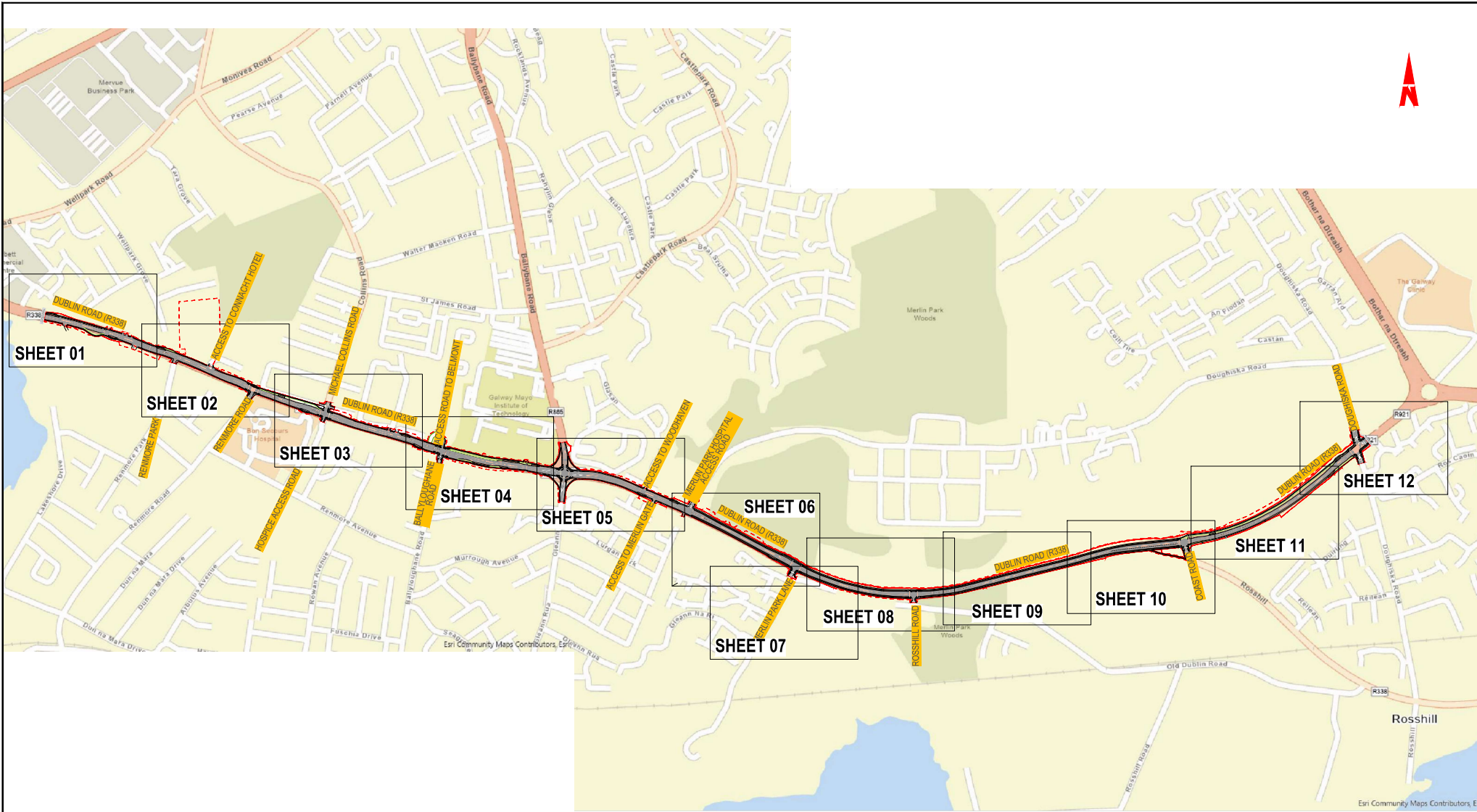


The image features a vibrant yellow background. On the right side, there are several overlapping, rounded rectangular shapes in shades of blue and green. These shapes are decorated with white circles of varying sizes. Some circles are solid white, while others have a thin green outline. The overall design is modern and abstract, with a focus on geometric forms and a bright color palette.

Proposed Surface Water Drainage

R:\22 Projects\2017 - BusConnects\Galway - Dublin Road\01_GEND Drawing\01_Galway\11-DWG_R0-XX-DR-CD-00000_Surface_Water_Drainage\KeyPlan.dwg



CYAL50379860
© Taithe Éireann - Surveying.



Tionscatal Éireann
Project Ireland
2040



**BUS
CONNECTS
GALWAY**
SUSTAINABLE TRANSPORT FOR A BETTER CITY



NTA
Udarás Náisiúnta Iompair
National Transport Authority





**BARRY
TRANSPORTATION**



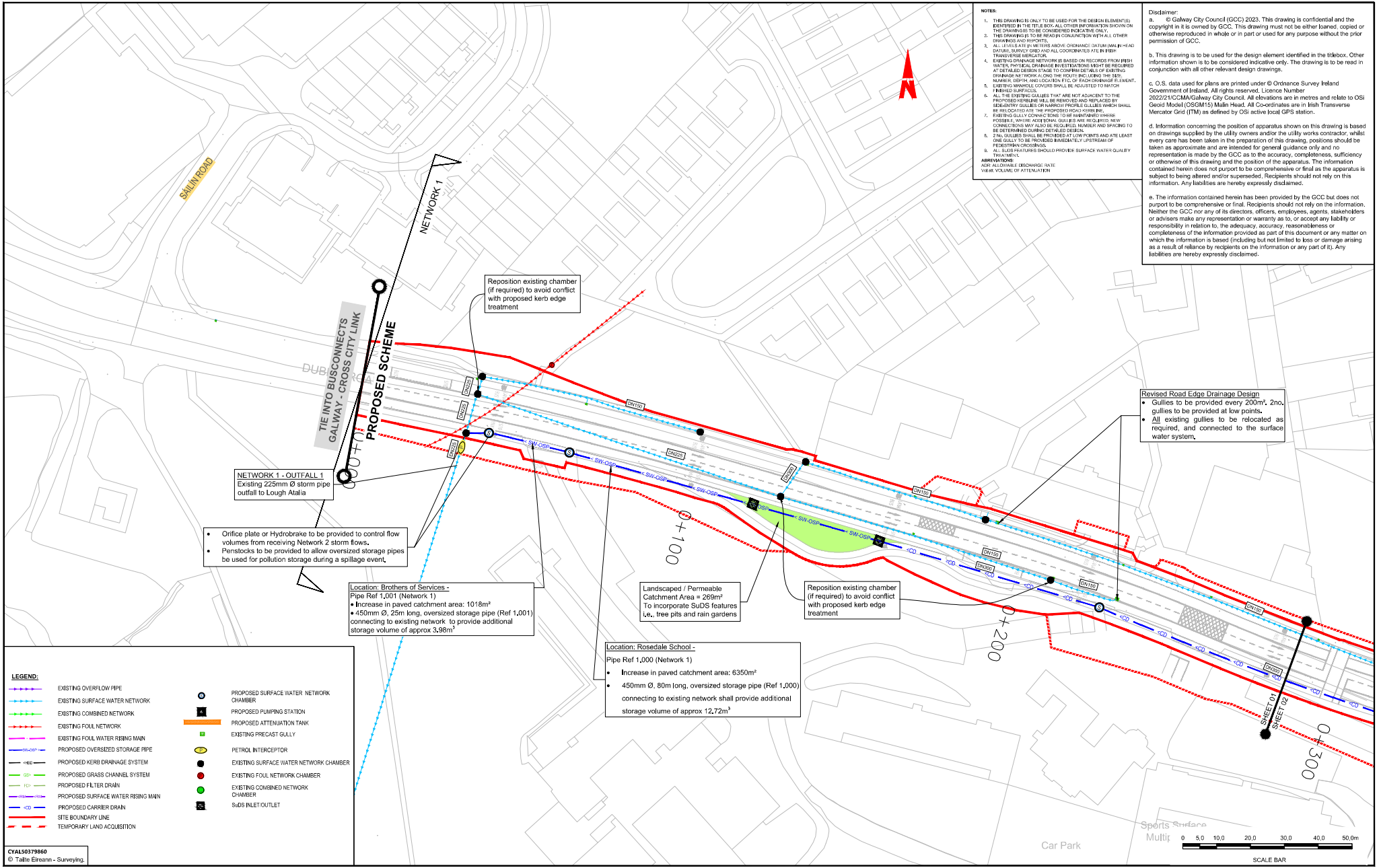
egis

Notes:
DO NOT SCALE, use figured dimensions only.
All levels are referred to Ordnance Survey Datum, Mean High Water.
This drawing is the property of Barry Transportation. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent. This document should not be relied on or used in circumstances other than those for which it was originally prepared. Barry Transportation accepts no responsibility for this document to any other party other than the party by whom it was commissioned.

Rev.	Date	Drawn	Description	Chkd	Appr.
01	06/12/24	GR	ISSUE FOR PLANNING	JH	JH

Project Title: BUSCONNECTS GALWAY : DUBLIN ROAD			Status: A1
Drawing Title: PROPOSED SURFACE WATER DRAINAGE NETWORKS KEY PLAN SHEET 01 OF 01			
Designed: GW	Drawing No.		Rev: C01
Drawn: GW	BCGDR-8TL-DNG-RD-XX-DR-CD-00000		
Approved: JN	Scale at A1: 1:5000		
Reviewed: JN	Date: OCTOBER 2024		

File Name: R:\22 Projects\2007 - Bus Connects\Galway - Dublin Road\GEN000 Drawing\BSCD-RD-XX-DR-CD-00001_0001_L_Scheme_Visual_Drainage.dwg



Notes:

DO NOT SCALE. Use figured dimensions only.

All levels are referred to Ordnance Survey Datum, Malm Head.

This drawing is the property of Barry Transportation. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent. This document should not be relied on or used in circumstances other than those for which it was originally prepared. Barry Transportation accepts no responsibility for the document to any other party other than the party by whom it was commissioned.

Rev.	Date	Drawn	Description	Chk'd	App'd
001	06/03/24	GP	BLUE FOR PLANNING	JH	UN

Project Title: GALWAY BUSCONNECTS: DUBLIN ROAD

Drawing Title: PROPOSED SURFACE WATER DRAINAGE NETWORKS
SHEET 1 OF 12

Designed: JH
Drawn: WDS
Approved: JH
Reviewed: RP

Drawing No.: BC0DR-01T-0NG-RD-XX-DR-CD-00001

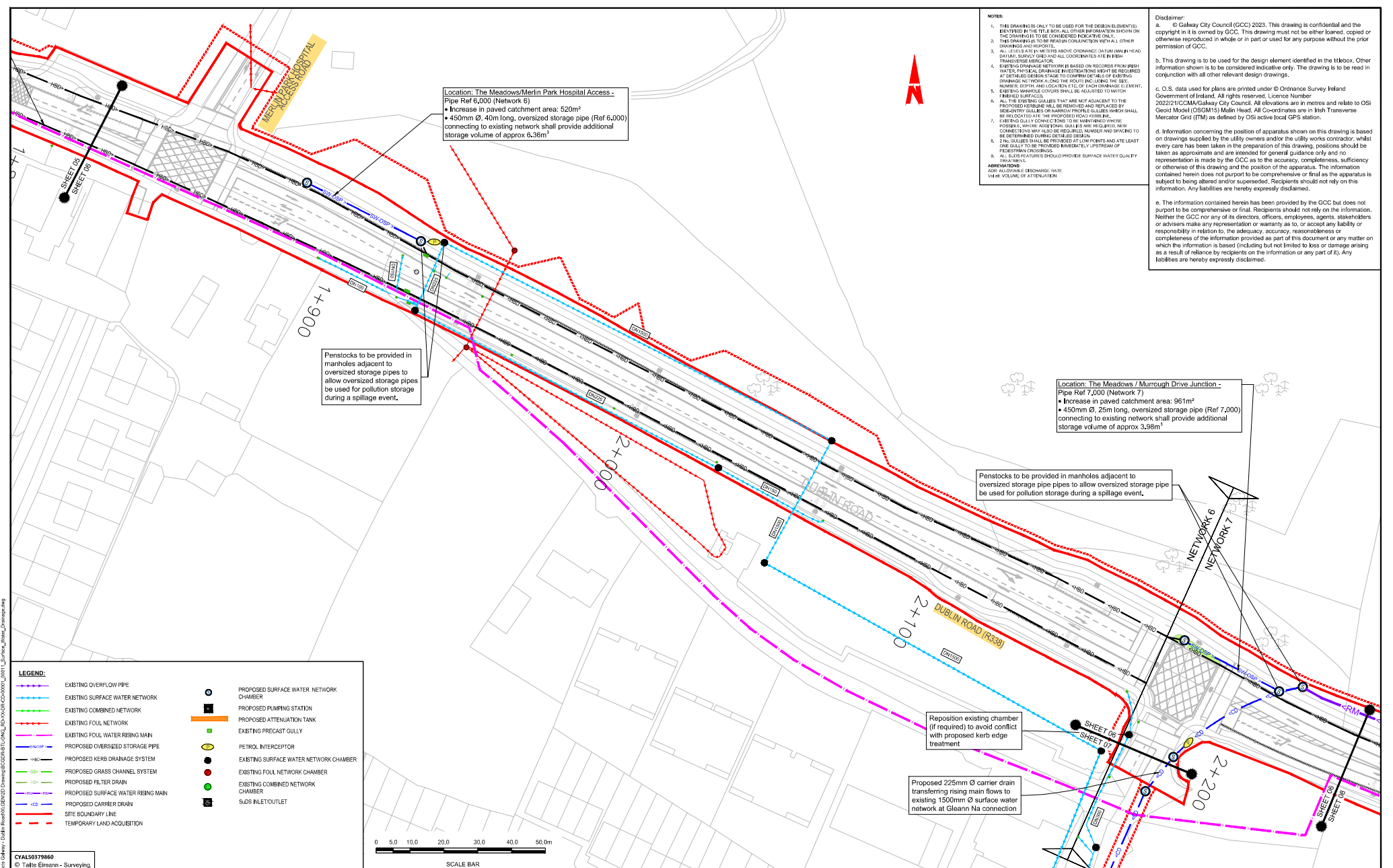
Scale at A1: 1:500

Date: MARCH 2023

Status: A1

Rev: C01

File Name: R:\22 Projects\2007 - Bus Connects Galway - Dublin Road\GEN00 Drawing\GEN00-Dublin-Road-XX-XX-DR-CD-00001_00011_L_Surface_Network.dwg



NOTES:

- THIS DRAWING IS ONLY TO BE USED FOR THE DESIGN ELEMENTS IDENTIFIED BY THE TITLE. ALL OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY.
- THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS AND REPORTS.
- ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM (MAH) HEAD DATUM, SURVEY GRID AND ALL COORDINATES ARE IN IRISH TRANSVERSE MERCATOR.
- EXISTING DRAINAGE NETWORK IS BASED ON RECORDS FROM PDAI. WATER, PHYSICAL DRAINAGE INVESTIGATIONS MUST BE CONDUCTED AT THE RELEVANT DEPTH OF PIPE TO CONFIRM ALL OF EXISTING DRAINAGE NETWORK ALONG THE ROUTE INCLUDING THE SIZE, NUMBER, DEPTH, AND MATERIAL TYPE OF EACH DRAINAGE ELEMENT.
- EXISTING MANHOLE COVERS SHALL BE ADJUSTED TO MATCH LIMITED SURFACES.
- ALL THE EXISTING GULLIES THAT ARE NOT ADJACENT TO THE PROPOSED VESSELING WILL BE REINFORCED AND REPLACED BY SIDE-ENTRY GULLIES OR NARROW PROFILE GULLIES WHICH SHALL BE RELOCATED TO THE PROPOSED FOOTPATH.
- EXISTING GULLY CONNECTIONS TO BE MAINTAINED WHERE POSSIBLE. WHERE NEW GULLIES ARE REQUIRED, NEW CONNECTIONS MAY ALSO BE REQUIRED. NUMBER AND SPACING TO BE DETERMINED DURING DETAILS DESIGN.
- 2% GULLIES SHALL BE PROVIDED AT LOW POINTS AND AT LEAST ONE GULLY TO BE PROVIDED KINEMATICALLY, OPTIMUM OF 1 PER 100M DRAINAGE LENGTH.
- ALL SUDS FEATURES SHOULD PROVIDE SURFACE WATER QUALITY TREATMENT.

ABBREVIATIONS:
KSP ALLOWABLE DISCHARGE RATE
VIE VOLUME OF ATTENUATION

Disclaimer:

a. © Galway City Council (GCC) 2023. This drawing is confidential and the copyright in it is owned by GCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of GCC.

b. This drawing is to be used for the design element identified in the titleblock. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number: 2022/21/CCM/Galway City Council. All co-ordinates are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the GCC as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or suspended. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the GCC but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the GCC nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Notes:

DO NOT SCALE. Use figured dimensions only.

All levels are referred to Ordnance Survey Datum, Mean Head.

This drawing is the property of Barry Transportation. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent. This document should not be relied on or used in circumstances other than those for which it was originally prepared. Barry Transportation accepts no responsibility for this document to any other party other than the party by whom it was commissioned.

Rev.	Date	Drawn	Description	Chk'd	Asst
001	06/02/24	QIP	BLUE FOR PLANNING	JH	JA

Project Title: GALWAY BUSCONNECTS: DUBLIN ROAD

Drawing Title: PROPOSED SURFACE WATER DRAINAGE NETWORKS
SHEET 6 OF 12

Design: JH
Drawn: WDS
Approved: JH
Reviewed: RP

Drawing No.: BCGDR-8T1-ONG-RO-XX-DR-CD-00006

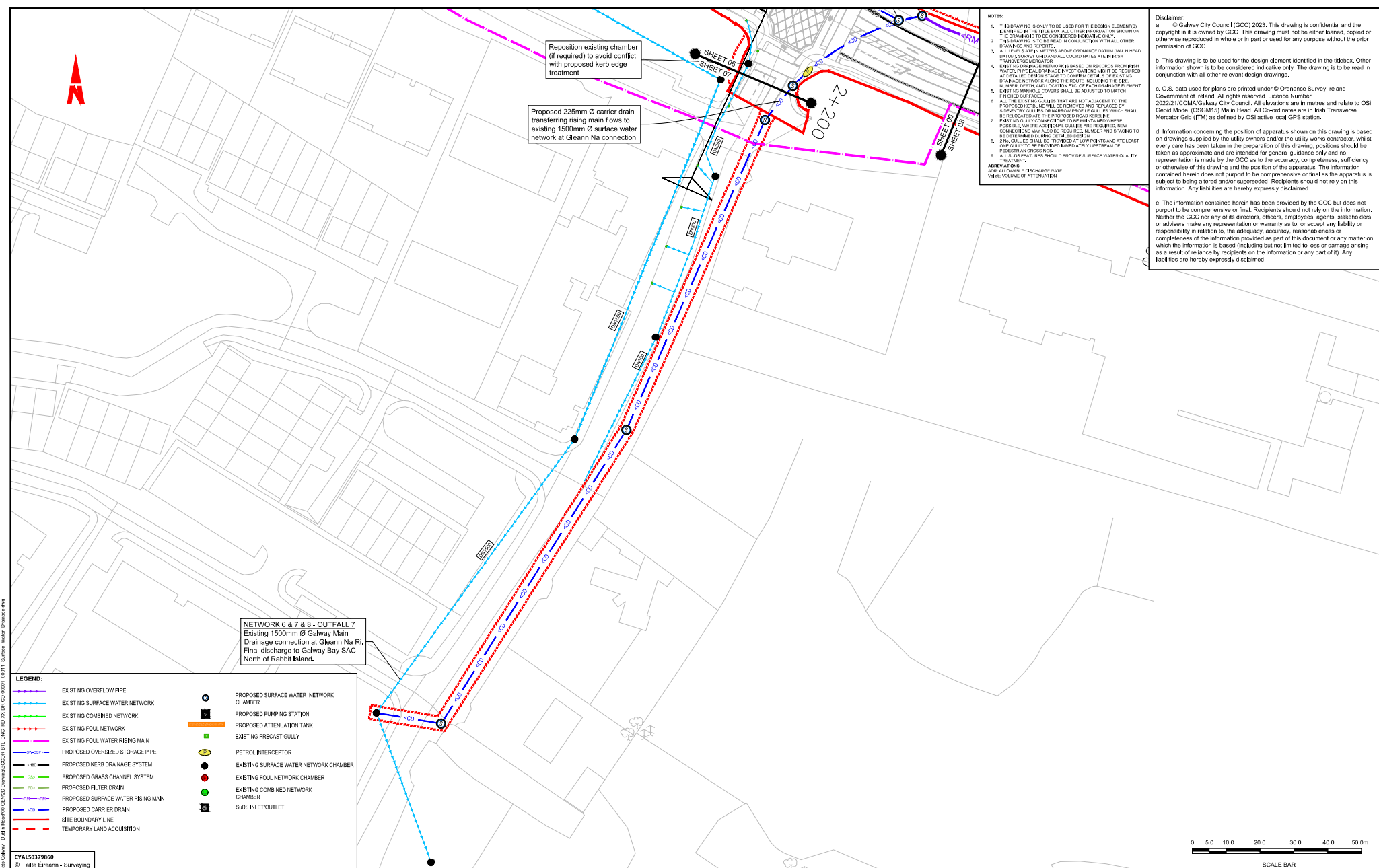
Scale: at A1: 1:500

Date: MARCH 2023

Status: A1

Rev: C01

File Name: R:\22 Projects\207 - Bus Connects Galway - Dublin Road\GIS\Drawings\BSCGDR-RT-CD-XX-DR-CD-00001_0001_L_Surface_Water_Drainage.dwg



LEGEND:

EXISTING OVERFLOW PIPE

EXISTING SURFACE WATER NETWORK

EXISTING COMBINED NETWORK

EXISTING FOUL NETWORK

EXISTING FOUL WATER RISING MAIN

PROPOSED OVERSIZED STORAGE PIPE

PROPOSED KERB DRAINAGE SYSTEM

PROPOSED GRASS CHANNEL SYSTEM

PROPOSED FILTER DRAIN

PROPOSED SURFACE WATER RISING MAIN

PROPOSED CARRIER DRAIN

SITE BOUNDARY LINE

TEMPORARY LAND ACQUISITION

PROPOSED SURFACE WATER NETWORK CHAMBER

PROPOSED PUMPING STATION

PROPOSED ATTENUATION TANK

EXISTING PRECAST GULLY

PETROL INTERCEPTOR

EXISTING SURFACE WATER NETWORK CHAMBER

EXISTING FOUL NETWORK CHAMBER

EXISTING COMBINED NETWORK CHAMBER

SUDS INLET/OUTLET

NETWORK 6 & 7 & 8 - OUTFALL 7
Existing 1500mm Ø Galway Main
Drainage connection at Gleann Na Ri.
Final discharge to Galway Bay SAC -
North of Rabbit Island.

CYAL50379860
© Taithe Éireann - Surveying.

NOTES:

- THIS DRAWING IS ONLY TO BE USED FOR THE DESIGN ELEMENTS IDENTIFIED BY THE TITLE BLOCK. ALL OTHER INFORMATION SHOWN ON THE DRAWING IS TO BE CONSIDERED INDICATIVE ONLY.
- THE DRAWING IS TO BE READ IN CONJUNCTION WITH ALL OTHER DRAWINGS AND REPORTS.
- ALL LEVELS ARE IN METRES ABOVE ORDNANCE DATUM (MAH) - HEAD TRANSVERSE DATUM.
- EXISTING DRAINAGE NETWORK IS BASED ON RECORDS FROM PDAI. WATER, PHYSICAL DRAINAGE INVESTIGATIONS MUST BE CONDUCTED AT THE FIELD LEVEL TO CONFIRM ALL OF EXISTING DRAINAGE NETWORK ALONG THE ROUTE INCLUDING THE SIZE, NUMBER, DEPTH AND LOCATION ETC. OF EACH DRAINAGE ELEMENT.
- EXISTING MANHOLE COVERS SHALL BE ADJUSTED TO MATCH FINISHED SURFACES.
- ALL THE EXISTING GULLIES THAT ARE NOT ADJACENT TO THE PROPOSED VESSEL WILL BE REMOVED AND REPLACED BY SIDE-ENTRY GULLIES OR NARROW PROFILE GULLIES WHICH SHALL BE RELOCATED AT THE PROPOSED POOL KERING.
- EXISTING GULLY CONNECTIONS TO BE MAINTAINED WHERE POSSIBLE. WHERE ADDITIONAL GULLIES ARE REQUIRED, NEW CONNECTIONS MAY ALSO BE REQUIRED. NUMBER AND SPACING TO BE DETERMINED DURING DETAILS DESIGN.
- 2% GULLIES SHALL BE PROVIDED AT LOW POINTS AND AT LEAST ONE GULLY TO BE PROVIDED KINEMATICALLY, UPSTREAM OF PERMANENT CROSSINGS.
- ALL SUDS FEATURES SHOULD PROVIDE SURFACE WATER QUALITY TREATMENT.

ABBREVIATIONS:
ASR ALLOWABLE DISCHARGE RATE
VIBRE VIBRATOR ATTENUATION

Disclaimer:

a. © Galway City Council (GCC) 2023. This drawing is confidential and the copyright in it is owned by GCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of GCC.

b. This drawing is to be used for the design element identified in the titleblock. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number: 2022/21/CMA/Galway City Council. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the GCC as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or suspended. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the GCC but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the GCC nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

Notes:

DO NOT SCALE. Use figured dimensions only.

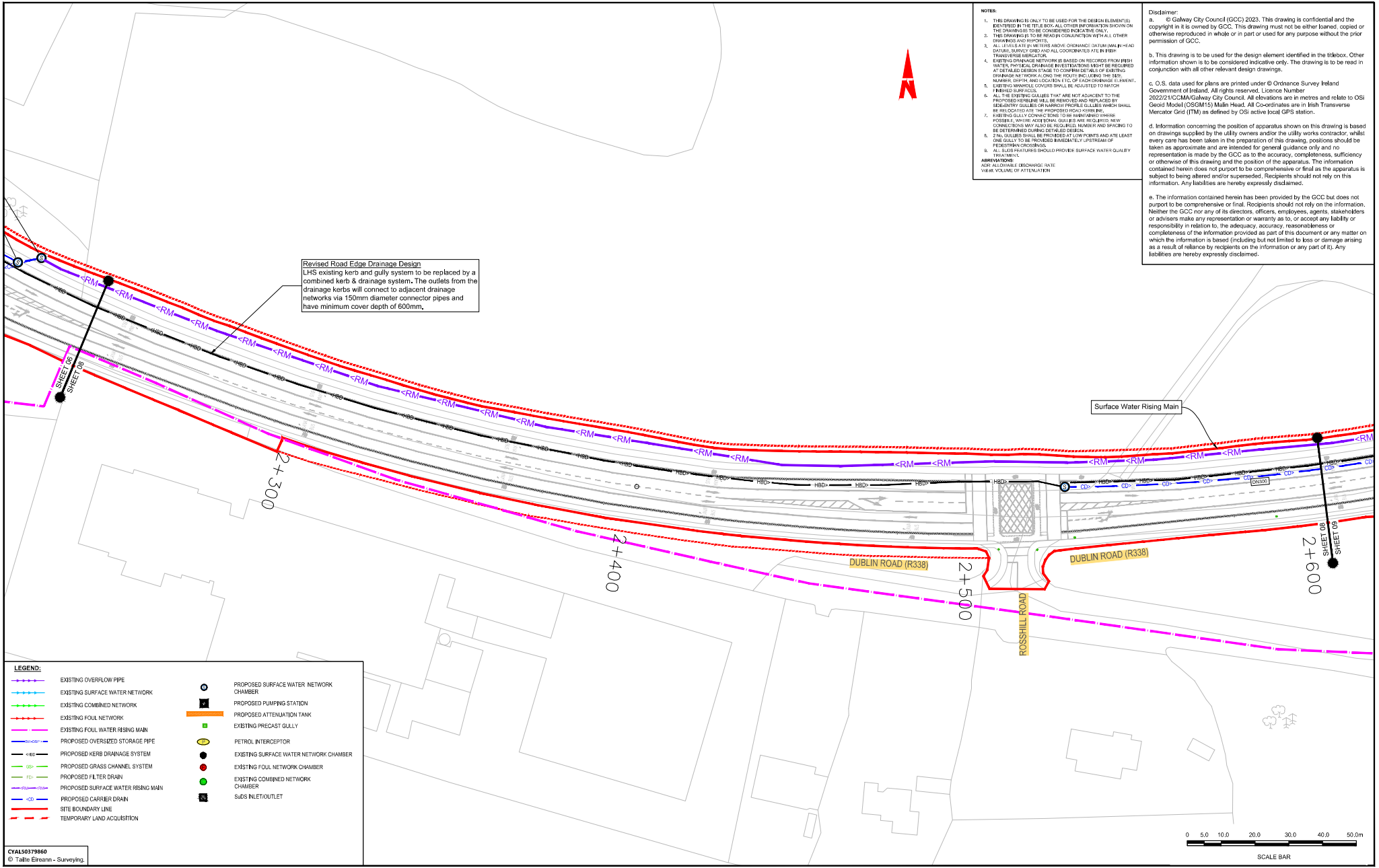
All levels are referred to Ordnance Survey Datum, Mean Head.

This drawing is the property of Barry Transportation. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent. This document should not be relied on or used in circumstances other than those for which it was originally prepared. Barry Transportation accepts no responsibility for the document to any other party other than the party by whom it was commissioned.

Rev.	Date	Drawn	Description	Chk'd	App'd
001	06/03/24	GP	BLUE FOR PLANNING	JH	JA

Project Title:		GALWAY BUSCONNECTS: DUBLIN ROAD		Status:
Drawing Title:		PROPOSED SURFACE WATER DRAINAGE NETWORKS		A1
		SHEET 07 OF 12		
Designed:	JH	Drawing No.:	BSCGDR-RT-CD-XX-DR-CD-00007	Rev:
Drawn:	WDS			C01
Approved:	JH	Scale at A1:	1:500	
Reviewed:	RP	Date:	MARCH 2023	

File Name: R:\22 Projects\2007 - BusConnects Galway - Dublin Road\GENDD Drawing\BOS\BOS-11\GENDD_R00\X-00R-000001_0001_L_Splines_Note_Drainage.dwg



Notes:

DO NOT SCALE. Use figured dimensions only.

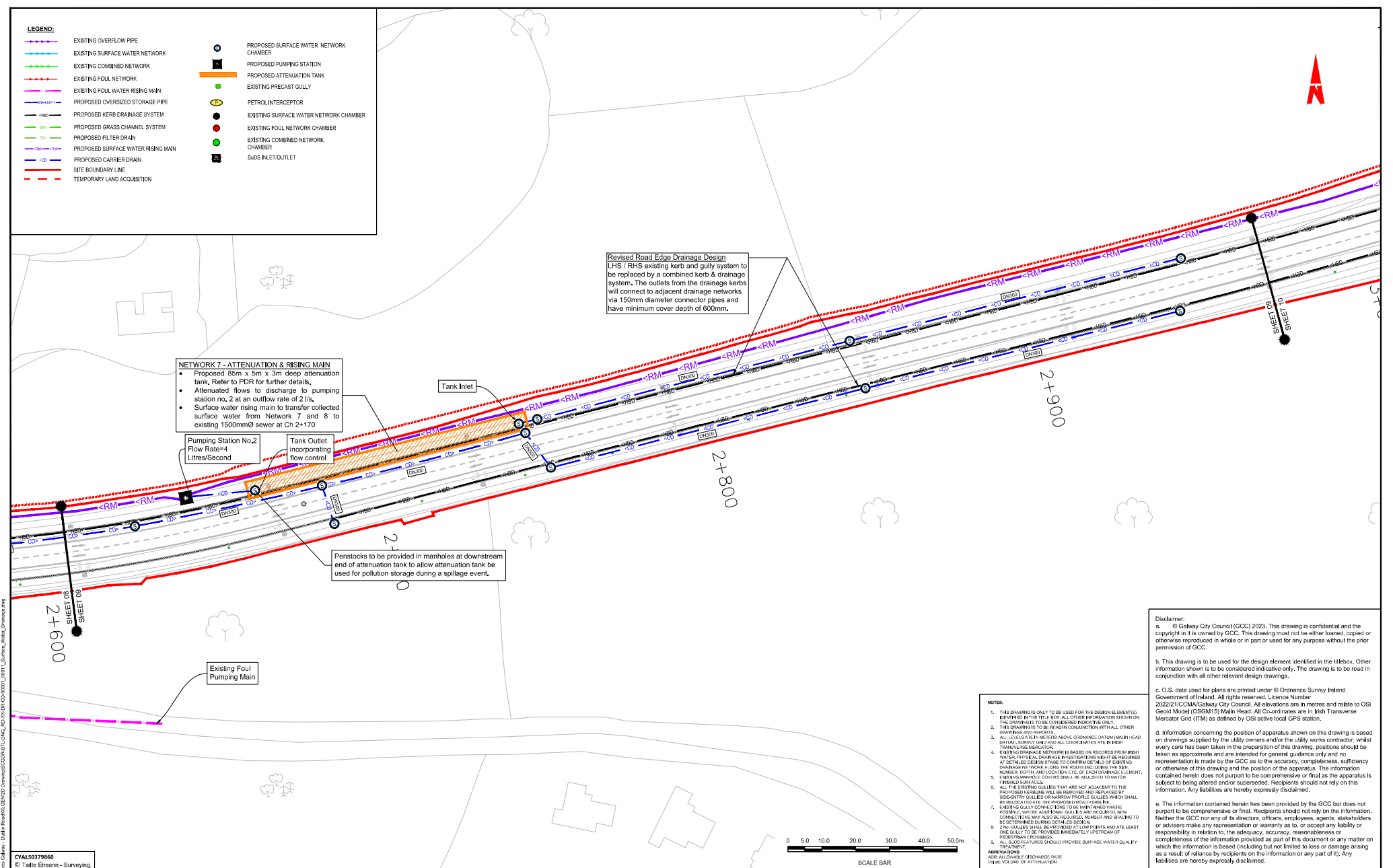
All levels are referred to Ordnance Survey Datum, Mean Head.

This drawing is the property of Barry Transportation. It is a confidential document and must not be copied, used, or its content divulged without prior written consent. This document should not be relied on or used in circumstances other than those for which it was originally prepared. Barry Transportation accepts no responsibility for the document to any other party other than the party by whom it was commissioned.

Rev.	Date	Drawn	Description	Chk'd	App'd
001	06/03/24	QIP	BLUE FOR PLANNING	JH	UN

Project Title:		GALWAY BUSCONNECTS: DUBLIN ROAD		Status:
Drawing Title:		PROPOSED SURFACE WATER DRAINAGE NETWORKS		A1
Drawing No.:		BCGDR-8TL-0NGL-RO-XX-DR-CD-00008		Rev:
Designed: JH		Scale at A1: 1:500		C01
Drawn: WDS		Date: MARCH 2023		
Approved: JH				
Reviewed: RP				

File Name: R:\22 Projects\2007 - BusConnects Galway - Dublin Road\GEN001 Drawing\B0001\GEN001_001_L3.dwg, User: jennan.ding



Notes:

DO NOT SCALE. Use figured dimensions only.

All levels are referred to Ordnance Survey Datum, Mean High.

This drawing is the property of Barry Transportation. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent. This document should not be relied on or used in circumstances other than those for which it was originally prepared. Barry Transportation accepts no responsibility for this document to any other party other than the party by whom it was commissioned.

Rev.	Date	Drawn	Description	Chkd	Asst
001	26/03/24	GP	BLUE FOR PLANNING	JH	JA

Project Title: GALWAY BUSCONNECTS: DUBLIN ROAD

Drawing Title: PROPOSED SURFACE WATER DRAINAGE NETWORKS
SHEET 9 OF 12

Designed: JH
Drawn: WDS
Approved: JH
Reviewed: RP

Drawing No: BCGDR-8TL-ONG_RD-XX-DR-CD-00009
Scale at A1: 1:500
Date: MARCH 2023

Status: A1

Rev: C01

CYAL50379660
© Taithe Eireann - Surveying.

Disclaimer:

a. © Galway City Council (GCC) 2023. This drawing is confidential and the copyright in it is owned by GCC. This drawing must not be either loaned, copied or otherwise reproduced in whole or in part or used for any purpose without the prior permission of GCC.

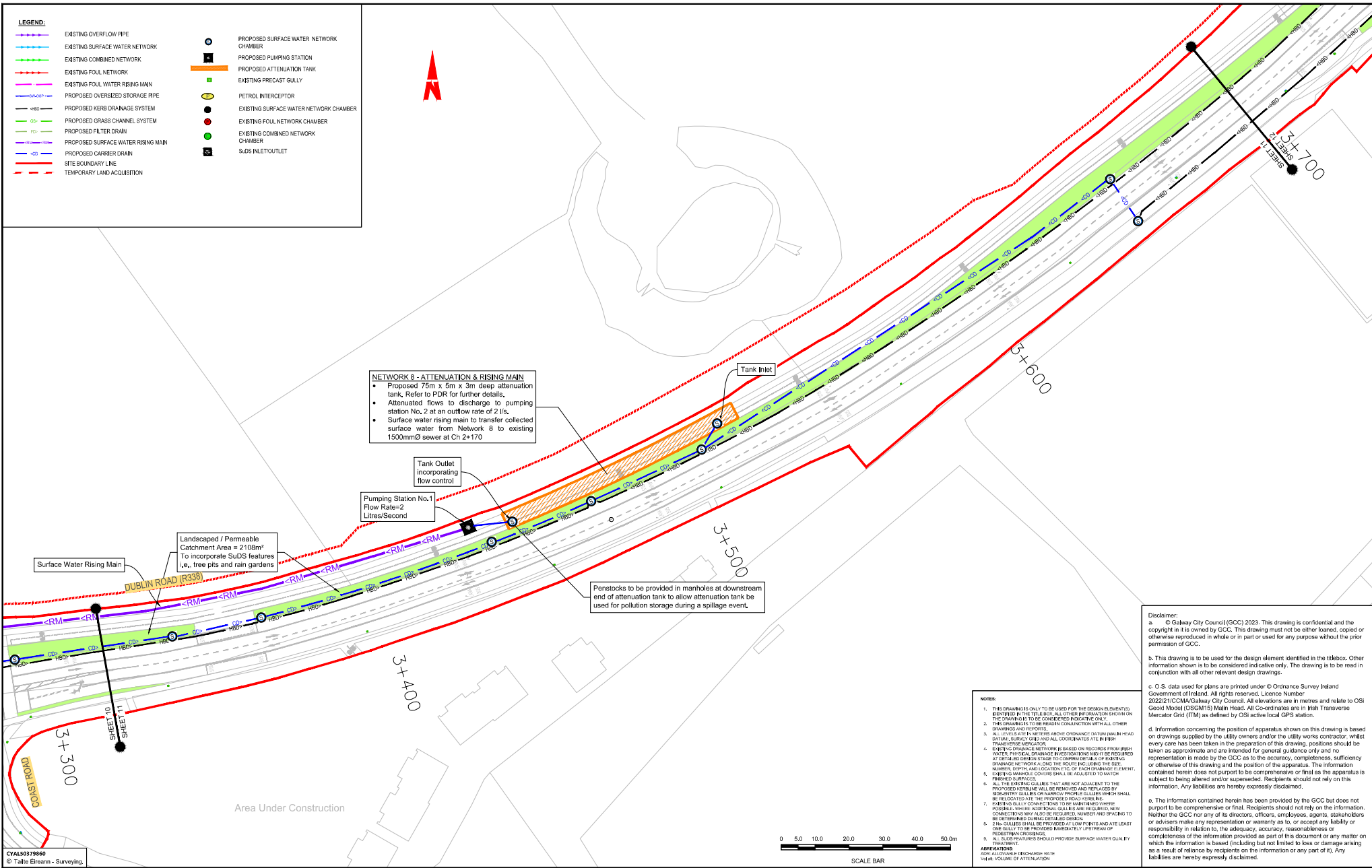
b. This drawing is to be used for the design element identified in the titlebox. Other information shown is to be considered indicative only. The drawing is to be read in conjunction with all other relevant design drawings.

c. O.S. data used for plans are printed under © Ordnance Survey Ireland Government of Ireland. All rights reserved. Licence Number - 2022/21/COMA/Galway City Council. All elevations are in metres and relate to OSI Geoid Model (OSGM15) Mean Head. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active local GPS station.

d. Information concerning the position of apparatus shown on this drawing is based on drawings supplied by the utility owners and/or the utility works contractor, whilst every care has been taken in the preparation of this drawing, positions should be taken as approximate and are intended for general guidance only and no representation is made by the GCC as to the accuracy, completeness, sufficiency or otherwise of this drawing and the position of the apparatus. The information contained herein does not purport to be comprehensive or final as the apparatus is subject to being altered and/or superseded. Recipients should not rely on this information. Any liabilities are hereby expressly disclaimed.

e. The information contained herein has been provided by the GCC but does not purport to be comprehensive or final. Recipients should not rely on the information. Neither the GCC nor any of its directors, officers, employees, agents, stakeholders or advisers make any representation or warranty as to, or accept any liability or responsibility in relation to, the adequacy, accuracy, reasonableness or completeness of the information provided as part of this document or any matter on which the information is based (including but not limited to loss or damage arising as a result of reliance by recipients on the information or any part of it). Any liabilities are hereby expressly disclaimed.

File Name: R:\22 Projects\2027 - BusConnects Galway - Dublin Road\GEN00 Drawing\B000\B000-000000_00011_Surfac_Water_Drainage.dwg



Tionscadal Éireann Project Ireland 2040

BUS CONNECTS GALWAY
SUSTAINABLE TRANSPORT FOR A BETTER CITY

NTA
Udarás Náisiúnta Iompair
National Transport Authority

BARRY TRANSPORTATION
e egis

Notes:
DO NOT SCALE. Use figured dimensions only.
All levels are referred to Ordnance Survey Datum, Mean High.
This drawing is the property of Barry Transportation. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent. This document should not be relied on or used in circumstances other than those for which it was originally prepared. Barry Transportation accepts no responsibility for the document to any other party other than the party by whom it was commissioned.

Rev.	Date	Drawn	Description	Chk'd	App'd
001	26/03/24	GP	BLUE FOR PLANNING	JR	JA

Project Title: GALWAY BUSCONNECTS: DUBLIN ROAD

Drawing Title: PROPOSED SURFACE WATER DRAINAGE NETWORKS
SHEET 11 OF 12

Design: JH
Drawn: WDS
Approved: JH
Reviewed: RP

Drawing No.: BCGDR-8TL-ONG_RD-XX-DR-CD-00011

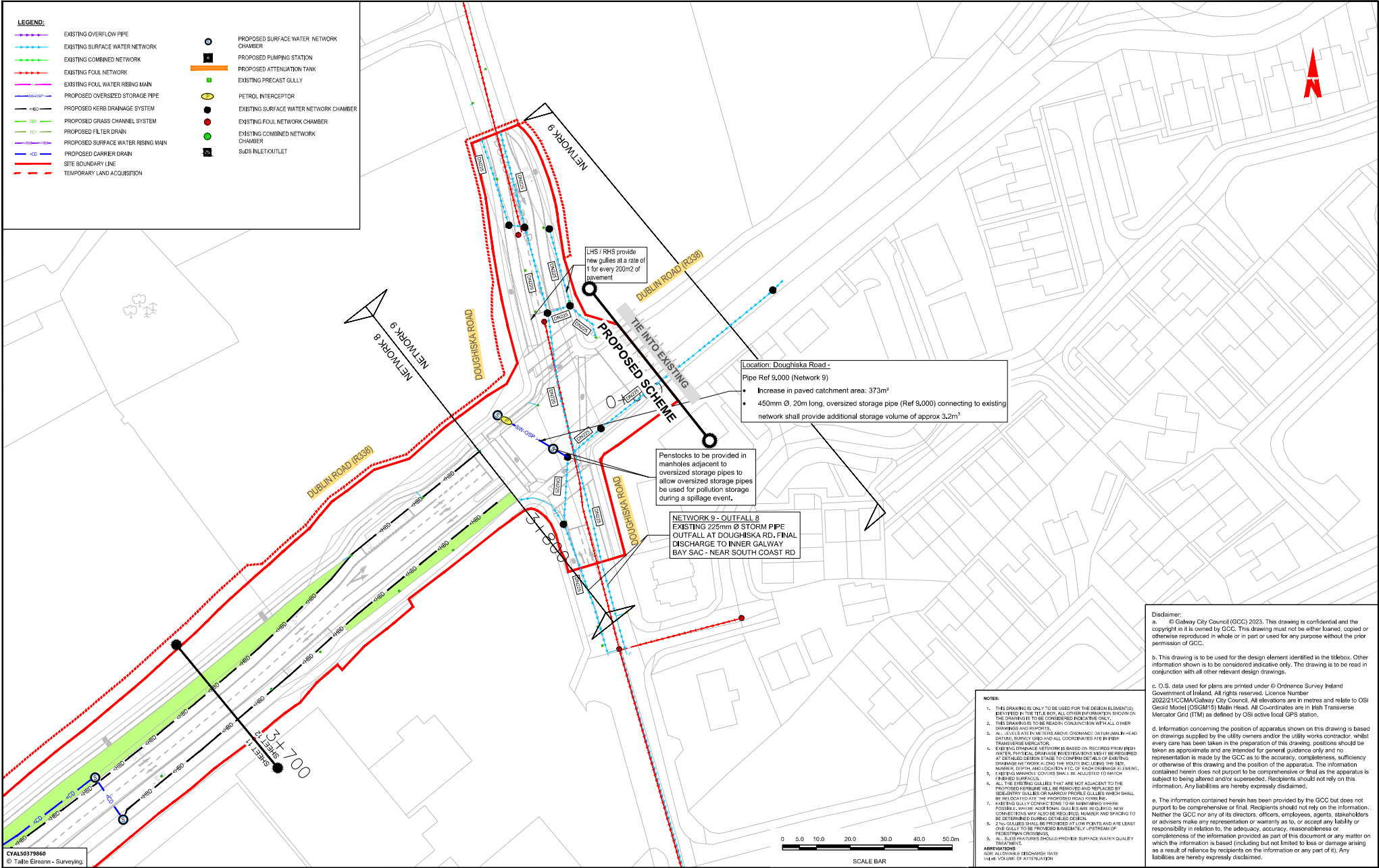
Scale at A1: 1:500

Date: MARCH 2023

Status: A1

Rev: C01

File Name: R:\22 Projects\2007 - Bus Connects\Galway - Dublin Road\GEN000 Drawing\B00001\GEN000_0011_S0100_Netw_Drainage.dwg





BUS CONNECTS GALWAY
SUSTAINABLE TRANSPORT FOR A BETTER CITY



Udarás Náisiúnta Iompair
National Transport Authority



BARRY TRANSPORTATION
e egis

Notes:

DO NOT SCALE. Use figured dimensions only.
All levels are referred to Ordnance Survey Datum, Mean Head.

This drawing is the property of Barry Transportation. It is a confidential document and must not be copied, used, or its contents divulged without prior written consent. This document should not be relied on or used in circumstances other than those for which it was originally prepared. Barry Transportation accepts no responsibility for the document to any other party other than the party by whom it was commissioned.

Rev.	Date	Drawn	Description	Chkd	Asst
001	26/03/24	GP	BLUE FOR PLANNING	JH	JA

Project Title: GALWAY BUSCONNECTS: DUBLIN ROAD

Drawing Title: PROPOSED SURFACE WATER DRAINAGE NETWORKS
SHEET 12 OF 12

Designed: JH
Drawn: WDS
Approved: JH
Reviewed: RP

Drawing No.: BCGDR-871-ONG_RD-XX-DR-CD-00012
Scale at A1: 1:500
Date: MARCH 2023

Status: A1
Rev: C01

File Name: R:\22 Projects\2007 - Bus Connects\Galway - Dublin Road\GEN000 Drawing\B00001\GEN000_0011_S0100_Netw_Drainage.dwg