

- NOTES**
- OSI TILE(S) USED: 2722-A
 - DO NOT SCALE FROM THIS DRAWING.
 - REFERENCE TO BE MADE TO THE TRACTION POWER STUDY D+WP56-ARP-P2-NL-RP-HV-000001 AND D+WP56-ARP-P2-NL-RP-GE-000155.
 - PROPOSED WORKS/REDLINE BOUNDARY TO BE CONFIRMED FOLLOWING COMPLETION OF SURVEYS. LOCATION OF PROPOSED INCOMING ESB CABLE TO BE CONFIRMED.
 - LOCATION OF ALL BURIED SERVICES TO BE CONFIRMED PRIOR TO CONSTRUCTION. ANY DISCREPANCIES ARE TO BE HIGHLIGHTED TO THE DESIGN ENGINEER.
 - ALL DIMENSIONS ARE IN METRES, UNLESS OTHERWISE STATED.
 - ALL CHAINAGES ARE IN KILOMETRES. (36+250 = 36.25km)
 - FINAL DIMENSIONS AND LEVELS TO BE DEVELOPED IN DETAILED DESIGN.
 - DETAILED DESIGNER/CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT AND DEVELOP ANY OMISSION OR ERROR PRIOR TO INSTALLATION.
 - SUBSTATIONS SHOWN ARE FOR PUBLIC CONSULTATION. REFERENCE DESIGN AND RAILWAY ORDER PURPOSES ONLY.
 - DRAWING TO BE PRINTED IN COLOUR.
 - THE CHAINAGE USED IS ACCORDING TO PERMANENT WAY DESIGN CHAINAGE. TO BE UPDATED TO OPERATIONAL CHAINAGE IN FURTHER PROJECT STAGES WHEN THE DESIGN IS FINISHED.
 - LIGHTING AND CCTV TO BE PROVIDED.
 - ALL LEVELS ARE IN METRES ORDNANCE DATUM (mOD) UNLESS OTHERWISE STATED.
 - THE DART+ COASTAL NORTH PROJECT IS POSITIONED ACCORDING TO THE IRISH TRANSVERSE MERCATOR (ITM) COORDINATE SYSTEM.
 - DRAWING TO BE READ IN CONJUNCTION WITH THE SUBSTATIONS HAZARD LOG D+WP56-ARP-P3-NL-HS-CX-000550.



LEGEND:

	EXISTING FENCING
	PROPOSED DEER PROOF TIMBER FENCING
	PROPOSED SECURITY PALISADE FENCING
	PROPOSED ASPHALT SURFACING
	PROPOSED CONCRETE SURFACING
	PROPOSED GRAVEL / OTHER POROUS SURFACING
	PROPOSED WILDFLOWER PLANTING
	PROPOSED LANDSCAPING
	MODIFIED /RETAINED EXISTING LANDSCAPING (INDICATIVE)
	CIÉ PROPERTY BOUNDARY
	PROPOSED ELEMENTS
	EXISTING ELEMENTS
	ELEMENTS TO BE REMOVED
	PROPOSED LEVELS
	EXISTING LEVELS

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Rev	Date	Drn	Chk'd	App'd	Description
P01	21/10/2022	SF	EJ	CC	ISSUED FOR PRELIMINARY DESIGN
P02	08/02/2023	SF	EJ	CC	ISSUED FOR OUTLINE DESIGN FOLLOWING COMMENTS
P03	24/04/2023	SF	EJ	CC	AMENDMENTS FOLLOWING COMMENTS

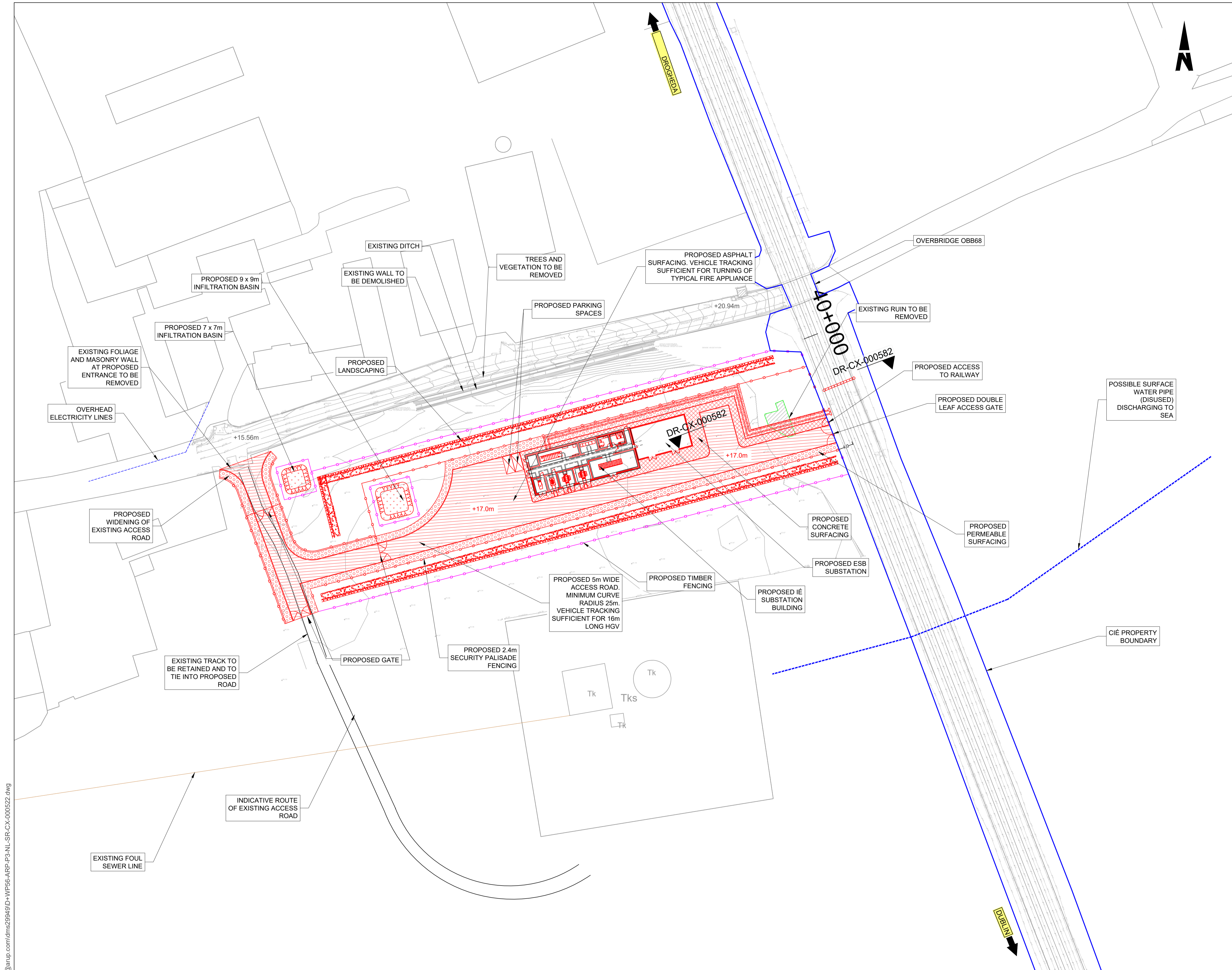
Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

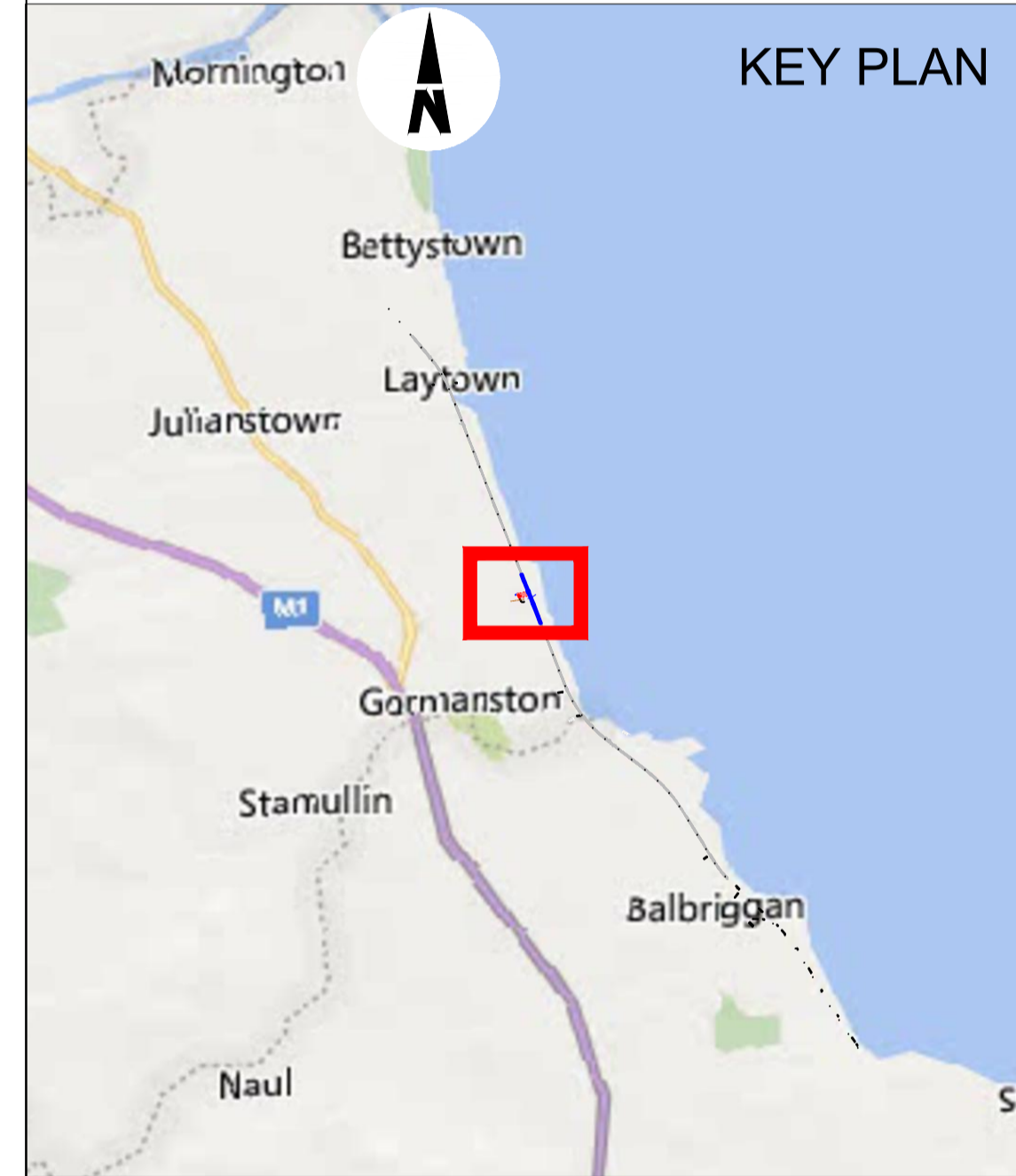
Date	X	Scale	1:500 @ A1 1:1000 @ A3	Drawn	SF	Checked	EJ	Approved	X
Project Code	D+WP56	Originator Code	ARP	QMS Code	280275-00				

Project Title DART+ COASTAL NORTH			
Drawing Title SUBSTATIONS: SOUTH SKERRIES PRELIMINARY DESIGN			
Drawing File Name D+WP56-ARP-P3-NL-DR-CX-000521	Sheet Number 01 of 01	Status S3	Rev P03

DO NOT SCALE USE FIGURED DIMENSIONS ONLY



- NOTES**
- OSI TILE(S) USED: 2446-C & 2514-A
 - DO NOT SCALE FROM THIS DRAWING
 - REFERENCE TO BE MADE TO THE TRACTION POWER STUDY D+WP56-ARP-P2-NL-RP-IV-000001 AND D+WP56-ARP-P2-NL-RP-GE-000155.
 - PROPOSED WORKS/REDLINE BOUNDARY TO BE CONFIRMED FOLLOWING COMPLETION OF SURVEYS. LOCATION OF PROPOSED INCOMING ESB CABLE TO BE CONFIRMED.
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 - SUBSTATIONS SHOWN ARE FOR PUBLIC CONSULTATION. REFERENCE DESIGN AND RAILWAY ORDER PURPOSES ONLY.
 - DRAWING TO BE PRINTED IN COLOUR.
 - THE CHAINAGE USED IS ACCORDING TO PERMANENT WAY DESIGN CHAINAGE. TO BE UPDATED TO OPERATIONAL CHAINAGE IN FURTHER PROJECT STAGES WHEN THE DESIGN IS FINISHED.
 - LIGHTING AND CCTV TO BE PROVIDED.
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 - THE DART+ COASTAL NORTH PROJECT IS POSITIONED ACCORDING TO THE IRISH TRANSVERSE MERCATOR (ITM) COORDINATE SYSTEM.
 - DRAWING TO BE READ IN CONJUNCTION WITH THE SUBSTATIONS HAZARD LOG D+WP56-ARP-P3-NL-HS-CX-000550.



LEGEND:

	EXISTING FENCING
	PROPOSED DEER PROOF TIMBER FENCING
	PROPOSED SECURITY PALISADE FENCING
	PROPOSED ASPHALT SURFACING
	PROPOSED CONCRETE SURFACING
	PROPOSED GRAVEL / OTHER POROUS SURFACING
	PROPOSED WILDFLOWER PLANTING
	PROPOSED LANDSCAPING
	MODIFIED /RETAINED EXISTING LANDSCAPING (INDICATIVE)
	CIÉ PROPERTY BOUNDARY
	PROPOSED ELEMENTS
	EXISTING ELEMENTS
	ELEMENTS TO BE REMOVED
	PROPOSED LEVELS
	EXISTING LEVELS

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Rev	Date	Drn	Chk'd	App'd	Description
P01	21/10/2022	SF	EJ	CC	ISSUED FOR PRELIMINARY DESIGN
P02	08/02/2023	SF	EJ	CC	ISSUED FOR OUTLINE DESIGN FOLLOWING COMMENTS
P03	24/04/2023	SF	EJ	CC	AMENDMENTS FOLLOWING COMMENTS

Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

Date: 24/04/2023 | Scale: 1:500 @ A1, 1:1000 @ A3 | Drawn: SF | Checked: EJ | Approved: CC

Project Code: D+WP56 | Originator Code: ARP | QMS Code: 280275-00

Project Title
DART+ COASTAL NORTH

Drawing Title
SUBSTATIONS: GORMANSTON
PRELIMINARY DESIGN

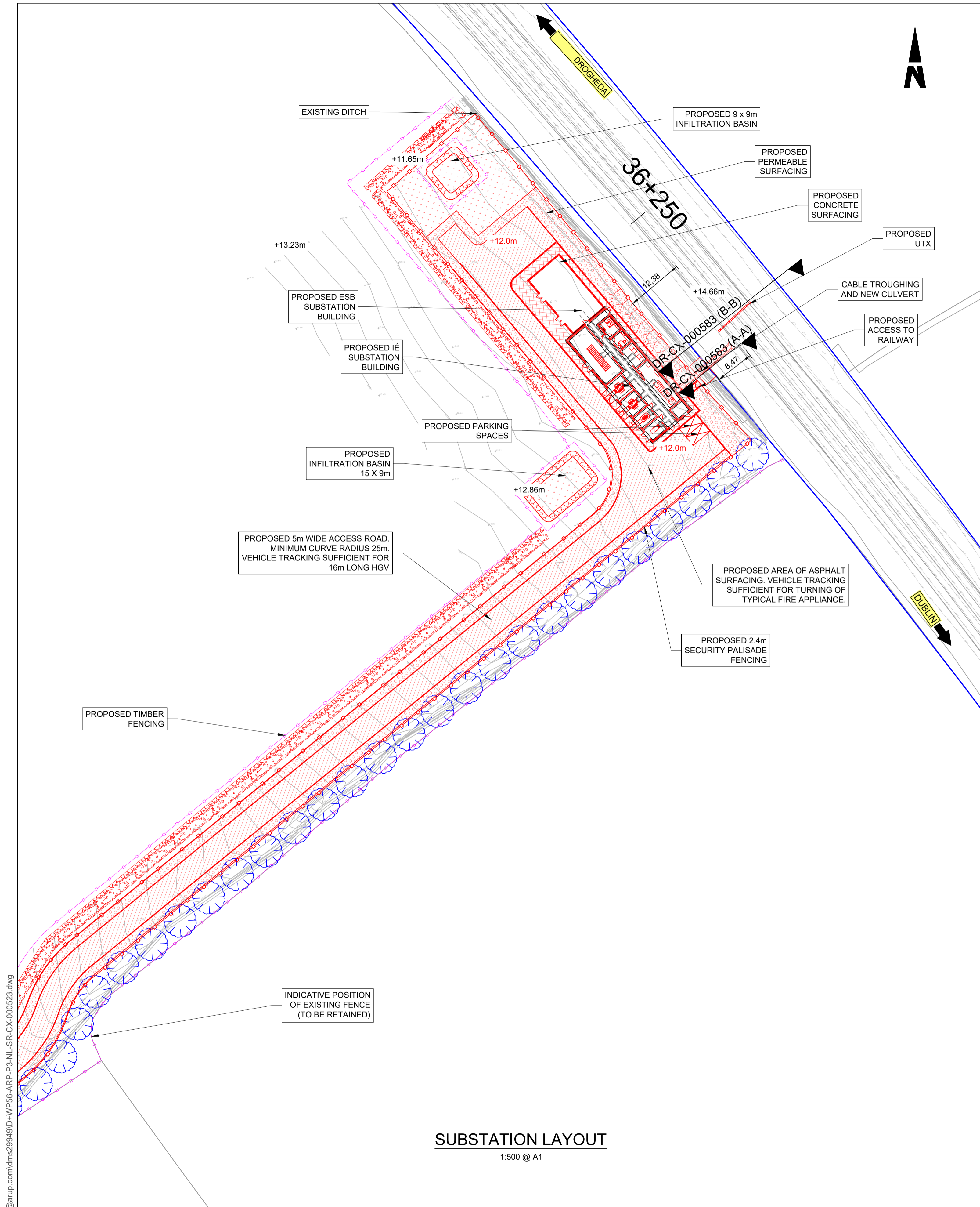
Drawing File Name
D+WP56-ARP-P3-NL-DR-CX-000522

Sheet Number
01 of 01

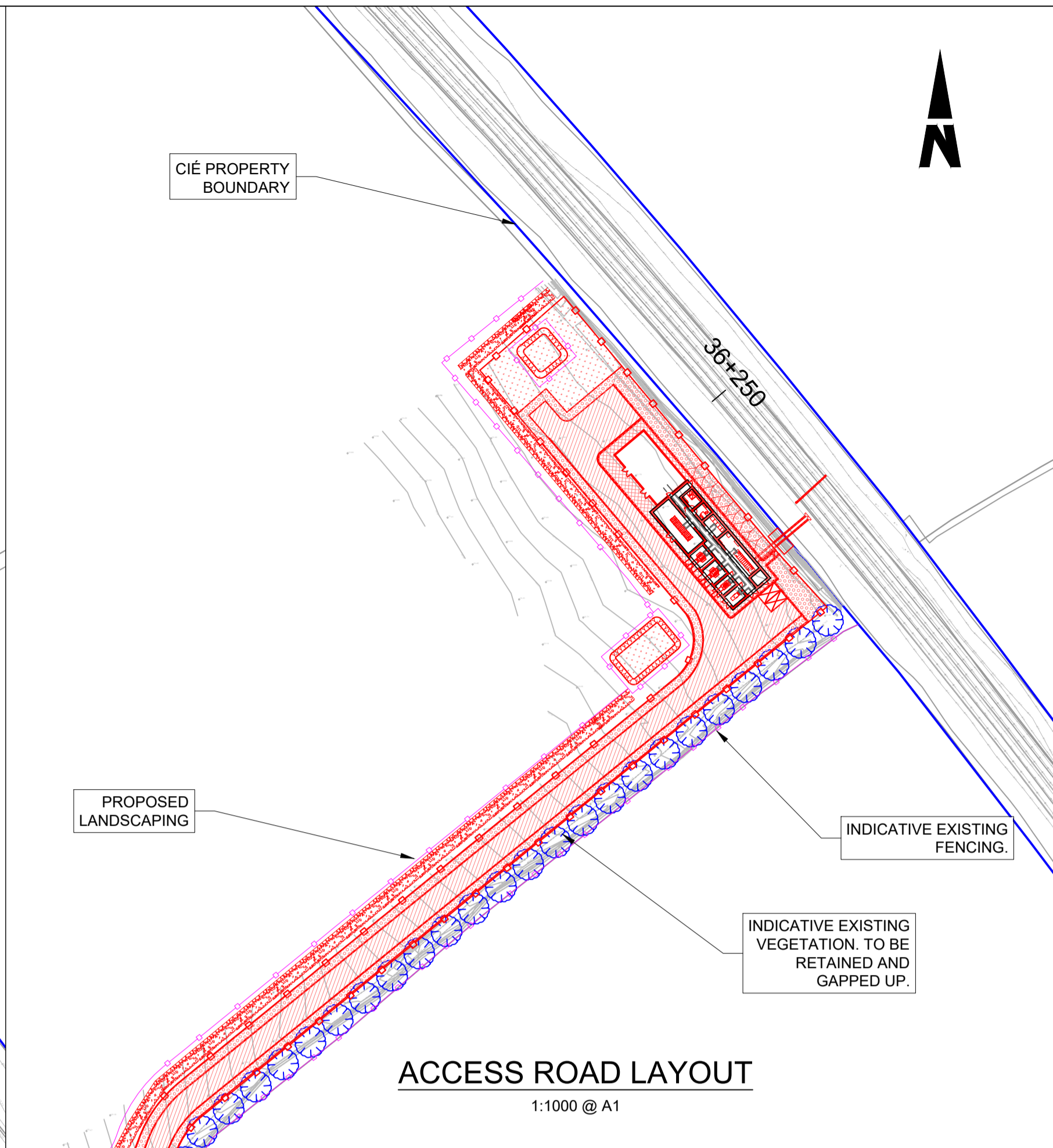
Status
S3

Rev
P03

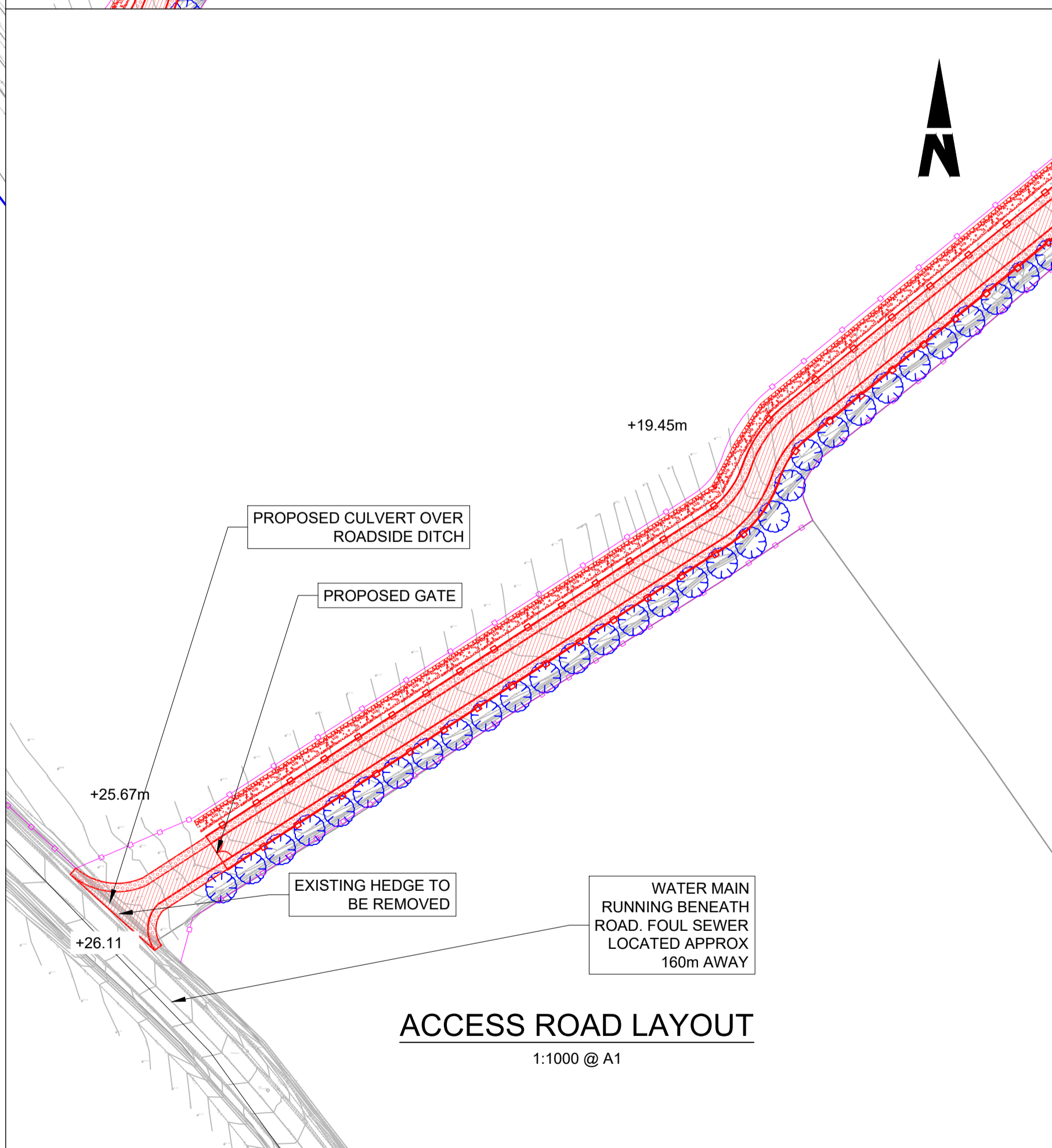
DO NOT SCALE USE FIGURED DIMENSIONS ONLY



SUBSTATION LAYOUT
1:500 @ A1



ACCESS ROAD LAYOUT
1:1000 @ A1



ACCESS ROAD LAYOUT
1:1000 @ A1

- NOTES**
- OSI TILE(S) USED: 2583-B & 2514-D
 - DO NOT SCALE FROM THIS DRAWING.
 - REFERENCE TO BE MADE TO THE TRACTION POWER STUDY D+WP56-ARP-P2-NL-RP-HV-000001 AND D+WP56-ARP-P2-NL-RP-GE-000155.
 - PROPOSED WORKS/REDLINE BOUNDARY TO BE CONFIRMED FOLLOWING COMPLETION OF SURVEYS. LOCATION OF PROPOSED INCOMING ESB CABLE TO BE CONFIRMED.
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 - THE CHAINAGE USED IS ACCORDING TO PERMANENT WAY DESIGN CHAINAGE. TO BE UPDATED TO OPERATIONAL CHAINAGE IN FURTHER PROJECT STAGES WHEN THE DESIGN IS FINISHED.
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 - THE DART+ COASTAL NORTH PROJECT IS POSITIONED ACCORDING TO THE IRISH TRANSVERSE MERCATOR (ITM) COORDINATE SYSTEM.
 - DRAWING TO BE READ IN CONJUNCTION WITH THE SUBSTATIONS HAZARD LOG D+WP56-ARP-P3-NL-HS-CX-000550.



KEY PLAN

LEGEND:

	EXISTING FENCING
	PROPOSED DEER PROOF TIMBER FENCING
	PROPOSED SECURITY PALISADE FENCING
	PROPOSED ASPHALT SURFACING
	PROPOSED CONCRETE SURFACING
	PROPOSED GRAVEL / OTHER POROUS SURFACING
	PROPOSED WILDFLOWER PLANTING
	PROPOSED LANDSCAPING
	MODIFIED /RETAINED EXISTING LANDSCAPING (INDICATIVE)
	CIÉ PROPERTY BOUNDARY
	EXISTING ELEMENTS
	ELEMENTS TO BE REMOVED
	PROPOSED LEVELS
	EXISTING LEVELS

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Rev	Date	Drn	Chk'd	App'd	Description
P01	21/10/2022	SF	EJ	CC	ISSUED FOR PRELIMINARY DESIGN
P02	08/02/2023	SF	EJ	CC	ISSUED FOR OUTLINE DESIGN FOLLOWING COMMENTS
P03	24/04/2023	SF	EJ	CC	AMENDMENTS FOLLOWING COMMENTS

Client: **Iarnród Éireann Irish Rail**

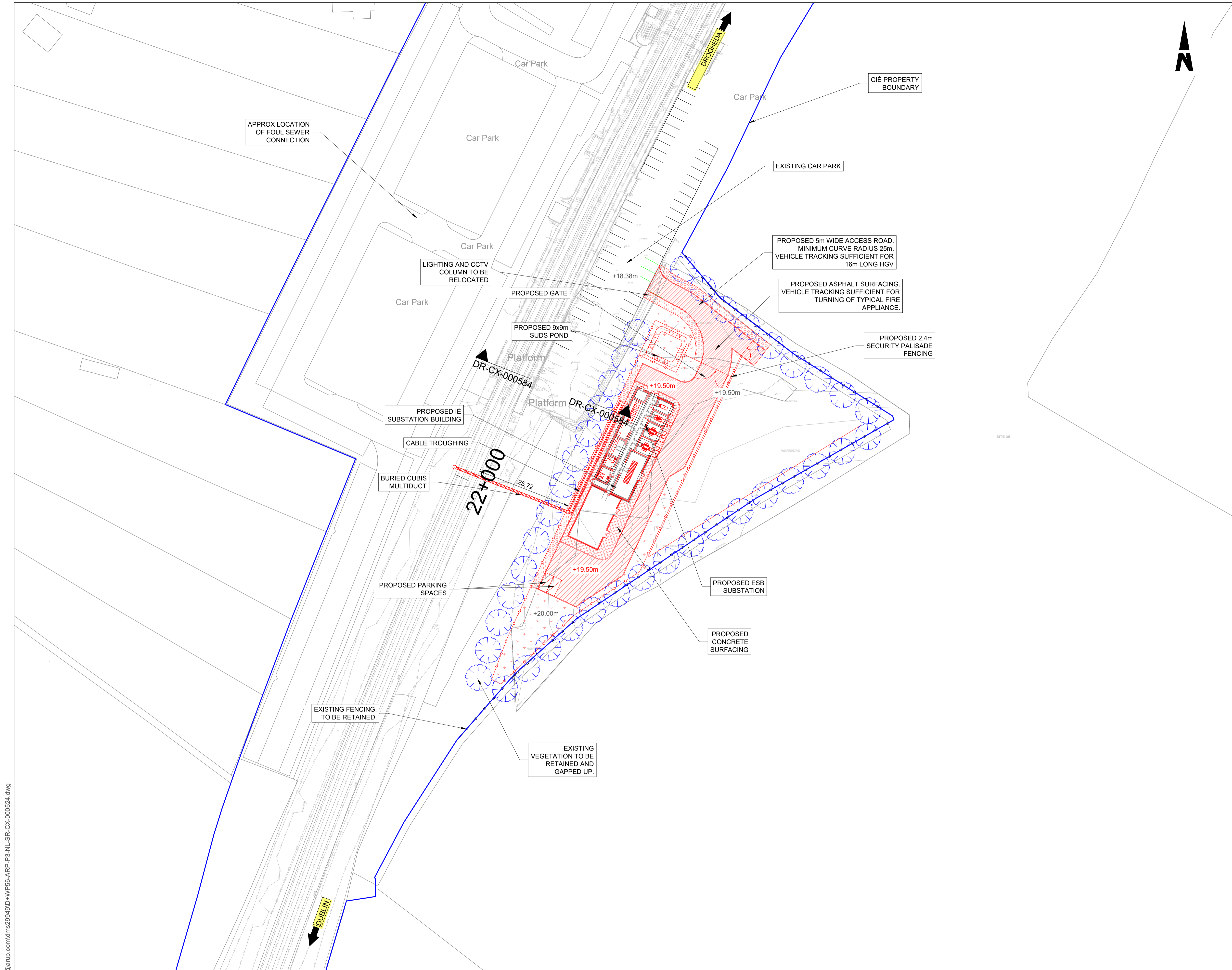
Engineering Designer: **ARUP**

Date: 24/04/2023 | Scale: SHOWN @ A1, SHOWN @ A3 | Drawn: SF | Checked: EJ | Approved: CC

Project Code: D+WP56 | Originator Code: ARP | QMS Code: 280275-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: SUBSTATIONS: BALBRIGGAN PRELIMINARY DESIGN			
Drawing File Name: D+WP56-ARP-P3-NL-DR-CX-000523	Sheet Number: 01 of 01	Status: S3	Rev: P03

DO NOT SCALE USE FIGURED DIMENSIONS ONLY



- NOTES**
- OSI TILE(S) USED: 2790-D
 - DO NOT SCALE FROM THIS DRAWING.
 - REFERENCE TO BE MADE TO THE TRACTION POWER STUDY D+WP56-ARP-P2-NL-RP-HV-000001 AND D+WP56-ARP-P2-NL-RP-GE-000155.
 - PROPOSED WORKS/REDLINE BOUNDARY TO BE CONFIRMED FOLLOWING COMPLETION OF SURVEYS. LOCATION OF PROPOSED INCOMING ESB CABLE TO BE CONFIRMED.
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 - DRAWING TO BE READ IN CONJUNCTION WITH THE SUBSTATIONS HAZARD LOG D+WP56-ARP-P3-NL-HS-CX-000550.



LEGEND:

	EXISTING FENCING
	PROPOSED DEER PROOF TIMBER FENCING
	PROPOSED SECURITY PALISADE FENCING
	PROPOSED ASPHALT SURFACING
	PROPOSED CONCRETE SURFACING
	PROPOSED GRAVEL / OTHER POROUS SURFACING
	PROPOSED WILD FLOWER PLANTING
	PROPOSED LANDSCAPING
	MODIFIED /RETAINED EXISTING LANDSCAPING (INDICATIVE)
	CIÉ PROPERTY BOUNDARY
	PROPOSED ELEMENTS
	EXISTING ELEMENTS
	ELEMENTS TO BE REMOVED
	PROPOSED LEVELS
	EXISTING LEVELS

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Rev	Date	Drn	Chk'd	App'd	Description
P01	21/10/2022	SF	EJ	CC	ISSUED FOR PRELIMINARY DESIGN
P02	08/02/2023	SF	EJ	CC	ISSUED FOR OUTLINE DESIGN FOLLOWING COMMENTS
P03	24/04/2023	SF	EJ	CC	AMENDMENTS FOLLOWING COMMENTS

Client: **Iarnród Éireann Irish Rail**

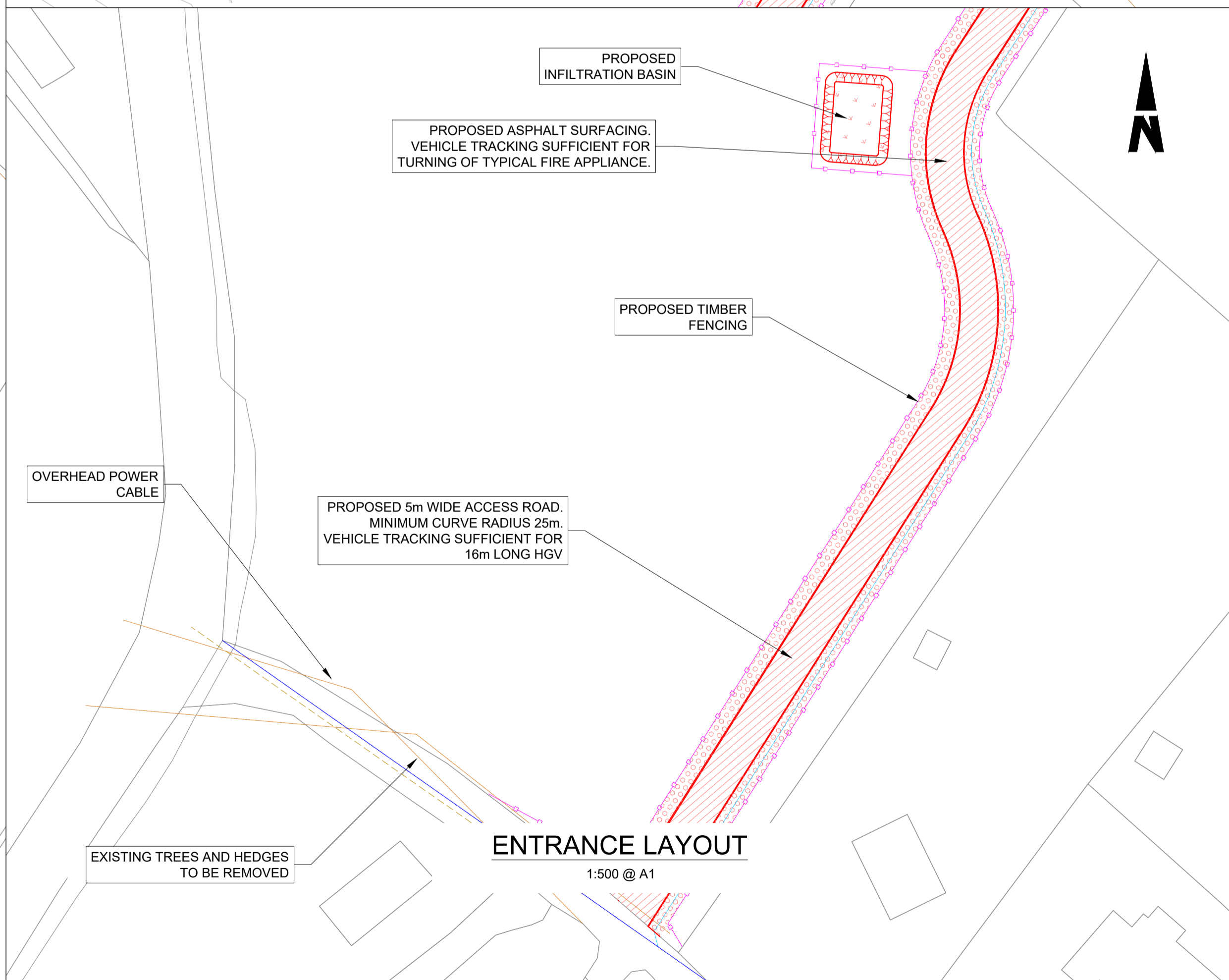
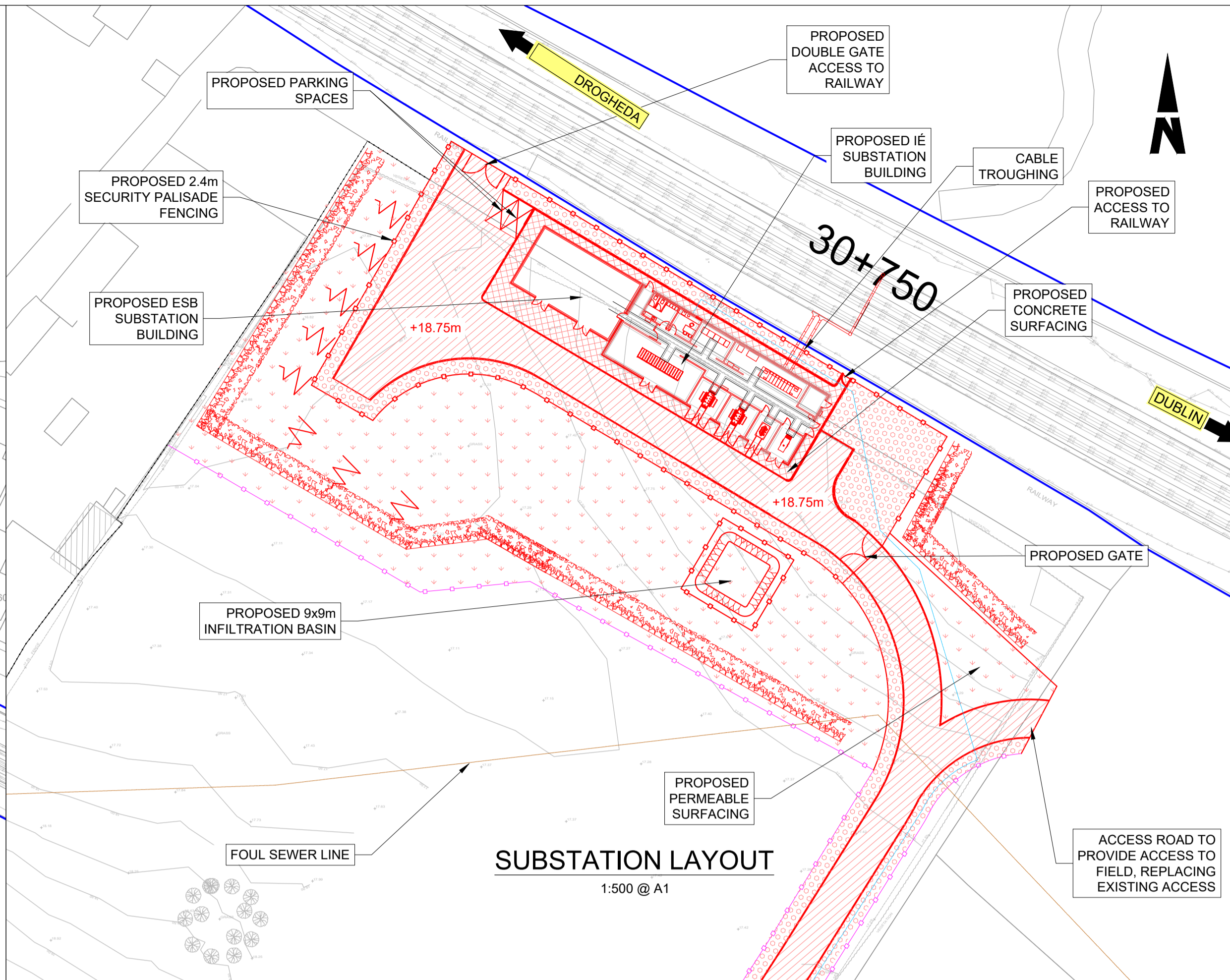
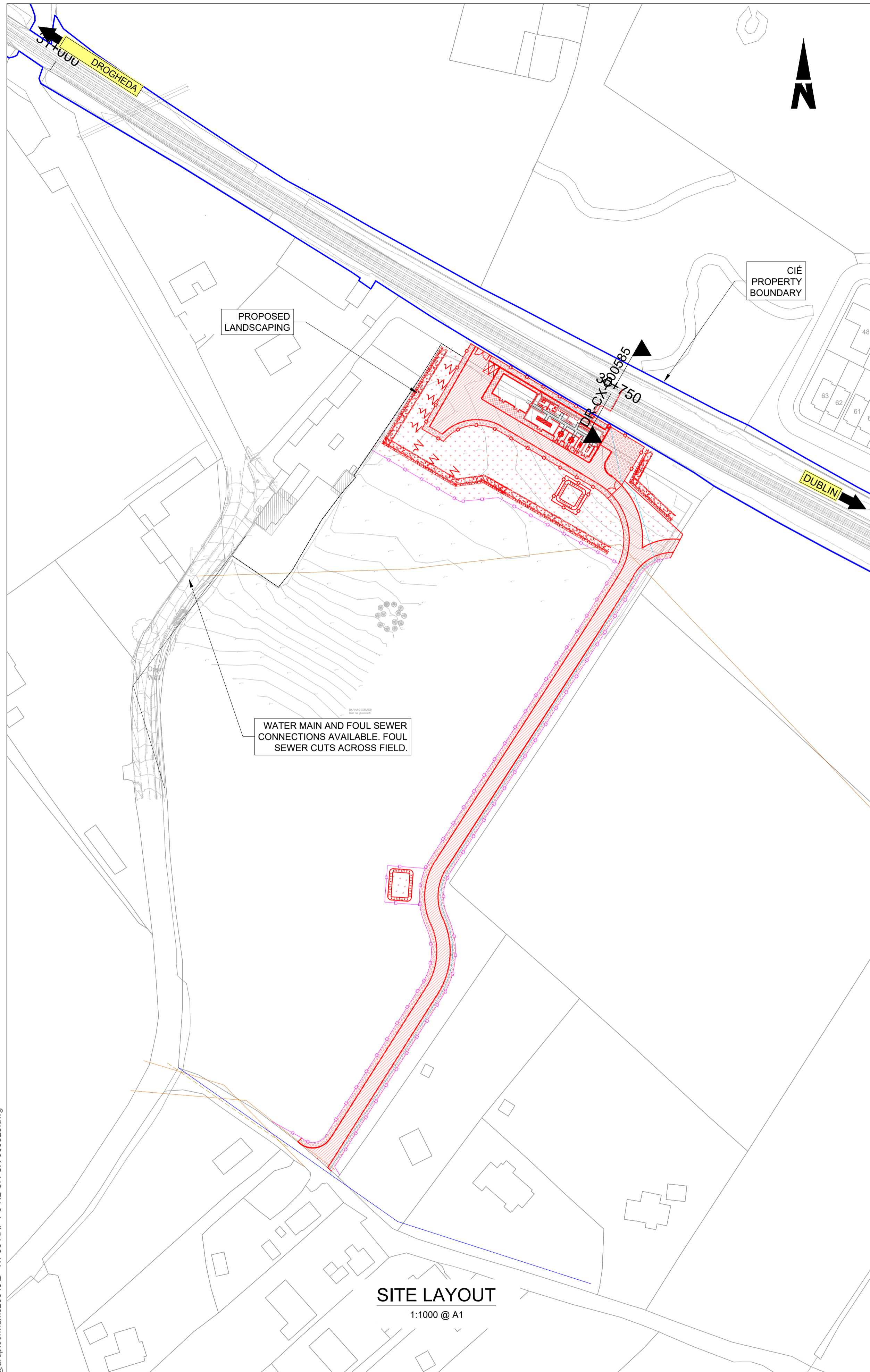
Engineering Designer: **ARUP**

Date	X	Scale	1:500 @ A1 1:1000 @ A3	Drawn	SF	Checked	EJ	Approved	X
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Project Code: D+WP56 | Originator Code: ARP | QMS Code: 280275-00

Project Title: DART+ COASTAL NORTH			
Drawing Title: SUBSTATIONS: RUSH AND LUSK PRELIMINARY DESIGN			
Drawing File Name: D+WP56-ARP-P3-NL-DR-CX-000524	Sheet Number: 01 of 01	Status: S3	Rev: P03

DO NOT SCALE USE FIGURED DIMENSIONS ONLY



- NOTES**
- OSI TILE(S) USED: 2651-B
 - DO NOT SCALE FROM THIS DRAWING.
 - REFERENCE TO BE MADE TO THE TRACTION POWER STUDY D+WP56-ARP-P2-NL-RP-HV-000001 AND D+WP56-ARP-P2-NL-RP-GE-000155.
 - PROPOSED WORKS/REDLINE BOUNDARY TO BE CONFIRMED FOLLOWING COMPLETION OF SURVEYS. LOCATION OF PROPOSED INCOMING ESB CABLE TO BE CONFIRMED.
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 - DRAWING TO BE READ IN CONJUNCTION WITH THE SUBSTATIONS HAZARD LOG D+WP56-ARP-P3-NL-HS-CX-000550.



LEGEND:

- EXISTING FENCING
- PROPOSED DEER PROOF TIMBER FENCING
- PROPOSED SECURITY PALISADE FENCING
- PROPOSED ASPHALT SURFACING
- PROPOSED CONCRETE SURFACING
- PROPOSED GRAVEL / OTHER POROUS SURFACING
- PROPOSED WILD FLOWER PLANTING
- PROPOSED LANDSCAPING
- MODIFIED /RETAINED EXISTING LANDSCAPING (INDICATIVE)
- CIÉ PROPERTY BOUNDARY
- PROPOSED ELEMENTS
- EXISTING ELEMENTS
- ELEMENTS TO BE REMOVED
- PROPOSED LEVELS (+16.0m)
- EXISTING LEVELS (+16.0m)

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Rev	Date	Drm	Chk'd	App'd	Description
P01	21/10/2022	SF	EJ	CC	ISSUED FOR PRELIMINARY DESIGN
P02	08/02/2023	SF	EJ	CC	ISSUED FOR OUTLINE DESIGN FOLLOWING COMMENTS
P03	24/04/2023	SF	EJ	CC	AMENDMENTS FOLLOWING COMMENTS

Client: **Iarnród Éireann Irish Rail**

Engineering Designer: **ARUP**

Date: 23/03/2023 | Scale: SHOWN @ A1, SHOWN @ A3

Project Code: D+WP56 | Originator Code: ARP | QMS Code: 280275-00

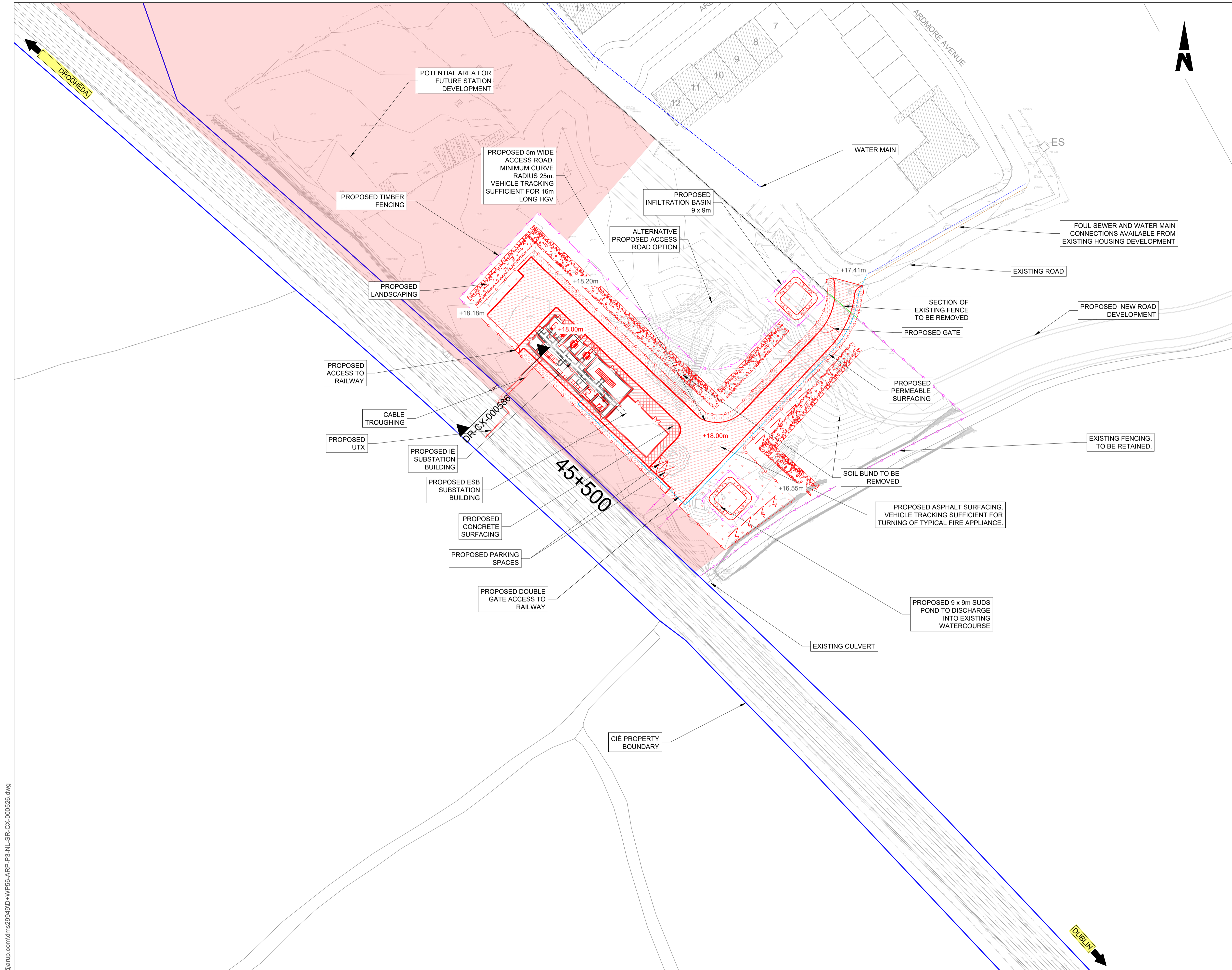
Drawn: SF | Checked: EJ | Approved: CC

Project Title: **DART+ COASTAL NORTH**

Drawing Title: **SUBSTATIONS: NORTH SKERRIES PRELIMINARY DESIGN**

Drawing File Name: D+WP56-ARP-P3-NL-DR-CX-000525 | Sheet Number: 01 of 01 | Status: S3 | Rev: P03

DO NOT SCALE USE FIGURED DIMENSIONS ONLY



- NOTES**
- OSI TILE(S) USED: 2383-B
 - DO NOT SCALE FROM THIS DRAWING.
 - REFERENCE TO BE MADE TO THE TRACTION POWER STUDY D+WP56-ARP-P2-NL-RP-HV-000001 AND D+WP56-ARP-P2-NL-RP-GE-000155.
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LEGEND:

	EXISTING FENCING
	PROPOSED DEER PROOF TIMBER FENCING
	PROPOSED SECURITY PALISADE FENCING
	PROPOSED ASPHALT SURFACING
	PROPOSED CONCRETE SURFACING
	PROPOSED GRAVEL / OTHER POROUS SURFACING
	PROPOSED WILD FLOWER PLANTING
	PROPOSED LANDSCAPING
	MODIFIED /RETAINED EXISTING LANDSCAPING (INDICATIVE)
	CIÉ PROPERTY BOUNDARY
	PROPOSED ELEMENTS
	EXISTING ELEMENTS
	ELEMENTS TO BE REMOVED
	PROPOSED LEVELS
	EXISTING LEVELS

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Rev	Date	Drn	Chk'd	App'd	Description
P01	21/10/2022	SF	EJ	CC	ISSUED FOR PRELIMINARY DESIGN
P02	08/02/2023	SF	EJ	CC	ISSUED FOR OUTLINE DESIGN FOLLOWING COMMENTS
P03	24/04/2023	SF	EJ	CC	AMENDMENTS FOLLOWING COMMENTS

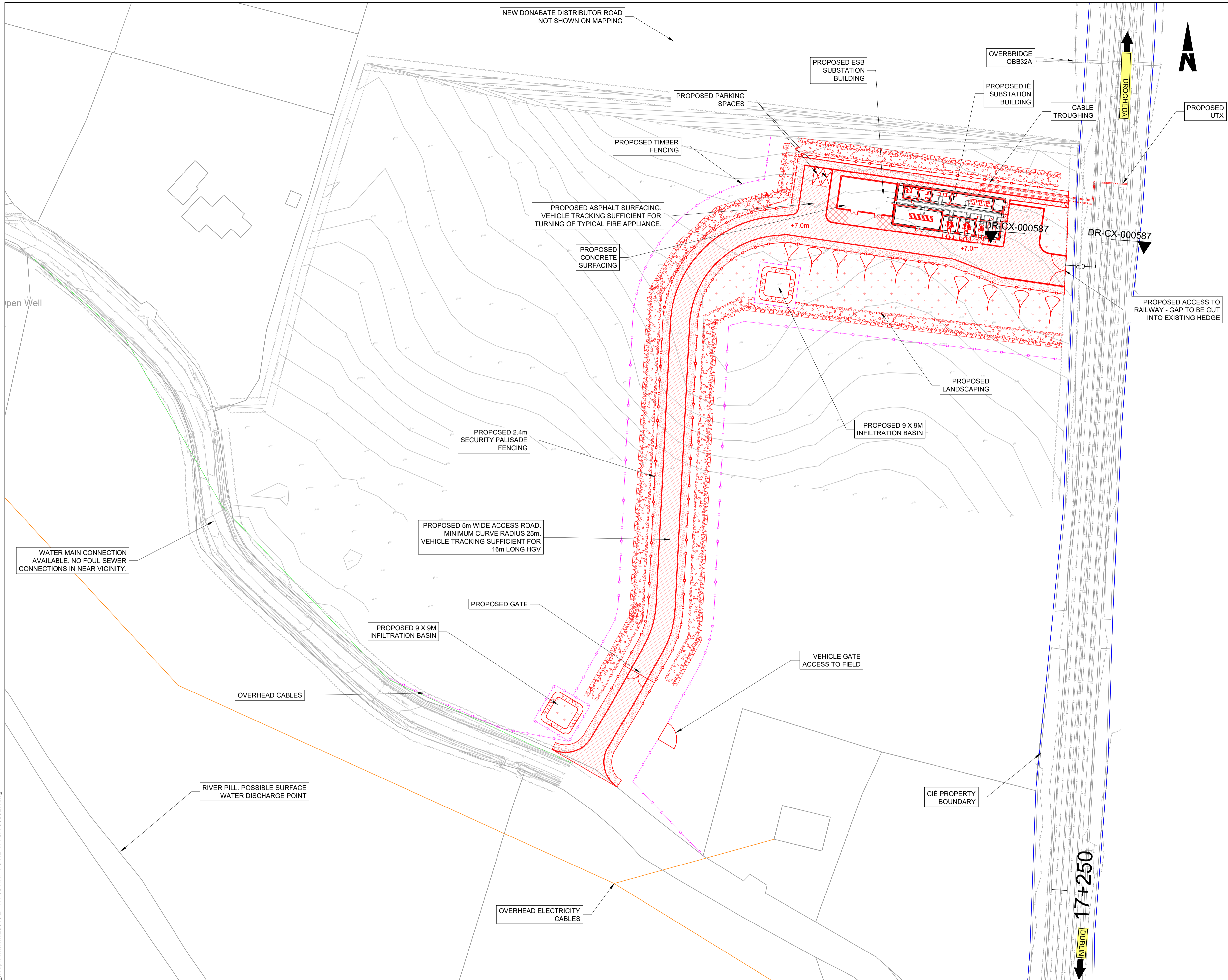
Client: **Iarnród Éireann Irish Rail**

Engineering Designer: **ARUP**

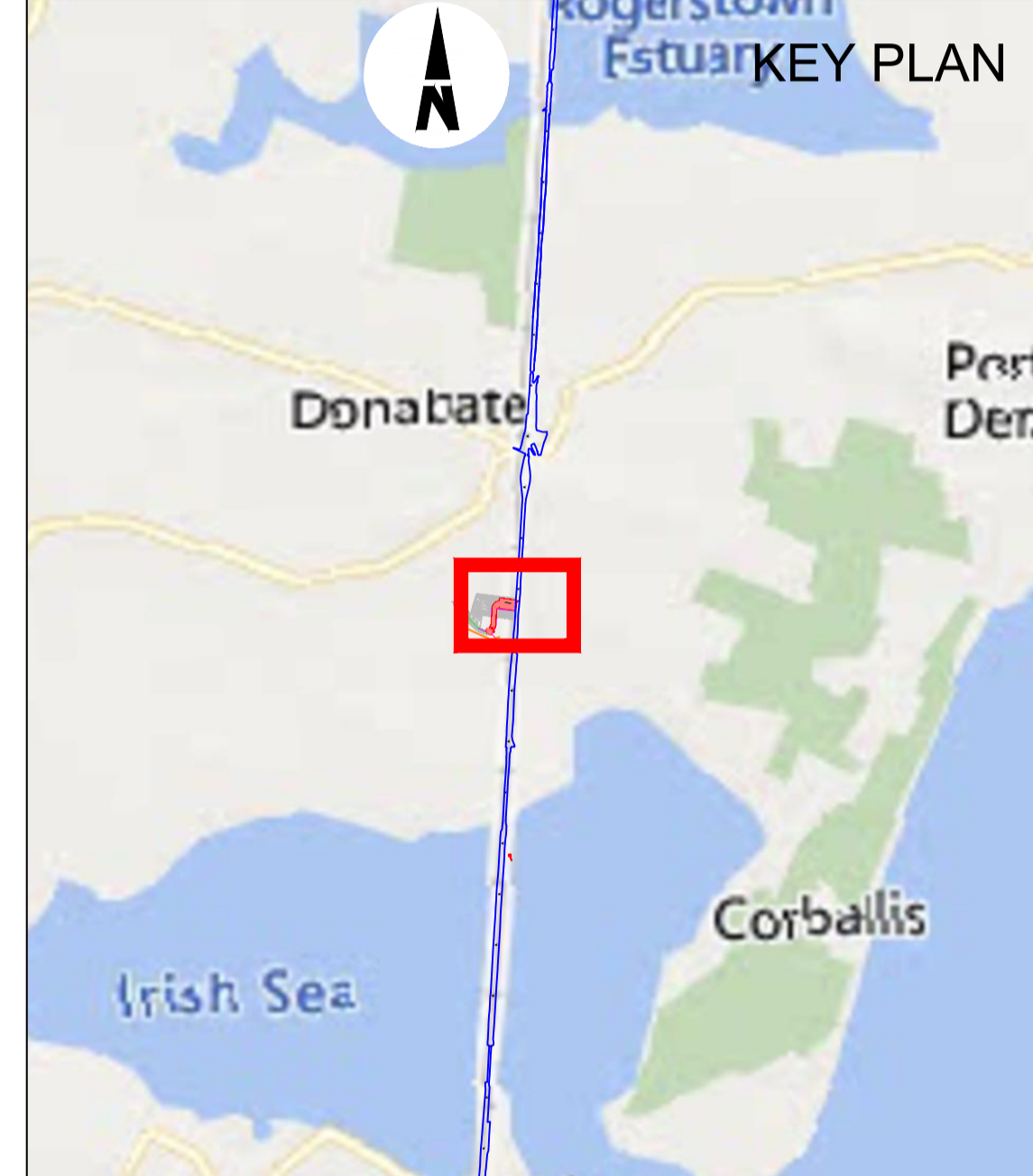
Date	X	Scale	1:500 @ A1 1:1000 @ A3	Drawn	SF	Checked	EJ	Approved	X
Project Code	D+WP56	Originator Code	ARP	QMS Code	280275-00				

Project Title: DART+ COASTAL NORTH			
Drawing Title: SUBSTATIONS: BETTYSTOWN PRELIMINARY DESIGN			
Drawing File Name: D+WP56-ARP-P3-NL-DR-CX-000526	Sheet Number: 01 of 01	Status: S3	Rev: P03

DO NOT SCALE USE FIGURED DIMENSIONS ONLY



- NOTES**
- OSI TILE(S) USED: 2926-B
 - DO NOT SCALE FROM THIS DRAWING.
 - REFERENCE TO BE MADE TO THE TRACTION POWER STUDY D+WP56-ARP-P2-NL-RP-HV-000001 AND D+WP56-ARP-P2-NL-RP-GE-000155.
 - PROPOSED WORKS/REDLINE BOUNDARY TO BE CONFIRMED FOLLOWING COMPLETION OF SURVEYS. LOCATION OF PROPOSED INCOMING ESB CABLE TO BE CONFIRMED.
 - LOCATION OF ALL BURIED SERVICES TO BE CONFIRMED PRIOR TO CONSTRUCTION. ANY DISCREPANCIES TO BE HIGHLIGHTED TO THE DESIGN ENGINEER.
 - ALL DIMENSIONS ARE IN METRES, UNLESS OTHERWISE STATED.
 - ALL CHAINAGES ARE IN KILOMETRES. (36+250 = 36.25km)
 - FINAL DIMENSIONS AND LEVELS TO BE DEVELOPED IN DETAILED DESIGN.
 - DETAILED DESIGNER/CONTRACTOR TO CHECK ALL DIMENSIONS AND REPORT AND DEVELOP ANY OMISSION OR ERROR PRIOR TO INSTALLATION. SUBSTATIONS SHOWN ARE FOR PUBLIC CONSULTATION. REFERENCE DESIGN AND RAILWAY ORDER PURPOSES ONLY.
 - DRAWING TO BE PRINTED IN COLOUR.
 - THE CHAINAGE USED IS ACCORDING TO PERMANENT WAY DESIGN CHAINAGE. TO BE UPDATED TO OPERATIONAL CHAINAGE IN FURTHER PROJECT STAGES WHEN THE DESIGN IS FINISHED.
 - LIGHTING AND CCTV TO BE PROVIDED.
 - ALL LEVELS ARE IN METRES ORDNANCE DATUM (mOD) UNLESS OTHERWISE STATED.
 - THE DART+ COASTAL NORTH PROJECT IS POSITIONED ACCORDING TO THE IRISH TRANSVERSE MERCATOR (ITM) COORDINATE SYSTEM.
 - DRAWING TO BE READ IN CONJUNCTION WITH THE SUBSTATIONS HAZARD LOG D+WP56-ARP-P3-NL-HS-CX-000550.



LEGEND:

	EXISTING FENCING
	PROPOSED DEER PROOF TIMBER FENCING
	PROPOSED SECURITY PALISADE FENCING
	PROPOSED ASPHALT SURFACING
	PROPOSED CONCRETE SURFACING
	PROPOSED GRAVEL / OTHER POROUS SURFACING
	PROPOSED WILD FLOWER PLANTING
	PROPOSED LANDSCAPING
	MODIFIED /RETAINED EXISTING LANDSCAPING (INDICATIVE)
	CIÉ PROPERTY BOUNDARY
	PROPOSED ELEMENTS
	EXISTING ELEMENTS
	ELEMENTS TO BE REMOVED
	PROPOSED LEVELS
	EXISTING LEVELS

WATER MAIN CONNECTION AVAILABLE. NO FOUL SEWER CONNECTIONS IN NEAR VICINITY.

RIVER PILL. POSSIBLE SURFACE WATER DISCHARGE POINT

PROPOSED GATE

VEHICLE GATE ACCESS TO FIELD

CIÉ PROPERTY BOUNDARY

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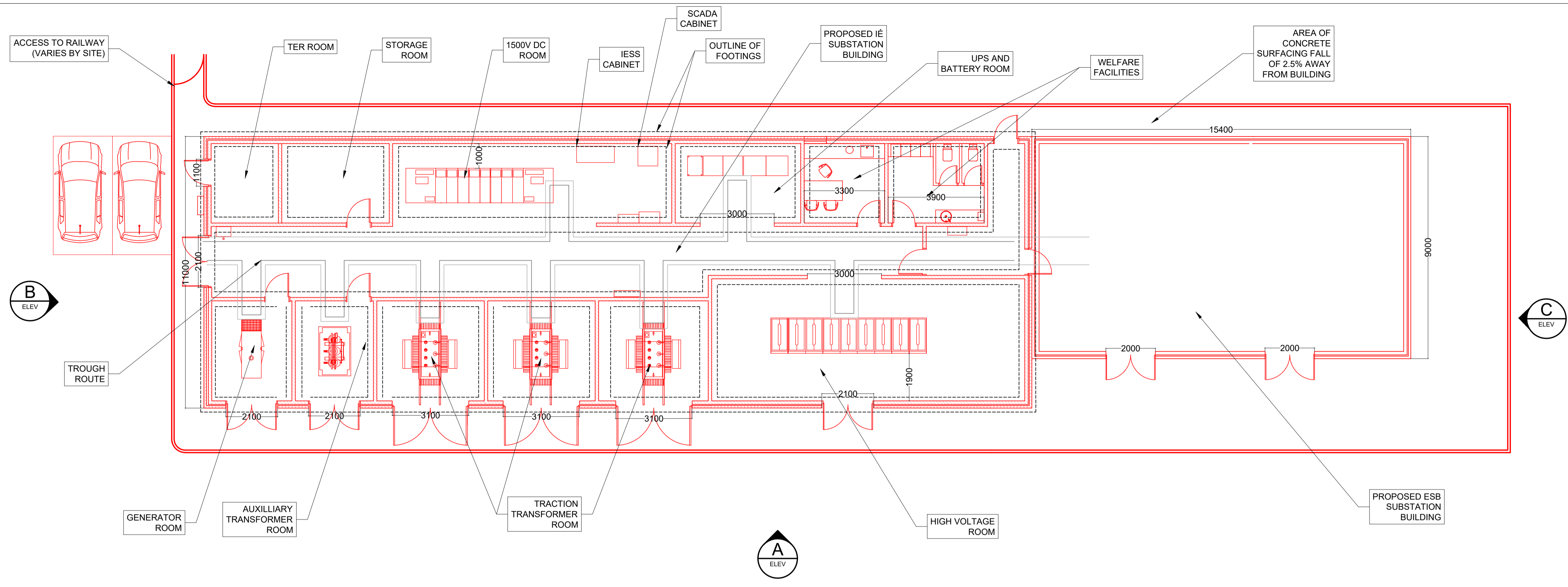
Rev	Date	Drn	Chk'd	App'd	Description
P01	21/10/2022	SF	EJ	CC	ISSUED FOR PRELIMINARY DESIGN
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Client Iarnród Éireann Irish Rail		Engineering Designer ARUP		
Date 24/04/2023	Scale 1:500 @ A1 1:1000 @ A3	Drawn SF	Checked EJ	Approved CC
Project Code D+WP56	Originator Code ARP	QMS Code 280275-00		

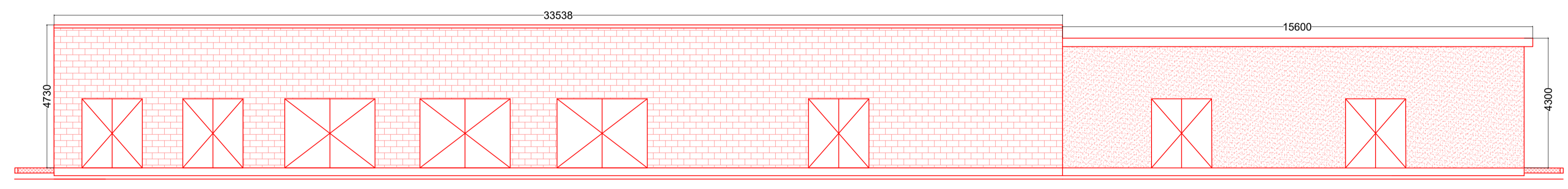
Project Title DART+ COASTAL NORTH			
Drawing Title SUBSTATIONS: DONABATE PRELIMINARY DESIGN			
Drawing File Name D+WP56-ARP-P3-NL-DR-CX-000527	Sheet Number 01 of 01	Status S3	Rev P03

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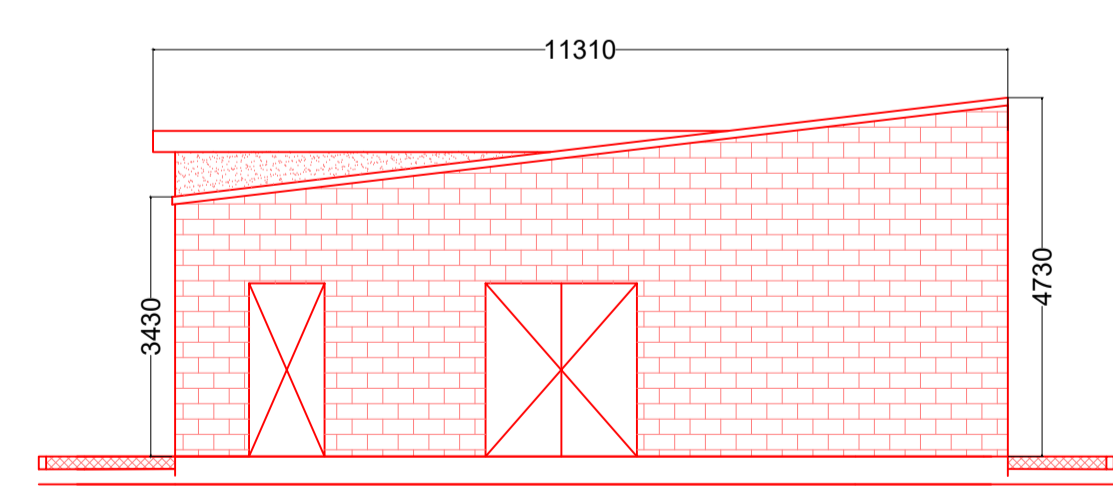
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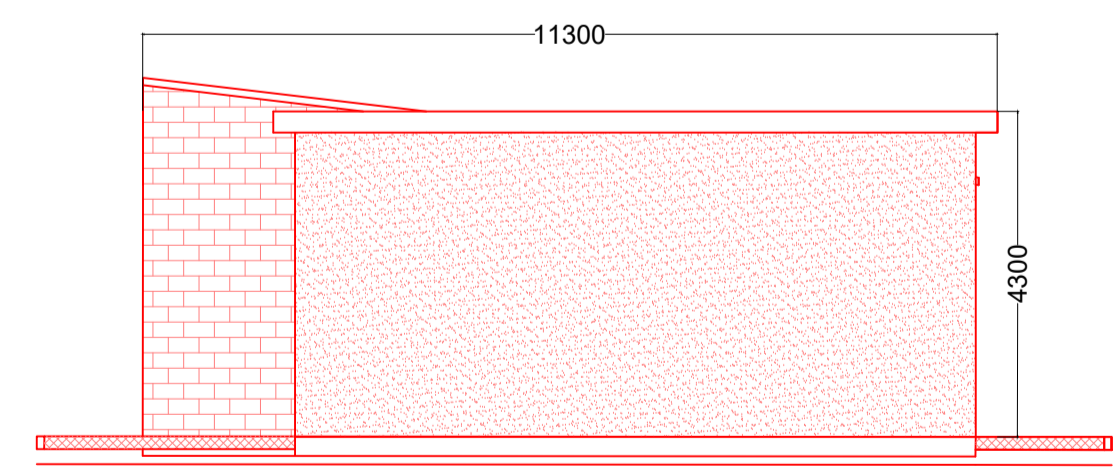
BUILDING PLAN
1:100 @ A1



ELEVATION A
1:100 @ A1



ELEVATION B
1:100 @ A1



ELEVATION C
1:100 @ A1

- NOTES**
1. REFER TO DRAWINGS D+WP56-ARP-P3-NL-DR-CX-000521 - 528 FOR SITE SPECIFIC DETAILS AND LAYOUTS.
 2. ALL MEASUREMENTS ARE IN MILLIMETRES UNLESS NOTED OTHERWISE
 3. ALL LEVELS ARE METRES ORDNANCE DATUM (mOD) UNLESS NOTED OTHERWISE
 4. THE DART+ COASTAL NORTH PROJECT IS POSITIONED ACCORDING TO THE IRISH TRANSVERSE MERCATOR (ITM) COORDINATE SYSTEM
 5. BUILDING ORIENTATION MAY BE HANDED WITH THE ESB SUBSTATION LOCATED ON OPPOSITE SIDE OF THE IE SUBSTATION BUILDING.
 6. PROVISION OF WELFARE FACILITIES VARY FROM SITE TO SITE DEPENDANT ON LOCALITY OF SEWERS
 7. ROOMS WITH A POTABLE WATER SUPPLY TO HAVE A FLOOR GULLY TYING IN TO THE FOUL DRAINAGE

C:\bms\arup-eur-pw-01\sam\frew@arup.com\dms28949\D+WP56-ARP-P3-NL-SR-CX-000595.dwg

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Client
Iarnród Éireann
Irish Rail

Engineering Designer
ARUP

Date	24/04/2023	Scale SHOWN @ A1 SHOWN @ A3	Drawn SF	Checked EJ	Approved CC
Project Code	D+WP56	Originator Code ARP	QMS Code	280275-00	

Project Title DART+ COASTAL NORTH			
Drawing Title DROGHEDA SUBSTATION LAYOUT DETAIL			
Drawing File Name D+WP56-ARP-P3-BE-DR-CX-000595	Sheet Number 01 of 01	Status S3	Rev P03

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