

TOBIN

Farranamartin, Tuam
Co. Galway
Stage 1
Road Safety Audit

Gilligan



Comhairle Chontae na Gaillimhe
Galway County Council

BUILT ON KNOWLEDGE

Document Control Sheet

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Client:	Gilligan Consulting Engineers
Project Reference	12128

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B	Final	KD	01/08/25	MR	01/08/25	MR	01/08/25

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ACEI ASSOCIATION OF
CONSULTING ENGINEERS
OF IRELAND



Table of Contents

1.	INTRODUCTION	1
1.1	EXISTING ENVIRONMENT.....	1
1.2	PROPOSED DEVELOPMENT.....	1
1.3	AUDIT DETAILS.....	2
1.4	COLLISION DATA	2
2.	ITEMS RESULTING FROM THIS ROAD SAFETY AUDIT	3
2.1	Problem.....	3
2.2	Problem.....	4
2.3	Problem.....	5
2.4	Problem.....	6
2.5	Problem.....	7
3.	Observation.....	9
3.1	Observation.....	9
3.2	Observation.....	9
	AUDIT TEAM STATEMENT	10

Appendices

- Appendix A-I List of Documents Examined
- Appendix A-II Problem Map
- Appendix A-III Feedback Form

List of Figures

Figure 1-1 Site Location	1
Figure 2-1 Right Turn Movement.....	3
Figure 2-2 Ramp Details	4
Figure 2-3 Underground Utility	5
Figure 2-4 Footpath Width.....	6
Figure 2-5 Visibility Splay.....	7
Figure 2-6 Visibility Envelope - Warning Signage.....	8
Figure 3-1 Signpost.....	9
Figure 3-2 Overhead Utility	9

1. INTRODUCTION

This report describes the Stage 1 Road Safety Audit carried out on an entrance to a proposed housing estate in Farranamartin, Tuam, Co. Galway. The proposed scheme is located within the jurisdictional boundary of Galway County Council seen in Figure 1-1.



Figure 1-1 Site Location

1.1 EXISTING ENVIRONMENT

The scheme is located along the R939 Regional Road, within the urban limits of Tuam. Co Galway, within the speed limit set at 50km/h. The existing environment comprising of linear ribbon developments, industrial and housing estates along both sides of the road. A road width of 7.2m, with an adjacent footpath width of 1.6m.

1.2 PROPOSED DEVELOPMENT

The proposed scheme is a housing estate, located along the R939 Regional Road. The proposed development consists of semi-detached and detached housing along with a proposed access onto the R939 with adjacent footpaths.

1.3 AUDIT DETAILS

The initial audit took place at the Galway office of TOBIN in March 2025. The audit comprised an examination of the documents provided by the Design Team, listed in Appendix A-I. In addition, a day-time site visit took place on Thursday the 27th of March 2025. Throughout the duration of the site visit, the weather was wet and overcast with the footpath carriageway surfaces were wet throughout.

The following information was not made available to the Audit Team:

- Site clearance.
- Swept path analysis.
- Utilities diversions.

The Audit Team members were as follows:

Audit Team Leader

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

Audit Team Member

- Kevin Duffy- BEng (Hons) Civil Eng., MIEI. Design Engineer for Roads & Transportation, TOBIN, - TII Reference KD*364

This Stage 1 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 A-III shall be completed and returned to the Road Safety Audit Team Leader for sign off.

1.4 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.

2. ITEMS RESULTING FROM THIS ROAD SAFETY AUDIT

2.1 PROBLEM

Right Turn Movements

The Audit Team observed onsite the existing environment along the R939 (Galway Road). The Audit Team are concerned about volume of traffic potentially turning right into the proposed estate. It may result in rear end collision(s) with stationary traffic wanting to turn right with approaching traffic.

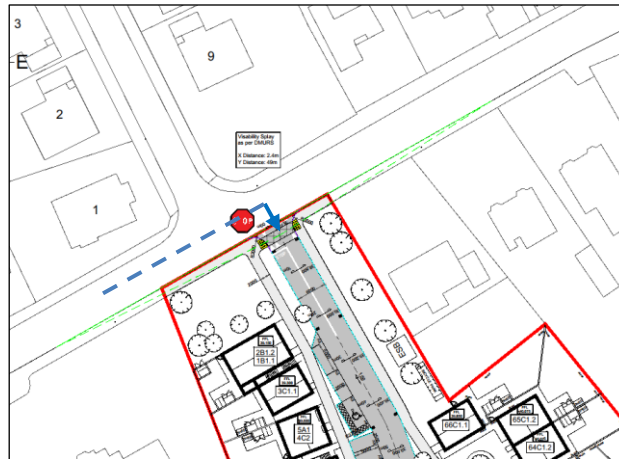


Figure 2-1 Right Turn Movement

Recommendation

The design team should ensure the planned traffic volumes don't require a queueing lane.

2.2 PROBLEM

Ramp Details

The Audit Team noted on the design drawings the proposed raised table crossing and kerbing detail. The Audit Team are concerned that the proposed ramp will commence out on the carriageway, due to required kerb and gradient standard. This may result in road users striking the ramp edge and directing them towards other vehicles resulting in a head on collision

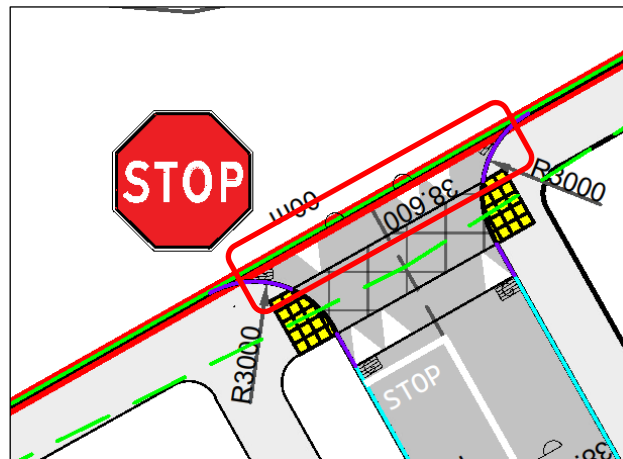


Figure 2-2 Ramp Details

Recommendation

The design team should ensure the proposed raised table crossing meet the required standards.

2.3 PROBLEM

Utilities

The Audit Team observed onsite existing utility/water metre in the footpath of the proposed access. The Audit Team is concerned that the underground utility/water metre hasn't been accounted for in the design teams proposed design. This may result in the utility cover becoming at trip hazard if not flush with the pavement resulting in potential slips or trips by Vulnerable Road Users .



Figure 2-3 Underground Utility

Recommendation

The design team should ensure all utilities are flush with the proposed works.

2.4 PROBLEM

Footpath Width

The Audit Team observed onsite the exiting footway width is approximately 1.6m. The Audit Team are concerned that the footpath is insufficient in width to allow vulnerable road users to pass two abreast. This may result in vulnerable road users entering the carriageway in order to pass one another. This may result in a collision between a vulnerable road user and a vehicle.



Figure 2-4 Footpath Width

Recommendation

The design team should ensure the footway width is as per standard.

2.5 PROBLEM

2.5.1 Visibility Envelope

Visibility Splay

The Audit Team noted on the design drawings the visibility splay, at the proposed access. The Audit Team is concerned that the visibility splay shown are for vehicles on the pedestrian crossing, not at the STOP line. Inadequate visibility may result in vehicles entering the carriageway with oncoming vehicles, which may result in a side swipe type collision.

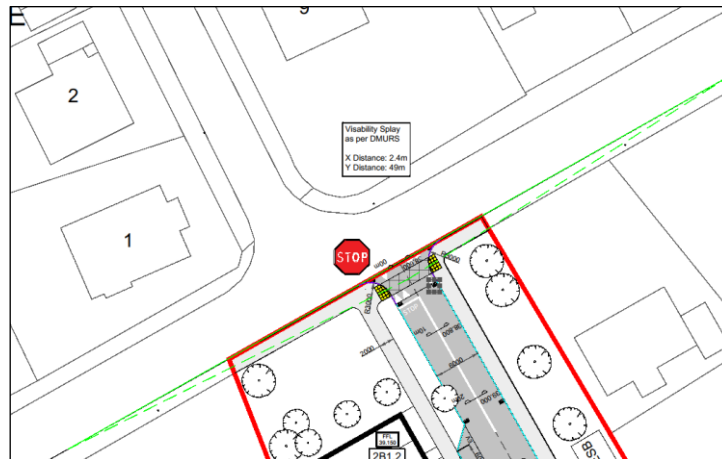


Figure 2-5 Visibility Splay

Recommendation

The design team should ensure visibility splay is provided as per standard.

2.5.2 Visibility Envelope

Visibility Splay – Warning Signage

The Audit Team observed onsite the location of the existing warning signage. The Audit Team are concerned that the high sided vehicles will have their visibility obstructed by the signage when exiting. Inadequate visibility may result in vehicles edging out into the carriageway, which may result in a side swipe type collision with approaching vehicles.



Figure 2-6 Visibility Envelope - Warning Signage

Recommendation

The design team should ensure the visibility envelope is clear form any obstructions.

3. OBSERVATION

3.1 OBSERVATION

Signpost

The Audit Team observed onsite a redundant post at the back of the footpath.



Figure 3-1 Signpost

3.2 OBSERVATION

Overhead Utility

The Audit Team observed onsite the overhead utility wires at the existing field access.

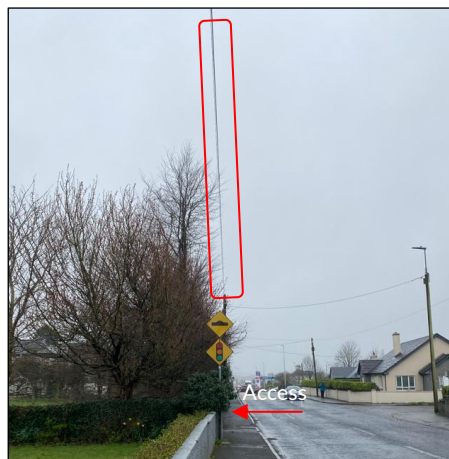


Figure 3-2 Overhead Utility

4. AUDIT TEAM STATEMENT

We certify that we have examined the design drawings and other information listed in the Appendices to this report and have carried out a desktop study. This examination has been carried out with the sole purpose of identifying any features of the scheme that can be removed or modified in order to improve the safety of the scheme. The problems that we have identified have been noted in this report, together with suggestions for improvement, which we recommend should be studied for implementation. We have not been involved with the scheme design.

AUDIT TEAM LEADER

Name: Maria Rooney

Signed: 

TII Reference: MR3384505

Date: 01/08/25

Position: Senior Engineer

Organisation: TOBIN

Address: Fairgreen House,
Fairgreen Road,
Galway.

AUDIT TEAM MEMBERS

Name: Kevin Duffy

Signed: 

TII Reference: KD*364

Date: 01/08/25

Position: Design Engineer

Organisation: TOBIN

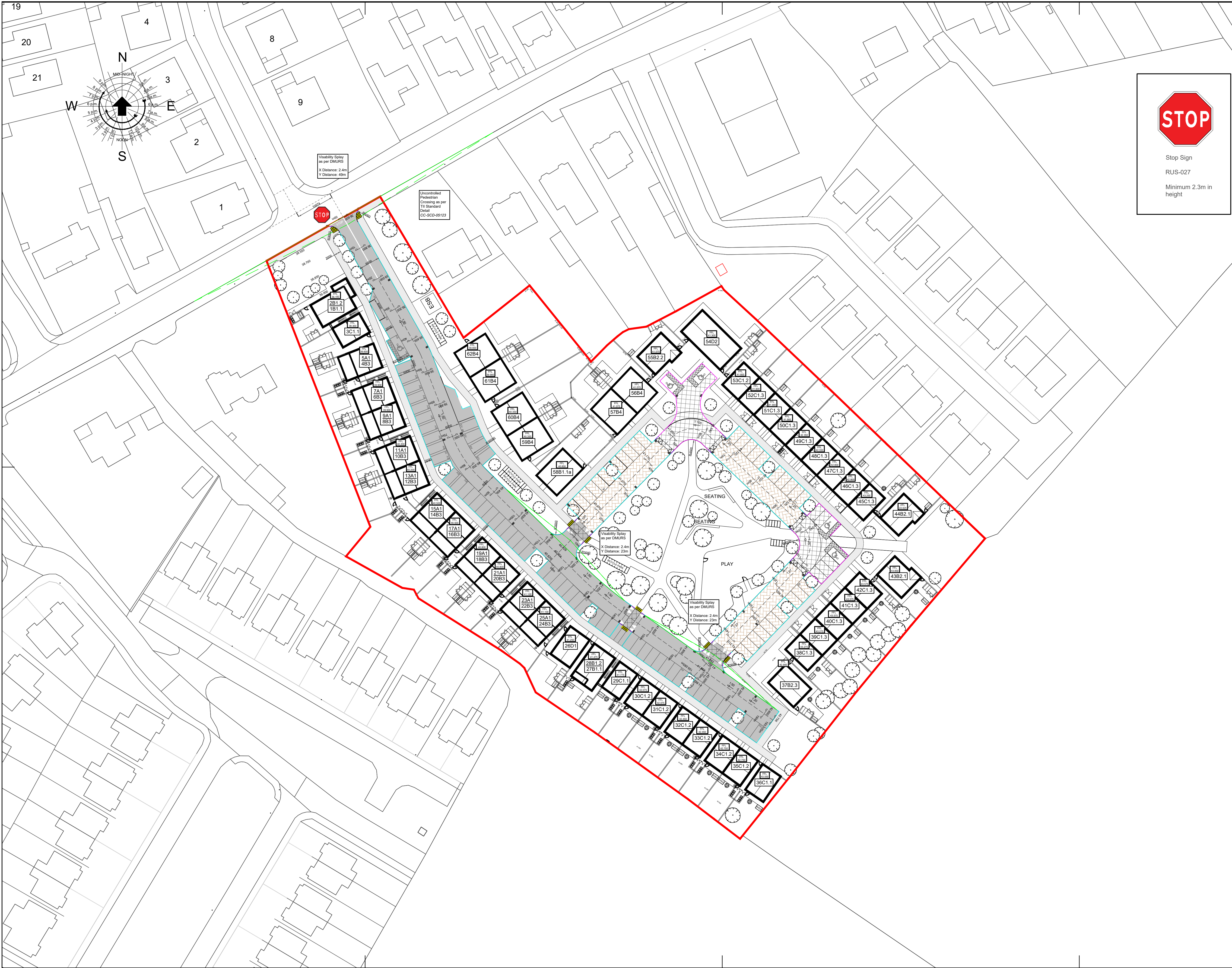
Address: Fairgreen House,
Fairgreen Road,
Galway.

Appendix A-I LIST OF DOCUMENTS EXAMINED

Road Layout – Rev P.02 24561-GNI-XX-ZZ-DR-C-0004

Road Long Section - Rev P.02 24561-GNI-XX-ZZ-DR-C-0005

Road Construction Details - Rev P.02 24561-GNI-XX-ZZ-DR-C-0006



KEY

Road Surface

Shared Surface

Brushed Concrete Pavement

Homezone Surfacing
(Imprinted Asphalt Surface)

Buff Blister Tactile
Paving

Kerb(max. 125mm)

Bullnose Kerb(max.
20mm)

Transitional Kerb

+6.0m

Level

Gully

Visibility Splay

Road Falls

- NOTES
1.

All stated units are indicative and the true measurements should be taken on site.
2.

Any Levels referenced refer to ORDNANCE SURVEY DATUM, MALIN HEAD.
3.

This drawing should be read in conjunction with the drawing referenced as: "24561-GNI-XX-ZZ-DR-C-0005 and 24561-GNI-XX-ZZ-DR-C-0006".
4.

Please refer to Architects drawings for boundary treatment details.
5.

All accessibility ancillaries must comply with Government 'Guidance on the use of Tactile Paving Surfaces'.
6.

All bituminous materials to comply with BS EN 13108-01 :2006.
7.

All asphalt work to comply with BS EN 13108-04 :2006.
8.

Cycle Lanes design and layout out to follow the "Cycle Design Manual(September 2023)".
9.

Thermo plastic paint to be used for all Road Markings, and they must be in accordance with the Department of Transport, Tourism and Sport Traffic sign manual.
10.

Ramps up to shared surfaces should be no steeper than a 1:12 gradient.
11.

Pavements/Roads to not exceed a 1:20 gradient, unless otherwise stated.
12.

Tactile Paving to comply with "Guidance on the use of tactile paving surfaces(December 2021)".
13.

Signs must be placed as shown on the drawing and must be in accordance with the Department of Transport, Tourism and Sport Traffic sign manual.
14.


Drop kerbs to be provided to the rear of the disabled parking bays to allow for level access to the pavement.

P.02 | CB | 25/07/25 | REVISED PLANNING ISSUE

P.01 | CB | 10/04/25 | PLANNING ISSUE

REV | BY | DD/MM/YY | DESCRIPTION

Client:



Comhairle Chontae na Gaillimhe
Galway County Council

Project:

Farranamartin Housing
Development, Tuam, Galway

Stage:

Planning

Drawing title:

Road Layout

Scale:

1:500

Size:

A1

Drawn by:

CB

Checked:

CT

Architect:

Collins-Rolston

Date:

04/12/24

Gilligan

CONSULTING CIVIL & STRUCTURAL ENGINEERS

23 BEDFORD STREET, BELFAST, BT27EJ

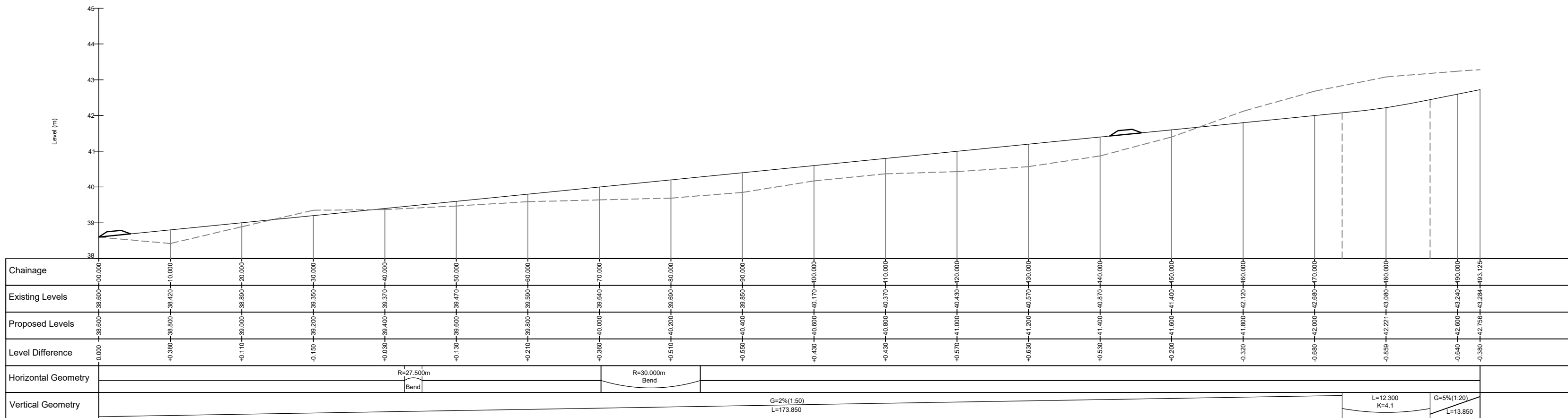
TELEPHONE: 028 9023 2841 FACSIMILE: 028 9024 7104

Drawing No:

24561-GNI-XX-ZZ-DR-C-0004

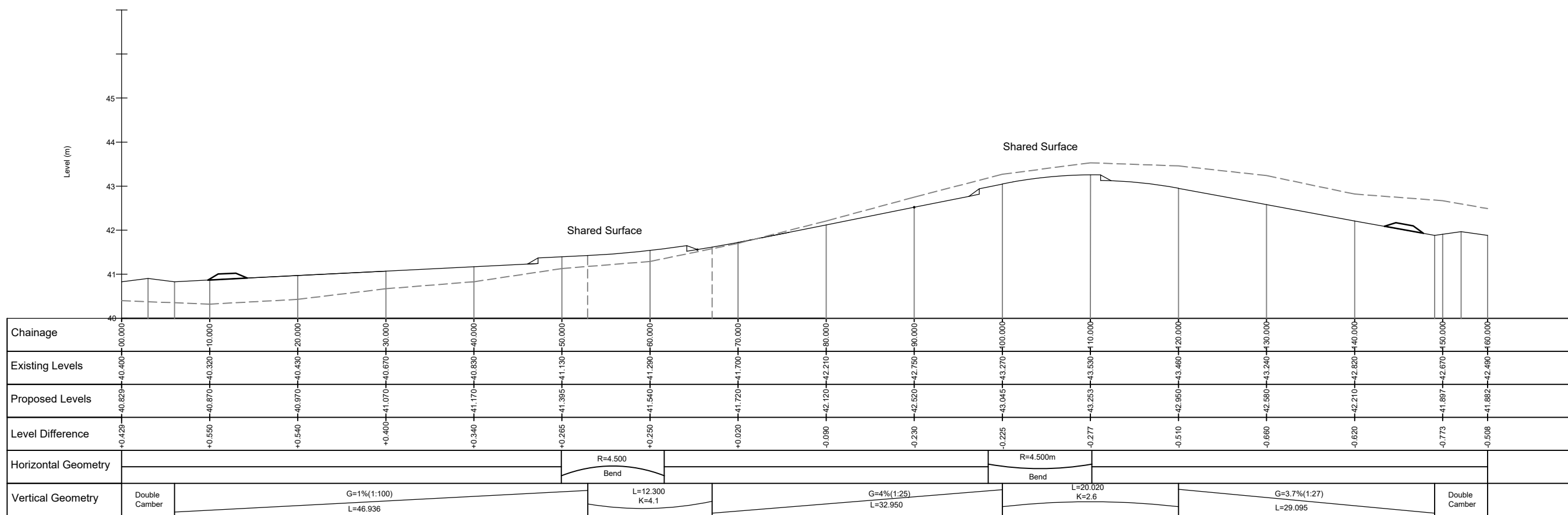
Revision:

P.02



ROAD ALIGNMENT 1 - LONGSECTION

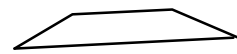
SCALE: H 1:500 V 1:100 DATUM: 38.000



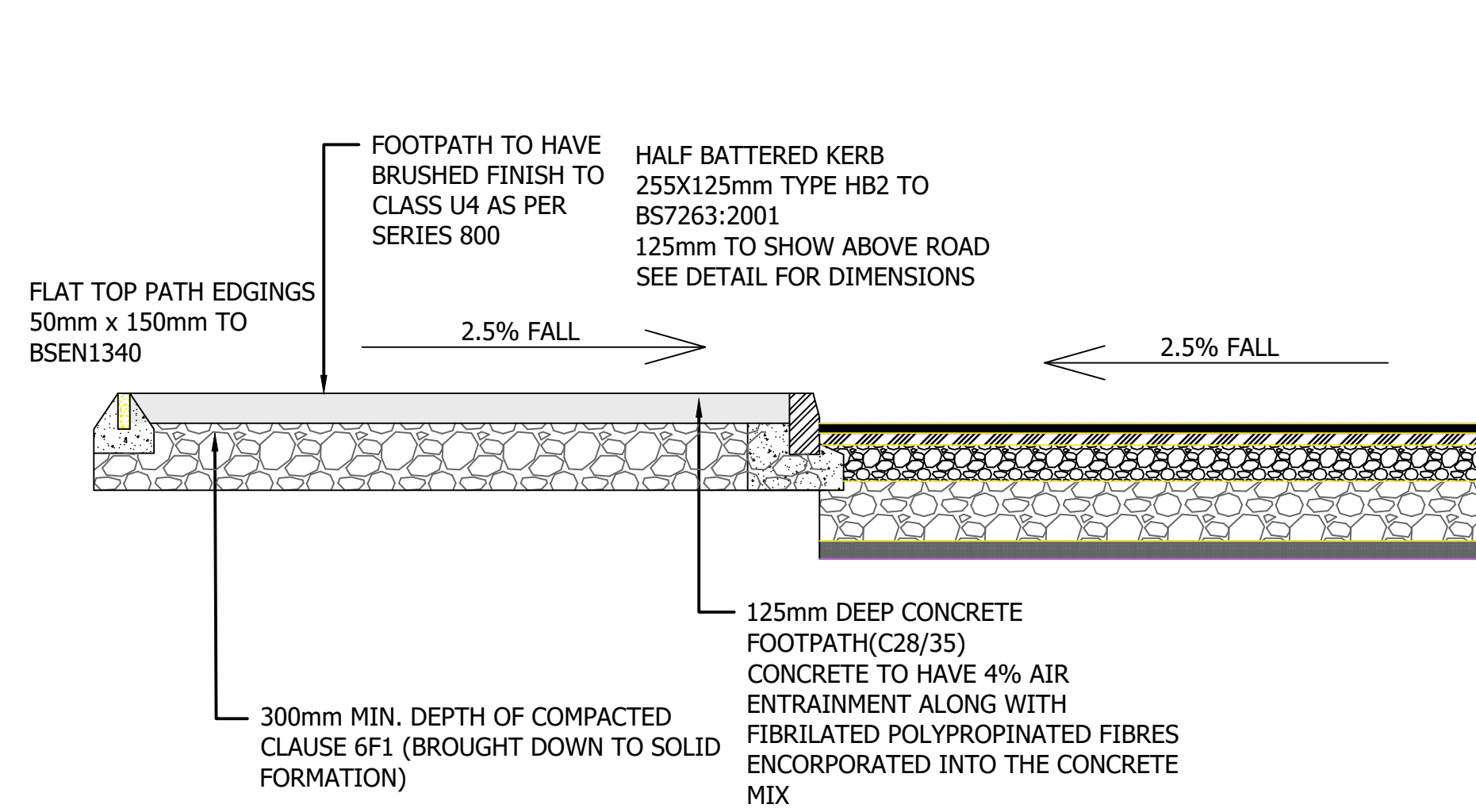
ROAD ALIGNMENT 2 - LONGSECTION

SCALE: H 1:500 V 1:100 DATUM: 40.000

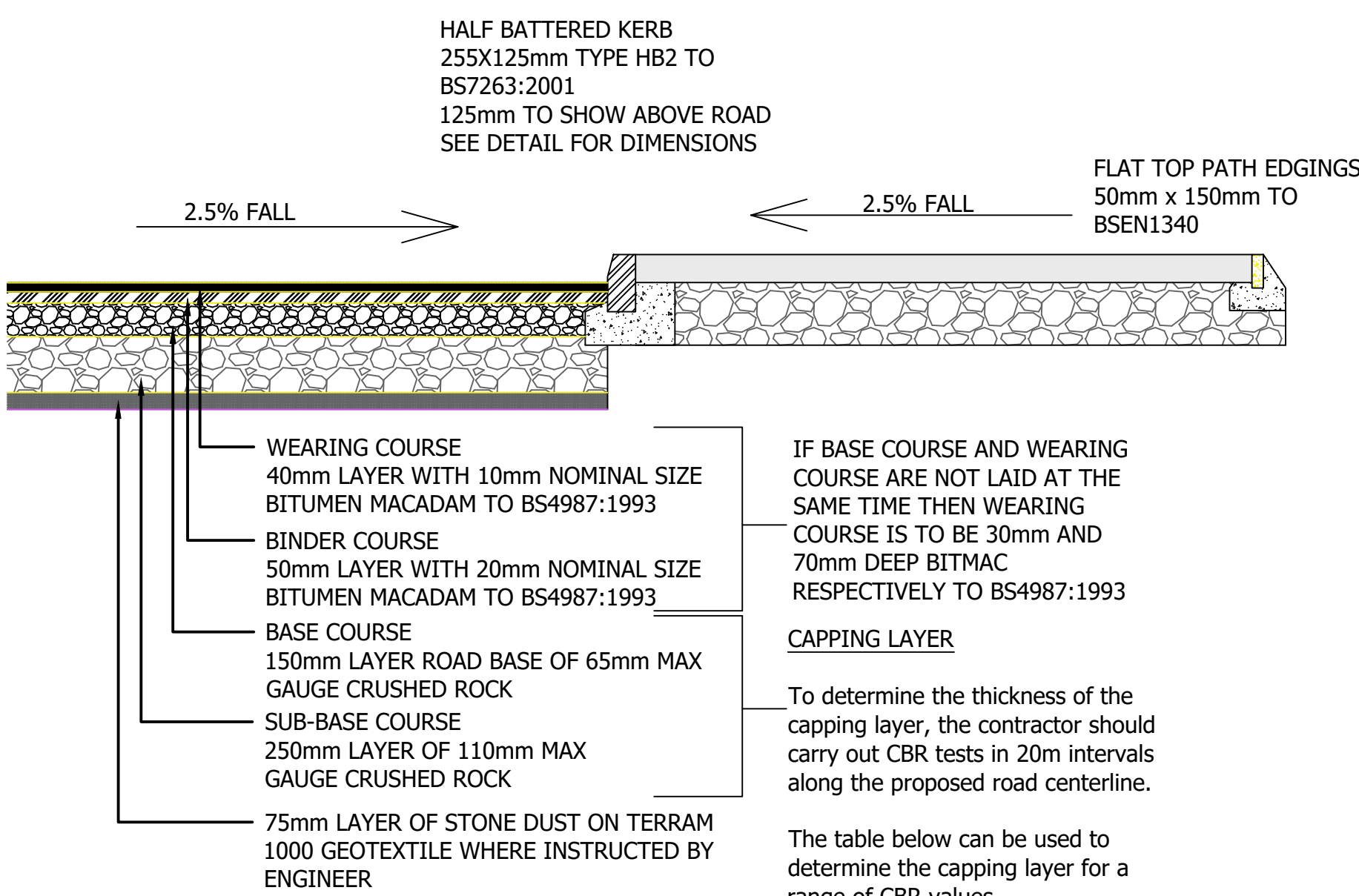
NOTES



Raised Table



FOOTPATH CONSTRUCTION DETAILS (1:25)



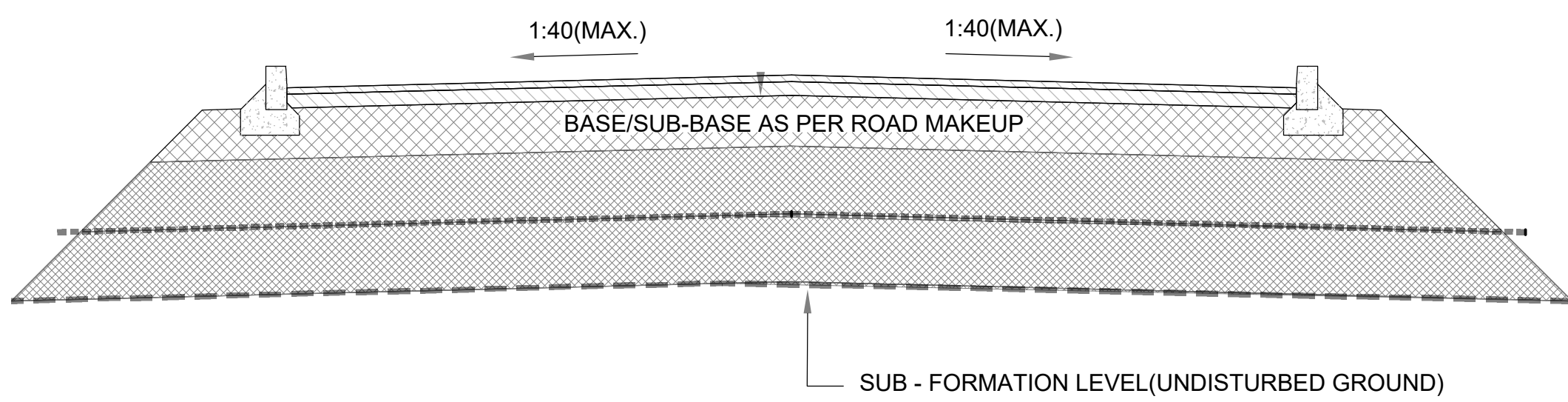
ROAD CONSTRUCTION DETAILS (1:25)

CBR	SUB-BASE	CAPPING LAYER
5-15%	250mm	-
2-5%	150mm	350mm
<2%	150mm	600mm

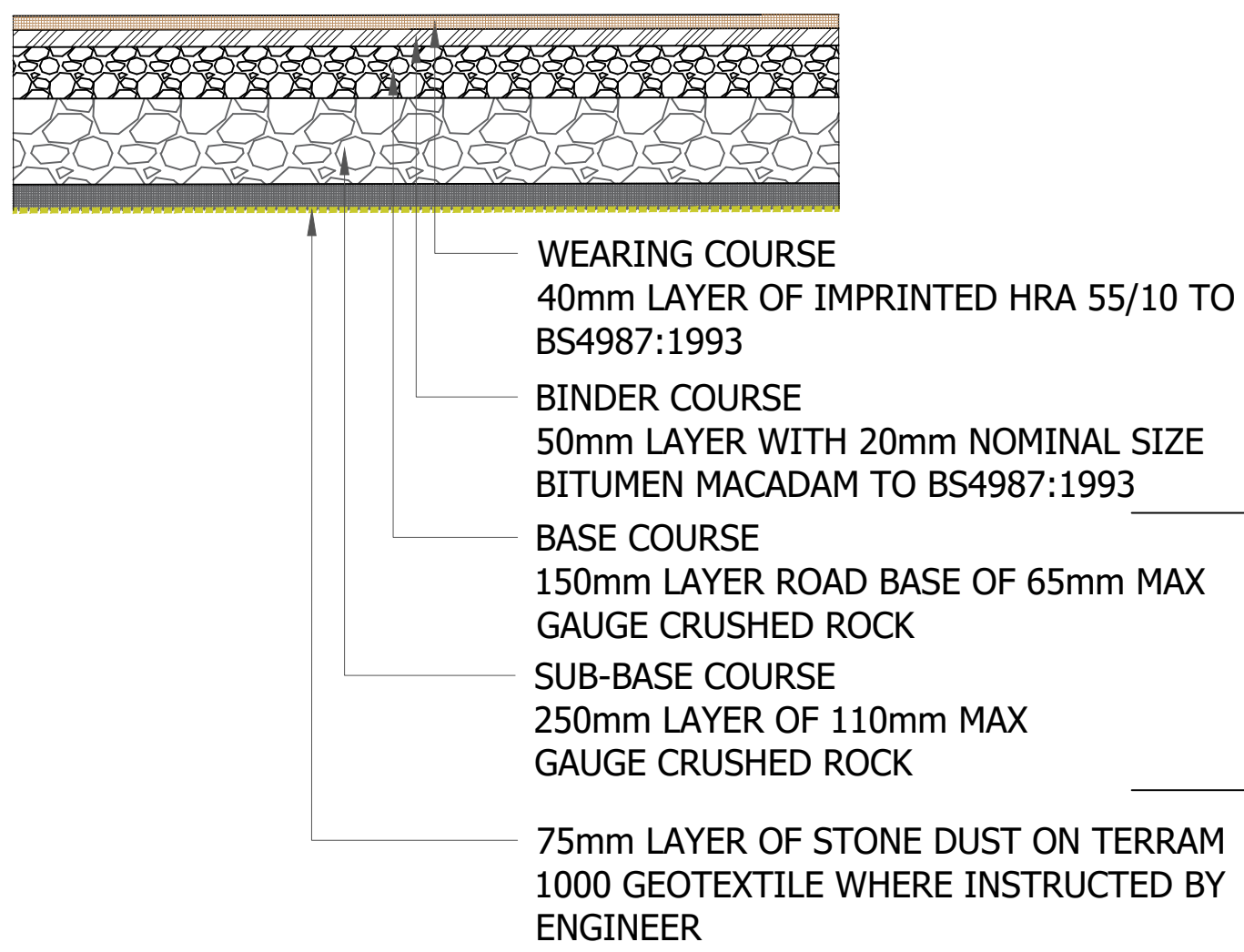
1. GEOGRID TO BE INSTALLED AS PER THE MANUFACTURERS REQUIREMENTS.
2. MIN. CBR VALUES TO BE ACHIEVED: 15% TOP OF CAPPING LAYERS 30% TOP OF SUB BASE LAYERS
3. GEOTEXTILE SEPERATION MEMBRANE TO BE INSTALLED AT THE SUB-FORMATION LEVEL. THE PROPOSED MATERIAL SHALL BE MANUFACTURED FROM SUNTHETIC MEMBRANE TERMALLY BONDED OR SIMILAR TYPE APPROVED BY ENGINEER.

KEY

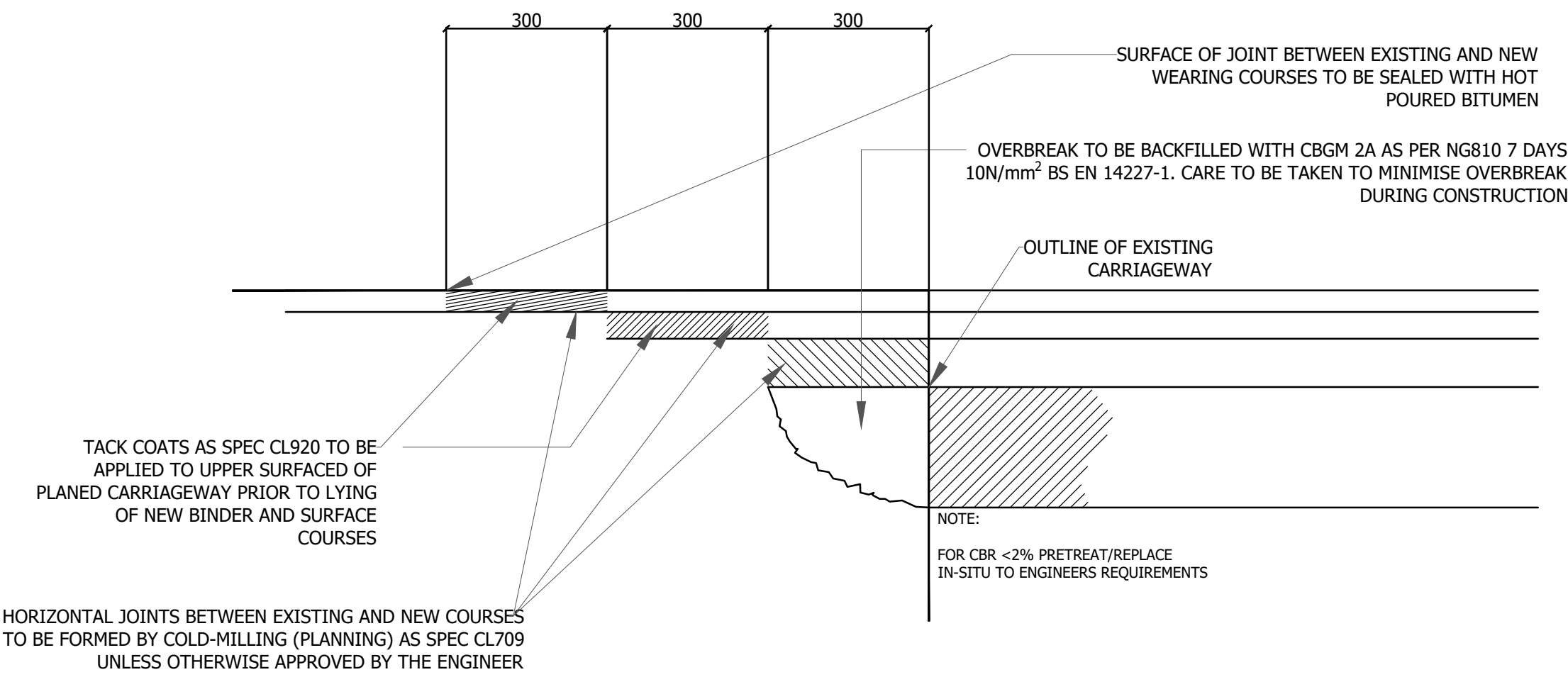
GEOGRID 1	----
GEOGRID 2	-----
GEOTEXTILE SEPERATION MEMBRANE	- - - - -
6F2 CAPPING MATERIAL	▨
SUB - BASE	▨
BINDER COURSE	▨
WEARING COURSE	▨



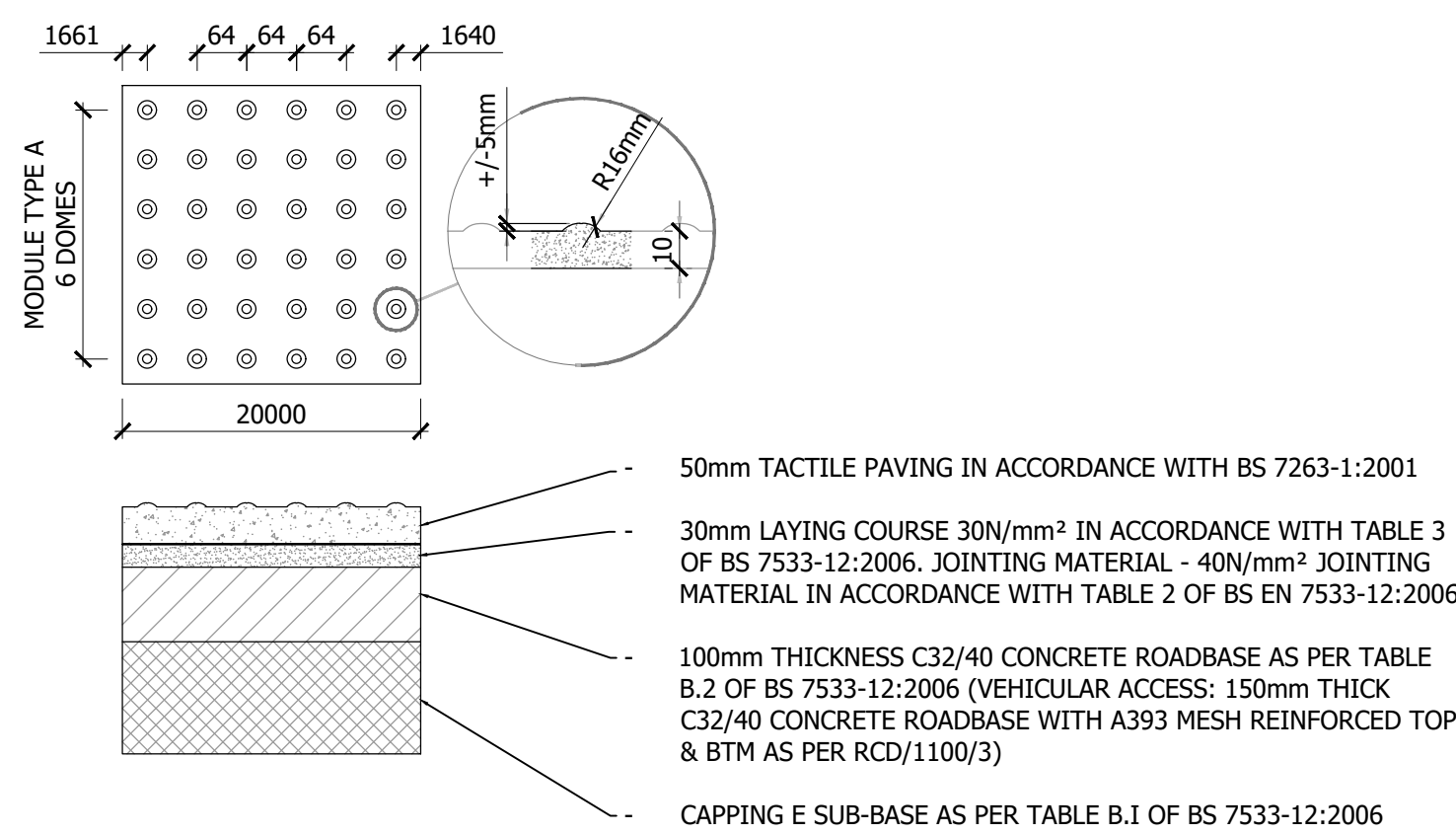
ROADS WITH SIGNIFICANT ROAD BUILD UP STANDARD DETAIL (NTS)



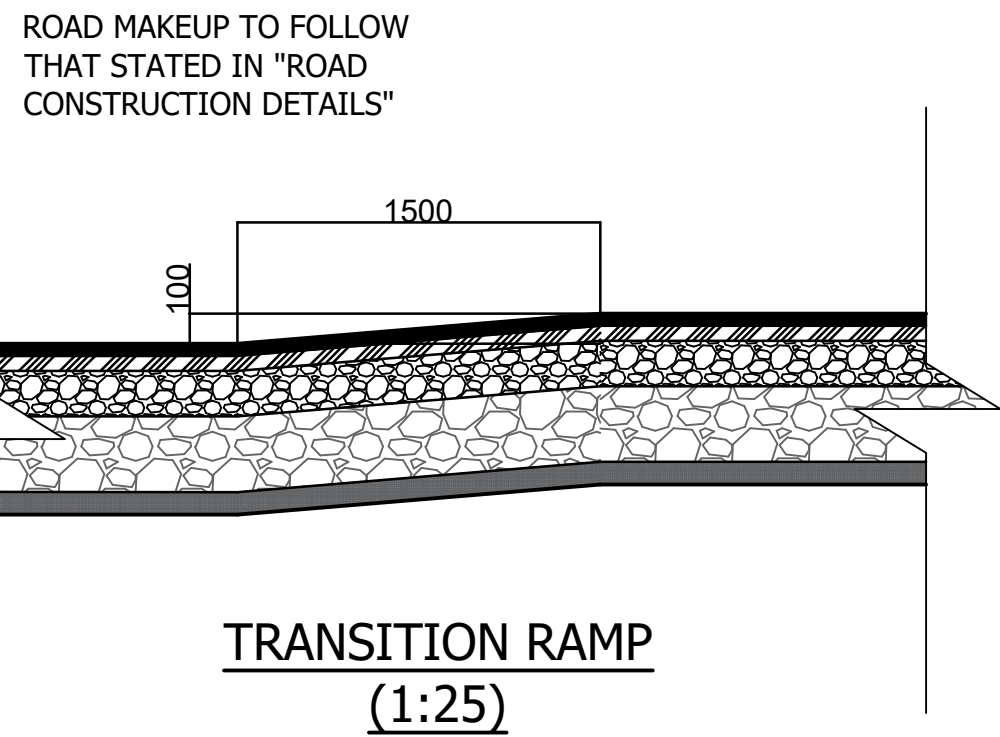
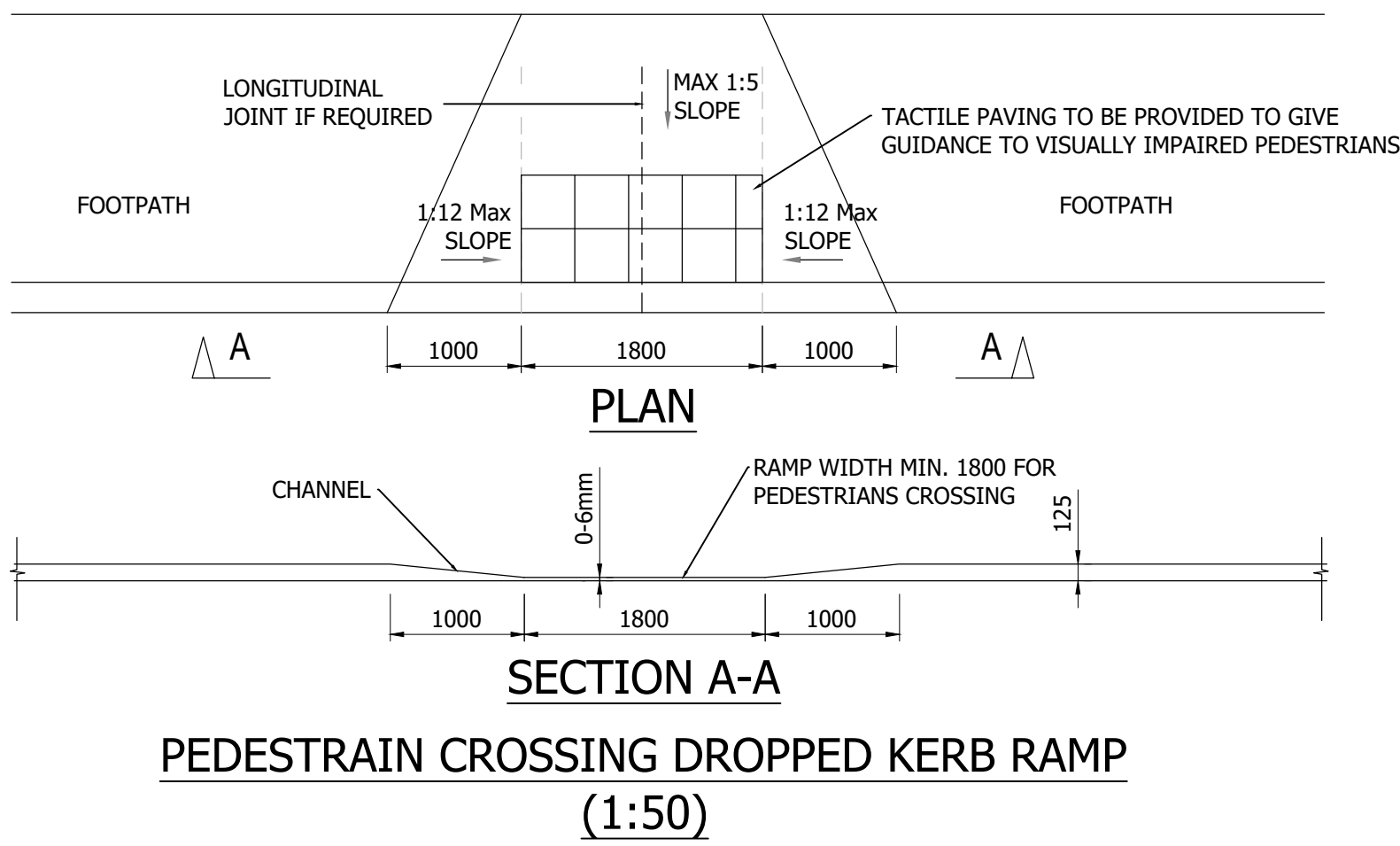
TYPICAL HOMEZONE ROADWAY SECTION (1:20)



ROAD CONSTRUCTION JOINT (1:10)



TACTILE PAVING UNCONTROLLED PEDESTRIAN CROSSINGS (1:10)



NOTES:

1. ALL DIMENSIONS IN MILLIMETERS UNLESS STATED OTHERWISE.
2. ALL STEELWORK TO BE GRADE S235 J2 IN ACCORDANCE WITH IS EN 12899-1.
3. ALL STEELWORK TO BE HOT-DIP GALVANIZED IN ACCORDANCE WITH IS EN ISO 1461.
4. CHECK THE UNDERGROUND SERVICES AT AN EARLY STAGE (AND ACCOMMODATE AS MAY BE NECESSARY).
5. REFER TO TRAFFIC SIGN MANUAL FOR ALL STANDARD DIMENSION.
6. POST EMBEDMENT TO BE 0.75 X D
7. ORIENTATION OF SIGN: ON A STRAIGHT ROAD - HORIZONTAL AXIS 90° AWAY FROM THE GENERAL ALIGNMENT OF THE LEFT-HAND SIDE OF THE CARRIAGEWAY ON A RIGHT-HAND BENDS - 90° ANGLE TO A LINE TANGENTIAL TO THE LEFT-HAND EDGE OF CARRIAGEWAY ON A LEFT-HAND BENDS - 95° FROM A LINE JOINING THE EDGE OF CARRIAGEWAY 200m IN ADVANCE OF THE SIGN.

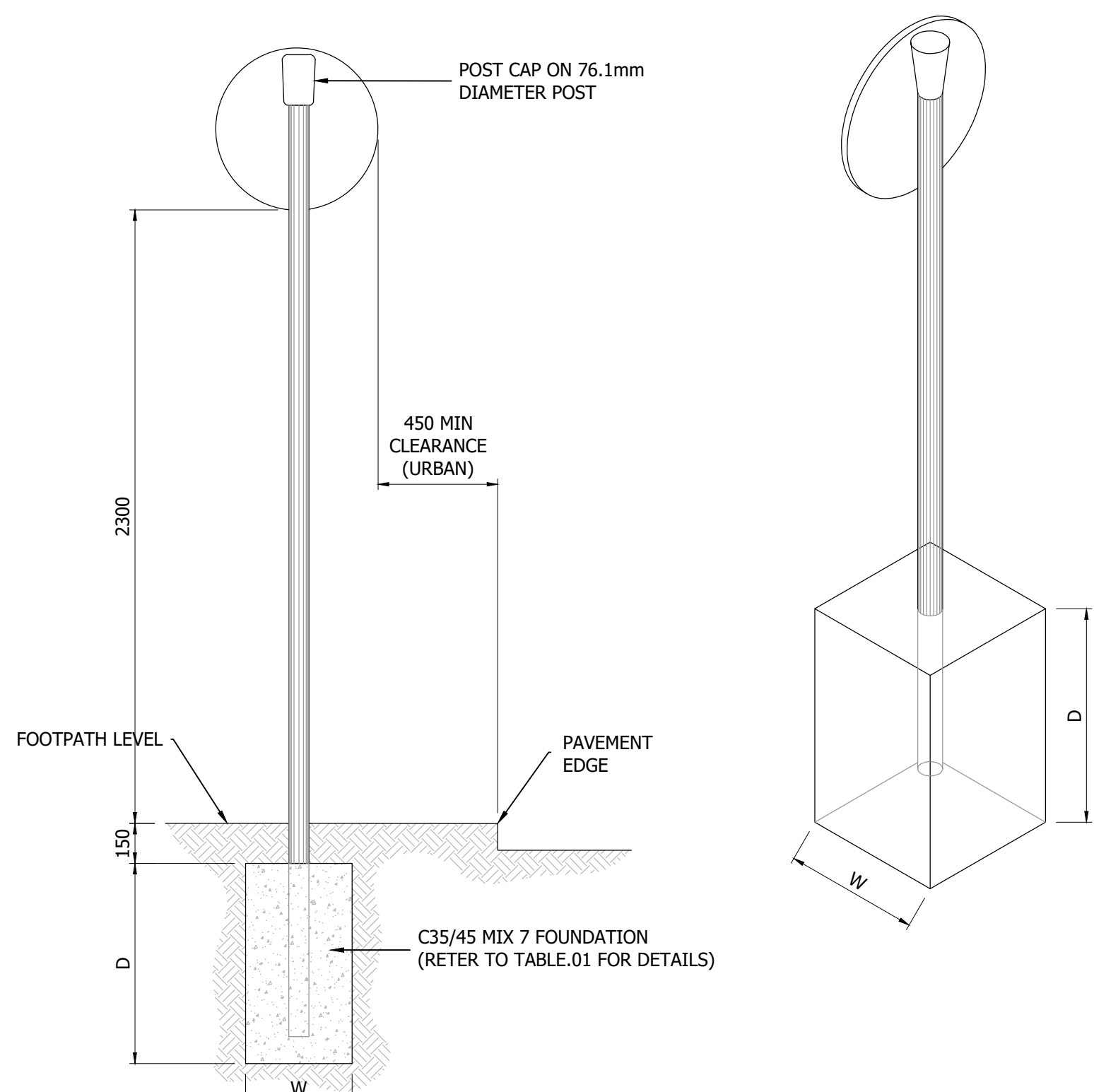
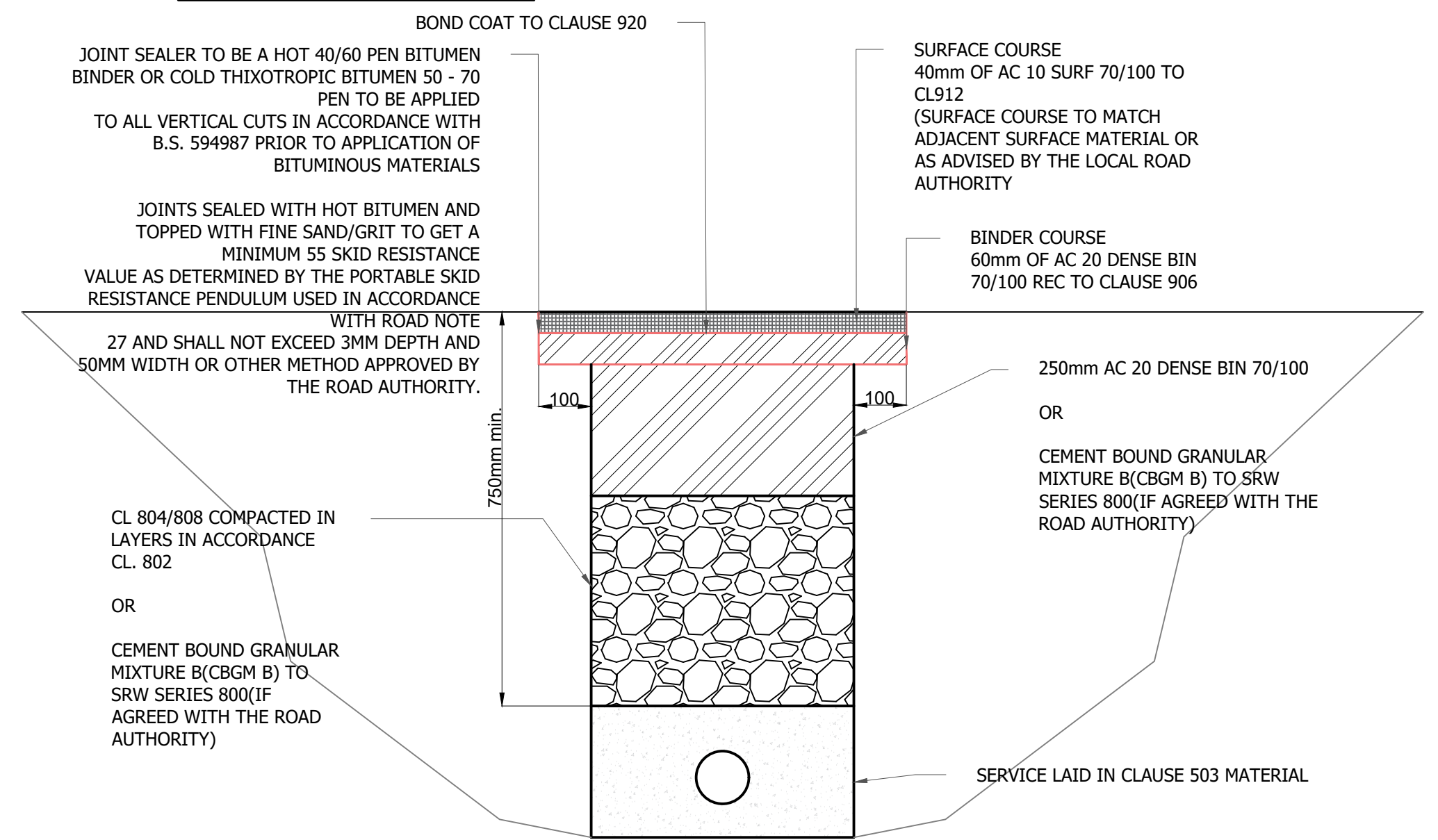


TABLE.01

SUMMARY	TRADITIONAL FOUNDATION OPTION 1			TRADITIONAL FOUNDATION OPTION 2			PLANTED FOUNDATION			POST DETAILS		
SIGN FACE AREA	L	W	D	L	W	D	Ø	D	Ø	WALL THICKNESS	TYPE	
≤0.283 m ² (8600mm)	0.75	0.40	0.55	0.55	0.55	0.55	0.40	0.50	76.1	3.2	CHS	
0.283<AREA≤0.5625m ² (BETWEEN 600Ø & 750x750)	0.75	0.65	0.65	0.70	0.70	0.70	0.40	0.65	76.1	3.2	CHS	
0.5625<AREA≤1.189m ² (750x750 TO 940x1265m ²)	1.00	0.75	0.50	0.80	0.80	0.80	0.40	0.75	76.1	3.2	CHS	

STANDARD DETAIL SD4 WITHIN THE DOCUMENT TITLED "GUIDELINES FOR MANAGING OPENINGS IN ROADS" APR. 2017

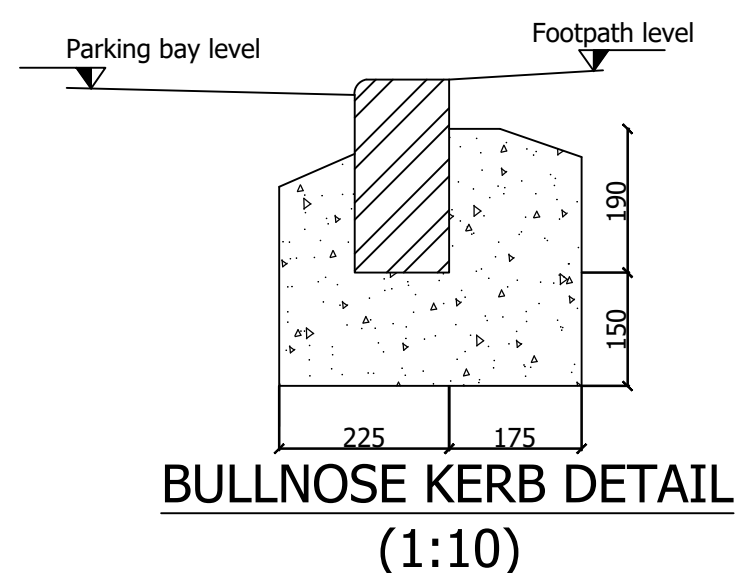
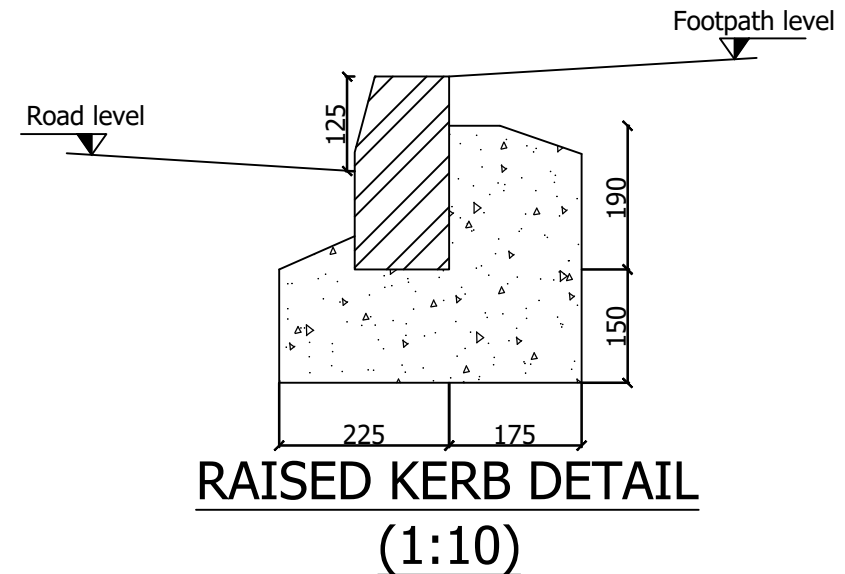
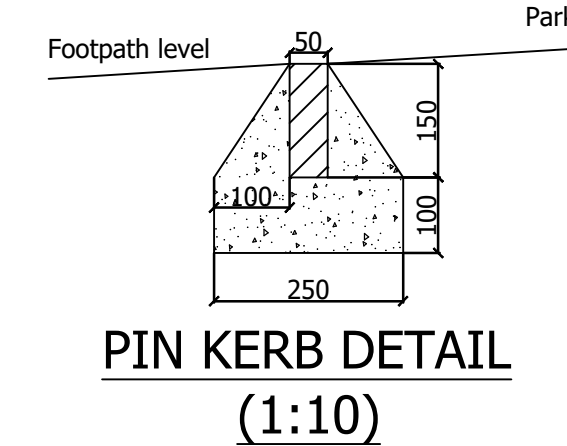
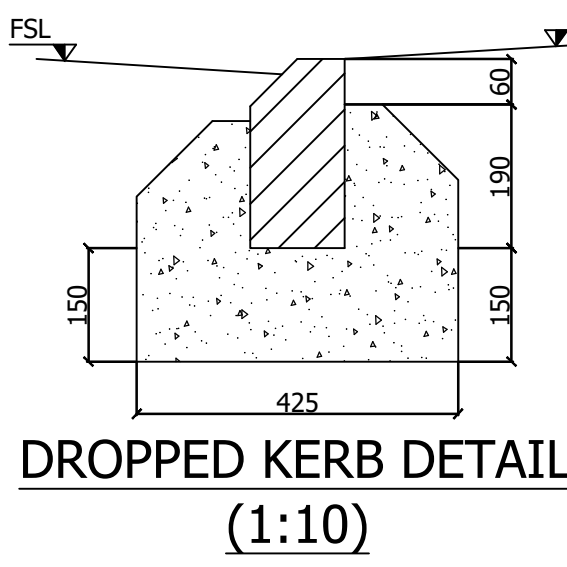
ANY NOTES REFERENCED SHOULD BE TAKEN FROM THIS DOCUMENT



TYPICAL SERVICE REINSTATEMENT DETAIL WITHIN AN ASPHALT ROAD (1:10)

NOTES:

1. All stated units are indicative and the true measurements should be taken on site.
2. Any Levels referenced refer to ORDONANCE SURVEY DATUM, MALIN HEAD
3. This drawing should be read in conjunction with the drawing referenced as "24561-GNI-XX-ZZ-DR-C-0004".
4. Please refer to Architects drawings for boundary treatment details.
5. All accessibility ancillaries must comply with Government 'Guidance on the use of Tactile Paving Surfaces'.
6. All bituminous materials to comply with BS EN 13108-01 :2006.
7. All asphalt work to comply with BS EN 13108-04 :2006.
8. Thermo plastic paint to be used for all Road Markings, and they must be in accordance with the Department of Transport, Tourism and Sport Traffic sign manual.
9. Ramps up to shared surfaces should be no steeper than a 1:15 gradient.
10. Pavements/Roads to not exceed a 1:20 gradient, unless otherwise stated.
11. Tactile Paving to comply with 'Guidance on the use of tactile paving surfaces(December 2021)'.
12. Signs must be placed as shown on the drawing and must be in accordance with the Department of Transport, Tourism and Sport Traffic sign manual.
13. Drop kerbs to be provided to the rear of the disabled parking bays to allow for level access to the pavement.



P.02 CB 25/07/25 REVISED PLANNING ISSUE
P.01 CB 11/04/25 PLANNING ISSUE
REV BY DDMMYY DESCRIPTION

Client: Comhairle Chontae na Gaillimhe Galway County Council

Project: Farranamartin Housing Development, Tuam, Galway

Stage: Planning

Drawing title: Road Construction Standard Details

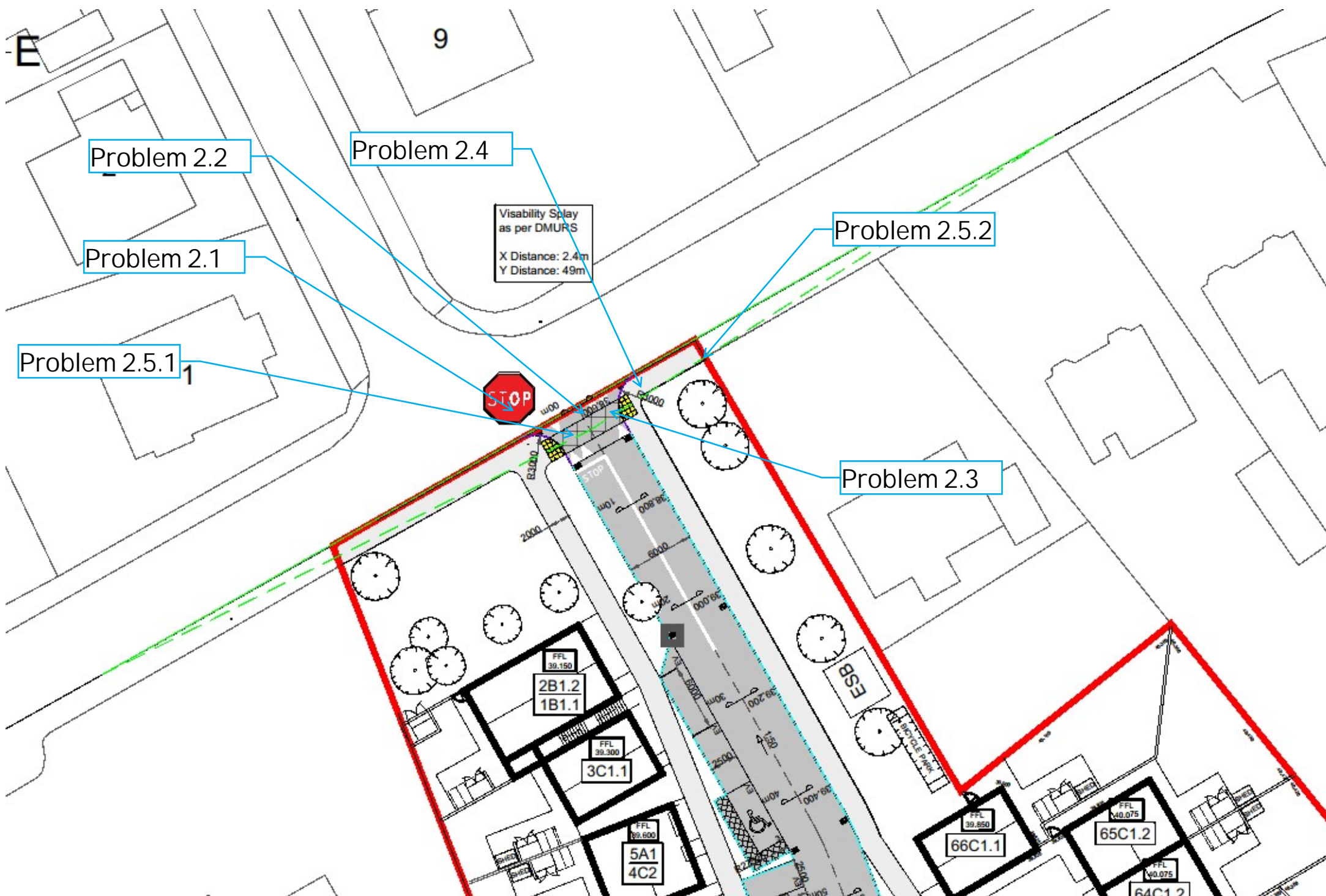
Scale: As Shown Size: A0

Drawn by: CB Checked: CT Architect: Collins-Rolston Date: 05/02/2025

Gilligan CONSULTING CIVIL & STRUCTURAL ENGINEERS
23 BEDFORD STREET, BELFAST, BT27EJ
TELEPHONE: 028 9023 2841 FACSIMILE: 028 9024 7104

Drawing No: 24561-GNI-XX-ZZ-C-0006 Revision: P.02

Appendix A-II PROBLEM MAP



Appendix A-III FEEDBACK FORM

Road Safety Audit Feedback Form

Scheme: Farranamartin, Tuam – New Housing Estate Access

Audit Stage: 1

Route R939

Date of Audit: 27/03/2025

To be Completed by Designer				To Be Completed by Audit Team Leader
Paragraph No. in Safety Audit Report	Problem accepted (yes/no)	Recommended Measures Accepted (yes /no)	Alternative Measures (describe). Give reason for not accepting recommended measure	Alternative Measures or reasons accepted by auditors (yes /no)
2.1	YES	NO	TTA is being completed for the site. In receipt of the TTA, discussions will be had with GCC in relation to this.	Yes
2.2	YES	NO	Alternatively, a standard pedestrian crossing is to be put in here at the junction in accordance with CC-SCD-05123.	Yes
2.3	YES	YES		
2.4	YES	NO	Footpath within the site, along the Galway Road will be 2.0m wide. GCC have been informed and made aware of the slimer footpath provision outside of the site boundary.	Yes
2.5.1	YES	YES		
2.5.2	YES	YES		

Signed:	<i>Conall Browne</i>	Designer	Conall Browne – Gilligan	Date:	11/04/2025
Signed:	<i>Eithne Murphy</i>	Client	Eithne Murphy – Galway County Council	Date:	11/04/2025
Signed:	<i>Maria Rooney</i>	Audit Team Leader	Maria Rooney - TOBIN	Date:	01/08/2025

