Environmental Impact Assessment Report

Volume 4

Appendix 4.1 Cable protection locations

codling
wind park

APPENDIX 4.1 CABLE PROTECTION LOCATIONS

1 Introduction

1. Codling Wind Park Limited (hereafter 'the Applicant') is proposing to develop the Codling Wind Park (CWP) Project, which is located in the Irish sea approximately 13 - 22 km off the east coast of Ireland, at County Wicklow.

2. This appendix forms part of **Chapter 4 Project Description** of the Environmental Impact Assessment Report (EIAR) for the CWP Project and provides details on the location of cable protection for the offshore export cables and the inter-array and interconnector cables.

3. As described in **Chapter 4 Project Description**, the Applicant will, where practicable, bury all cables to a minimum depth of cover. In cases where depth of cover is inadequate due to unforeseeable seabed conditions, cable protection will be implemented as mitigation to avoid risks to other marine operations. It should be noted that cable burial is the preferred method of protection, and secondary cable protection will only be used where cable burial is not appropriate or achievable.

4. A preliminary cable burial risk assessment, involving a peer review of environmental considerations, ground conditions, and anticipated installation considerations, has been undertaken to identify locations that may require cable protection. This exercise has determined the maximum extent and volume of cable protection within the array site and offshore export cable corridor, which has been used as a basis for the EIA. Locations of cable protection are provided in tabulated form in this appendix as follows:

   - Offshore export cables, **Table 1** below
   - IACs WTG Layout Option A (75 WTGs), **Table 2** below
   - IACs WTG Layout Option B (60 WTGs), **Table 3** below
   - Interconnector Cables, **Table 4** below.

2 Offshore export cables cable protection

Table 1 Cable protection locations offshore export cable

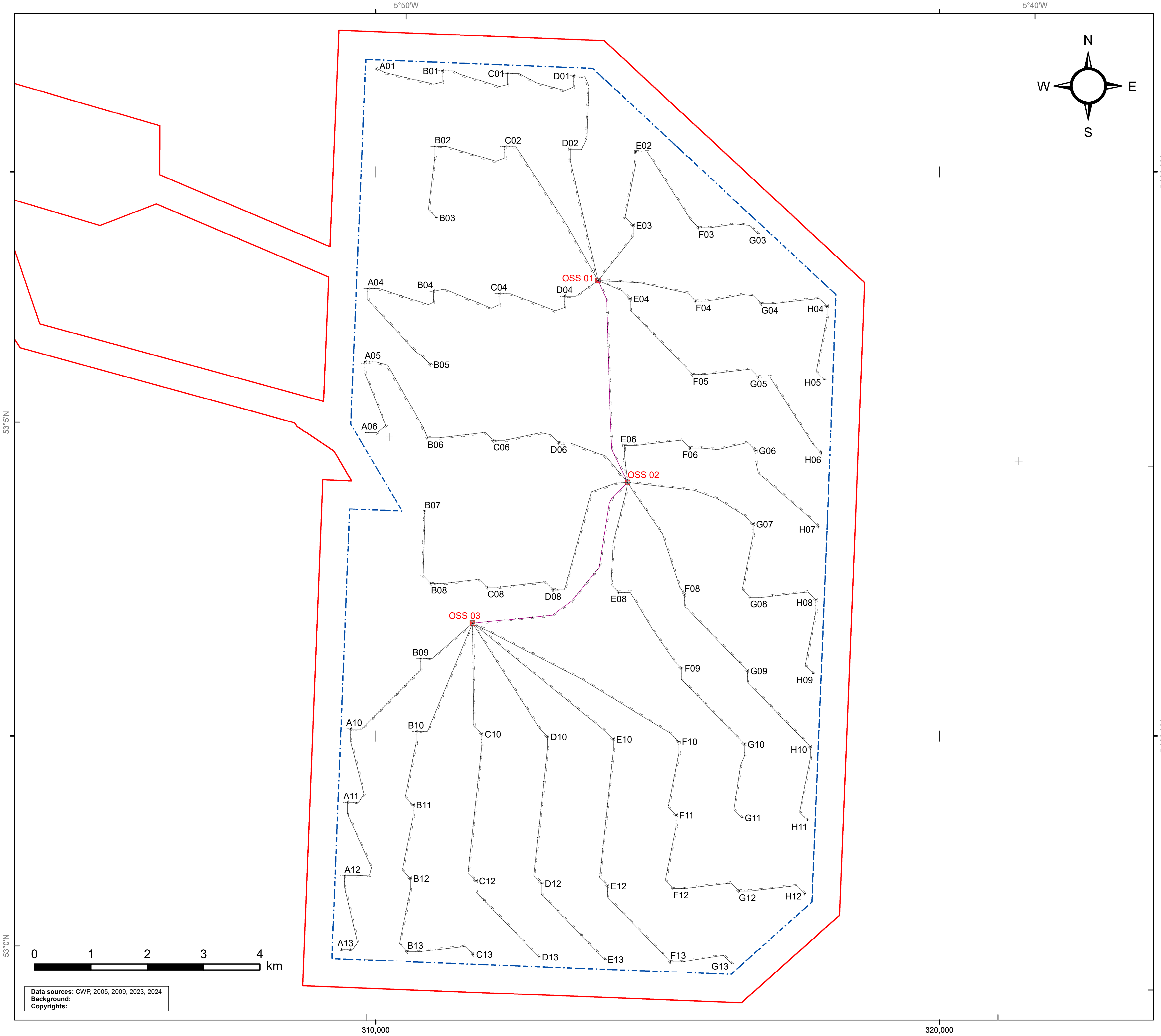
Circuit 1		Circuit 2		Circuit 3	
KP Start	KP end	KP Start	KP end	KP Start	KP end
2650	2750	2500	2550	2650	2750
2900	2950	2700	2750	3000	3050
3200	3300	3100	3250	3200	3300
4480	4580	4100	4200	3440	3540
5000	5150	5400	5550	4750	4900
5600	5700	5850	5950	5400	5500
8500	8600	8500	8600	8500	8600
9900	10000	9900	10000	9800	9900
11200	11300	11400	11500	11400	11500
12650	12800	12800	12950	13200	13350
14400	14550	14400	14550	13950	14100
15050	15200	15050	15200	14750	14900
16050	16200	16050	16200	15750	15900
17050	17300	16800	17050	17000	17250
17550	17700	17400	17550	17450	17600
18750	18950	18550	18750	18250	18450
21850	22000	21750	21900	21600	21750
23600	23750	23500	23650	23350	23500
25200	25350	25100	25250	24950	25100
27500	27650	27400	27550	27250	27400
28900	29150	28800	29050	28650	28900
29400	29600	29300	29500	29150	29350
29900	30150	29900	30300	29900	30300
30250	30350	32300	32450	31900	32100
32100	32200	33900	34050	33950	34200
33600	33750	34450	34700	34550	34800
36050	36200	37800	38000	37800	38000
37100	37200	39800	40050	41250	41500
37650	37800	42300	42550	42100	42200
38200	38350	44550	44700	43500	43650
38950	39200	44829	44879	43934	43984
39800	39900				

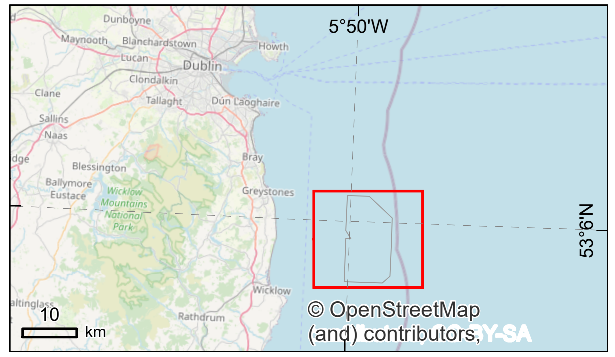
Circuit 1		Circuit 2		Circuit 3	
KP Start	**KP end**	**KP Start**	**KP end**	**KP Start**	**KP end**
40400	40550				
41000	41150				
41386	41436				

3 IAC Cable Protection Locations

3.1 WTG Layout Option A (75 WTGs)

5. To provide context to **Table 2**, **Figure 1,** below details IAC layouts in respect of WTG Layout Option A.





Legend

- Planning application boundary
- Array site
- Inter-array cables (IACs)
- Interconnector cables
- OSS
- Wind turbine generators (WTGs)

codling wind park

Project: Codling Wind Park

Contractor:

Website:

Figure 1
WTG layout Option A (75 WTGs)

CWP doc. number: CWP-CWP-ENG-08-01-MAP-1703

Internal descriptive code: WF - PAB..WF.RLB..WTG.LO.75.L219..IACs..OSSs..INTCs - - (EIAR.Vol.04.Ch.04.Ap.04.01.FIG.01)

Size: A3

Scale: 1:65,000

CRS: EPSG 25830

Rev.	*Updates*	*Date*	*By*	*Chk'd*	*App'd*
00	Final for issue	2024/07/10	EA	CD	ES

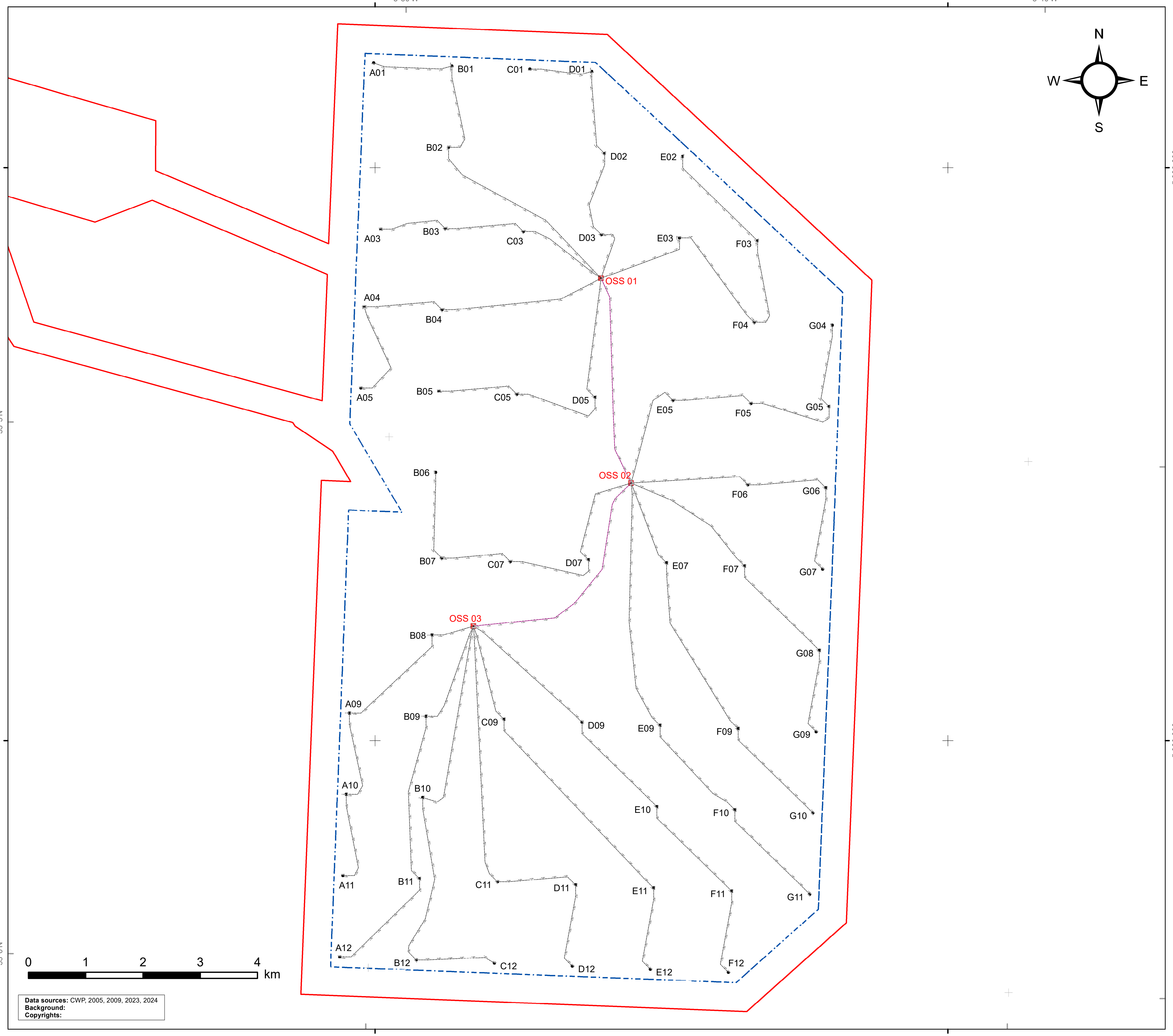
Table 2 Cable protection locations IACs WTG Layout Option A (75 WTGs)

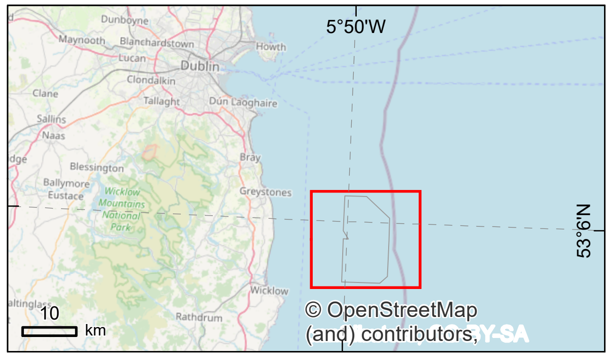
Cable_ID	1st end CP	KP1 start1	KP1 end	KP2 start	KP2 end	2nd end CP2
OSS 01-C02	25.0	300.0	700.0	1,150.0	1,450.0	25.0
C02-B02	25.0	950.0	1,300.0			25.0
B02-B03	25.0	150.0	300.0	900.0	1,000.0	25.0
OSS 01-D02	25.0	200.0	450.0	1,100.0	1,350.0	25.0
D02-D01	25.0	300.0	550.0	1,350.0	1,500.0	25.0
D01-C01	25.0	250.0	400.0	1,000.0	1,150.0	25.0
C01-B01	25.0	800.0	950.0	1,200.0	1,350.0	25.0
B01-A01	25.0	300.0	400.0	1,150.0	1,350.0	25.0
OSS 01-E03	25.0	250.0	350.0	550.0	700.0	25.0
E03-E02	25.0	200.0	300.0	850.0	1,000.0	25.0
E02-F03	25.0	250.0	400.0	900.0	1,150.0	25.0
F03-G03	25.0	350.0	450.0	600.0	700.0	25.0
OSS 01-F04	25.0	350.0	500.0	1,000.0	1,250.0	25.0
F04-G04	25.0	400.0	500.0	800.0	900.0	25.0
G04-H04	25.0	250.0	350.0	800.0	900.0	25.0
H04-H05	25.0	400.0	500.0	900.0	1,050.0	25.0
OSS 01-E04	25.0	400.0	500.0			25.0
E04-F05	25.0	250.0	350.0	1,300.0	1,550.0	25.0
F05-G05	25.0	250.0	450.0			25.0
G05-H06	25.0	800.0	900.0	1,450.0	1,700.0	25.0
OSS 01-D04	25.0	200.0	300.0			25.0
D04-C04	25.0	950.0	1,250.0			25.0
C04-B04	25.0	1,000.0	1,300.0			25.0
B04-A04	25.0	150.0	300.0	1,100.0	1,250.0	25.0
A04-B05	25.0	200.0	350.0	1,500.0	1,700.0	25.0
OSS 02-E06	25.0	300.0	400.0			25.0
E06-F06	25.0	200.0	250.0	1,000.0	1,150.0	25.0
F06-G06	25.0	200.0	300.0	900.0	1,000.0	25.0
G06-H07	25.0	300.0	500.0	1,200.0	1,400.0	25.0
OSS 02-G07	25.0	1,100.0	1,200.0	1,700.0	2,050.0	25.0
G07-G08	25.0	250.0	500.0			25.0
G08-H08	25.0	900.0	1,100.0			25.0
H08-H09	25.0	200.0	300.0	850.0	1,000.0	25.0
OSS 02-F08	25.0	350.0	650.0	1,900.0	2,100.0	25.0
F08-G09	25.0	250.0	400.0	1,000.0	1,200.0	25.0
G09-H10	25.0	250.0	400.0	1,000.0	1,200.0	25.0
H10-H11	25.0	200.0	300.0	850.0	1,000.0	25.0
OSS 02-E08	25.0	250.0	450.0	950.0	1,200.0	25.0

Cable_ID	1st end CP	KP1 start1	KP1 end	KP2 start	KP2 end	2nd end CP2
E08-F09	25.0	400.0	650.0	1,600.0	1,700.0	25.0
F09-G10	25.0	400.0	650.0	1,600.0	1,700.0	25.0
G10-G11	25.0	200.0	300.0	850.0	1,000.0	25.0
OSS 02-D08	25.0	500.0	800.0	2,200.0	2,500.0	25.0
D08-C08	25.0	500.0	700.0			25.0
C08-B08	25.0	400.0	600.0			25.0
B08-B07	25.0	200.0	300.0	600.0	750.0	25.0
OSS 02-D06	25.0	250.0	350.0	1,000.0	1,200.0	25.0
D06-C06	25.0	200.0	400.0			25.0
C06-B06	25.0	100.0	150.0	550.0	700.0	25.0
B06-A05	25.0	200.0	350.0	1,500.0	1,700.0	25.0
A05-A06	25.0	400.0	550.0	1,200.0	1,350.0	25.0
OSS 03-F10	25.0	500.0	800.0	2,000.0	2,500.0	25.0
F10-F11	25.0	250.0	350.0	1,100.0	1,250.0	25.0
F11-F12	25.0	200.0	300.0	850.0	1,000.0	25.0
F12-G12	25.0	900.0	1,100.0			25.0
G12-H12	25.0	900.0	1,100.0			25.0
OSS 03-E10	25.0	500.0	800.0	2,000.0	2,300.0	25.0
E10-E12	25.0	500.0	750.0	2,000.0	2,250.0	25.0
E12-F13	25.0	400.0	650.0	1,550.0	1,650.0	25.0
F13-G13	25.0	800.0	1,000.0			25.0
OSS 03-D10	25.0	500.0	700.0	2,000.0	2,300.0	25.0
D10-D12	25.0	500.0	750.0	2,000.0	2,250.0	25.0
D12-E13	25.0	400.0	650.0	1,600.0	1,700.0	25.0
OSS 03-C10	25.0	500.0	750.0	1,700.0	1,850.0	25.0
C10-C12	25.0	500.0	750.0	2,000.0	2,250.0	25.0
C12-D13	25.0	400.0	650.0	1,600.0	1,700.0	25.0
OSS 03-B10	25.0	500.0	700.0	1,800.0	2,100.0	25.0
B10-B11	25.0	250.0	350.0	1,100.0	1,250.0	25.0
B11-B12	25.0	250.0	350.0	1,100.0	1,250.0	25.0
B12-B13	25.0	250.0	350.0	1,100.0	1,250.0	25.0
B13-C13	25.0	800.0	1,000.0			25.0
OSS 03-B09	25.0	800.0	1,000.0			25.0
B09-A10	25.0	800.0	1,000.0	1,550.0	1,750.0	25.0
A10-A11	25.0	1,150.0	1,450.0			25.0
A11-A12	25.0	1,200.0	1,300.0	1,450.0	1,700.0	25.0
A12-A13	25.0	1,150.0	1,450.0			25.0

3.2 WTG Layout Option B (60 WTGs)

6. To provide context to **Table 3**, **Figure 2,** below details IAC layouts in respect of WTG Layout Option B





Legend

- Planning application boundary
- Array site
- Inter-array cables (IACs)
- Interconnector cables
- OSS
- Wind turbine generators (WTGs)

codling wind park

Project: Codling Wind Park

Contractor: LOGO

Website:

Figure 2
WTG layout Option B (60 WTGs)

CWP doc. number: CWP-CWP-ENG-08-01-MAP-1702

Internal descriptive code:

Size: A3
Scale: 1:65,000

CRS: EPSG 25830

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00	Final for issue	2024/07/10	EA	CD	ES

Table 3 Cable protection locations IACs WTG Layout Option B (60 WTGs)

Cable_ID	1st end CP	KP1 start	KP1 end	KP2 start	KP2 end	2nd end CP2
OSS 01 - C03	25.0	250.0	350.0	1150.0	1450.0	25.0
C03-B03	25.0	200.0	400.0	1200.0	1300.0	25.0
B03-A03	25.0	200.0	350.0	1000.0	1100.0	25.0
OSS 01 - B02	25.0	200.0	450.0	2600.0	3400.0	25.0
B02-B01	25.0	200.0	400.0	650.0	850.0	25.0
B01-A01	25.0	300.0	400.0	1100.0	1300.0	25.0
OSS 01 - D03	25.0	650.0	850.0			25.0
D03-D02	25.0	650.0	900.0	1200.0	1350.0	25.0
D02-D01	25.0	150.0	350.0	1150.0	1350.0	25.0
D01-C01	25.0	150.0	300.0	750.0	900.0	25.0
OSS 01 - E03	25.0	150.0	250.0	1300.0	1550.0	25.0
E03-F04	25.0	150.0	300.0	1300.0	1600.0	25.0
F04-F03	25.0	150.0	350.0	1200.0	1350.0	25.0
F03-E02	25.0	350.0	500.0	1600.0	1900.0	25.0
OSS 01 - D05	25.0	150.0	350.0	1800.0	2050.0	25.0
D05-C05	25.0	150.0	500.0			25.0
C05-B05	25.0	100.0	400.0	1200.0	1350.0	25.0
OSS 01 - B04	25.0	150.0	350.0	2000.0	2550.0	25.0
B04-A04	25.0	100.0	350.0	1200.0	1350.0	25.0
A04-A05	25.0	100.0	500.0	1250.0	1500.0	25.0
OSS 02 - E05	25.0	100.0	250.0	1500.0	1750.0	25.0
E05-F05	25.0	100.0	300.0	1200.0	1300.0	25.0
F05-G05	25.0	200.0	300.0	1350.0	1550.0	25.0
G05-G04	25.0	150.0	450.0			25.0
OSS 02 - F06	25.0	100.0	150.0	1150.0	1700.0	25.0
F06-G06	25.0	100.0	200.0	1150.0	1350.0	25.0
G06-G07	25.0	100.0	300.0	1300.0	1400.0	25.0
OSS 02 - F07	25.0	300.0	500.0	1000.0	1500.0	25.0
F07-G08	25.0	150.0	300.0	1500.0	1700.0	25.0
G08-G09	25.0	1200.0	1400.0			25.0
OSS 02 - E07	25.0	300.0	600.0	1100.0	1400.0	25.0
E07-F09	25.0	1100.0	1350.0	3000.0	3150.0	25.0
F09-G10	25.0	100.0	300.0			25.0
OSS 02 - E09	25.0	200.0	1200.0	2200.0	2400.0	25.0

Cable_ID	1st end CP	KP1 start	KP1 end	KP2 start	KP2 end	2nd end CP2
E09-F10	25.0	1400.0	1650.0			25.0
F10-G11	25.0	150.0	250.0	1800.0	1900.0	25.0
OSS 02 - D07	25.0	200.0	650.0	1650.0	1750.0	25.0
D07-C07	25.0	200.0	400.0	750.0	850.0	25.0
C07-B07	25.0	100.0	250.0			25.0
B07-B06	25.0	100.0	200.0	1000.0	1400.0	25.0
OSS 03 - D09	25.0	150.0	250.0	1950.0	2400.0	25.0
D09-E10	25.0	150.0	300.0	1700.0	1900.0	25.0
E10-F11	25.0	150.0	300.0	1650.0	1900.0	25.0
F11-F12	25.0	150.0	300.0	1200.0	1350.0	25.0
OSS 03 - C09	25.0	150.0	350.0	1500.0	1650.0	25.0
C09-E11	25.0	150.0	350.0	3200.0	3850.0	25.0
E11-E12	25.0	150.0	350.0			25.0
OSS 03 - C11	25.0	150.0	400.0	3200.0	3500.0	25.0
C11-D11	25.0	150.0	300.0	1150.0	1300.0	25.0
D11-D12	25.0	150.0	300.0	1250.0	1400.0	25.0
OSS 03 - B10	25.0	150.0	350.0	3000.0	3350.0	25.0
B10-B12	25.0	1450.0	1650.0	2550.0	2950.0	25.0
B12-C12	25.0	150.0	300.0	1150.0	1250.0	25.0
OSS 03 - B09	25.0	150.0	300.0	1650.0	1800.0	25.0
B09-B11	25.0	1350.0	1750.0	2700.0	2850.0	25.0
B11-A12	25.0	150.0	400.0	1750.0	1950.0	25.0
OSS 03 - B08	25.0	500.0	600.0			25.0
B08-A09	25.0	150.0	250.0	1550.0	1850.0	25.0
A09-A10	25.0	150.0	300.0	1350.0	1550.0	25.0
A10-A11	25.0	1200.0	1550.0			25.0

4 Interconnector cables

Table 4 Cable protection locations interconnector cables

NAME	1st end CP	KP1 start1	KP1 end	KP2 start	KP2 end	2nd end CP2
OSS 01 - OSS 02	25.0	300.0	700.0	3,000.0	3,500.0	25.0
OSS 02 - OSS 03	25.0	300.0	650.0	3,100.0	3,750.0	25.0