

Preliminary Design Report

N83 Rural Regeneration
& Development Scheme Dunmore

[INSERT TII Ref. No.]



Date: 21/08/2025

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1 Introduction

O'Connor Sutton Cronin Multidisciplinary Consulting Engineers (OCSC) have been appointed by Galway County Council (GCC) to prepare a regeneration scheme for Dunmore Village in County Galway. The scheme initially incorporated road improvement that involves widening/realignment design of existing Bridge Street in Dunmore and junction improvement at Castle Street/High Street/Barrack Street with the addition of the public realm design along the east of N83 where existing buildings are proposed for removal. The extents of the project will also provide for incorporation of all existing services together with the provision of services for future needs.

The Dunmore Area for the scheme is shown in Figure 1.1. This Design Standards Report sets out the design criteria, standards, advice and guidance notes to which various elements of the scheme will be designed including an Audit of methods of compliance with standards. The route will be primarily designed in accordance with Design Manual for Urban Roads and Streets (DMURS) with reference to the TII's designs standards where appropriate.

The scheme is approximately 195m long and involves the reconstruction of existing sections of the N83 as well as offline realignment to improve sections of sub-standard alignment. The existing alignment has a sub-standard cross section and there are no overtaking opportunities. This report has been prepared in accordance with the guidance provided in TII Publication DN-GEO-03030 and approval is sought to proceed to Phase 4, Statutory Procedures.

A site location map is provided below.



Figure 1.1: Dunmore Site Location

2 Collision History

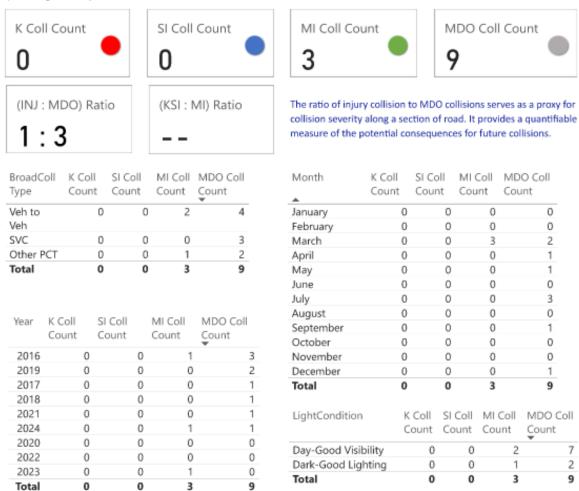
An assessment of reported collision data for the study area between 2016 and 2024 at N83 Dunmore section indicates a low-severity collision profile. Over this eight-period, there were no fatal (K) or serious injury (SI) collisions recorded. A total of three minor injury (MI) collisions and nine material damage only (MDO) collisions were reported. This results in an injury to MDO ratio of 1:3, which suggest that the majority of incidents result in vehicle damage rather than personal injury.

In terms of collision type, the data shows that incidents are primarily associated with vehicle-to-vehicle movements and other classified collision types, with limited evidence of single-vehicle loss of control or vulnerable road user involvement. The absence of head-on or high-severity collision types further supports the assessment of relatively low collision risk along this section.

The annual distribution shows sporadic collision occurrence, with modest peaks in 2016 and 2019 (four and two collisions respectively), followed by a declining trend in recent years. Notably, no collisions have been recorded since 2022, which may reflect improved driver behaviour, road safety interventions, or broader travel pattern changes. Monthly distribution indicates no clear seasonal trend, with collisions occurring in isolated months only.

Summary & spatial distribution of data from reported collisions (2016 to 2024)

Head-On = head-on type collisions, NUM = non-motorised road users (cyclists & pedestrians), Other PCT = Other primary collision types that don't fit standard board collision types, SVC = single vehicle collision, Veh to Veh = collision involving two or more vehicle (excluding head-on)



RdSurface			MI Coll Count	MDO Coll Count
Dry	0	0	2	5
Wet	0	0	1	4
Total	0	0	3	9

RouteNo			MI Coll Count	MDO Coll Count
N83	0	0	3	9
Total	0	0	3	9

Table 2-1: TII Collison Database

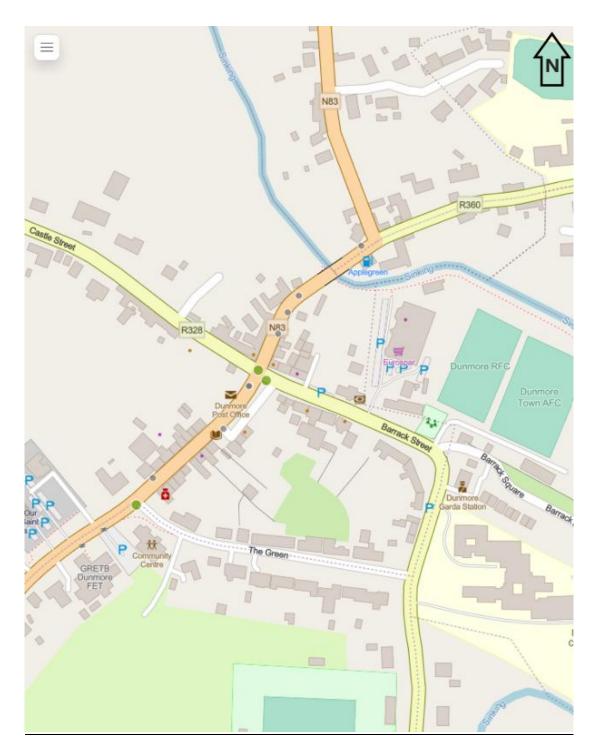


Table 2-2: TII Collison Location

3 Scheme/Safety Objectives

The primary objectives of the scheme are identified below;

- Demolition of Buildings on Bridge Street and Barrack Street to allow the realignment of the N83;
- New Public Realm along Bridge Street linking the Town Square with the Sinking River;
- A new artistic Mural and interpretive art within the extended public realm;
- Provision of all ancillary works, public lights, services, boundaries, street furniture and amenities;
- Improvements to the road, footpath, and vulnerable road user facilities on High Street and Bridge Street which from part of the N83;
- Improvements to the road, footpath, and vulnerable road user facilities on Castle Street and Barrack Street which from part of the R328;
- The incorporation of traffic signals at junction of High Street / Castle Street / Bridge Street / Barrack Street;
- The provision of pedestrian facilities with road crossings;
- Provision of broadband infrastructure;
- Protection of the environment in the course of these works.

4 Existing Conditions

4.1 Speed

The posted speed limit at this section of the N83 is 50km/hr.

Traffic Volumes;

In order to inform this assessment, Tracsis were contracted to carry out traffic surveys at the following locations:

Table 4-1: Traffic Survey Locations

Junction	Location	Contractor	Date	Times
1	N83/ The Green	Tracsis	25/02/2020	07:00 – 19:00
2	R328 Barrack St./ Barrack Sq.	Tracsis	25/02/2020	07:00 – 19:00
3	N83 High St./ Bridge St./R328 Barrack St./Castle St.	Tracsis	25/02/2020	07:00 – 19:00
4	N83 Bridge St./ Sion Hill/ R360	Tracsis	25/02/2020	07:00 – 19:00

Location of traffic count can be seen from Figure 4.1.

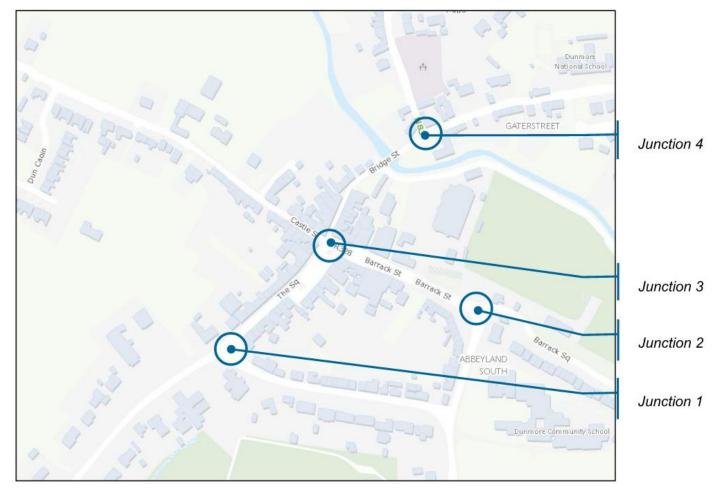


Figure 4.1: Traffic Count Location

The surveys took the form of 15-minute interval junction turning counts and were carried out on Tuesday 25th February 2020 between the hours of 07:00 and 19:00.

A seven-fold classification system was used as follows:

- Bicycle;
- Motorcycle;
- Car;
- Light Goods Vehicle;
- Heavy Goods Vehicle (Class OGV 1);
- Heavy Goods Vehicle (Class OGV 2);
- Bus (PSV).

In addition to the above, the following were also recorded:

- Pedestrian crossing counts at each arm of each junction over 15 minute intervals;
- Queue length surveys recording the maximum queue lengths observed on a per lane basis at each approach of each junction over 5 minute intervals.

It must be noted that, as surveys were carried out in 2020, which is outside of the acceptable limit for assessment. As a result, the Average Daily Traffic (ADT) figures from a TII Traffic Counter located along the N83 approximately 7km from the assessment site was used to determine the appropriate growth factor. The most recent 2024 ADT value was compared against the 2020 ADT value, which gave a growth factor of 1.35. This factor was then applied to the 2020 survey data.

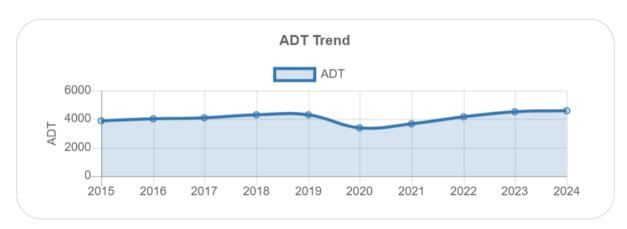


Figure 4.2: ADT for Traffic Counter on N83 (between Tuam and Dunmore)

The AADT of the N83 arm from traffic count data was 2,925 in 2024 with an HGV % of 5%.

4.2 Horizontal & Vertical Alignment

4.3 Alignment

The existing N83 horizontal geometry has a horizontal radius that is sub-standard for a design speed of 50km/hr. The road improvement involves the upgrade of the N83 route and the R328 Regional route incorporating specifically the upgrade Bridge Street for the comfort and safety of all road users. As identified earlier in this report Bridge Street currently has a width of between 3.4 and 4.5 metres restricts the ability of larger vehicles to freely traverse the route.

The alignment of the N83 and the R328 will be designed so that so that the geometric elements, including horizontal and vertical curvature of the carriageway and sight stopping distance will be in accordance with DMURS and TII guidance where appropriate having values consistent with the design speed of 50 kph.

The relevant horizontal and vertical geometric design values are highlighted in DMURS figure 4.1 below for the 50 kph Design Speed highlighted with the red outline. A standard carriageway cross fall of 2.50% will be adopted generally.

Horizontal Curves								
Design Speed (km/h)	10	20	30	40	50	60		
Side Friction Factor (F)		0.300	0.300	0.25	0.214	0.184		
Min. radius with adverse camber of 2.5%		11	26	56	104	178		
Min. radius with superelevation of 2.5%	3	111	22	46	82	136		
Design Speed (Irm/h)	10	1	CURVATURE	40	150	40		
Design Speed (km/h) Crest Curve K Value	10 N/A	VERTICAL 20 N/A	CURVATURE 30 N/A	40 2.6	50	60 8.2		

Figure 4.3: DMURS Carriageway Geometric Parameters

4.4 Cross Section Crossfall & Superelevation

4.4.1 Cross Section

The existing cross section of the N83 varies with carriageway width of 3.4 to 4.5m with sub-standard footpath on either side of road.

4.4.2 Crossfall

Existing carriageway cross falls varies throughout the length of study area.

4.4.3 Superelevation

N/A.

4.5 Junctions & Accesses

There are a number of existing domestic accesses which are located along this section of the N83 which are to be rationalised and maintained. The scheme involves major junctions, one at village centre Castle Street / High Street / Barrack Street / Bridge Street.



Figure 4.4: Existing Narrow Carriageway and footpath

4.6 Facilities for Vulnerable Road Users

This is a town section of the N83, there are currently narrow dedicated facilities for pedestrians or cyclists. The proposed cross section of the N83 consider widening of existing footpath to suit DMURS standards. Sustainable urban environments are for people who are living in, working in, moving through or just visiting the area. Pedestrians are the most vulnerable of all road users, as they include children, old, disabled people as well as able bodied people.

4.7 Visibility & Sightlines

Forward visibility is limited due to the horizontal and vertical curves. There are no opportunities for overtaking and it is prohibited by the use of a solid centre line.

5 Environmental, Archaeological and Other Constraints

5.1 Appropriate Assessment

The Habitats Directive provides legal protection for habitats and species of European importance and establishes the requirement for an AA. This AA screening is based on best scientific knowledge and has utilised ecological and hydrological expertise. In addition, a detailed online review of published scientific literature and 'grey' literature was conducted.

This AA has been prepared for the N83 Dunmore Regeneration — Public Realm project in Dunmore, Co. Galway. There is no spatial overlap between the study area and the closest Natura Site Lough Corrib SAC (000297). Due to the lack of spatial overlap and the nature of the works, impacts to Lough Corrib SAC are predicted to be probable, temporary and not significant. The next closest Natura Site is Williamstown Turlough SAC (002296), located 6.2km northeast of the site, there is no hydrological connection between the study area and Williamstown Turloughs SAC or any other Natura Sites within the 15km ZOI. Therefore, impacts to the remainder of European sites within the ZOI are predicted to be Unlikely and not significant

This stage 1 screening for AA of the N83 Dunmore Regeneration – Public Realm in Dunmore, Co. Galway has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the project.

The AA screening process has considered potential effects which may arise during the construction and operational phases as a result of the implementation of the project. Through an assessment of the pathways for effects and an evaluation of the project characteristics, taking into account the processes involved and the distance of separation from European sites, it has been evaluated those adverse effects on the qualifying interests, special conservation interests, or the conservation objectives of Lough Corrib SAC are probable to occur as a result of the proposed project. However, due to the lack of spatial overlap between the site and Lough Corrib SAC as well as the nature of the works, these impacts are predicted to be temporary and not significant.

On the basis of objective information and in view of best scientific knowledge, the proposed development, either individually or in combination with other plans or projects, and without relying on any mitigation measures, is unlikely to have a significant effect on Lough Corrib SAC, in view of the sites' conservation objectives, and there is no reasonable scientific doubt in relation to this conclusion. Consequently, this project screens out and a Stage Two Appropriate Assessment is not required for the project.

5.2 Ecological Assessment

The overall purpose of Ecological Impact Assessment report was to assess the ecological standing of the site in its current condition in advance of the works beginning on Dunmore, County Galway. The proposed works at the N83 Dunmore regeneration project will not result in negative effects on the ecology of the area or on sites designated for nature once standard construction best practice methods are implemented. Overall, the residual effects are anticipated to be slight.

The report has identified the baseline ecological status of the site along with ensuring compliance with relevant national and European statutory requirements to guarantee that works completed by Galway County Council will not negatively impact environmental receptors.

It is anticipated that the proposed road works have the potential to negatively impact on the immediate surrounding environment. Potential concerns arising from the works include:

- Temporary disturbance of species for the duration of the works
- Displacement of species

Although some negative impacts have been outlined above for the works in terms of siltation, species disturbance, etc., the implementation of standard operating procedures and best practice methods reduce the risk of impact on the ecology of the site with no long-term impact on the ecology of the site and protected areas within the ZoI. It is recommended that a pre-construction dusk bat surveys, and invasive species survey be carried out if more than 12 months has passed since previous surveys. In addition to this, nesting bird surveys should be carried out 24 hours prior to demolition commencing if the works are to be carried out during nesting bird season (March 1st to August 31st).

It is concluded that, subject to implementation of best practice methods and standard operating procedures along with mitigation measures (which are not linked to the SAC or its qualifying interests), the proposed project is not foreseen to give rise to any significant adverse effects on the ecological integrity of the site, alone or in combination with other plans or projects.

The proposed scheme will have no direct impacts on any Special Protection Areas or Special Areas of Conservation identified in the Local Authority Development Plan.

5.3 Other Environmental Surveys

Bat Survey has been carried out to assess and evaluate the importance of the existing habitat for bats. Where appropriate, avoidance or mitigation measures are suggested.

The following bat species have been recorded during this bat survey: Common pipistrelle, Soprano pipistrelle and Lesser noctule. This represents three of the nine resident bat species known to Ireland. All bat species recorded during this Bat Survey are Annex IV species under the EU Habitats Directive and all have a Favourable Status in Ireland.

Bats may use old stone buildings as roosts, roosting in attics or cracks in stonework. Such suitable roosts were identified during the suitability assessment; however, no signs of bats roosting within the buildings were observed during the assessment. Bats may also use mature trees with tree holes, etc. as roosting sites all year round. Such suitable roosts were identified during the suitability assessment; however, no signs of bats roosting within trees were observed during the assessment. The bats were mainly seen foraging along the Sinking River and in the treelines and woodland on either side the river towards the north of the site. However, no bats were observed emerging from or re-entering the buildings or treelines during the surveys.

As the proposed works are related to the demolition of buildings within the site boundary, removal of vegetation and the widening of the N83, there is a low risk of impact to the bat species present on site.

The main impacts of the proposed development on bat fauna are summarised as follows:

- Bats will often use old stone buildings as roosting sites. Although no roosts were identified, there is potential for roosting within the area which will be removed. This is considered a Low-Moderate, Negative Impact.
- Bats may use mature trees with tree holes, etc. as roosting sites all year round. Although no roosts were
 identified, there is potential for roosting within the area which will be removed. This is considered a LowModerate, Negative Impact.

The following mitigation measures are recommended to reduce the potential impact of the proposed development on local bat populations:

- Consider construction of bat boxes to compensate for the loss of potential roosts.
- In the event that bats are found on the proposed development site during enabling or construction works, works should immediately cease in that area, and the local NPWS conservation ranger should be contacted.
 The bats should be removed by hand by a suitably qualified licensed surveyor.
- Construction works will be limited to daylight hours to avoid negative effects on bats. The use of construction lighting will be limited to an absolute minimum. In general, artificial light creates a barrier for commuting bats so lighting should be avoided where possible. If any external lighting is required, it must be sensitive to the presence of bats commuting in the area. Directional lighting (i.e., lighting which is cowled away from sensitive habitats with no light spillage, in line with best practice) shall be used.
- For the removal of any trees, a soft felling technique should be implemented, where possible, to allow any bats adequate opportunity to escape the affected tree. Trees should be gently pushed over rather than cut down, with the possibility of needing to excavate and sever roots in some cases. In order to ensure the optimum warning for any roosting bats that may be present, an affected tree should be pushed lightly two to three times, with a pause of approximately 30 seconds between each nudge to allow bats to become active. The trees will then be pushed to the ground slowly and should remain in place for a period of 48 hours to allow bats to escape and relocate to nearby trees.
- A toolbox talk should be provided to construction staff setting out the actions to take if bats are discovered during works. In that event, works should stop immediately, and the advice of an Ecologist should be sought.

This survey conclusion on the bat usage on the Dunmore site and in the surrounding area. Three bat species were recorded during the bat surveys: Common pipistrelle, Soprano pipistrelle and Lesser noctule. A high level of bat activity was recorded across all three species. Based on the evidence collected during the surveys, it is deemed that the bat populations recorded within the survey area are of Local Importance. In the absence of mitigation, the proposed development will likely have a Low-Moderate, negative impact on local bat populations. A number of mitigation measures have been provided and incorporated into the design of the proposed development. Strict adherence to these will reduce the overall impact to a Negligible-Low level.

5.4 Archaeological Constraints

N/A.

6 Proposed Design

6.1 General

The site inspections, discussions with Galway County Council project team and the data gathered on the preliminary investigations informed the design process. A route options assessment using Multi Criteria Analysis in accordance with the TII procedures outlined took place. The design has evolved from a combination of the foregoing, the use of DMURS and TII design standards as required where appropriate using values consistent with the design speed of 50 kph. The scheme details incorporate horizontal, vertical and cross section details with pavement design in accordance with TII standards.

The N83 Bridge Street Dunmore Rural Regeneration is proposed to incorporate works as outlined below:

- Demolition of Buildings on Bridge Street and Barrack Street to allow the realignment of the N83;
- New Public Realm along Bridge Street linking the Town Square with the Sinking River;
- A new artistic Mural and interpretive art within the extended public realm;
- Provision of all ancillary works, public lights, services, boundaries, street furniture and amenities;
- Improvements to the road, footpath, and vulnerable road user facilities on High Street and Bridge Street which from part of the N83;
- Improvements to the road, footpath, and vulnerable road user facilities on Castle Street and Barrack Street which from part of the R328;
- The incorporation of traffic signals at junction of High Street / Castle Street / Bridge Street / Barrack Street;
- The provision of pedestrian facilities with road crossings;
- Provision of broadband infrastructure;
- Protection of the environment in the course of these works.

At the feasibility and option selection stage five options were explored and below are the options listed,

- 1. Improvements along Castle Street and Bridge Street, widening the road to the west of Bridge Street.
- 2. Improvements along Castle Street and Bridge Street, widening the road to the east of Bridge Street.
- 3. New road from Barrack Street over the Sinking River to meet the N83 at the Bridge Bar.
- 4. Extend the cul-de-sac along Castle Street over the river, to create a new junction with the N83.
- 5. A new road to the west of the town which would create a link between Castle St and the N83.

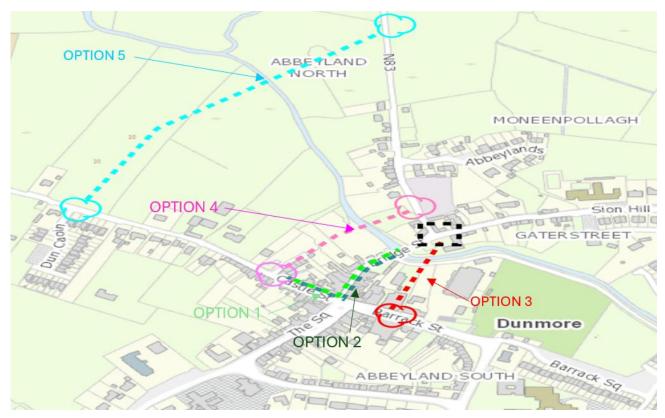


Figure 6.1: Options Considered

The multi criteria analysis methodology is based on the TII method and considers the following headline items:

- 1. Economy Considering Transport Efficiency and Effectiveness, Wider Economic Impacts, Funding Impacts, Transport Quality and Reliability
- 2. Safety & Design Standards Road/Street User Safety, Security, likely reduction in collisions and ability to achieve design standards
- 3. Environment Assessing the effects on various aspects of environment such as Flora and Fauna, Architectural and Heritage.
- 4. Accessibility & Social Inclusion Deprived geographical areas and vulnerable groups.
- 5. Integration Consideration of the routes relating to Transport Integration, Land Use Integration, Geographical and other government policy integration providing regional balance.
- 6. Physical Activity –Under these criteria, the options were ranked by consideration of the Ambience, Absenteeism (loneliness) and Reduction of Health Risks.

Summary of each option score for MCA can be found in below Figure 6.2.

DUNMORE MCA OPTIONS SCORING SUMMARY									
	Economy	Safety & Design Standards	Environment	Accessibility & Social Inclusion	Integration	Physical Activity	Total		
Option 0: Do Nothing	12	3	49	2	9	4	79		
Option 1: Widening on West Side of Bridge Street	23	14	34	7	20	10	108		
Option 2: Widening on East Side of Bridge Street	23	20	34	10	21	10	118		
Option 3: Semi-Bypass from Barrack Street to N83	18	15	30	6	17	12	98		
Option 4: Semi-Bypass from Castle Street to N83	13.5	15	32.5	4	14	13	92		
Option 5: Bypass from N83 to Castle Street	13.5	14	29.5	2	12	15	86		

Figure 6.2: MCA Summary

The Option 2 widening on the eastern side of the Bridge Street emerged as the preferred option.

This Option achieves the following:

- A comprehensive road traffic management solution.
- A better economical balance for the future users and the town centre of Dunmore
- A safe option and adheres to design standards.
- Provides dedicated space for pedestrian & cyclists.
- Better facilitate the vulnerable users.
- Also, it enhances accessibility to the schools and the community facilities.
- Provides optimal balanced impact to the environment, archaeological and cultural heritage of Dunmore.
- Compatible with Galway County Development Plan & Rural Re-generation.
- Streamlines strategic connectivity and mitigates urban sprawl.

Increased health benefits by facilitating people to walk and cycle to the schools, town centre, playgrounds and the club.

6.2 Cross Section Crossfall & Superelevation.

6.2.1 Cross Section

The area of Bridge Street where a new design is implemented will have the standard lane width on the Arterial Street in the range of 2.75m to 3.5m. Within this range the preferred values are 3.0m and 3.25m. The selected value of 3.25m has been chosen for Dunmore in view of the wider function of the routes to accommodate the traffic in the region. The carriageway widths will remain consistent for upgraded sections and transition to existing road cross sections at tie-ins.

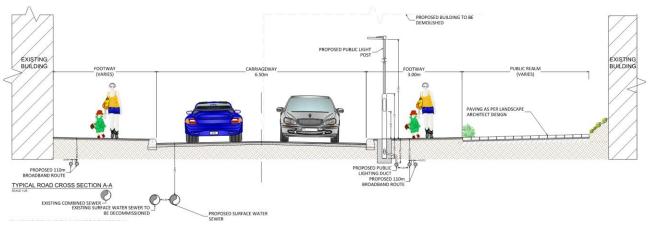


Figure 6.3: Proposed Cross Section

6.2.2 Crossfall

A normal camber of 2.5% will be provided along Bridge Street-N83 and as the default crossfall and match to existing camber at tie in location.

6.2.3 Superelevation

No superelevation is provided.

6.3 Facilities for Vulnerable Road Users

The design of Dunmore centre aims for the optimum pedestrian Quality of Service consistent with the standards. The width of the footpath has been determined using the Cycle Design Manual where 3m is considered the appropriate width. The anticipated traffic volume of pedestrians at Dunmore is of low volume and 3.0m standard width for the Pedestrians is deemed appropriate.

A public realm space is designed on east of N83 section along bridge street which connects pedestrians from village centre to the scenic sinking river pathway.

6.4 Junctions

The primary principle in the design of junctions will be to provide junctions that are safe and consistent with existing layouts to present a uniformity of approach to drivers and all road users. In addition, junctions will have sufficient capacity to accommodate design year peak traffic flows thus optimising network capacity.

The primary junction strategy objectives will be:

- To facilitate all road user movements efficiently, effectively and safely;
- To provide safe crossing for pedestrians at desired lines;
- To optimise road safety by ensuring adequate visibility and consistency;
- To ensure capacity for the intend volumes of traffic;
- To function as traffic calming measures;
- To provide an economic solution, so that the cost of implementing the design will be, to the maximum possible extent, offset by the economic benefits derived;
- To optimise road construction costs;
- To minimise environmental impacts, such as impacts on the Sinking River, protected species, air pollution and engine noise, by minimising fuel consumption through reductions in the number of speed changes and the number of stop/starts required;
- One principle function of junctions design in Dunmore will be to manage road space to allow all movements be implemented.

All junctions designed as part of the works on the N83 and R328 will be designed in accordance with DMURS where a balanced design approach will be used. All arms of junctions require a crossing. The key junctions within the scope of works are the crossroads in Dunmore centre (crossroads at High Street/Barrack Street/Bridge Street/Castle Street). The existing private access point to properties will be facilitated. During the design, particular attention will be given to the village centre crossroads and the ability to accommodate all road user movements.

6.5 Drainage

There is an existing surface water sewer along Bridge Street. This sewer is indicated as flow from south to north and discharging to The Sinking River, with the outfall at the west side of the bridge. The proposed N83 surface water collection will be provided by a system of kerb and gully (accesses) which will discharge at existing outfall location.

The general principals behind the drainage design as follows

- The existing surface water drainage network regime of the area will be utilised;
- The design will ensure continuation of existing overland flows;
- The drainage of the proposed road will be designed such that surface water drainage and sub-grade drainage will be provided for the mainline carriageway alignment alterations in horizontal and vertical alignments. This discharge will be passed through a petrol interceptor where required before discharge to an existing outfalls;
- The maintenance or improvement to the quality of the existing drainage network;
- The application of Sustainable Urban Drainage Systems (SuDS) to the surface water drainage system where possible in-line with Galway County Council's SuDS standards;
- Rainfall intensities to be factored up by 20% to take into account climate change.

The road drainage for the scheme will be designed in accordance with the TII specifications. The elements of the drainage to be constructed will be constructed in accordance with the TII standard details. Any SuDS elements incorporated into the scheme will be designed in accordance with The SuDS Manual (published by CIRIA, 2007). All water courses that receive road discharge will be protected by measures to minimise the risk of pollution as recommended by the Inland Fisheries Board. The recommendations of the Department of the Marine & Natural Resources publication Fishery Guidelines for Local Authority Work will be adopted in the design of outfalls. The realignment is generally an upgrading of standards and as such can utilise the existing networks without significant alteration of the contributing area. Hence it is not envisaged that any significant attenuation capacity will form a part of the detail design.

6.6 Pavement

The pavement of the new road will be designed in accordance with the DN-PAV-03021. The design of the Capping Layer and the Sub-Base shall follow the requirements of the TII Standards: Foundations as noted earlier. The design depth of the pavement layers will follow the requirements of TII Standards based on the cumulative number of standard axles over the pavement life. The pavement materials to be used and method of construction will follow the requirements of the TII's Specification for Road Works.

6.7 Safety Barrier Risk Assessment and Provision

N/A.

6.8 Traffic Signs and Road Markings

Directional and Regulatory Signage for the scheme will be provided in accordance with the Department of Transport 'Traffic Signs Manual 2019' and the 'Road Traffic (Signs) Regulations, 1997' and any subsequent amendments to these documents. All Regulatory and Warning signage will be consistent with the Design Speed of the mainline and secondary roads. All directional information signage will be consistent with the classification and Design Speed of the scheme. Road markings, reflective markings and studs shall be provided in accordance with the Department of Transport 'Traffic Signs Manual' and in accordance with Series 1200 of the 'Specification for Road Works' as published by the TII. Temporary traffic signs during construction will comply with Chapter 8 the 'Traffic Signs Manual 2019' and in accordance with Series 1200 of the 'Specification for Road Works' as published by the TII.

6.9 Accommodation Works

The accommodation works associated with the demolition of the existing buildings beside the N83 will include the provision of secure site hoarding and traffic management measures to ensure the safety of road users and construction personnel during the works. Temporary signage, barriers, and, where necessary, a reduced speed limit will be implemented along the N83 to manage traffic flow and minimize disruption. Existing entrances and boundary treatments affected by the demolition will be reinstated or realigned to suit the revised site layout. Additionally, any utilities such as water, electricity, or telecoms serving the buildings will be disconnected, capped, or diverted in accordance with utility provider requirements.

6.10 Lighting

Lighting Design will be in accordance with the requirements of BS 5489-1 (2013) Code of Practice for the Design of Public Lighting and ISEN 13201-2 (2015) Road Lighting Part 2, Performance Requirements and Galway County Council Guidelines. The lighting design is proposed to utilise lighting columns whose height is sensitive to the scale of the built and planned environment. In accordance with DMURS 4.2.5 only white light sources will be considered in the design of street lighting. The installation of the lighting network will comply with the requirements of the 'Specification for Road Works' as published by the TII and in accordance with the recommendations of BS5489 and BS5649. Full cut-off lanterns will be utilised to minimise night-time visual intrusion if required.

6.11 Departures from Standard

There is no departure in the design.

7 Road Safety Audit

A Stage 1 Road Safety Audit was carried out in June 2025. Minor comments were received from stage 1 road safety audit and same has been incorporated in the design. The level of detail provided at this stage is sufficient and it is not anticipated that the tender drawings will include additional design elements other that those that may arise from the Statutory Processes. If those changes are substantial, then a revised audit will be undertaken. The final, signed report is provided in Appendix B.

Only one problem was identified by the Audit Team. One of the problems highlighted was left turn of articulated vehicle on to N83 will lead to overhang and damage signal heads and also cause safety concern for pedestrians. All recommendations were accepted by the Design Team and are incorporated into the design drawings appended to this report.

8 Total Scheme Budget

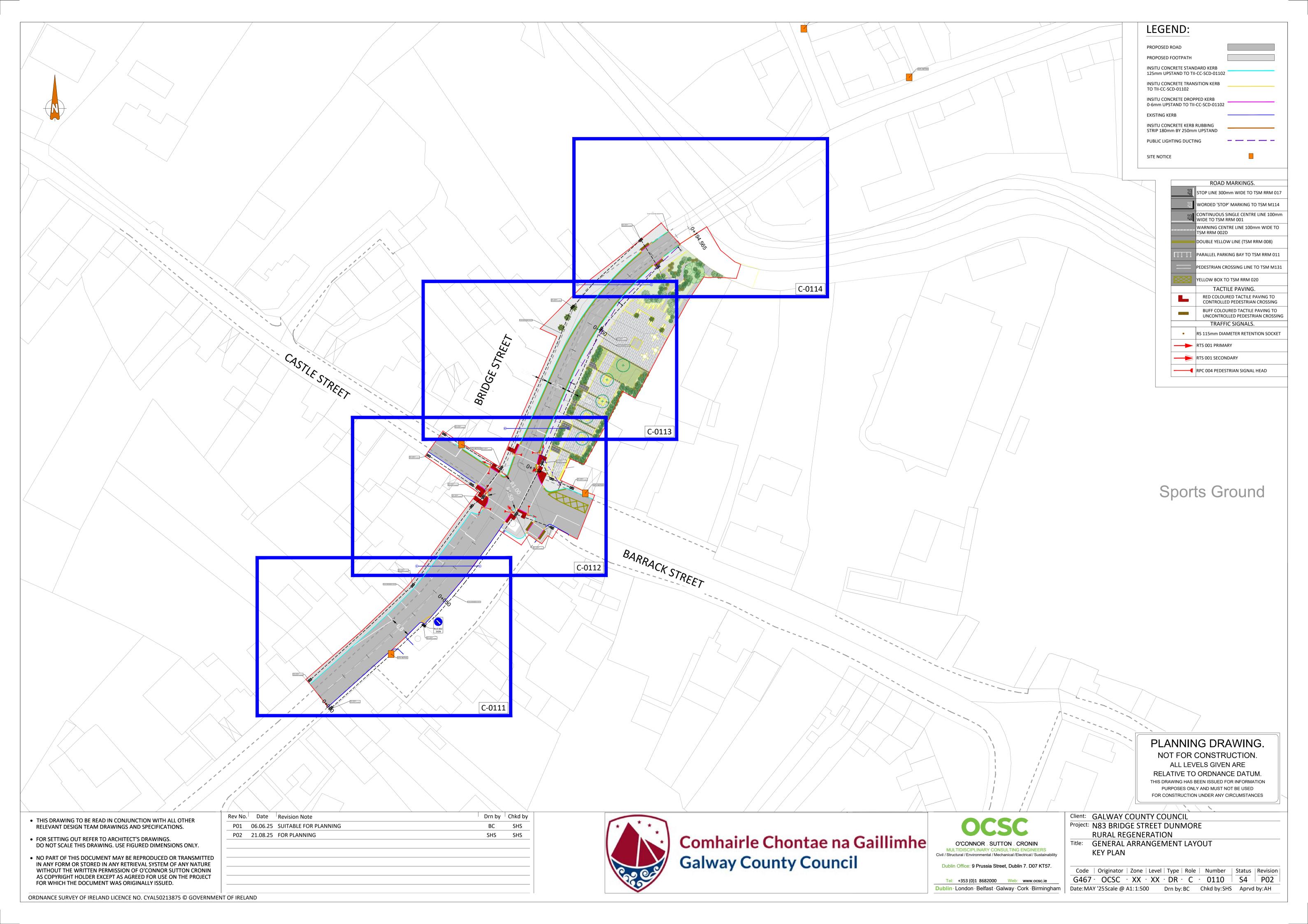
The total cost estimate is €2,774,209.16 including VAT for proposed works. Details of the costing is attached in Appendix C.

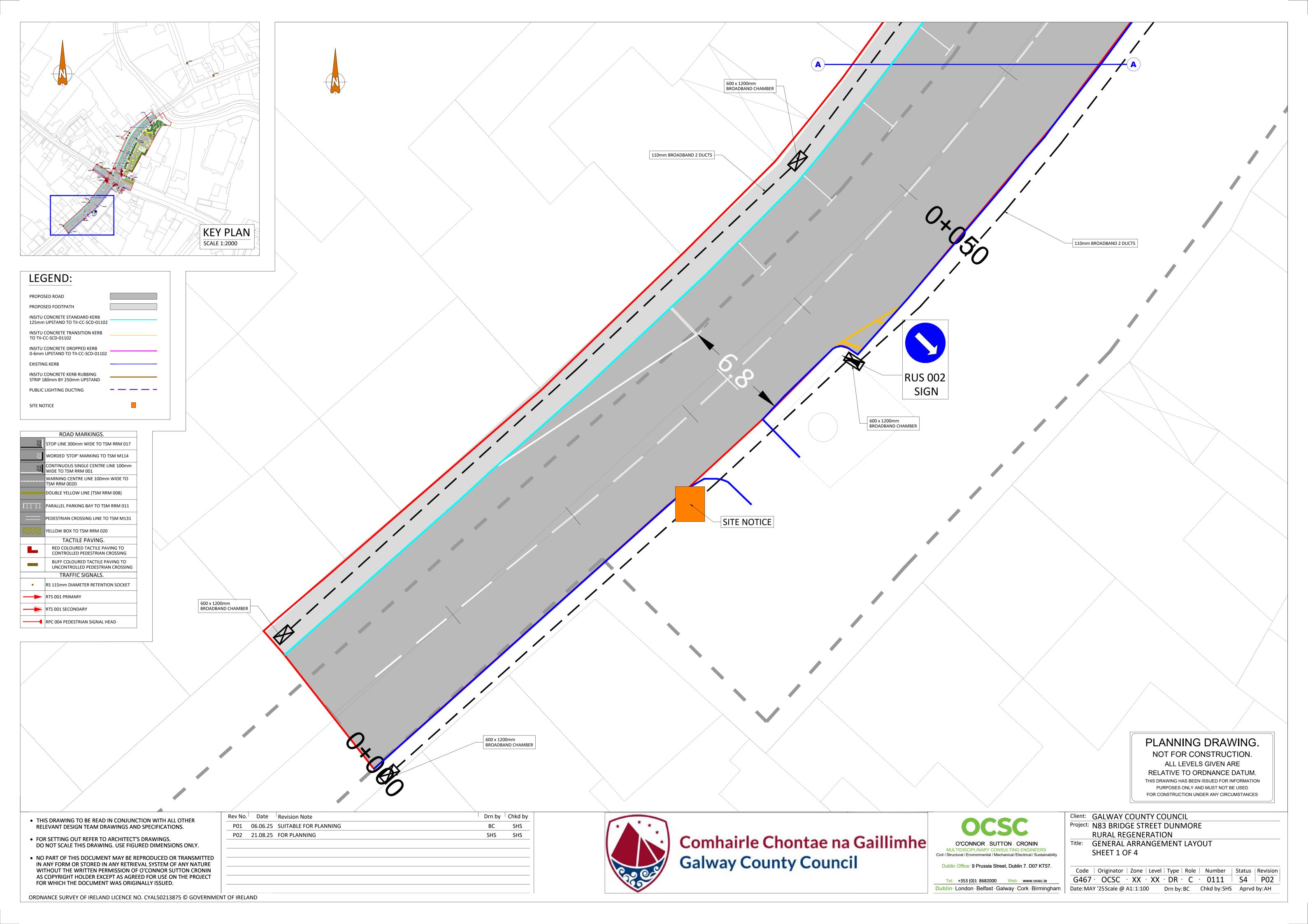
9 Project Appraisal Balance Sheet

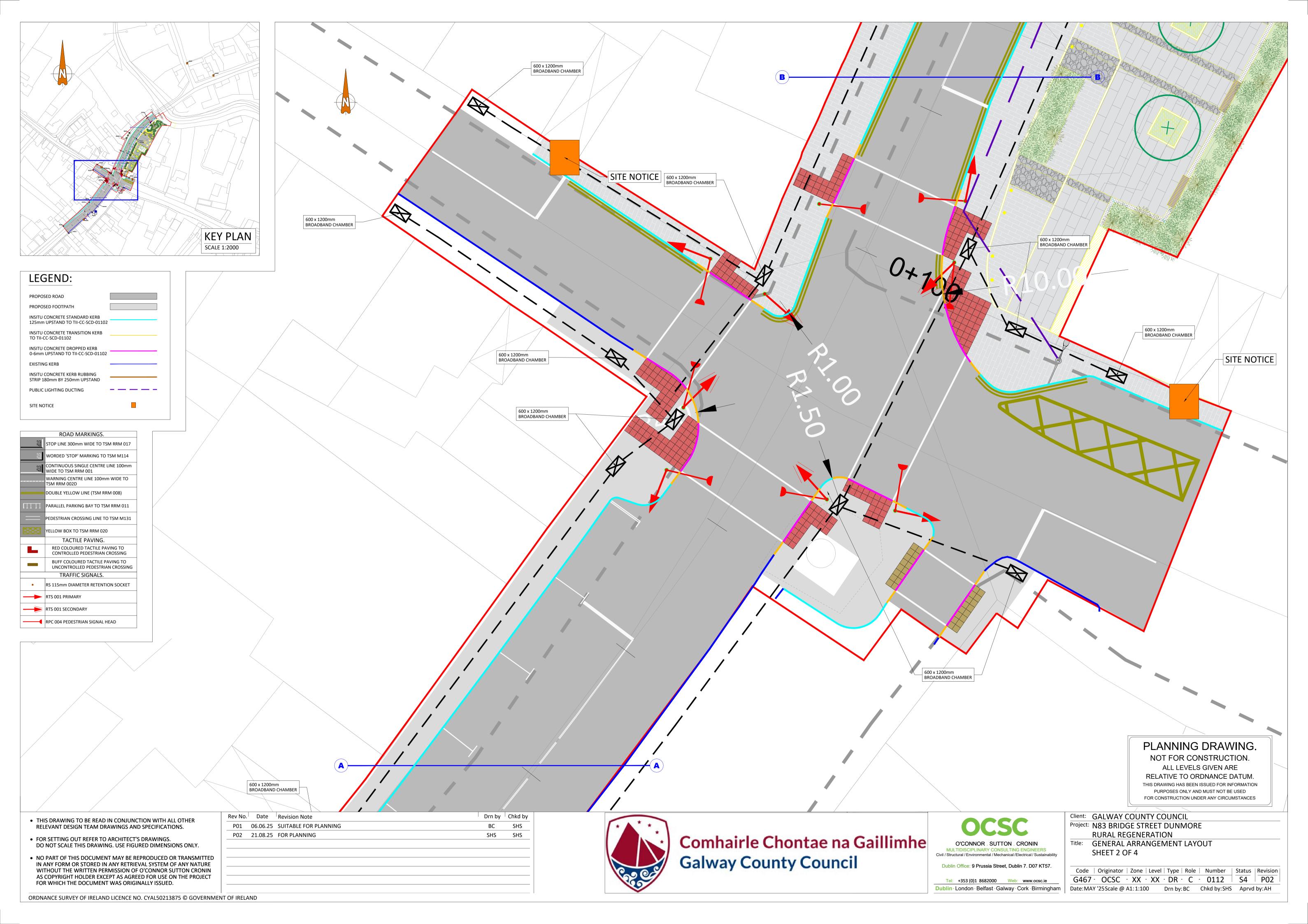
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Appendix A – Design Drawings

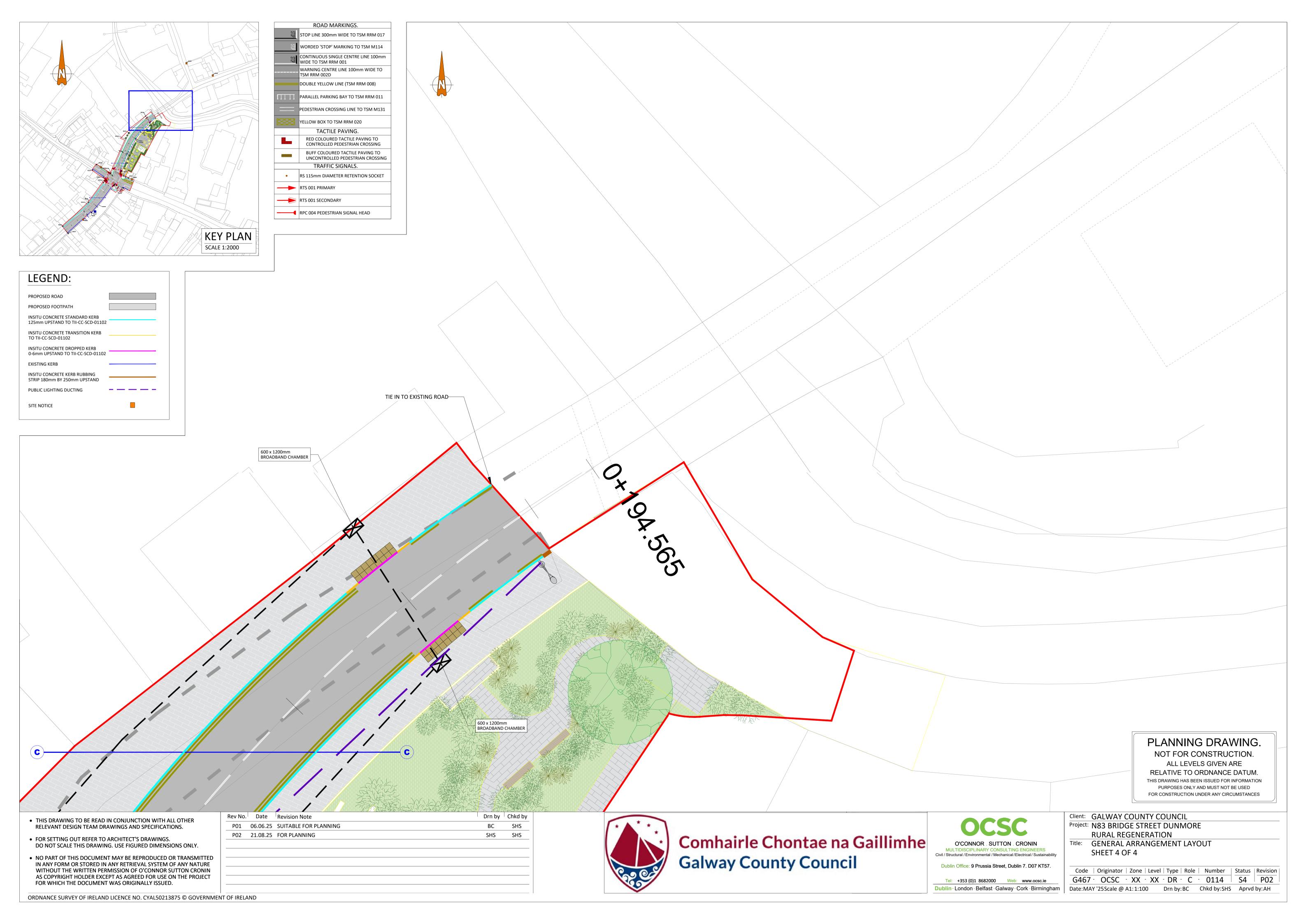


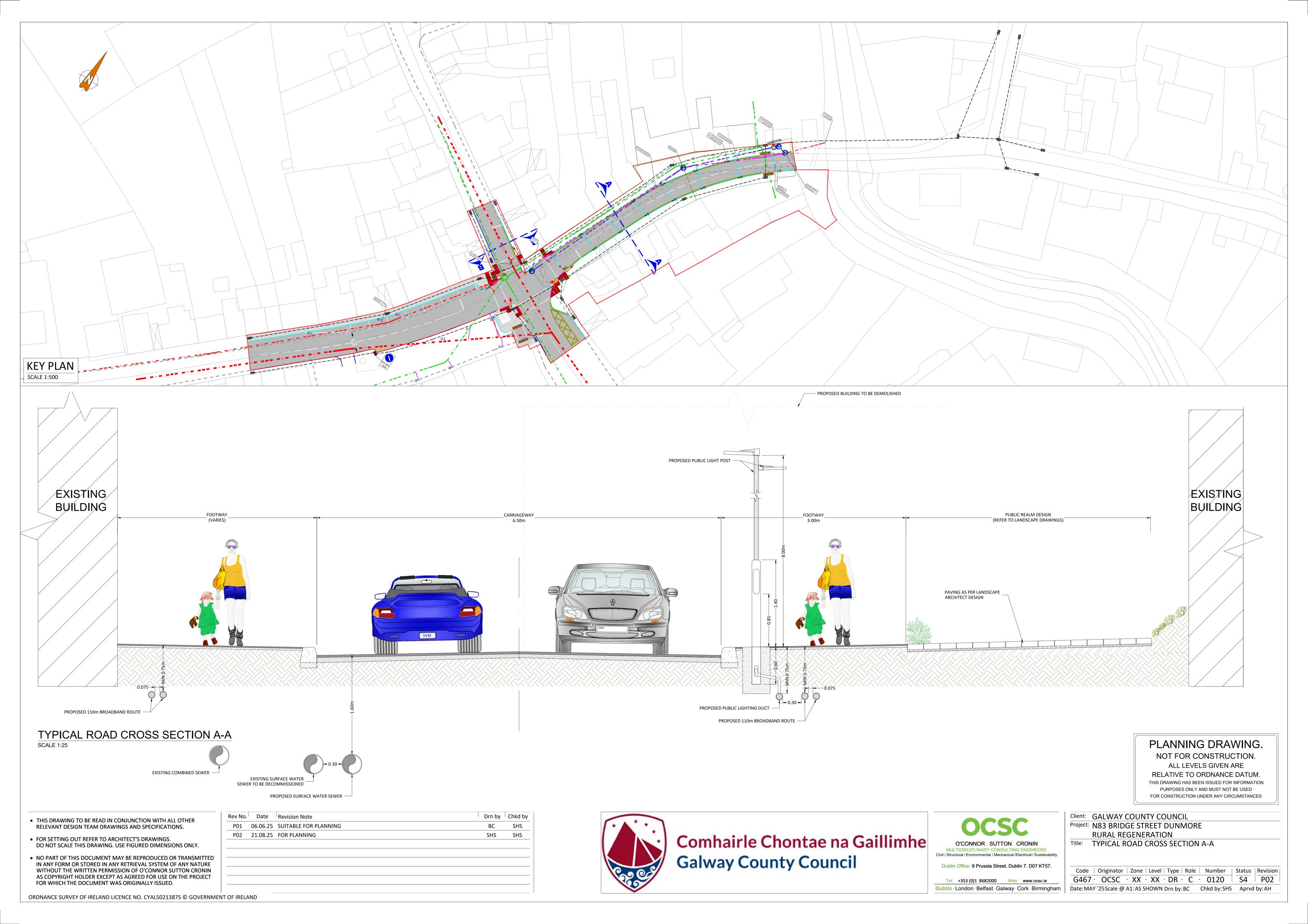


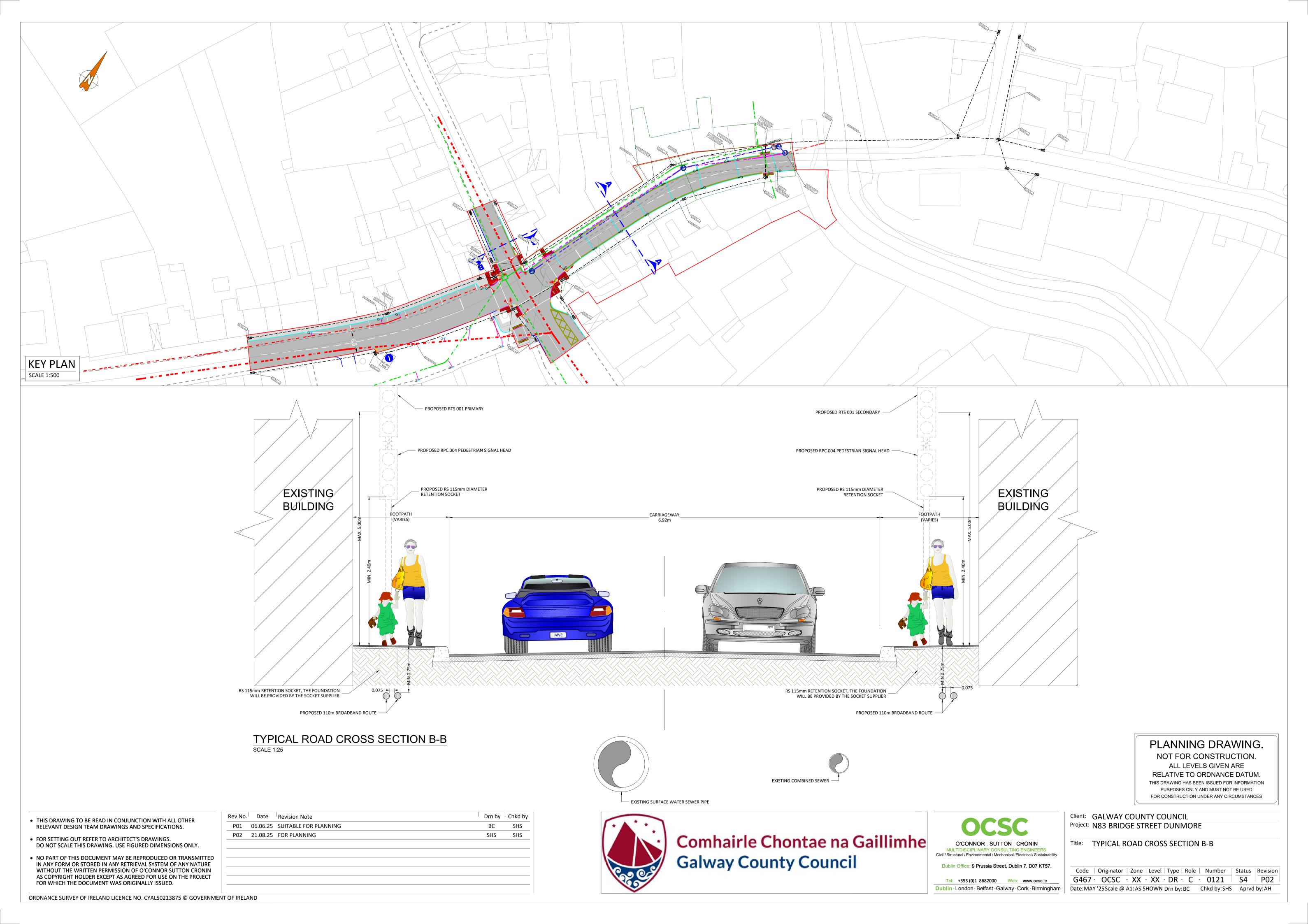


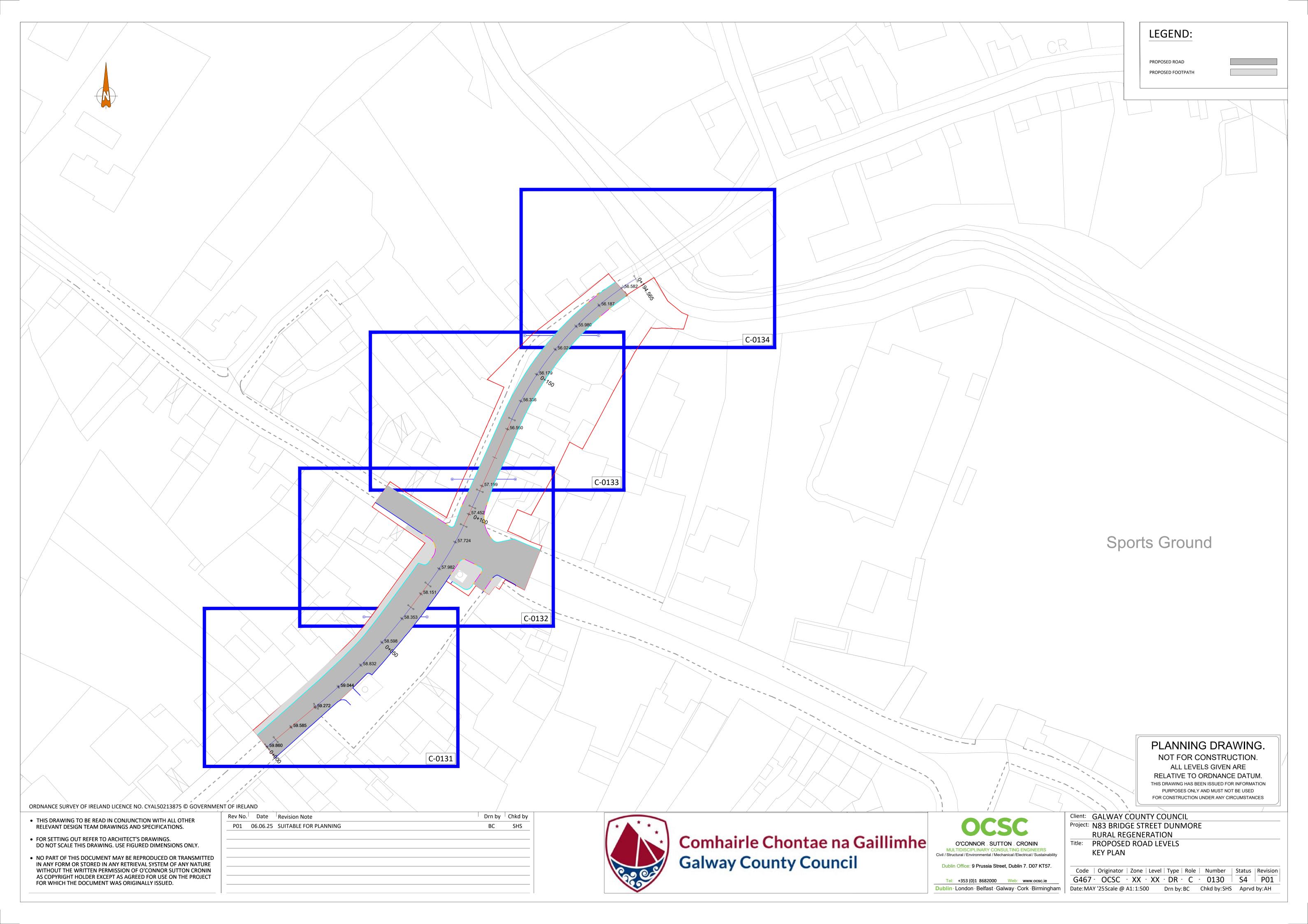


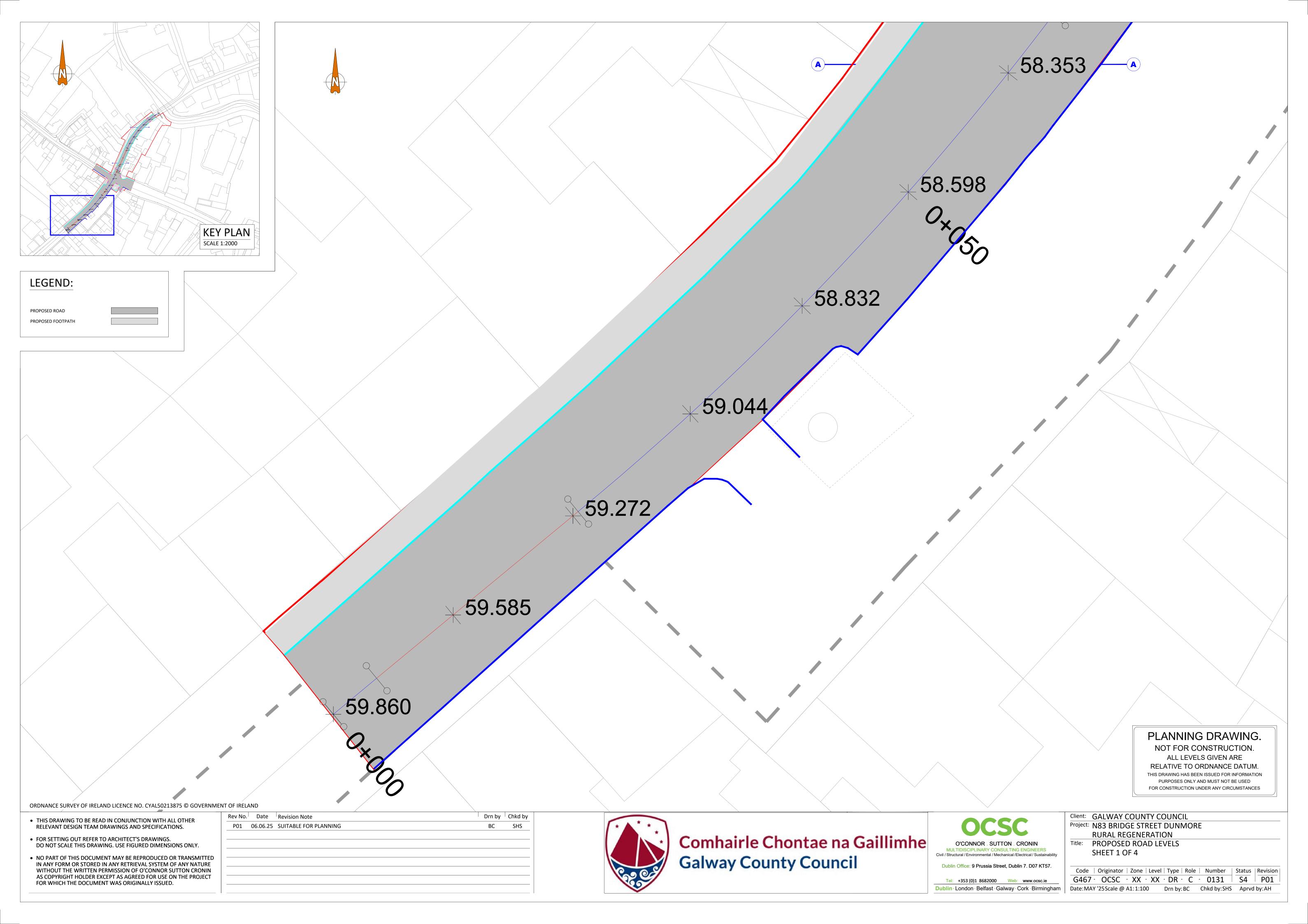


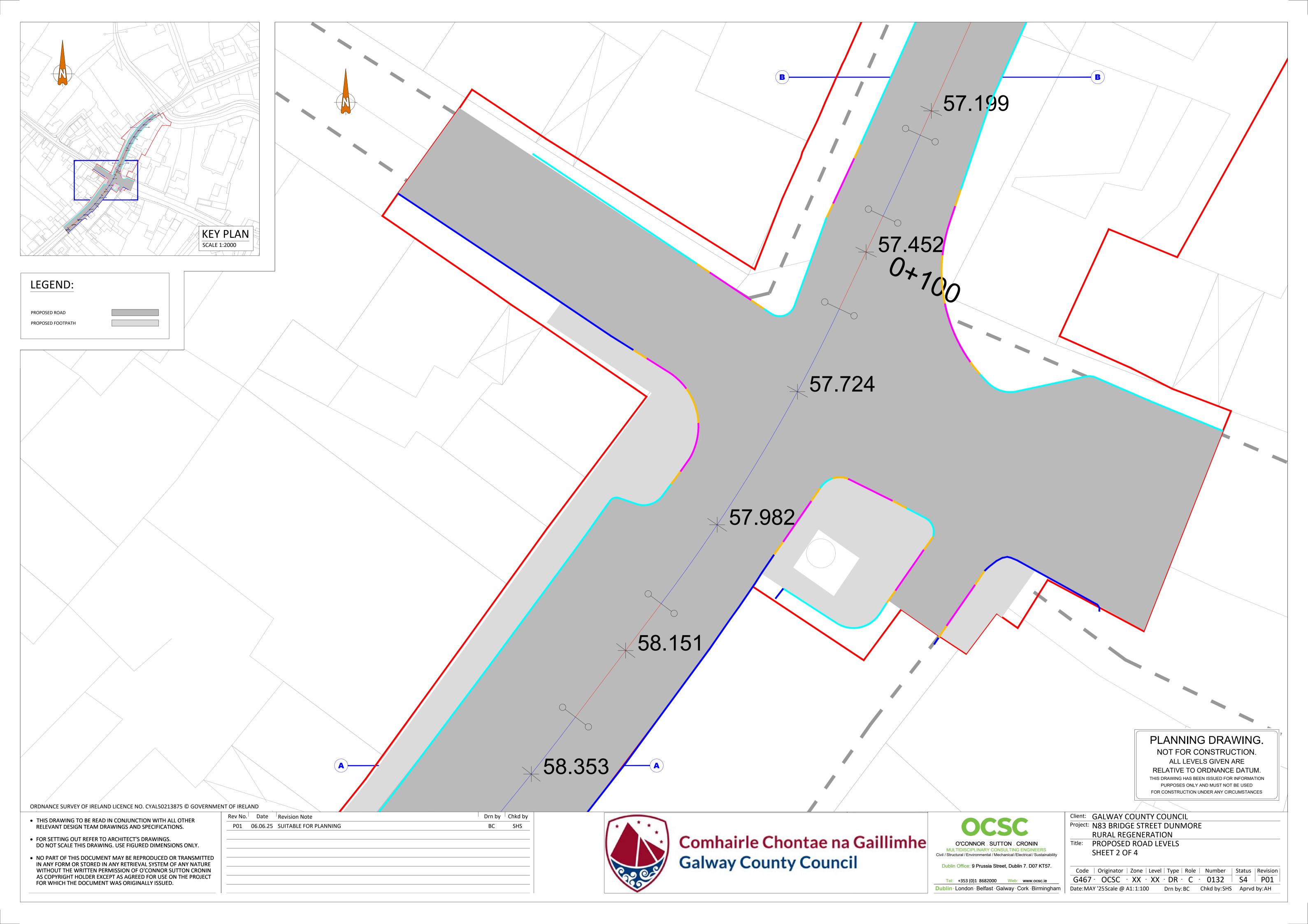


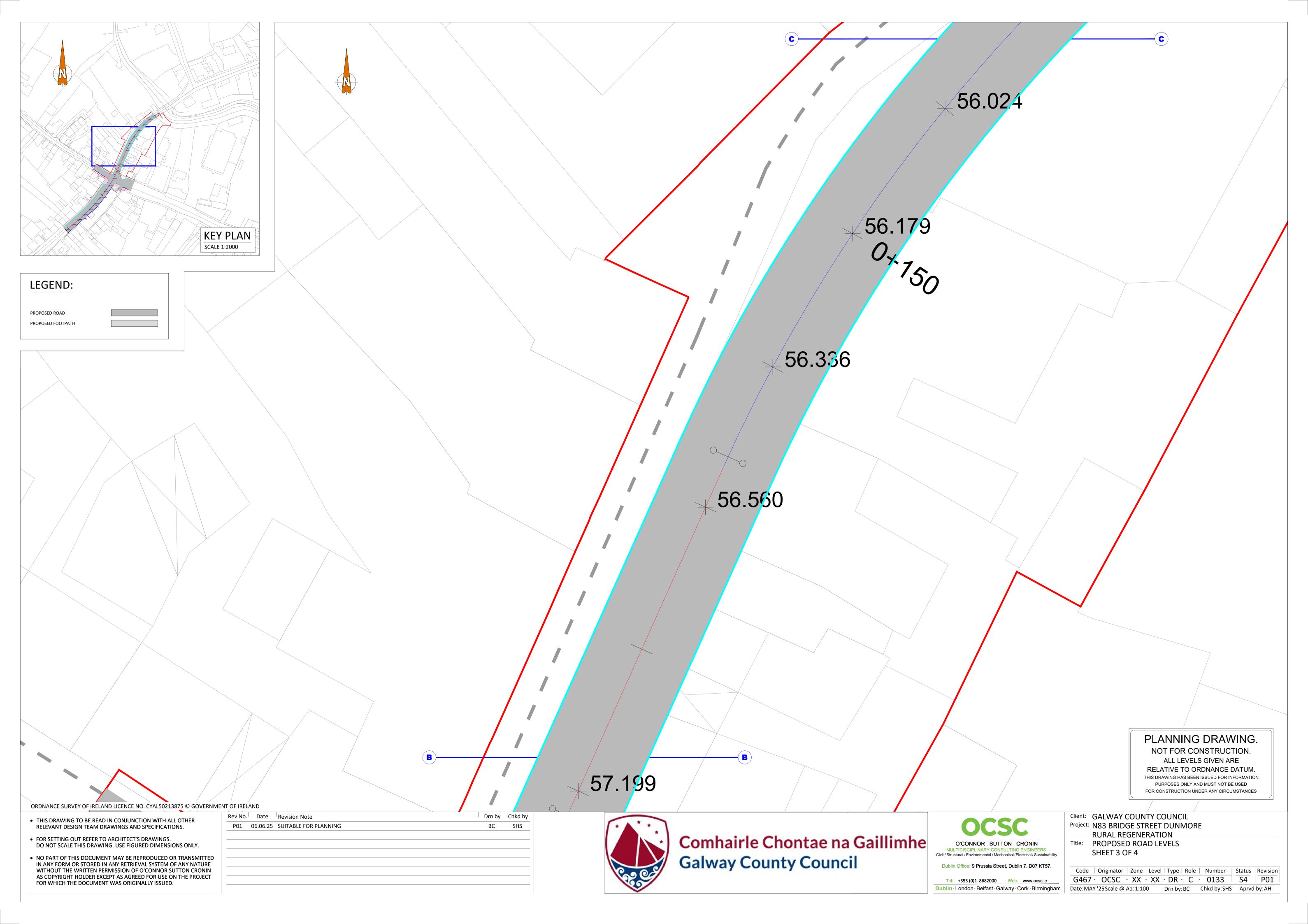


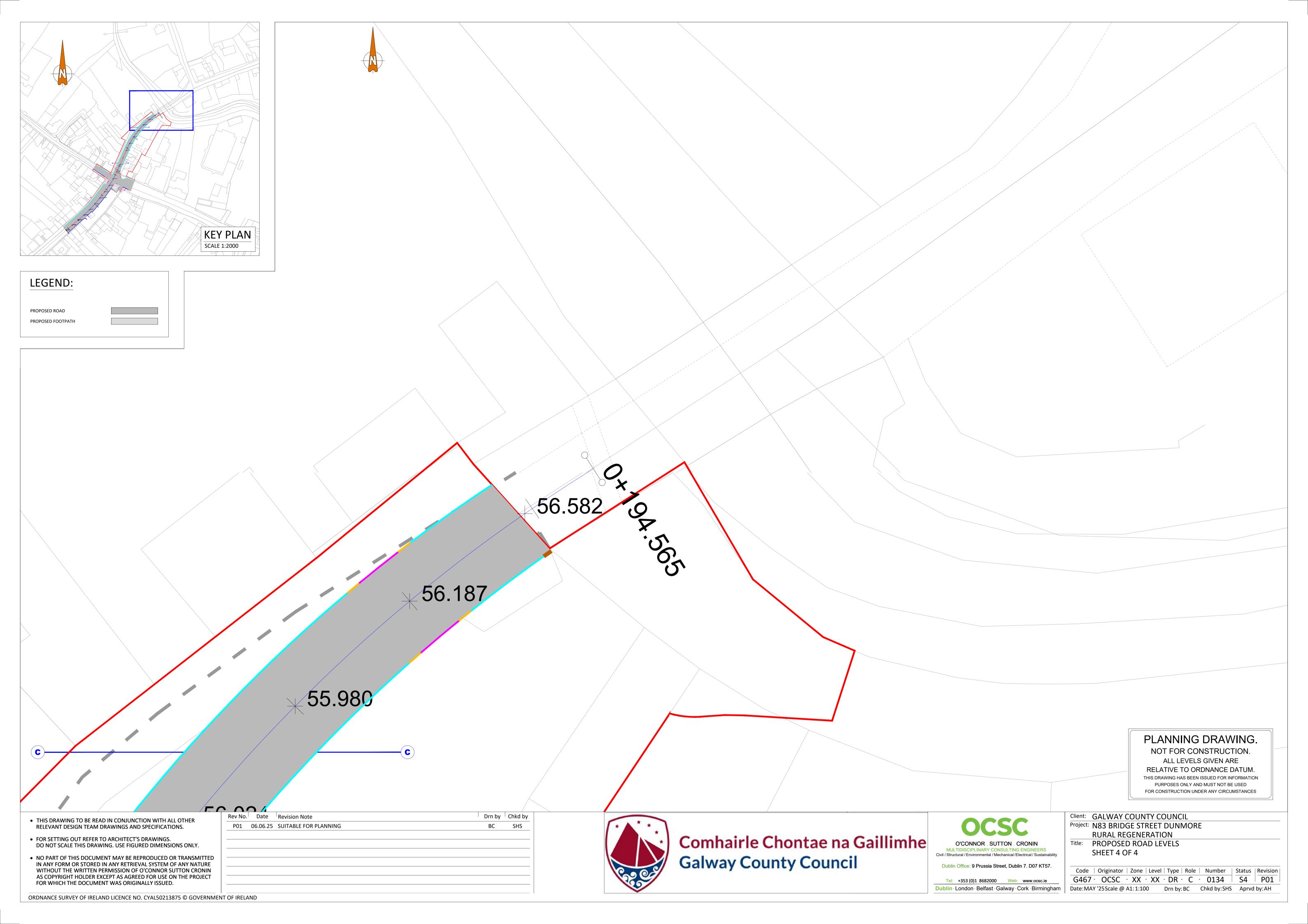


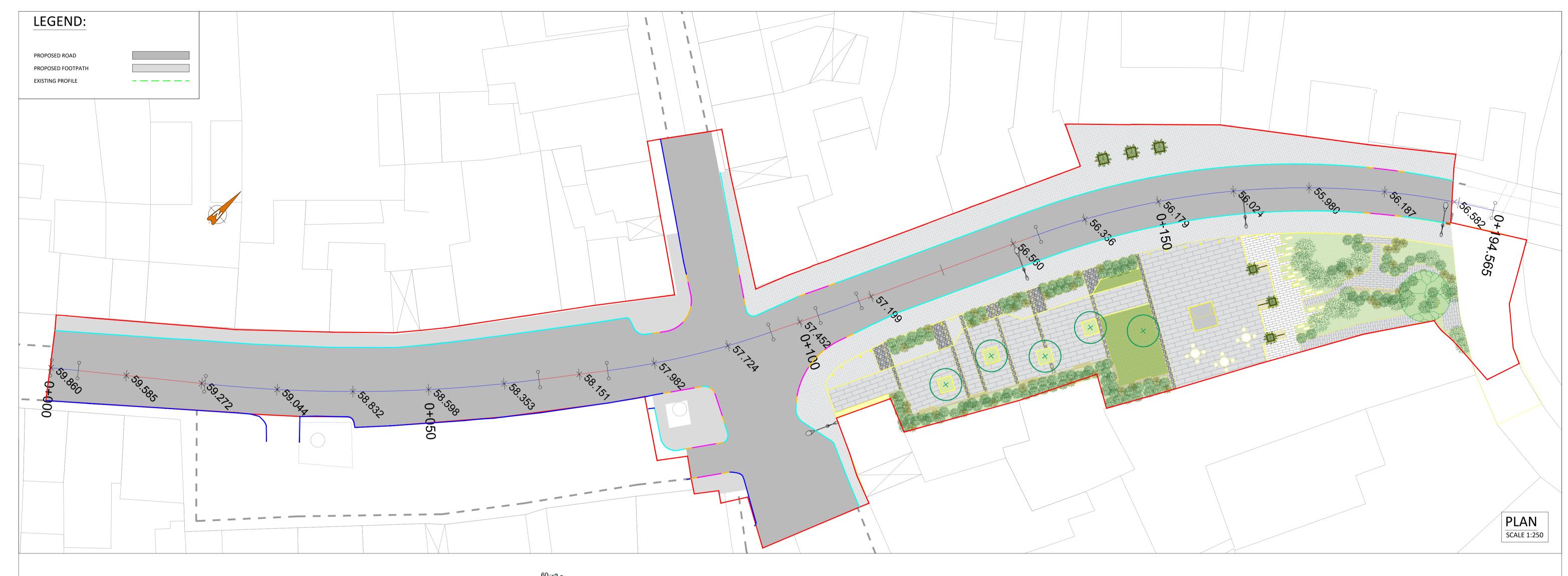


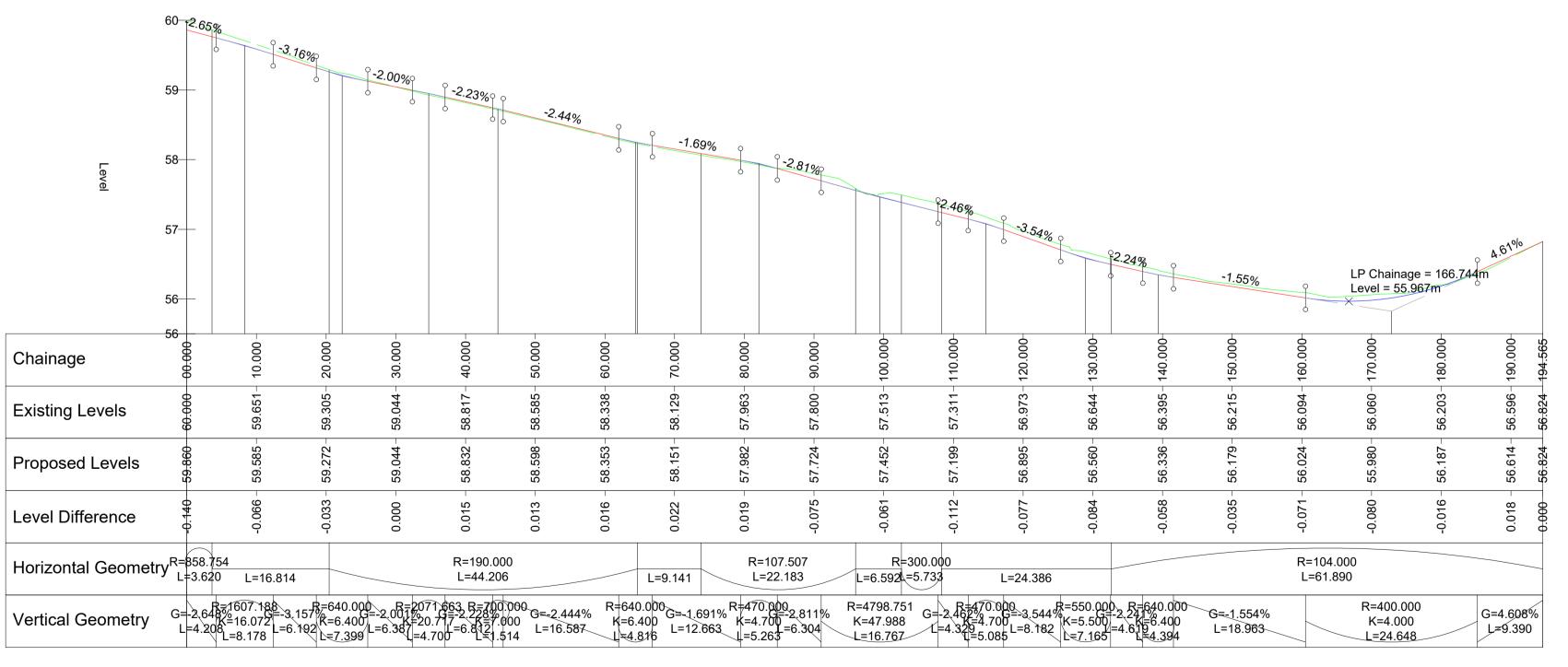












PLANNING DRAWING.

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BRIDGE ST - N83 - LONGSECTION

SCALE: H 1:500,V 1:50. DATUM: 55.500

- THIS DRAWING TO BE READ IN CONJUNCTION WITH ALL OTHER RELEVANT DESIGN TEAM DRAWINGS AND SPECIFICATIONS.
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	Rev No.	Date	Revision Note	Drn by	Chkd by
	P01	06.06.25	SUITABLE FOR PLANNING	ВС	SHS
	P02	21.08.25	FOR PLANNING	SHS	SHS
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Civil / Structural / Environmental / Mechanical / Electrical / Sustainability

Dublin Office: 9 Prussia Street, Dublin 7. D07 KT57.

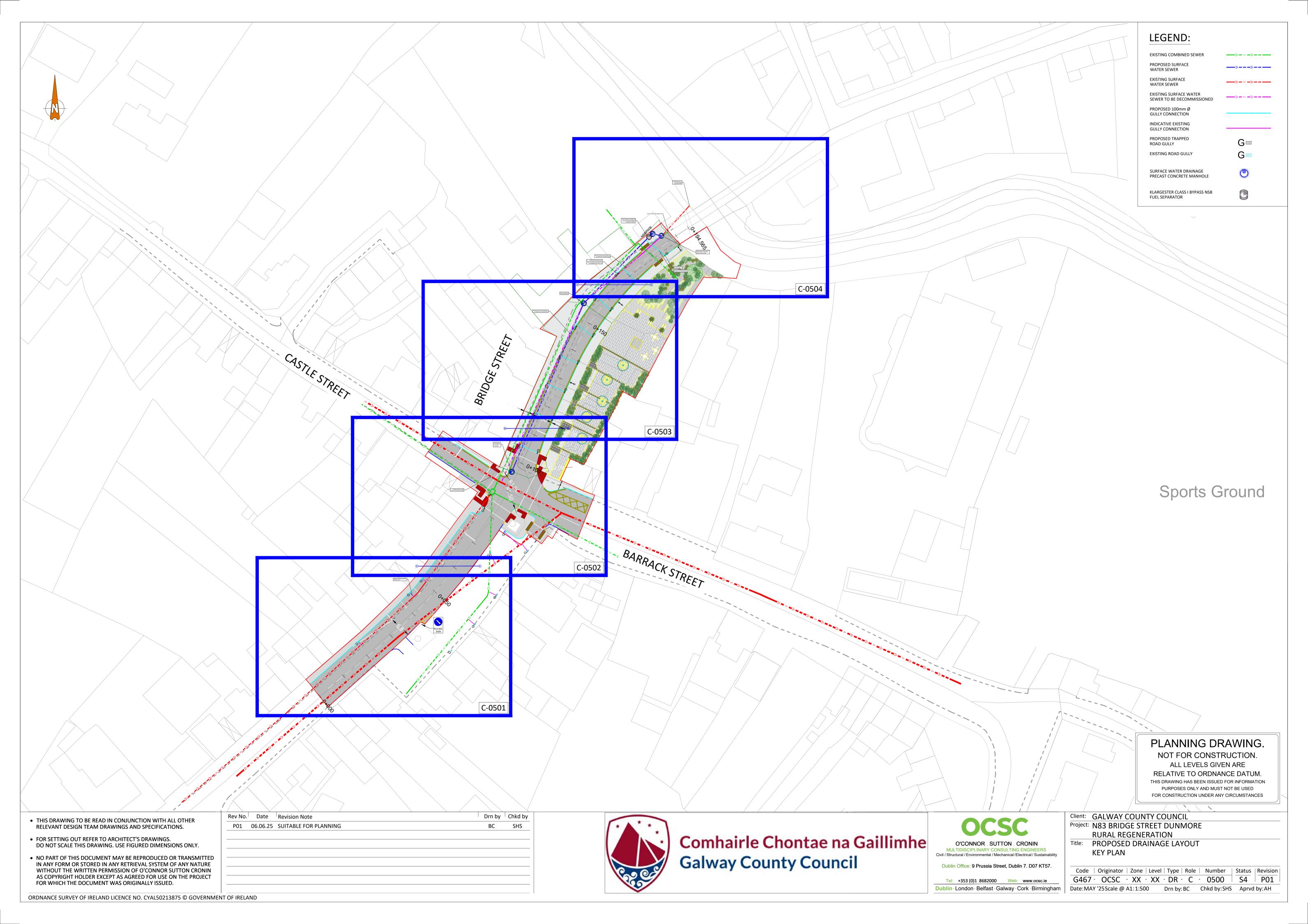
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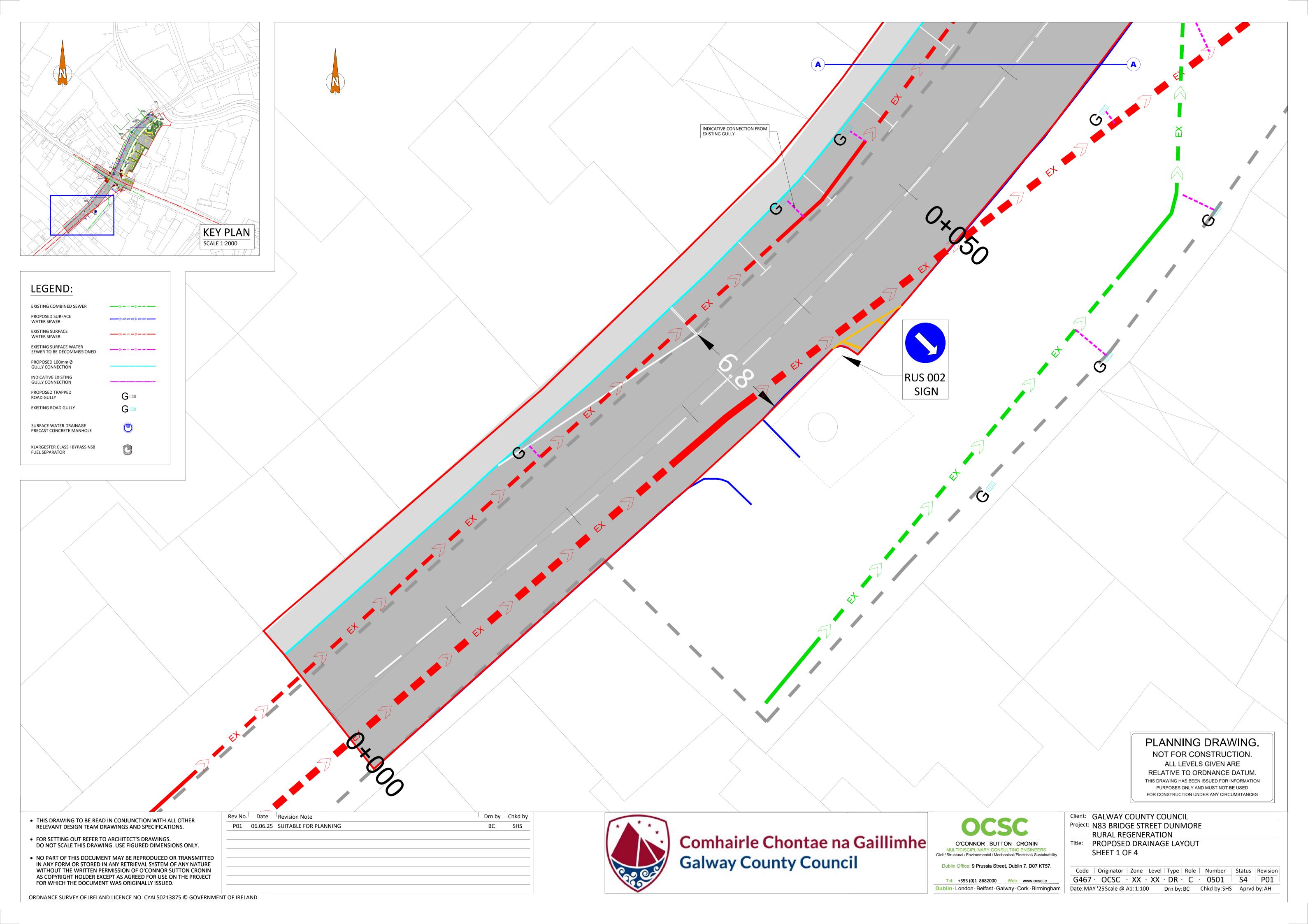
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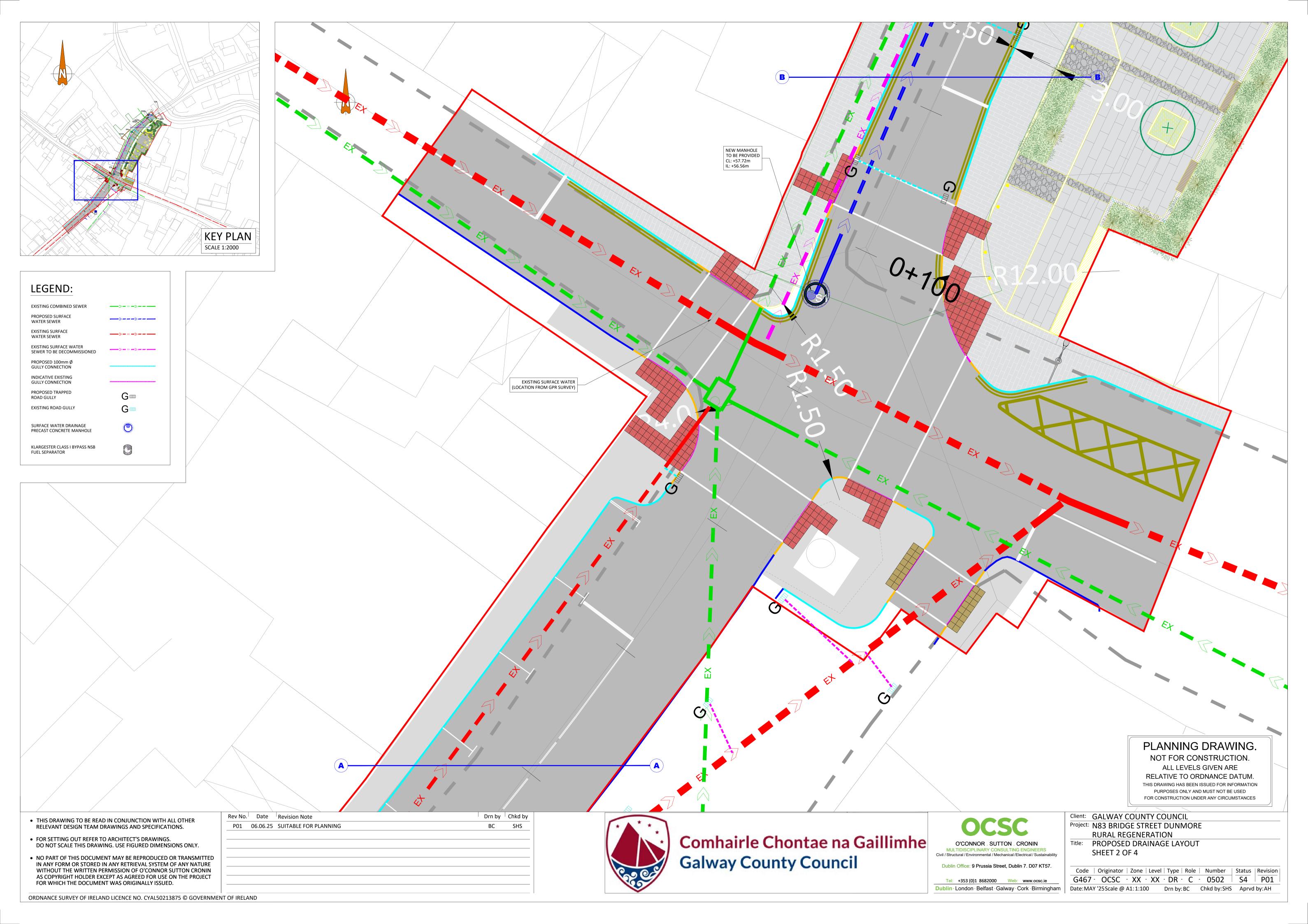
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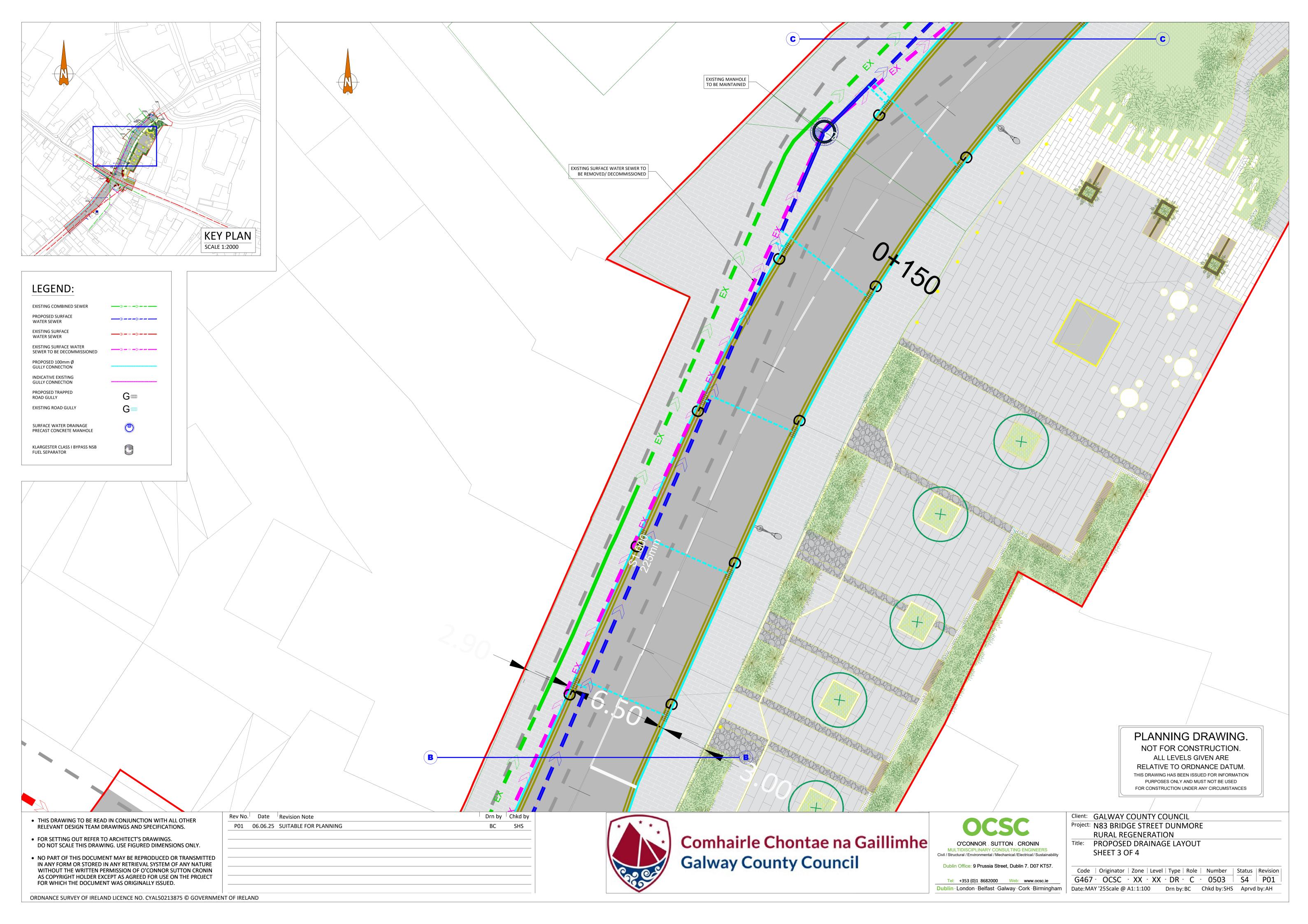
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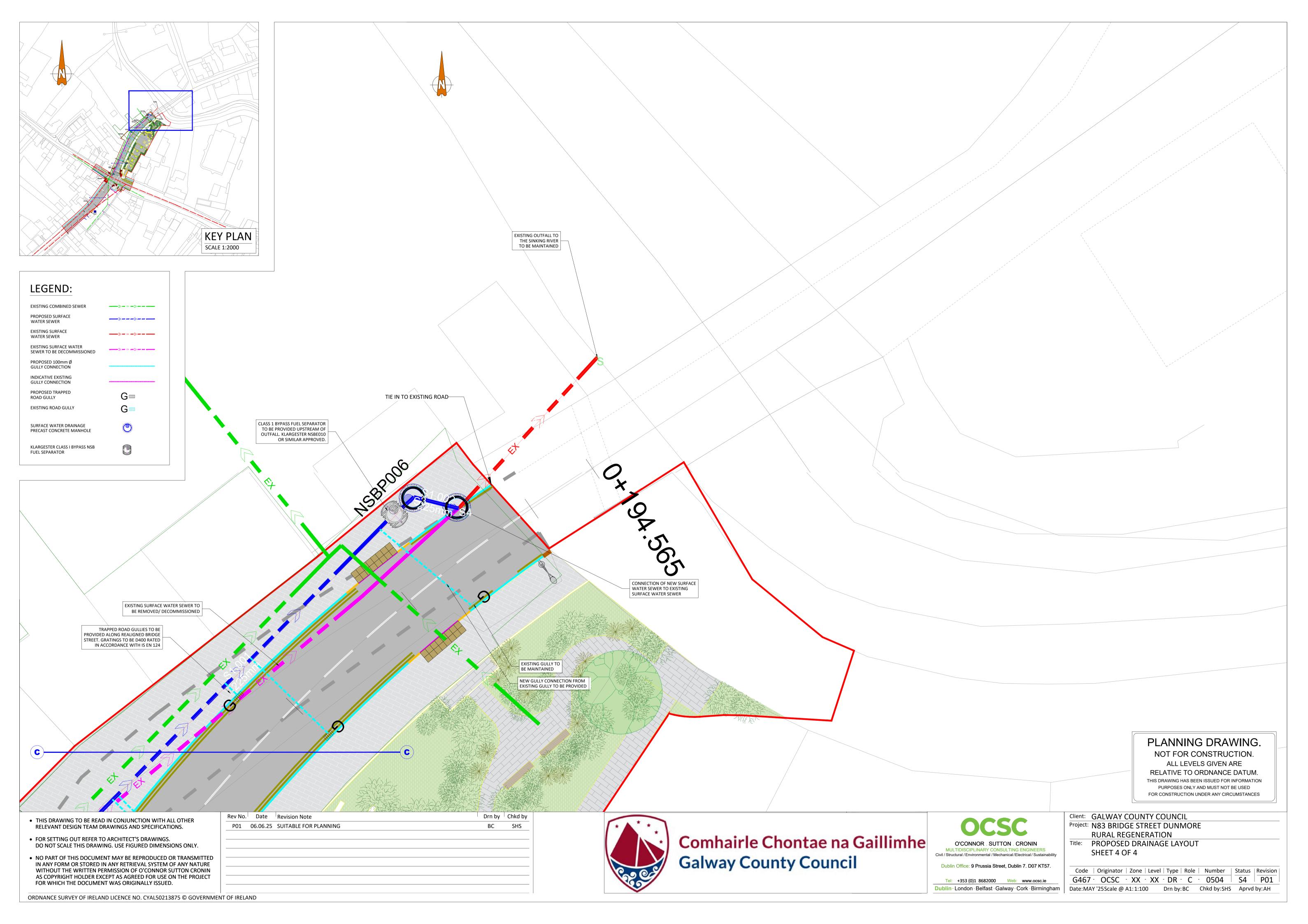
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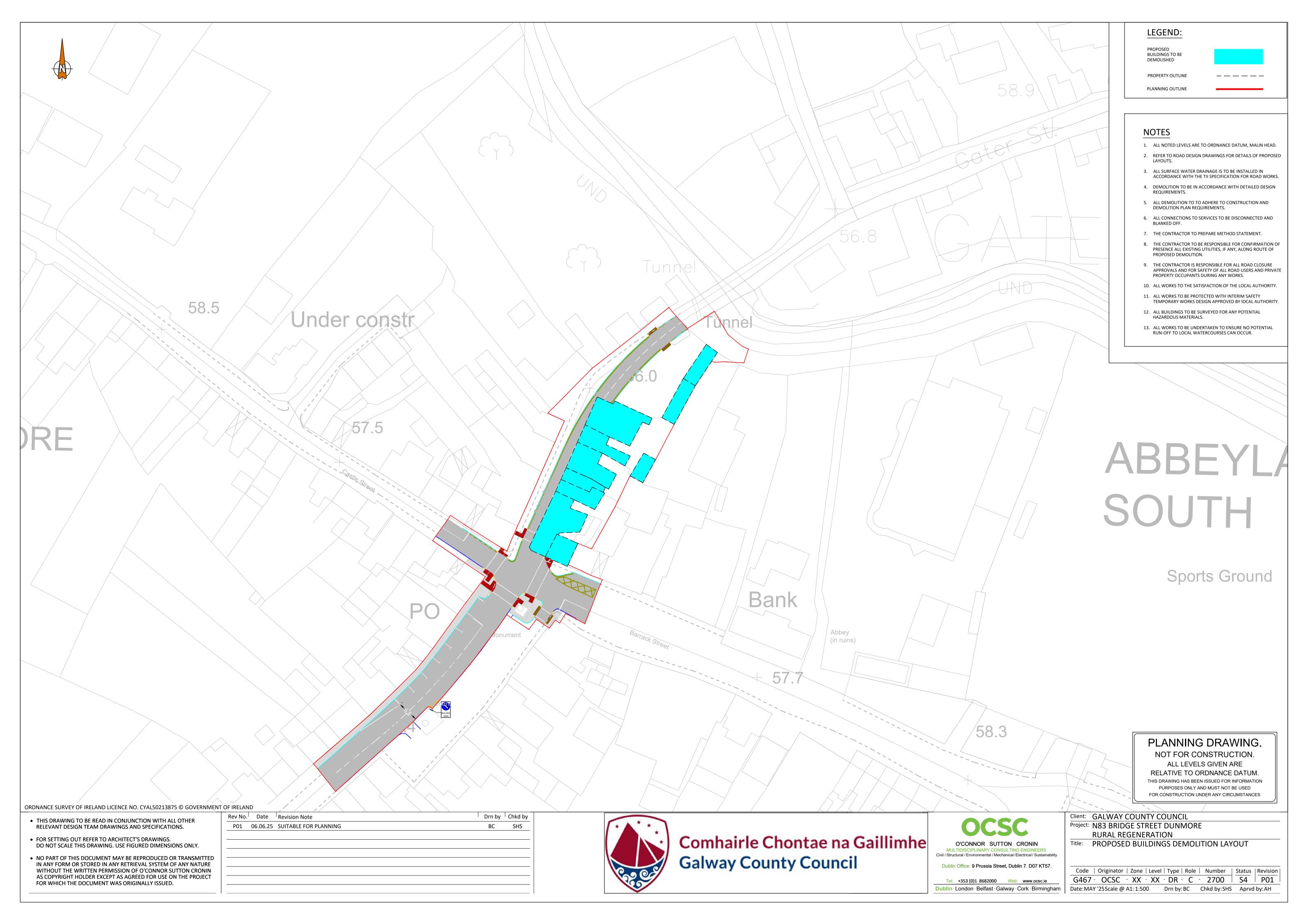












Appendix B –Road Safety Audit

Title: STAGE 1 ROAD SAFETY AUDIT

For;

N83 Bridge Street Dunmore Rural Regeneration

Client: OCSC/GCC

Date: **June 2025**

Report reference: 2700R01

VERSION: DRAFT

Prepared By:

Bruton Consulting Engineers Ltd

Glaspistol Tel: 041 9881456

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1.0 Introduction

This report was prepared in response to a request from Suhas HS, OCSC Consulting Engineers, for a Stage 1 Road Safety Audit of the proposed N83 Bridge Street Dunmore Rural Regeneration Scheme.

The Road Safety Audit Team comprised of;

Team Leader: Norman Bruton, BE CEng FIEI, Cert Comp RSA.

TII Auditor Approval no. NB 168446

Team Member: Owen O'Reilly, B.SC. Eng Dip Struct. Eng NCEA Civil Dip Civil. Eng CEng MIEI

TII Auditor Approval no. 001291756

The Road Safety Audit comprised an examination of the drawings provided and a site visit by the Audit Team on the 3rd of June 2025. The weather at the time of the site visit was dry and the road surface was also dry.

This Stage 1 Road Safety Audit has been carried out in accordance with the requirements of TII, Publication Number GE-STY-01024, dated December 2017.

The scheme has been examined and this report compiled in respect of the consideration of those matters that have an adverse effect on road safety. It has not been examined or verified for compliance with any other standards or criteria.

The problems identified in this report are considered to require action in order to improve the safety of the scheme for road users.

If any of the recommendations within this safety audit report are not accepted, a written response is required, stating reasons for non-acceptance. Comments made within the report under the heading of Observation are intended to be for information only. Written responses to Observations are not required.

A location map showing where each problem occurs is provided in Appendix A.

A list of the documents provided to the Audit Team is provided in Appendix B.

The feedback form to be completed by the Design Team Leader is provided in Appendix C.

TII Audit Team Approval is provided in Appendix D.

The same Audit Team carried out a Combined Stage 1 & 2 Road Safety Audit on a larger version of this scheme in May 2021 (Report ref 977R01).



2.0 Background

It is proposed to undertake urban regeneration of Bridge Street in Dunmore including the R328 crossroads and to improve High Street on approach to the junction.

Bridge Street and High Street are part of the N83 national secondary route. Bridge Street is a very narrow street with two vehicles generally not able to pass and a give-take type system is in operation.

It is intended to widen the street through demolition of old buildings. The R328 junction is to be signalised.

The site location is shown below.



Image courtesy of openstreetmap.org.



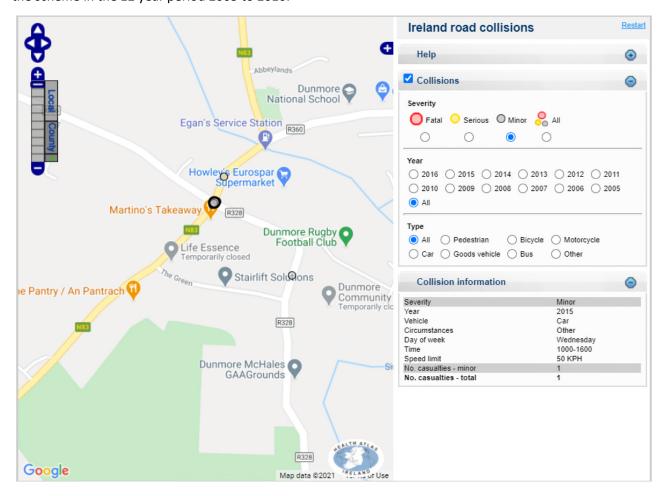


Overall scheme map.





The Road Safety Authority's website showed that there were four minor injury collisions recorded along the scheme in the 12 year period 2005 to 2016.





3.0 Issues Identified in This Road Safety Audit.

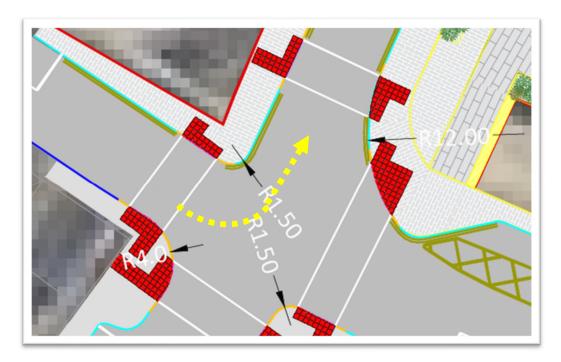
3.1 Problem

LOCATION

Drawing G467- OCSC-XX-XX-DR-C-0100 S2 P05, Castle Street Junction.

PROBLEM

The Castle Street to Bridge Street left turn for heavy goods vehicles (HGVs) will not be feasible with the introduction of the signalised junction. The acute angle at the junction may however lead to the trailing wheels of HGVs mounting the footpath or to the cab of HGVs overhanging the footpath on the opposite side. Given that the N83 is a national Road a relatively large percentage of HGVs can be expected to make this manoeuvre. Without sufficient room there could be collisions with pedestrians or material damage of the footpaths and possibly the signal heads/poles.



RECOMMENDATION

It is recommended that a swept path analysis be carried out for HGVs at this junction to ensure that the manoeuvre can be easily undertaken and if required that Bridge Street be realigned to allow a larger corner radius and smoother path for HGVs.

A similar exercise should be carried out for the left turn from the N83 to Castle Street.



4.0 Audit Statement

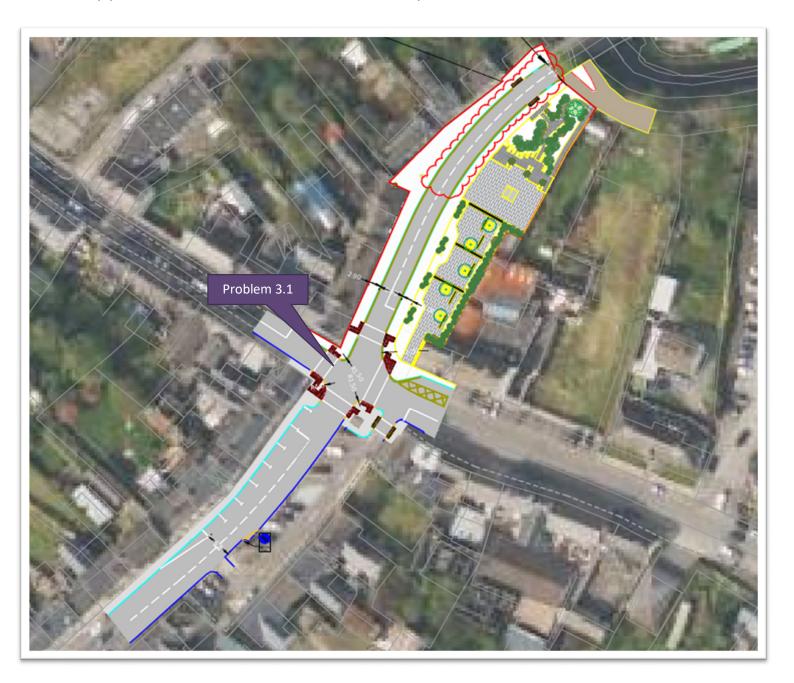
We certify that we have examined the drawings and other information provided and have visited the site. The examination has been carried out with the sole purpose of identifying any aspects of the design which could be added, removed or modified in order to improve the safety of the scheme.

The problems identified have been noted in this report together with associated safety improvement suggestions which we would recommend should be studied for implementation. The audit has been carried out by the persons named below who have not been involved in any design work on this scheme as a member of the Design Team.

Norman Bruton	Signed:	
(Audit Team Leader)	Dated:	
Owen O'Reilly	Signed:	
(Audit Team Memher)	Dated:	



Appendix A – Problem Location Map





Appendix B

Information Supplied to the Audit Team

• Drawing G467- OCSC-XX-XX-DR-C-0100 S2 P05



Appendix C

Feedback Form

SAFETY AUDIT FORM – FEEDBACK ON AUDIT REPORT

Scheme: N83 Bridge Street, Dunmore

Stage: 1 Road Safety Audit

Date Audit (Site Visit) Completed: 3rd of June 2025

Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended measure accepted (yes/no)	Alternative measures (describe)	Alternative measures accepted by Auditors (Yes/No)
3.1				

Signed	Date
Design Team Leader	
Signed	Date
Audit Team Leader	
Signed	Date
Employer	



Appendix D — Audit Team Approval

To Be Confirmed

Appendix C – Cost Estimate

N83 Bridge Street & Centre Jun	ction -	Cost Estima	ate		
Description	Unit	Unit	Rate	Cost	Sub Totals
ACQUISITION					
Acquisition					
Costing Properties 1- 7	7	No.	€85,000.00	€595,000.00	
Costing Property 8	1 1	No.	€75,000.00	€75,000.00	
Acquisition sub total					
DEMOLITION					
Disconnect Power Lines and provide alternative power to properties affected.				€20,000.00	
Provide Alternative Public Lighting	3	No.	€2,834.00	€8,502.00	
Demolition contract. All demolition done by contractor will be conducted using their own	8	VA/I	640,000,00	600,000,00	
equipment and staff.		Wks	€10,000.00	€80,000.00	
Plug all existing services discontinued	8	wooks	€2,500.00	€5,000.00 €5,000.00	
Manage all traffic on public roads	°	weeks	€2,500.00	€10,000.00	
Ensure safety of adjoining building - carry out condition surveys Upon demolition clear and remove debris from the property.	4	weeks	€5,000.00	€20,000.00	
Erect all temporary fencing	100		€5,000.00 €125.00	€20,000.00 €12,500.00	
		m	€125.00	€12,500.00	
Provide all water and environmental equipment for compliance with legislation and contract	8	weeks	€500.00	€4,000.00	
Carry out hazardous material survey				€3,000.00	
Dispose of all hazardous material	_	_		€30,000.00	
Provide all H & S equipment	8	weeks	€500.00	€4,000.00	
Provide PSCS		2		€6,000.00	
The site will be cleared of all debris.	600	m^3	€60.00	€36,000.00	
Erect 1.8 m high Boundary Fence at rear of proposed footpath/ verge edge.	100	m	€150.00	€15,000.00	
Demolition sub total					€259,002.00
TEMPORARY ROAD					
Temporary road for traffic during construction 400 mm capping (€18), 150 mm 808 (€8.25), 140 mm Blacktop (€43)					
	600	m^2	€69.25	€41,550.00	
Excavation	420	m ³	€25.00	€10,500.00	
Disposal	420	m^3	€35.00	€14,700.00	
Temporary Road Markings				€1,000.00	
Signage / Display warning signs	8	weeks	€1,800.00	€14,400.00	
Contractor maintenance	8	weeks	€1,800.00	€14,400.00	
Temporary Road sub total					€96,550.00
PERMANENT ROAD WORKS:					
BRIDGE STREET					
Excavation & Disposal	960	m^3	€50.00	€48,000.00	
Blacktop Materials	1600	m ²	€66.00	€105,600.00	
	1 1	m ³		1	
Subbase (300mm 808)	480	111	€50.00	€24,000.00	I

Karbing	1 400	l	€35.00	€14,000.00	
Kerbing Drainage SW (225mm)	400 100	m m	€35.00 €120.00	€14,000.00 €12,000.00	
Drainage SW (225mm)	5	m No.	€3,080.00	€12,000.00 €15,400.00	
Drainage manholes	100		€5,080.00 €55.00	€15,400.00 €5,500.00	
Gully pipes Road hippo Gullies	100	m m	€55.00 €550.00	€5,500.00 €5,500.00	
	640		€55.00	€3,500.00 €35,200.00	
Ducting(2way,110mm) Chambers (JB4)	20	m 	€850.00	€35,200.00 €17,000.00	
Line Marking	513		€830.00 €4.00	€17,000.00 €2,052.00	
	20	m No.	€4.00 €200.00	€2,032.00 €4,000.00	
Road symbols / arrows Public lighting	6	No.	€3,000.00	€4,000.00 €18,000.00	
ESB Power source / mini pillar	1	No.	€3,000.00	€10,000.00 €10,000.00	
·	007.5	m ²	604.00		
Surfacing bridge	337.5		€21.00	€7,087.50	
Footpath	912.5	m ²	€42.00	€38,325.00	
Additional for Paving	913	m ²	€20.00	€18,260.00	
Watermain + Fittings	160	m	€200.00	€32,000.00	
Replacement of litter bins / street furniture	5	No.	€650.00	€3,250.00	
Interceptor	1	No.	€6,000.00	€6,000.00	
CENTRE JUNCTION					
Transmission cabinet	1	No.	€2,500.00	€2,500.00	
Mini Pillar	1	No.	€750.00	€750.00	
Loop Boxes	2	No.	€350.00	€700.00	
Tactile Pavers	80	m ²	€250.00	€20,000.00	
Traffic Signal Poles	10	No.	€1,200.00	€12,000.00	
Traffic Signal heads	20	No.	€1,250.00	€25,000.00	
Cabling	100	m	€5.00	€500.00	
Four-way ducting (110mm)	100	m	€389.00	€38,900.00	
JB4 Chambers	4	No.	€850.00	€3,400.00	
ESB connection	1	No.	€1,500.00	€1,500.00	
Push Button Unit	10	No.	€557.00	€5,570.00	
LANDSCAPING					
Landscaping	1	Item	€220,000.00	€220,000.00	
Permanent Road Works Bridge Street & Centre Junction					€751,994.50
SUB TOTAL					€1,107,546.50

N83 HIGH STREET - Cost Estimate							
Description	Unit	Unit	Rate	Cost	Sub Totals		
HIGH STREET							
PERMANENT ROAD WORK							
Planing	400	m^2	€60.00	€24,000.00			
Excavation & Disposal	40	m^3	€50.00	€2,000.00			
Blacktop Materials	1200	m^2	€66.00	€79,200.00			
Subbase (300mm 808)	360	m^3	€50.00	€18,000.00			
Kerbing	200	m	€35.00	€7,000.00			
Drainage SW	10	m	€120.00	€1,200.00			
Gully pipes	70	m	€55.00	€3,850.00			
Road hippo Gullies	10	No.	€550.00	€5,500.00			
ine Marking	200	m	€4.00	€800.00			
Road symbols / arrows	10	No.	€200.00	€2,000.00			
Footpath	300	m ²	€42.00	€12,600.00			
SUB TOTAL					€156,150.00		

Summary of Cost Estimate						
Item No.	Description	Amount				
	DUNMORE STREET ESTIMATE SUMMARY					
1	Bridge Street & Centre Junction	€	1,107,546.5			
2	High Street	€	156,150.0			
	Measure	€	1,263,696.			
	Traffic Management (7%)	€	88,458.			
	Preliminaries(15%)	€	189,554.			
	Contingency-Archaeology/Unforeseen Ground Conditions (15%)	€	420,810.			
	Construction Cost Ex. VAT	€	1,541,709.			
	VAT(13.5%)	€	208,130.			
	Construction Cost Incl. VAT	€	1,749,840.			
	Professional Fees	€	279,974.			
	VAT(23%)	€	64,394.			
	Professional Fees including VAT	€	344,368.			
	Acquisition of Properties 1-8(€ 85 000.00 each)	€	680,000.			
3	Total Cost Estimate	€	2,774,209.			
3	Total Cost Estimate	-	2,114,209.			











PAX . 252 (01) 646 2601