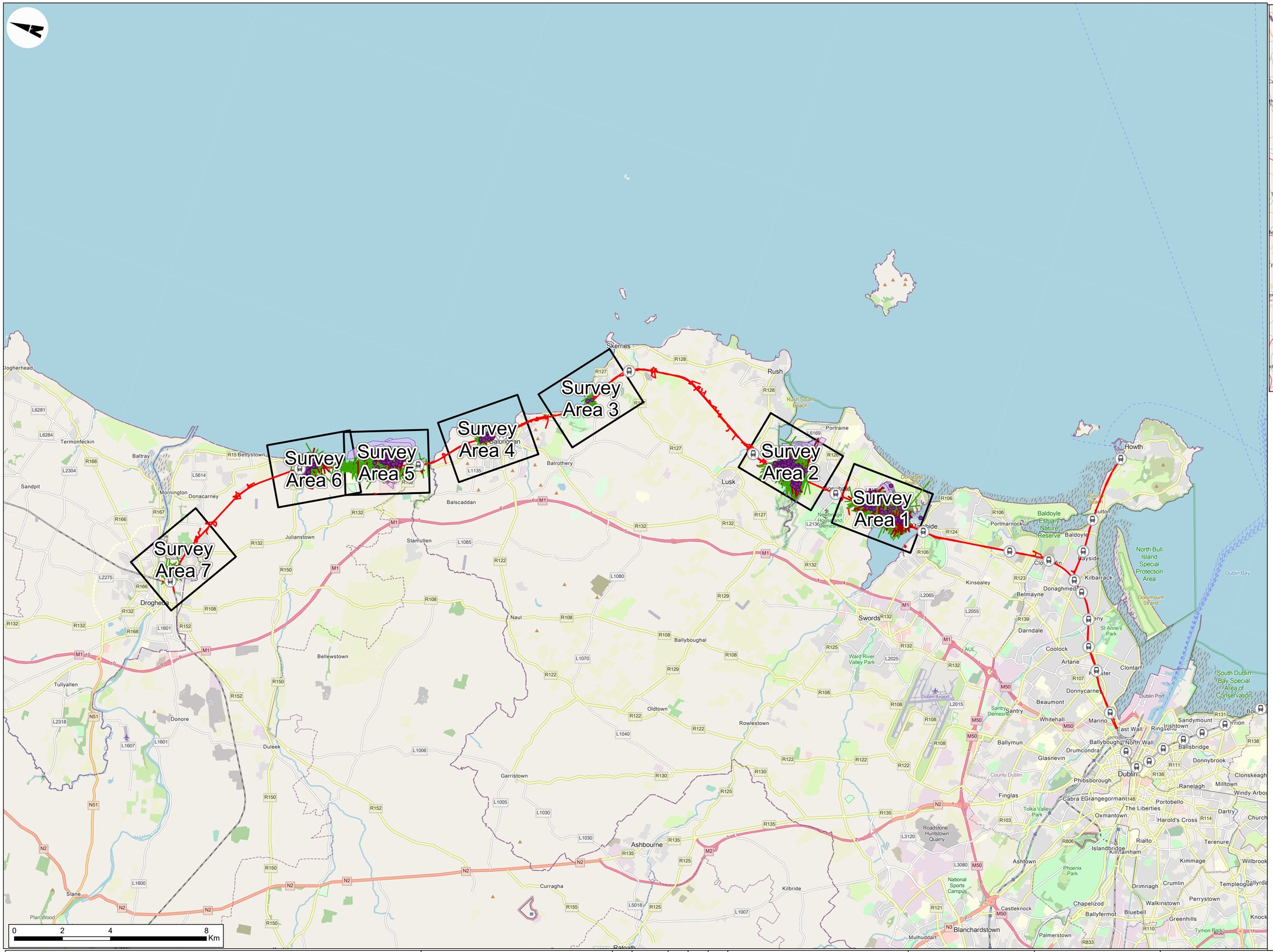

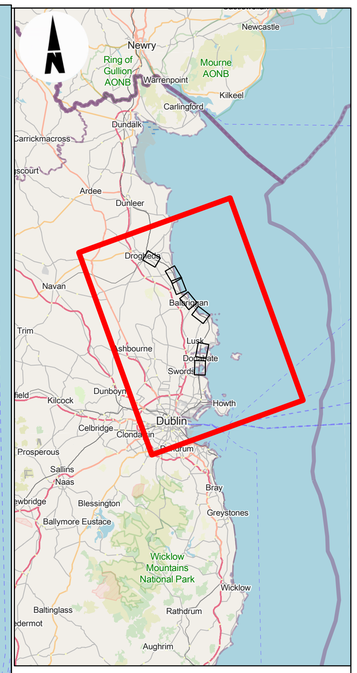

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY
- FLOCK COUNT
- FLOCK COUNT AREAS

FLIGHT LINES (HEIGHT)

- 0-10M
- >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:75000 @ A1 1:150000 @ A3	DM	SQ	COD

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

Project Title: **DART+ COASTAL NORTH**

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY OVERVIEW

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100091	1 of 85	S4	P02

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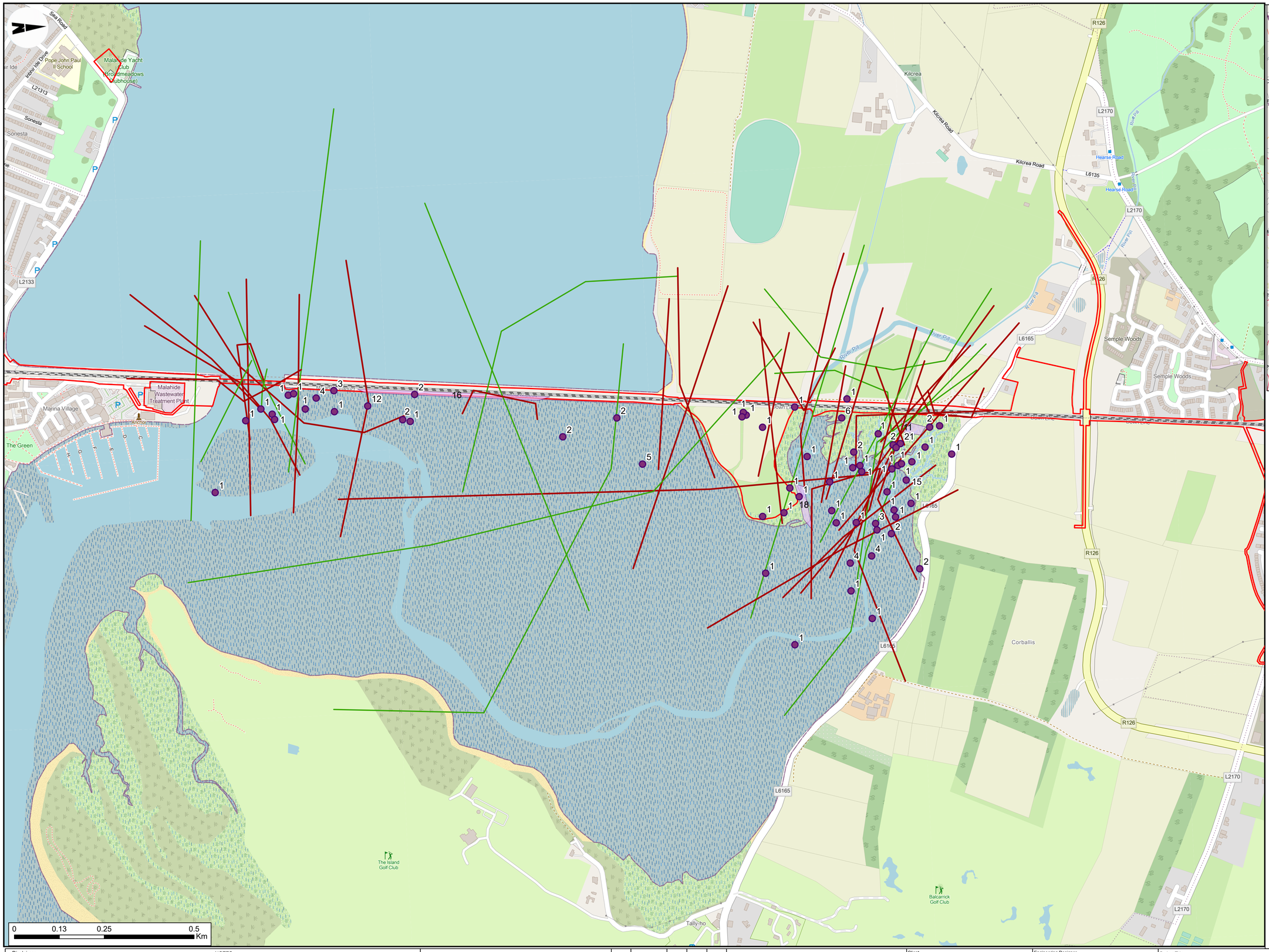

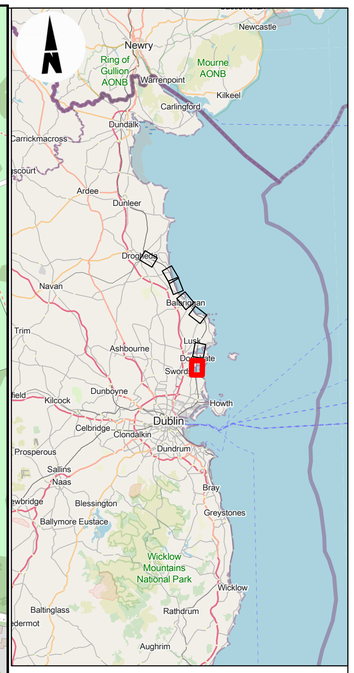

LEGEND

- DEVELOPMENT BOUNDARY
- FLOCK COUNT
- FLOCK COUNT AREAS

FLIGHT LINES (HEIGHT)

- 0-10M
- >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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Engineering Designer: ARUP

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 1

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100092	2 of 85	S4	P02

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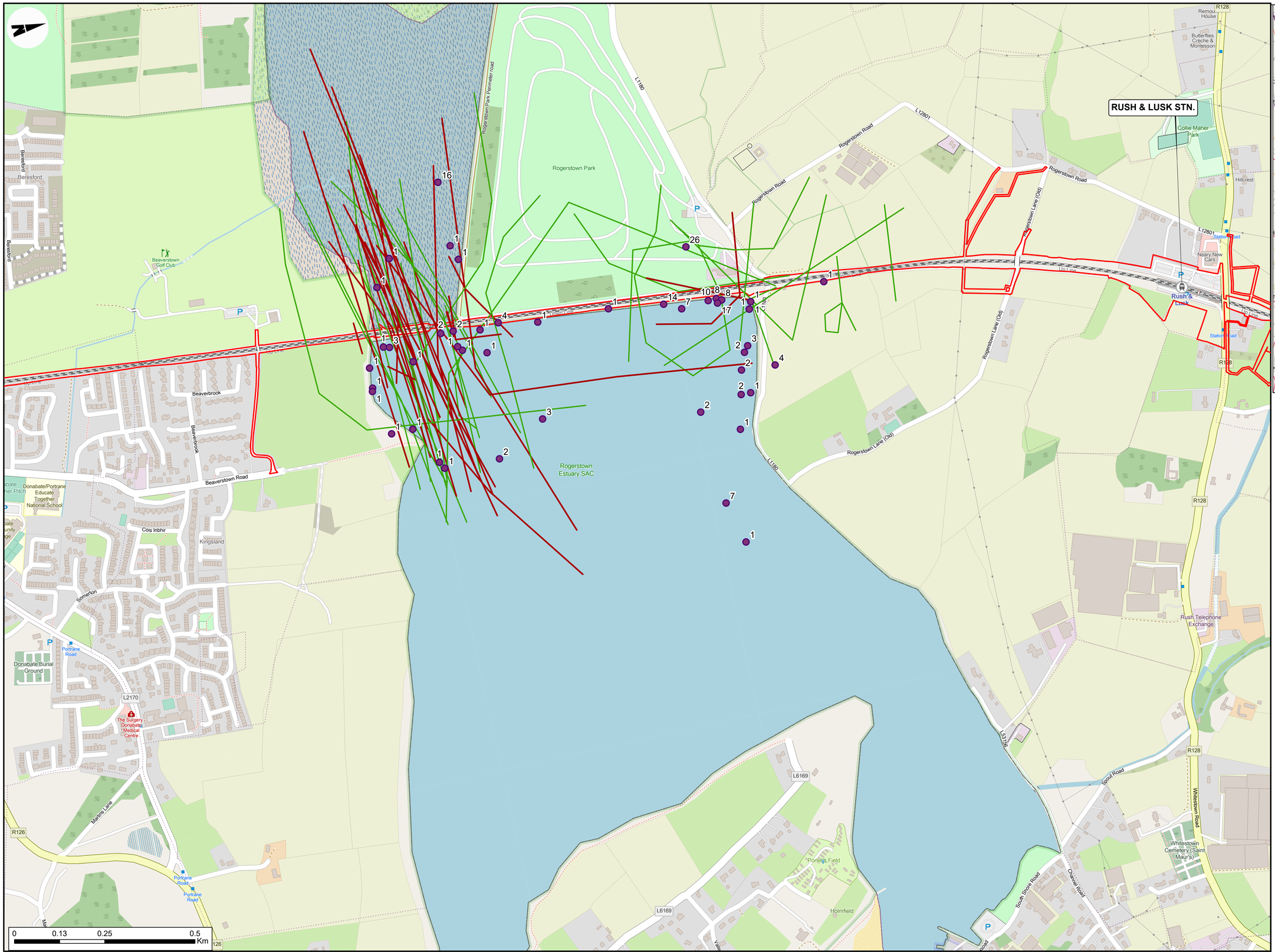

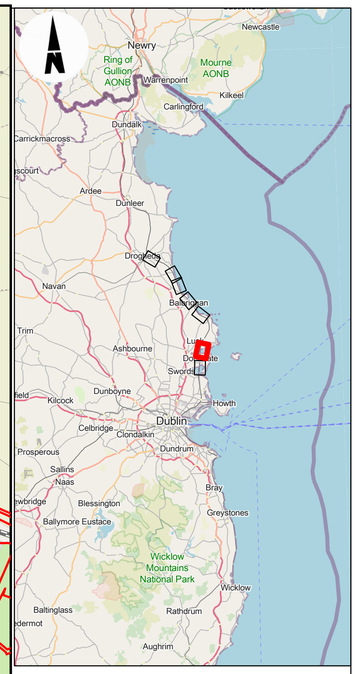

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY
- FLOCK COUNT

FLIGHT LINES (HEIGHT)

- 0-10M
- >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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Engineering Designer: ARUP

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 2

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100093	3 of 85	S4	P02

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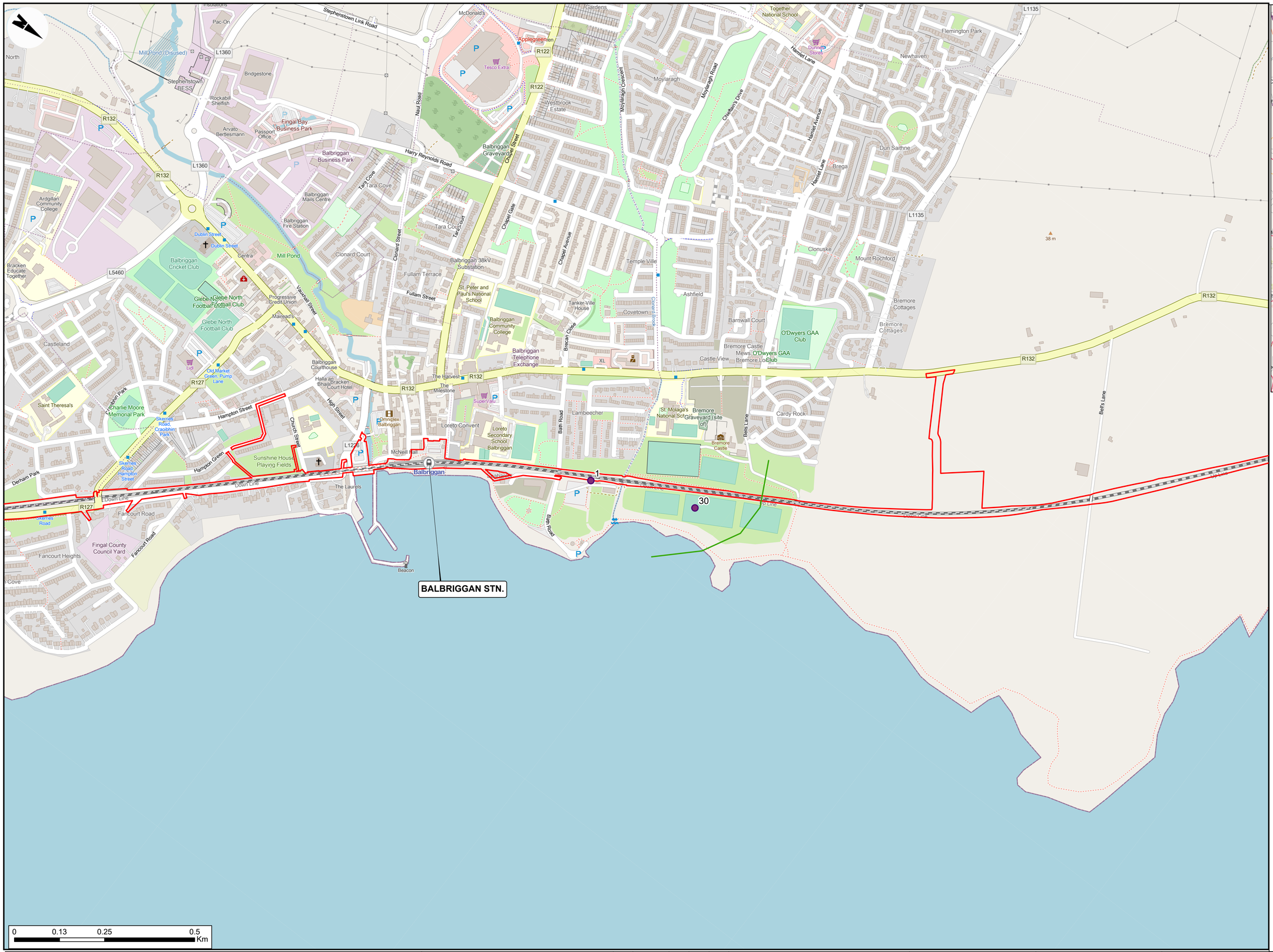

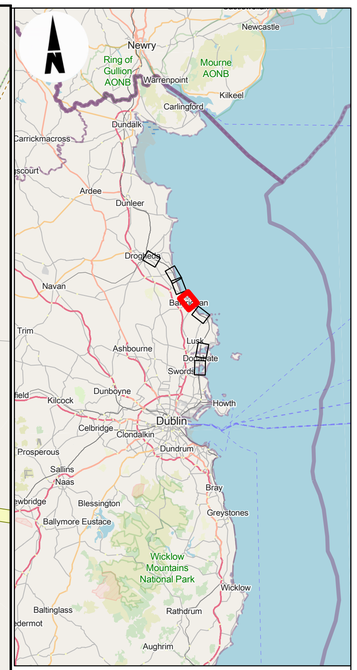

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY
- FLOCK COUNT

FLIGHT LINES (HEIGHT)

- >10M

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DART+ Coastal North
NTA Údarás Náisiúnta Iompair National Transport Authority
Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail
Engineering Designer: ARUP

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 4

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100094	4 of 85	S4	P02

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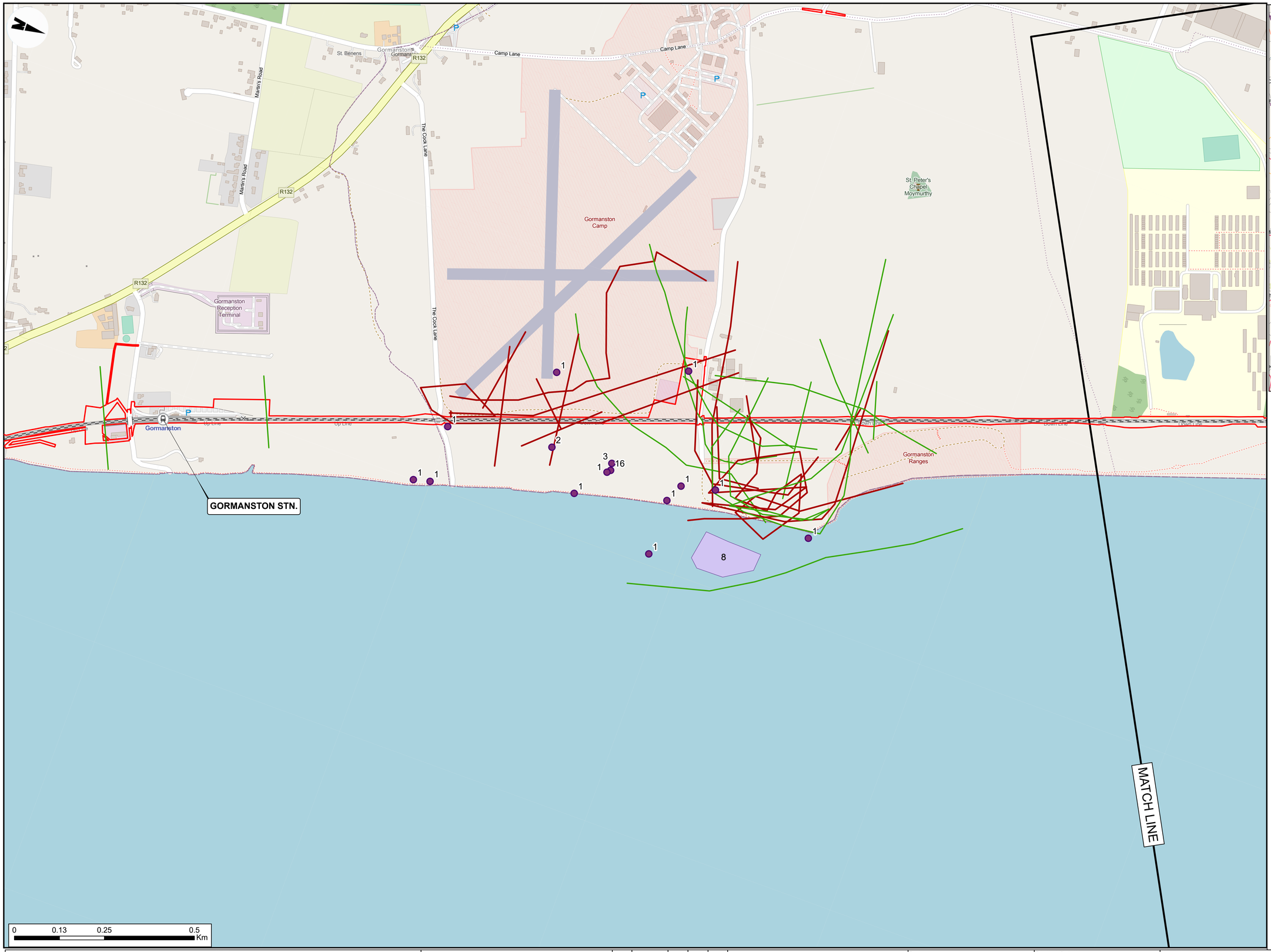

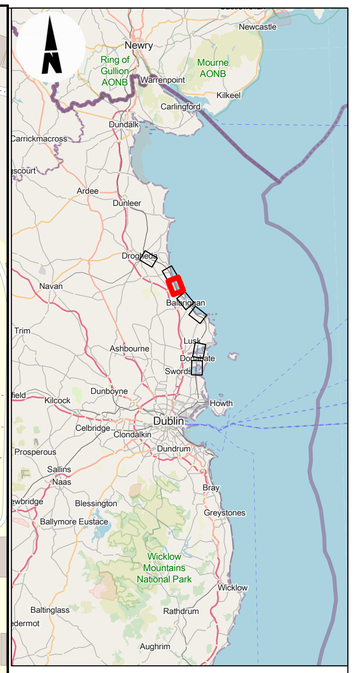

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY
- FLOCK COUNT
- FLOCK COUNT AREAS

FLIGHT LINES (HEIGHT)

- 0-10M
- >10M

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DART+ Coastal North
NTA Údarás Náisiúnta Iompair National Transport Authority
Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
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Client: Iarnród Éireann Irish Rail
Engineering Designer: ARUP

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 5

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100095	5 of 85	S4	P02

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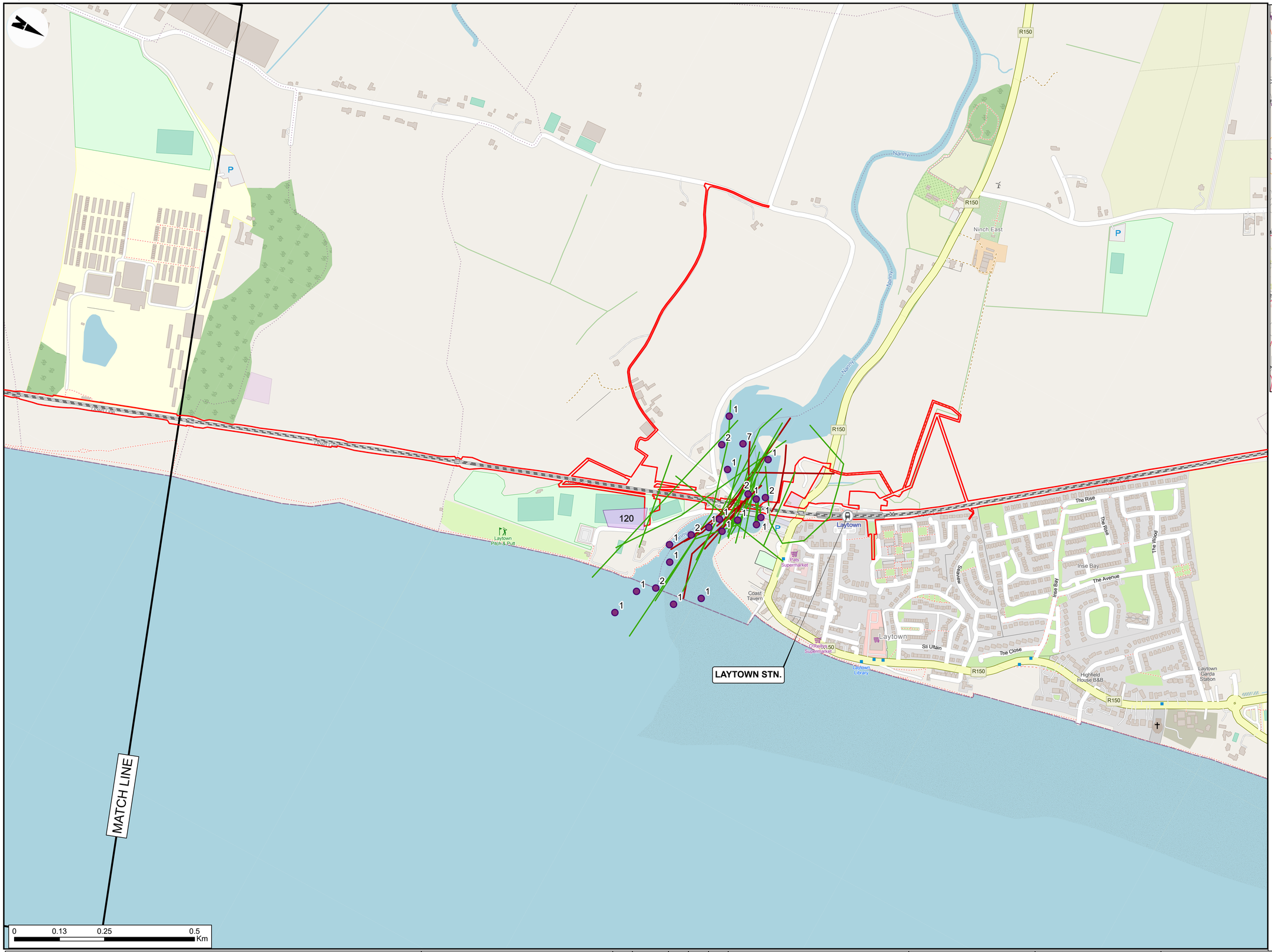

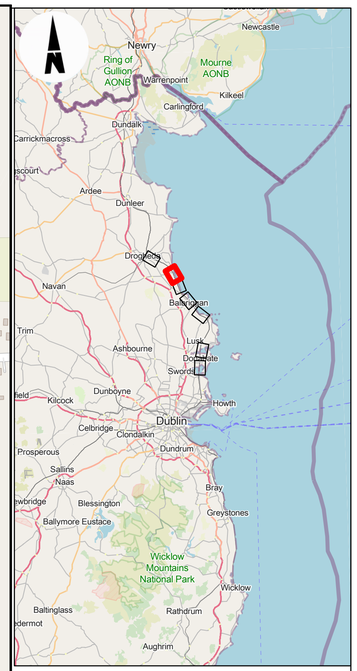

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY
- FLOCK COUNT
- FLOCK COUNT AREAS

FLIGHT LINES (HEIGHT)

- 0-10M
- >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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Engineering Designer: ARUP

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

Project Title: **DART+ COASTAL NORTH**

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 6

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100096	6 of 85	S4	P02

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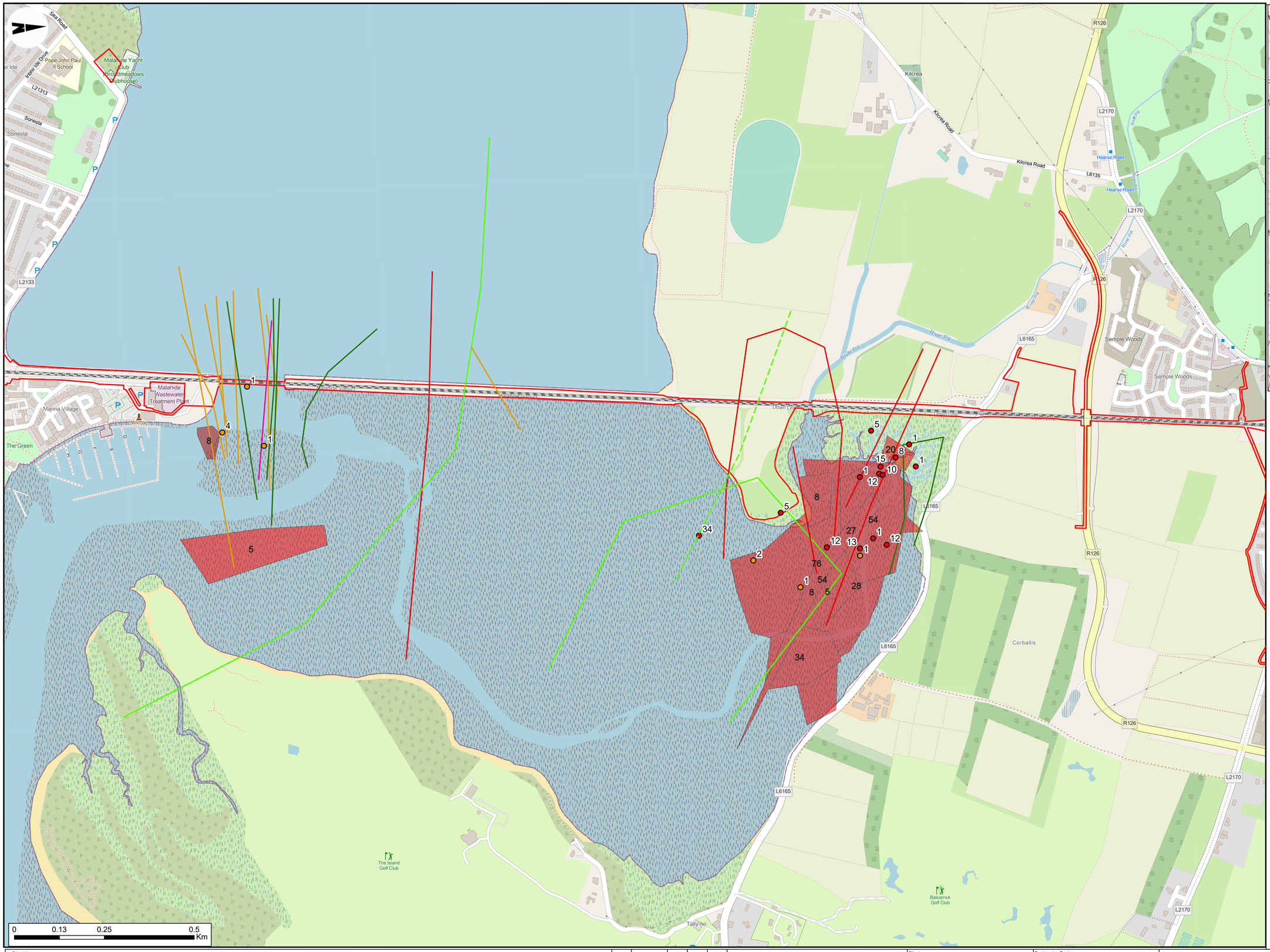

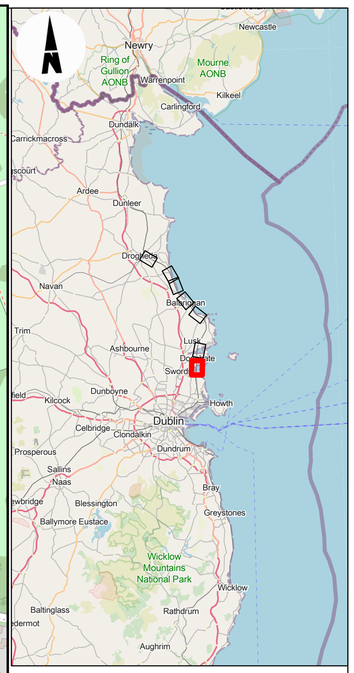

LEGEND

- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BAR-TAILED GODWIT
- COMMON GULL

FLOCK COUNT AREAS
- BAR-TAILED GODWIT
- COMMON GULL

FLIGHT LINES (HEIGHT)
- BAR-TAILED GODWIT: >10M
- COMMON GULL: 0-10M
- COMMON GULL: >10M
- COMMON TERN: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

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D+WP56	ARP	279933-00

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 1

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100097	7 of 85	S4	P02

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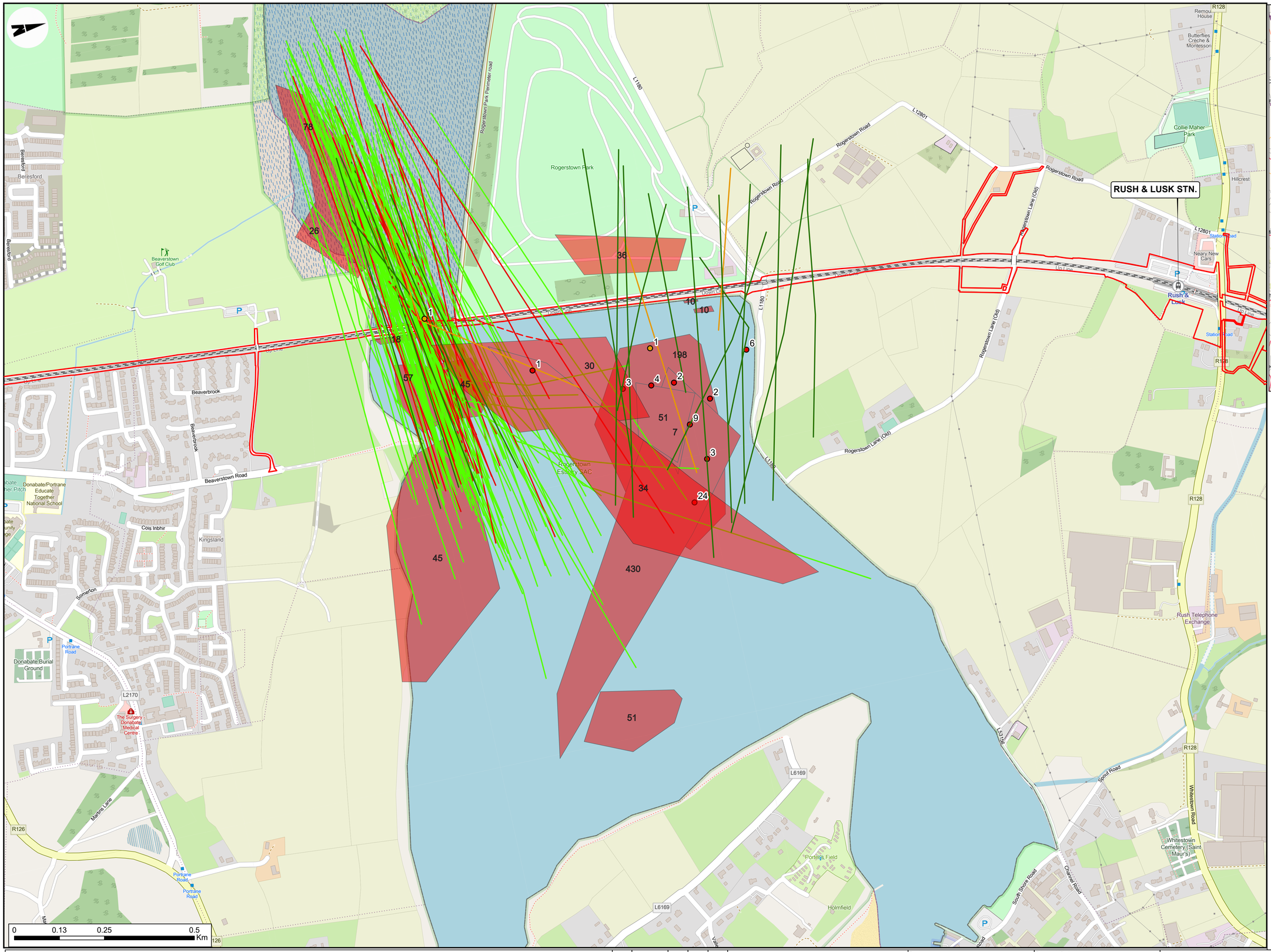

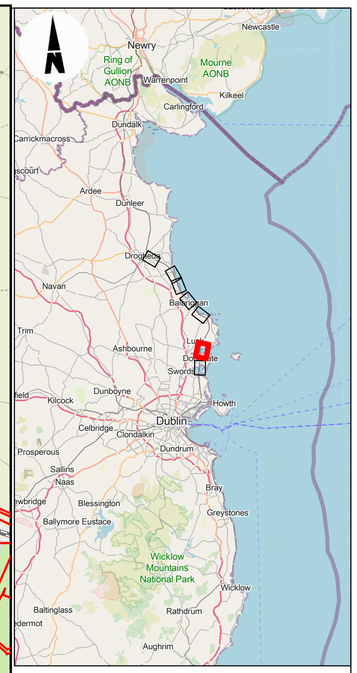

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BAR-TAILED GODWIT
- COMMON GULL

FLOCK COUNT AREAS
- BAR-TAILED GODWIT

FLIGHT LINES (HEIGHT)
- BAR-TAILED GODWIT: 0-10M
- BAR-TAILED GODWIT: >10M
- COMMON GULL: 0-10M
- COMMON GULL: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

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Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 2

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100098	8 of 85	S4	P02

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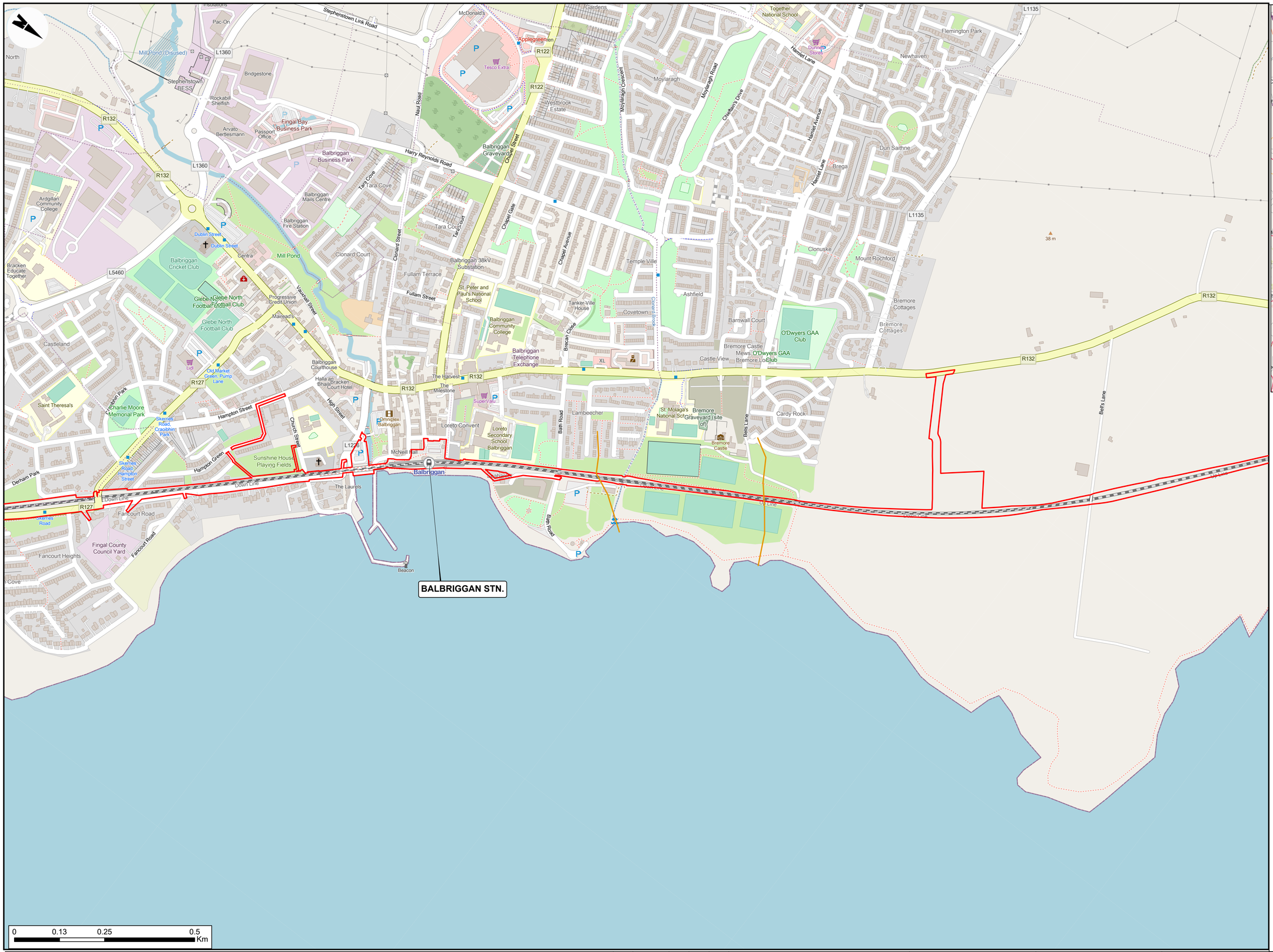

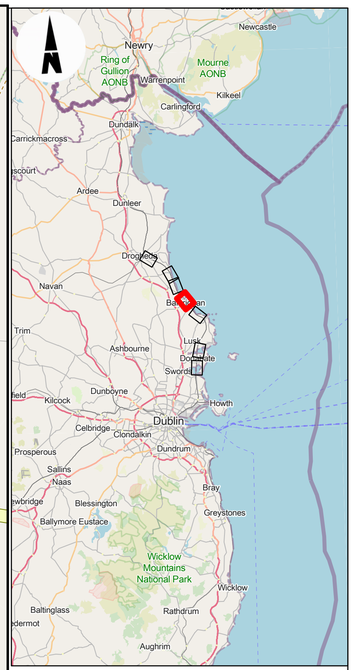

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLIGHT LINES (HEIGHT)

- COMMON GULL: 0-10M

0 0.13 0.25 0.5 Km

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3. FIGURE ONLY INCLUDES AREAS WITH SURVEY RESULTS.

DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 4

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	279933-00	D+WP56-ARP-ZZ-NL-DR-EVBD-100099	9 of 85	S4	P02

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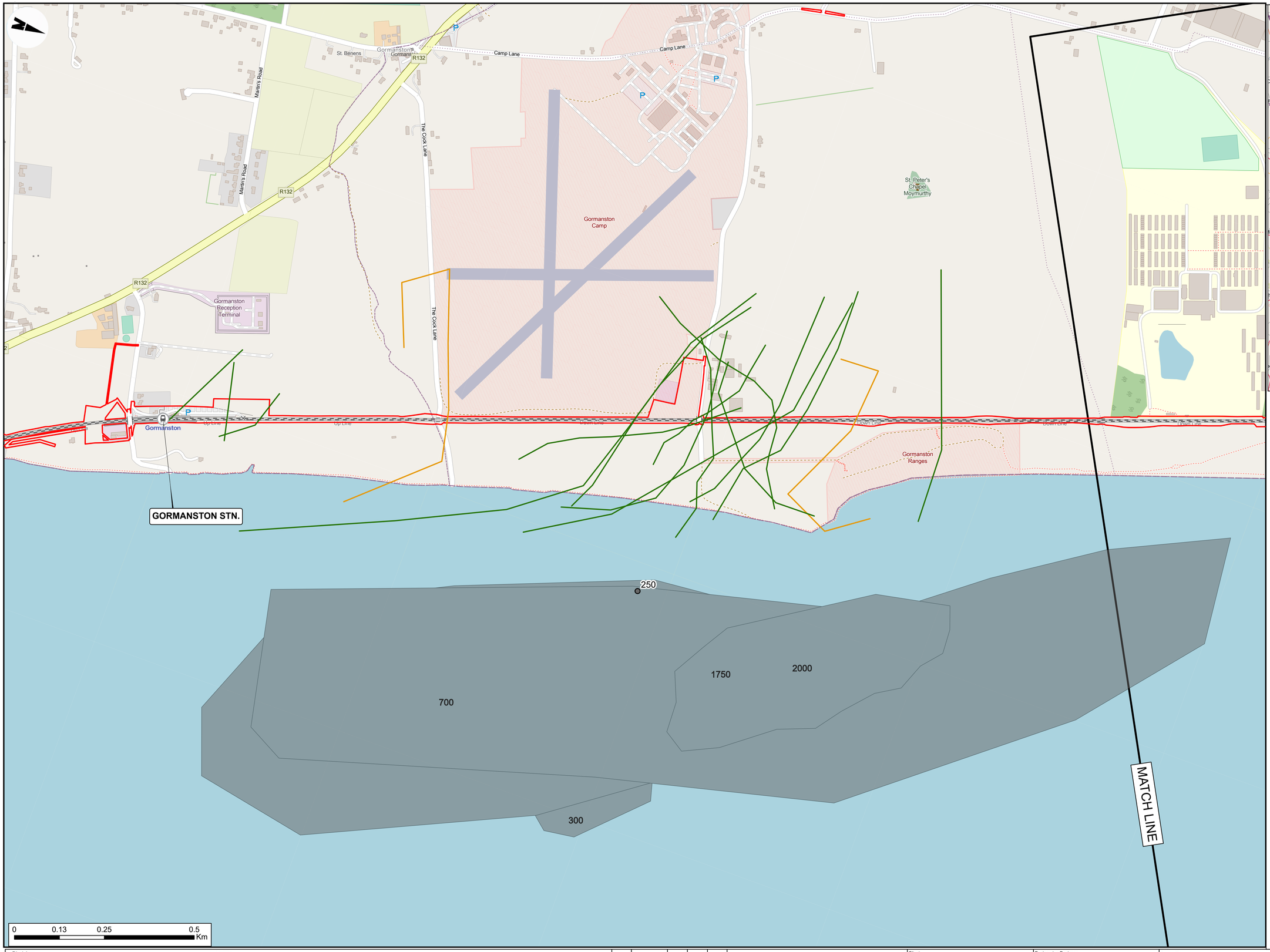

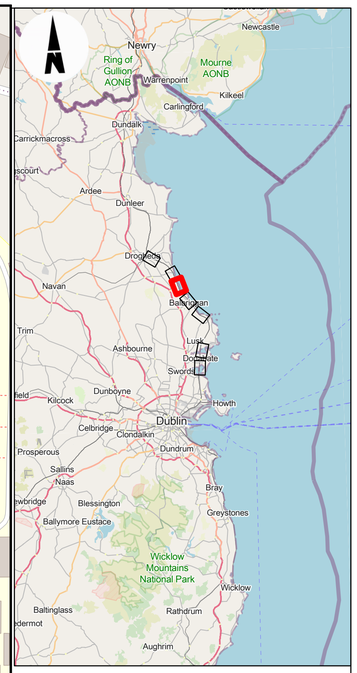

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- COMMON SCOTER

FLOCK COUNT AREAS
- COMMON SCOTER

FLIGHT LINES (HEIGHT)
- COMMON GULL: 0-10M
- COMMON GULL: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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Engineering Designer: ARUP

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 5

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100110	10 of 85	S4	P02

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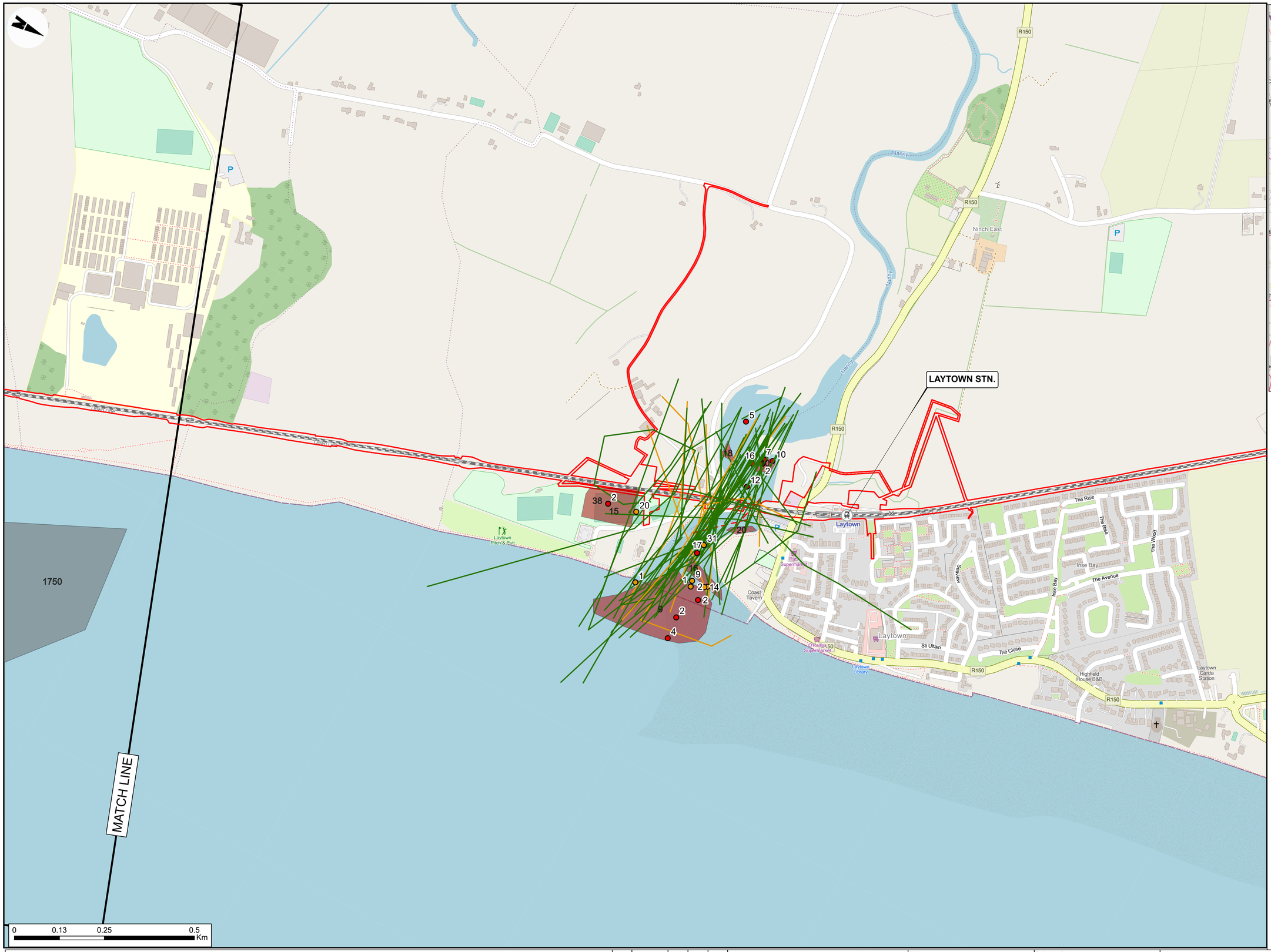

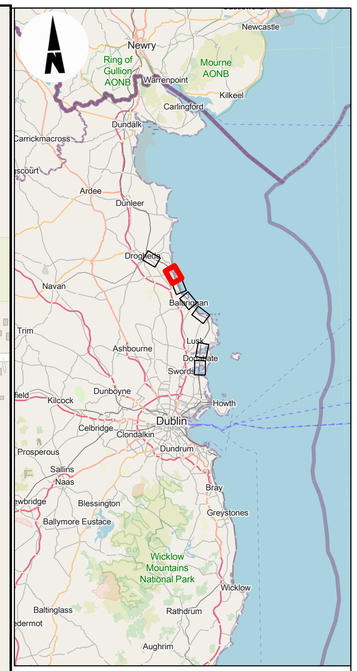

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BAR-TAILED GODWIT
- COMMON GULL

FLOCK COUNT AREAS
- COMMON GULL
- COMMON SCOTER

FLIGHT LINES (HEIGHT)
- BAR-TAILED GODWIT: 0-10M
- COMMON GULL: 0-10M
- COMMON GULL: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 6

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100111	11 of 85	S4	P02

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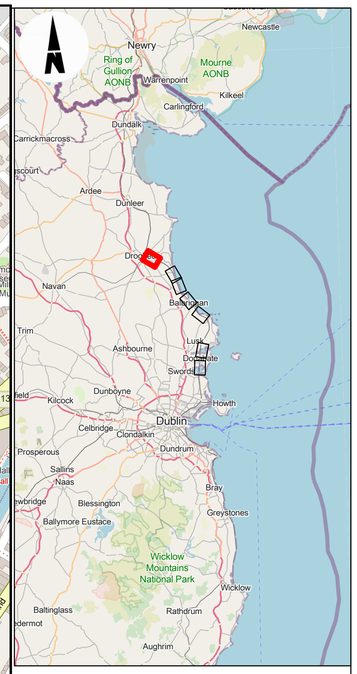

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLIGHT LINES (HEIGHT)

- COMMON GULL: >10M

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DART+ Coastal North

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 7

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100112	12 of 85	S4	P02

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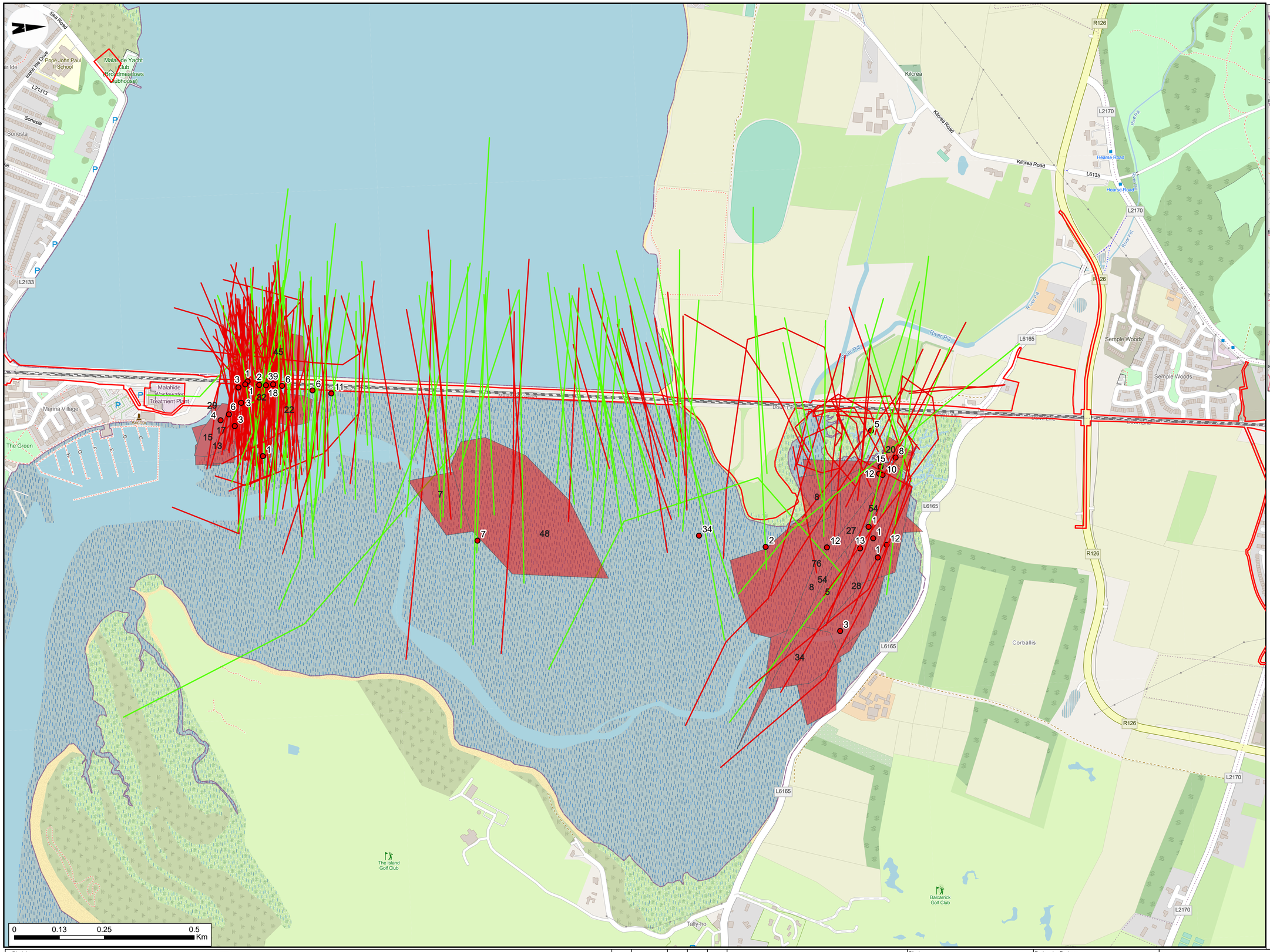

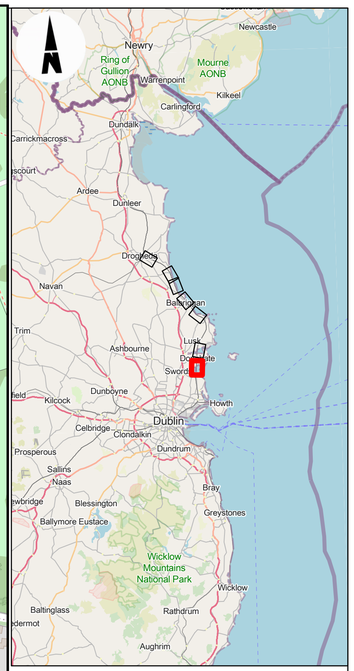

LEGEND

- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BLACK-HEADED GULL

FLOCK COUNT AREAS
- BLACK-HEADED GULL

FLIGHT LINES (HEIGHT)
- BLACK-HEADED GULL: 0-10M
- BLACK-HEADED GULL: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: **DART+ COASTAL NORTH**

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 1

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100113	13 of 85	S4	P02

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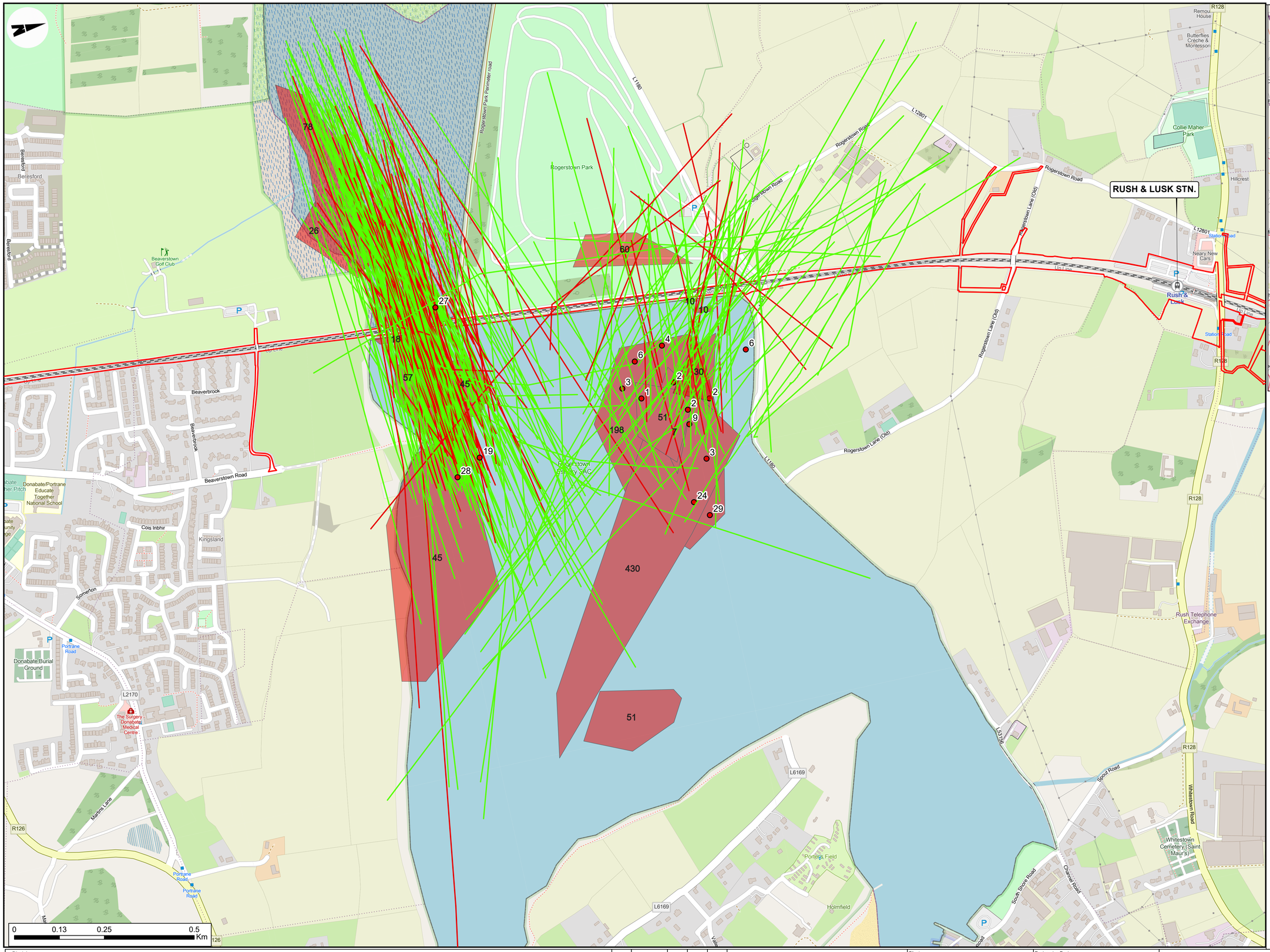

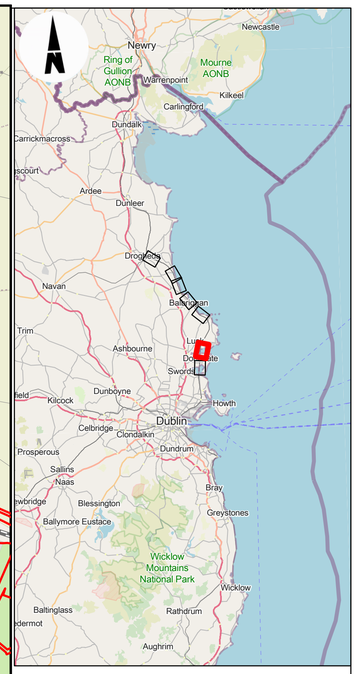

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BLACK-HEADED GULL

FLOCK COUNT AREAS
- BLACK-HEADED GULL

FLIGHT LINES (HEIGHT)
- BLACK-HEADED GULL: 0-10M
- BLACK-HEADED GULL: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 2

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100114	14 of 85	S4	P02

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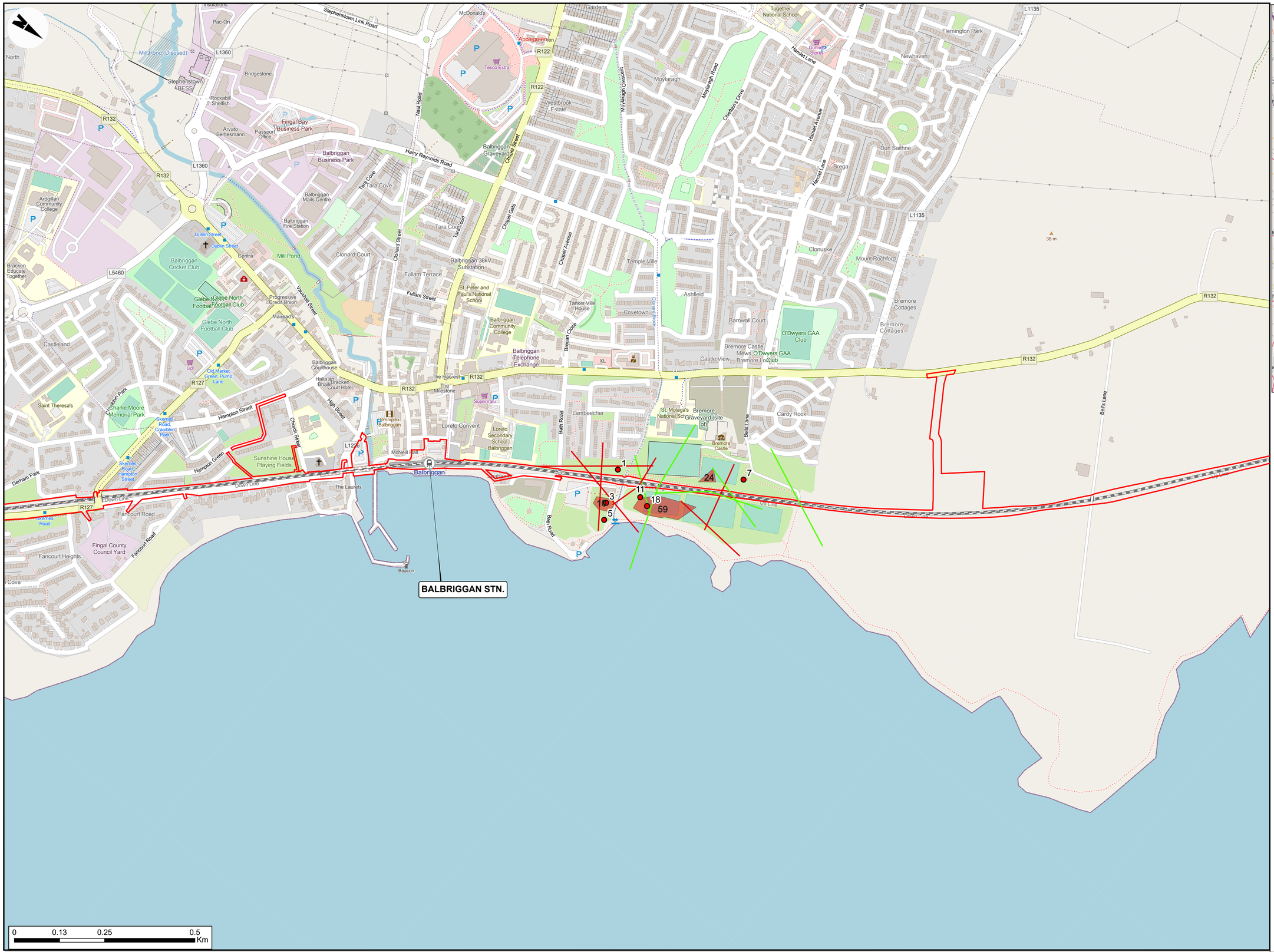

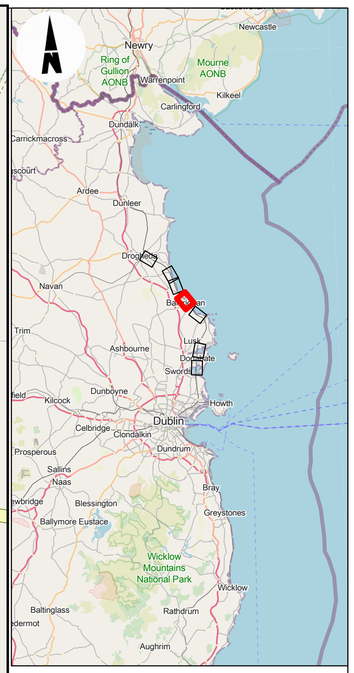

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BLACK-HEADED GULL

FLOCK COUNT AREAS
- BLACK-HEADED GULL

FLIGHT LINES (HEIGHT)
- BLACK-HEADED GULL: 0-10M
- BLACK-HEADED GULL: >10M

0 0.13 0.25 0.5 Km

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DART+ Coastal North

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 4

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100115	15 of 85	S4	P02

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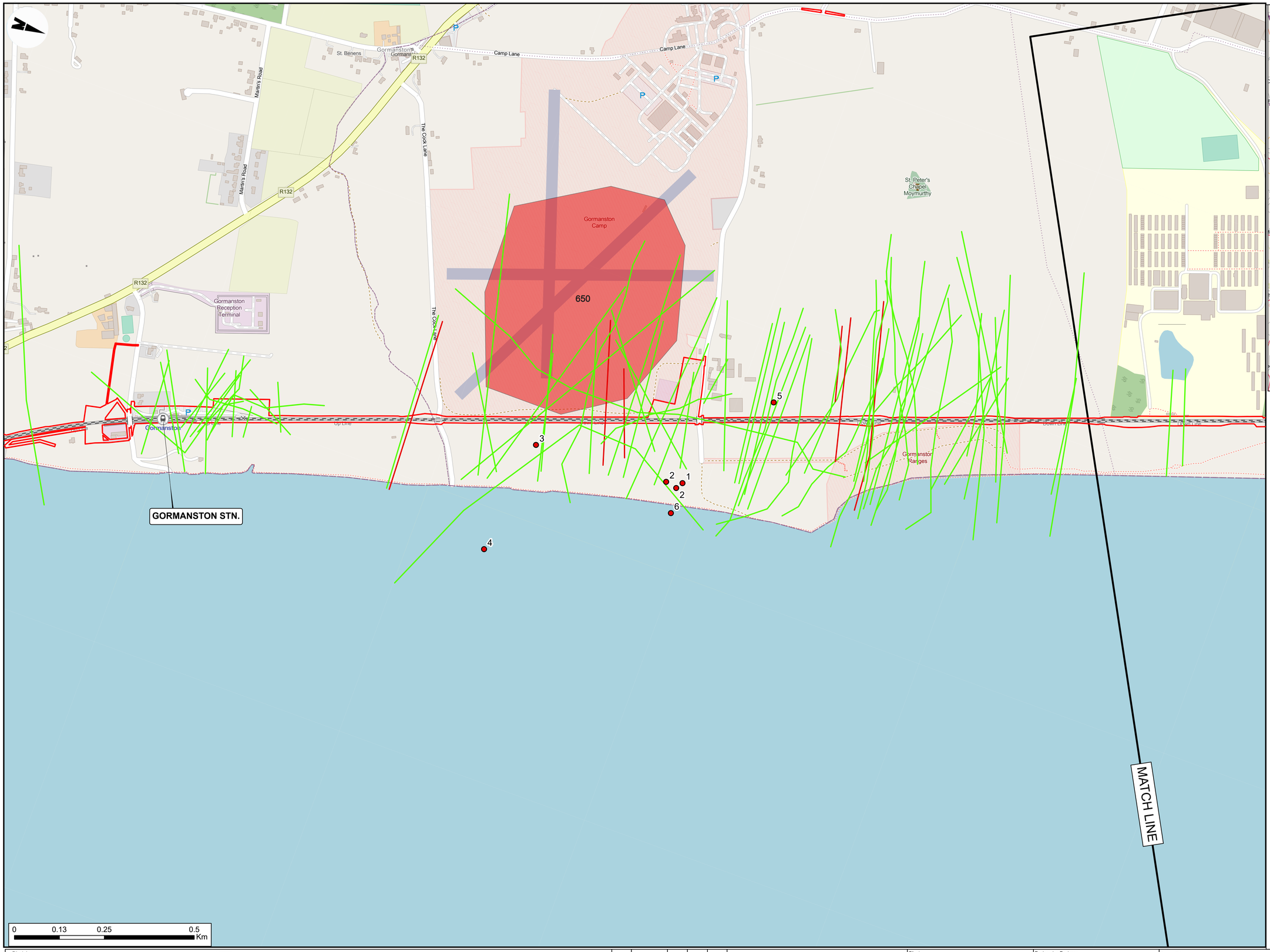

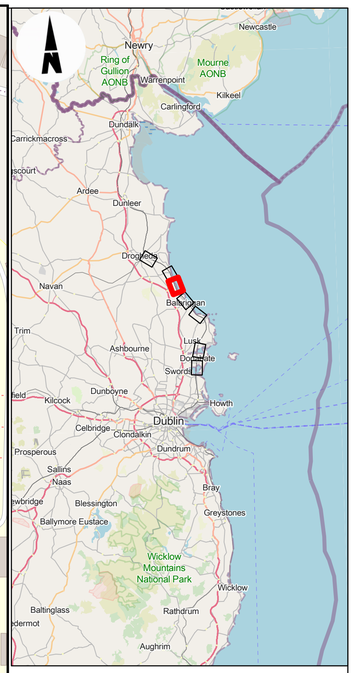

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BLACK-HEADED GULL

FLOCK COUNT AREAS
- BLACK-HEADED GULL

FLIGHT LINES (HEIGHT)
- BLACK-HEADED GULL: 0-10M
- BLACK-HEADED GULL: >10M

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DART+ Coastal North

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D+WP56	ARP	279933-00

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 5

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100116	16 of 85	S4	P02

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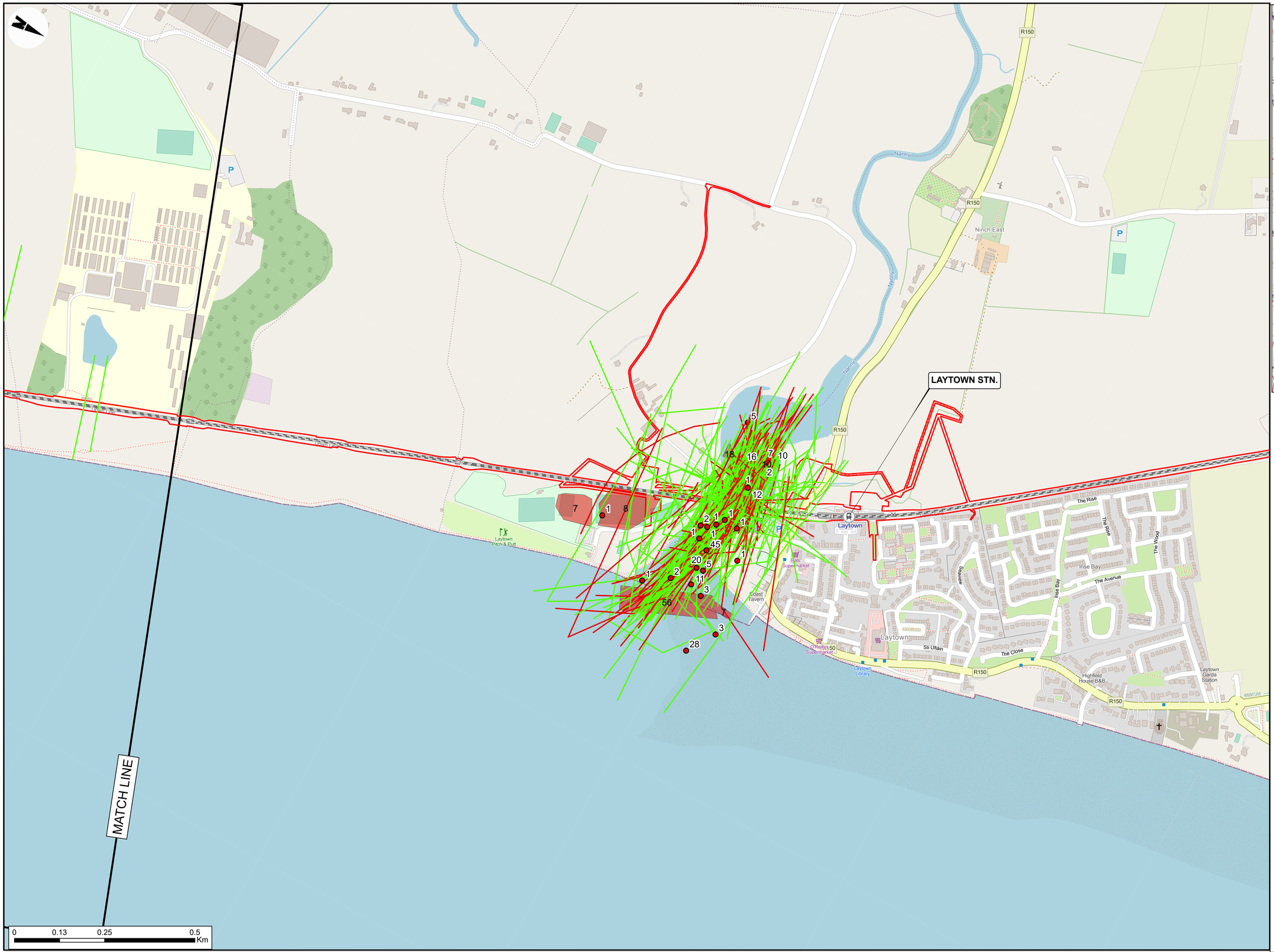

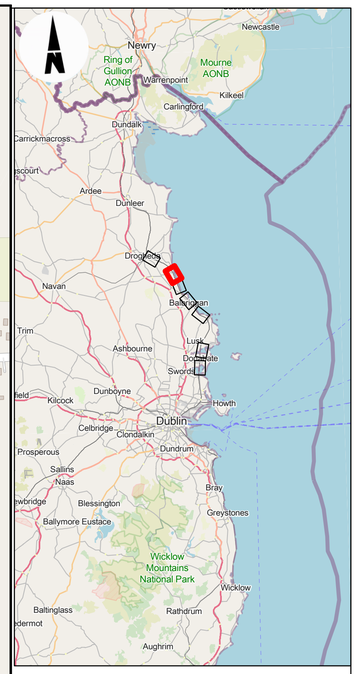

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BLACK-HEADED GULL

FLOCK COUNT AREAS
- BLACK-HEADED GULL

FLIGHT LINES (HEIGHT)
- BLACK-HEADED GULL: 0-10M
- BLACK-HEADED GULL: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

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Engineering Designer: ARUP

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 6

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100117	17 of 85	S4	P02

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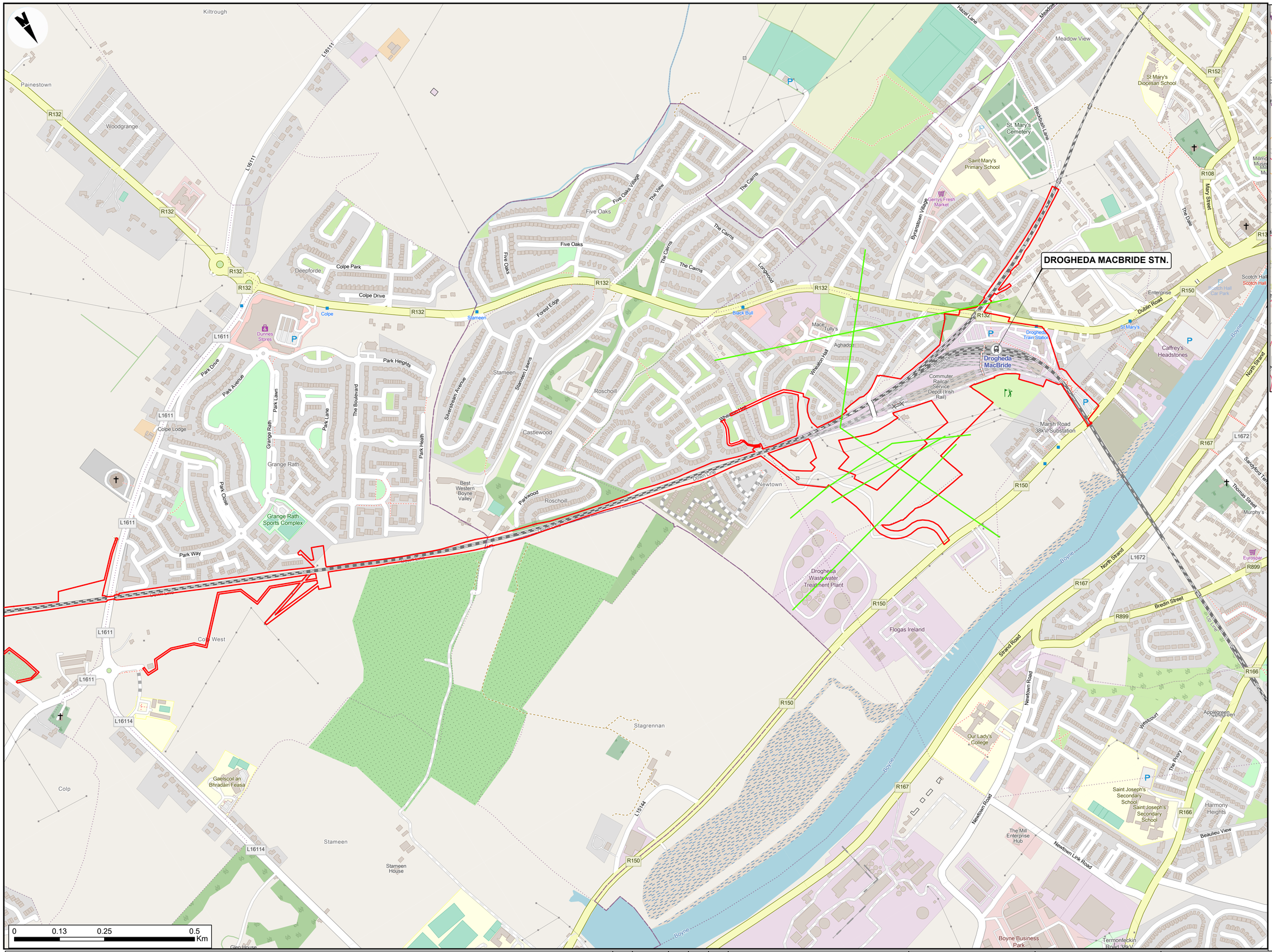

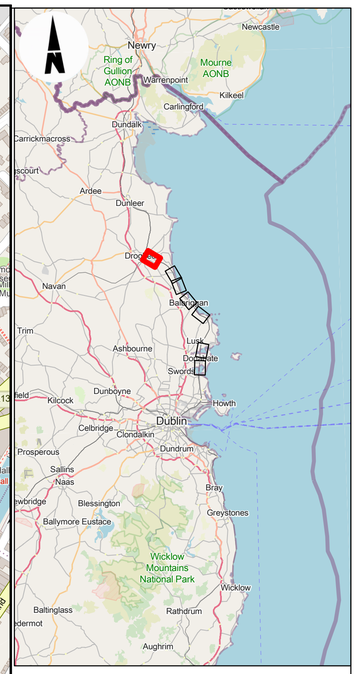

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLIGHT LINES (HEIGHT)

- BLACK-HEADED GULL: >10M

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2. BIRD COUNTS AT EACH POINT OR WITHIN EACH AREA DISPLAYED AS LABELS.
3. FIGURE ONLY INCLUDES AREAS WITH SURVEY RESULTS.

DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 7

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100118	18 of 85	S4	P02

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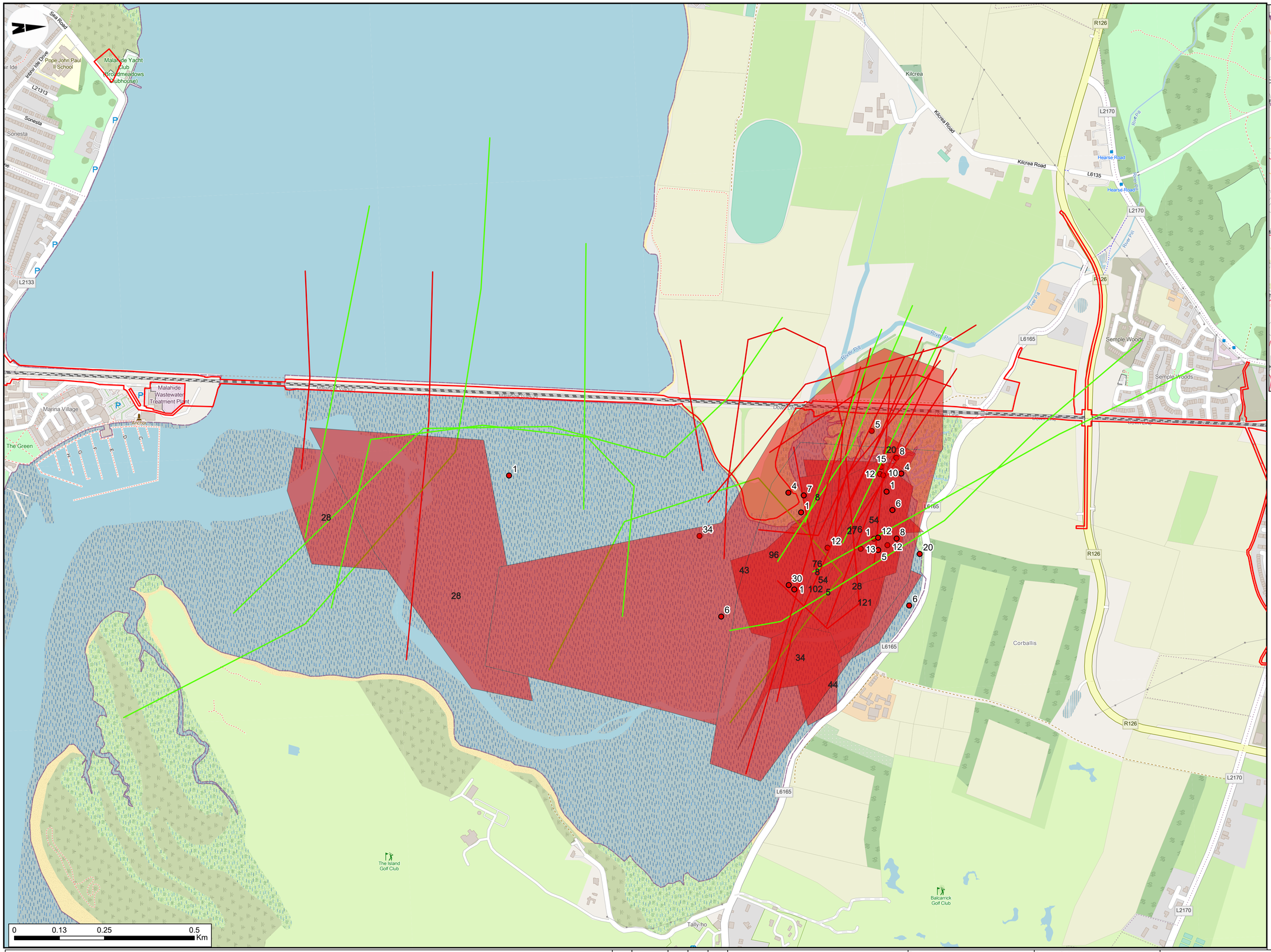

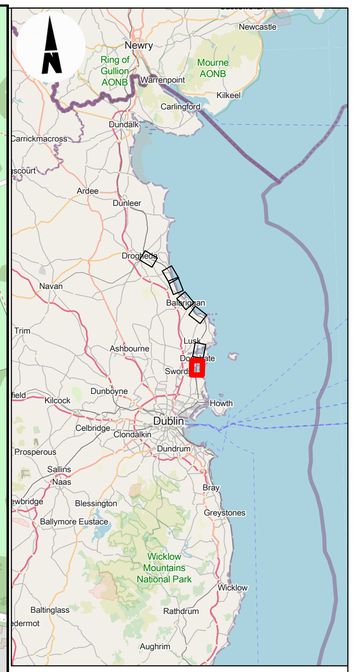

LEGEND

- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BLACK-TAILED GODWIT

FLOCK COUNT AREAS
- BLACK-TAILED GODWIT

FLIGHT LINES (HEIGHT)
- BLACK-TAILED GODWIT: 0-10M
- BLACK-TAILED GODWIT: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 1

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100119	19 of 85	S4	P02

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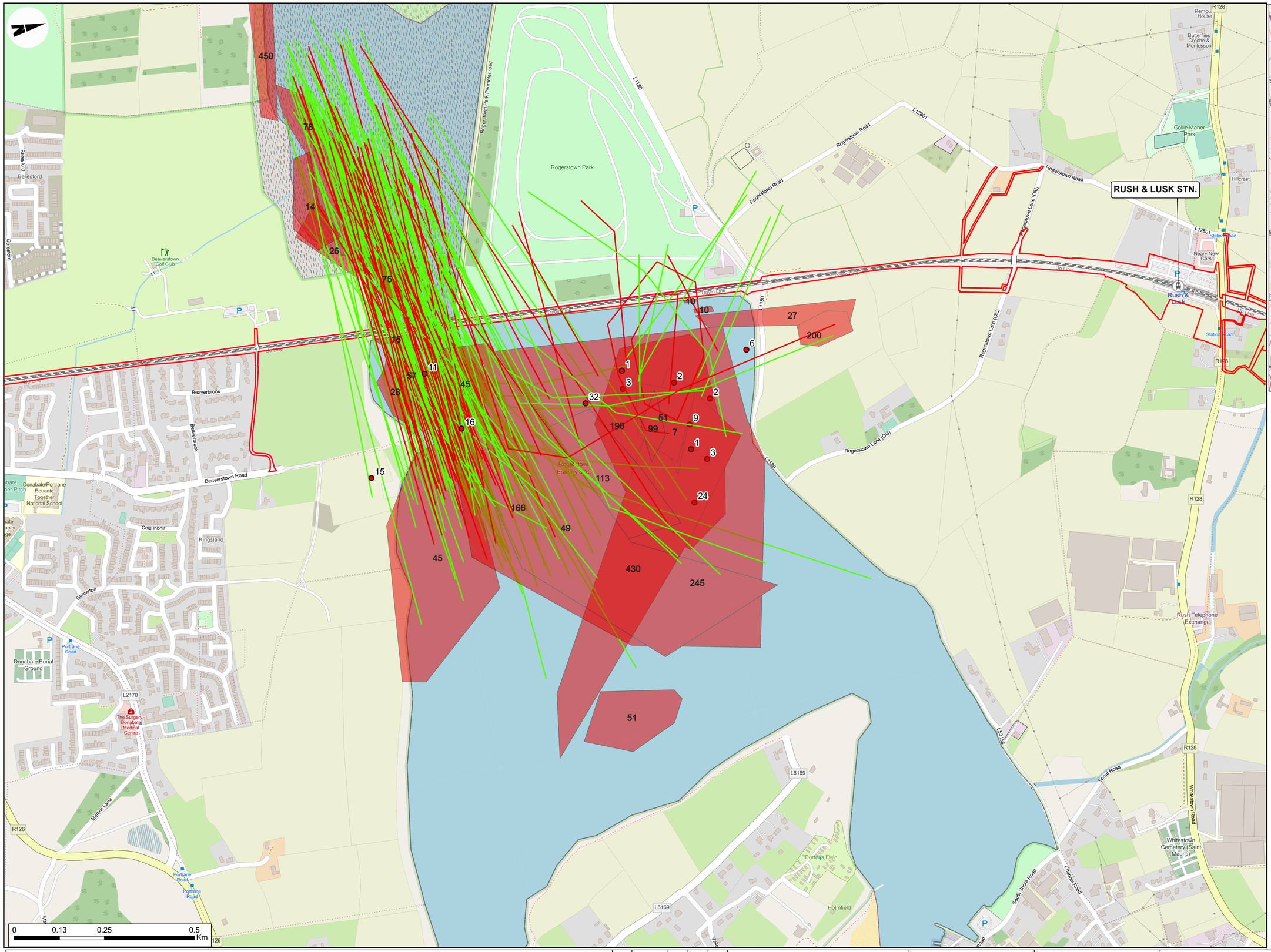

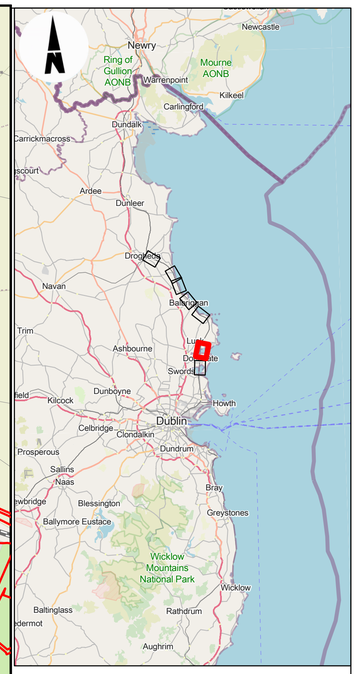

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BLACK-TAILED GODWIT

FLOCK COUNT AREAS
- BLACK-TAILED GODWIT

FLIGHT LINES (HEIGHT)
- BLACK-TAILED GODWIT: 0-10M
- BLACK-TAILED GODWIT: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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Engineering Designer: ARUP

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07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 2

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100120	20 of 85	S4	P02

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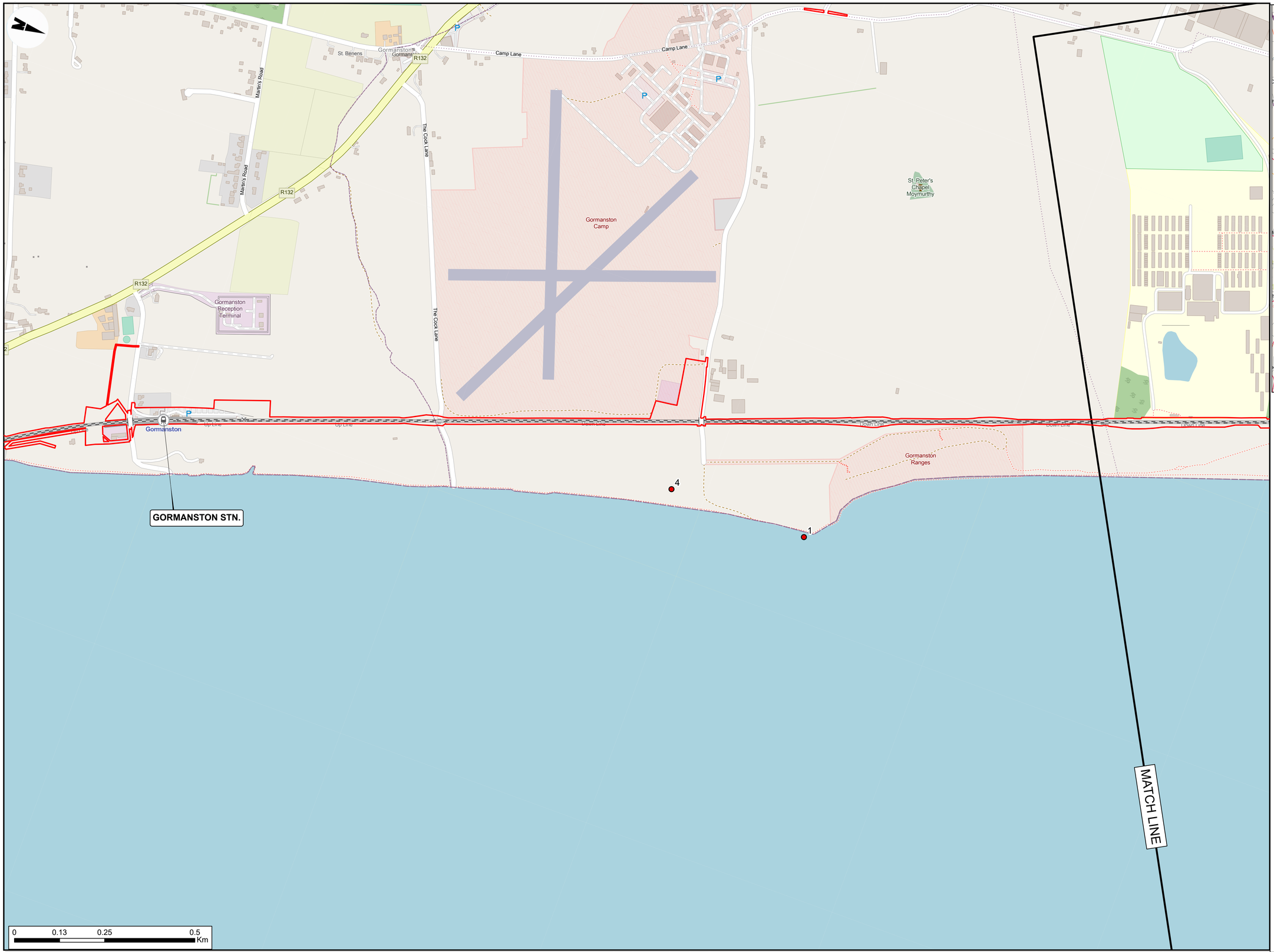

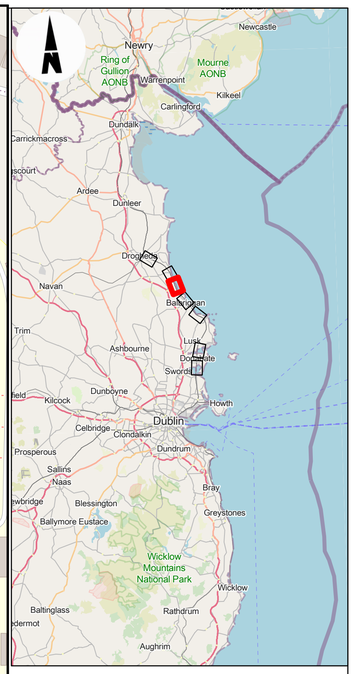

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT

- BLACK-TAILED GODWIT

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DART+ Coastal North

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 5

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100121	21 of 85	S4	P02

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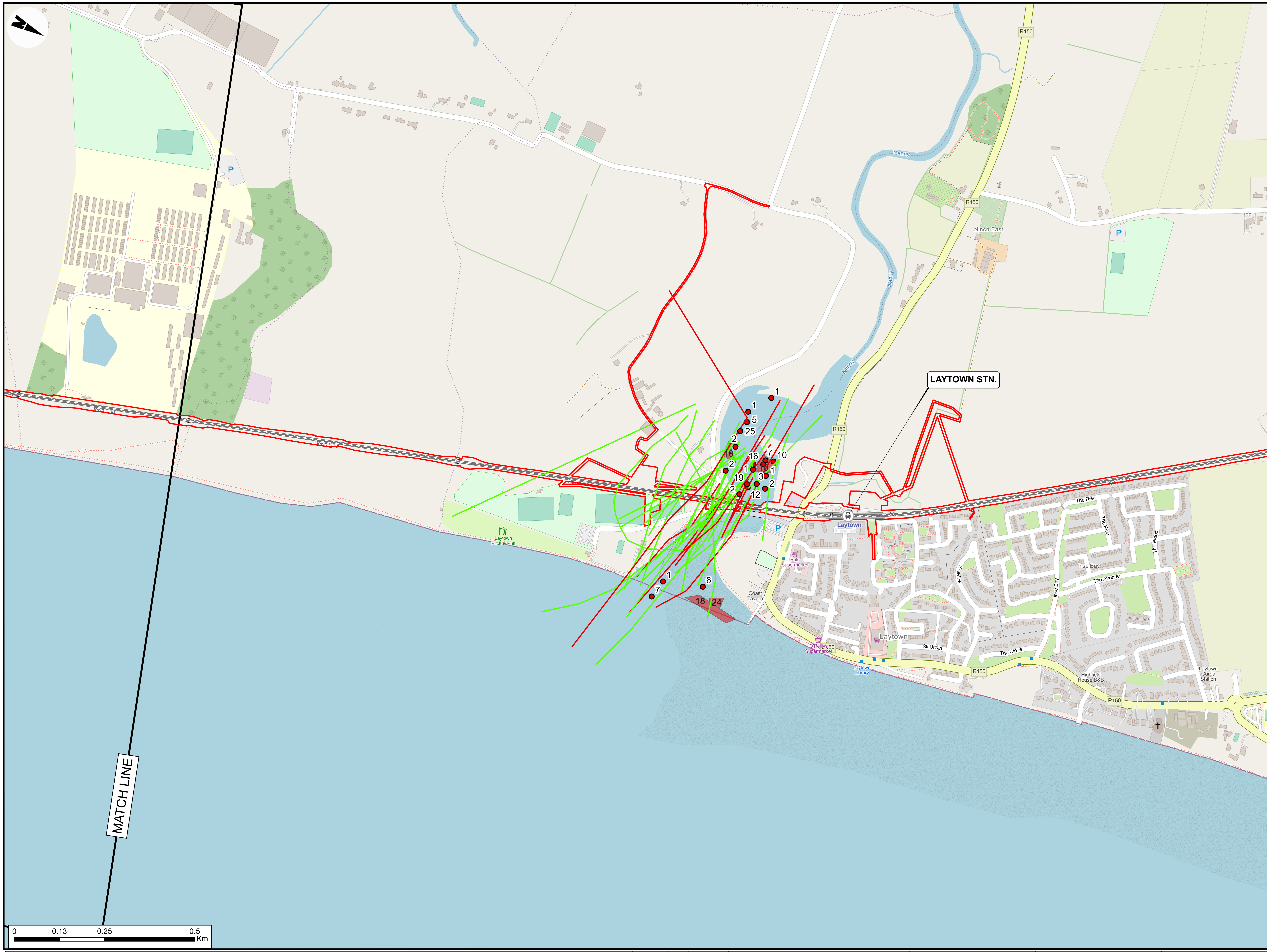

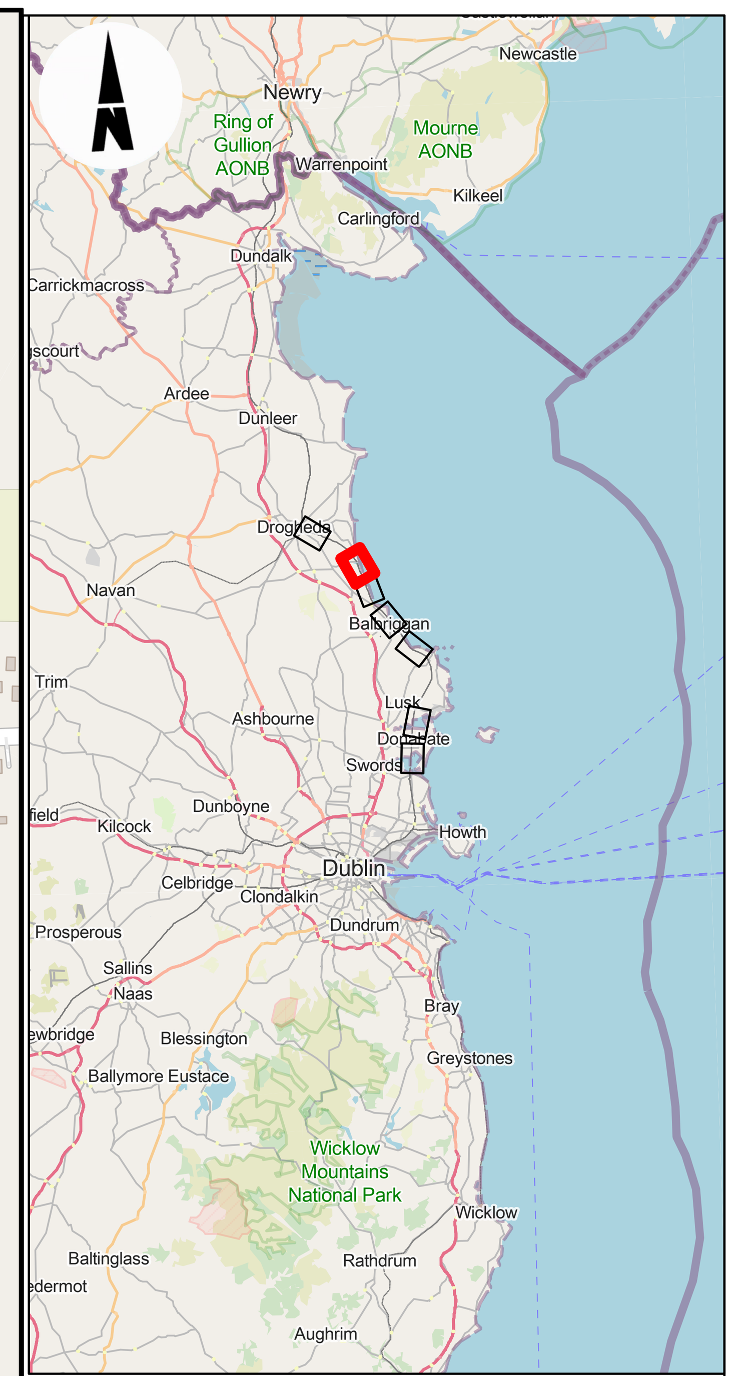

LEGEND

RAILWAY STATIONS

DEVELOPMENT BOUNDARY

FLOCK COUNT
- BLACK-TAILED GODWIT

FLOCK COUNT AREAS
- BLACK-TAILED GODWIT

FLIGHT LINES (HEIGHT)
- BLACK-TAILED GODWIT: 0-10M
- BLACK-TAILED GODWIT: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

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Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 6

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	279933-00	D+WP56-ARP-ZZ-NL-DR-EVBD-100122	22 of 85	S4	P02

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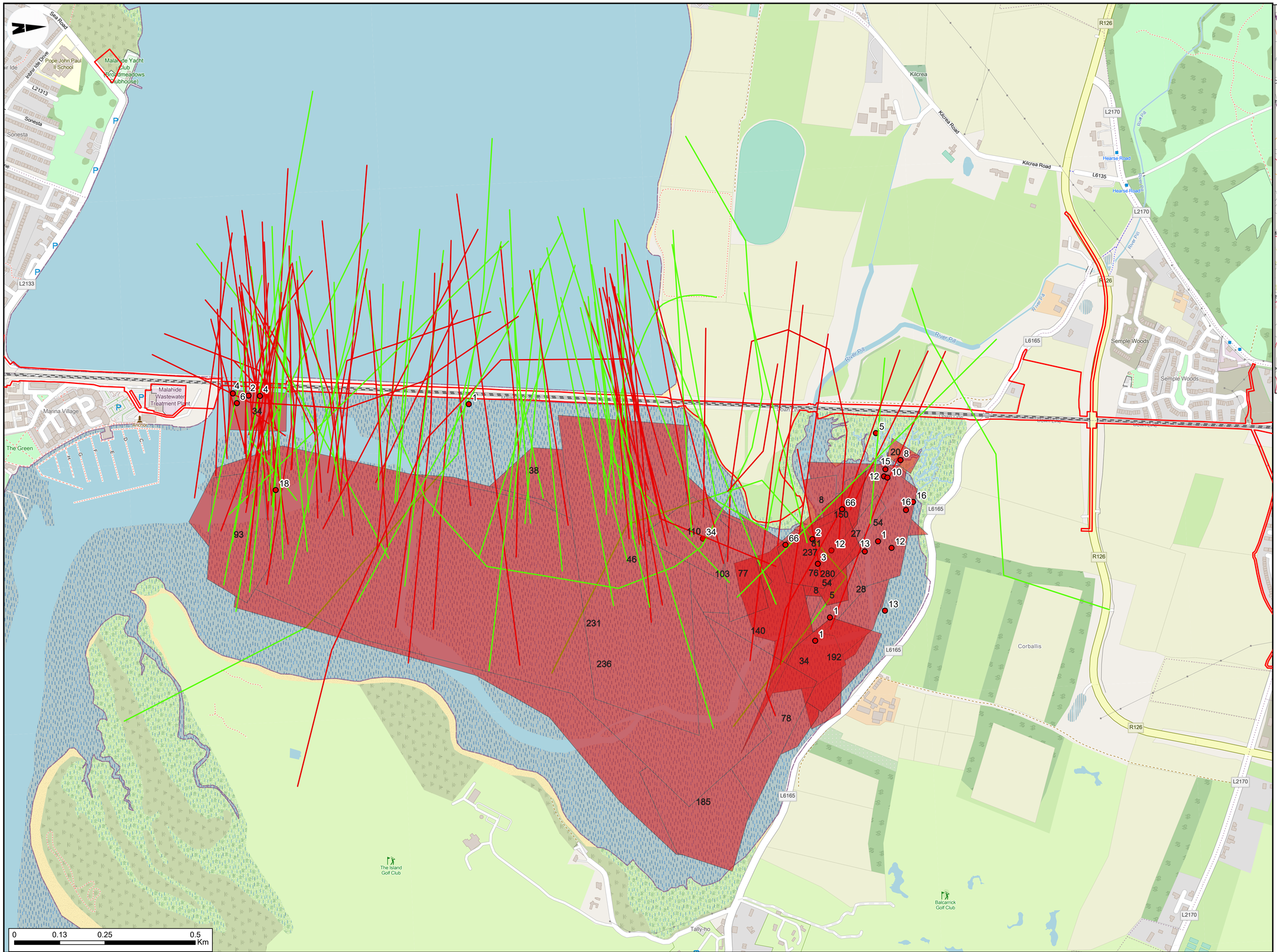

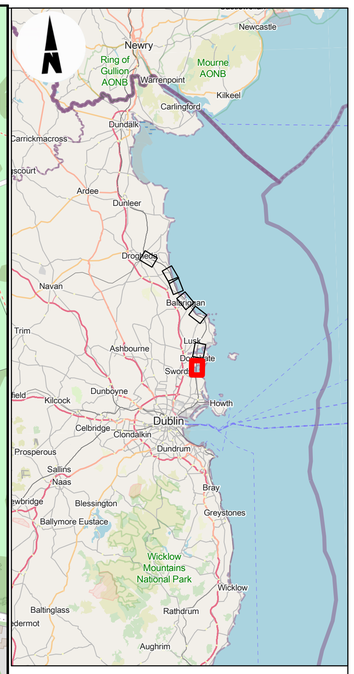

LEGEND

- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BRENT GOOSE

FLOCK COUNT AREAS
- BRENT GOOSE

FLIGHT LINES (HEIGHT)
- BRENT GOOSE: 0-10M
- BRENT GOOSE: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

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07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 1

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100123	23 of 85	S4	P02

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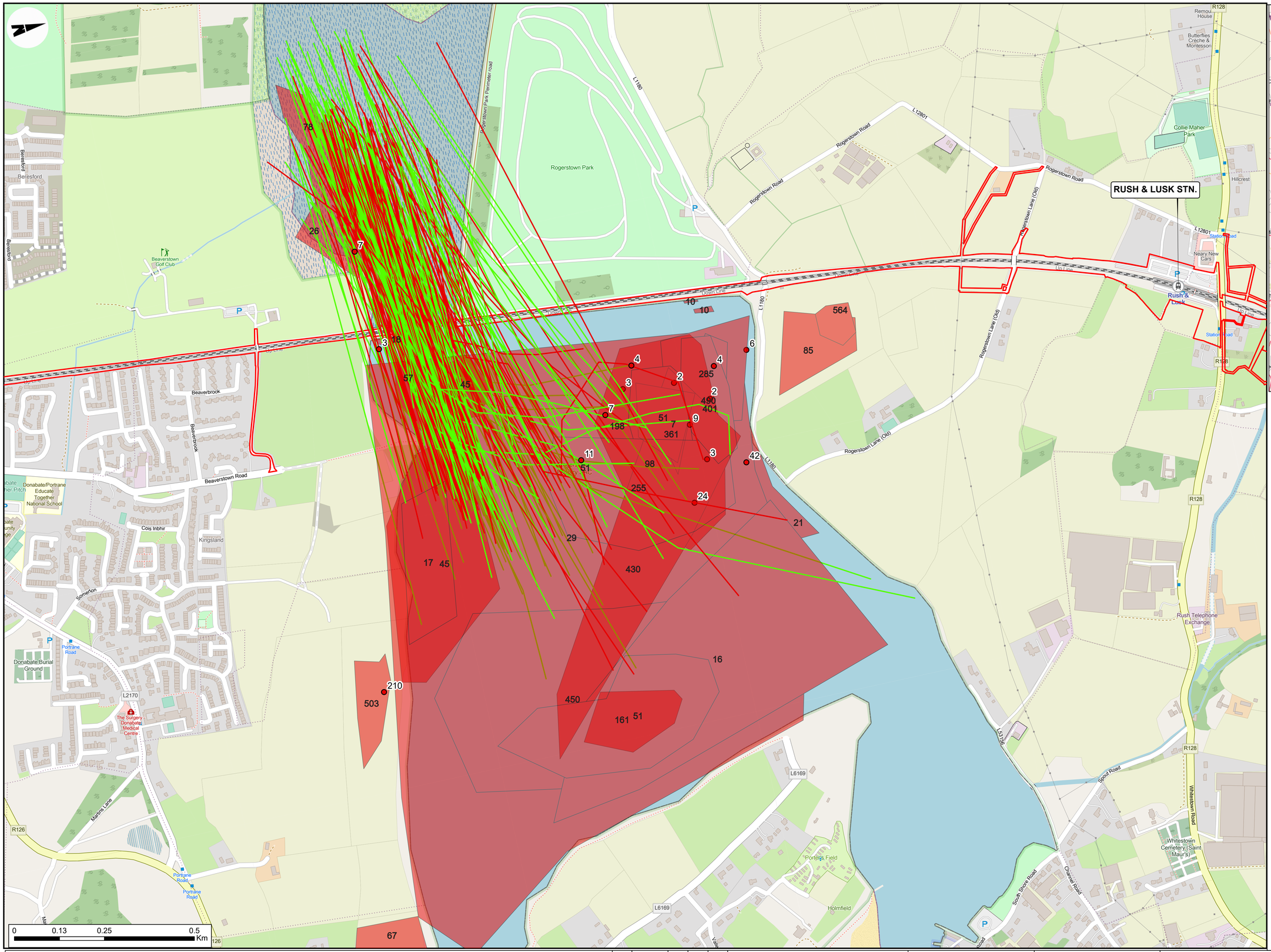

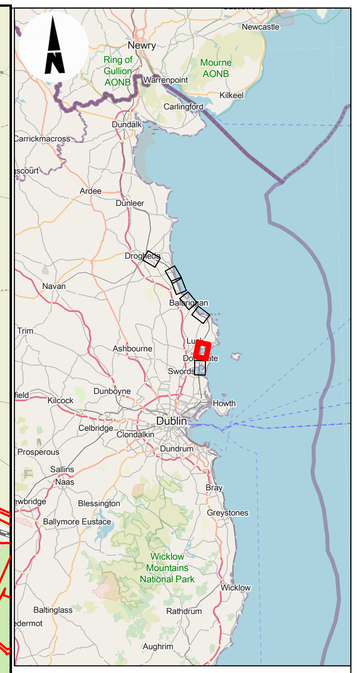

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BRENT GOOSE

FLOCK COUNT AREAS
- BRENT GOOSE

FLIGHT LINES (HEIGHT)
- BRENT GOOSE: 0-10M
- BRENT GOOSE: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 2

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100124	24 of 85	S4	P02

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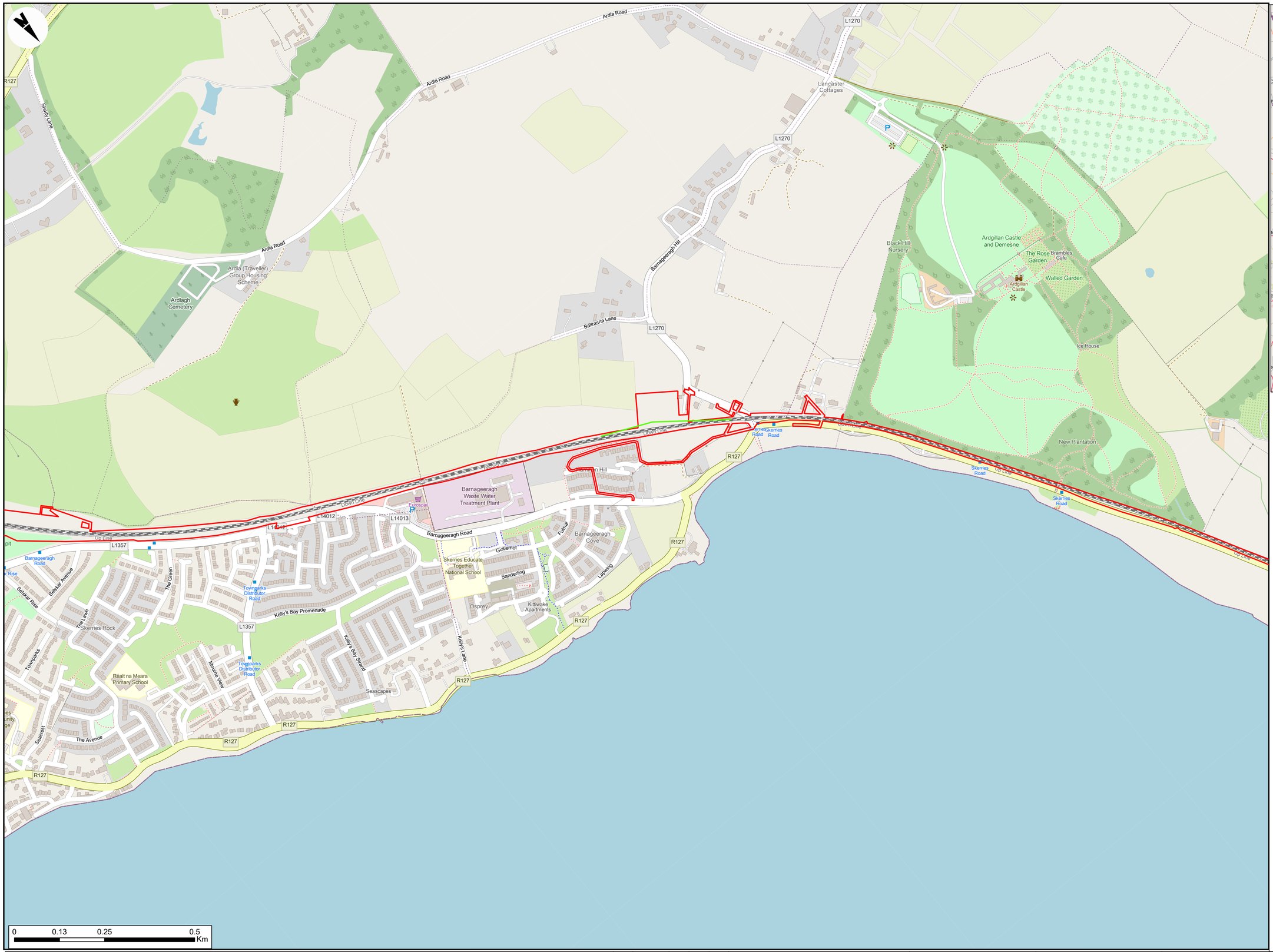

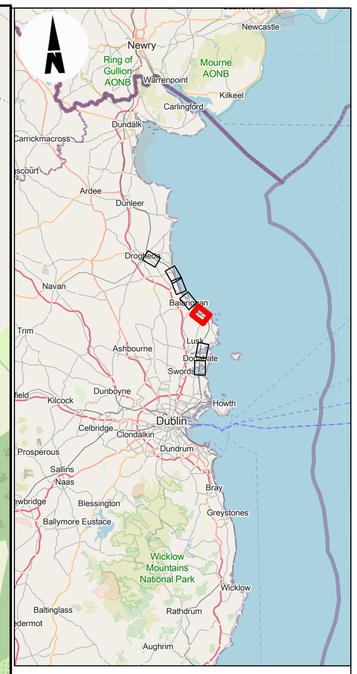

LEGEND

DEVELOPMENT BOUNDARY

FLIGHT LINES (HEIGHT)

BRENT GOOSE: >10M

0 0.13 0.25 0.5 Km

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DART+ Coastal North

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Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Date: 07/09/2023 | Scale: 1:5000 @ A1, 1:10000 @ A3 | Drawn: DM | Checked: SQ | Approved: COD

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

Project Title: **DART+ COASTAL NORTH**

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 3

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100125 | Sheet Number: 25 of 85 | Status: S4 | Rev: P02

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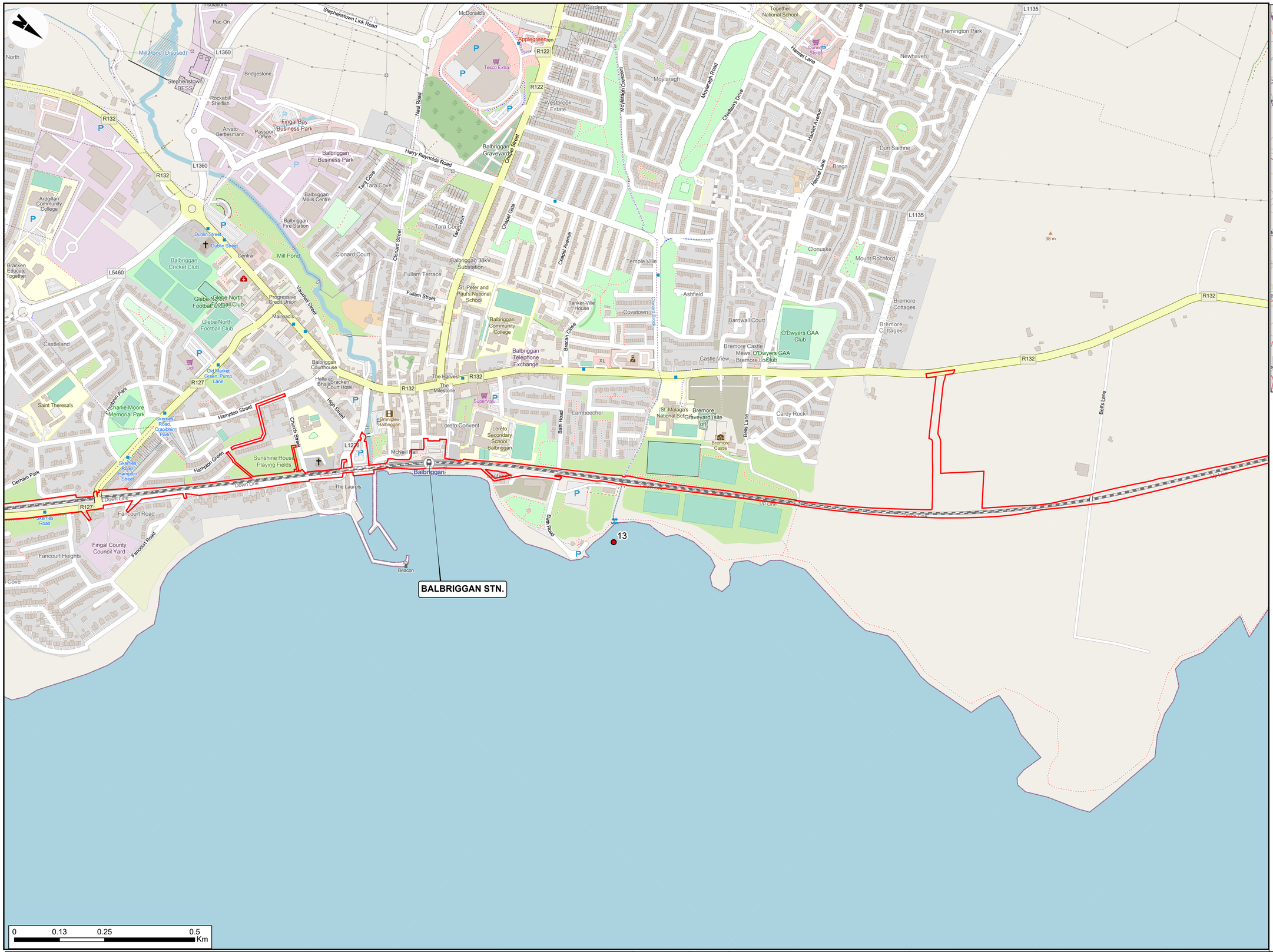

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT

- BRENT GOOSE

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Rev	Date	Drn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 4

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	279933-00	D+WP56-ARP-ZZ-NL-DR-EVBD-100126	26 of 85	S4	P02

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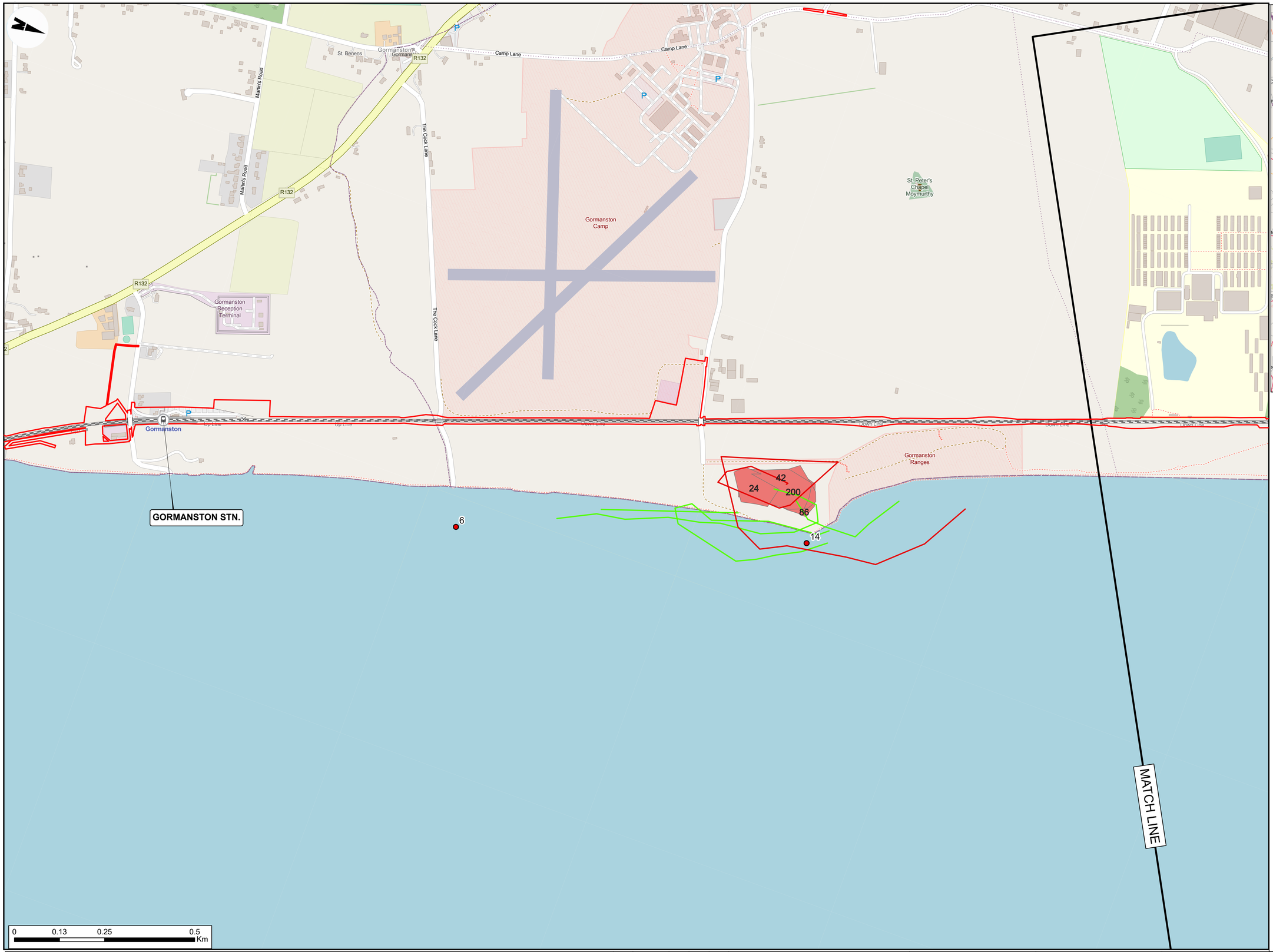

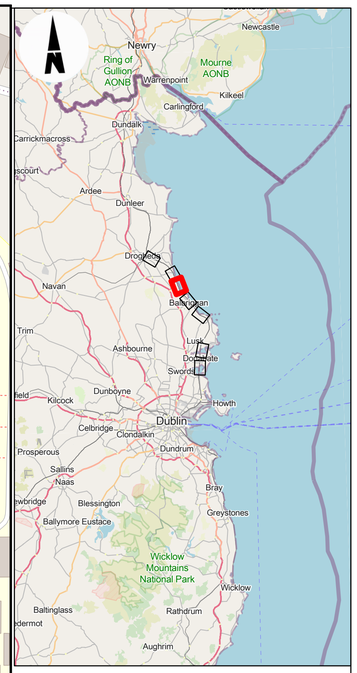

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BRENT GOOSE

FLOCK COUNT AREAS
- BRENT GOOSE

FLIGHT LINES (HEIGHT)
- BRENT GOOSE: 0-10M
- BRENT GOOSE: >10M

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3. FIGURE ONLY INCLUDES AREAS WITH SURVEY RESULTS.

DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 5

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100127	27 of 85	S4	P02

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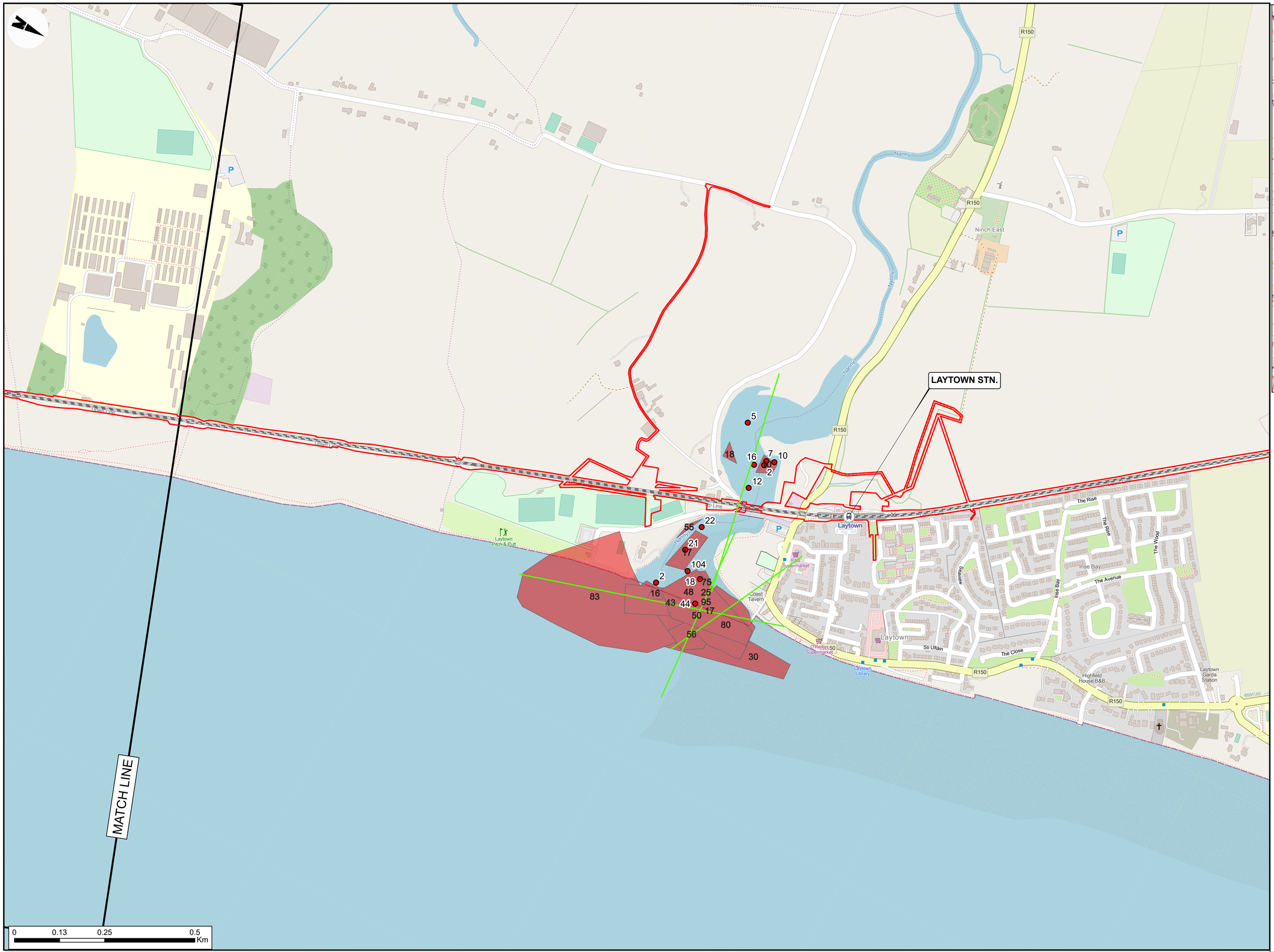

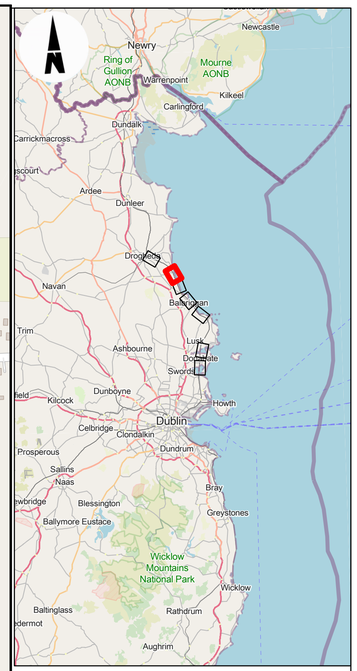

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- BRENT GOOSE

FLOCK COUNT AREAS
- BRENT GOOSE

FLIGHT LINES (HEIGHT)
- BRENT GOOSE: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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Engineering Designer: ARUP

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 6

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100128	28 of 85	S4	P02

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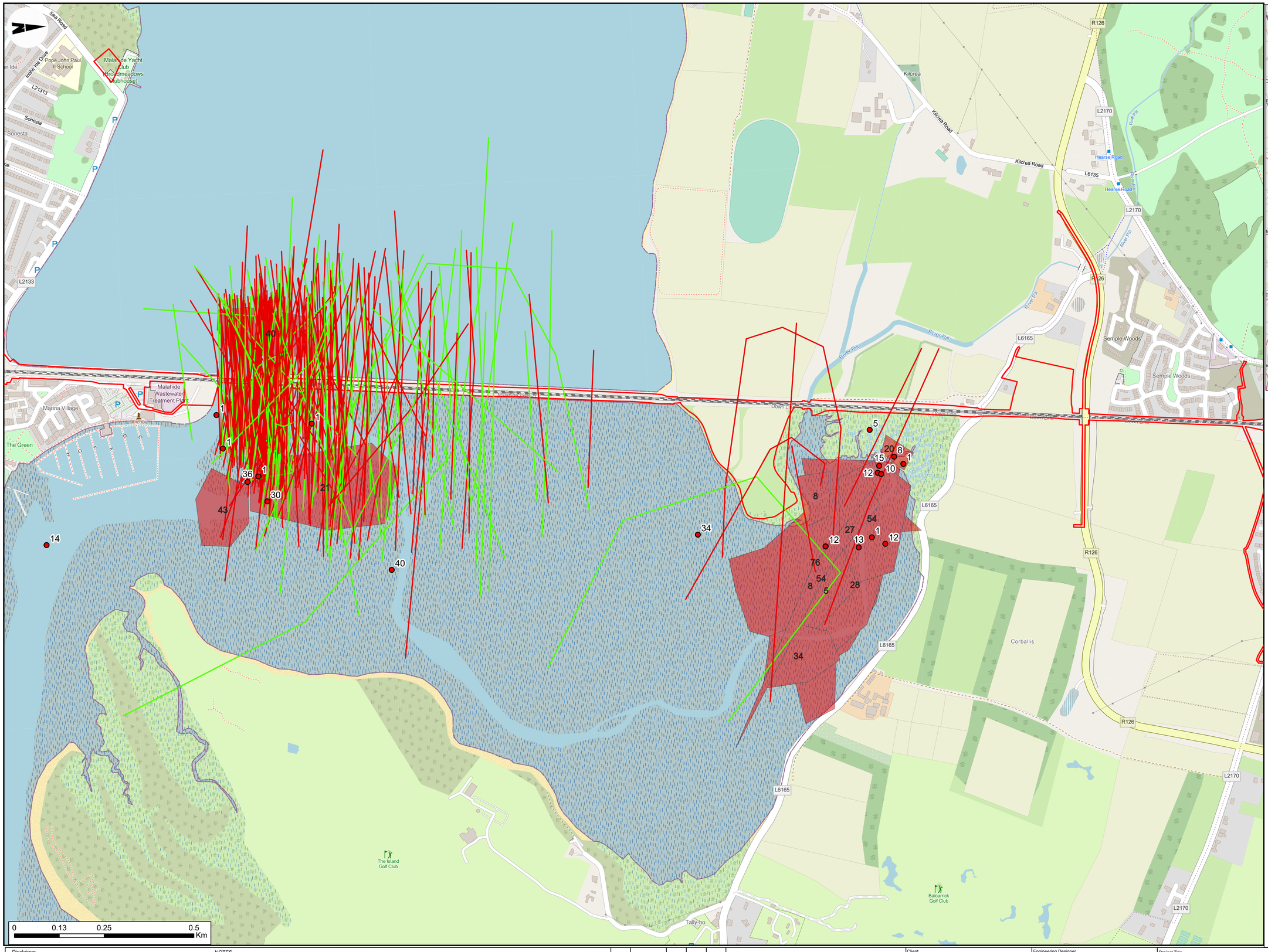

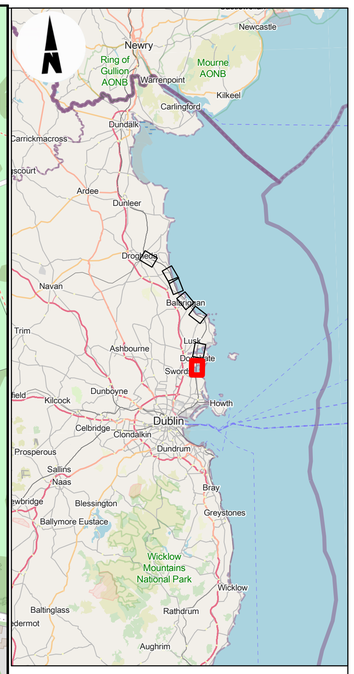

LEGEND

- DEVELOPMENT BOUNDARY

FLOCK COUNT
- CORMORANT

FLOCK COUNT AREAS
- CORMORANT

FLIGHT LINES (HEIGHT)
- CORMORANT: 0-10M
- CORMORANT: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 1

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100129	29 of 85	S4	P02

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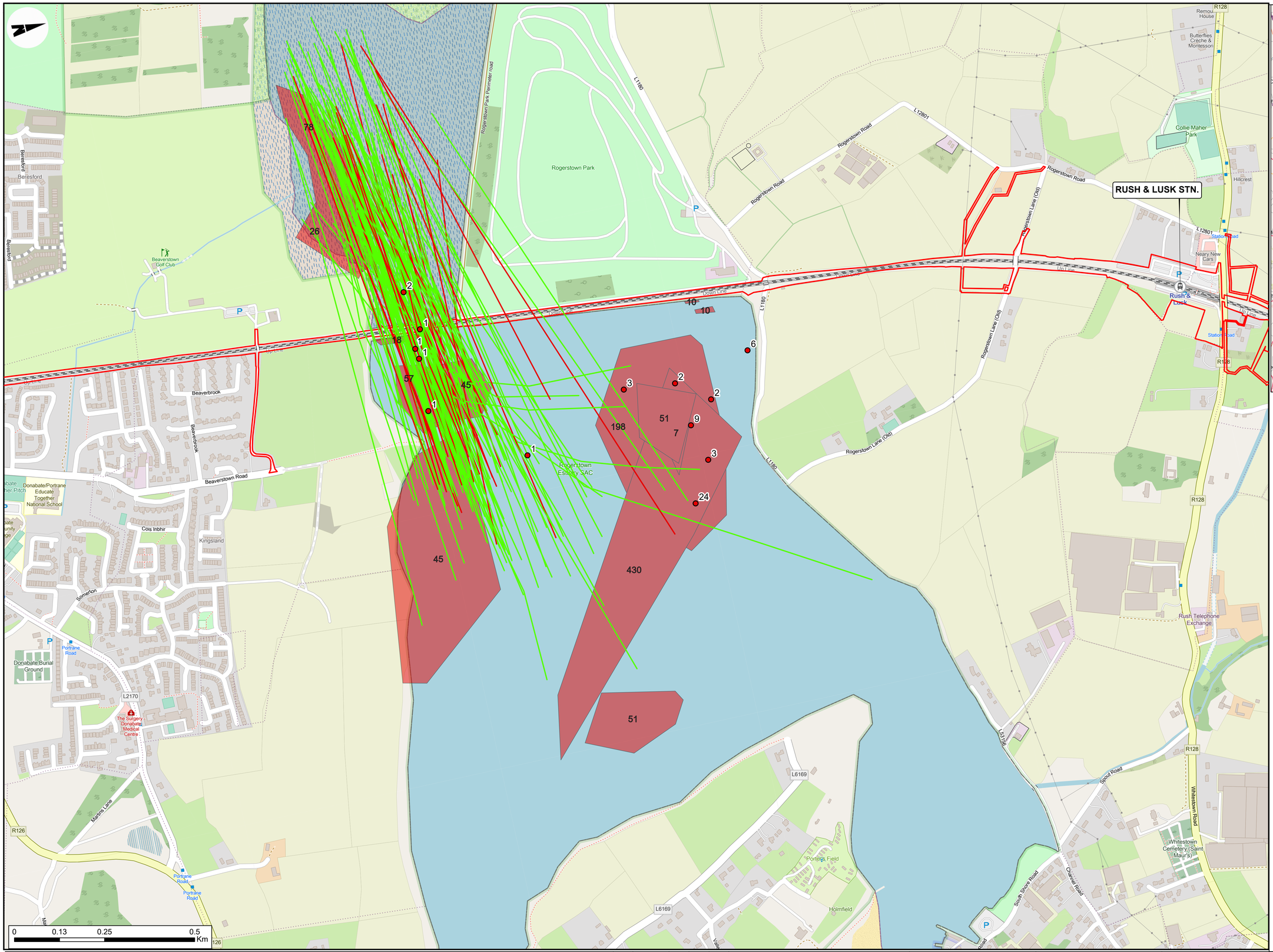

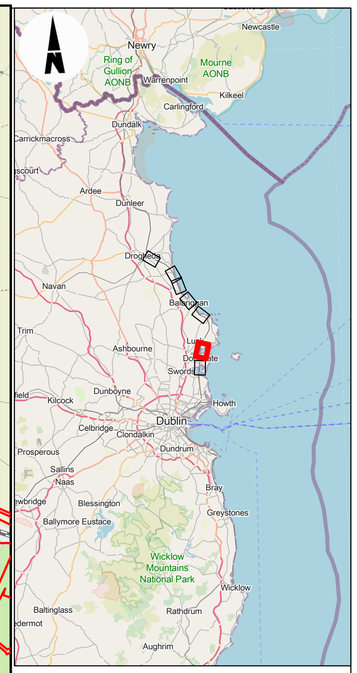

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- CORMORANT

FLIGHT LINES (HEIGHT)
- CORMORANT: 0-10M
- CORMORANT: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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Engineering Designer: ARUP

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 2

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100130	30 of 85	S4	P02

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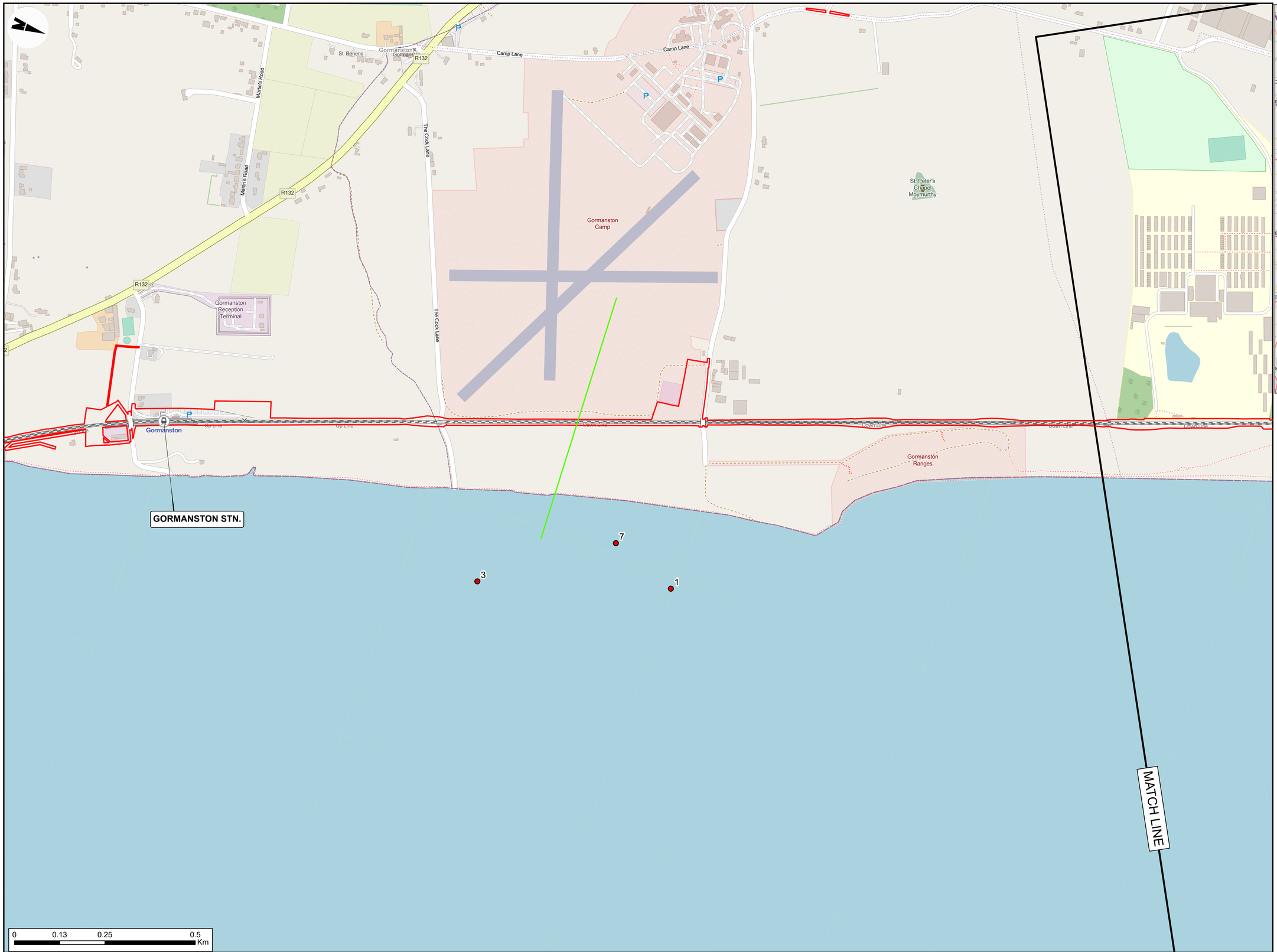

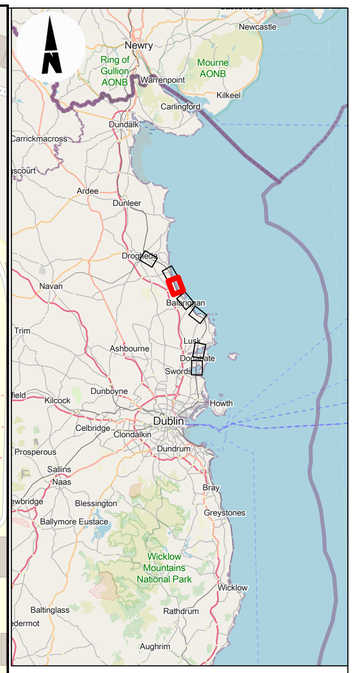

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT

- CORMORANT

FLIGHT LINES (HEIGHT)

- CORMORANT: >10M

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Tionscadal Éireann Project Ireland 2040

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

Project Title: **DART+ COASTAL NORTH**

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 5

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100131	31 of 85	S4	P02

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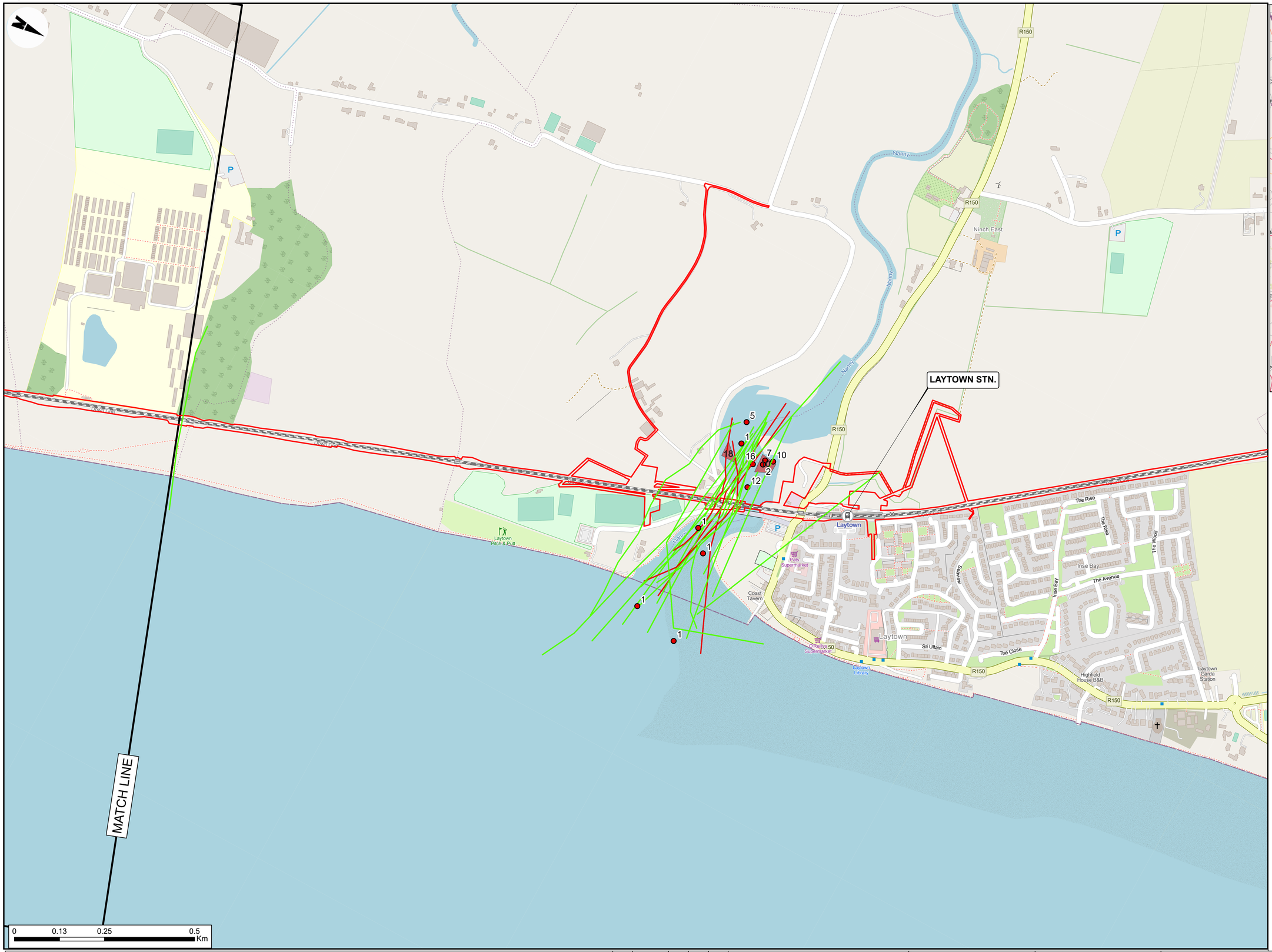

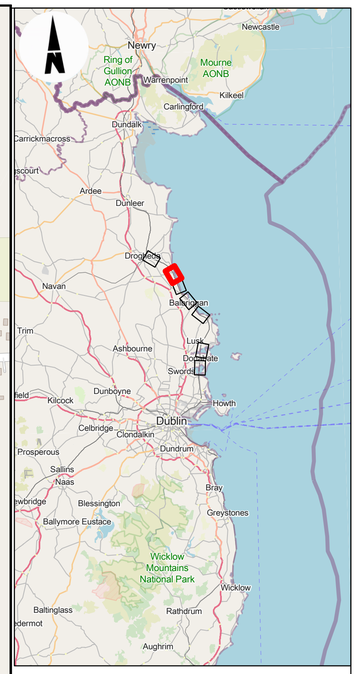

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- CORMORANT

FLIGHT LINES (HEIGHT)
- CORMORANT: 0-10M
- CORMORANT: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

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DART+ Coastal North

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Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

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07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 6

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100132	32 of 85	S4	P02

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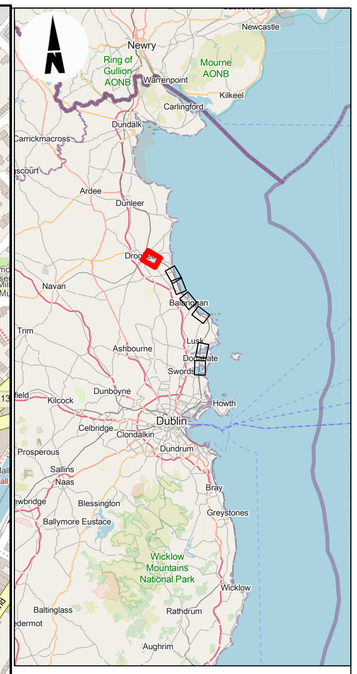

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLIGHT LINES (HEIGHT)

- CORMORANT: >10M

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 7

Drawing File Name	Sheet Number	Status	Rev
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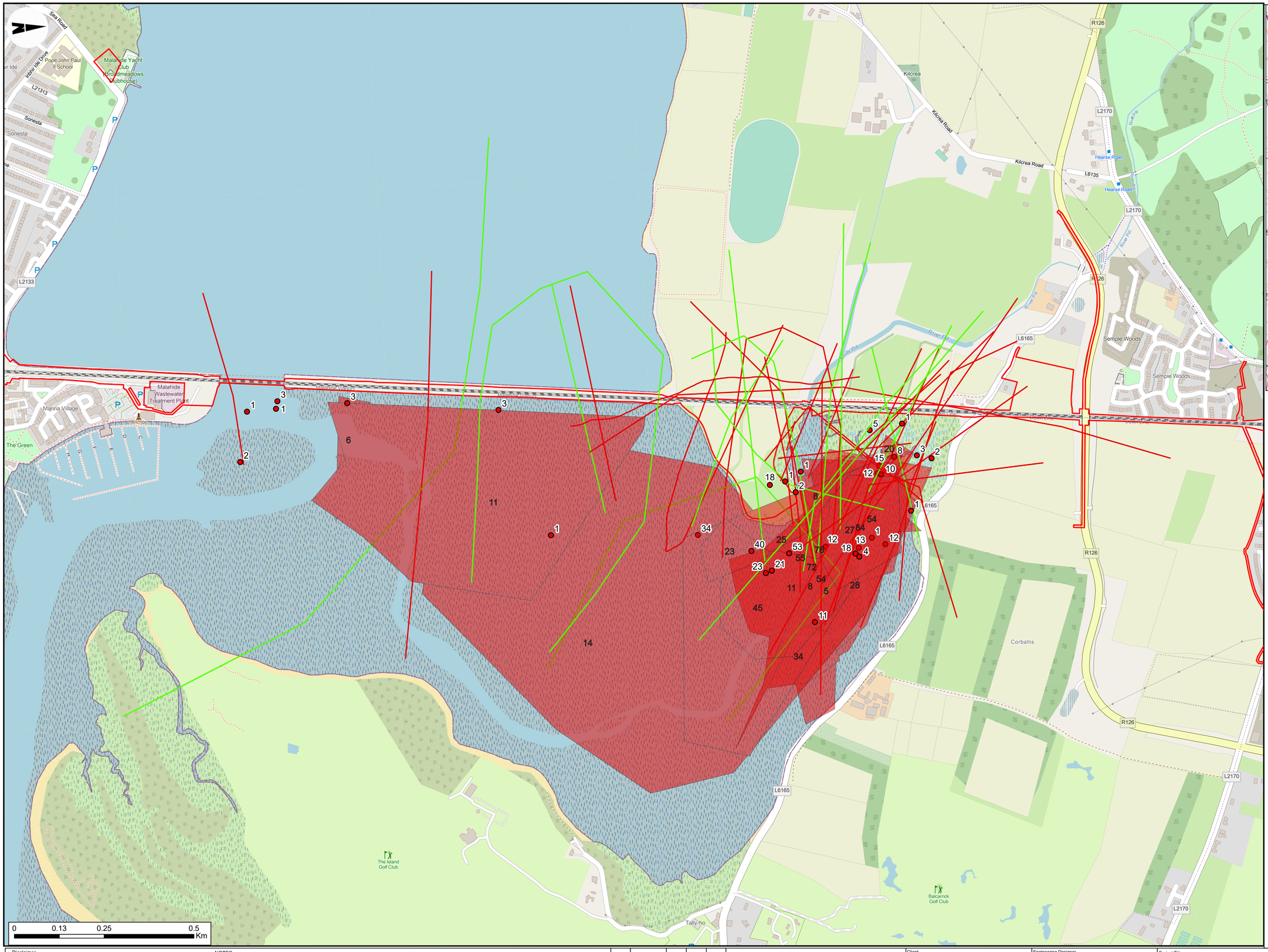

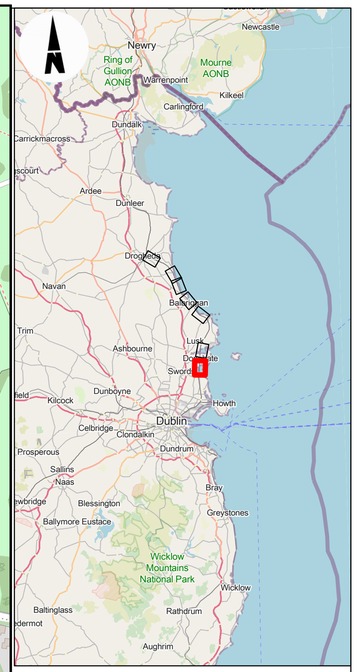

LEGEND

- DEVELOPMENT BOUNDARY

FLOCK COUNT
- CURLEW

FLOCK COUNT AREAS
- CURLEW

FLIGHT LINES (HEIGHT)
- CURLEW: 0-10M
- CURLEW: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

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P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 1

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100134	34 of 85	S4	P02

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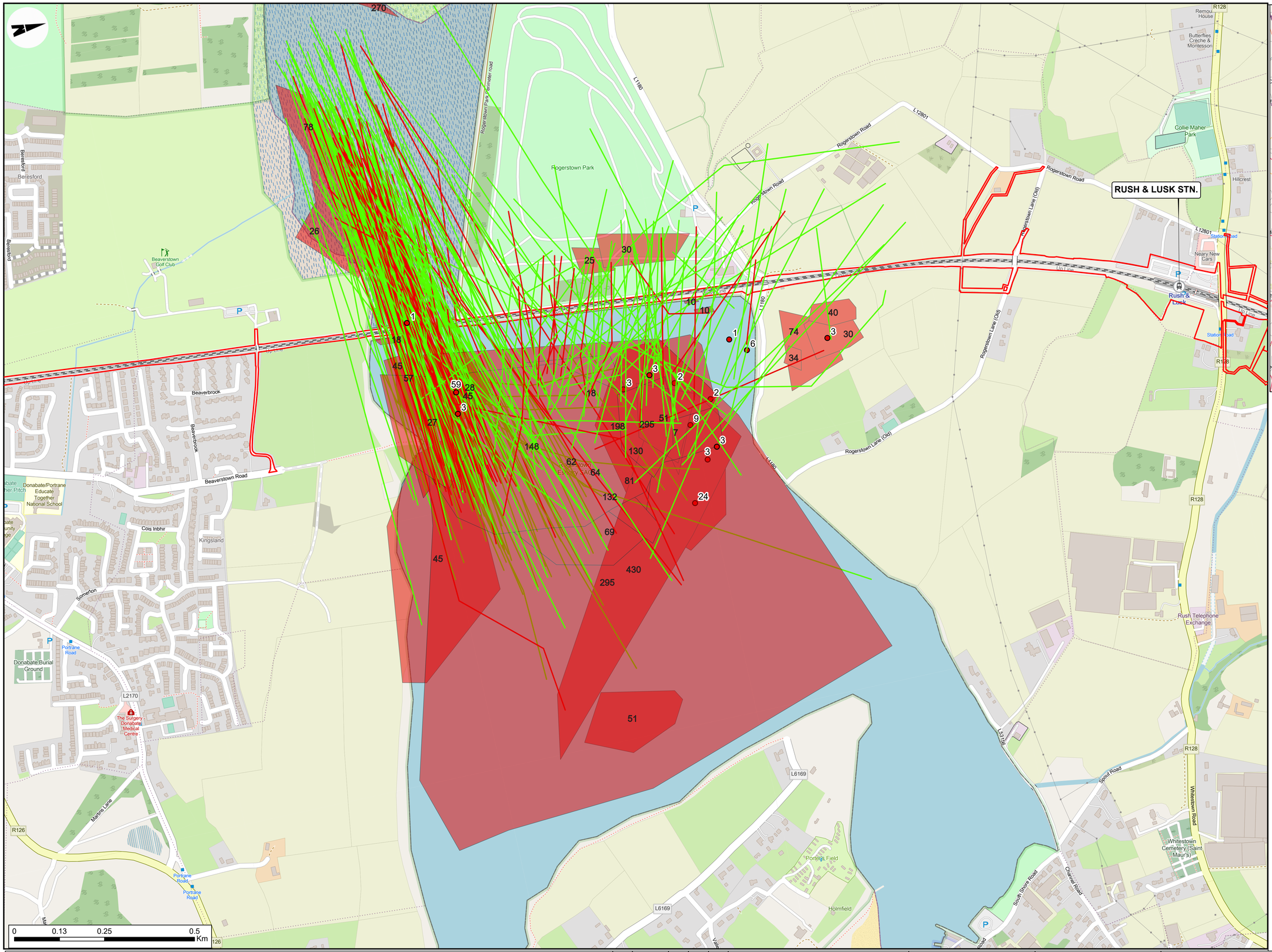

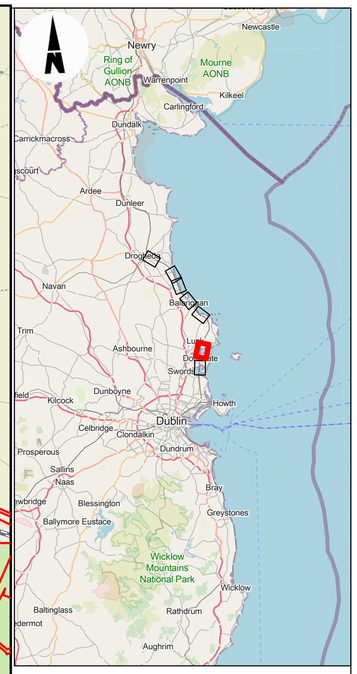

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- CURLEW

FLOCK COUNT AREAS
- CURLEW

FLIGHT LINES (HEIGHT)
- CURLEW: 0-10M
- CURLEW: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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3. FIGURE ONLY INCLUDES AREAS WITH SURVEY RESULTS.

DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

Tionscadal Éireann Project Ireland 2040

Rev	Date	Drn	Chk'd	App'd	Description
P02	31/05/2024	DM	SQ	COD	PLANNING ISSUE

Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 2

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100135	35 of 85	S4	P02

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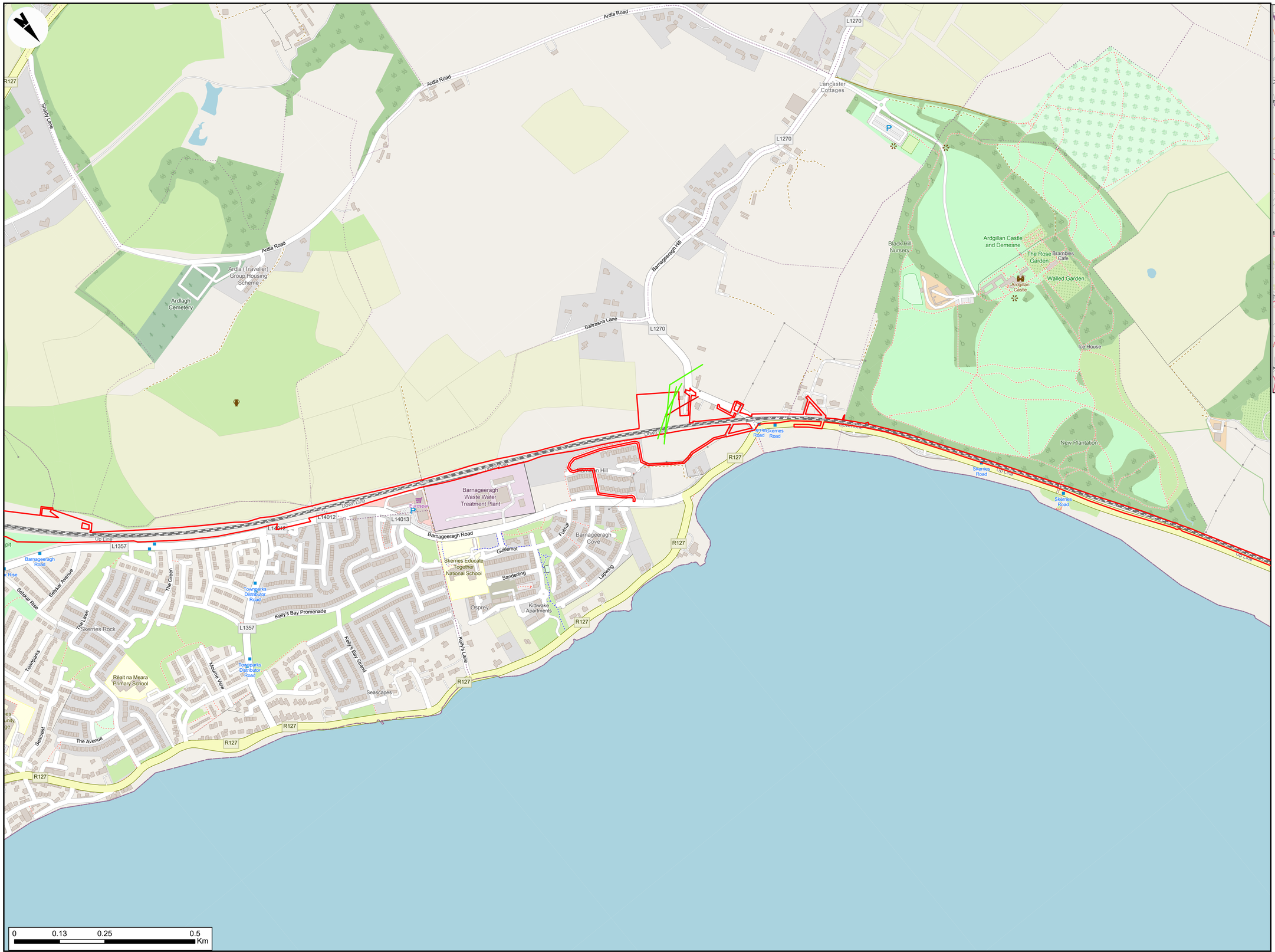

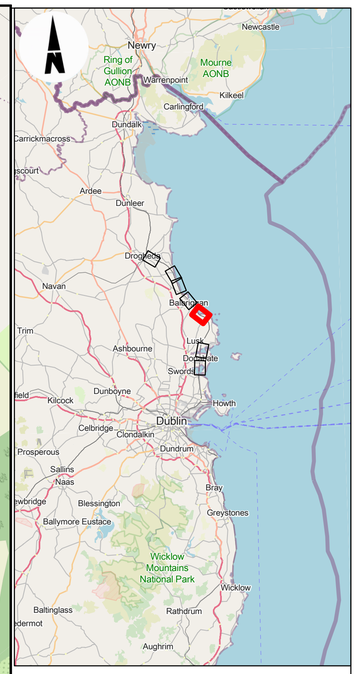

LEGEND

DEVELOPMENT BOUNDARY

FLIGHT LINES (HEIGHT)

CURLEW: 0-10M

CURLEW: >10M

0 0.13 0.25 0.5 Km

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DART+ Coastal North

NTA Údarás Náisiúnta Iompair National Transport Authority

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Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Date: 07/09/2023 | Scale: 1:5000 @ A1, 1:10000 @ A3 | Drawn: DM | Checked: SQ | Approved: COD

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

Project Title: **DART+ COASTAL NORTH**

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 3

Drawing File Name: D+WP56-ARP-ZZ-NL-DR-EVBD-100136 | Sheet Number: 36 of 85 | Status: S4 | Rev: P02

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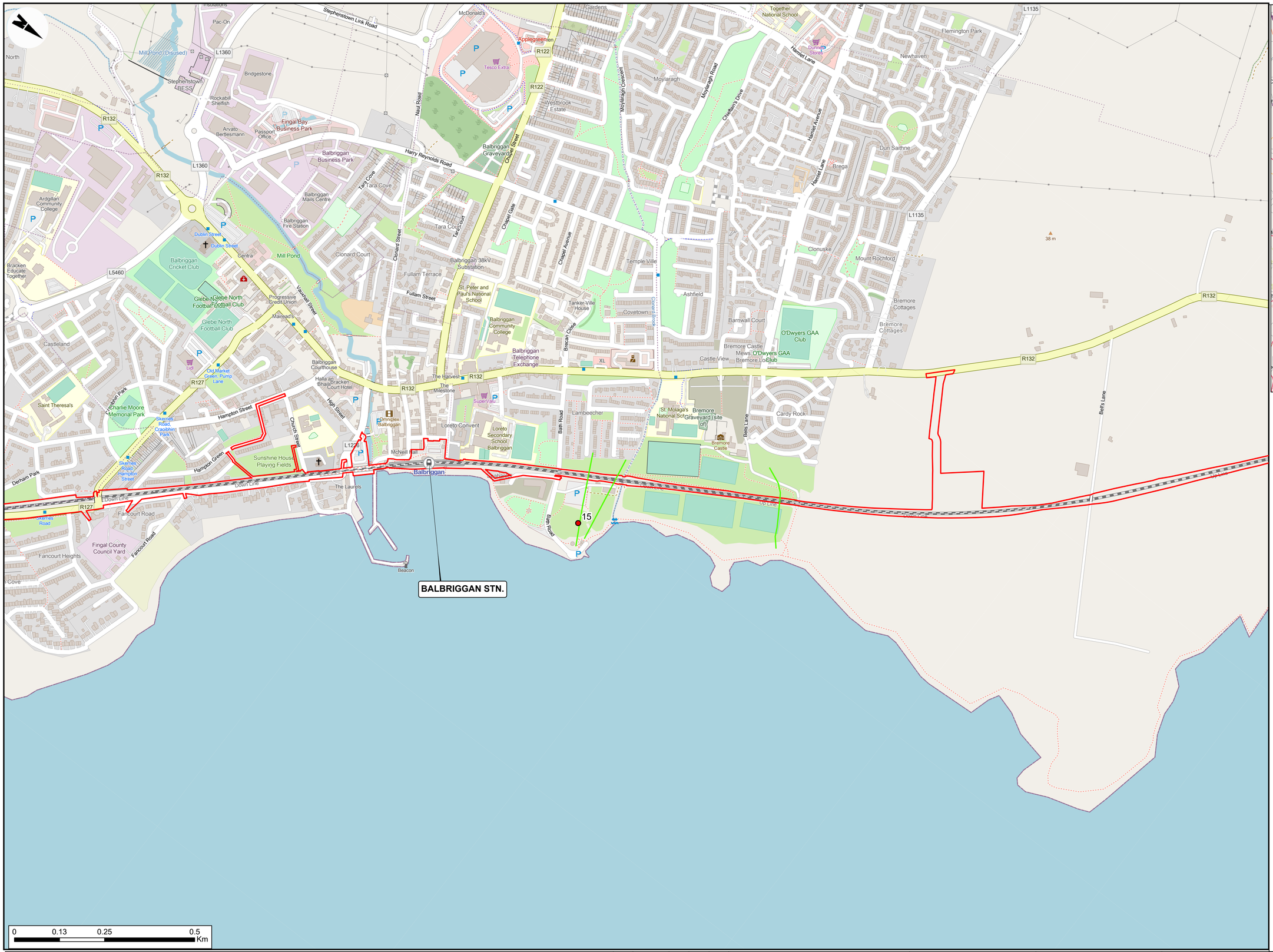

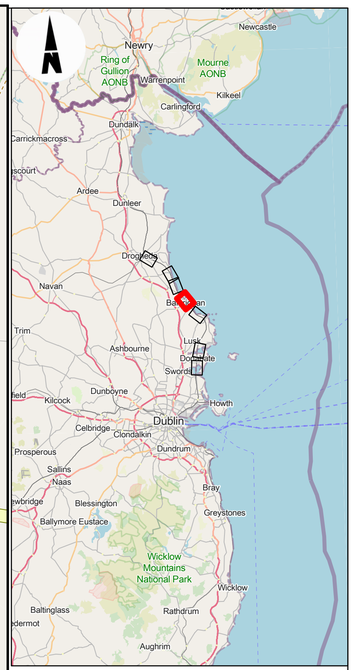

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT

- CURLEW

FLIGHT LINES (HEIGHT)

- CURLEW: >10M

0 0.13 0.25 0.5 Km

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DART+ Coastal North

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Client: Iarnród Éireann Irish Rail

Engineering Designer: ARUP

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY FIGURE 8.8: WINTERING BIRD SURVEY SURVEY AREA 4

Date	Scale	Drawn	Checked	Approved
07/09/2023	1:5000 @ A1 1:10000 @ A3	DM	SQ	COD

Project Code	Originator Code	QMS Code	Drawing File Name	Sheet Number	Status	Rev
D+WP56	ARP	279933-00	D+WP56-ARP-ZZ-NL-DR-EVBD-100137	37 of 85	S4	P02

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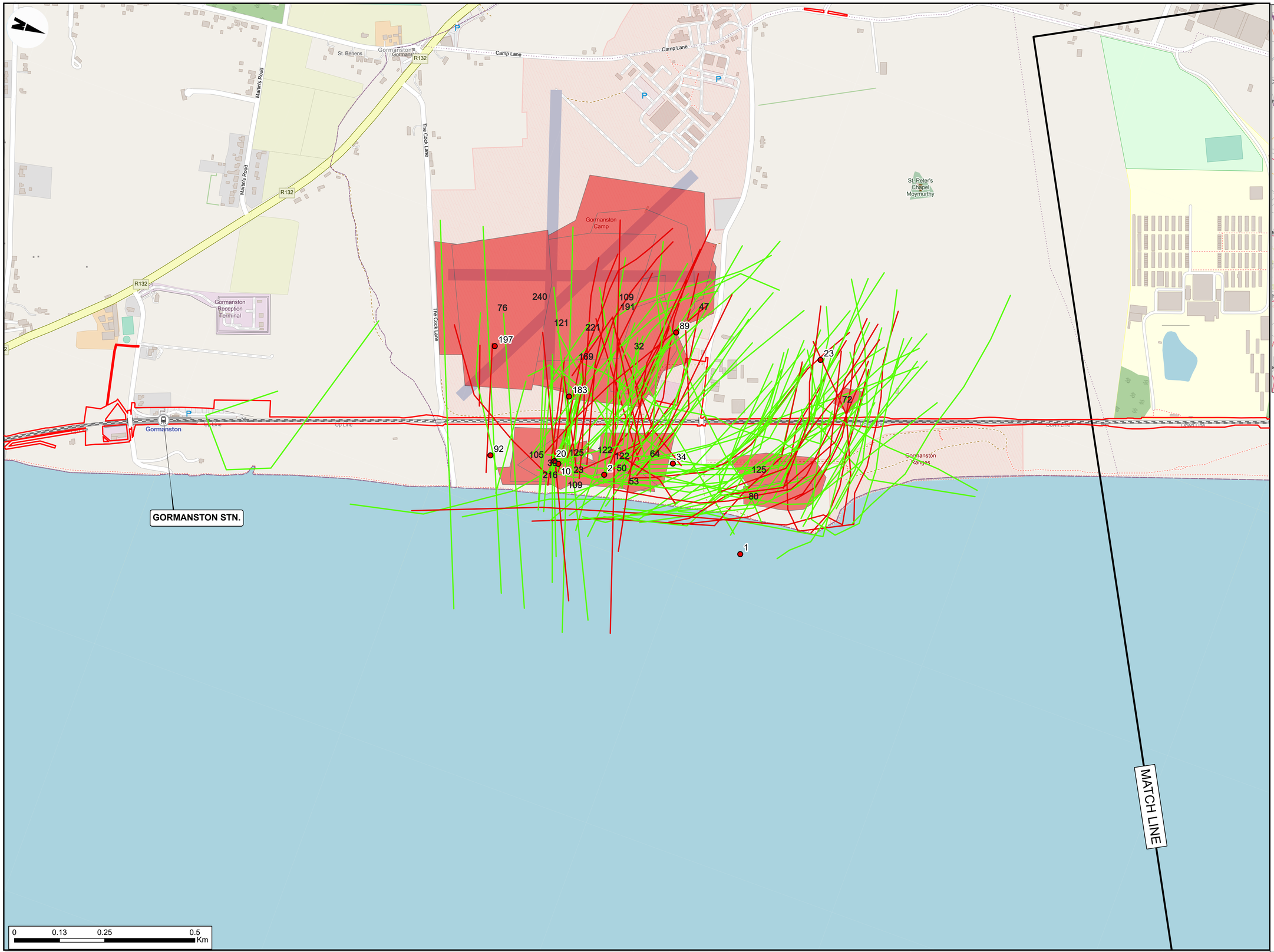

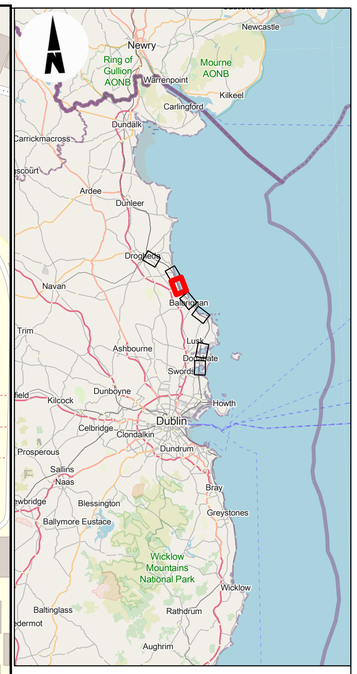

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- CURLEW

FLOCK COUNT AREAS
- CURLEW

FLIGHT LINES (HEIGHT)
- CURLEW: 0-10M
- CURLEW: >10M

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DART+ Coastal North

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D+WP56	ARP	279933-00

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 5

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100138	38 of 85	S4	P02

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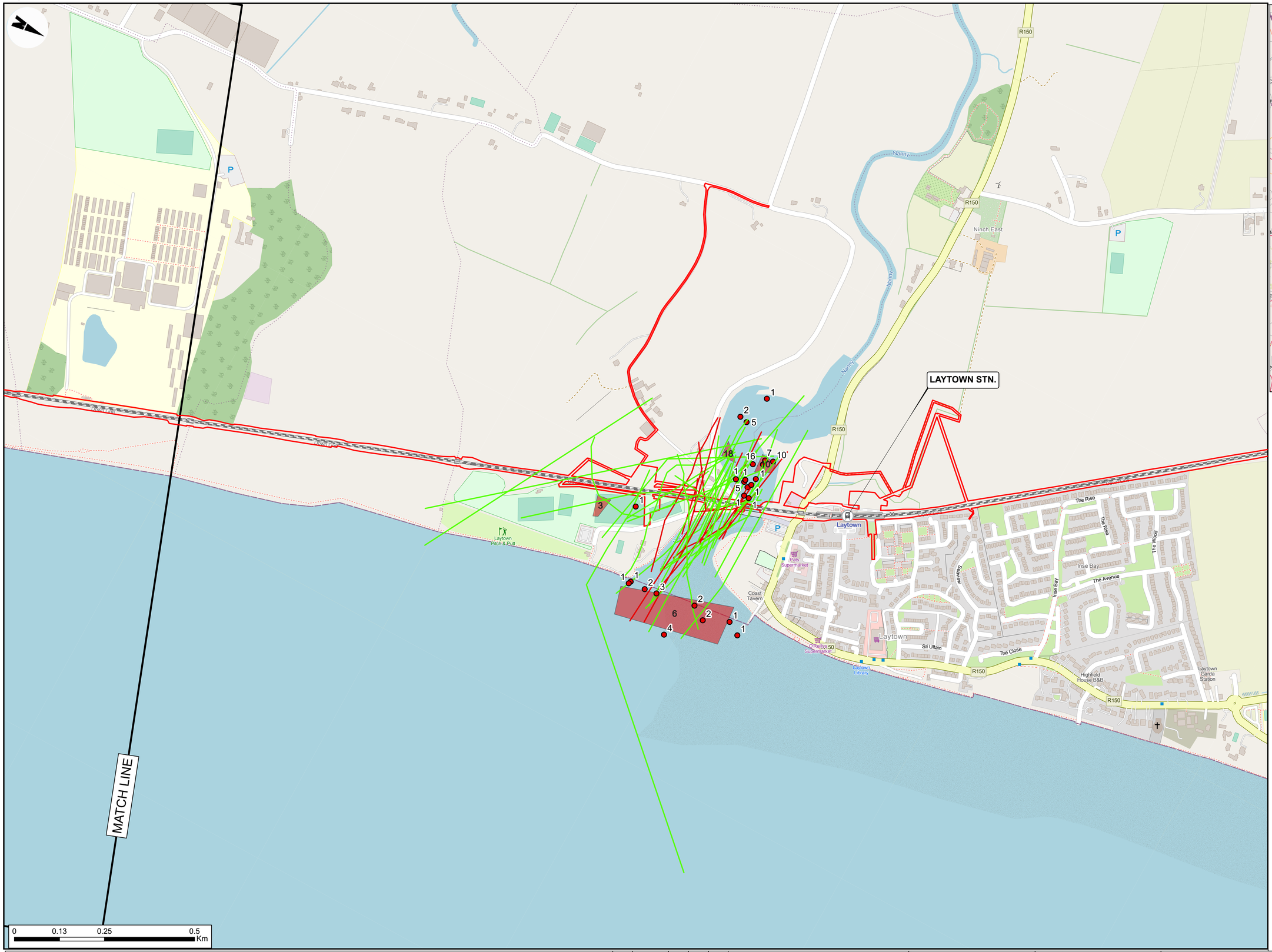

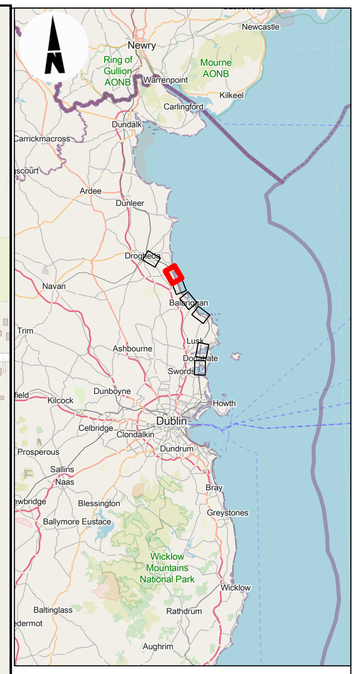

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- CURLEW

FLOCK COUNT AREAS
- CURLEW

FLIGHT LINES (HEIGHT)
- CURLEW: 0-10M
- CURLEW: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

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DART+ Coastal North

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

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 6

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100139	39 of 85	S4	P02

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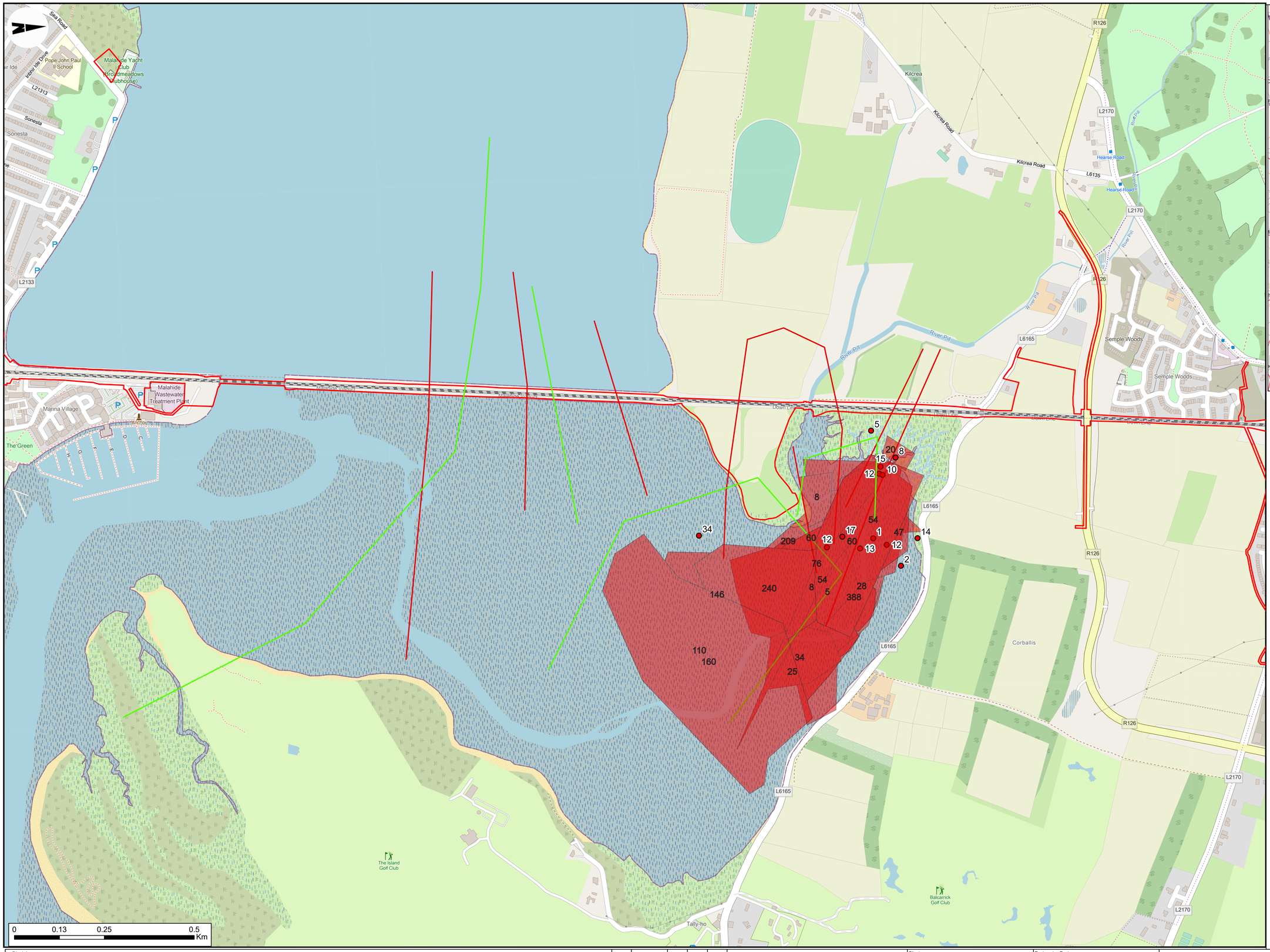

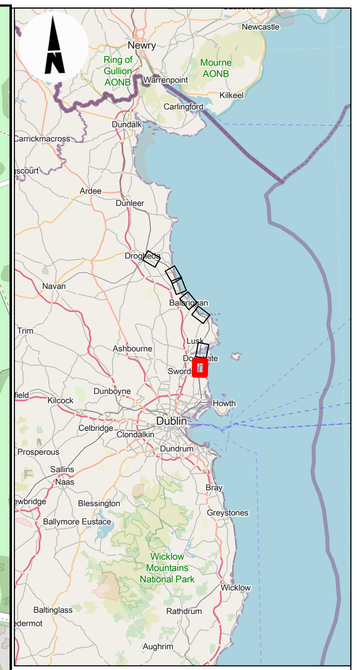

LEGEND

- DEVELOPMENT BOUNDARY

FLOCK COUNT
- DUNLIN

FLOCK COUNT AREAS
- DUNLIN

FLIGHT LINES (HEIGHT)
- DUNLIN: 0-10M
- DUNLIN: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 1

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100140	40 of 85	S4	P02

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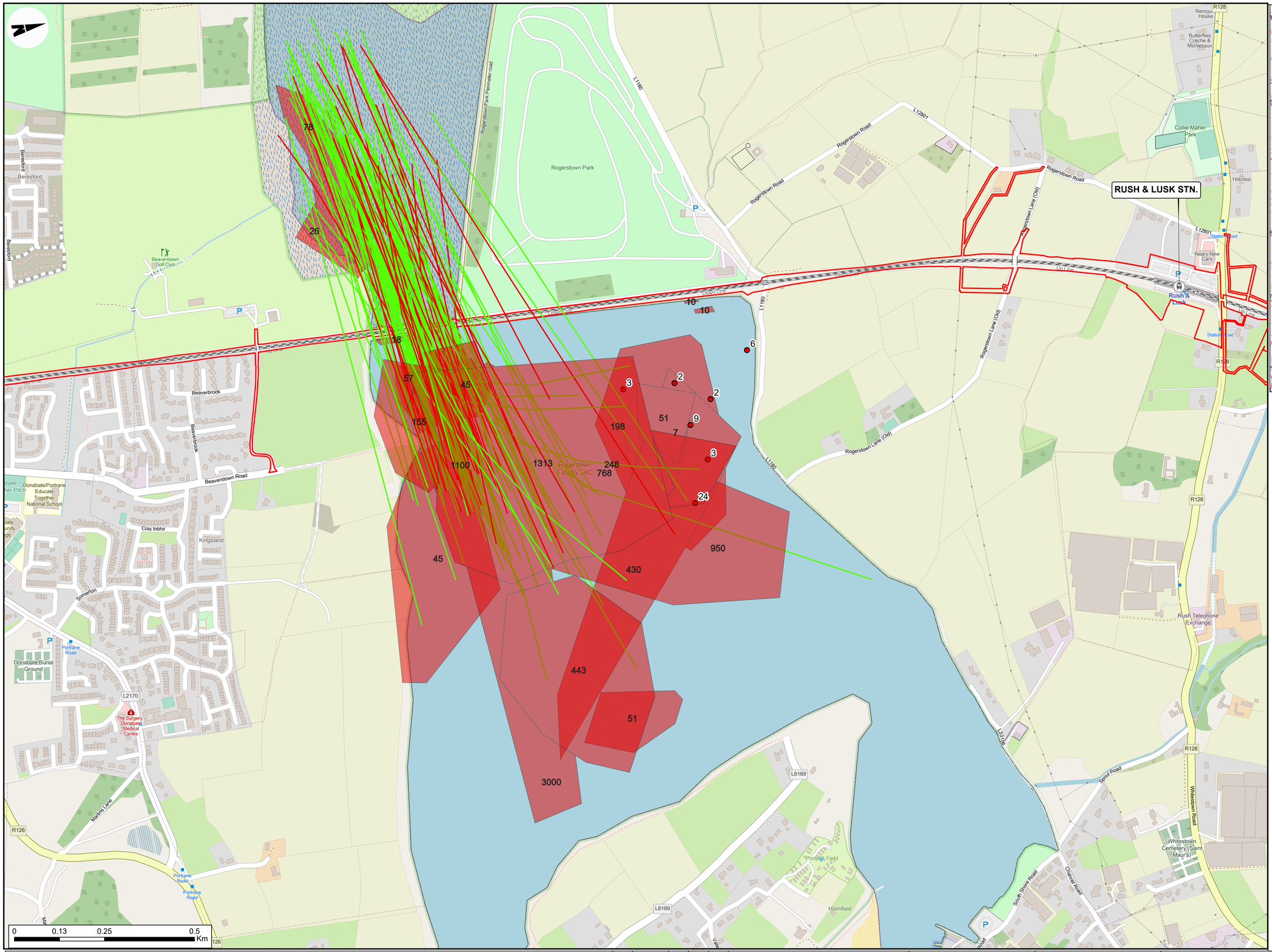

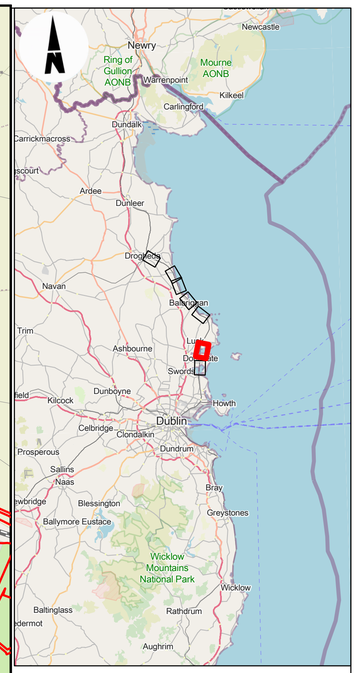

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT AREAS
- DUNLIN

FLIGHT LINES (HEIGHT)
- DUNLIN: 0-10M
- DUNLIN: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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DART+ Coastal North

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D+WP56	ARP	279933-00

Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 2

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100141	41 of 85	S4	P02

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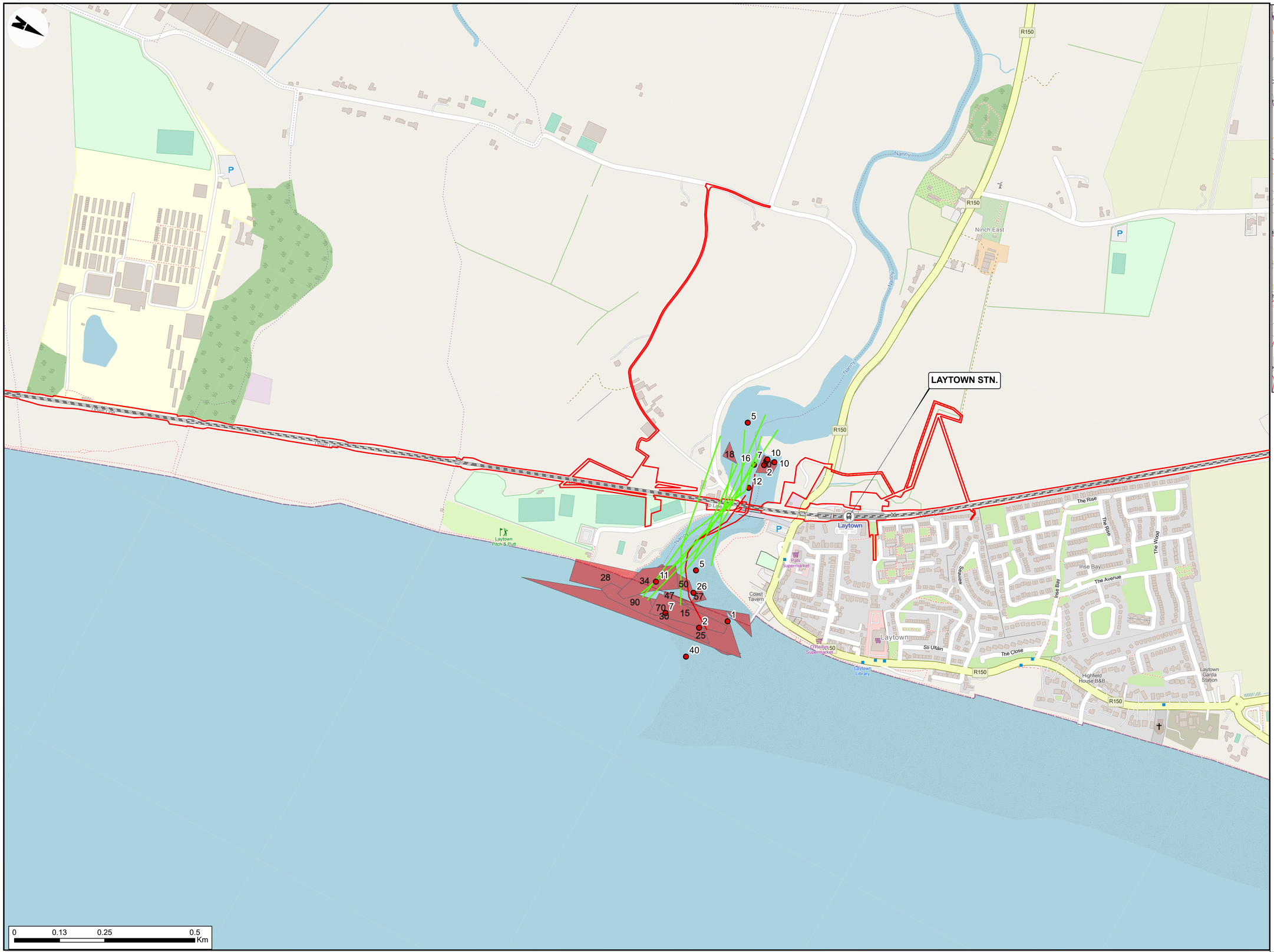

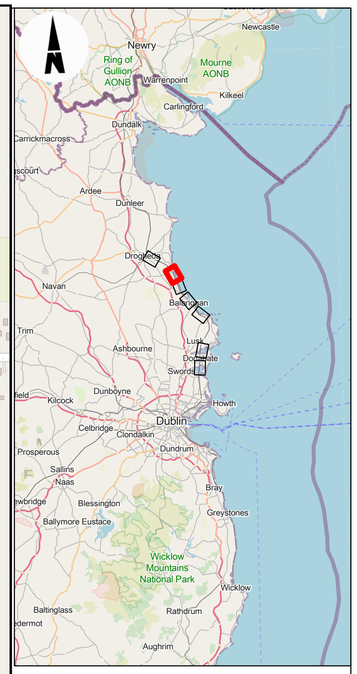

LEGEND

- RAILWAY STATIONS
- DEVELOPMENT BOUNDARY

FLOCK COUNT
- DUNLIN

FLOCK COUNT AREAS
- DUNLIN

FLIGHT LINES (HEIGHT)
- DUNLIN: 0-10M
- DUNLIN: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

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Project Title: DART+ COASTAL NORTH

Drawing Title: BIODIVERSITY
FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 6

Drawing File Name	Sheet Number	Status	Rev
D+WP56-ARP-ZZ-NL-DR-EVBD-100142	42 of 85	S4	P02

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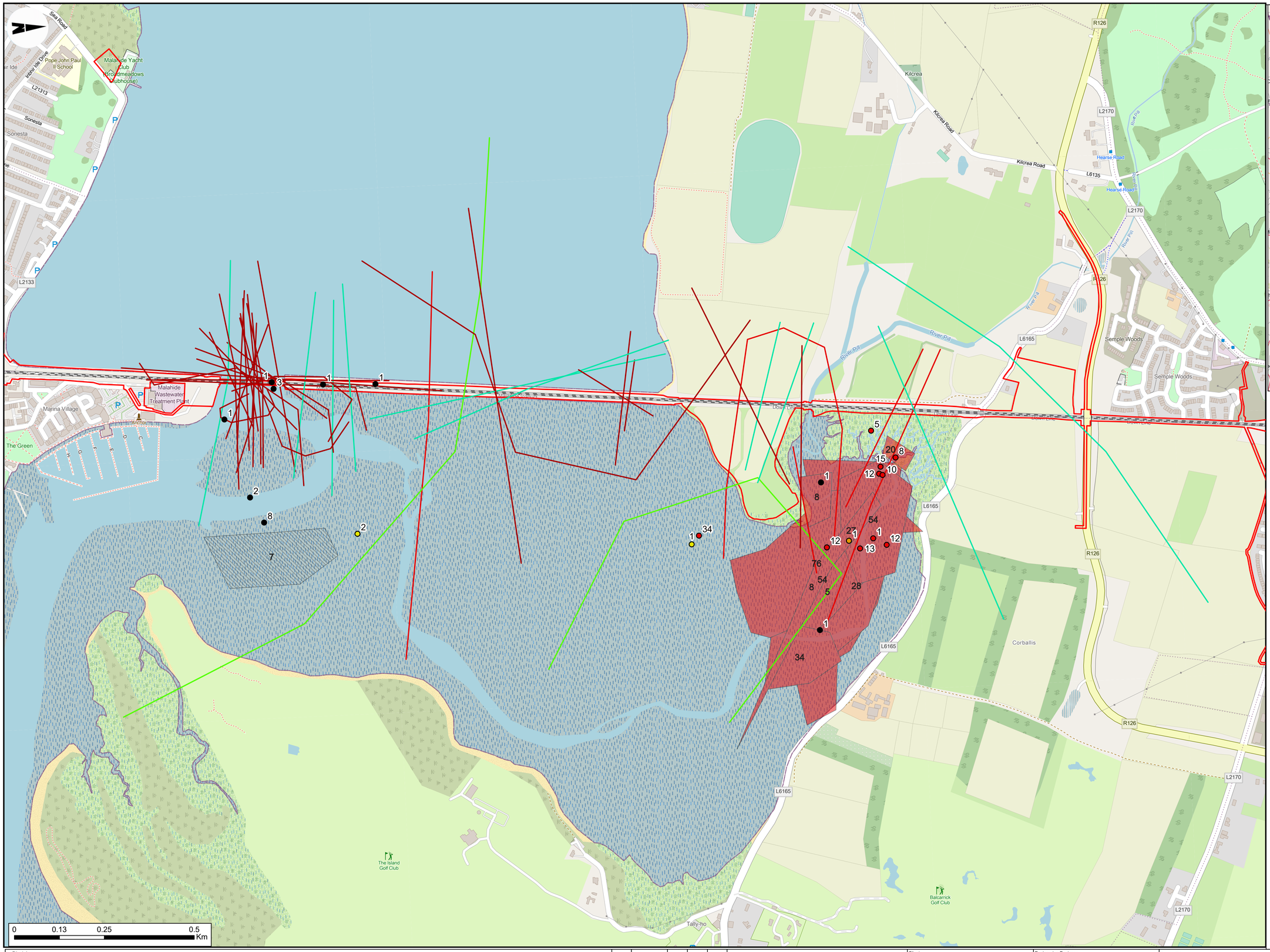

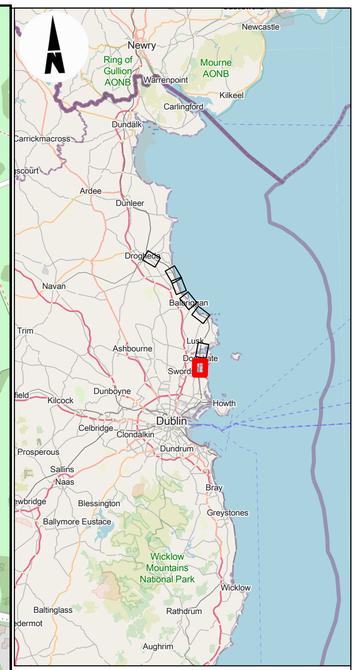

LEGEND

- DEVELOPMENT BOUNDARY

FLOCK COUNT
- GOLDEN PLOVER
- GREAT BLACK-BACKED GULL
- GREAT CRESTED GREBE

FLOCK COUNT AREAS
- GREY PLOVER

FLIGHT LINES (HEIGHT)
- GREAT BLACK-BACKED GULL: 0-10M
- GREAT BLACK-BACKED GULL: >10M

FLOCK COUNT
- WIGEON

FLOCK COUNT AREAS
- WIGEON

FLIGHT LINES (HEIGHT)
- WIGEON: 0-10M
- WIGEON: >10M

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Project Title: DART+ COASTAL NORTH

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FIGURE 8.8: WINTERING BIRD SURVEY
SURVEY AREA 1

Drawing File Name	Sheet Number	Status	Rev
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