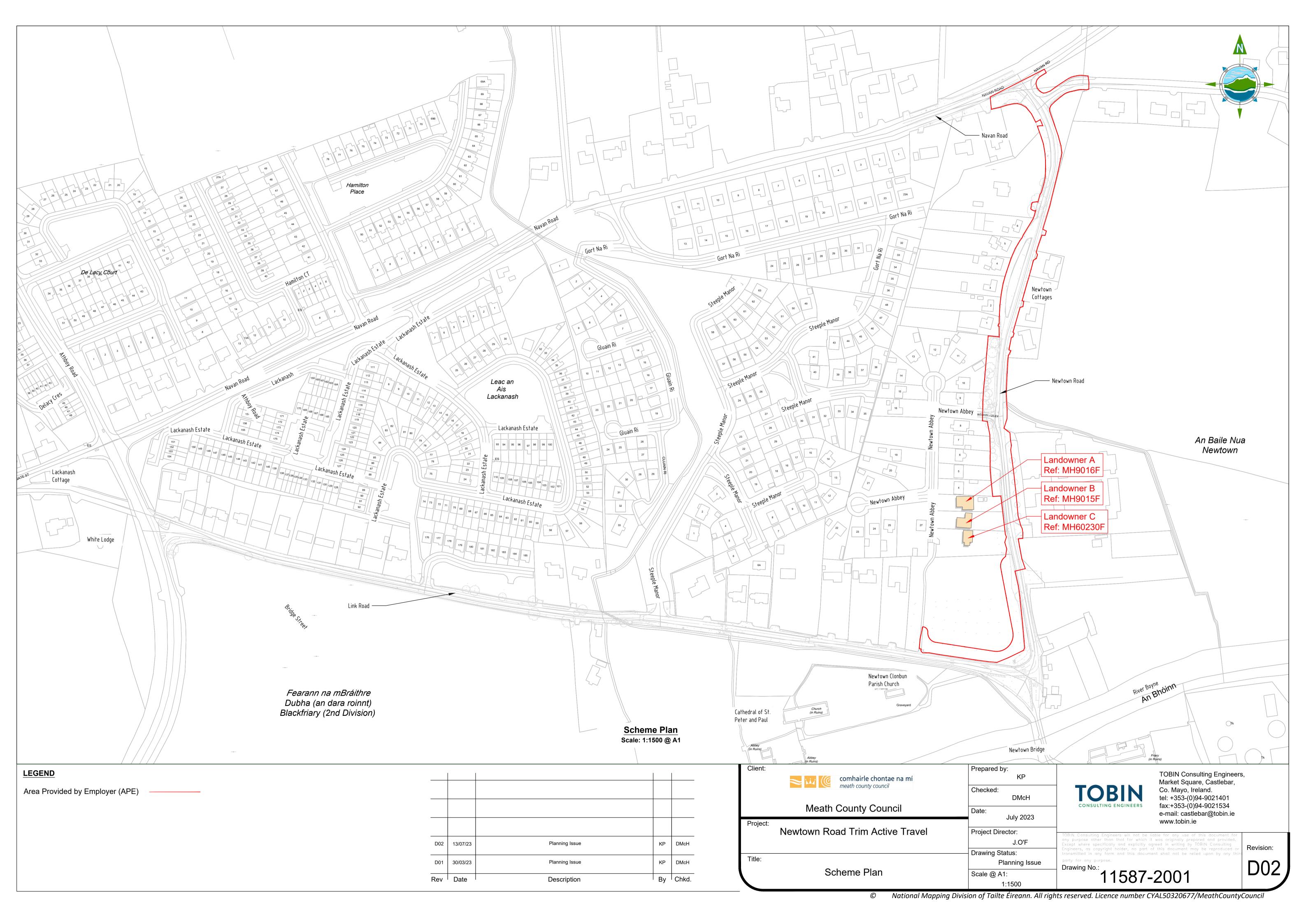
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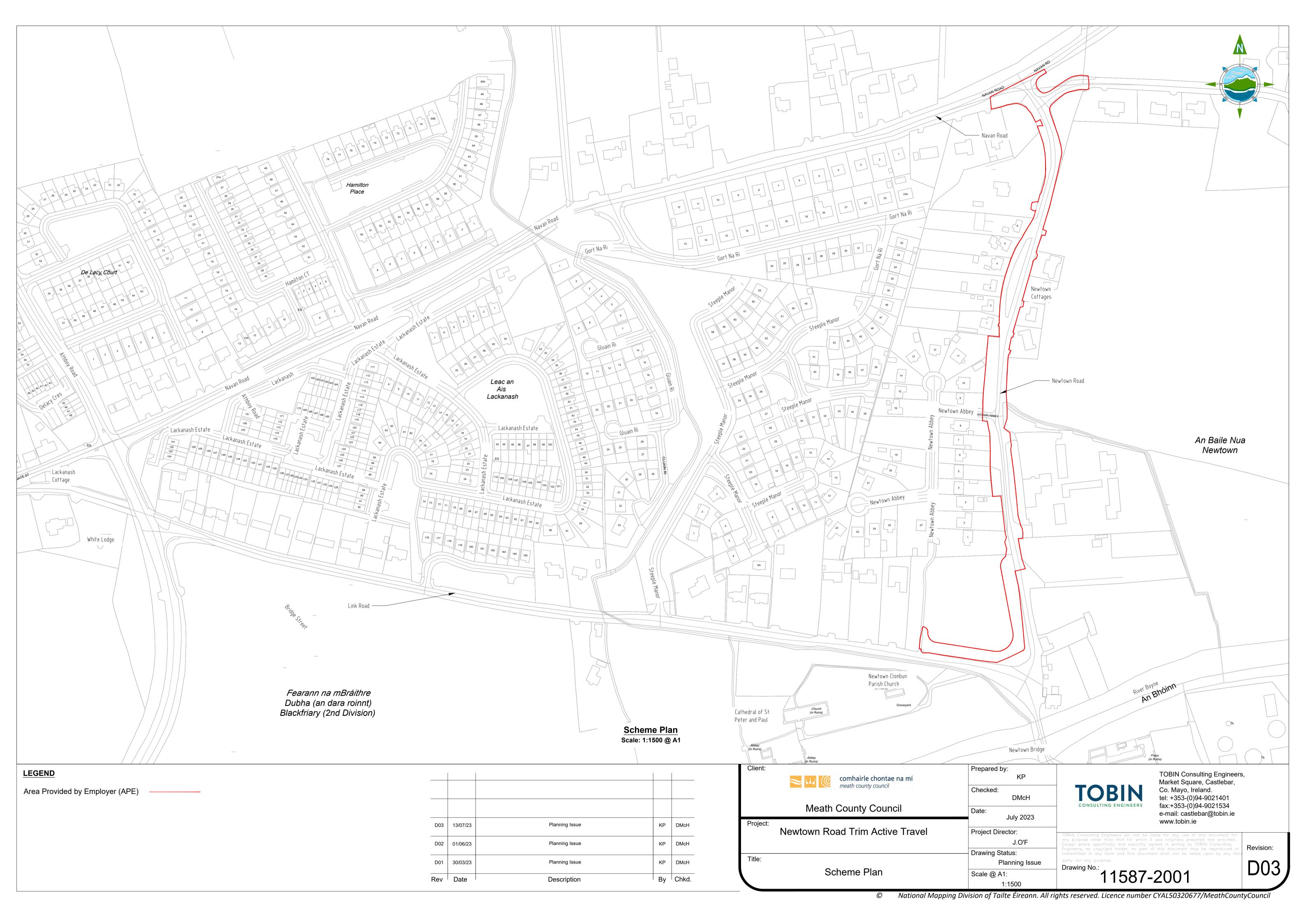
Fairgreen Road

Galway

Appendix A LIST OF DOCUMENTS EXAMINED

- Report
 - o 11587 Newtown Road Trim Options Selection Report D01
- Drawings
 - o 11587 2001 Scheme Plan D03
 - o 11587 2000 Location Map D01
 - o 11587-2002-2004 Area provided by Employer-D03
 - o 11587-2100-2102 Site Clearance-D03
 - o 11587-2200-2202 Drainage Plan-D02
 - o 11587-2300-2310 Geometric Design-D03
 - o 11587-2420-2422 Kerbing and Paved Area-D02
 - o 11587-2500-2502 Traffic Sign and Road Markings-D03
 - o 11587-2580 -2582 Lighting Plan-D02
 - o 11587-2800 -2802 Landscaping-D03
 - o 11587-2900-2902 Earthworks & Boundary Treatment D03



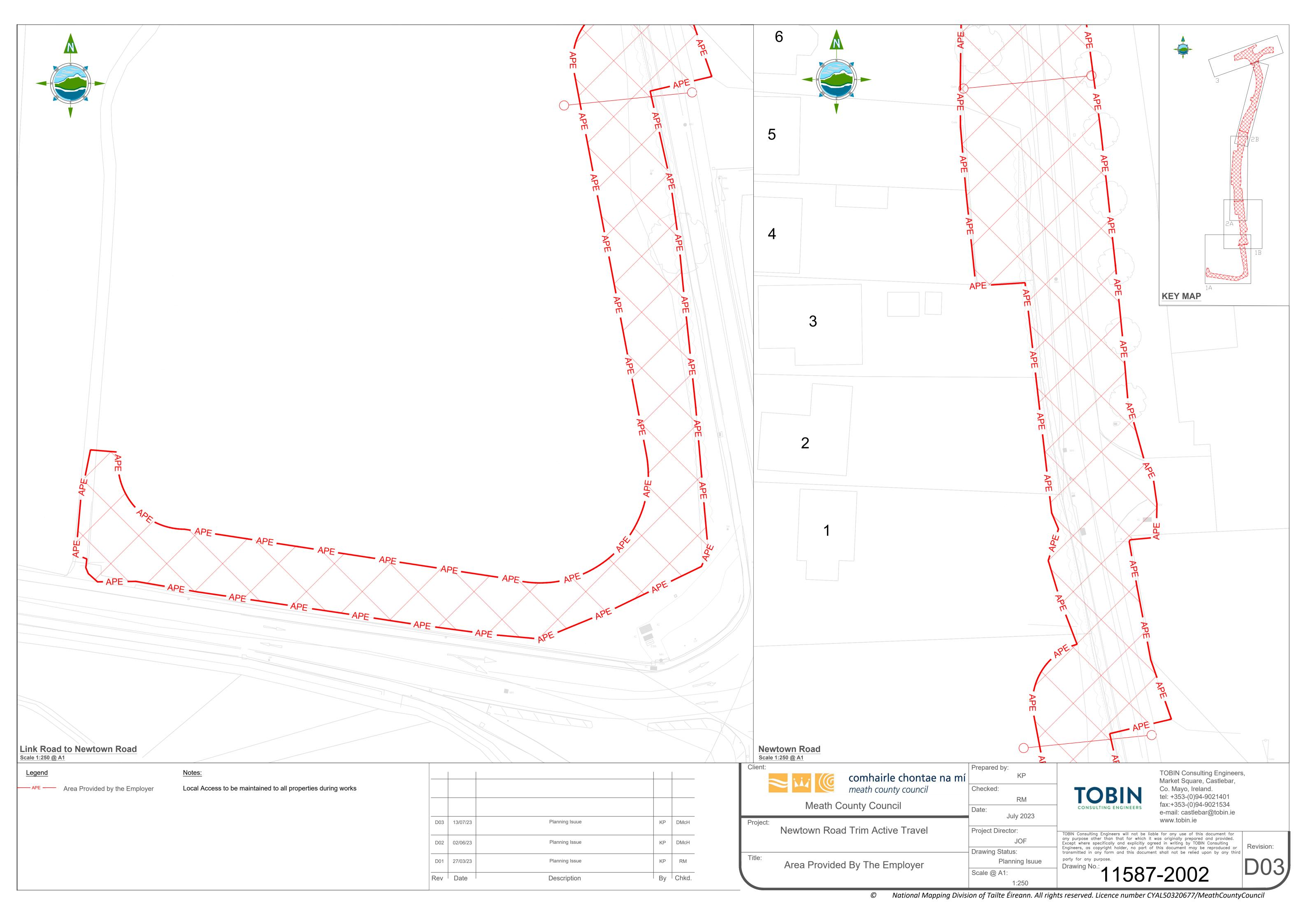


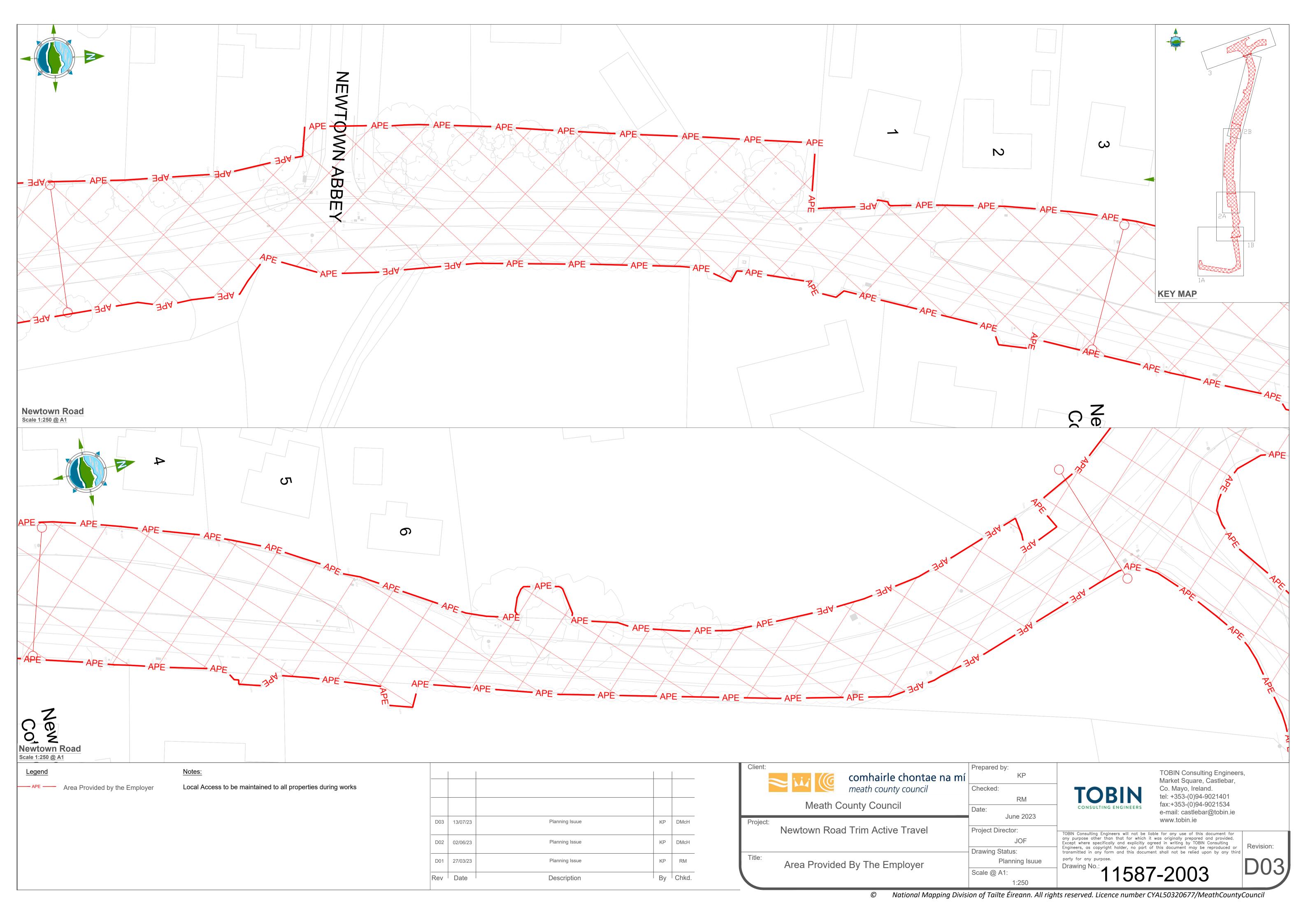


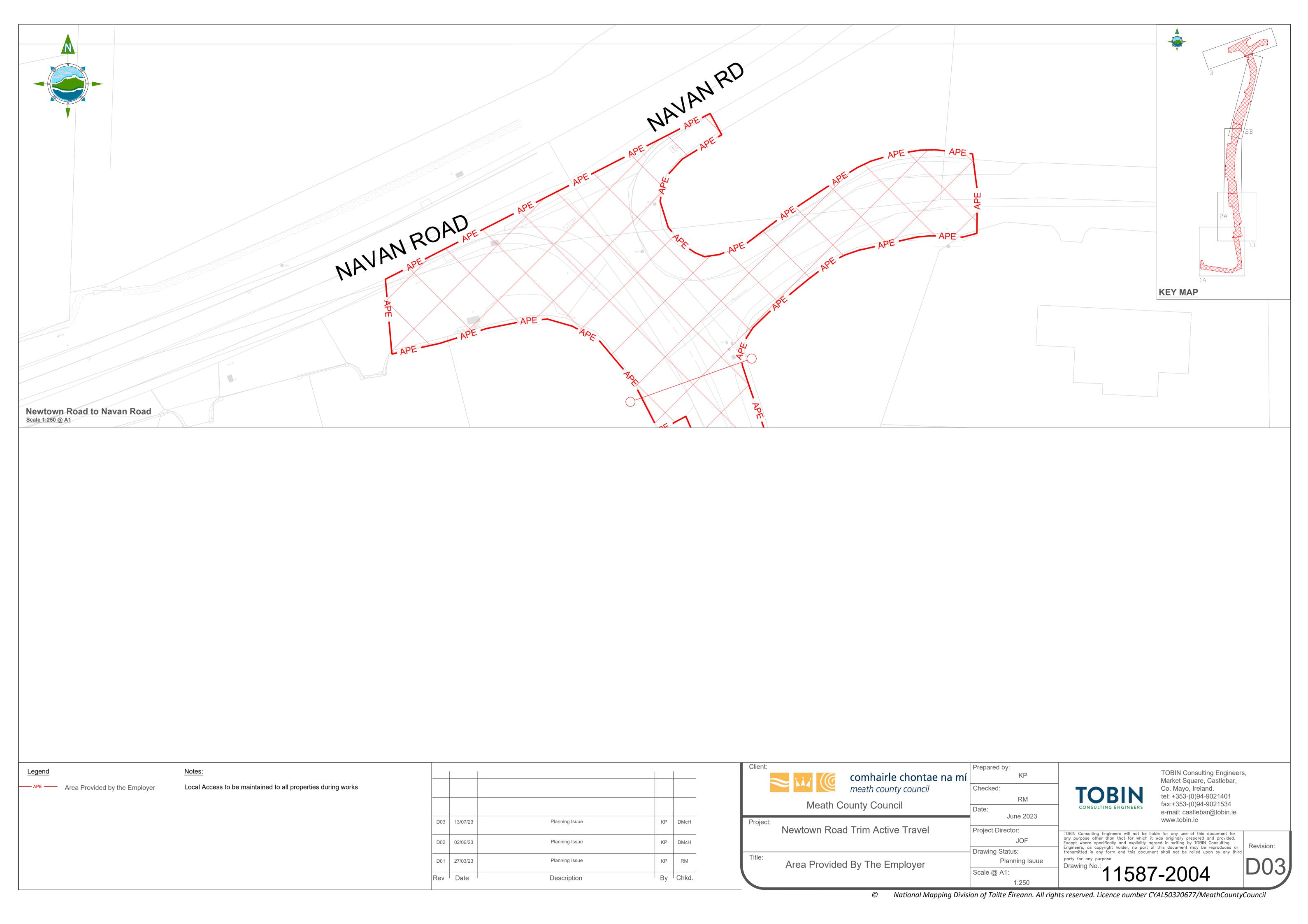


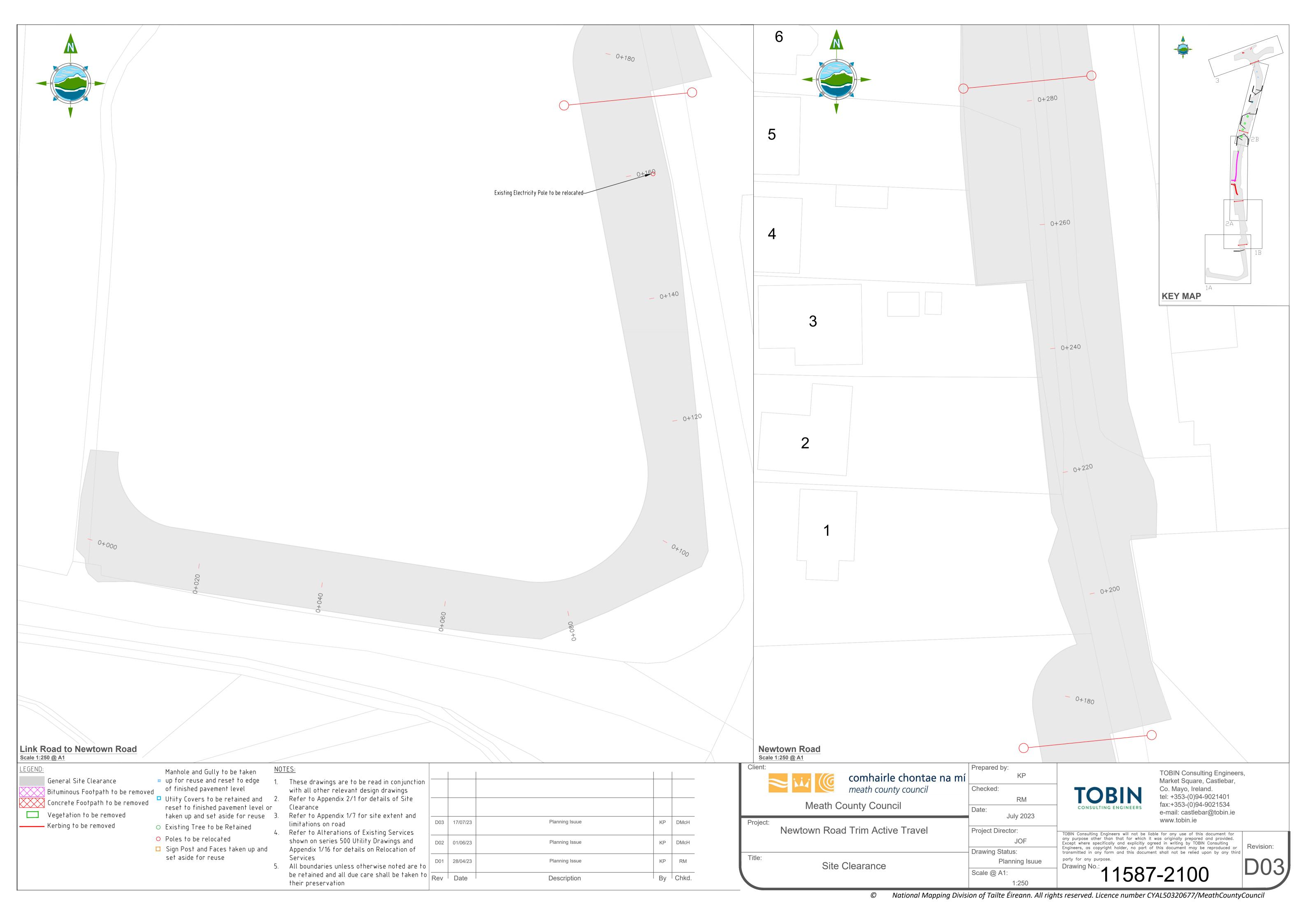
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Rev Date Description By Chkd.

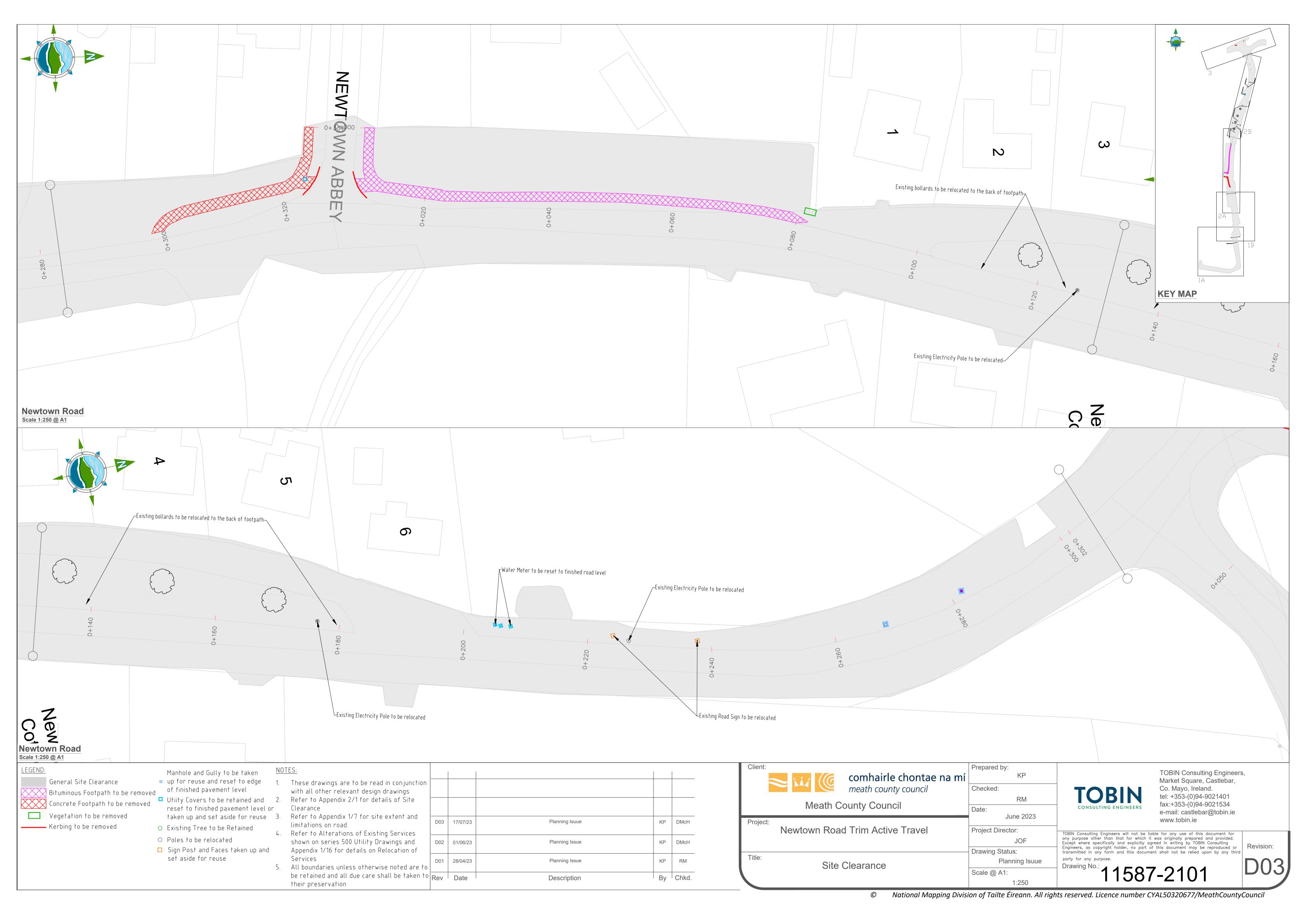
TOBIN Consulting Engineers, Market Square, Castlebar, Co. Mayo, Ireland. tel: +353-(0)94-9021401 fax:+353-(0)94-9021534 e-mail: castlebar@tobin.ie www.tobin.ie comhairle chontae na mí meath county council Checked: DMcH Meath County Council Date: 28/04/23 Newtown Road Trim Active Travel Project Director: J.O'F Revision: Drawing Status: Title: Planning Issue D01 Location Map Scale @ A1: 11587-2000





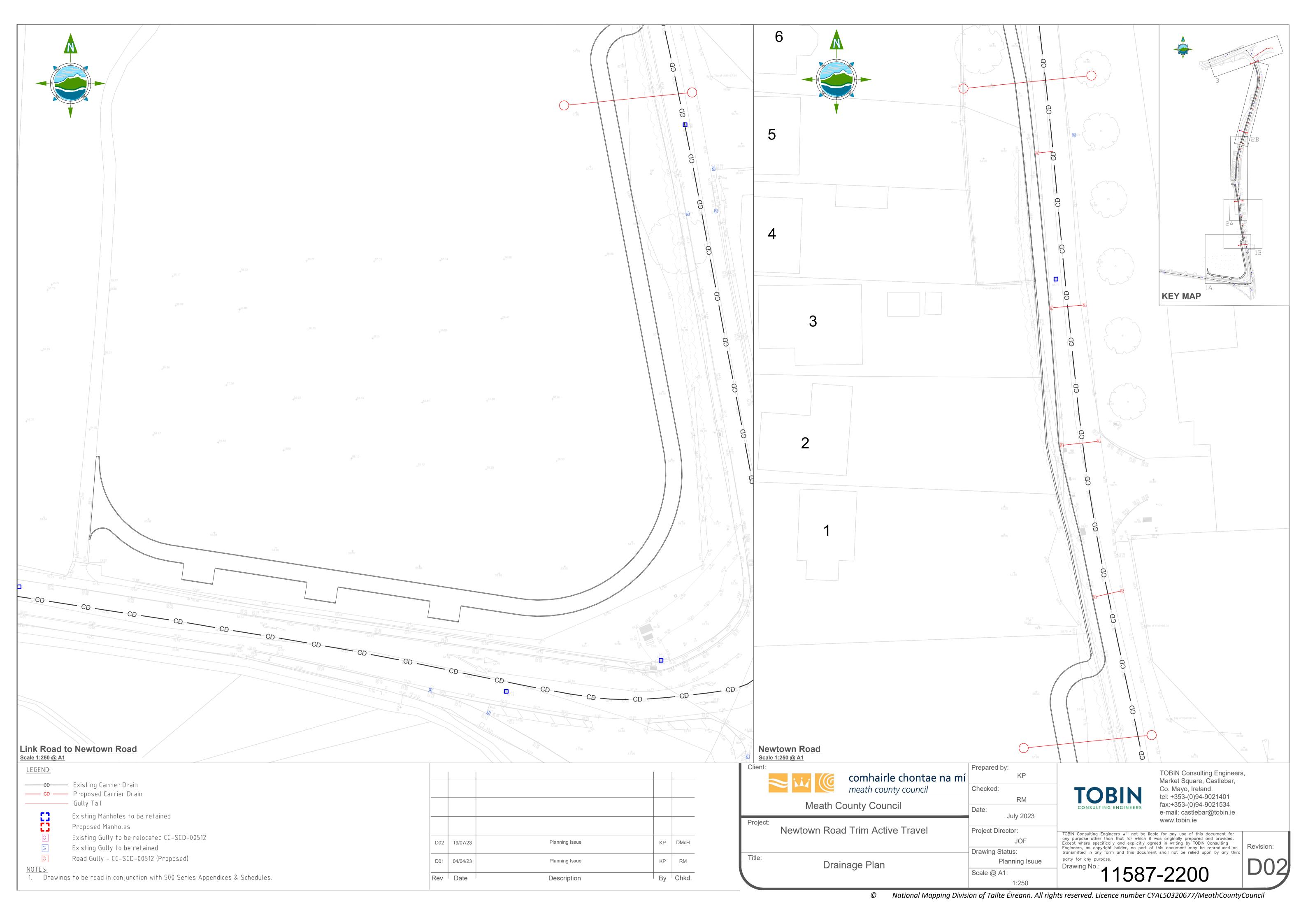


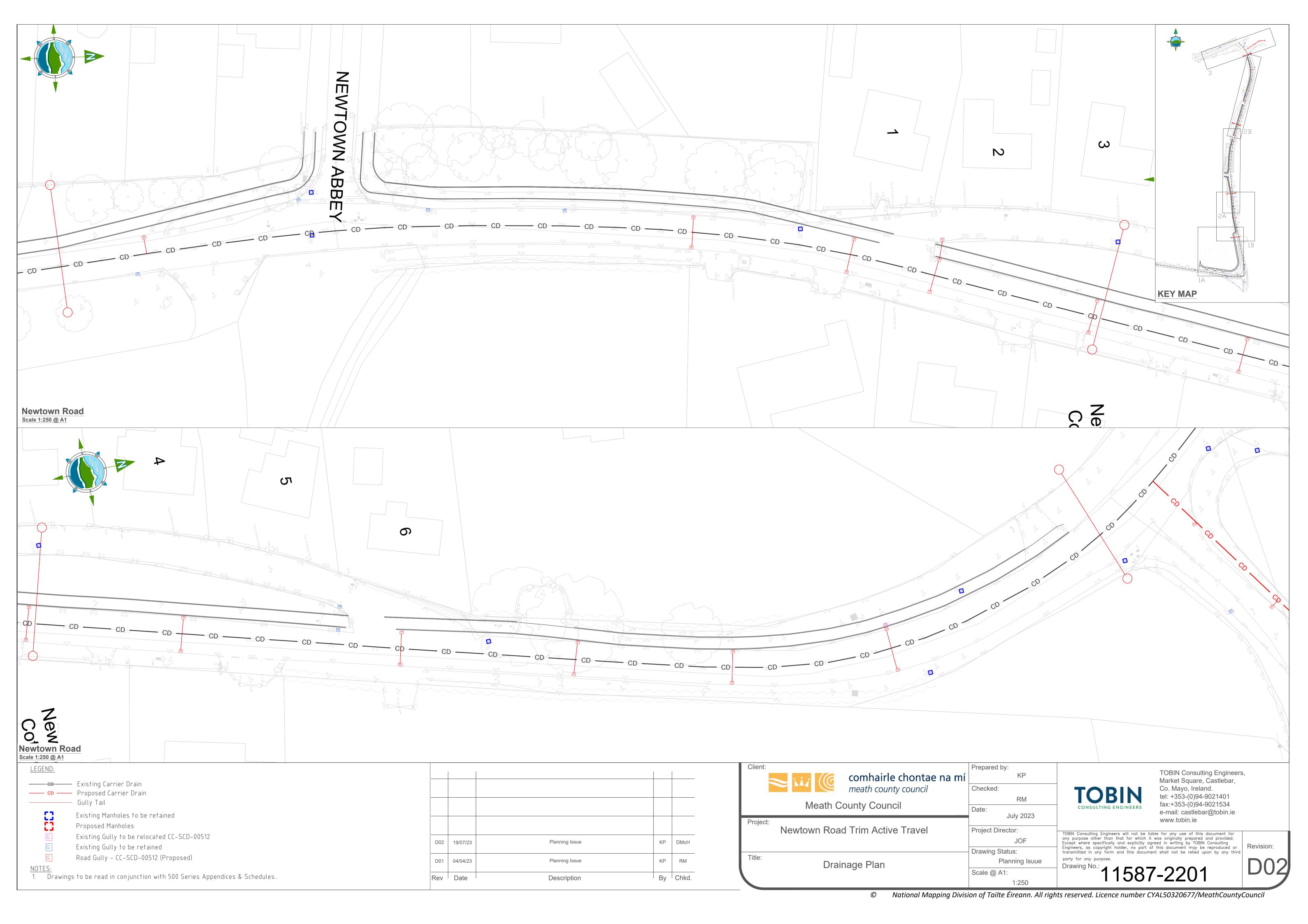


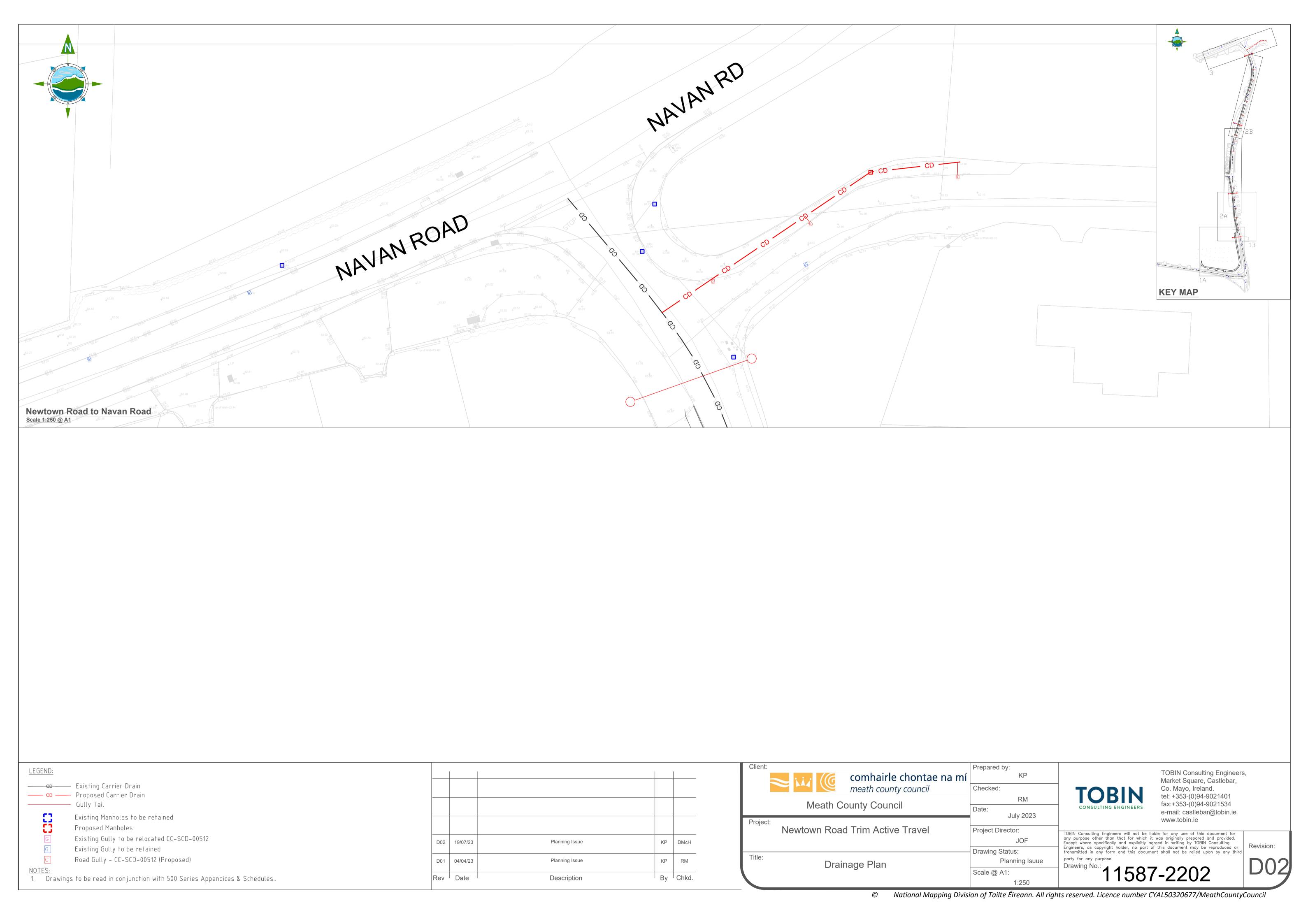


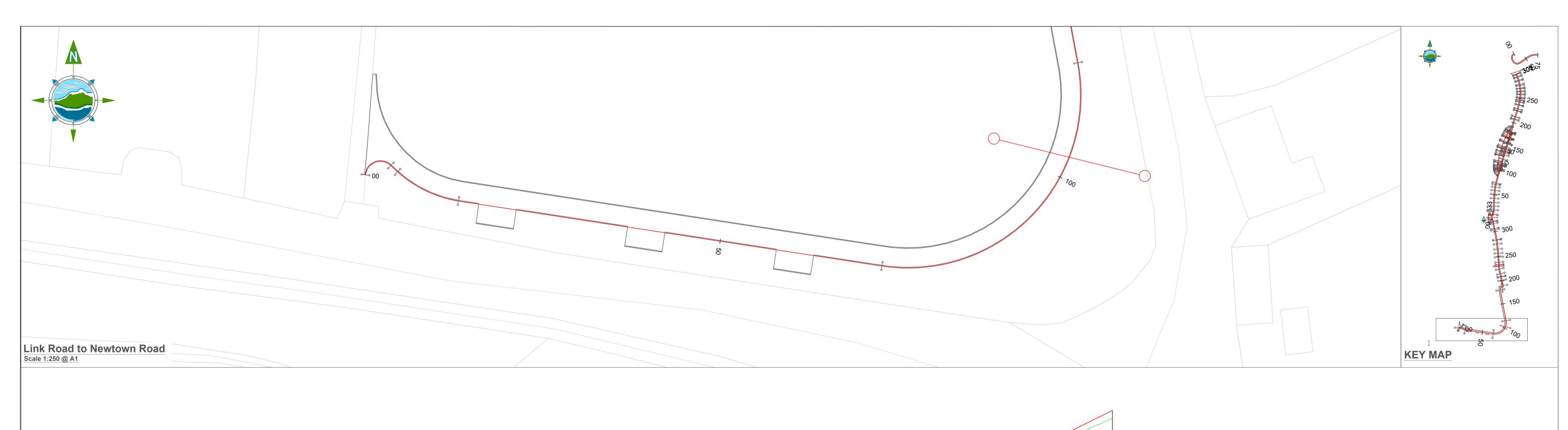


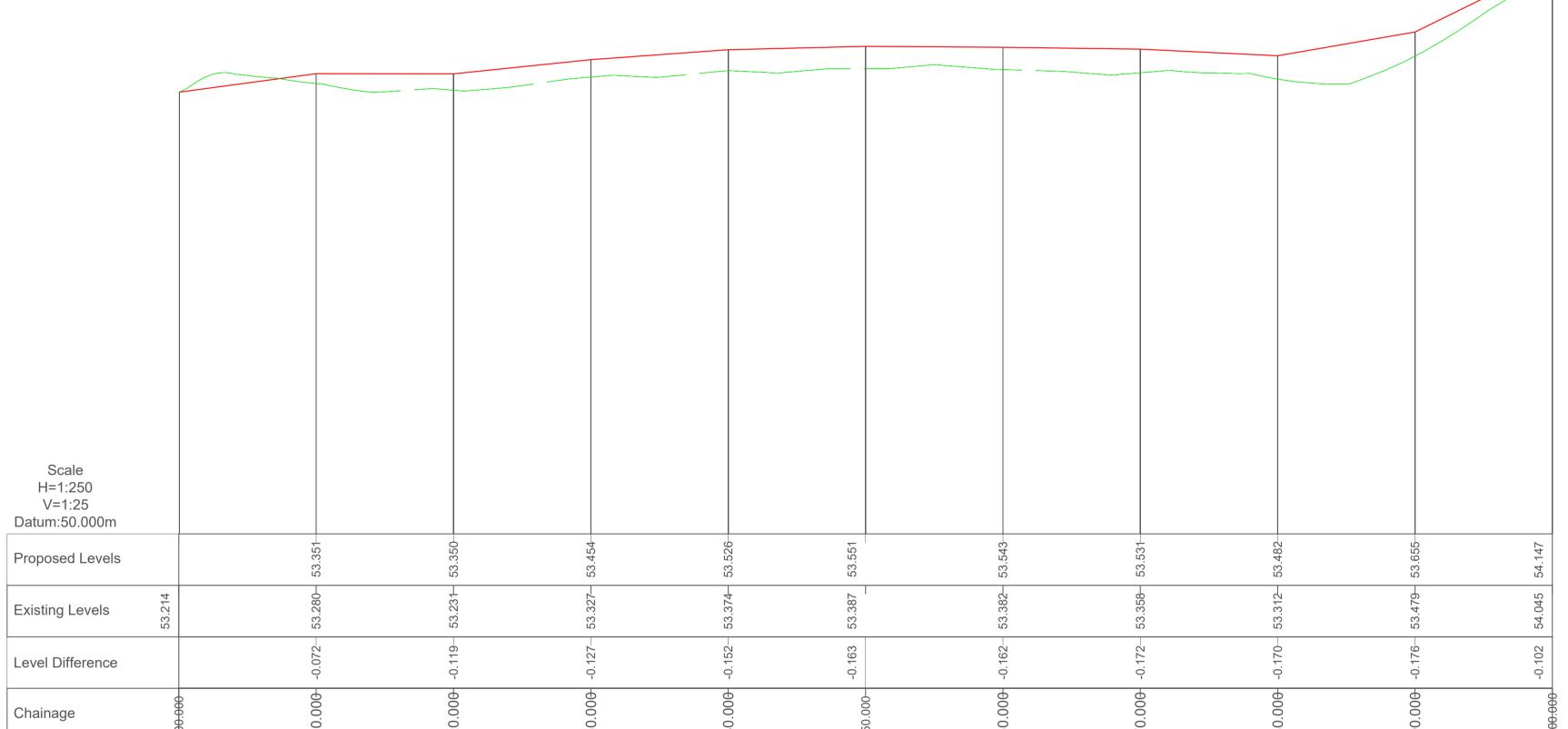
Vegetation to be removed	·	. Refer to Appendix 1/7 for site extent and	D03 17/07/23	Planning Isuue	KP DMcH	Project:		June 2023	e-mail: castlebar@tobin.ie www.tobin.ie	
———— Kerbing to be removed	 Existing Tree to be Retained Poles to be relocated 	limitations on road Refer to Alterations of Existing Services shown on series 500 Utility Drawings and	D00 04/00/00	Planning Issue	KD DM-H	Newtown Road Trim	Active Travel	Project Director: JOF	TOBIN Consulting Engineers will not be liable for any use of this document for any purpose other than that for which it was originally prepared and provided.	
	Sign Post and Faces taken up and	Appendix 1/16 for details on Relocation of	D02 01/06/23		KP DMcH	Title		— Drawing Status:	Except where specifically and explicitly agreed in writing by TOBIN Consulting Engineers, as copyright holder, no part of this document may be reproduced or transmitted in any form and this document shall not be relied upon by any thir	Revision:
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		be retained and all due care shall be taken to their preservation	Rev Date	Description	By Chkd.			1:250	11307-2102	











Description

By Chkd.

<u>LEGEND</u> Proposed Design Level Existing Ground Level D03 26/07/23 Planning Isuue KP DMcH D02 06/06/23 Planning Issue KP DMcH D01 28/04/23 KP RM Planning Issue

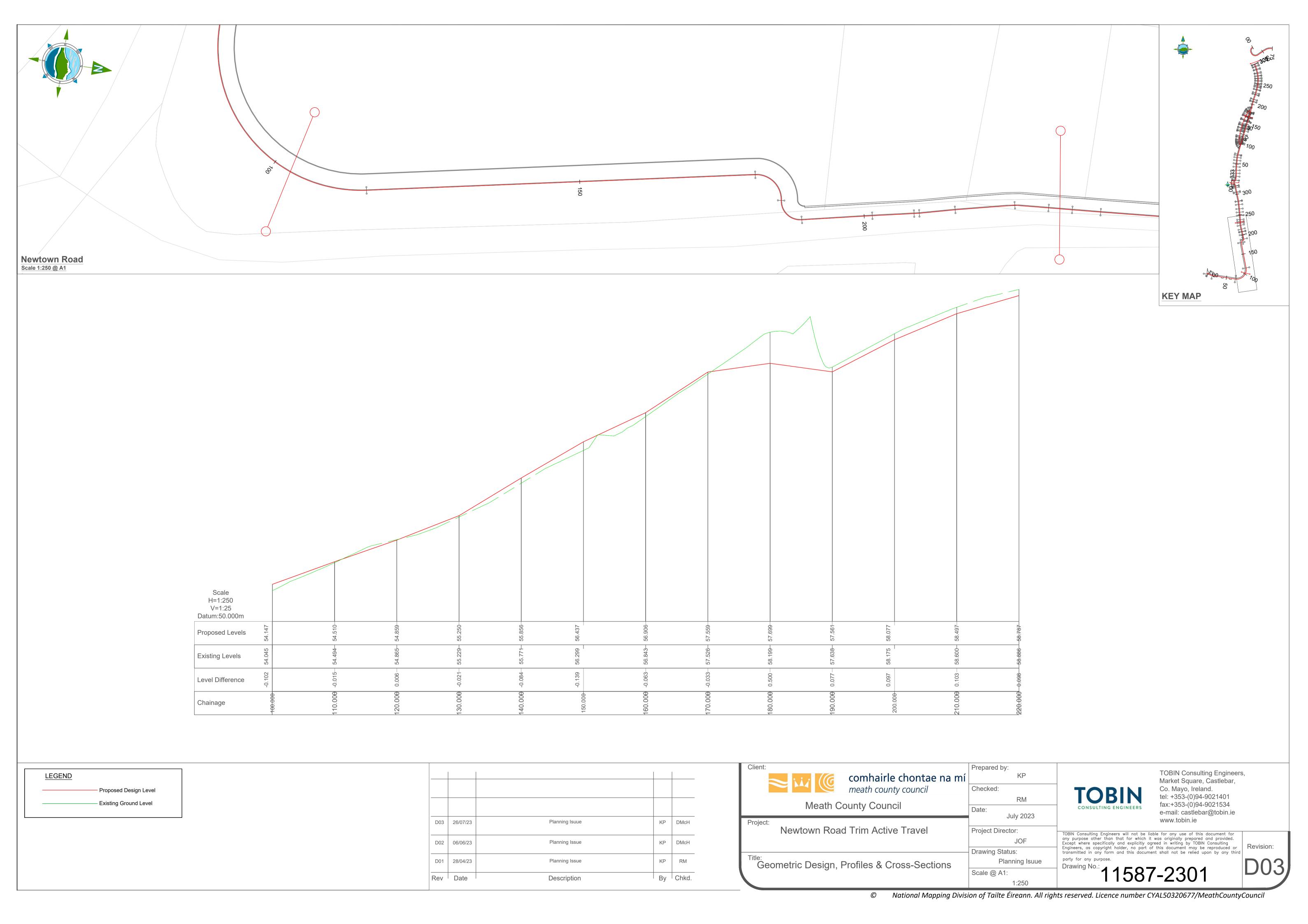
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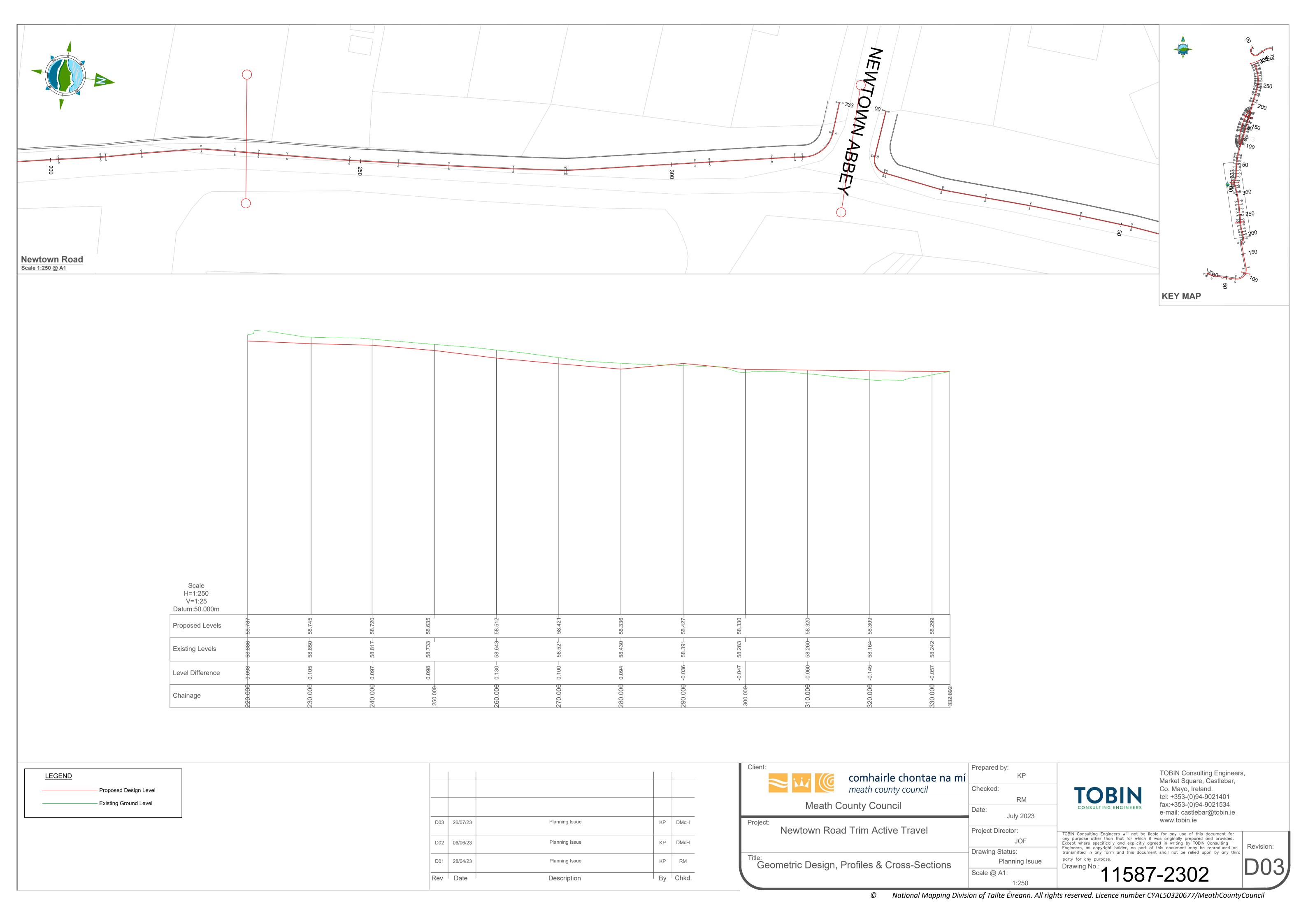
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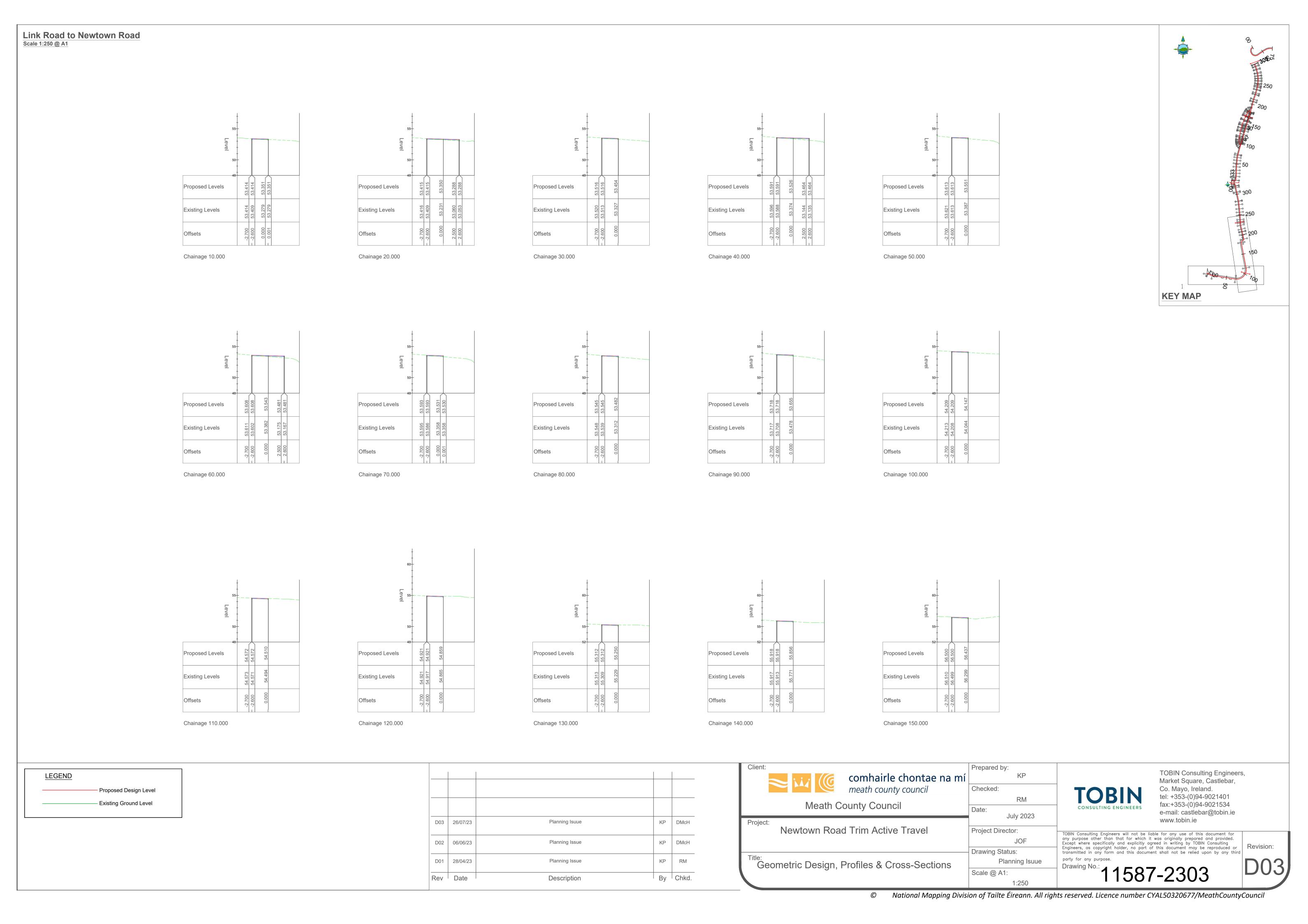
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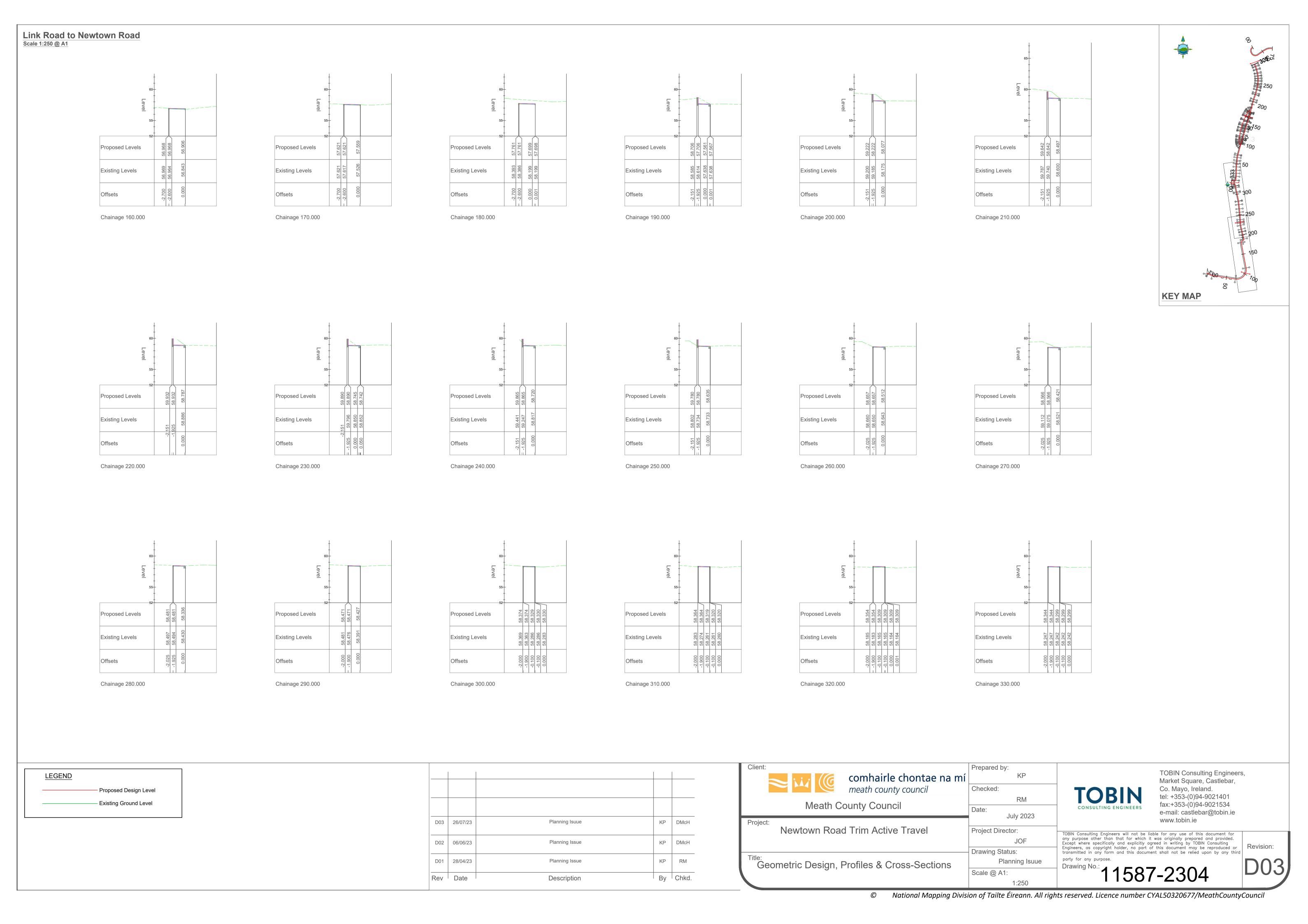
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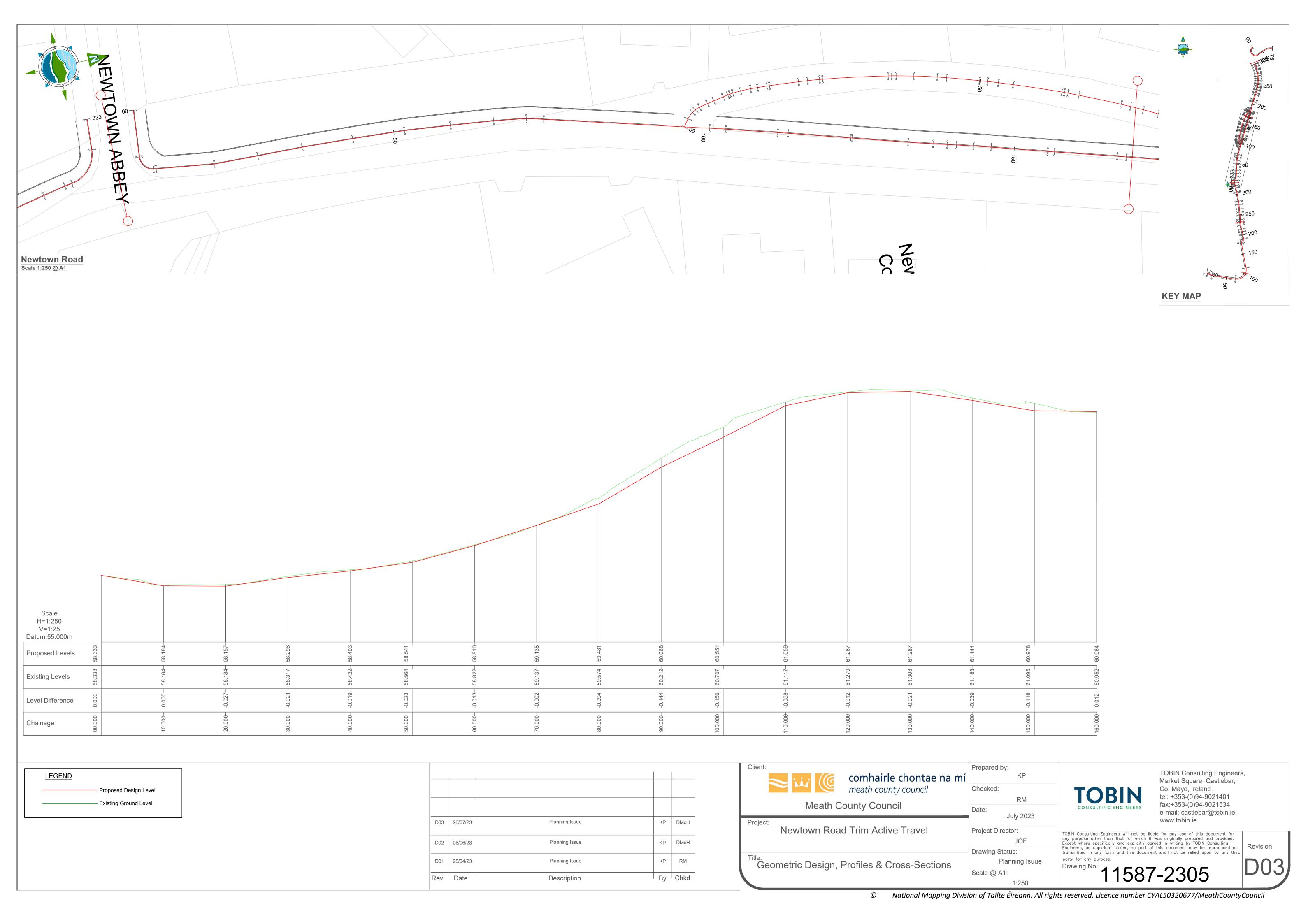
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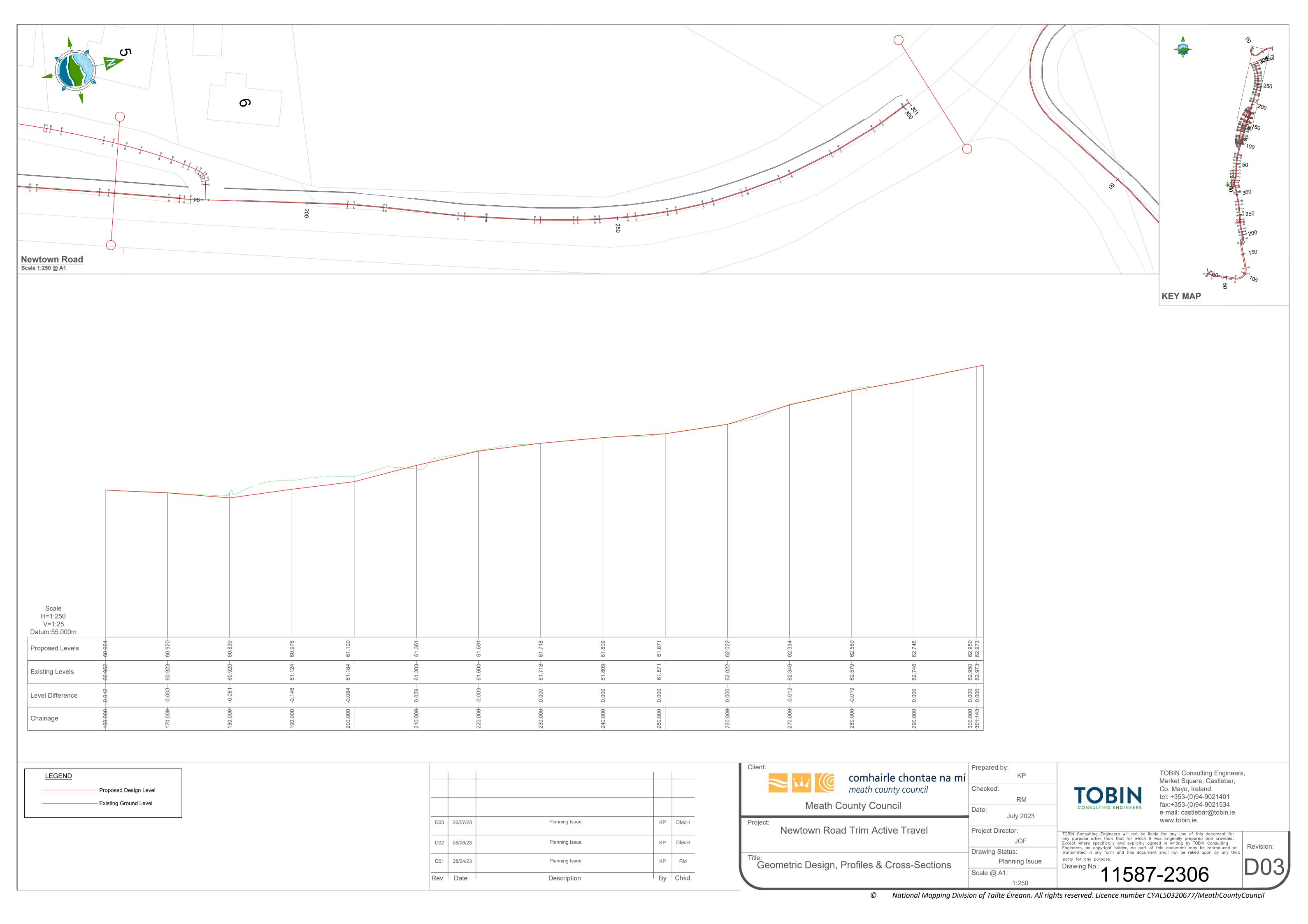


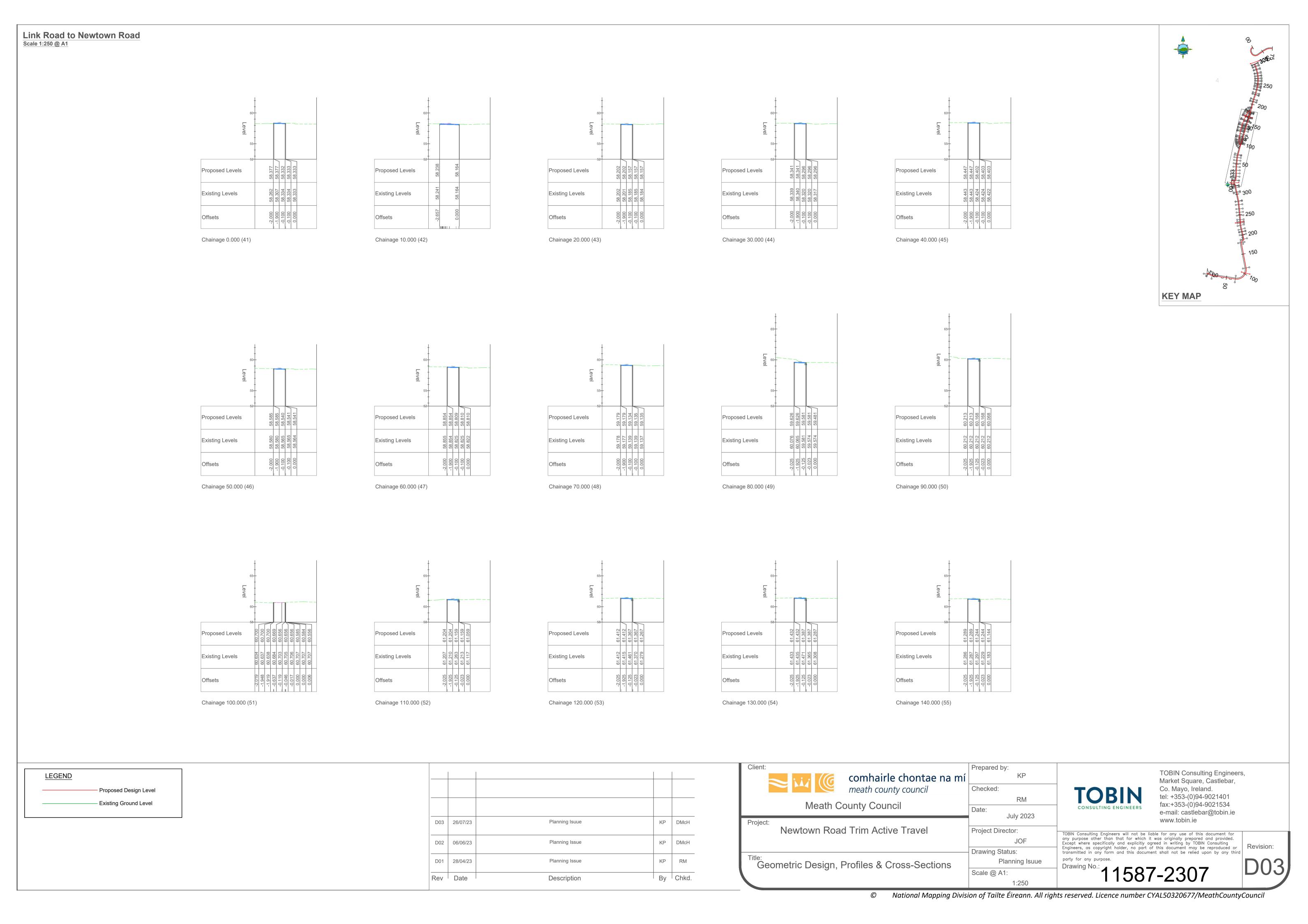


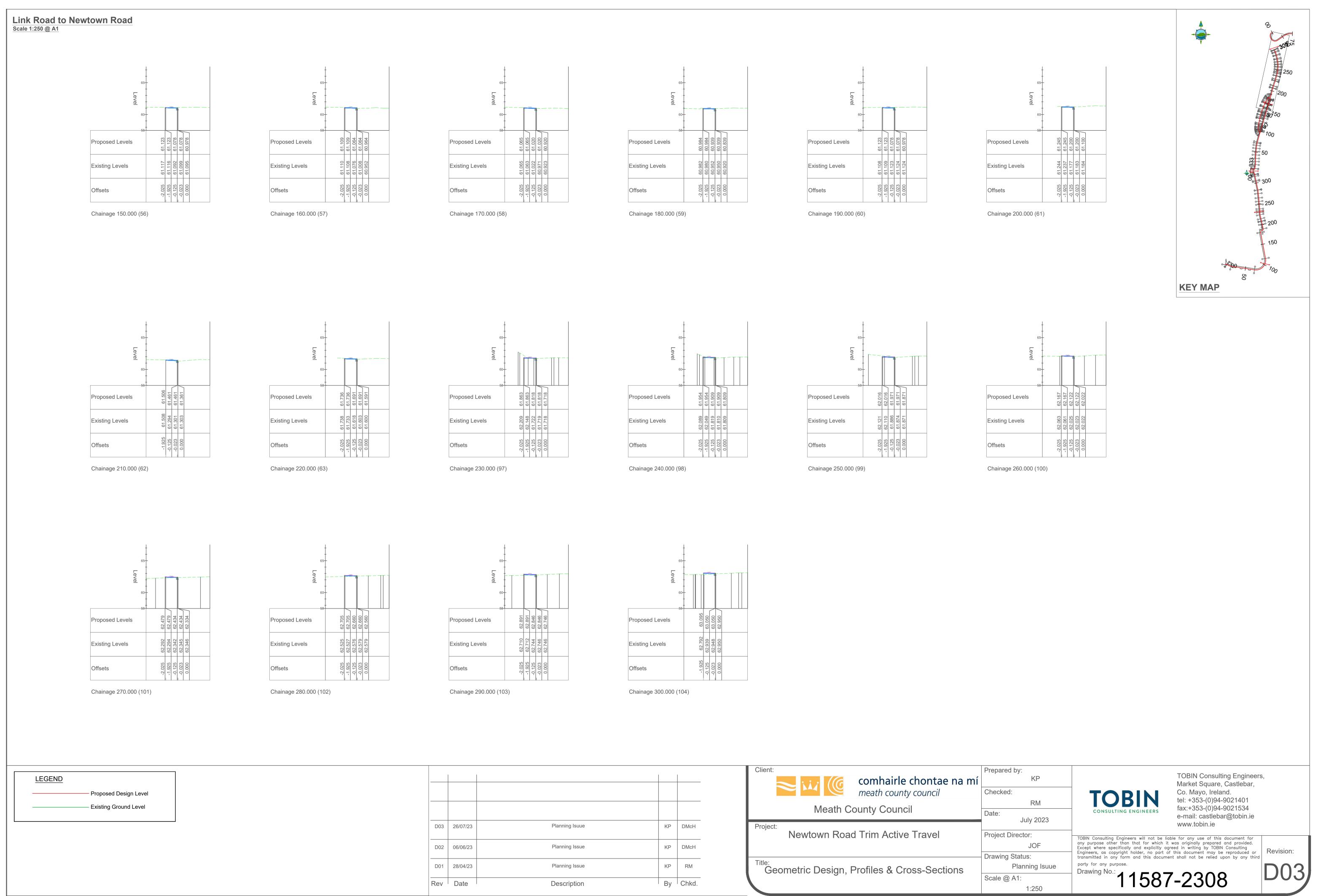


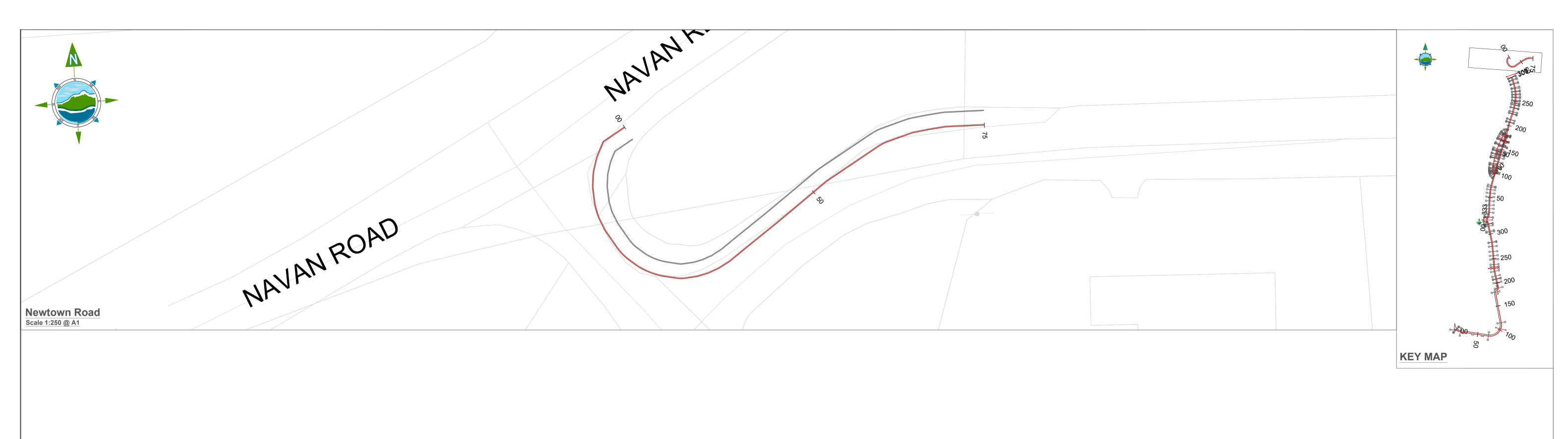


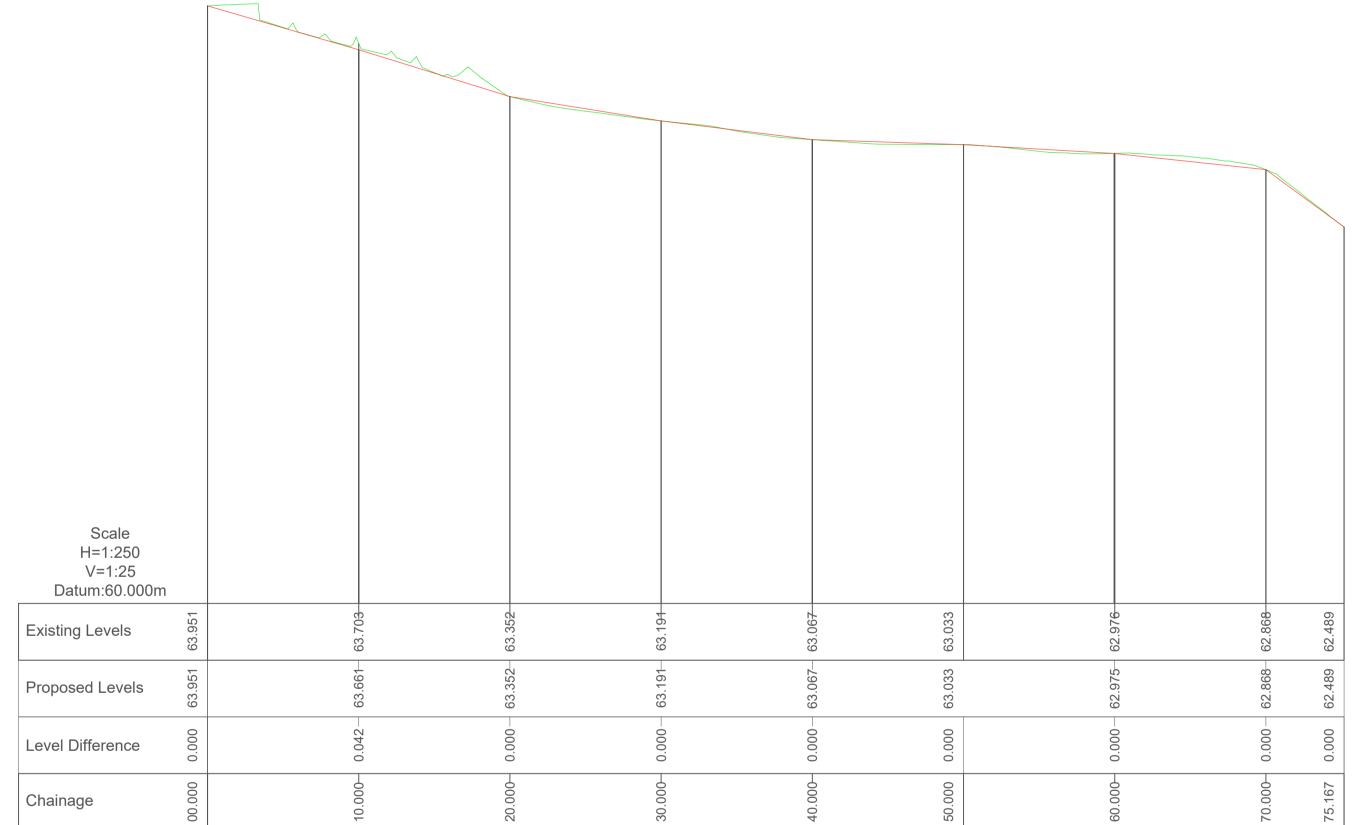












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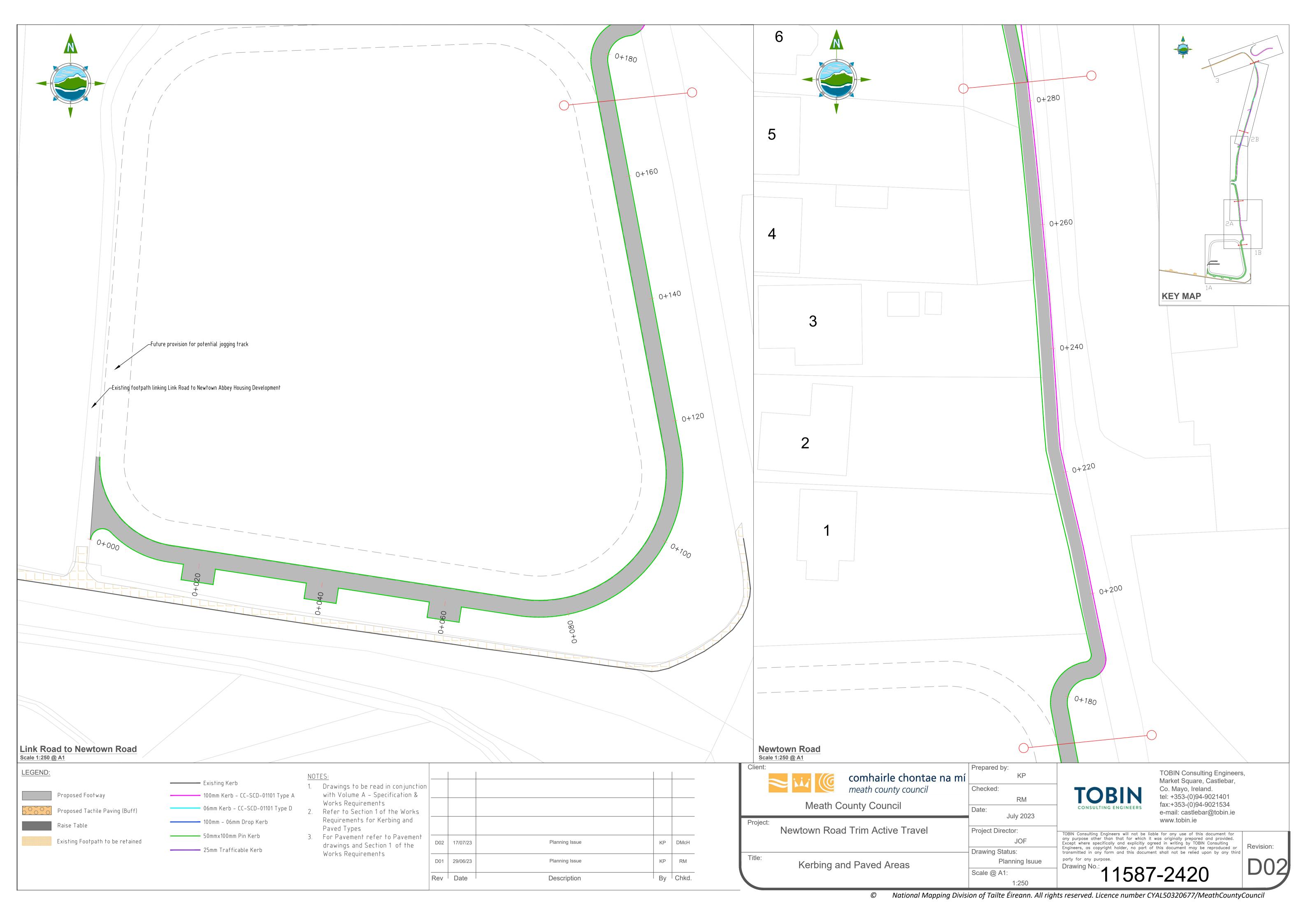
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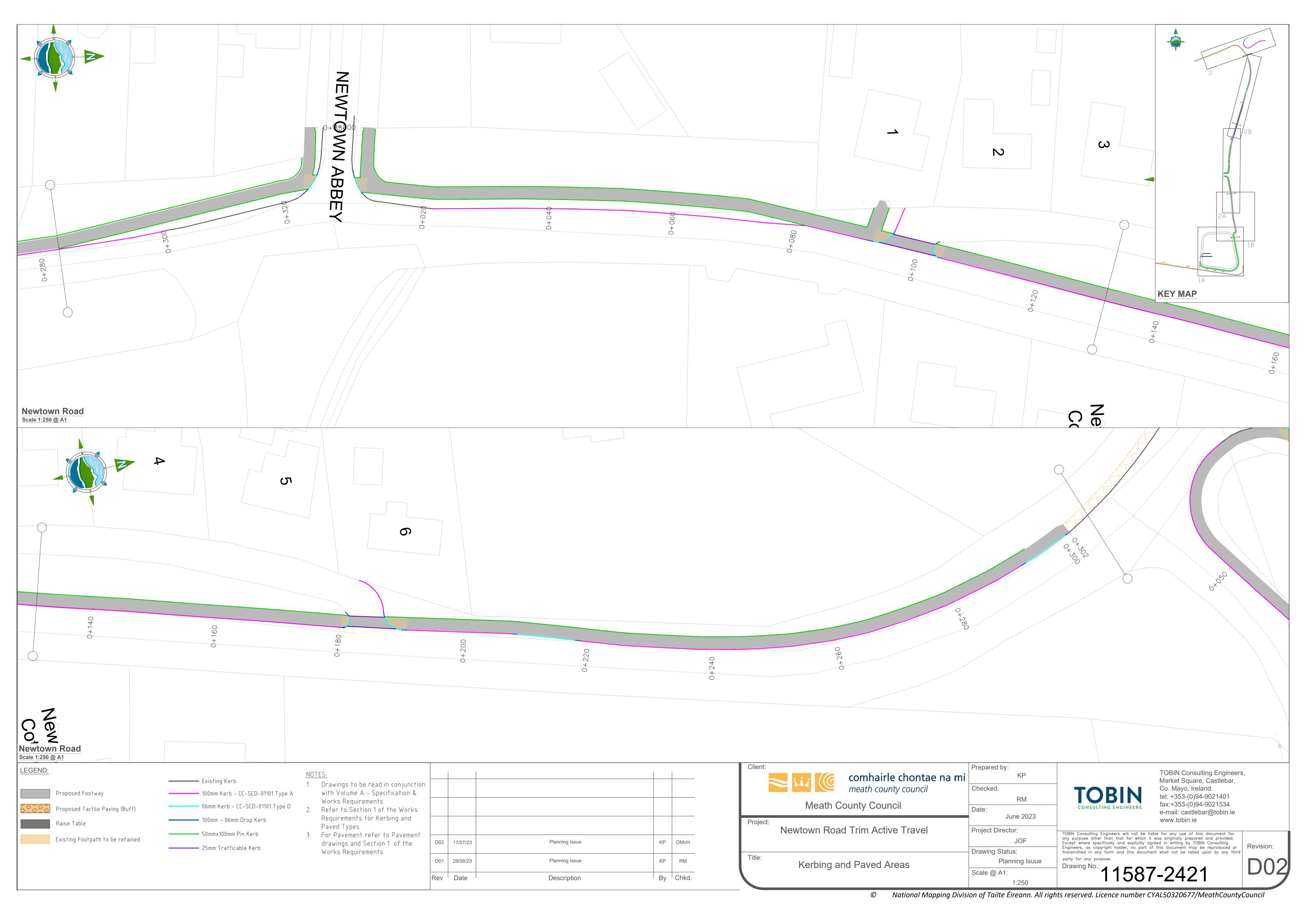
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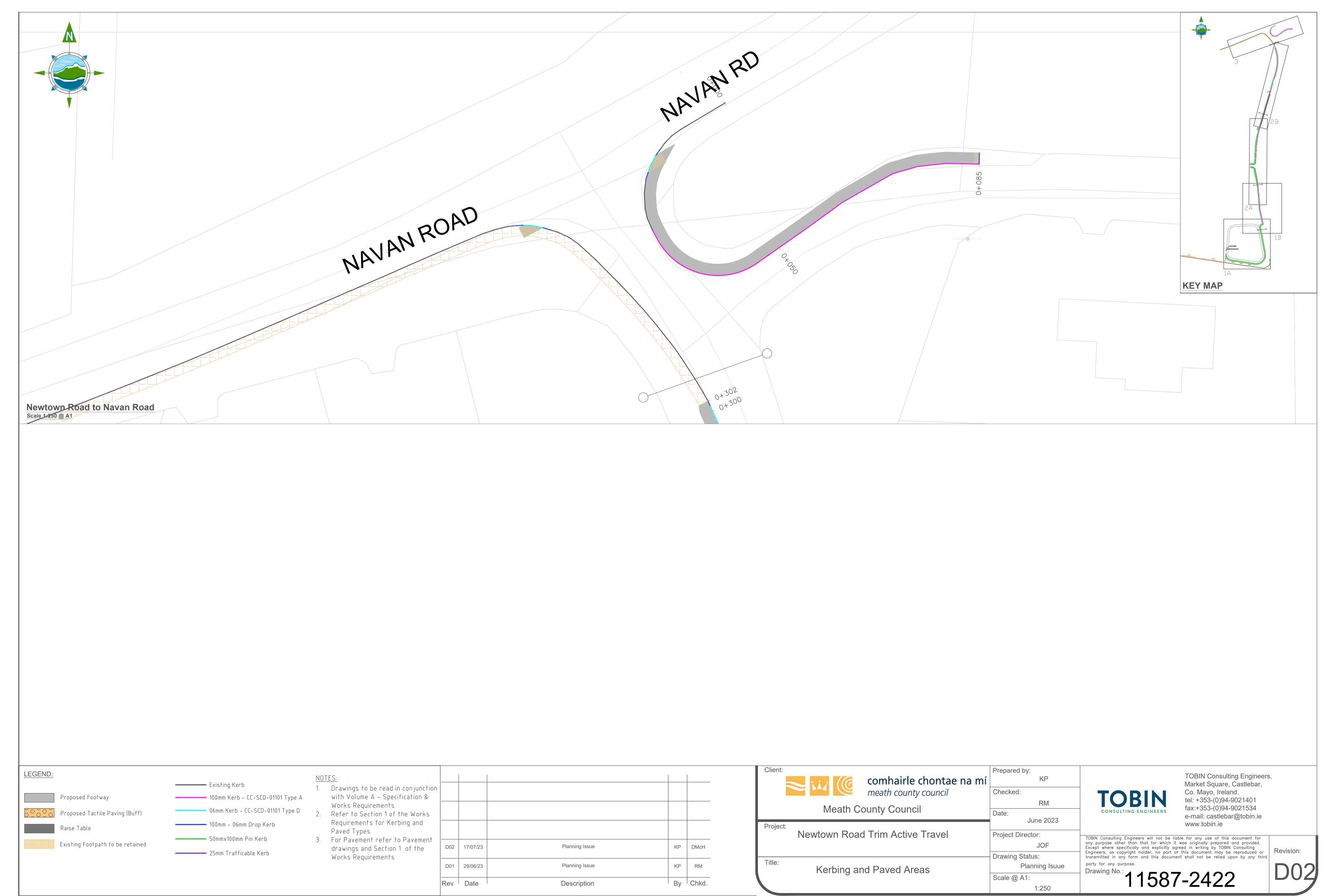
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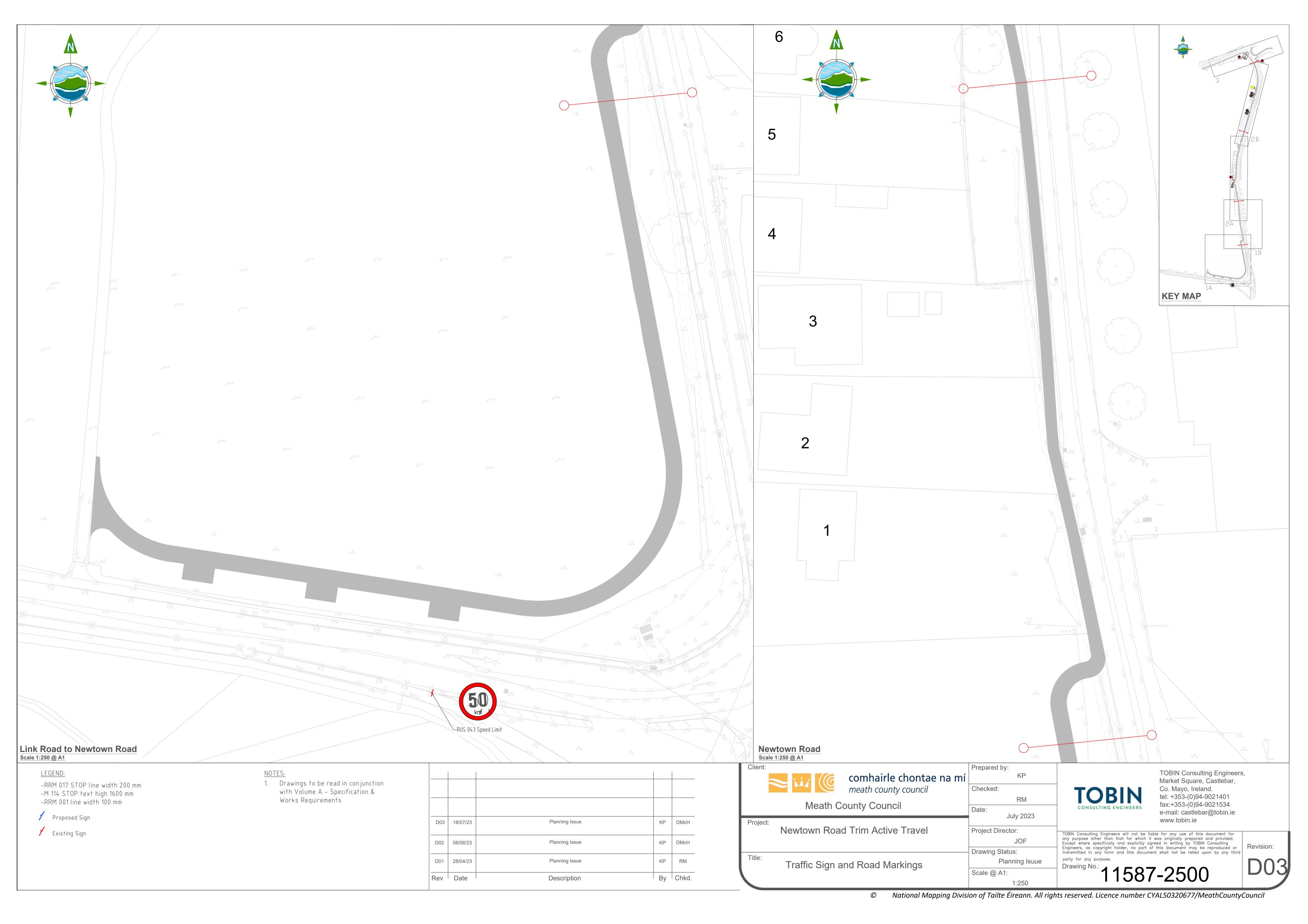
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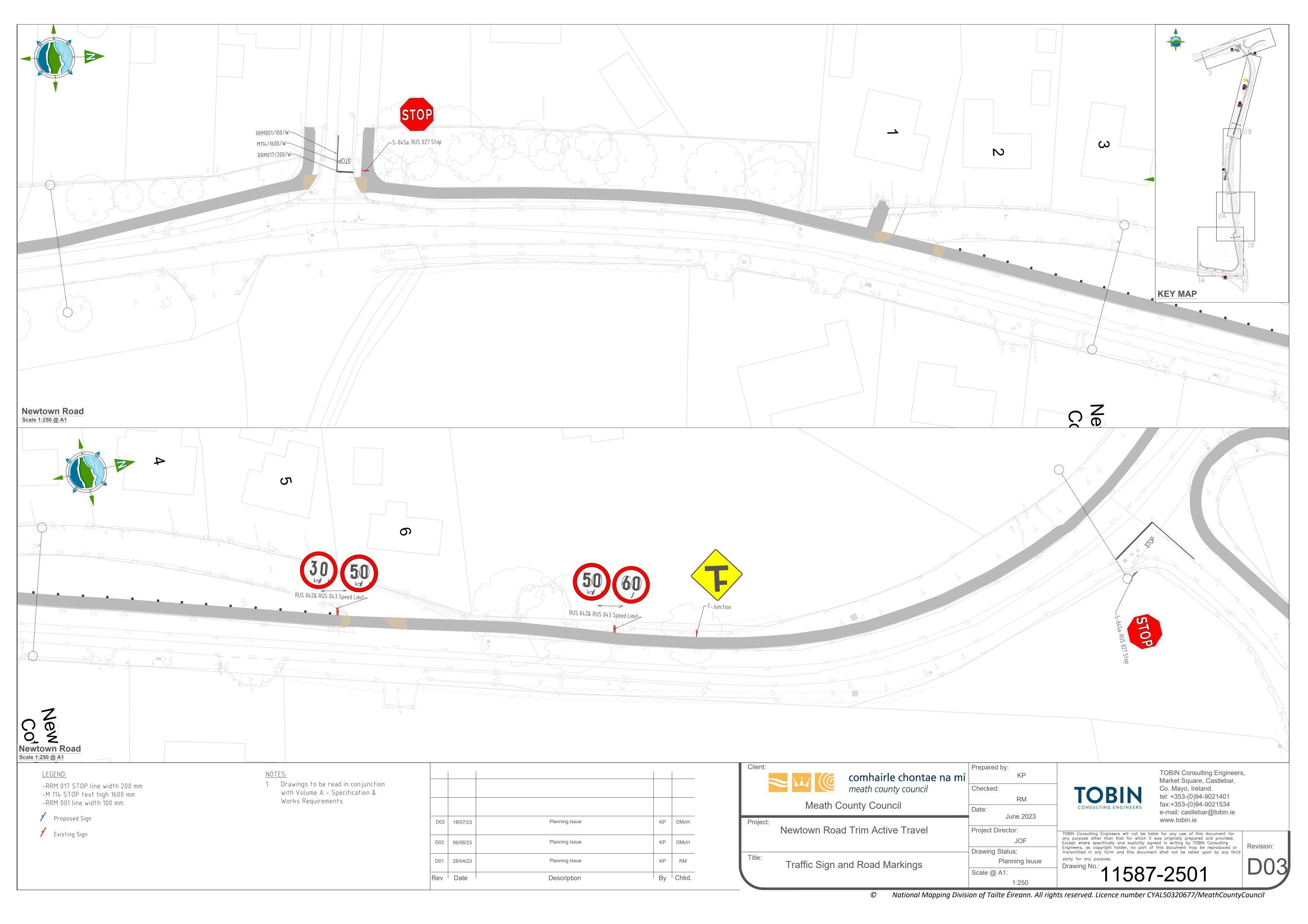
Link Road to Newtown Road Scale 1:250 @ A1 . 150 Proposed Levels Proposed Levels Proposed Levels Proposed Levels Proposed Levels **KEY MAP** Existing Levels Existing Levels Existing Levels Existing Levels Existing Levels Chainage 0.000 Chainage 10.000 (119) Chainage 20.000 (120) Chainage 30.000 (121) Chainage 40.000 (122) Proposed Levels Proposed Levels Proposed Levels Proposed Levels Existing Levels Existing Levels Existing Levels Existing Levels Offsets Offsets Offsets Chainage 50.000 (123) Chainage 60.000 (124) Chainage 70.000 (125) Chainage 75.167 Prepared by: TOBIN Consulting Engineers, Market Square, Castlebar, <u>LEGEND</u> comhairle chontae na mí KP meath county council Co. Mayo, Ireland. Checked: Proposed Design Level tel: +353-(0)94-9021401 RMMeath County Council fax:+353-(0)94-9021534 Existing Ground Level Date: e-mail: castlebar@tobin.ie July 2023 www.tobin.ie D03 26/07/23 Planning Isuue KP DMcH Newtown Road Trim Active Travel Project Director: TOBIN Consulting Engineers will not be liable for any use of this document for any purpose other than that for which it was originally prepared and provided. Except where specifically and explicitly agreed in writing by TOBIN Consulting Engineers, as copyright holder, no part of this document may be reproduced or transmitted in any form and this document shall not be relied upon by any third JOF D02 06/06/23 KP DMcH Planning Issue Revision: **Drawing Status:** Title:
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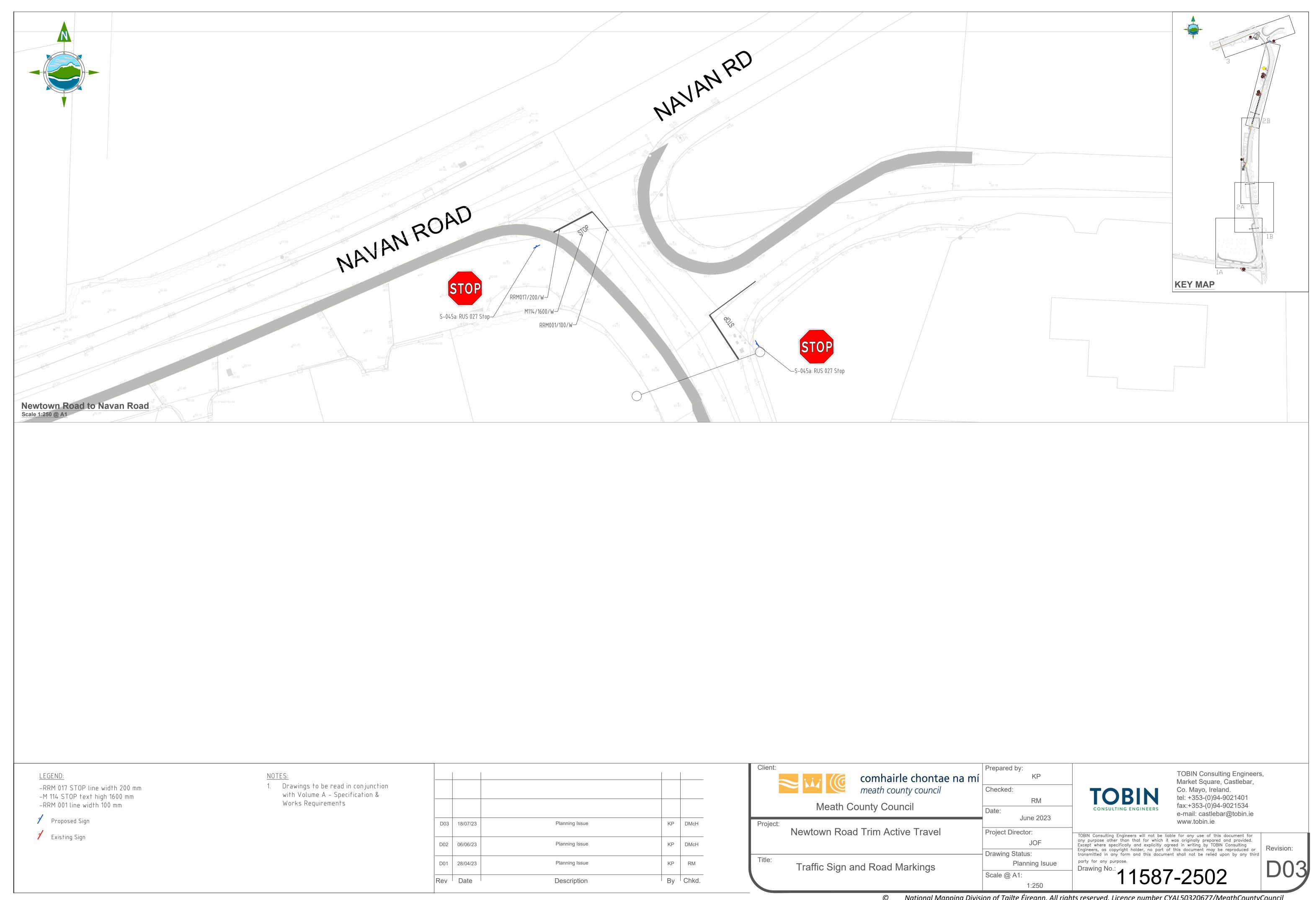


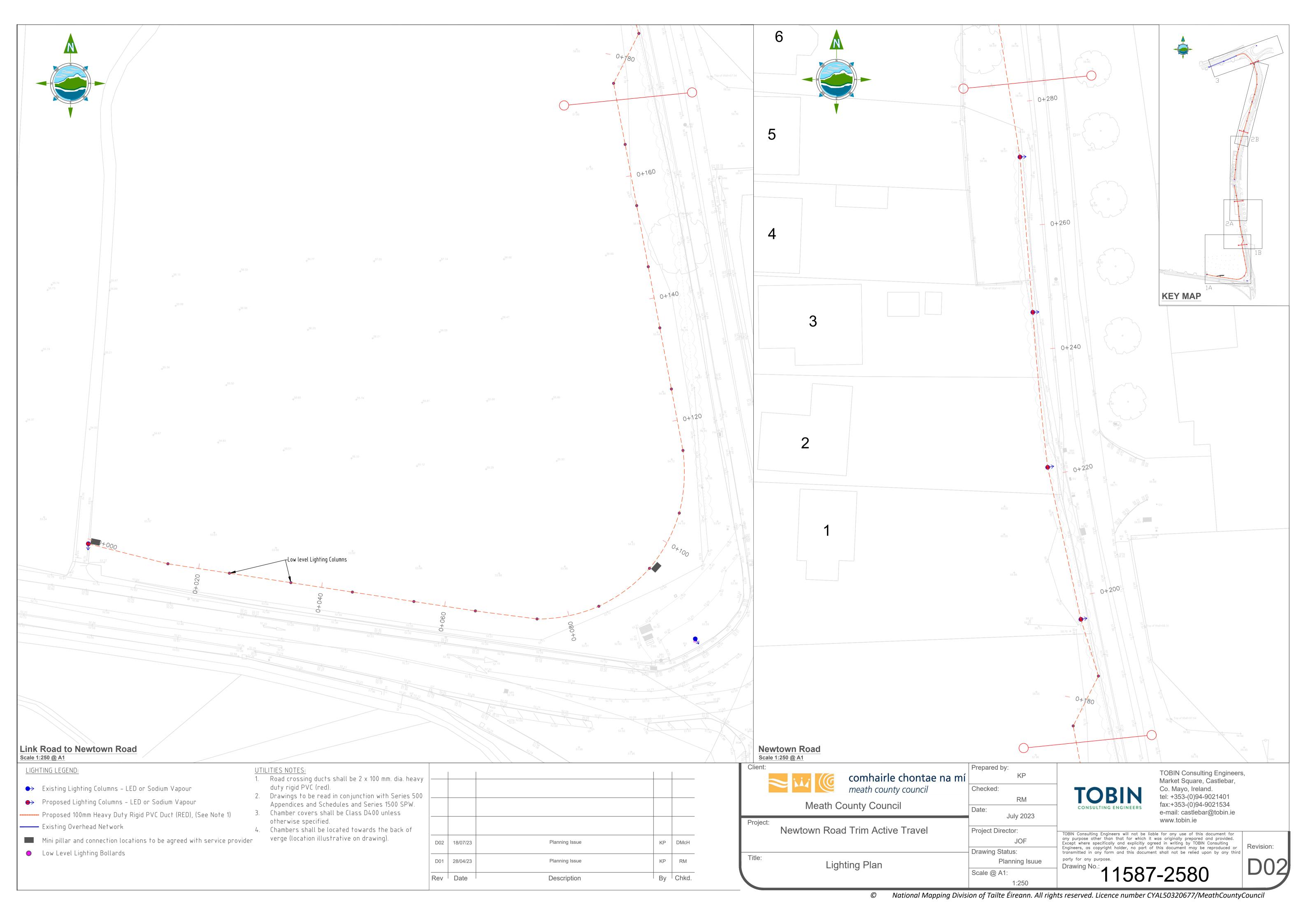


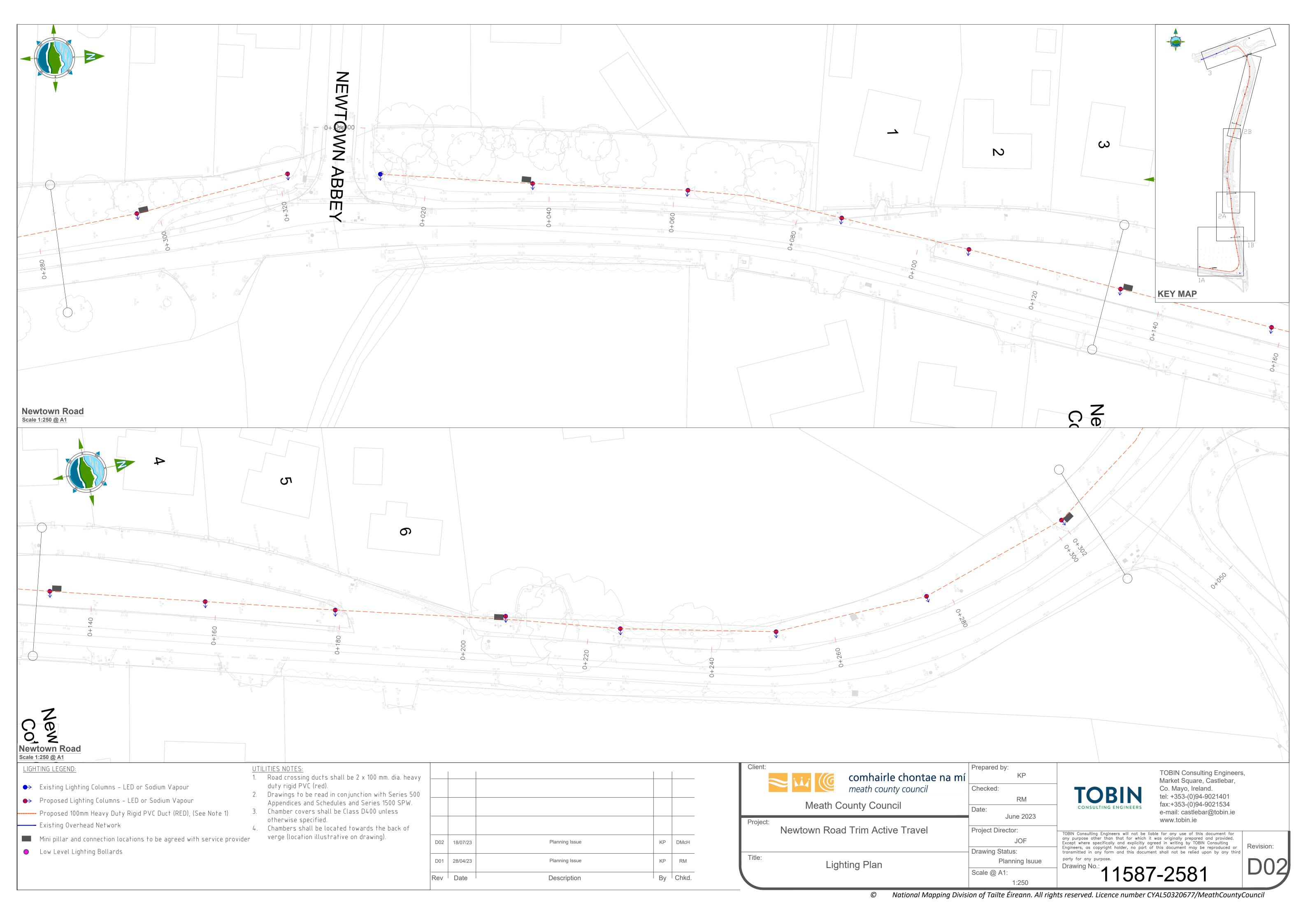


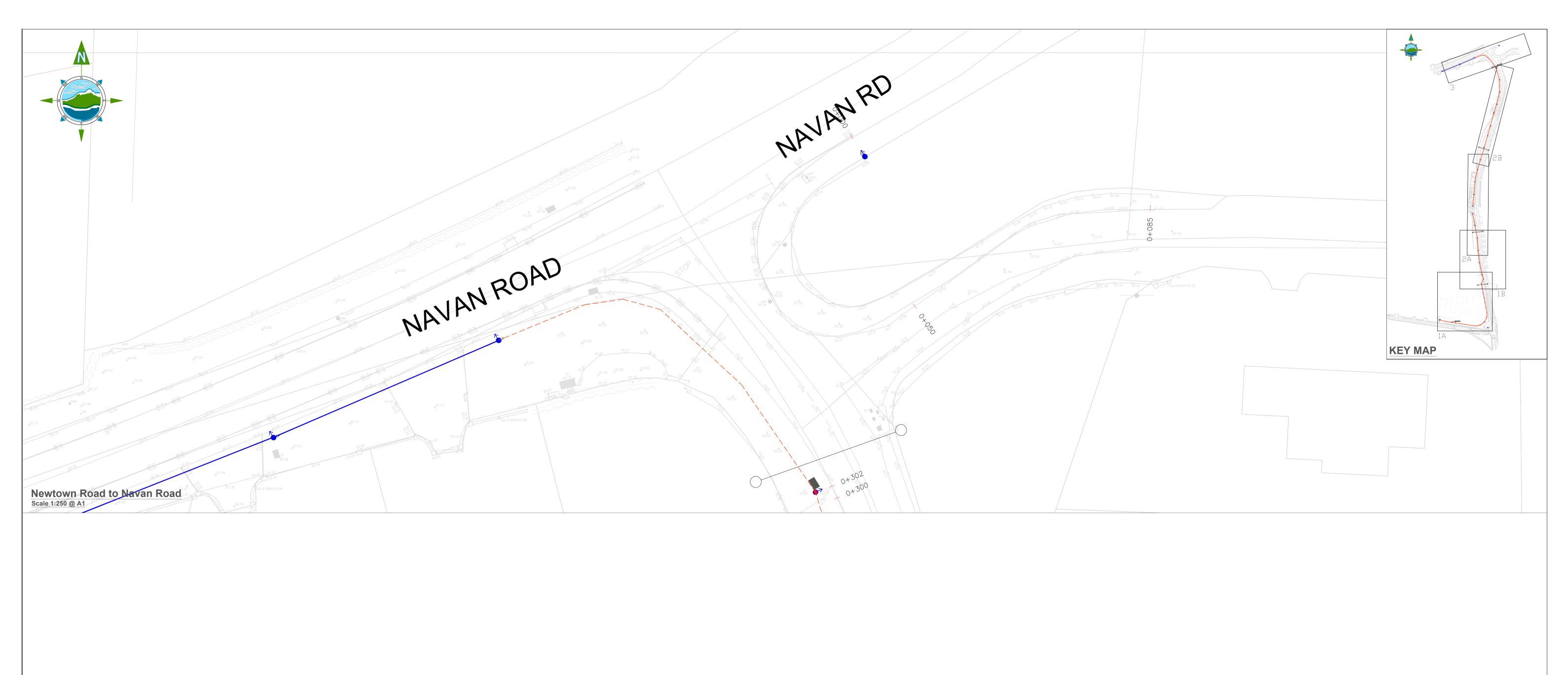


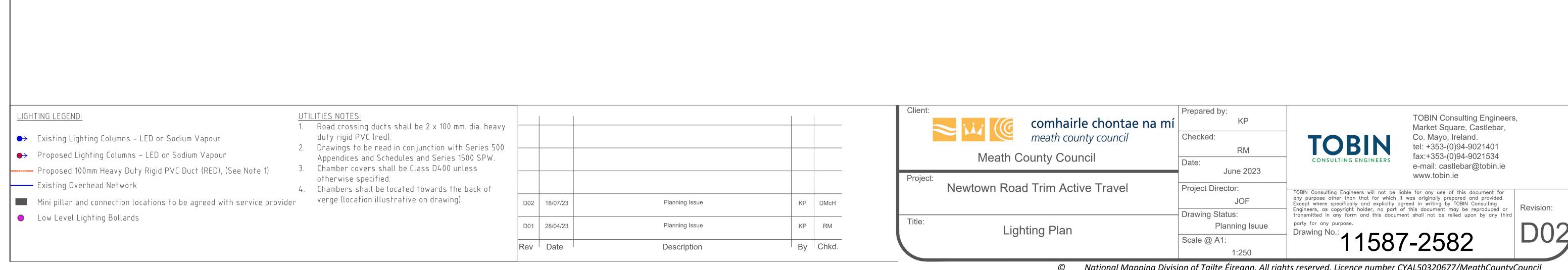


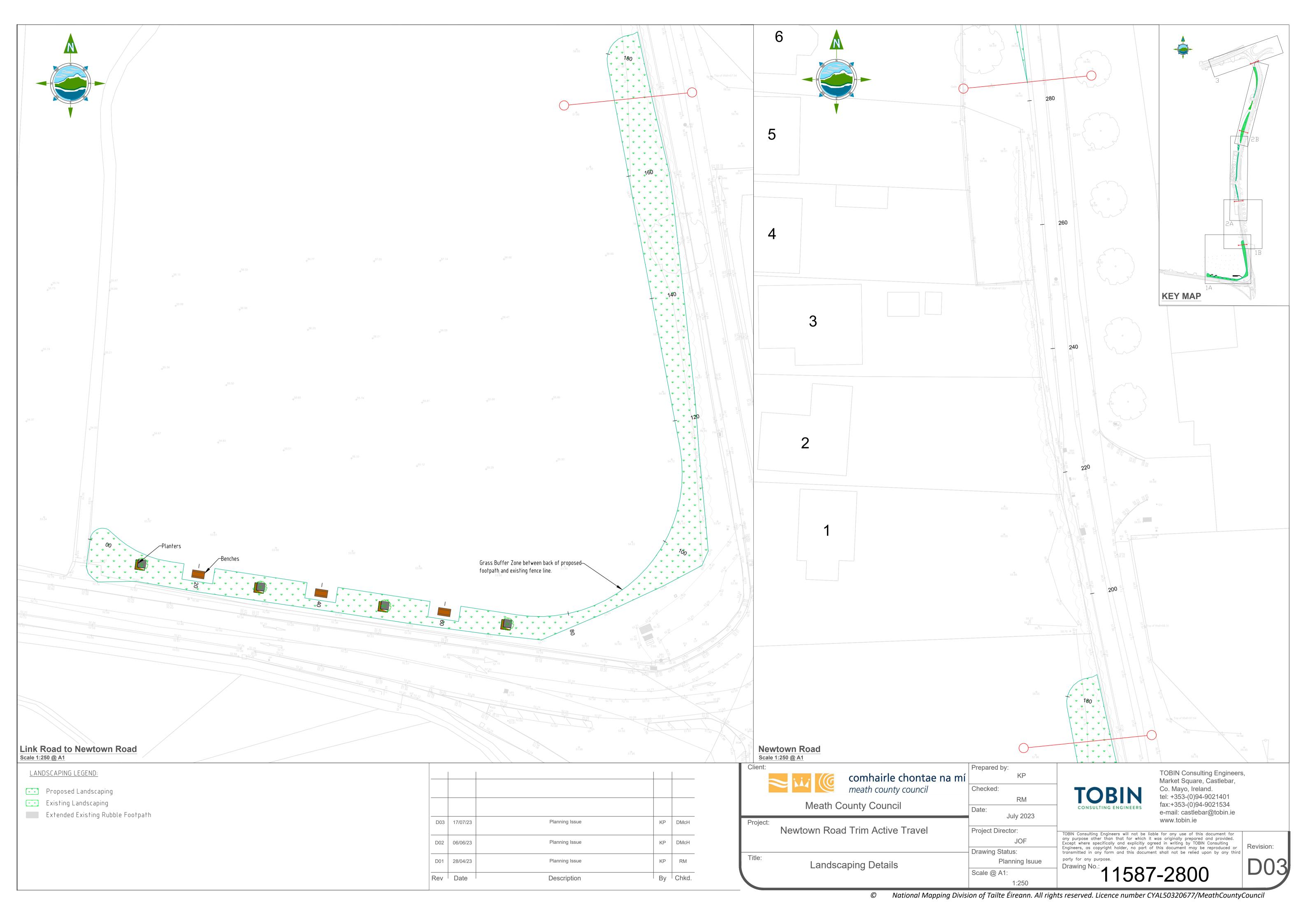


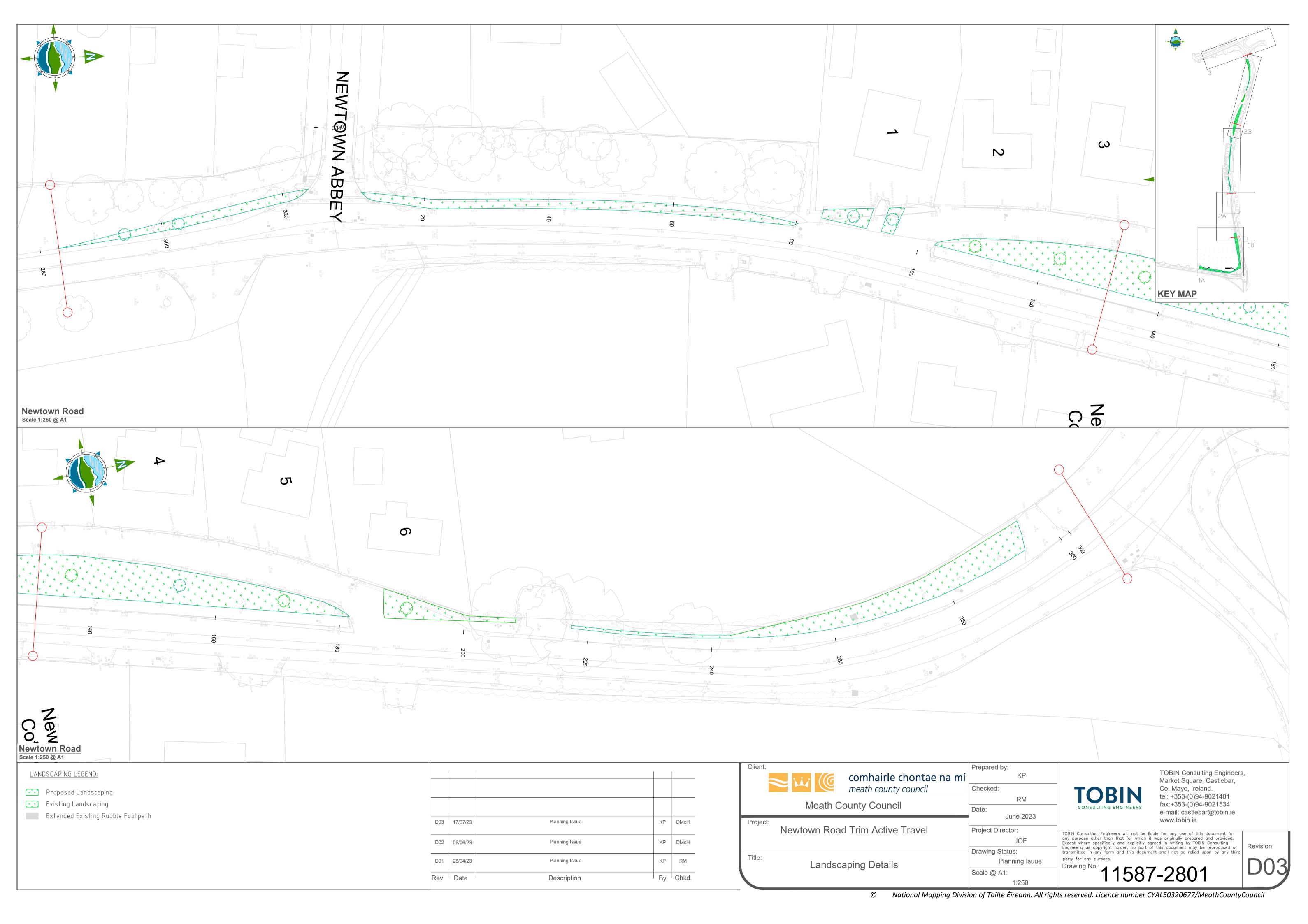


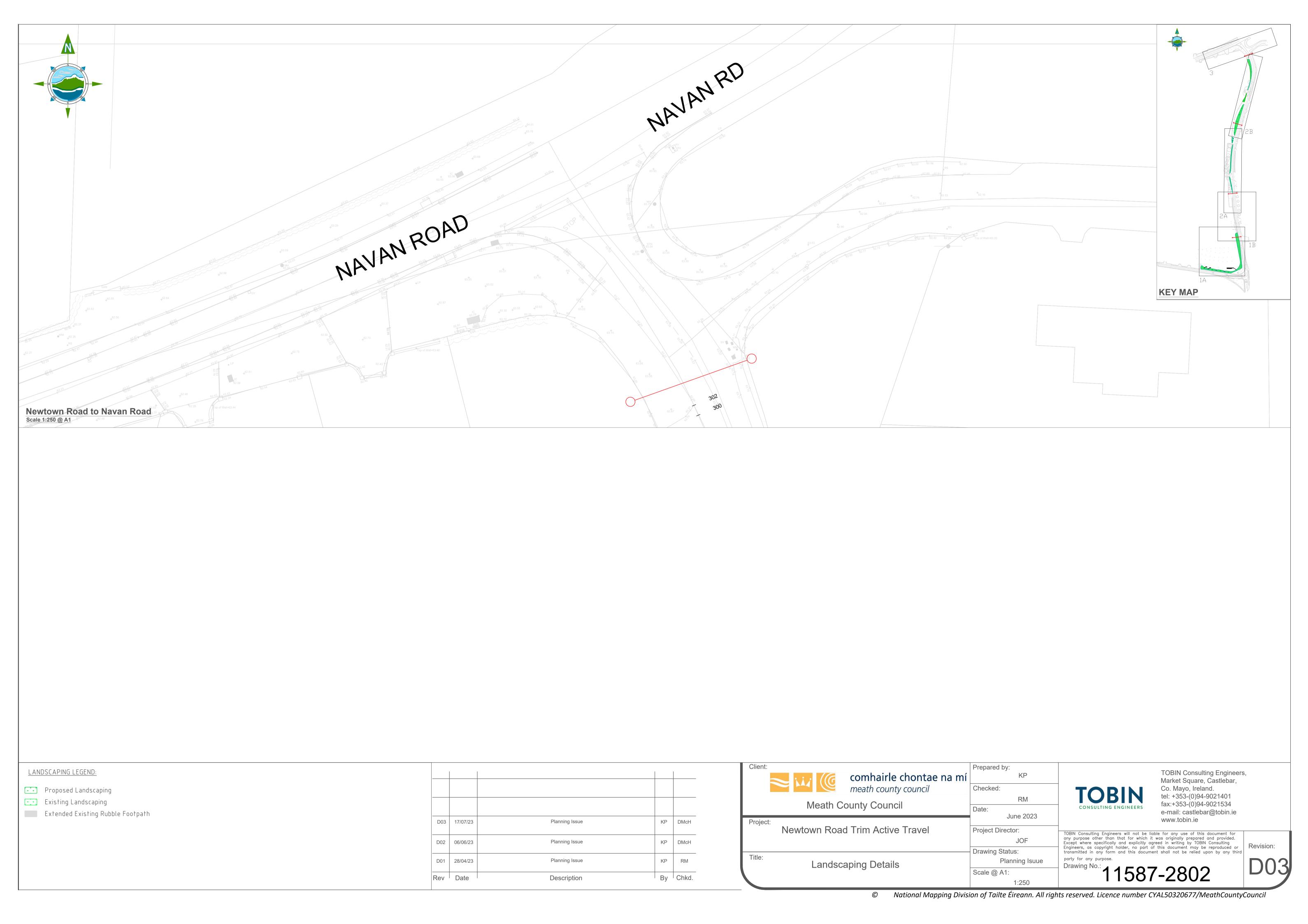


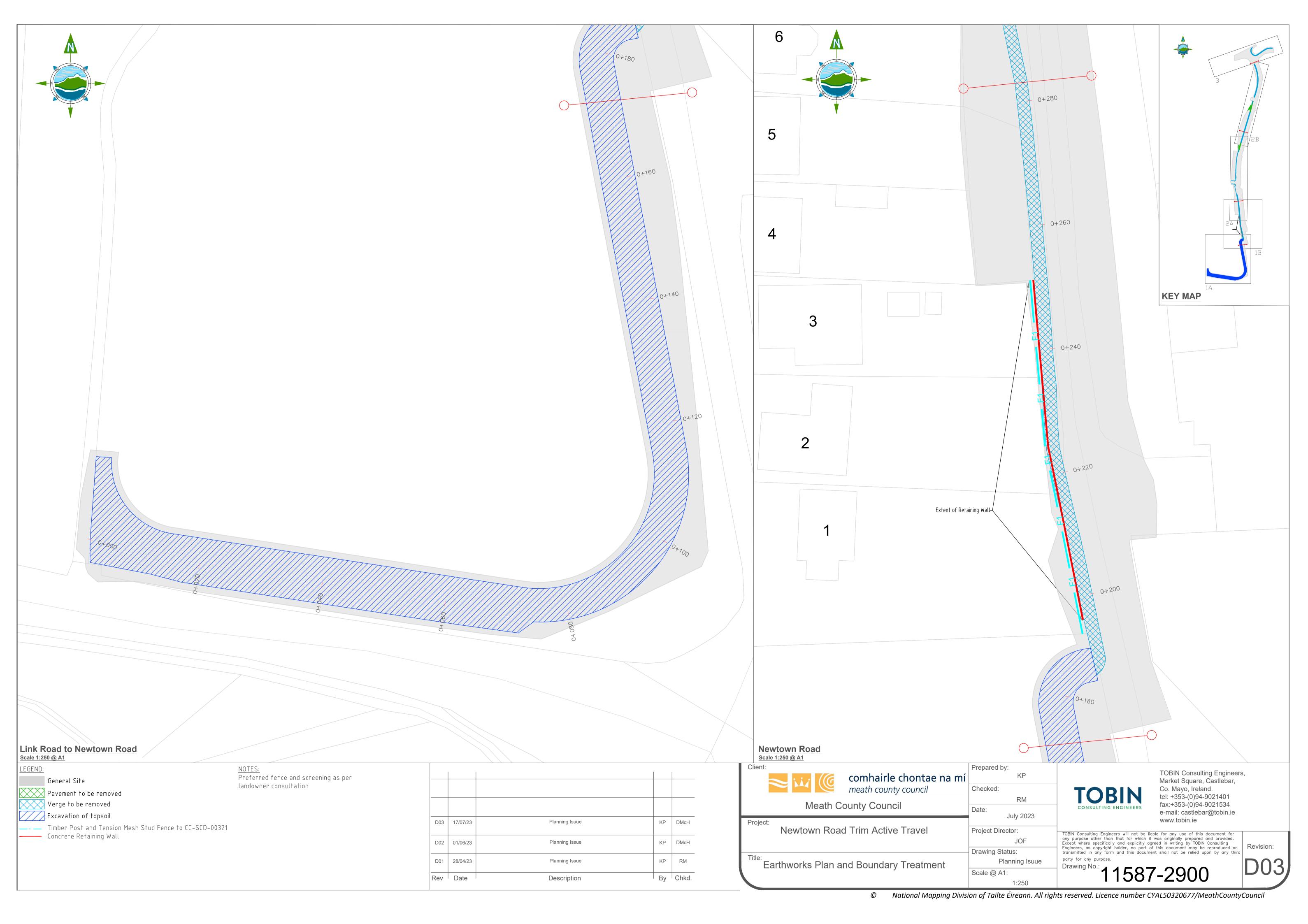


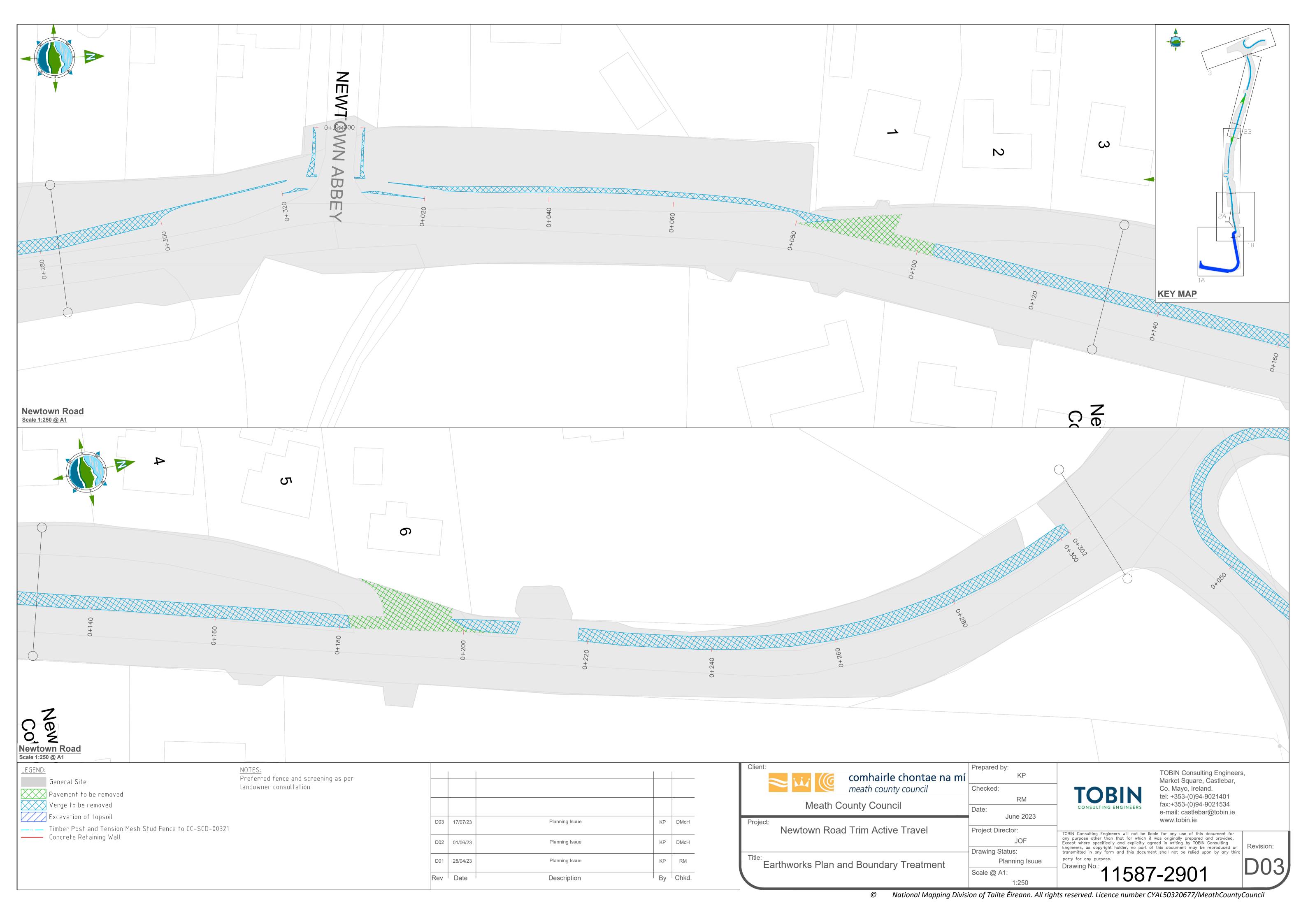


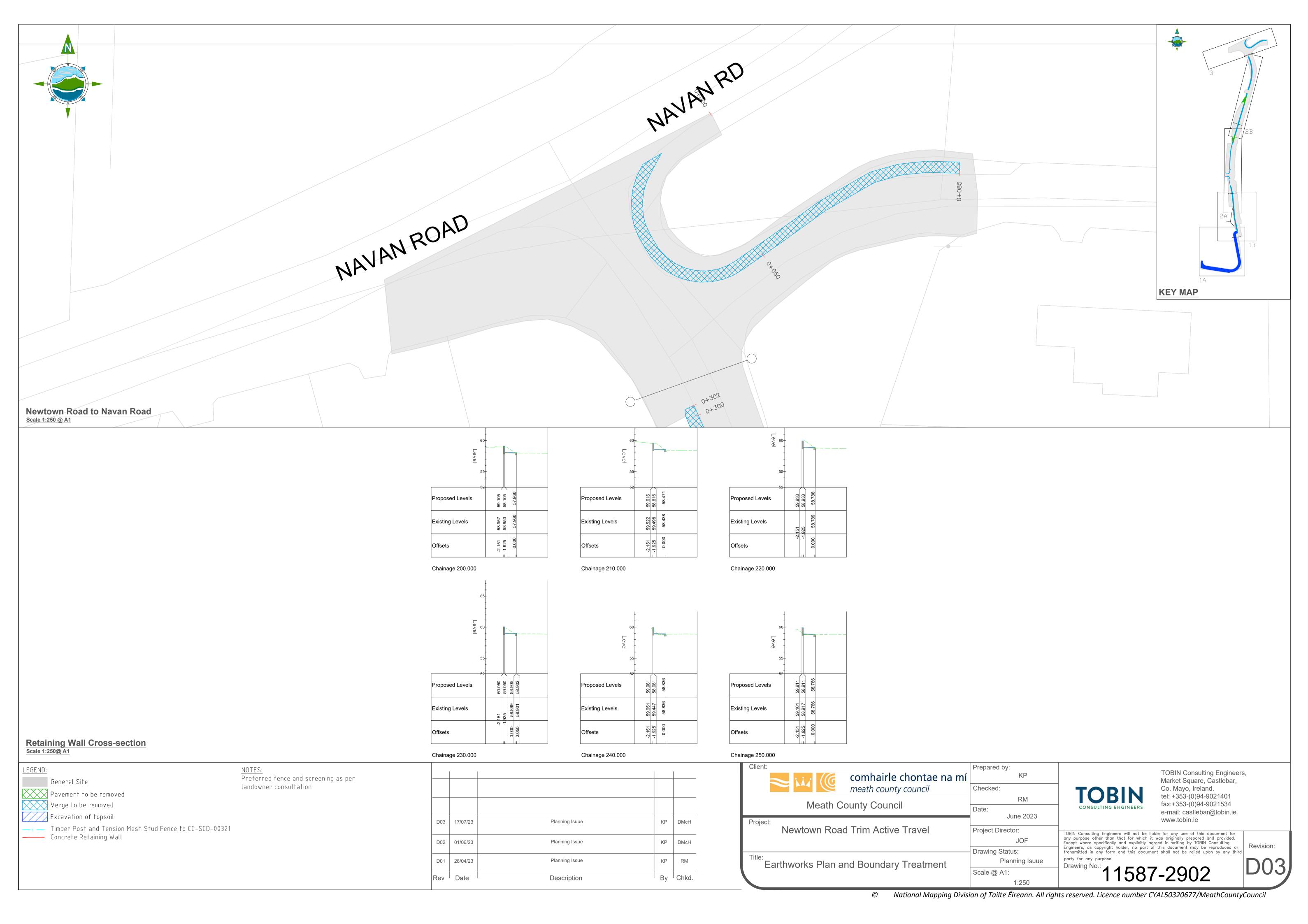




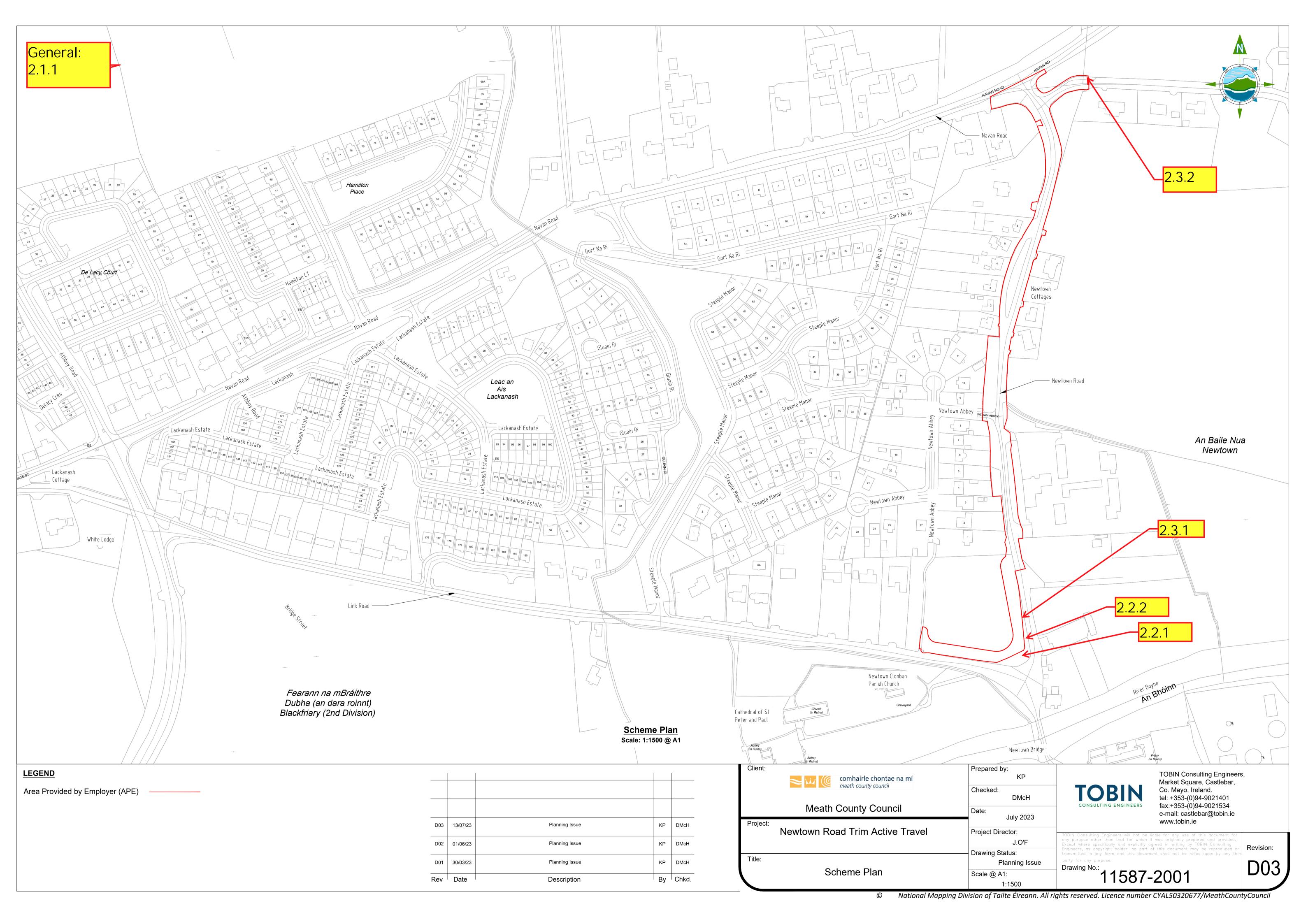








Appendix B PROBLEM MAP



Appendix C ROAD SAFETY AUDIT FEEDBACK FORM



Scheme: Newtown Road Trim Active Travel Scheme Road Sarety Audit Feedback Form Scheme: Newtown Road Trim Active Travel Scheme Route No.: L8016 & L8017 Date of Audit: 25/09/2023		Daniel Cafeston Amelita Familiano In Farma	
Scheme: Newtown Road Trim Active Travel Scheme Audit Stage: 1-2 Route No.: L8016 & L8017 Date of Audit: 25/09/2023		Road Safety Audit Feedback Form	
	Scheme: Newtown Road Trim Active Travel Scho	eme	
	Audit Stage: 1-2	Route No.: L8016 & L8017	Date of Audit: 25/09/2023

2.3.2 Yes	2.3.1 Yes	2.2.2 Yes	2.2.1 Yes	2.1.1 No	Paragraph Problem No. in Safety accepted Audit (yes/no) Report
Yes	Yes	Yes	Yes	Yes	Recommended Measures Accepted (yes/no)
					To be Completed by Designer d Alternative Measures (describe). Give reason for not accepting recommended measure
					To Be Completed by Audit Team Leader Alternative Measures or reasons accepted by auditors(yes/no)

1/4	Signed:	Signed:	Signed:
	Lora J. My	S.H.)	David Mc Hugh
	Audit Team Leader	Client	Designer
	Laura Gaffney	STEPHEN HOET	David McHugh
	Date:	Date:	Date:
	03/11/23	03/11/23	02/11/23

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