

- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PU - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0030720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TL16).



Rev	Date	Dn	Chkd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **larród Éireann Irish Rail**

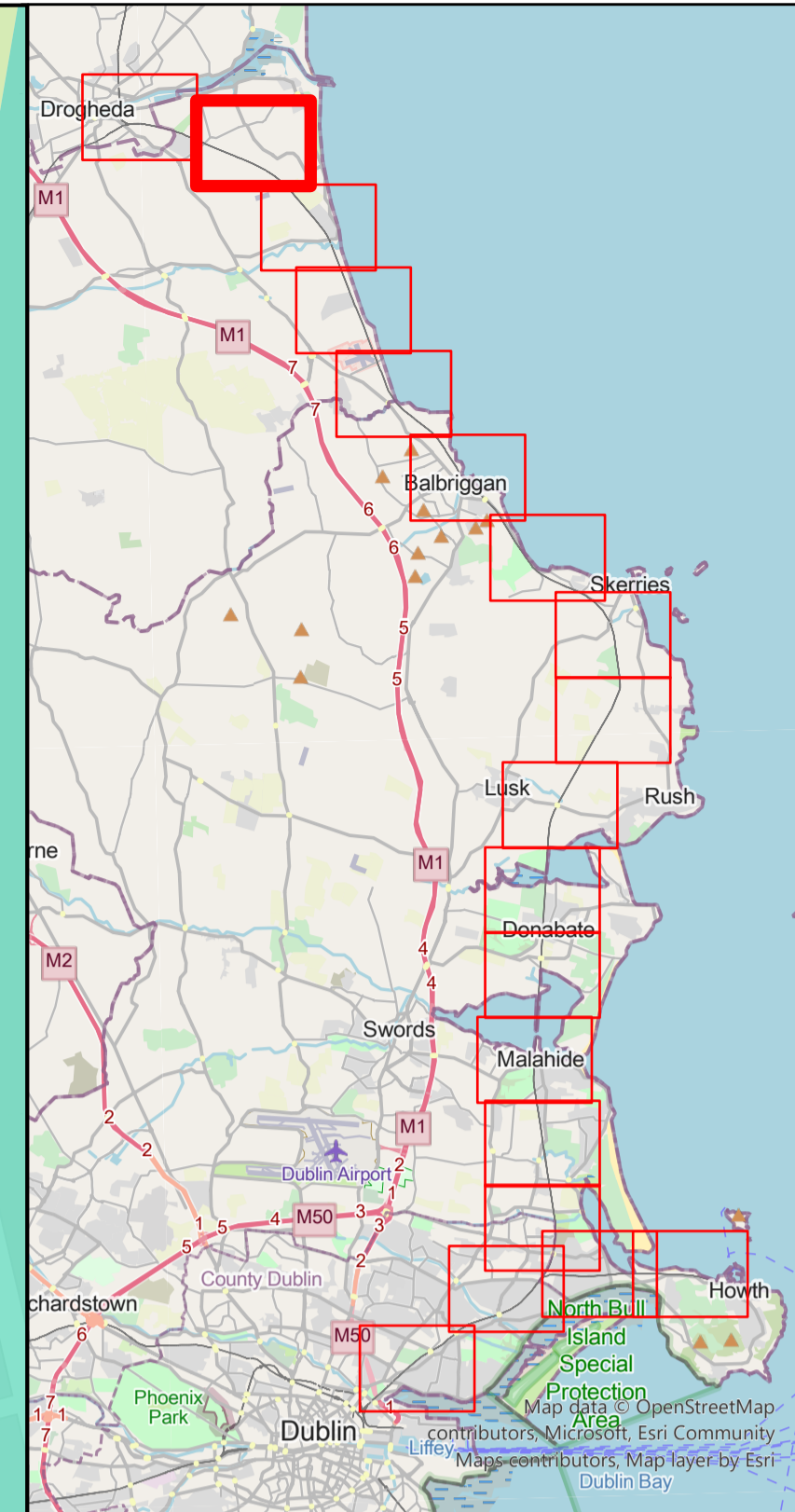
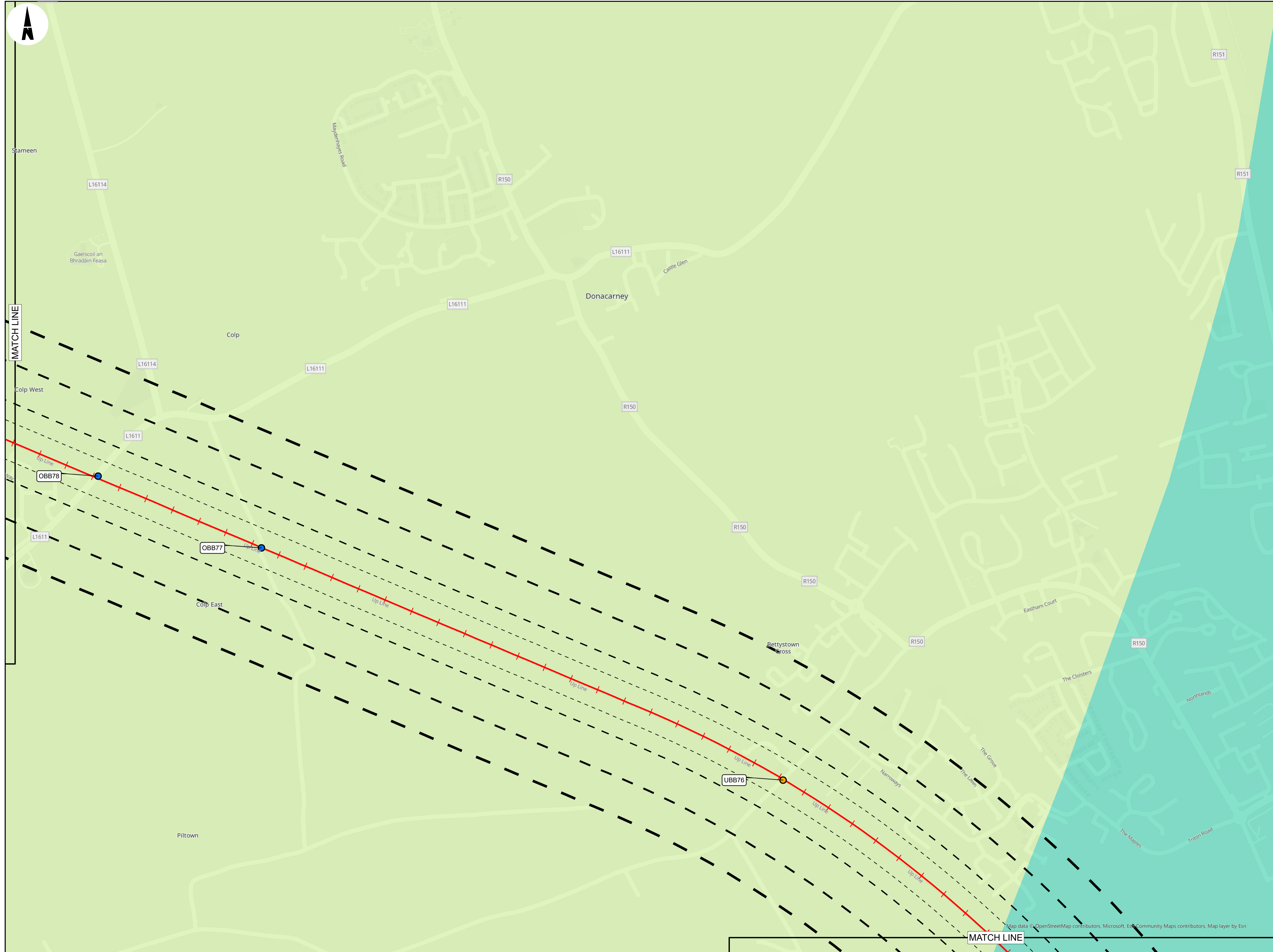
Engineering Designer: **ARUP**

Date: 20/09/2021 | Scale: 1:5000 @ A1 | 1:10000 @ A3

Project Code: D+WP56 | Originator Code: ARP | OMS Code: 279933-00

Drawn: DM | Checked: SH | Approved: COD

Project Title: DART+ COASTAL NORTH			
Drawing Title: CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP			
Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000601	Sheet Number: 1 of 19	Status: 902	Rev: P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).



Rev	Date	Dn	Ch'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

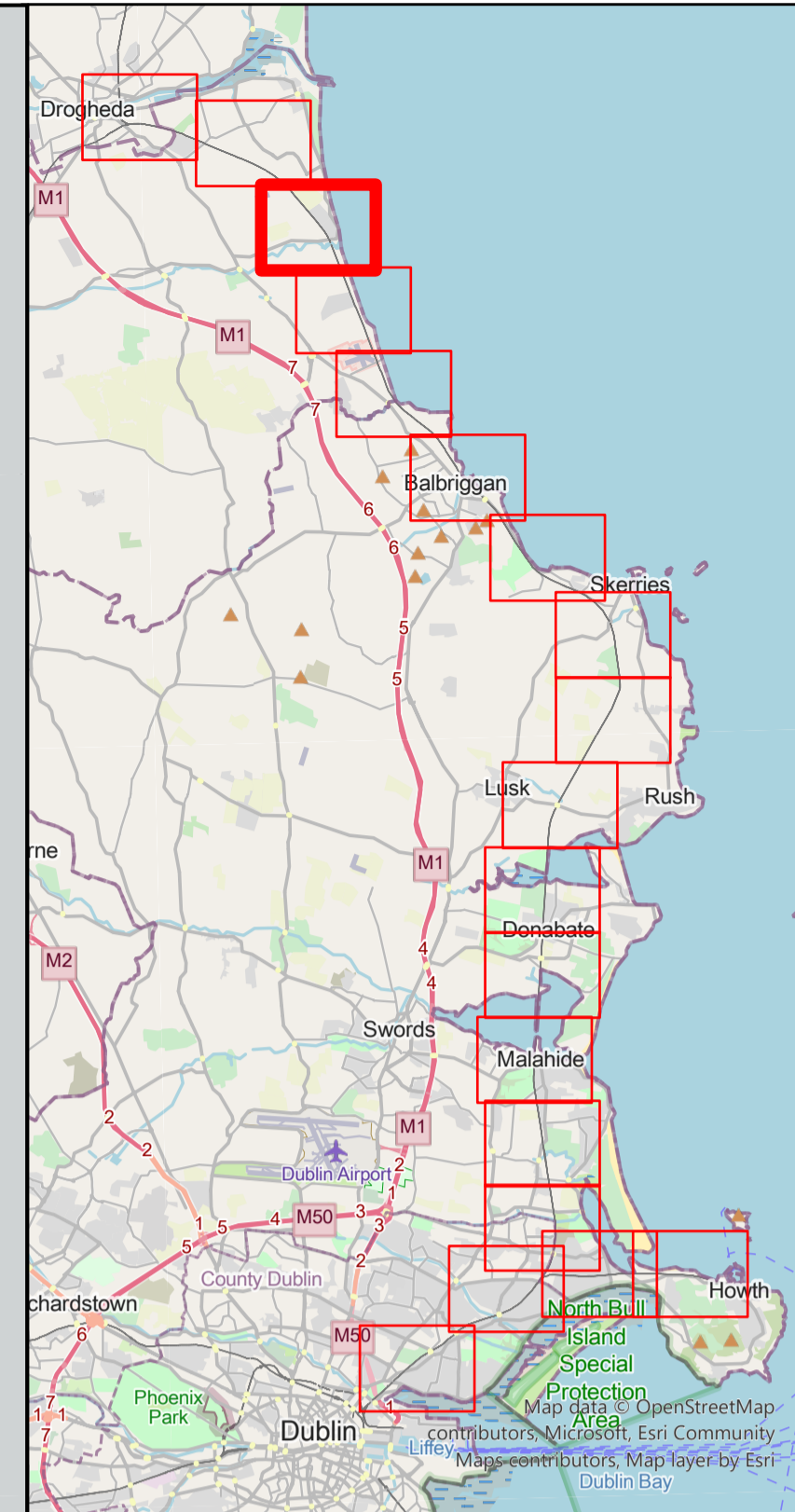
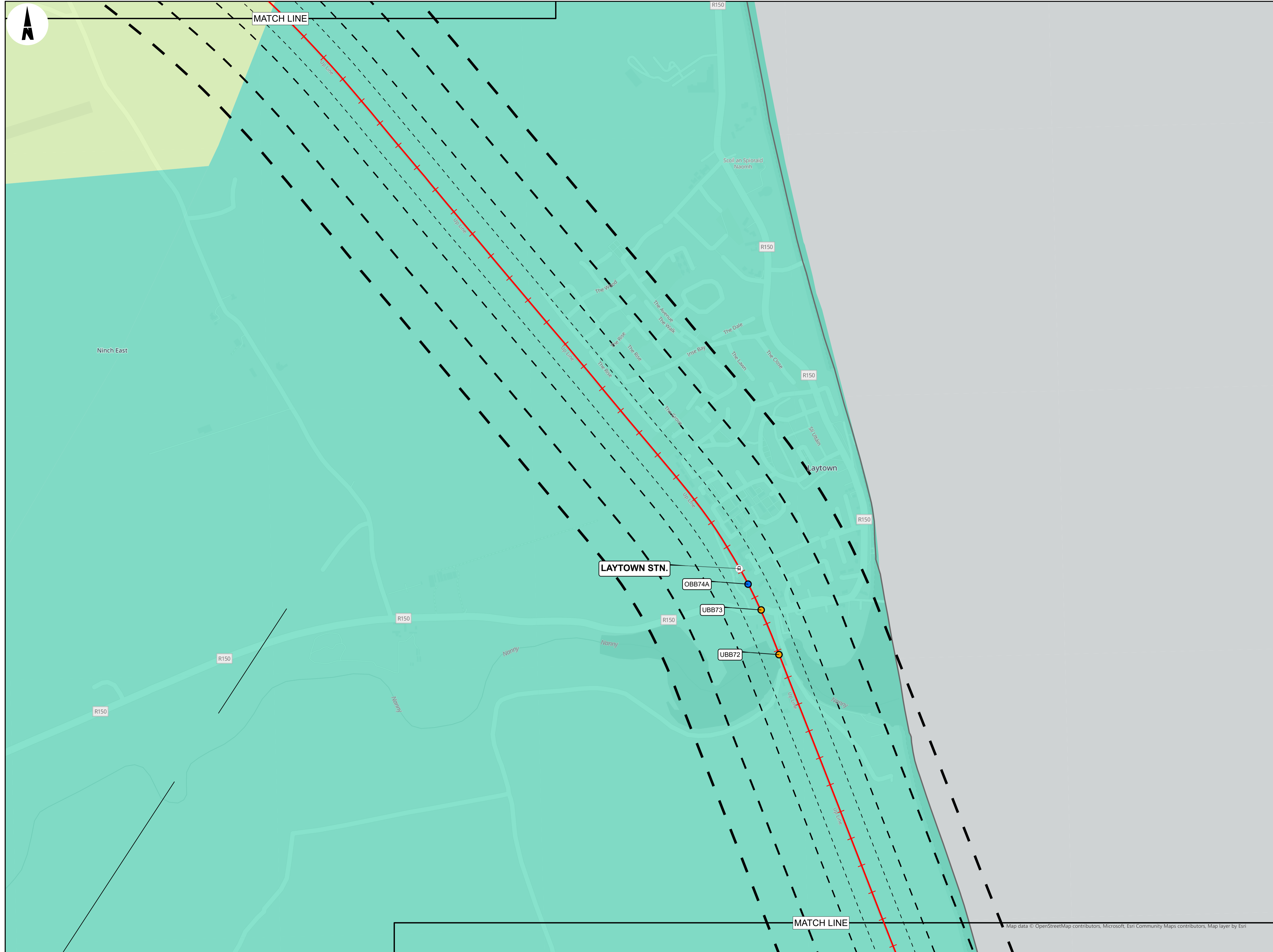
Date: 20/09/2021 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

Drawn: DM, Checked: SH, Approved: COD

Project Title: DART+ COASTAL NORTH	Sheet Number: 2 of 19	Status: 902	Rev: P03
Drawing Title: CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP	Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000602		



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 60M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Map data © OpenStreetMap contributors, Microsoft, Esri Community Maps contributors, Map layer by Esri

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSi Aerial Data or OSi Lidar Data) & Survey No. 2021/OSi_NMA_180 (OSi Vector Data). All elevations are in metres and relate to OSi Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TLLG).



Rev	Date	Dn	Chkd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **Irish Rail**

Engineering Designer: **ARUP**

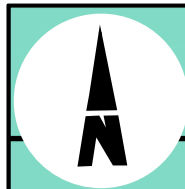
Date: 20/09/2021 | Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 | Originator Code: ARP

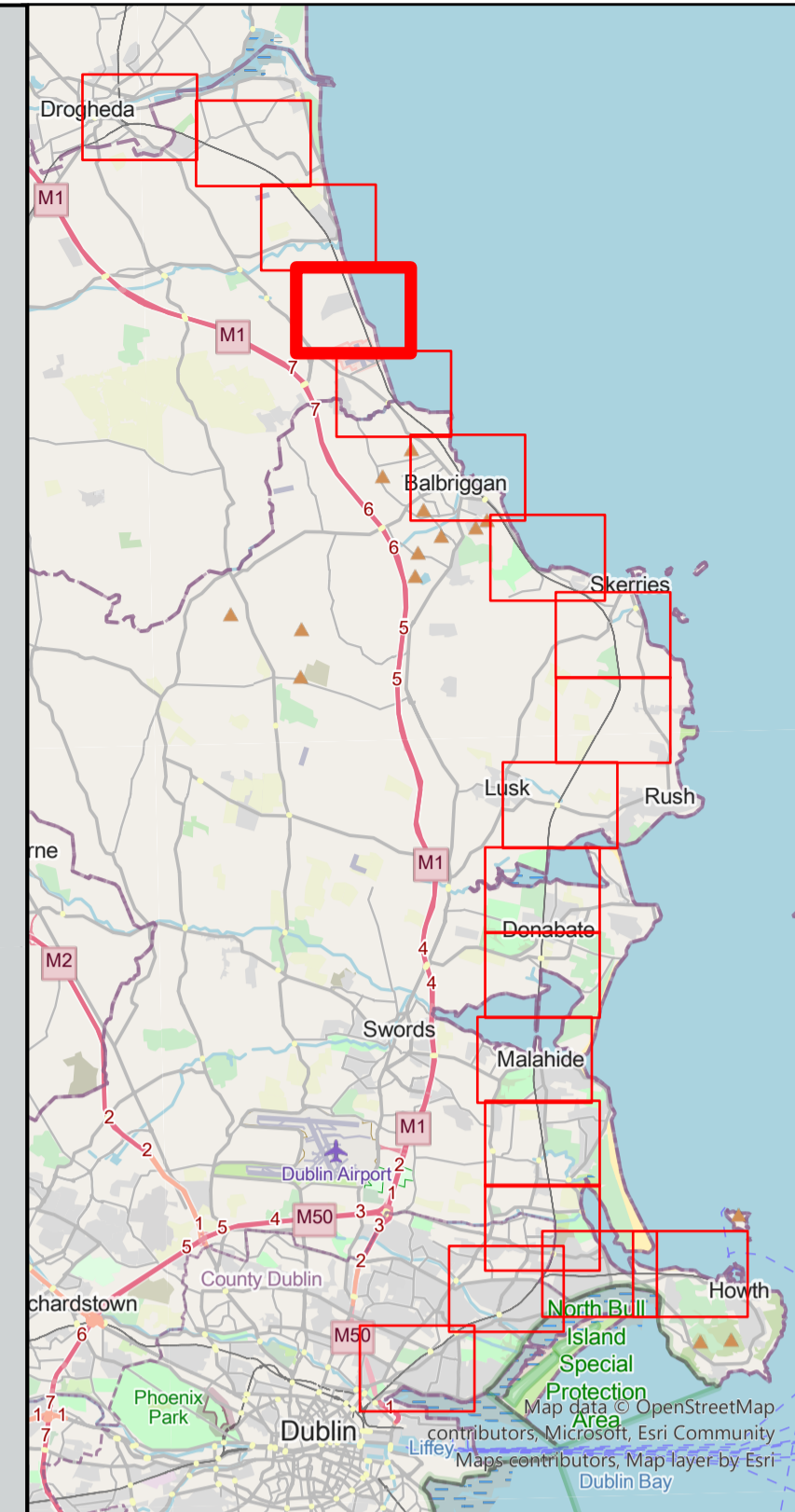
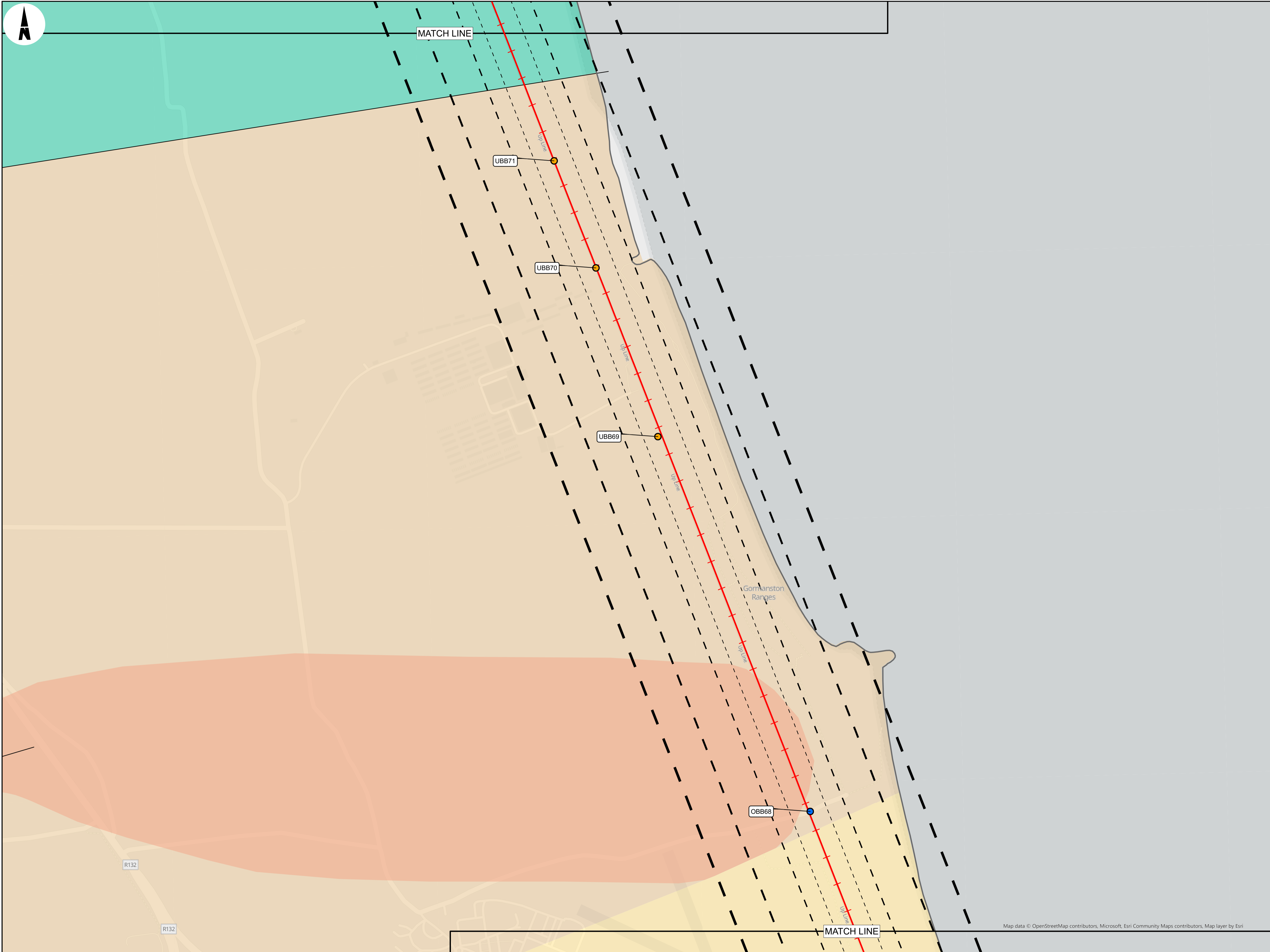
QMS Code: 279933-00

Drawn: DM | Checked: SH | Approved: COD

Project Title	DART+ COASTAL NORTH		
Drawing Title	CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP		
Drawing File Name	D+WP56-ARP-ZZ-NL-OR-EV-000603	Sheet Number	3 of 19
Status	902	Rev	P03



MATCH LINE



LEGEND

- RAILWAY STATIONS
- BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
- RAILWAY LINE
- BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
- ADMINISTRATIVE BOUNDARY
- COUNTY BOUNDARY
- AQUIFER BEDROCK FAULTLINE
- AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
- LAKE
- GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Map data © OpenStreetMap contributors, Microsoft, Esri Community Maps contributors, Map layer by Esri

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

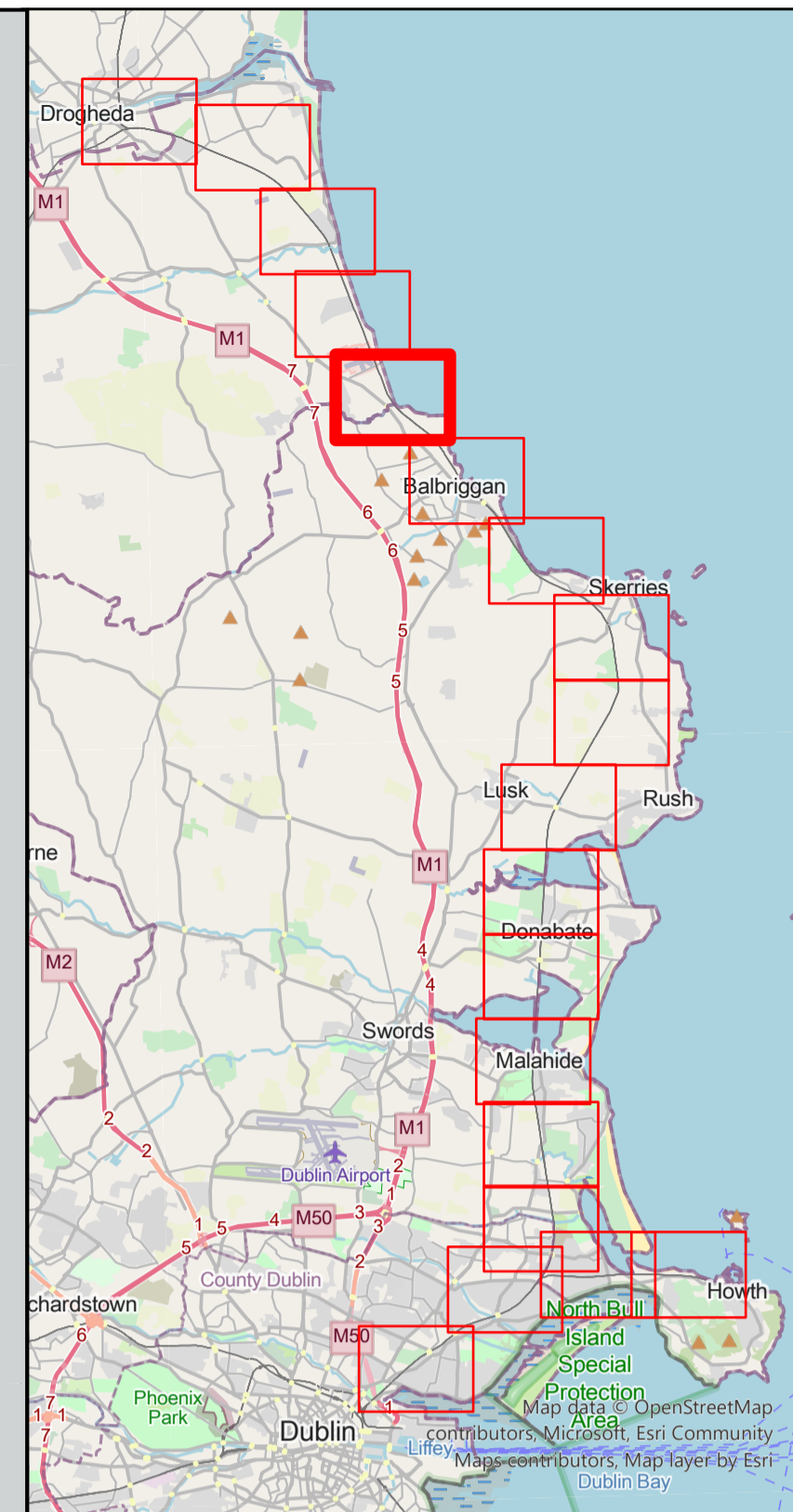
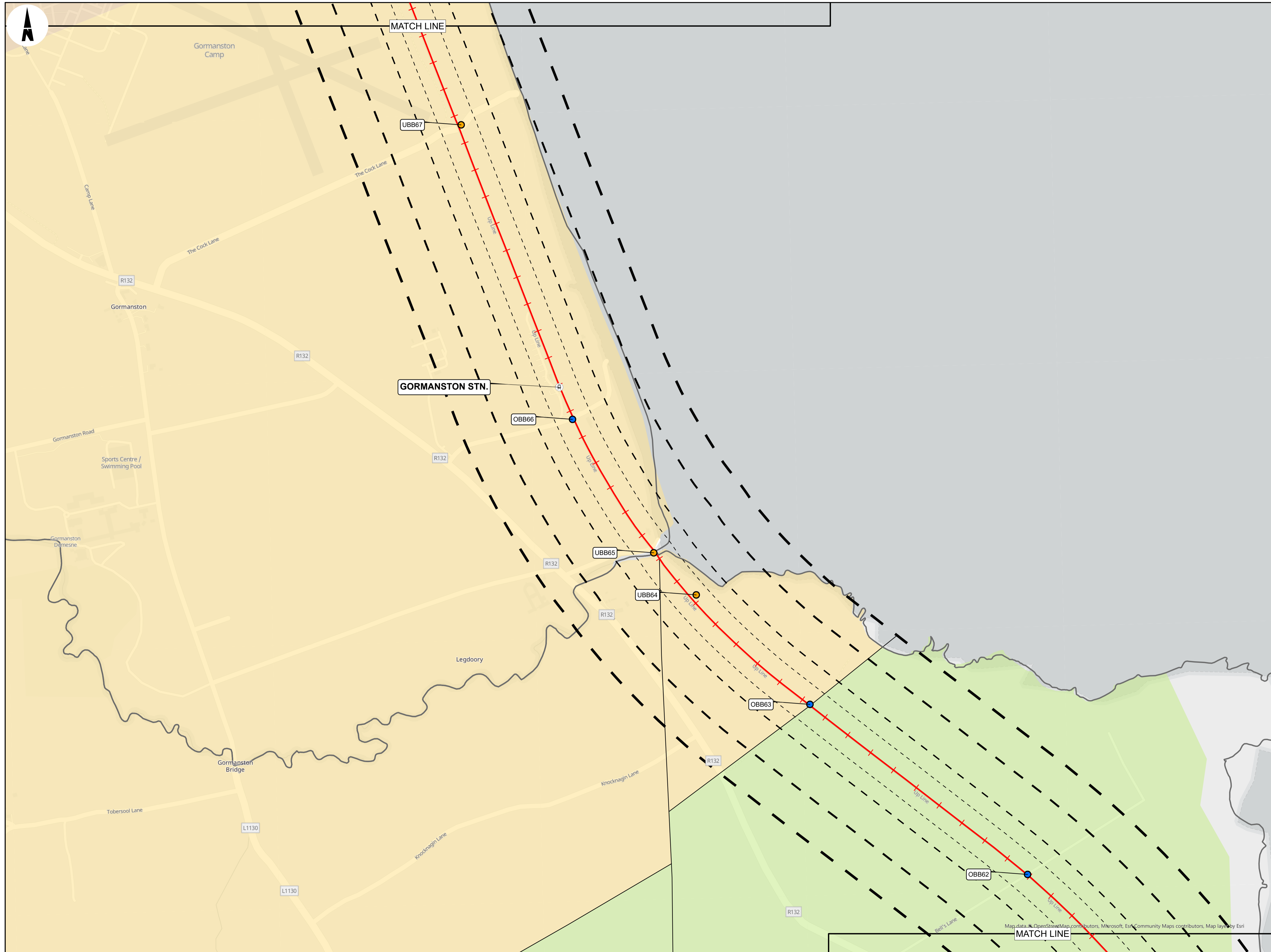
© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSi Aerial Data or OSi Lidar Data) & Survey No. 2021/OSi_NMA_180 (OSi Vector Data). All elevations are in metres and relate to OSi Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TLLG).



Rev	Date	Dn	Chk'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client		Engineering Designer	
Date	20/09/2021	Scale	1:5000 @ A1 1:10000 @ A3
Project Code	D+WP56	Originator Code	ARP
Drawn	DM	Checked	SH
Approved	COD		
QMS Code	279933-00		

Project Title			
DART+ COASTAL NORTH			
Drawing Title			
CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP			
Drawing File Name	D+WP56-ARP-ZZ-NL-OR-EV-000604	Sheet Number	4 of 19
Status	902	Rev	P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LI - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PU - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).



Rev	Date	Dn	Ch'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **Irish Rail**

Engineering Designer: **ARUP**

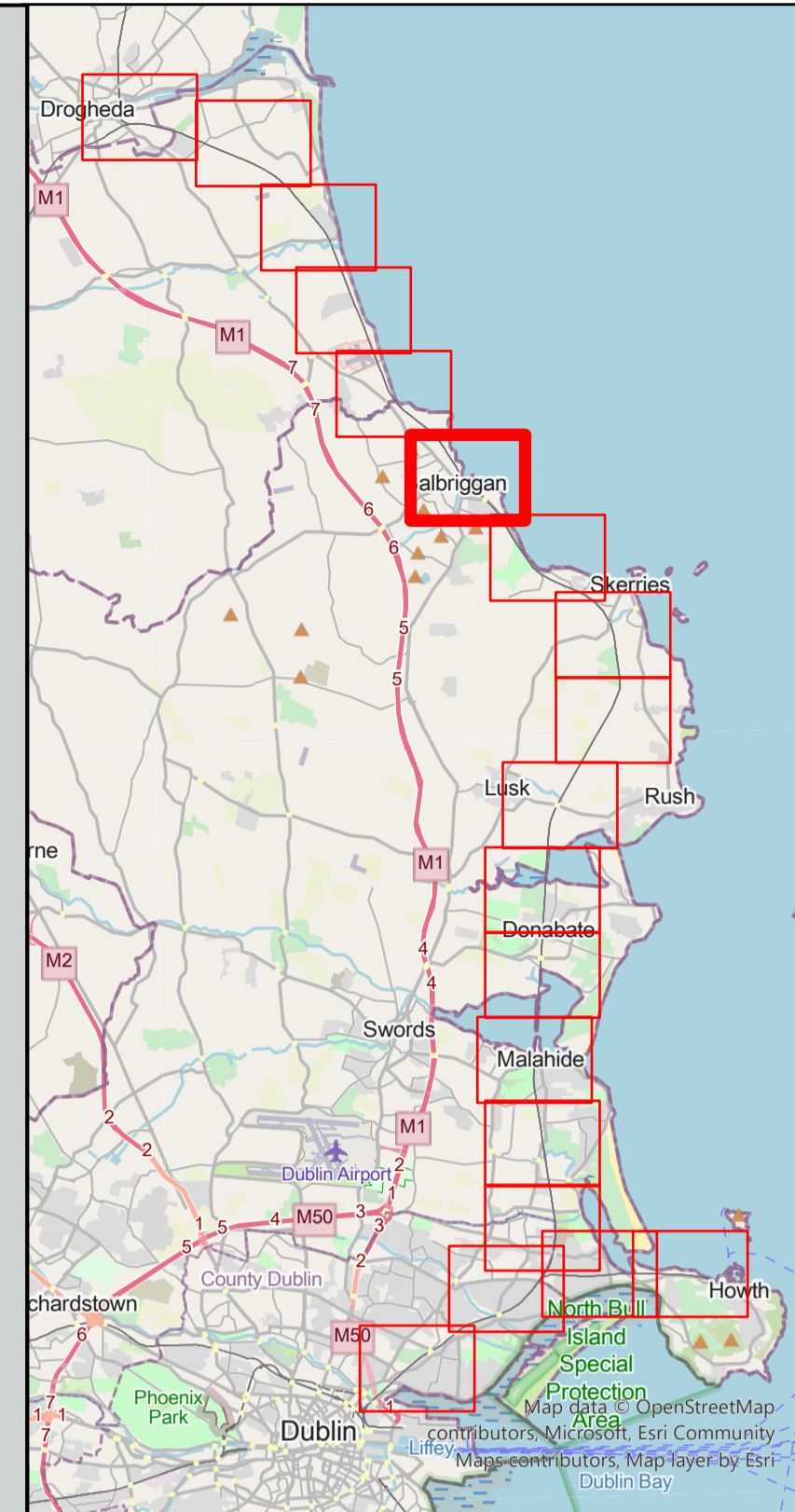
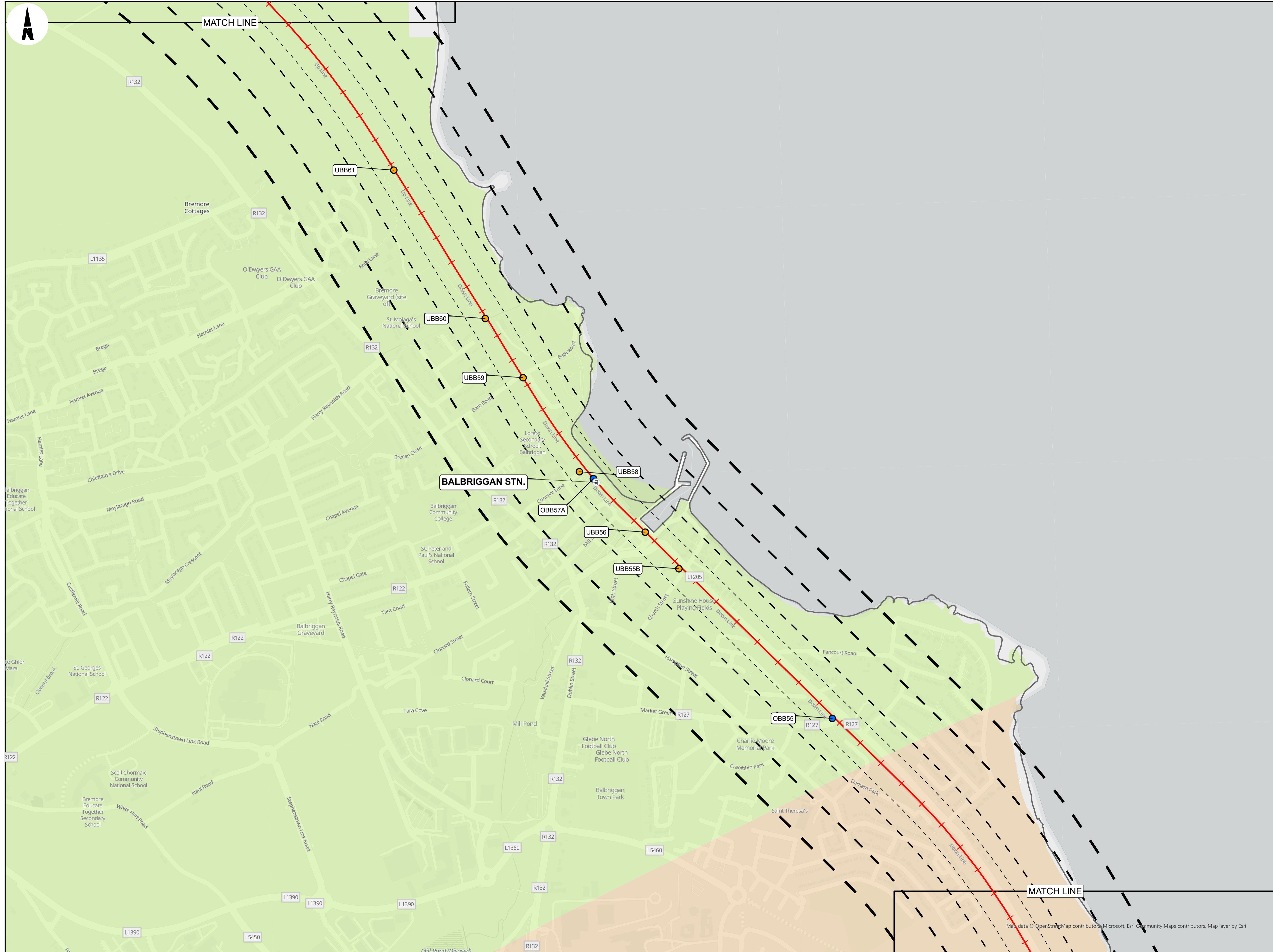
Date: 20/09/2021 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

Drawn: DM, Checked: SH, Approved: COD

Project Title: DART+ COASTAL NORTH	Sheet Number: 6 of 19	Status: 902	Rev: P03
Drawing Title: CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP	Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000605		



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 60M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LI - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).



Rev	Date	Dn	Chkd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 20/09/2021 | Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 | Originator Code: ARP

Drawn: DM | Checked: SH | Approved: COD

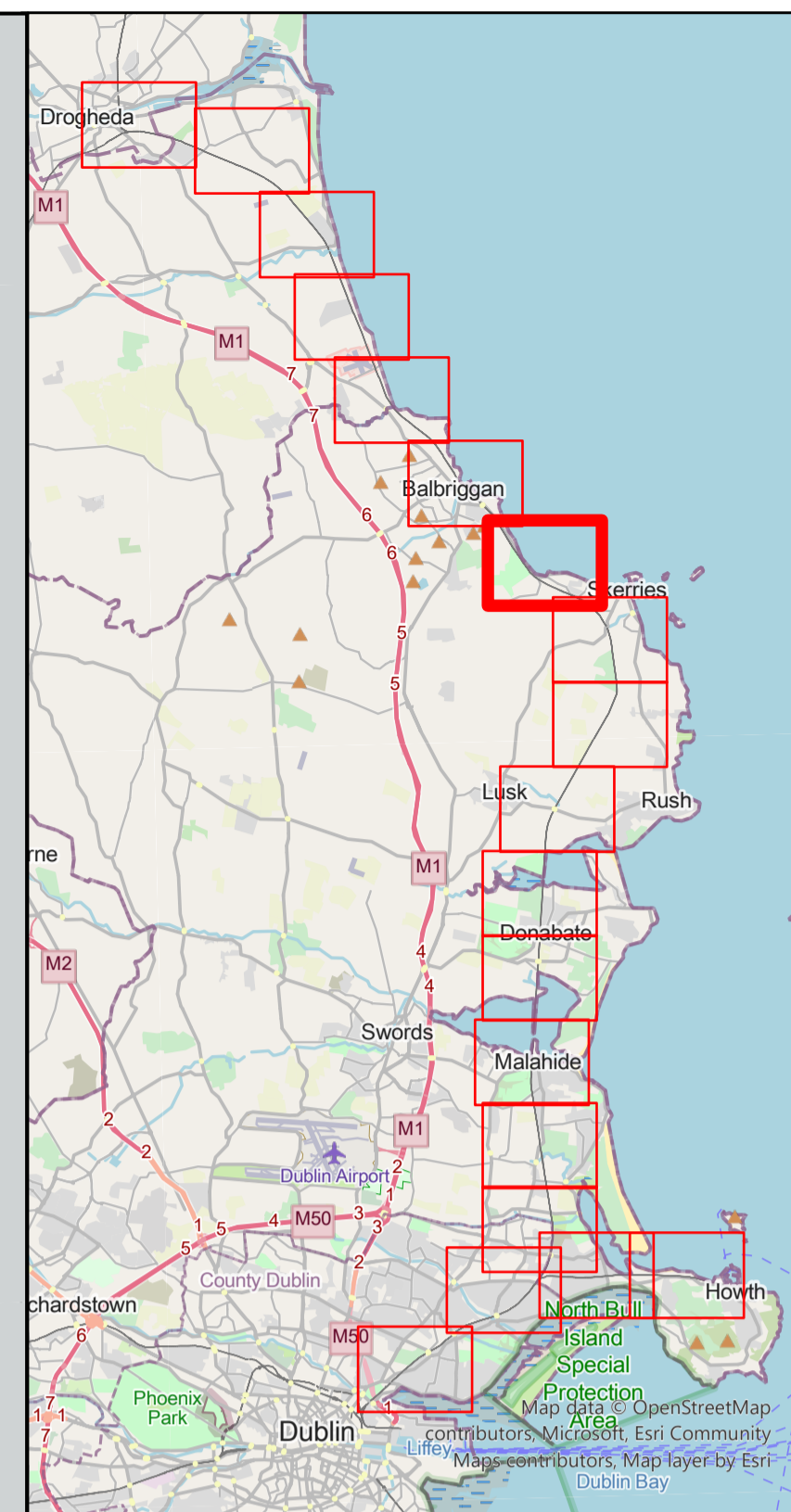
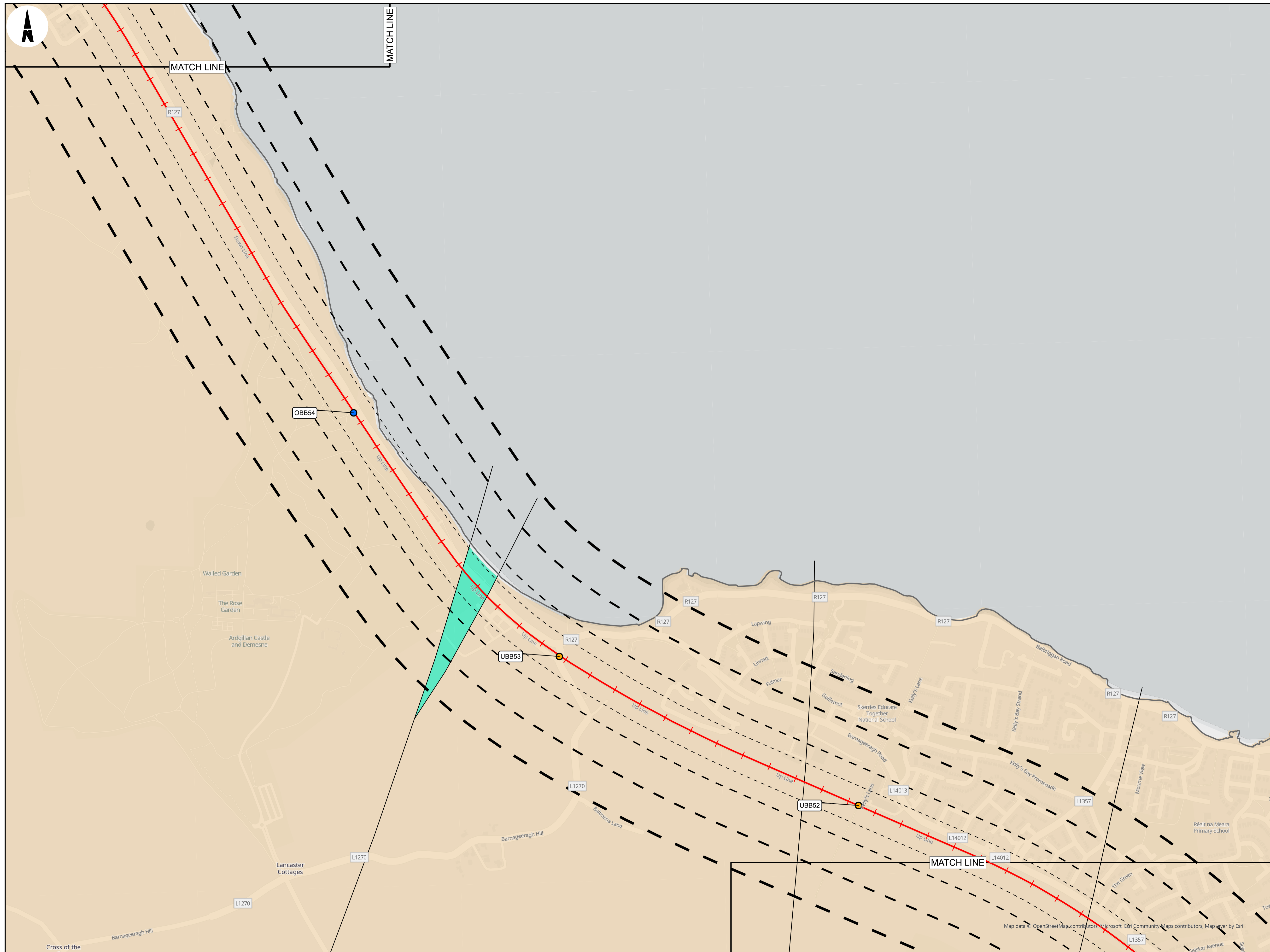
OMS Code: 279933-00

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP**

Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000606

Sheet Number: 6 of 19 | Status: 902 | Rev: P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - L - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).

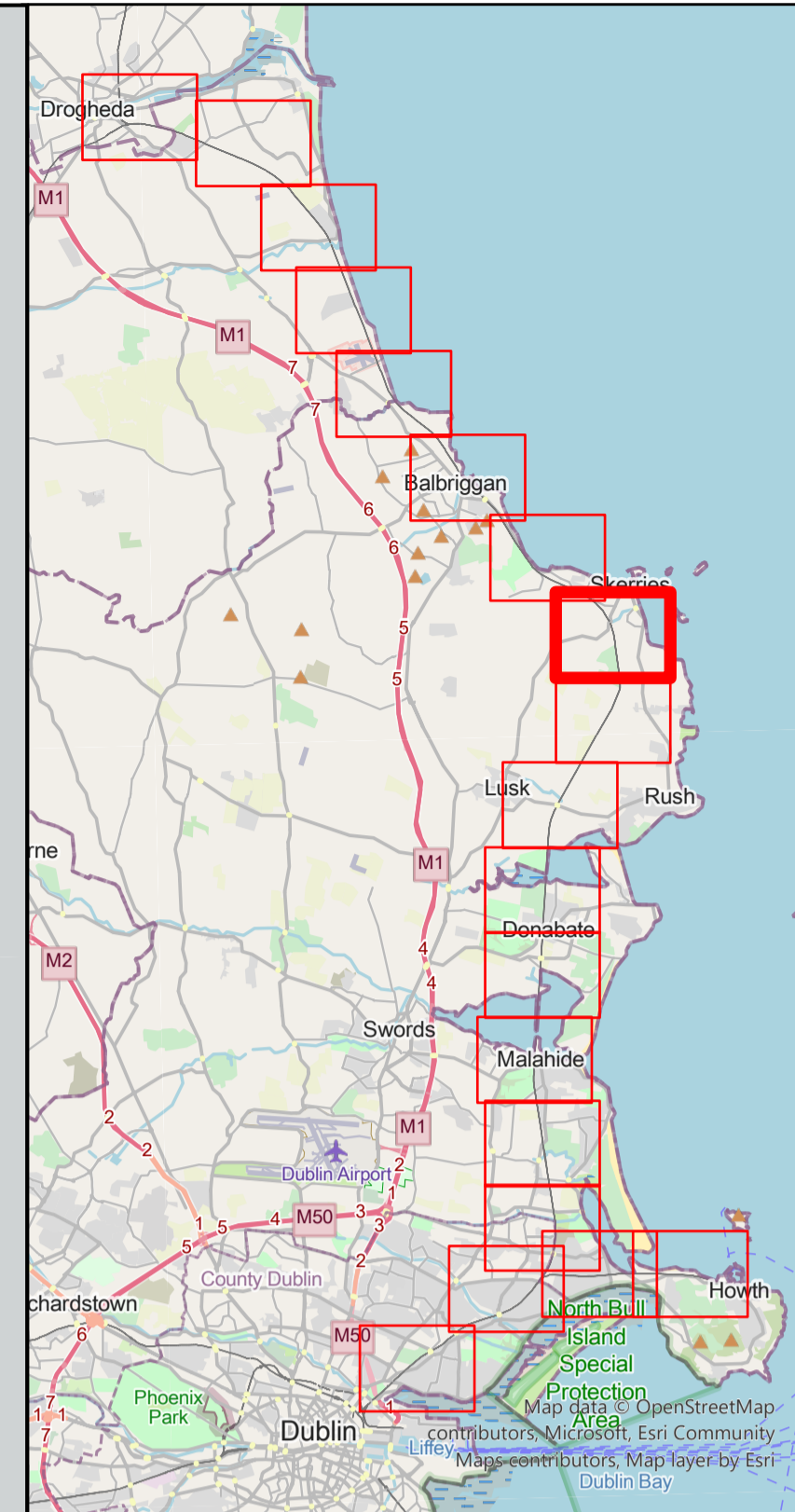
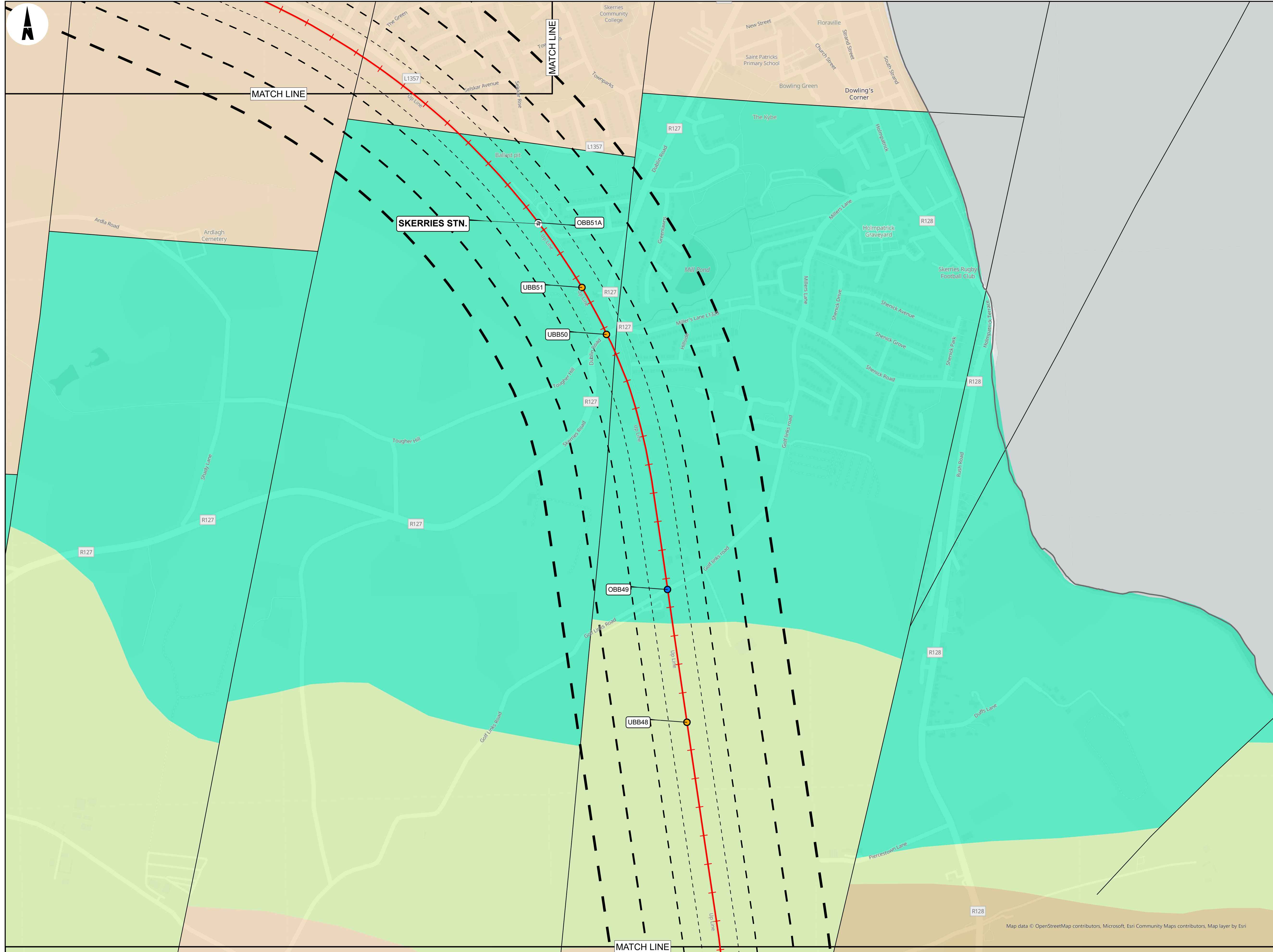


Rev	Date	Dn	Ch'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client	Date	Scale	Project Code	Originator Code
lanróid Éireann Irish Rail	20/09/2021	1:5000 @ A1 1:10000 @ A3	D+WP56	ARP

Engineering Designer		
ARUP		
Drawn	Checked	Approved
DM	SH	COD

Project Title			
DART+ COASTAL NORTH			
Drawing Title			
CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP			
Drawing File Name		Sheet Number	Status
D+WP56-ARP-ZZ-NL-OR-EV-000607		7 of 19	902
Rev	P03		



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - L - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PU - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Map data © OpenStreetMap contributors, Microsoft, Esri Community Maps contributors, Map layer by Esri

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).



Rev	Date	Dm	Chkd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 20/09/2021 | Scale: 1:5000 @ A1, 1:10000 @ A3

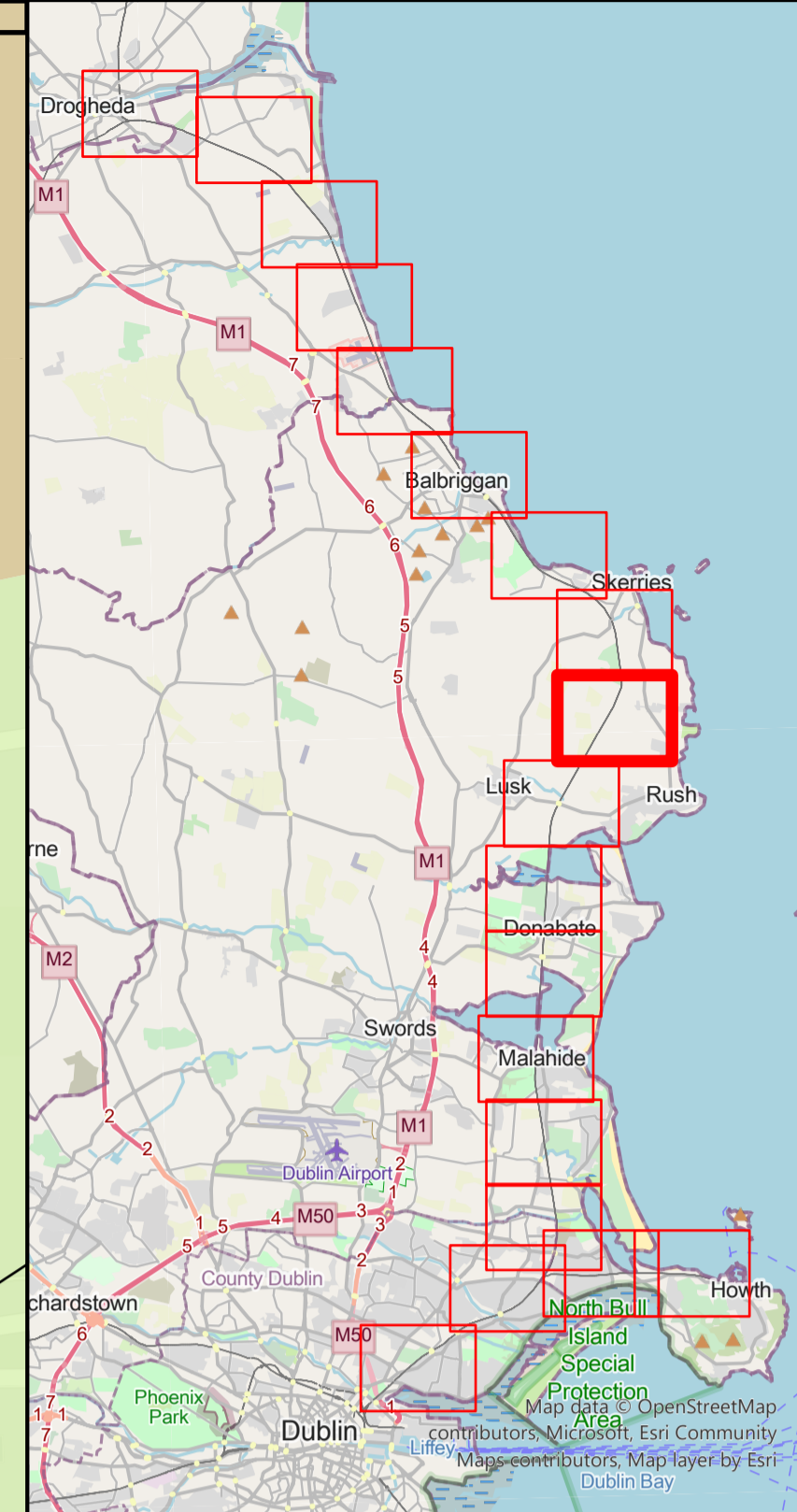
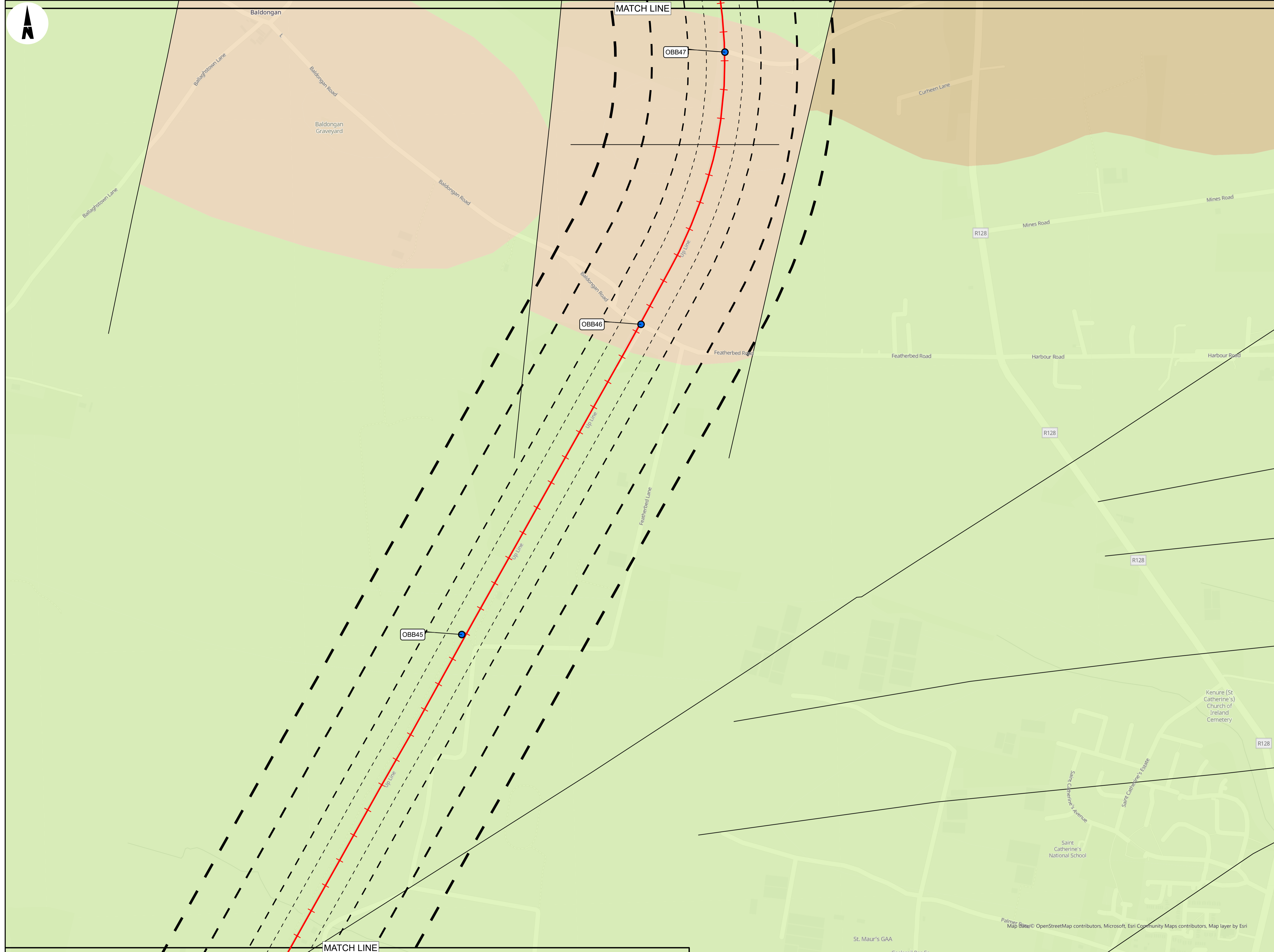
Project Code: D+WP56 | Originator Code: ARP | QMS Code: 279933-00

Drawn: DM | Checked: SH | Approved: COD

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **CONSTRAINTS REPORT
AQUIFER BEDROCK CONSTRAINTS
OPEN STREET MAP BASEMAP**

Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000608 | Sheet Number: 8 of 19 | Status: 902 | Rev: P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

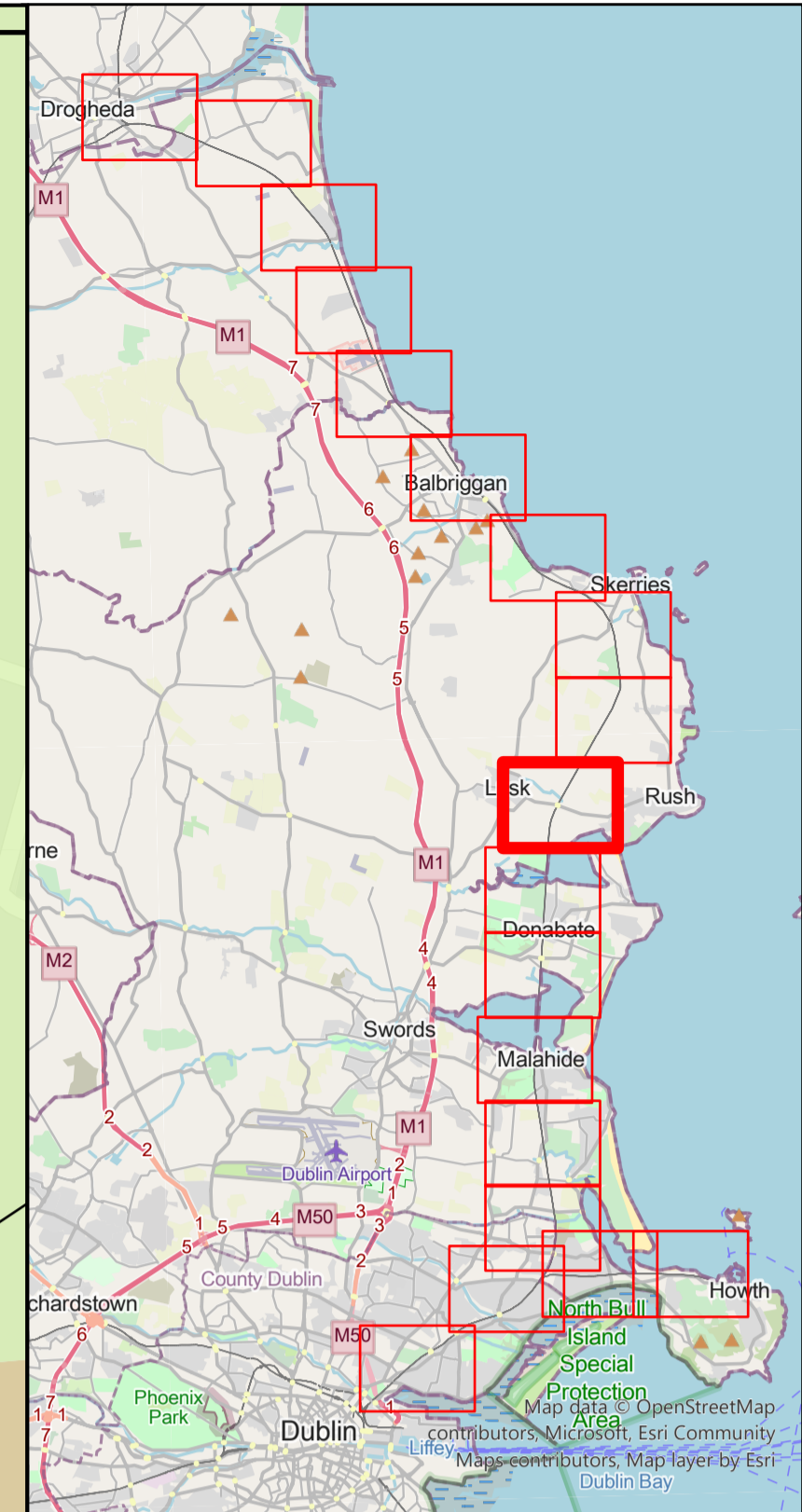
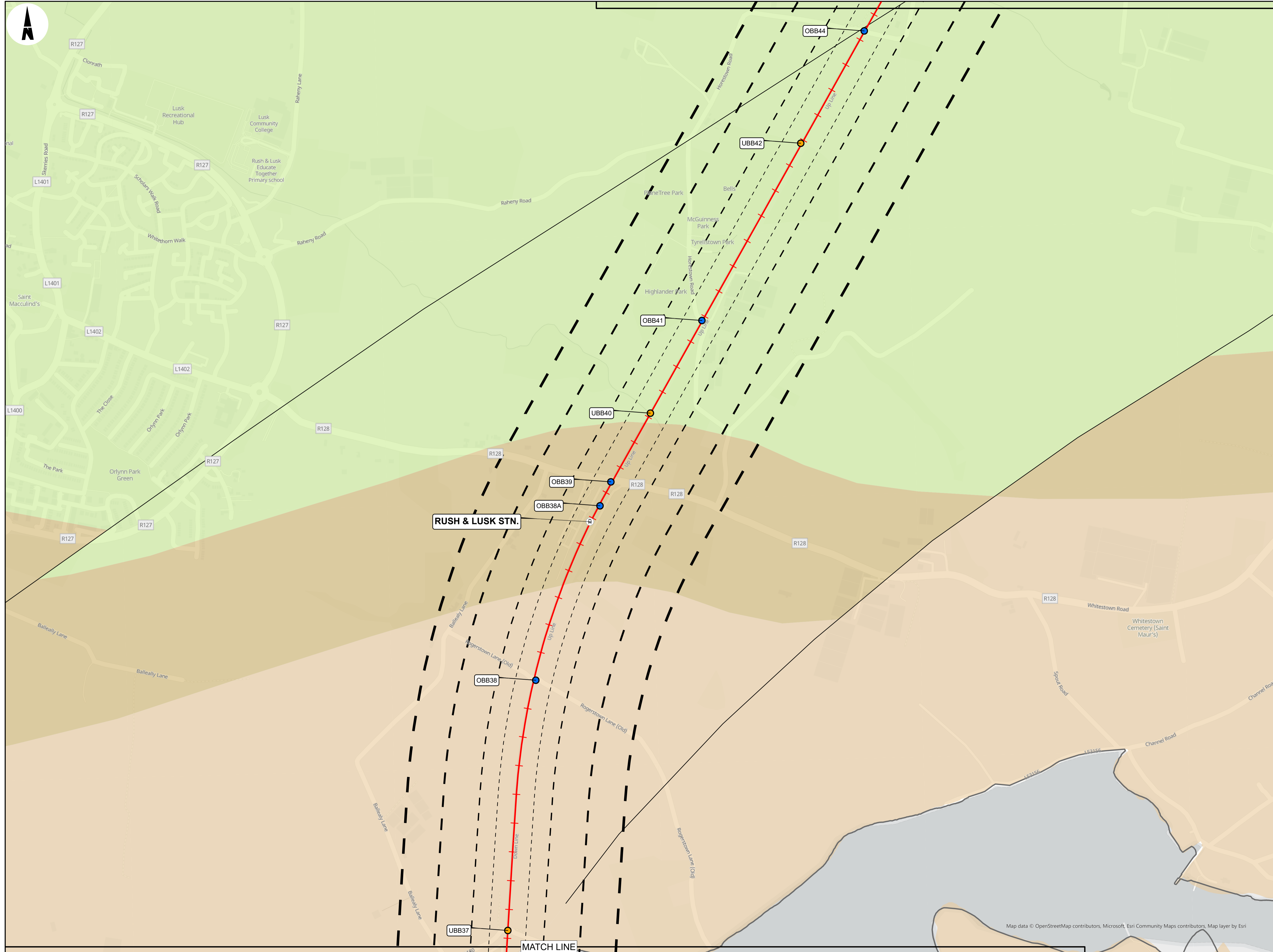
© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).

Rev	Date	Dn	Chkd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client	Engineering Designer
Date: 20/09/2021	Scale: 1:5000 @ A1 1:10000 @ A3
Project Code: D+WP56	Originator Code: ARP
	QMS Code: 279933-00

Project Title	Drawing Title
DART+ COASTAL NORTH	CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP
Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000609	Sheet Number: 9 of 19
Status: 902	Rev: P03

© Arup



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES**
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS**
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK**
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LI - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PU - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER**
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).



Rev	Date	Dn	Chk'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 20/09/2021 Scale: 1:5000 @ A1 / 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP QMS Code: 279933-00

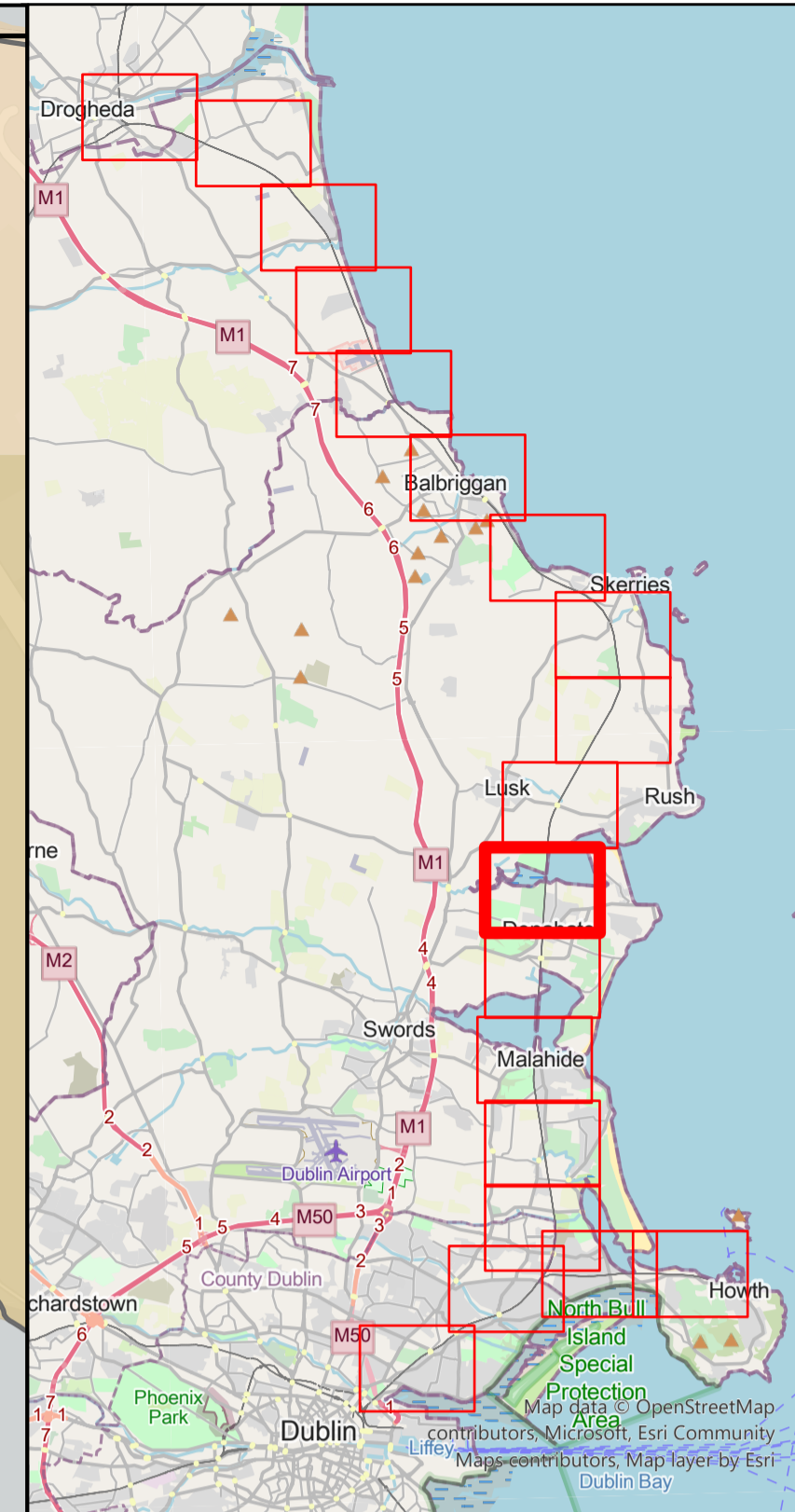
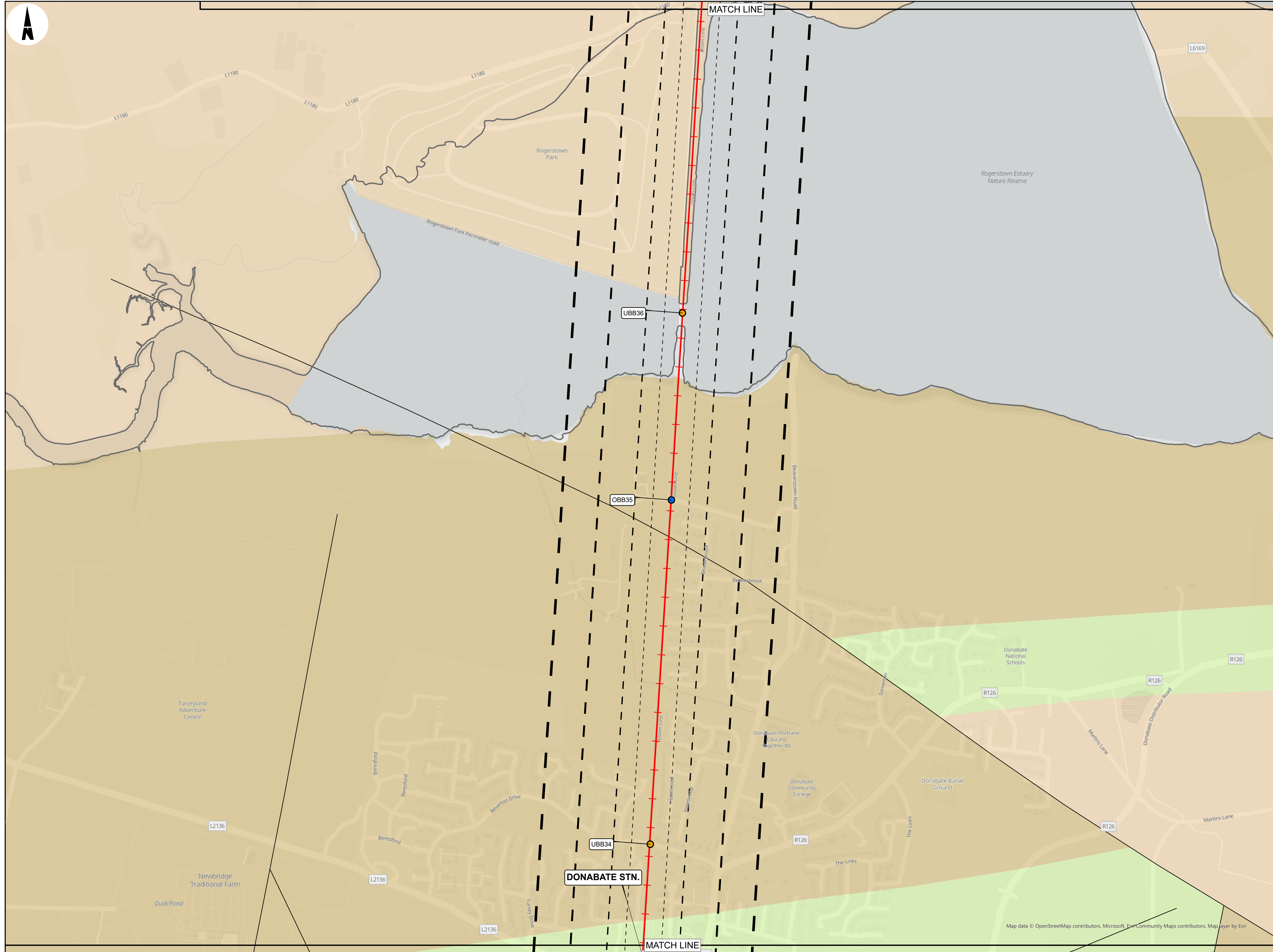
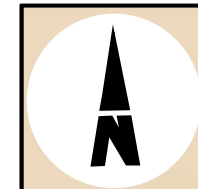
Drawn: DM Checked: SH Approved: COD

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **CONSTRAINTS REPORT OPEN STREET MAP BASEMAP**

Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000610

Sheet Number: 10 of 19 Status: 902 Rev: P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).



Rev	Date	Dn	Chkd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 20/09/2021 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

Drawn: DM, Checked: SH, Approved: COD

Project Title: **DART+ COASTAL NORTH**

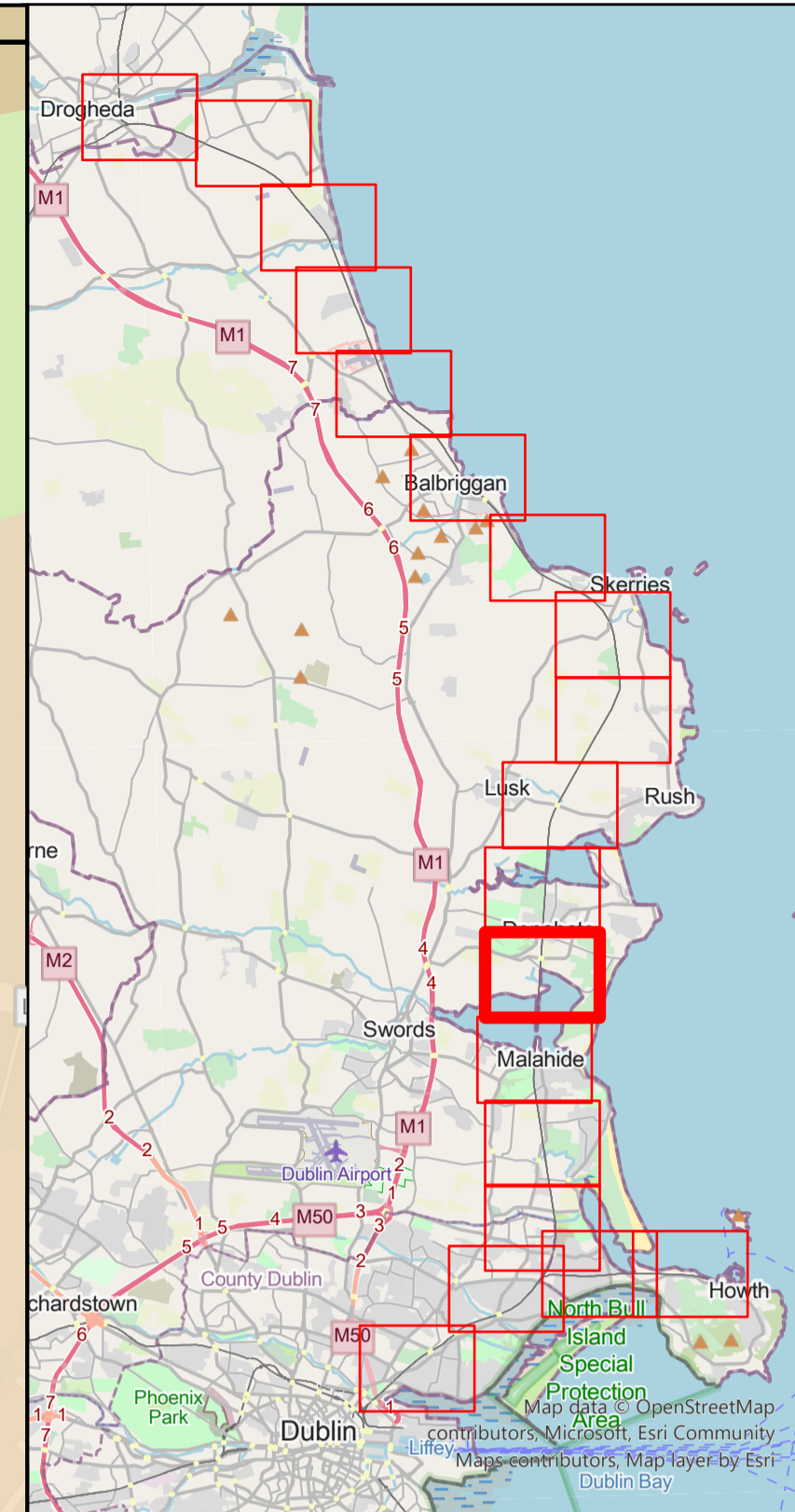
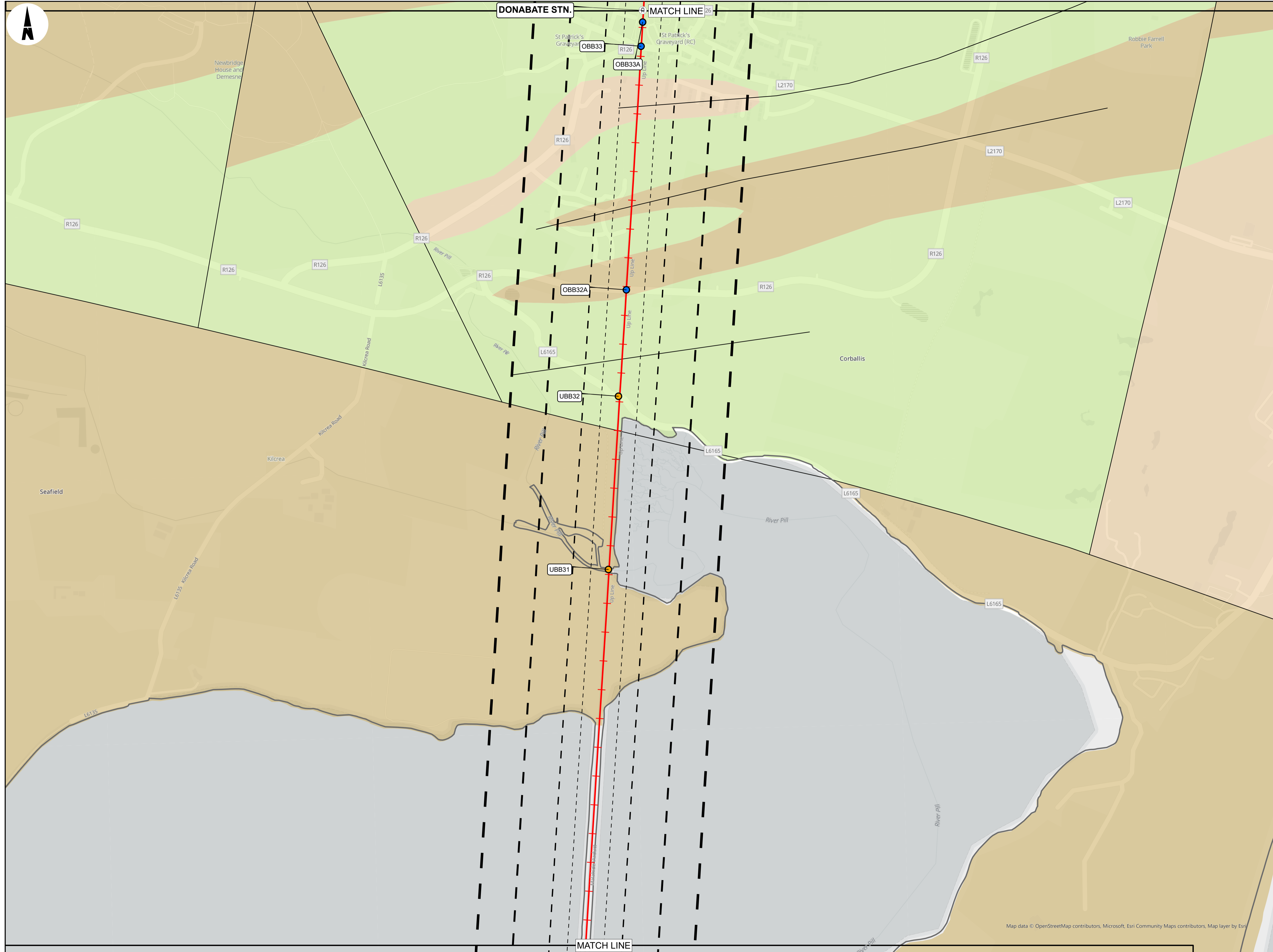
Drawing Title: **CONSTRAINTS REPORT OPEN STREET MAP BASEMAP**

Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000611

Sheet Number: 11 of 19

Status: 902

Rev: P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LI - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PU - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).



Rev	Date	Dn	Ch'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **Iarnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 20/09/2021 | Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 | Originator Code: ARP

QMS Code: 279933-00

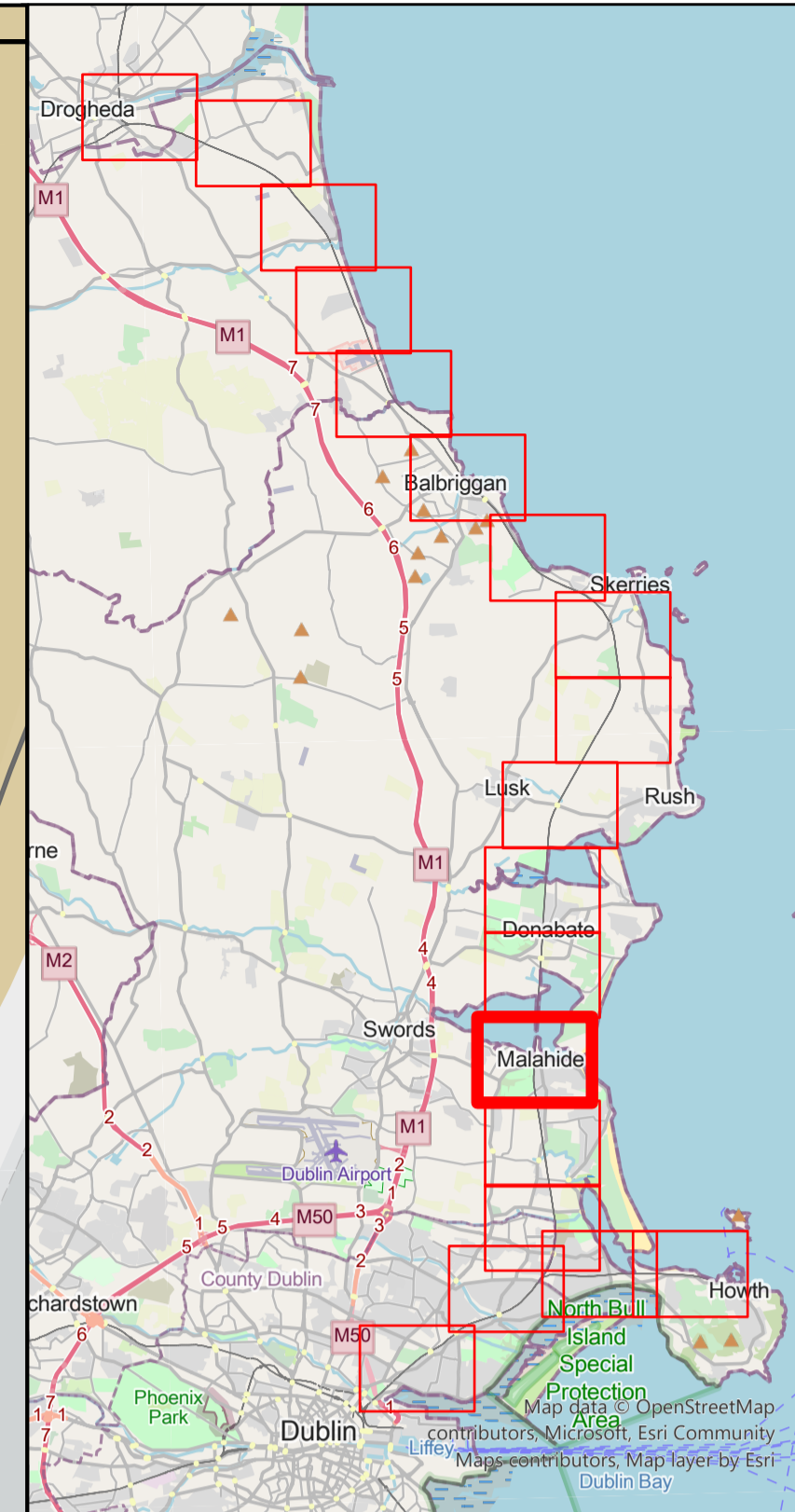
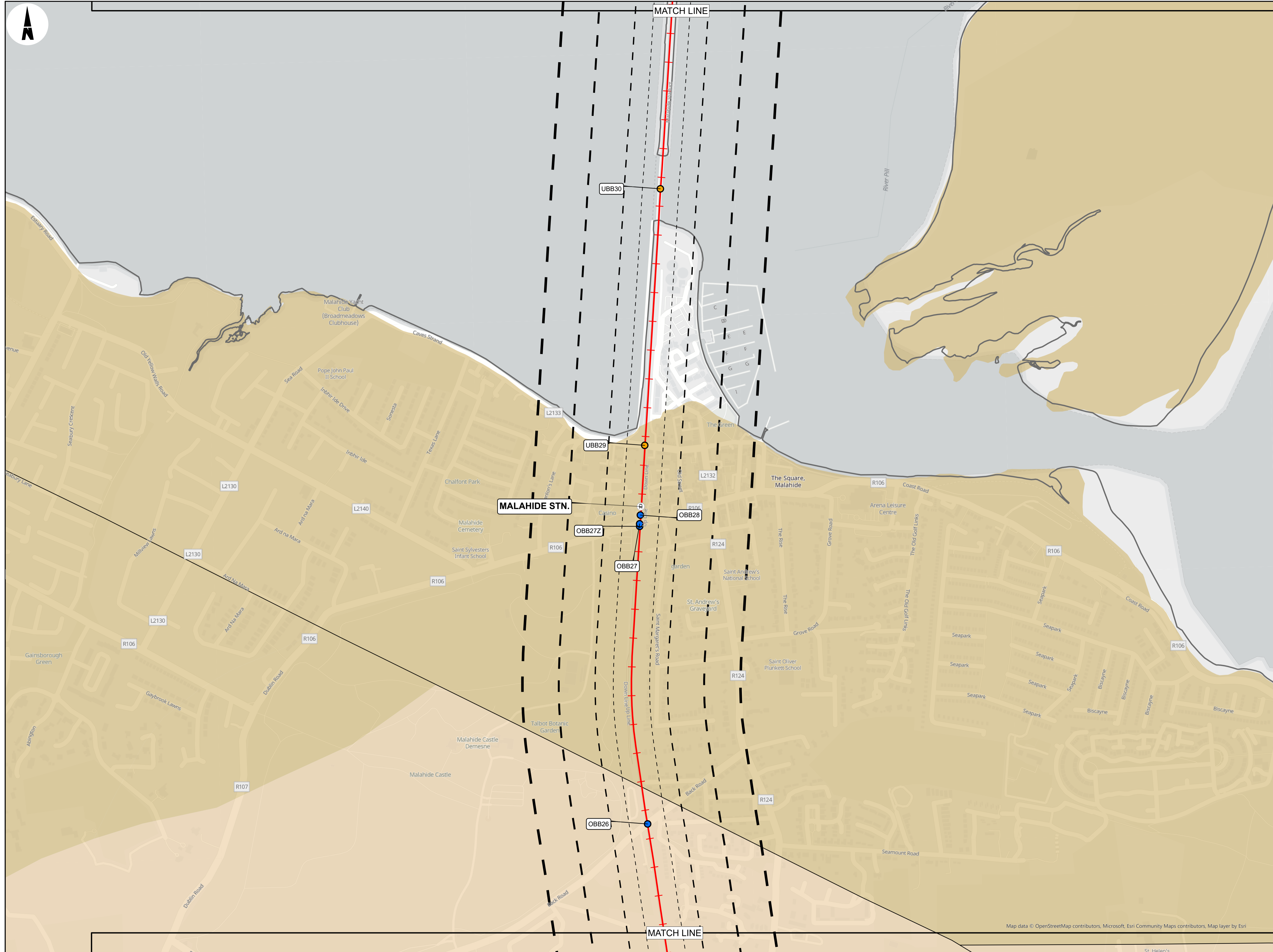
Drawn: DM | Checked: SH | Approved: COD

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP**

Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000612

Sheet Number: 12 of 19 | Status: 902 | Rev: P03



LEGEND

- RAILWAY STATIONS
- BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
- RAILWAY LINE
- BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
- ADMINISTRATIVE BOUNDARY
- COUNTY BOUNDARY
- AQUIFER BEDROCK FAULTLINE
- AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
- LAKE
- GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Map data © OpenStreetMap contributors, Microsoft, Esri Community Maps contributors, Map layer by Esri

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0030720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).



Rev	Date	Dn	Ch'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 20/09/2021 | Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 | Originator Code: ARP | QMS Code: 279933-00

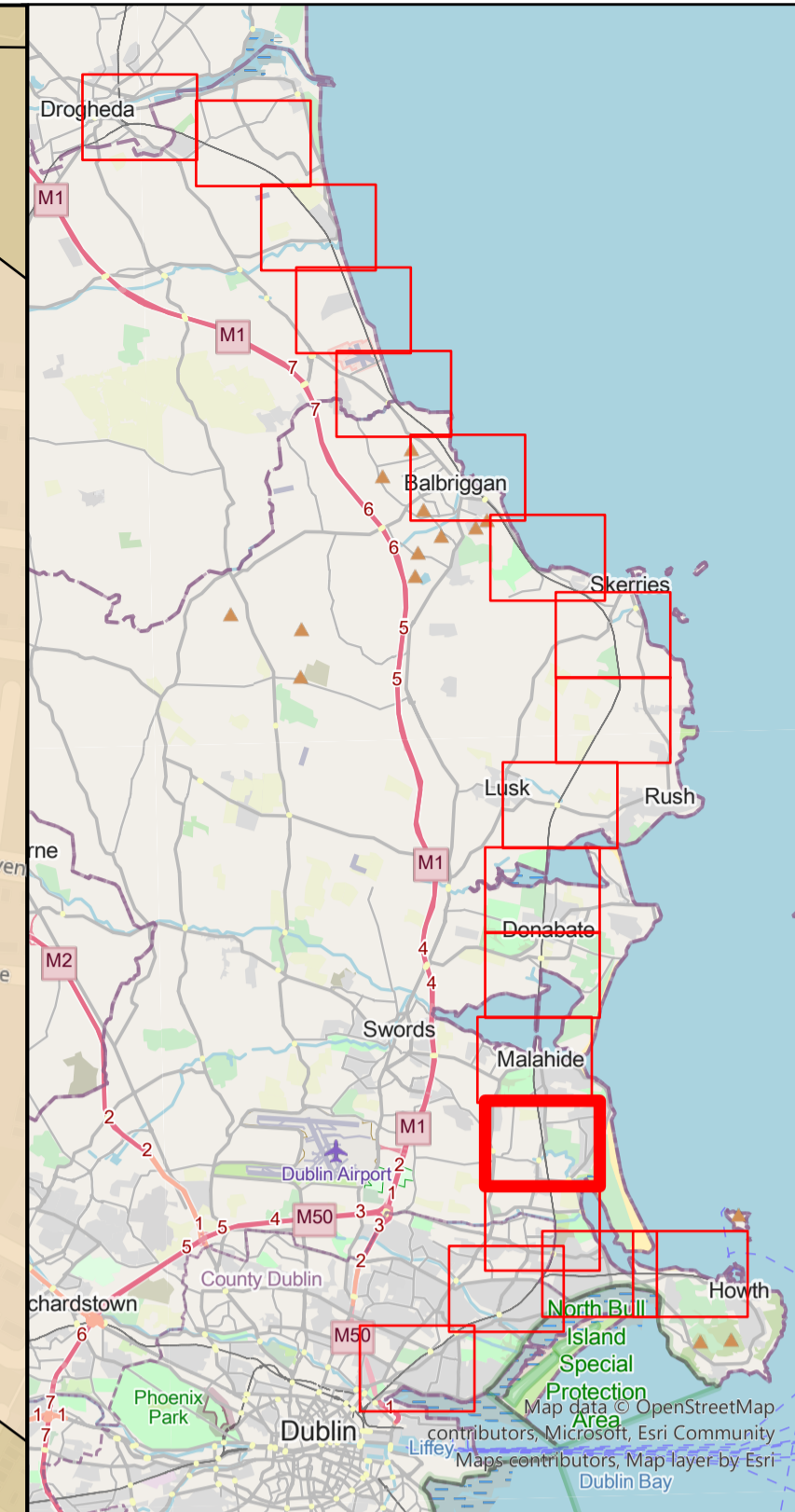
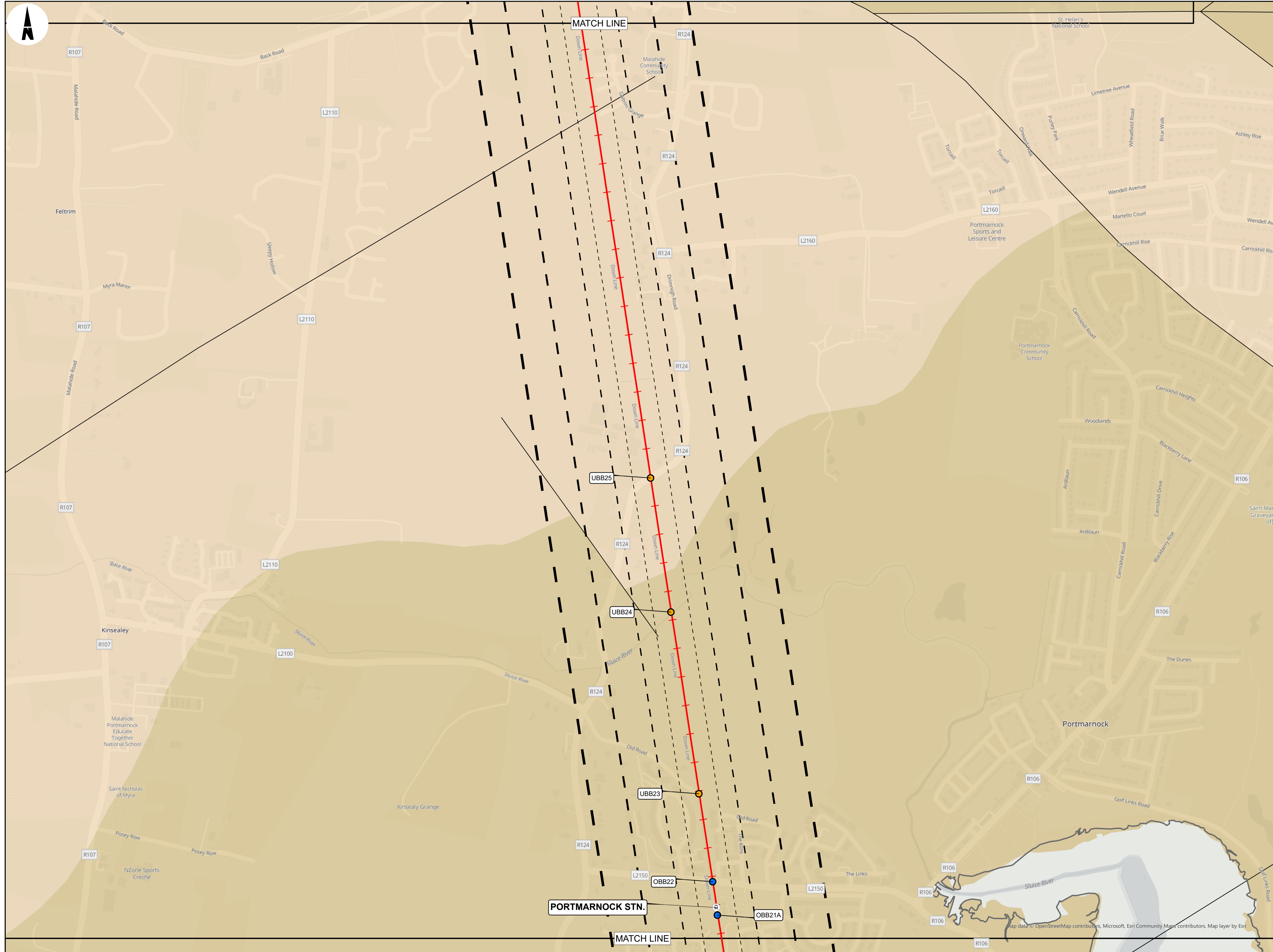
Drawn: DM | Checked: SH | Approved: COD

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP**

Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000613

Sheet Number: 13 of 19 | Status: 902 | Rev: P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PU - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0030720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLLG).

Rev	Date	Dn	Chkd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client		Engineering Designer		Project Title	
Iarnród Éireann Irish Rail		ARUP		DART+ COASTAL NORTH	
Date	Scale	Drawn	Checked	Approved	
20/09/2021	1:5000 @ A1 1:10000 @ A3	DM	SH	COD	
Project Code	Originator Code	QMS Code		Drawing File Name	
D+WP56	ARP	279933-00		D+WP56-ARP-ZZ-NL-OR-EV-000614	

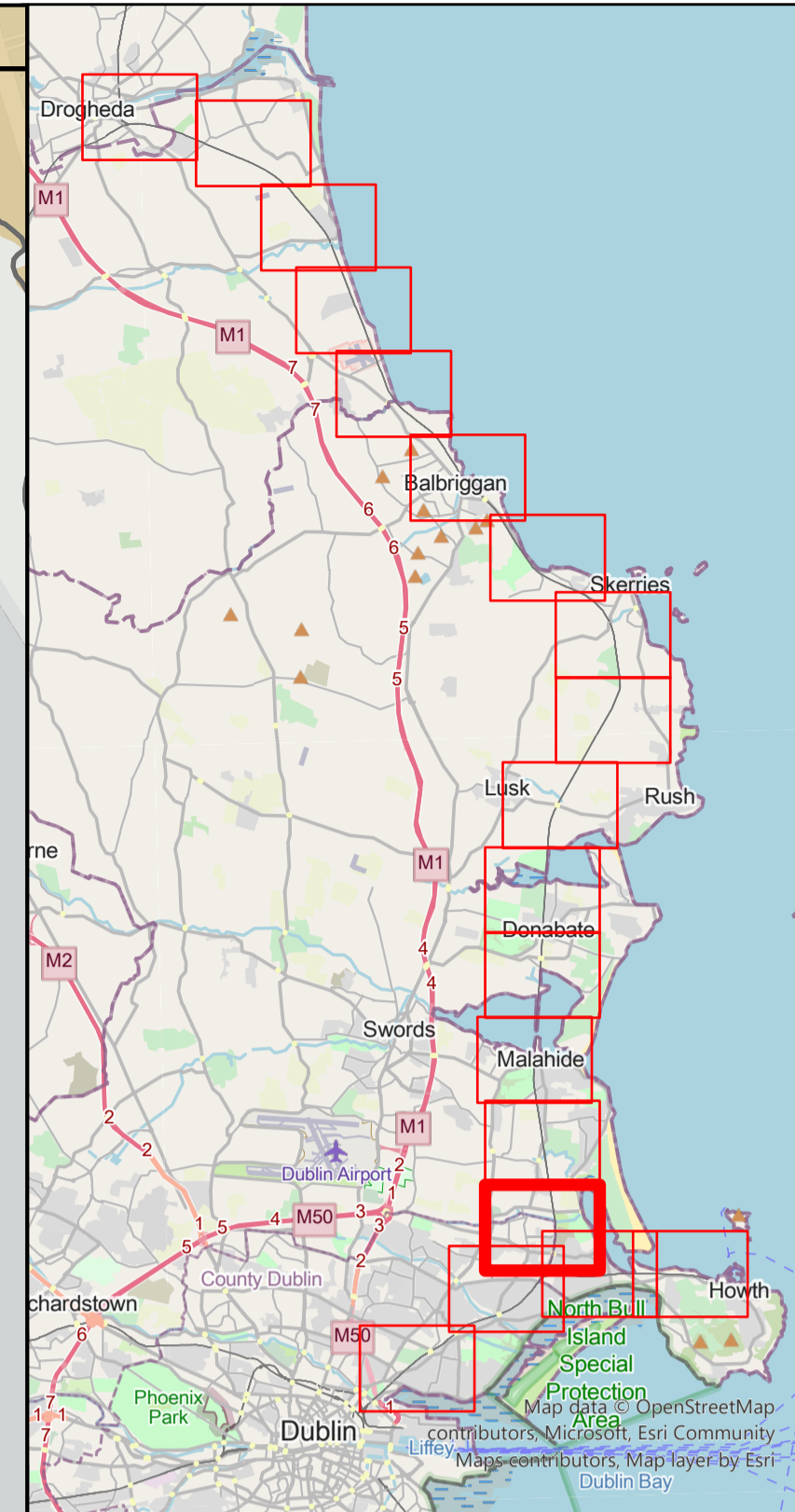
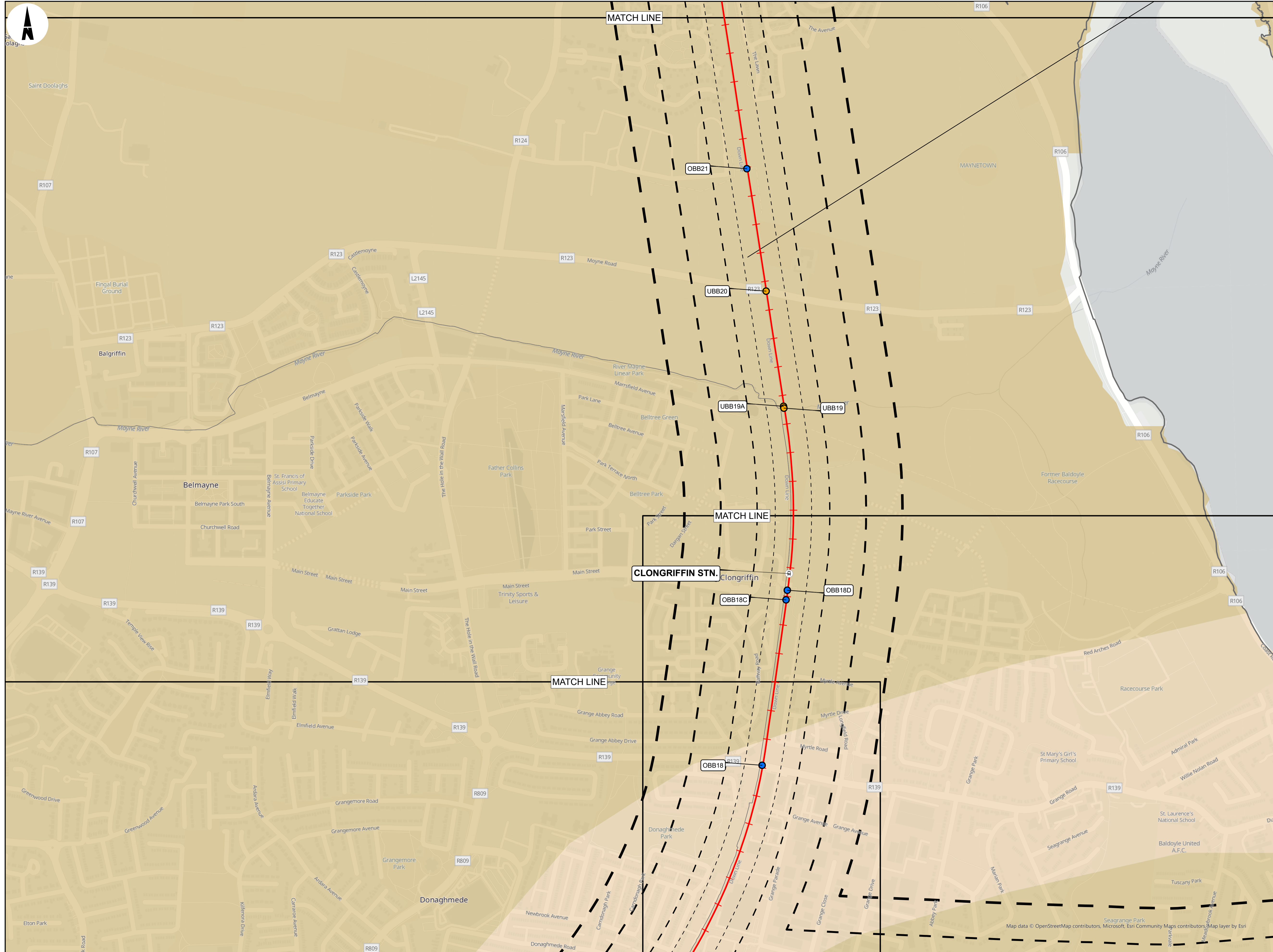
Sheet Number	Status	Rev
14 of 19	902	P03

Drawing Title: CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP

Sheet Number: 14 of 19

Status: 902

Rev: P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LI - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLTG).



Rev	Date	Dn	Chkd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **larnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 20/09/2021 Scale: 1:5000 @ A1, 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

Drawn: DM Checked: SH Approved: COD

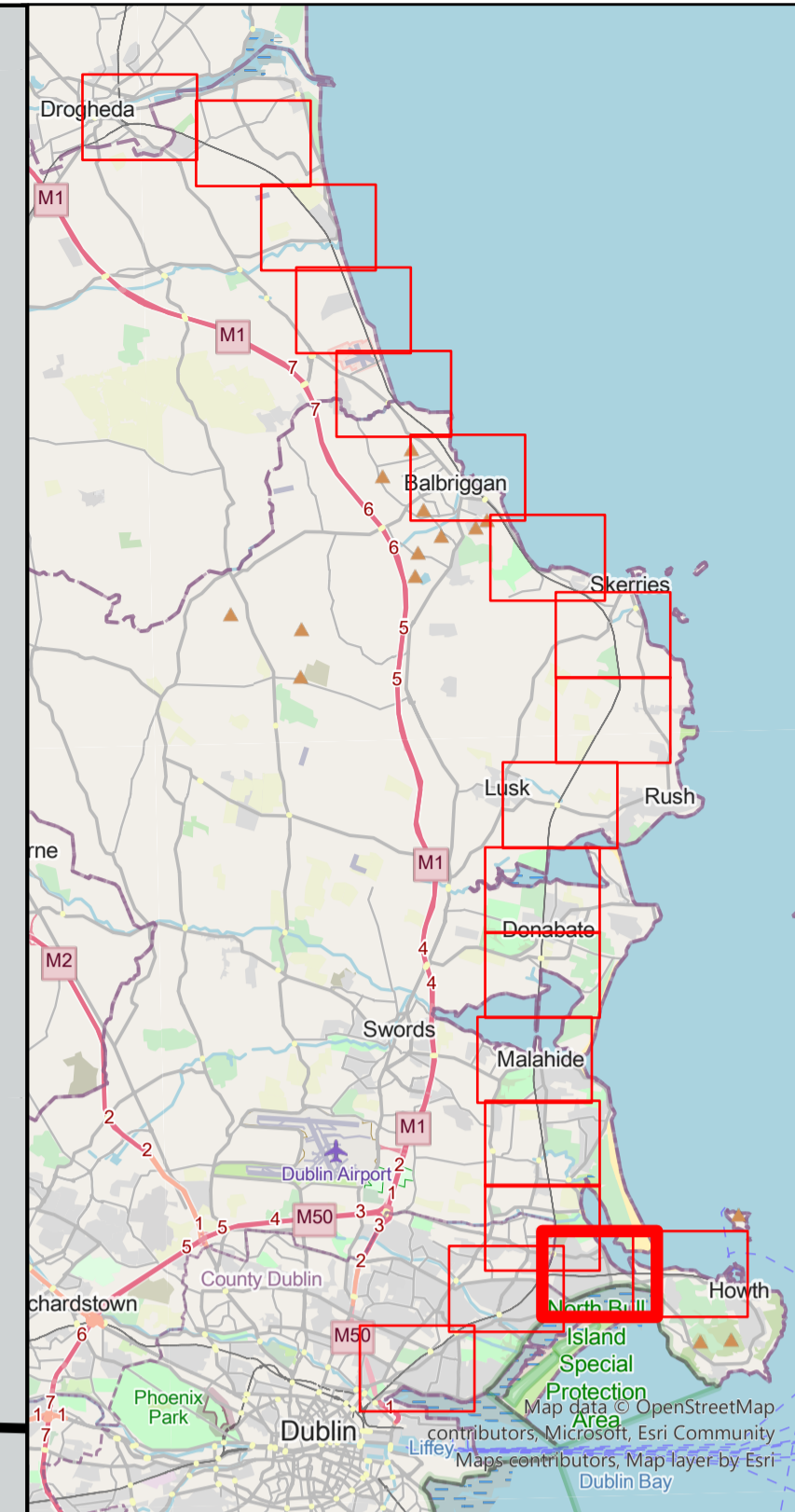
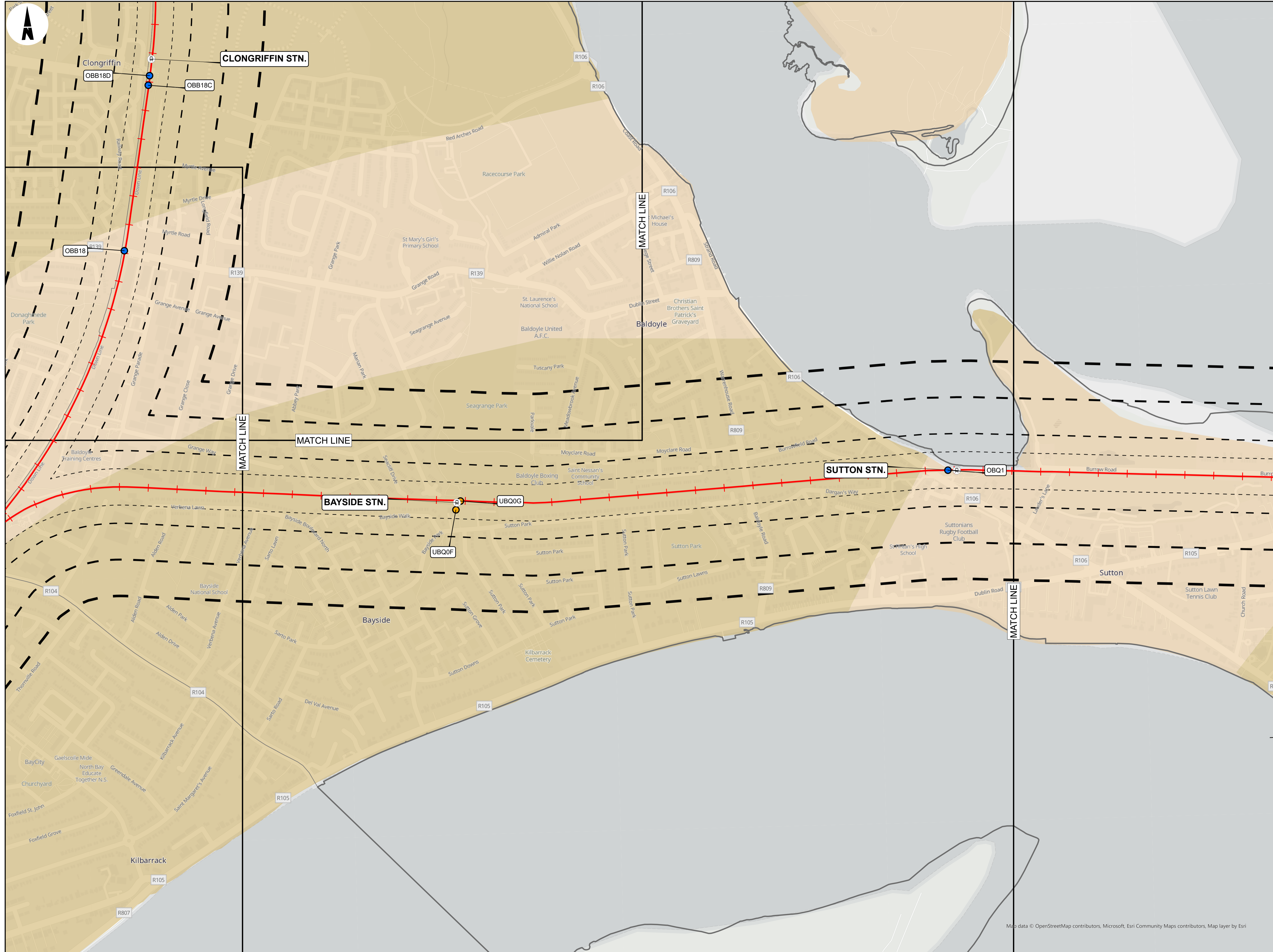
OMS Code: 279933-00

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP**

Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000615

Sheet Number: 15 of 19 Status: 902 Rev: P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 60M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Map data © OpenStreetMap contributors, Microsoft, Esri Community Maps contributors, Map layer by Esri

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0030720 (OSi Aerial Data or OSi Lidar Data) & Survey No. 2021/OSi_NMA_180 (OSi Vector Data). All elevations are in metres and relate to OSi Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSi active GPS station Tallaght College (TLTG).



Rev	Date	Dn	Ch'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 20/09/2021 Scale: 1:5000 @ A1 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

QMS Code: 279933-00

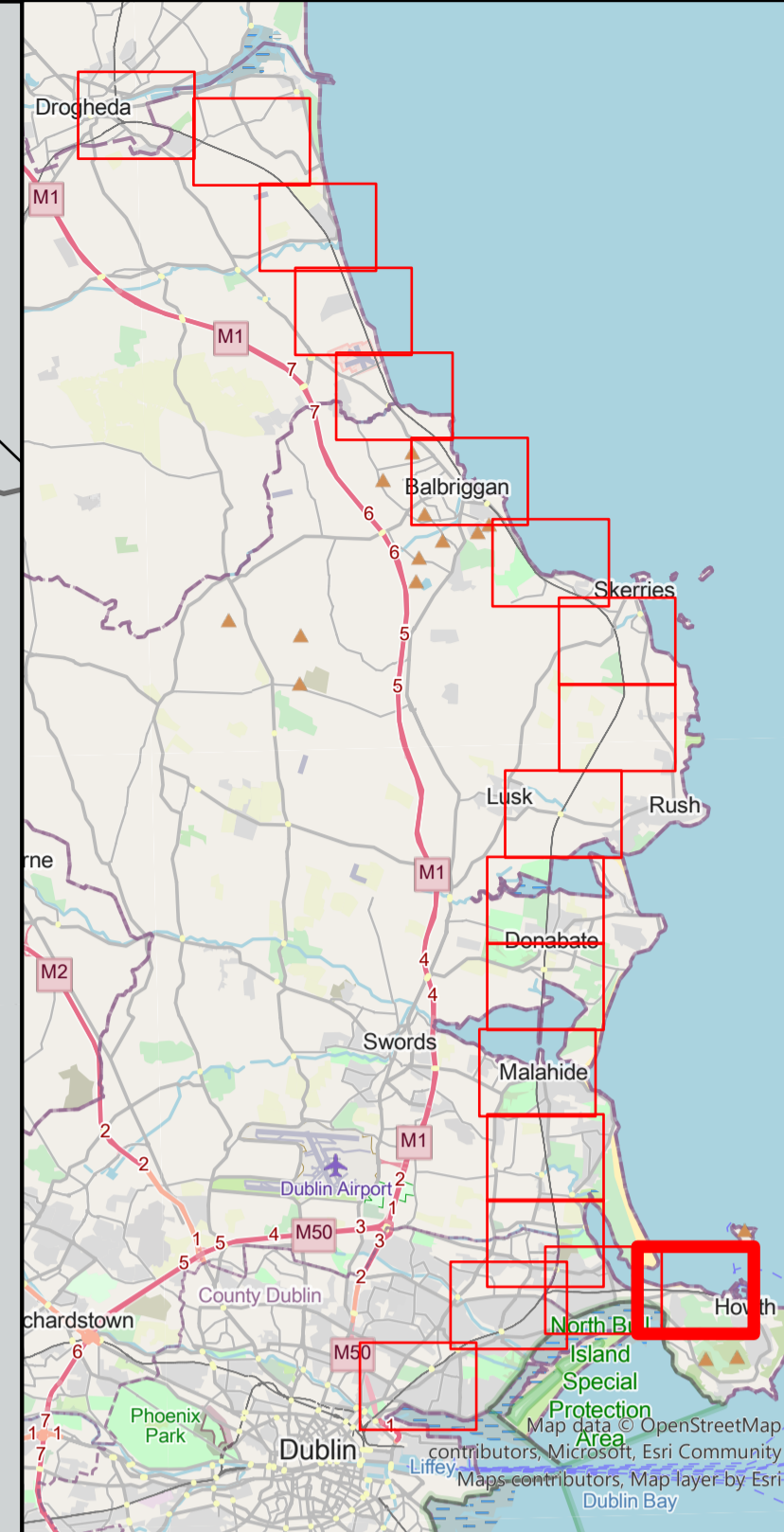
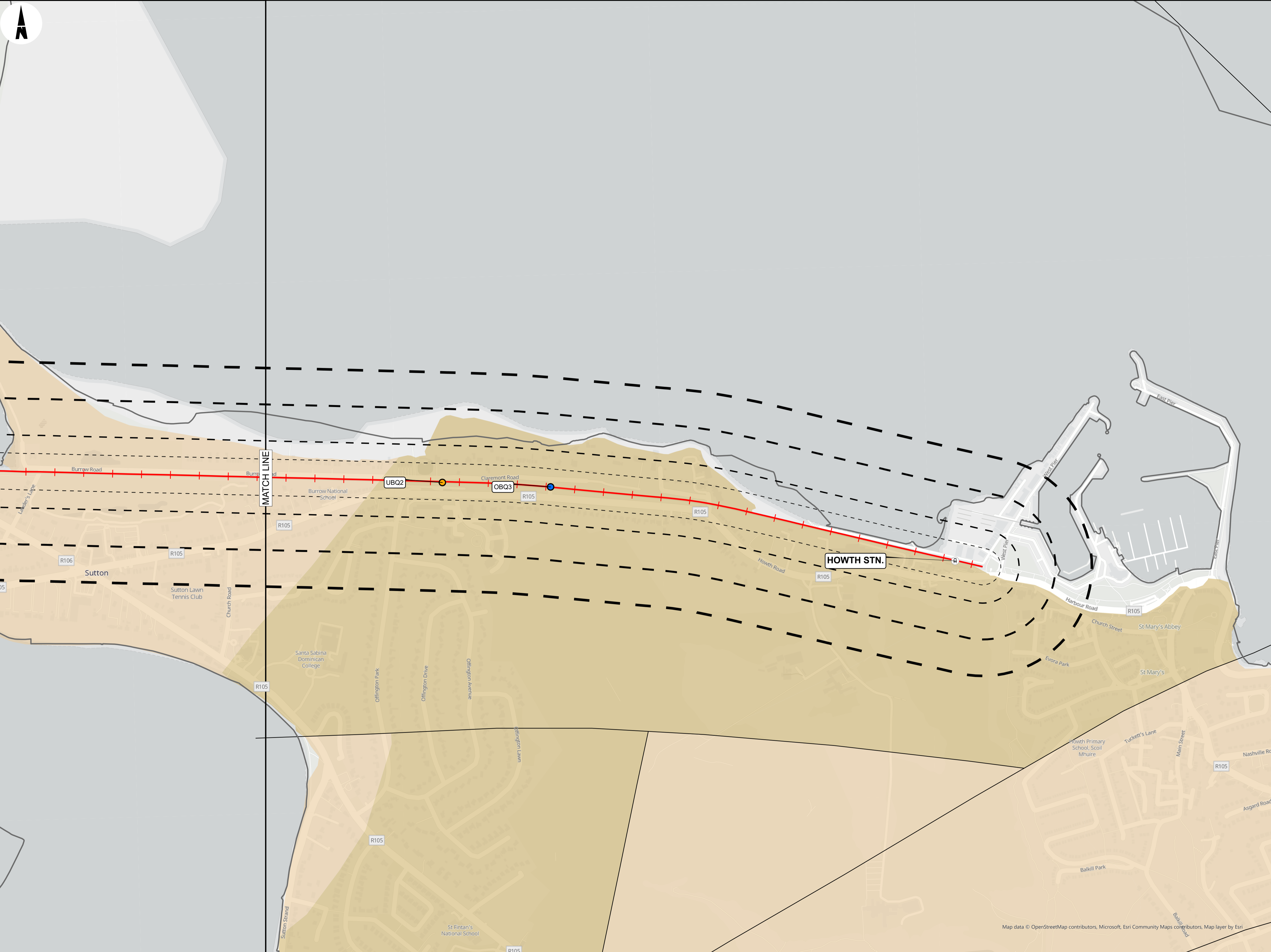
Drawn: DM Checked: SH Approved: COD

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP**

Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000616

Sheet Number	Status	Rev
16 of 19	902	P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0039720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLTG).



Rev	Date	Dn	Chk'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client

Date: 20/09/2021 Scale: 1:5000 @ A1 1:10000 @ A3

Project Code: D+WP56 Originator Code: ARP

Engineering Designer

Drawn: DM Checked: SH Approved: COD

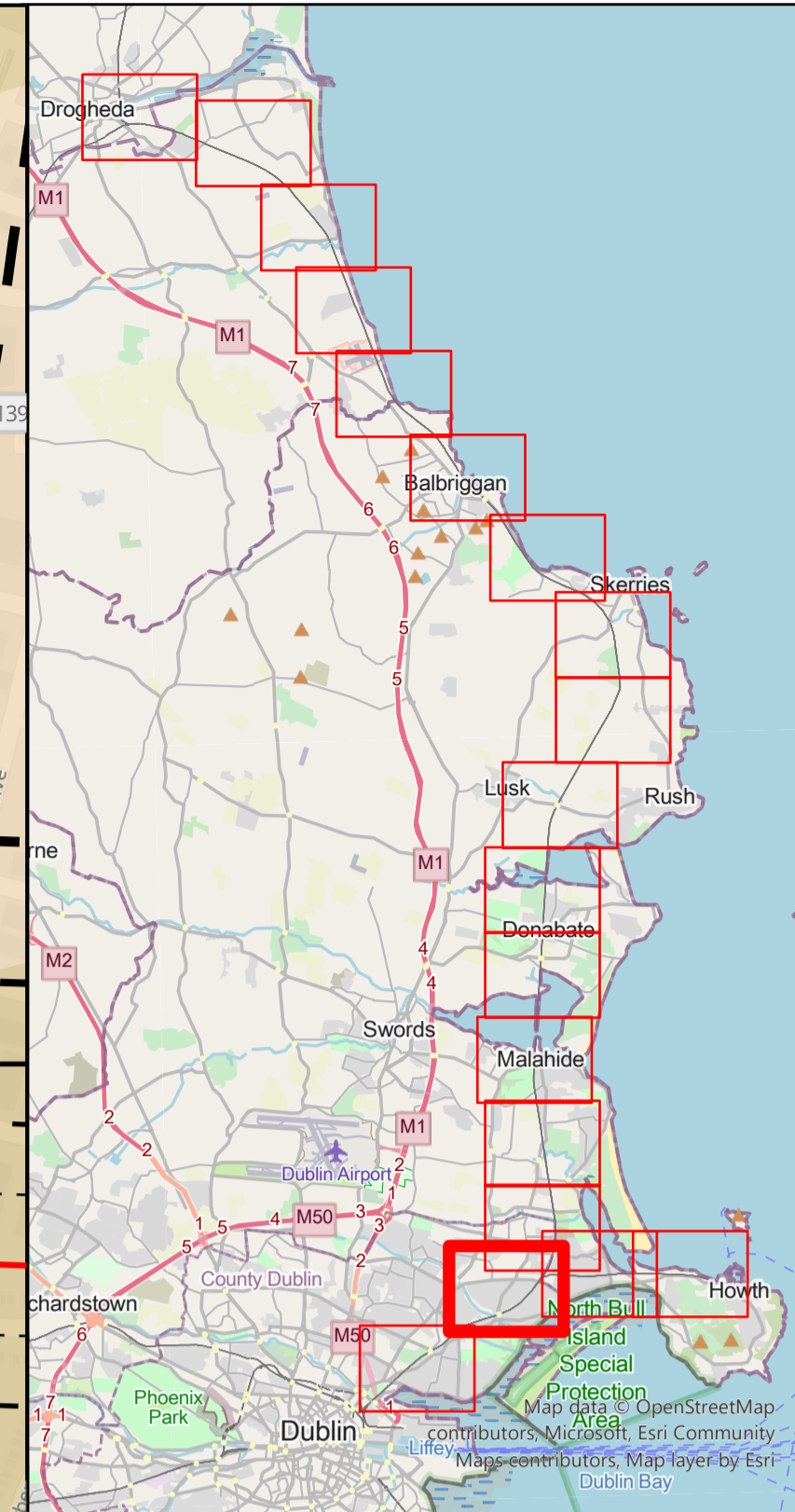
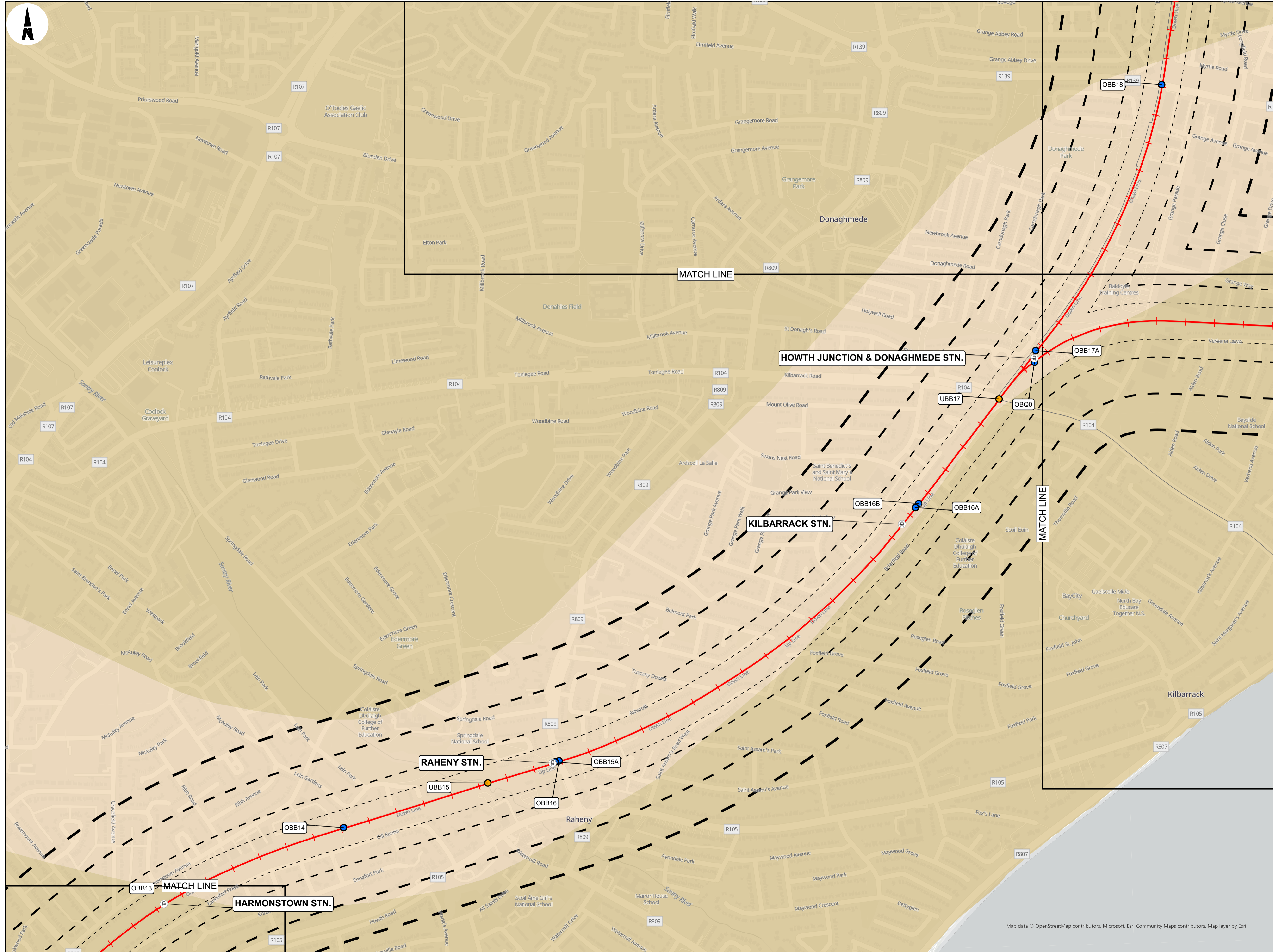
QMS Code: 279933-00

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP**

Drawing File Name: D+WP56-ARP-ZZ-NL-OR-EV-000617

Sheet Number: 17 of 19 Status: 902 Rev: P03



- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LI - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Map data © OpenStreetMap contributors, Microsoft, Esri Community Maps contributors, Map layer by Esri

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0030720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLTG).



Rev	Date	Dn	Ch'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client: **Irish Rail**

Engineering Designer: **ARUP**

Date: 20/09/2021 | Scale: 1:5000 @ A1 | 1:10000 @ A3

Project Code: D-WP56 | Originator Code: ARP

Drawn: DM | Checked: SH | Approved: COD

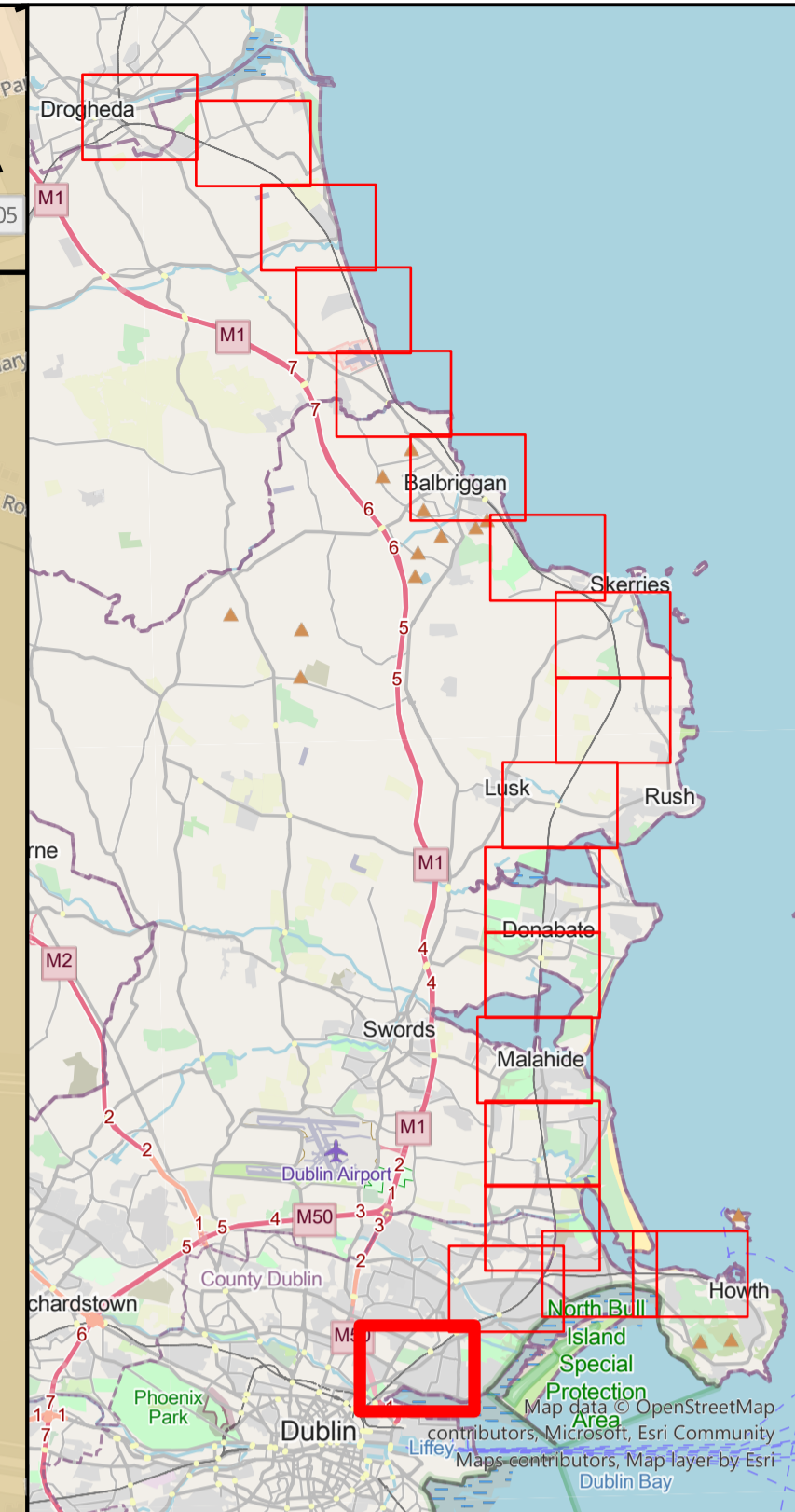
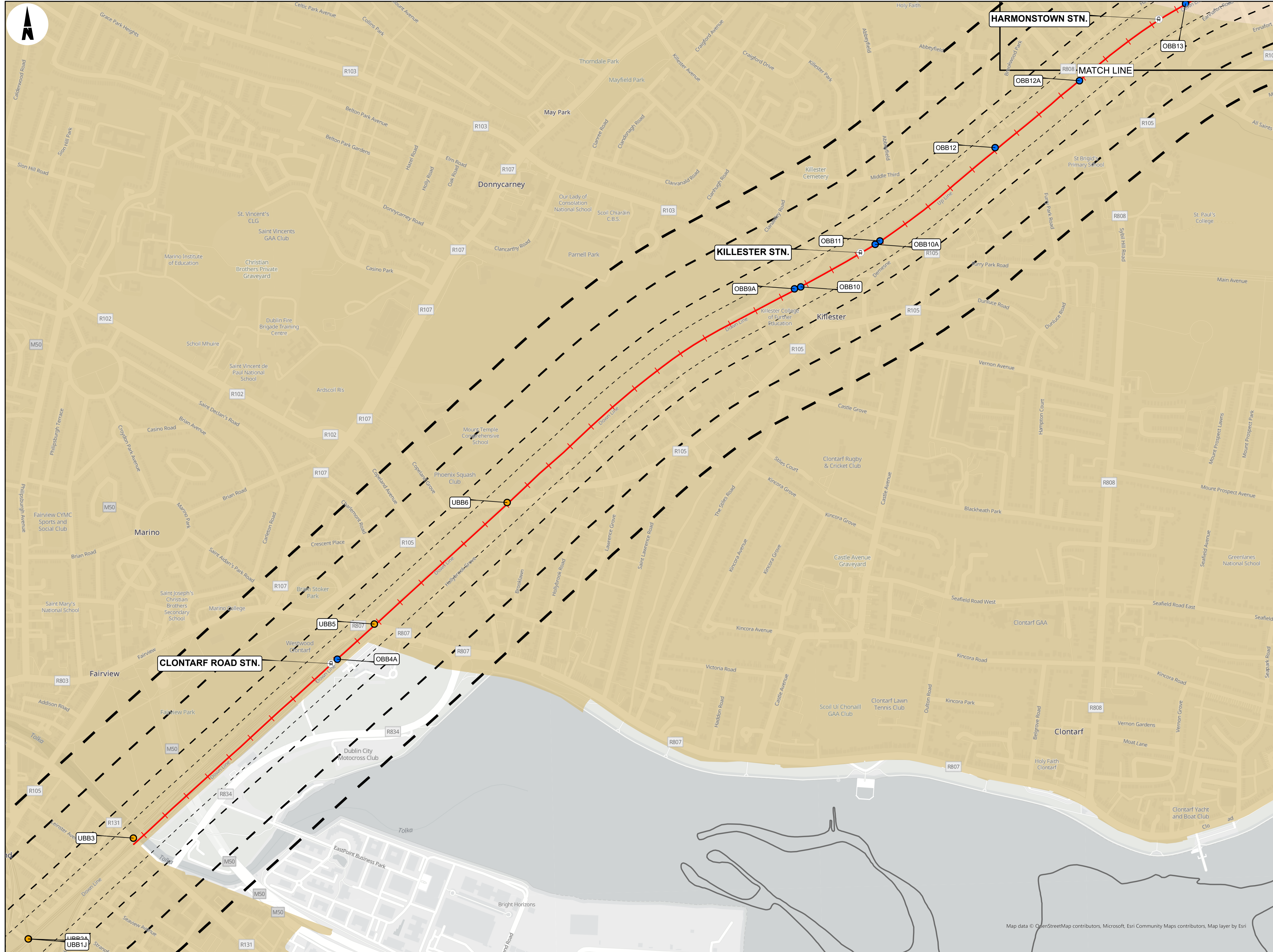
OMS Code: 279933-00

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **CONSTRAINTS REPORT AQUIFER BEDROCK CONSTRAINTS OPEN STREET MAP BASEMAP**

Drawing File Name: D-WP56-ARP-ZZ-NL-OR-EV-000618

Sheet Number: 18 of 19 | Status: 902 | Rev: P03

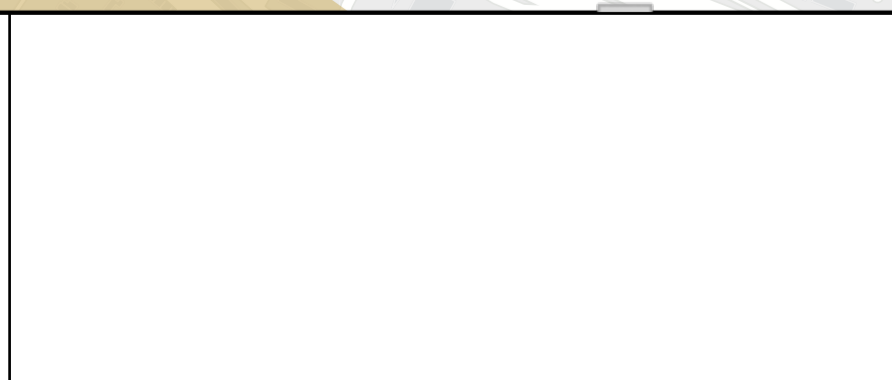


- LEGEND**
- RAILWAY STATIONS
 - BRIDGES
 - OVERBRIDGE
 - UNDERBRIDGE
 - RAILWAY LINE
 - BUFFERS
 - 50M
 - 100M
 - 200M
 - 300M
 - ADMINISTRATIVE BOUNDARY
 - COUNTY BOUNDARY
 - AQUIFER BEDROCK FAULTLINE
 - AQUIFER BEDROCK
 - RKC - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (CONDUIT)
 - RKD - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED (DIFFUSE)
 - RK - REGIONALLY IMPORTANT AQUIFER - KARSTIFIED
 - RF - REGIONALLY IMPORTANT AQUIFER - FISSURED BEDROCK
 - LM - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS GENERALLY MODERATELY PRODUCTIVE
 - LK - LOCALLY IMPORTANT AQUIFER - KARSTIFIED
 - LJ - LOCALLY IMPORTANT AQUIFER - BEDROCK WHICH IS MODERATELY PRODUCTIVE ONLY IN LOCAL ZONES
 - PI - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE EXCEPT FOR LOCAL ZONES
 - PJ - POOR AQUIFER - BEDROCK WHICH IS GENERALLY UNPRODUCTIVE
 - LAKE
 - GRAVEL AQUIFER
 - LOCALLY IMPORTANT GRAVEL AQUIFER
 - REGIONALLY IMPORTANT GRAVEL AQUIFER

Copyright © Irish Rail (2021). This drawing is confidential and the copyright in it is owned by Irish Rail. 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 Irish Rail.

© OpenStreetMap contributors

© Ordnance Survey Ireland and Government of Ireland. All O.S. data used for plans are printed under "Copyright Ordnance Survey Ireland" Survey No. 0030720 (OSI Aerial Data or OSI Lidar Data) & Survey No. 2021/OSI_NMA_180 (OSI Vector Data). All elevations are in metres and relate to OSI Geoid Model (OSGM02) Malin Head as defined by existing Project Control. All Co-ordinates are in Irish Transverse Mercator Grid (ITM) as defined by OSI active GPS station Tallaght College (TLTG).



Rev	Date	Dn	Ch'd	App'd	Description
P01	30/09/2021	DM	SH	COD	
P02	11/10/2021	DM	SH	COD	
P03	10/12/2021	DM	SH	COD	

Client	Engineering Designer	Project Title
		DART+ COASTAL NORTH

Date	Scale	Drawn	Checked	Approved
20/09/2021	1:5000 @ A1 1:10000 @ A3	DM	SH	COD

Project Code	Originator Code	OMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	279933-00	D+WP56-ARP-ZZ-NL-OR-EV-000619	19 of 19	902	P03