APPENDIX 6-1

BOTANICAL ASSESSMENT REPORT

Table of Contents

1. INTRODUCTION 1
1.1 Statement of Authority 1
1.2 Methodology 1
1.2.1 Survey Methodology 1
1.2.2 Habitat and Vegetation Composition Analysis 2
1.2.3 Annex I Habitat Assessments 3
1.2.3.1 Active raised bog [7110] and Degraded raised bogs still capable of natural regeneration [7120] 3
2. PROPOSED INFRASTRUCTURE 1
2.1 Proposed Turbine 1 1
2.2 Proposed Turbine 2 3
2.3 Proposed Turbine 3 4
2.4 Proposed Turbine 4 7
2.5 Proposed Turbine 5 8
2.6 Proposed Turbine 6 10
2.7 Proposed Turbine 7 13
2.8 Proposed Turbine 8 16
2.9 Proposed Turbine 9 18
2.10 Proposed Turbine 10 19
2.11 Proposed Turbine 11 20
2.12 Proposed Turbine 12 23
2.13 Proposed Turbine 13 24
2.14 Proposed Turbine 14 26
2.15 Proposed Turbine 15 29
2.16 Proposed Turbine 16 32
2.17 Proposed Turbine 17 34
2.18 Proposed Turbine 18 36
2.19 Proposed Turbine 19 39
2.20 Proposed Turbine 20 42
2.21 Proposed Turbine 21 43
2.22 Proposed Turbine 22 46
2.23 Proposed Turbine 23 47
2.24 Proposed Turbine 24 50
2.25 Proposed Turbine 25 51
2.26 Proposed Turbine 26 52
2.27 Proposed Turbine 27 53
2.28 Proposed Turbine 28 55
2.29 Proposed Turbine 29 58
2.30 Proposed Turbine 30 59
2.31 Proposed Turbine 31 61
2.32 Proposed Turbine 32 62
2.33 Proposed Turbine 33 65
2.34 Proposed Turbine 34 66
2.35 Proposed Turbine 35 69
2.36 Proposed Turbine 36 72
2.37 Proposed Turbine 37 73
2.38 Proposed Turbine 38 74
2.39 Proposed Turbine 39 76
2.40 Proposed Turbine 40 78
2.41 Proposed Turbine 41 80

2.42 Proposed Turbine 42 82
2.43 Proposed Turbine 43 83
2.44 Proposed Turbine 44 85
2.45 Proposed Turbine 45 88
2.46 Proposed Turbine 46 89
2.47 Proposed Onsite Substation 91
2.48 Proposed Offsite Substation 96
2.49 Proposed Met Mast 1 100
2.50 Proposed Met Mast 2 102
2.51 Proposed Temporary Construction Compound 1 – Codd 1 Bog (northwest) 104
2.52 Proposed Temporary Construction Compound 2 – Ballydermot North Bog (south) 105
2.53 Proposed Temporary Construction Compound 3 – Ballydermot South Bog (southeast) 108
2.54 Proposed Temporary Construction Compound 4 – Blackriver Bog (west) 109
2.55 Proposed Temporary Construction Compound 5 – Barnaran Bog (west) 110
2.56 Proposed Temporary Construction Compound 6 – Glashabaun South Bog (southwest) 112
2.57 Proposed Temporary Construction Compound 7 – Glashabaun North Bog (west) 114
2.58 Proposed Temporary Construction Compound 8 – Glashabaun North Bog (northeast) 115
2.59 Proposed Temporary Construction Compound 9 – Lodge Bog (Proposed Onsite Substation) 116
2.60 Proposed Temporary Construction Compound 10 – Killybegs, Co. Kildare (Proposed Offsite Substation) 118

3. **REMNANT RAISED BOG 120**

3.1 Amenity Track, Ballydermot South Bog 120
3.2 North of Proposed Turbine 10, Blackriver Bog 121
3.3 Northwest of Proposed Turbine 39, Blackriver Bog 124
3.4 Northwest of Proposed Turbine 9, Blackriver Bog 126
3.5 Northwest of Proposed Turbine 42, Glashabaun South Bog 128
3.6 West of Proposed Turbine 13, Ballydermot South Bog 129
3.7 East of Proposed Turbine 28, Glashabaun North Bog 133

4. **CONCLUSION 140**

5. **BIBLIOGRAPHY 141**

TABLE OF FIGURES

Figure 6-1-1 Relevé Locations 1

Figure 6-1-2 Eco-hydrological modelling results 135

TABLE OF TABLES

Table 1-1 Categorising types of plots using clustering analysis (after Wiser & de Cáceres, 2013). 2

Table 2-1 Botanical Survey Results Proposed Turbine 1 – Relevé 1 1

Table 2-2 Botanical Survey Results Proposed Turbine 1 – Relevé 2 2

Table 2-3 Botanical Survey Results Proposed Turbine 2 3

Table 2-4 Botanical Survey Results Proposed Turbine 3 – Relevé 1 4

Table 2-5 Botanical Survey Results Proposed Turbine 3 – Relevé 2 6

Table 2-6 Botanical Survey Results Proposed Turbine 5 8

Table 2-7 Botanical Survey Results Proposed Turbine 6 – Relevé 1 10
Table 2-8 Botanical Survey Results Proposed Turbine 6 – Relevé 2 11
Table 2-9 Botanical Survey Results Proposed Turbine 6 – Relevé 3 12
Table 2-10 Botanical Survey Results Proposed Turbine 7 – Relevé 1 14
Table 2-11 Botanical Survey Results Proposed Turbine 7 – Relevé 2 15
Table 2-12 Botanical Survey Results Proposed Turbine 8 16
Table 2-13 Botanical Survey Results Proposed Turbine 9 18
Table 2-14 Botanical Survey Results Proposed Turbine 10 19
Table 2-15 Botanical Survey Results Proposed Turbine 11 – Relevé 1 20
Table 2-16 Botanical Survey Results Proposed Turbine 11 – Relevé 2 21
Table 2-17 Botanical Survey Results Proposed Turbine 13 – Relevé 1 24
Table 2-18 Botanical Survey Results Proposed Turbine 13 – Relevé 2 25
Table 2-19 Botanical Survey Results Proposed Turbine 14 – Relevé 1 26
Table 2-20 Botanical Survey Results Proposed Turbine 14 – Relevé 2 27
Table 2-21 Botanical Survey Results Proposed Turbine 15 – Relevé 1 29
Table 2-22 Botanical Survey Results Proposed Turbine 15 – Relevé 2 30
Table 2-23 Botanical Survey Results Proposed Turbine 16 33
Table 2-24 Botanical Survey Results Proposed Turbine 17 – Relevé 1 34
Table 2-25 Botanical Survey Results Proposed Turbine 17 – Relevé 2 35
Table 2-26 Botanical Survey Results Proposed Turbine 18 – Relevé 1 37
Table 2-27 Botanical Survey Results Proposed Turbine 18 – Relevé 2 38
Table 2-28 Botanical Survey Results Proposed Turbine 19 – Relevé 1 39
Table 2-29 Botanical Survey Results Proposed Turbine 19 – Relevé 2 41
Table 2-30 Botanical Survey Results Proposed Turbine 20 42
Table 2-31 Botanical Survey Results Proposed Turbine 21 – Relevé 1 44
Table 2-32 Botanical Survey Results Proposed Turbine 21 – Relevé 2 45
Table 2-33 Botanical Survey Results Proposed Turbine 22 46
Table 2-34 Botanical Survey Results Proposed Turbine 23 – Relevé 1 48
Table 2-35 Botanical Survey Results Proposed Turbine 23 – Relevé 2 49
Table 2-36 Botanical Survey Results Proposed Turbine 24 50
Table 2-37 Botanical Survey Results Proposed Turbine 25 51
Table 2-38 Botanical Survey Results Proposed Turbine 26 52
Table 2-39 Botanical Survey Results Proposed Turbine 27 53
Table 2-40 Botanical Survey Results Proposed Turbine 28 – Relevé 1 55
Table 2-41 Botanical Survey Results Proposed Turbine 28 – Relevé 2 56
Table 2-42 Botanical Survey Results Proposed Turbine 29 58
Table 2-43 Botanical Survey Results Proposed Turbine 30 60
Table 2-44 Botanical Survey Results Proposed Turbine 31 61
Table 2-45 Botanical Survey Results Proposed Turbine 32 – Relevé 1 62
Table 2-46 Botanical Survey Results Proposed Turbine 32 – Relevé 2 63
Table 2-47 Botanical Survey Results Proposed Turbine 33 65

Table 2-48 Botanical Survey Results Proposed Turbine 34 – Relevé 1 66
Table 2-49 Botanical Survey Results Proposed Turbine 34 – Relevé 2 67
Table 2-50 Botanical Survey Results Proposed Turbine 35 – Relevé 1 69
Table 2-51 Botanical Survey Results Proposed Turbine 35 – Relevé 2 70
Table 2-52 Botanical Survey Results Proposed Turbine 35 – Relevé 3 71
Table 2-53 Botanical Survey Results Proposed Turbine 37 73
Table 2-54 Botanical Survey Results Proposed Turbine 38 75
Table 2-55 Botanical Survey Results Proposed Turbine 39 76
Table 2-56 Botanical Survey Results Proposed Turbine 40 79
Table 2-57 Botanical Survey Results Proposed Turbine 41 – Relevé 1 80
Table 2-58 Botanical Survey Results Proposed Turbine 41 – Relevé 2 81
Table 2-59 Botanical Survey Results Proposed Turbine 42 82
Table 2-60 Botanical Survey Results Proposed Turbine 43 84
Table 2-61 Botanical Survey Results Proposed Turbine 44 - Relevé 1 85
Table 2-62 Botanical Survey Results Proposed Turbine 44 - Relevé 2 86
Table 2-63 Botanical Survey Results Proposed Turbine 45 88
Table 2-64 Botanical Survey Results Proposed Turbine 46 89
Table 2-65 Botanical Survey Results Proposed Onsite Substation – Relevé 1 91
Table 2-66 Botanical Survey Results Proposed Onsite Substation – Relevé 2 92
Table 2-67 Botanical Survey Results Proposed Onsite Substation – Relevé 3 93
Table 2-68 Botanical Survey Results Proposed Onsite Substation – Relevé 4 95
Table 2-69 Botanical Survey Results Proposed Offsite Substation – Relevé 1 96
Table 2-70 Botanical Survey Results Proposed Offsite Substation – Relevé 2 97
Table 2-71 Botanical Survey Results Proposed Offsite Substation – Relevé 3 99
Table 2-72 Botanical Survey Results Proposed Met Mast 1– Relevé 1 100
Table 2-73 Botanical Survey Results Proposed Met Mast 1 – Relevé 2 101
Table 2-74 Botanical Survey Results Proposed Met Mast 2 103
Table 2-75 Botanical Survey Results Proposed Temporary Construction Compound 1 104
Table 2-76 Botanical Survey Results Proposed Temporary Construction Compound 2 – Relevé 1 105
Table 2-77 Botanical Survey Results Proposed Temporary Construction Compound 2 – Relevé 2 107
Table 2-78 Botanical Survey Results Proposed Temporary Construction Compound 3 108
Table 2-79 Botanical Survey Results Proposed Temporary Construction Compound 4 110
Table 2-80 Botanical Survey Results Proposed Temporary Construction Compound 5 111
Table 2-81 Botanical Survey Results Proposed Temporary Construction Compound 6 112
Table 2-82 Botanical Survey Results Proposed Temporary Construction Compound 7 114
Table 2-83 Botanical Survey Results Proposed Temporary Construction Compound 8 115
Table 2-84 Botanical Survey Results Proposed Temporary Construction Compound 9 (Proposed Onsite Substation) 116
Table 2-85 Botanical Survey Results Proposed Temporary Construction Compound 10 (Proposed Offsite Substation) 118
Table 3-1 Botanical Survey Results Raised Bog - Amenity Track, Ballydermot South Bog 120

Table 3-2 Botanical Survey Results Raised Bog - North of Proposed Turbine 10, Blackriver Bog 122
Table 3-3 Botanical Survey Results Raised Bog – Northwest of Proposed Turbine 39, Blackriver Bog 124
Table 3-4 Botanical Survey Results Raised Bog – Northwest of Proposed Turbine 9, Blackriver Bog 126
Table 3-5 Botanical Survey Results Raised Bog – Northwest of Proposed Turbine 42, Glashabaun South Bog 128
Table 3-6 Botanical Survey Results - Cutover Bog 35m West of Proposed Turbine 13, Ballydermot South Bog 130
Table 3-7 Botanical Survey Results Raised Bog – 100m West of Proposed Turbine 13, Ballydermot South Bog 131
Table 3-8 Botanical Survey Results Raised Bog – East of Proposed Turbine 28, Glashabaun North Bog 133

TABLE OF PLATES

Plate 2-1 Proposed Turbine 1 is partially located within an area of cutover bog which has revegetated with Scrub (WS1) 2
Plate 2-2 Area of pioneer Poor fen (PF2) within the footprint of the hardstand of Proposed Turbine 1 3
Plate 2-3 Proposed Turbine 2 is largely located within Cutover bog (PB4) consisting of bare peat with little revegetation 4
Plate 2-4 Proposed Turbine 3 is located within cutover bog revegetating with pioneer Poor fen (PF2) and Scrub (WS1) 6
Plate 2-5 Some areas of the Proposed Turbine 3 hardstand are more densely revegetated by pioneer Poor fen (PF2) and Scrub (WS1) 7
Plate 2-6 Cutover bog (PB4) consisting of bare peat with small amounts of ling heather, downy birch seedlings, common cottongrass and hare's-tail cottongrass and the moss Campylopus at the location of Proposed Turbine 4. 8
Plate 2-7 A mosaic of pioneer Poor fen (PF2) and Scrub (WS1) present at the location of Proposed Turbine 5. 9
Plate 2-8 Areas within the hardstand of Proposed Turbine 6 are in the early stages of revegetation, dominated by field horsetail (Equisetum arvense) at the time of surveys 11
Plate 2-9 The habitats within the hardstand of Proposed Turbine 6 transition into a mosaic of Poor fen (PF2) and revegetating Scrub (WS1) 12
Plate 2-10 Proposed Turbine 6 is partially located within Bog woodland (WN7) highly dominated by downy birch (Betula pubescens) 13
Plate 2-11 Proposed Turbine 7 is located within an area of revegetating Cutover bog (PB4) 15
Plate 2-12 An area in the south of the hardstand of Proposed Turbine 7 is characterised by Poor fen (PF2) with some standing water. 16
Plate 2-13 Area of dry revegetating grassland present at the location of Proposed Turbine 8. 18
Plate 2-14 Proposed Turbine 9 is located within Cutover bog (PB4) dominated by bare peat. 19
Plate 2-15 Proposed Turbine 10 is located within Cutover bog (PB4) which has revegetated with a secondary Calluna-dominated community 20
Plate 2-16 Proposed Turbine 11 is located within cutover bog which has revegetated with a mosaic of Scrub (WS1) and pioneer Poor fen (PF2). 21
Plate 2-17 Proposed Turbine 11 is partially located within an area of developed Poor fen and flush (PF2) 23
Plate 2-18 Proposed Turbine 12 is located within Cutover bog (PB4) consisting of 100 percent bare peat with no revegetation. 24
Plate 2-19 Proposed Turbine 13 is largely located within an area of Cutover bog (PB4) dominated by bare peat. . 25
Plate 2-20 The Proposed Turbine 13 hardstand area has been partially revegetated with a mosaic of pioneer Poor fen (PF2) and Scrub (WS1) 26
Plate 2-21 Proposed Turbine 14 is located within an area of Cutover bog (PB4) with large areas of bare peat. 27
Plate 2-22 The bare peat at Proposed Turbine 14 forms a mosaic with revegetating pioneer Poor fen (PF2) species 29

Plate 2-23 Proposed Turbine 15 is partially located within Cutover bog (PB4) with only early revegetation present at the time of survey. 30

Plate 2-24 Part of the hardstand of Proposed Turbine 15 is comprised of a mosaic of a secondary Calluna-dominated community and Scrub (WS1) 32

Plate 2-25 Proposed Turbine 16 is partially located within a wide area of open water 33

Plate 2-26 Proposed Turbine 16 is partially located in an area of Cutover bog (PB4) dominated by bare peat 34

Plate 2-27 Area of birch Scrub (WS1) at the location of Proposed Turbine 17 35

Plate 2-28 Area of Cutover bog (PB4) dominated by bare peat, within the Proposed Turbine 17 hardstand 36

Plate 2-29 Proposed Turbine 18 is located in an area of Cutover bog (PB4) revegetated with wet grassland species, being used for ongoing local turbary. 38

Plate 2-30 The Proposed Turbine 18 hardstand extends into an area of early revegetating Reed and large sedge swamp (FS1) with some standing water 39

Plate 2-31 Birch-dominated Bog woodland (WN7) present at the location of Proposed Turbine 19 41

Plate 2-32 Area of cutover bog with encroachment of Conifer species and ling heather (Calluna vulgaris) within the Proposed Turbine 19 hardstand 42

Plate 2-33 Proposed Turbine 20 is located in an area of cutover bog that is being colonised largely by species typical of pioneer Poor fen (PF2) 43

Plate 2-34 Proposed Turbine 21 is located in an area of cutover bog that has revegetated with species typical of Wet grassland (GS4) 45

Plate 2-35 Area of purple moor-grass (Molinia caerulea) dominated Wet grassland (GS4) at the location of Proposed Turbine 21 46

Plate 2-36 Proposed Turbine 22 is located in an area of cutover bog that is revegetating with pioneer soft-rush (Juncus effusus) dominated Poor fen (PF2) and Scrub (WS1) 47

Plate 2-37 Area of Reed and large sedge swamp (FS1) present at the location of Proposed Turbine 23 48

Plate 2-38 Proposed Turbine 23 is located within cutover bog that has become waterlogged and developed into a Reed and large sedge swamp (FS1) 50

Plate 2-39 Proposed Turbine 24 is located in an area of Cutover bog (PB4) comprising mostly bare peat with little revegetation 51

Plate 2-40 Proposed Turbine 25 is located within Cutover bog (PB4) dominated by bare peat with little revegetation 52

Plate 2-41 Proposed Turbine 26 is located in an area of Cutover bog (PB4) dominated by bare peat 53

Plate 2-42 Proposed Turbine 27 is located within an area of cutover bog which has revegetated with Scrub (WS1) with a dry grassland understorey. 55

Plate 2-43 Part of the Proposed Turbine 28 hardstand is located within Cutover bog (PB4) dominated by bare peat with early revegetation. 56

Plate 2-44 Much of the Proposed Turbine 28 hardstand has been revegetated by mature birch Scrub (WS1) 57

Plate 2-45 Proposed Turbine 29 is located within an area of cutover bog that has revegetated with Scrub (WS1) and pioneer Poor fen (PF2) 59

Plate 2-46 Proposed Turbine 30 is largely located within Cutover bog (PB4) entirely dominated by bare peat 60

Plate 2-47 The Proposed Turbine 30 hardstand is partially located within cutover bog characterised by secondary Calluna-dominated community and Scrub (WS1) 60

Plate 2-48 Proposed Turbine 31 is located within Cutover bog (PB4) dominated by bare peat 62

Plate 2-49 Proposed Turbine 32 is located within Cutover bog (PB4) dominated by bare peat with early revegetation 63

Plate 2-50 Downy birch (Betula pubescens) Scrub (WS1) revegetating within a section of the Proposed Turbine 32 hardstand 64

Plate 2-51 Dense birch-dominated Bog woodland (WN7) present at the location of Proposed Turbine 33 66

Plate 2-52 Proposed Turbine 34 is partially located within an area of cutover bog recolonised by a secondary Calluna-dominated community 67

Plate 2-53 Proposed Turbine 34 is partially located within an area of Bog woodland (WN7) 68

Plate 2-54 Cutover bog revegetating with immature birch and willow Scrub (WS1) present at the location of Proposed Turbine 35 70

Plate 2-55 Dense downy birch (Betula pubescens) dominated Scrub (WS1) present at the location of Proposed Turbine 35 71

Plate 2-56 Cutover bog (PB4) revegetating with a mosaic of Scrub (WS1) and Poor fen (PF2) type vegetation present within the Proposed Turbine 35 hardstand. 72

Plate 2-57 Proposed Turbine 36 is located in an area of Cutover bog (PB4) comprising bare peat. 73

Plate 2-58 Bog woodland (WN7) present at the location of Proposed Turbine 37 74

Plate 2-59 Proposed Turbine 38 is located within cutover bog revegetating with pioneer Poor fen (PF2) 76

Plate 2-60 Dense Scrub (WS1) and Calluna-dominated community present at the location of Proposed Turbine 39 76

Plate 2-61 Mosaic of pioneer Poor fen (PF2) and a Calluna-dominated community present within the Proposed Turbine 39 hardstand 78

Plate 2-62 The Proposed Turbine 40 hardstand is largely comprised of Cutover bog (PB4) with little recolonising vegetation 79

Plate 2-63 Proposed Turbine 40 extends into an area of Scrub (WS1) and Poor fen (PF2) mosaic on cutover bog. 80

Plate 2-64 Bog woodland (WN7) recorded at the location of Proposed Turbine 41 82

Plate 2-65 Area of immature birch Scrub (WS1) recorded at the location of Proposed Turbine 42 83

Plate 2-66 Bog Woodland (WN7) present at the location of Proposed Turbine 43 85

Plate 2-67 Proposed Turbine 44 is located in an area of Bog woodland (WN7) 86

Plate 2-68 Area of soft-rush (Juncus effusus) dominated Poor fen (PF2) present within the Proposed Turbine 44 hardstand 88

Plate 2-69 Bog woodland (WN7) present at the location of Proposed Turbine 45 89

Plate 2-70 Proposed Turbine 46 is located in an area of Scrub (WS1) and pioneer Poor fen (PF2) 91

Plate 2-71 Area of cutover bog revegetating with early common cottongrass (Eriophorum angustifolium) dominated Poor fen (PF2) at the location of the Proposed Onsite Substation 92

Plate 2-72 A mosaic of pioneer Poor fen (PF2) and Scrub (WS1) on cutover bog at the location of the Proposed Onsite Substation 93

Plate 2-73 Areas of dry Recolonising bare ground (ED3) at the location of the Proposed Onsite Substation 95

Plate 2-74 Calluna-dominated community on the high field present at the location of the Proposed Onsite Substation 96

Plate 2-75 The Proposed Offsite Substation is partially located within an Improved agricultural grassland (GA1) field 97

Plate 2-76 The southern portion of the Proposed Offsite Substation is located a field of rush dominated Wet grassland (GS4) 98

Plate 2-77 The area of the Proposed Offsite Substation is classified as Dry meadows and grassy verges (GS2) in the east 100

Plate 2-78 Proposed Met Mast 1 is located in an area of Cutover bog (PB4) with small amounts of revegetation of ling heather (Calluna vulgaris) 101

Plate 2-79 The access road for the Proposed Met Mast 1 partially extends into an area of Cutover bog (PB4) revegetating with Poor fen (PF2) vegetation 102

Plate 2-80 Proposed Met Mast 2 is located at the margins of an area of Scrub (WS1) adjacent to bare cutover bog. 104

Plate 2-81 Proposed Temporary Construction Compound 1 is located within Cutover bog (PB4) dominated by bare peat.....105

Plate 2-82 Area of Cutover bog (PB4) with revegetation present within the Proposed Temporary Construction Compound 2.....106

Plate 2-83 Area of revegetated Wet grassland (GS4) within the footprint of the Proposed Temporary Construction Compound 2.....108

Plate 2-84 Area of Recolonising bare ground (ED3) at the location of Proposed Temporary Construction Compound 3.....109

Plate 2-85 Proposed Temporary Construction Compound 4 is located within an area of largely bare peat with some revegetation of common cottongrass (Eriophorum angustifolium).....110

Plate 2-86 Recolonising bare ground (ED3) habitat present at the location of Proposed Temporary Construction Compound 5.....112

Plate 2-87 Areas of bare peat and Cutover bog (PB4) revegetating with Poor fen (PF2) recorded at the location of Proposed Temporary Construction Compound 6, with standing water present at the time of survey.....112

Plate 2-88 Proposed Temporary Construction Compound 6 is located within an area of Cutover bog (PB4) revegetating with a mosaic of Poor fen (PF2) and Scrub (WS1).....114

Plate 2-89 Proposed Temporary Construction Compound 7 is located in an area of Cutover bog (PB4) highly dominated by bare peat.....115

Plate 2-90 Proposed Temporary Construction Compound 8 is located within an area of pioneer Poor fen (PF2) and Scrub (WS1).....116

Plate 2-91 Area of Cutover bog (PB4) dominated by bare peat at the location of Proposed Temporary Construction Compound 9 associated with the Proposed Onsite Substation, with early revegetation present at the time of survey.....117

Plate 2-92 The location of the Proposed Temporary Construction Compound 10 associated with the Proposed Offsite Substation is located within a field of Wet grassland (GS4)/Scrub (WS1).....119

Plate 3-1 Remnant Raised bog (PB1) present at the location of a proposed amenity trail in the southernmost area of Ballydermot South Bog.....121

Plate 3-2 Remnant Raised bog (PB1) located to the north of Proposed Turbine 10, Blackriver Bog.....123

Plate 3-3 2.5m high facebank and drain at the margin of the Raised bog (PB1) to the north of Proposed Turbine 10, Blackriver Bog.....124

Plate 3-4 Area of uncut remnant Raised bog (PB1) located to the northwest of Proposed Turbine 39.....126

Plate 3-5 Area of remnant Raised bog (PB1) located to the northwest of Proposed Turbine 9.....128

Plate 3-6 Area of dry, degraded remnant Raised bog (PB1) recorded to the northwest of Proposed Turbine 42..129

Plate 3-7 Marginal area of the high Cutover bog (PB4) located to the west of Proposed Turbine 13.....131

Plate 3-8 Area of Raised bog (PB1) at Cloonroosk Bog, in the southwest of Ballydermot South Bog.....132

Plate 3-9 A drainage ditch within Cloonroosk Bog which has been subject to drain blocking efforts, now showing abundant Sphagnum cuspidatum.....133

Plate 3-10 Area of degraded, ling heather (Calluna vulgaris) dominated raised bog to the east of Proposed Turbine 28.....134

1. INTRODUCTION

MKO were commissioned to undertake detailed botanical surveys to provide an evaluation and assessment of the habitats occurring on site at the proposed Ballydermot Wind Farm, Co. Kildare and Co. Offaly (hereafter the Proposed Project).

As detailed in Section 1.1.1 in Chapter 1 Introduction, for the purposes of this EIAR, the various project components are described and assessed using the following references: 'Proposed Project', 'Proposed Enhancement Areas', 'Proposed Construction Haul Routes', 'Proposed Turbine Delivery Route', 'Project Site', 'Proposed Wind Farm', 'Proposed Turbines', 'Proposed Grid Connection', 'Proposed Onsite Substation' and 'Proposed Offsite Substation'.

The detailed assessments focused on the habitats occurring under or immediately adjacent to the footprint of the Proposed Project, as well as within areas of remnant, uncut raised bog within the area encompassing the Proposed Wind Farm, the Proposed Onsite Substation, 0.5km of the Proposed Grid Connection underground electrical cabling route, and the Proposed Enhancement Areas, hereafter the 'Proposed Wind Farm site'.

1.1 Statement of Authority

Botanical field assessments were undertaken by MKO ecologists Amy McDermott (B.Sc.), Bea Jackson (B.A., M.Sc.), Brídín Foster (B.Sc.), Caití Farren (B.A.), Caoimhe Myles (B.Sc., M.Sc.), Chandra Walter (B.Sc.), Ciara Lynn Sheehan (B.Sc.), Cuan Feely (B.Sc.), Deepali Mooloo (B.Sc., M.Sc.), Kate Johnson (B.Sc.), Kate Leahy (B.Sc.), Kate O'Donnell (B.Sc., ACIEEM), Katy Beckett (B.A., M.Sc.), Mairead Kavanagh (B.Sc.), Niamh Leahy (B.Sc.), Ellen Tuck (B.Sc.), Padraig Desmond (B.Sc.), Rachel Walsh (B.Sc., MCIEEM), Rudraksh Gupta (B.Sc., M.Sc., ACIEEM) and Sarah Mullen (B.Sc., M.Sc., Ph.D.). This report has been prepared by Katy Beckett and reviewed by Sarah Mullen. All ecologists have relevant academic qualifications and are competent in undertaking habitat and ecological assessments; refer to Appendix 6-7 which details the relevant statement of authority for all the above listed surveyors.

1.2 Methodology

1.2.1 Survey Methodology

Detailed botanical surveys were undertaken at a number of targeted locations within the Project Site on the 16th, 18th, 23rd, 25th and 29th of July and 13th of August 2024 and the 13th, 14th, 19th, 20th, 26th and 27th of May and 6th of July 2026.

Targeted locations included representative habitats at each turbine base and other Proposed Project infrastructure including the proposed temporary construction compounds, proposed met masts, Proposed Onsite Substation and Proposed Offsite Substation. In addition, detailed botanical surveys were also undertaken across the Project Site in areas of remnant uncut raised bog. A total of 93 no. relevés were undertaken, the results of which are provided in the following sections. The locations of all relevés are shown in Figure 6-1-1 below. The size of all relevés was 2m x 2m with the exception of relevés within remnant raised bog which were 4m x 4m in extent (in accordance with Fernandez *et al.* (2014) *Raised Bog Monitoring and Assessment Survey 2013*) and relevés within woodland habitats were 20m x 20m in extent (in accordance with Daly *et al.* (2023) *The monitoring and assessment of four EU Habitats Directive Annex I woodland habitats*).

Plant nomenclature for vascular plants follows '*New Flora of the British Isles*' (Stace, 2019), while mosses and liverworts nomenclature follow '*Mosses and Liverworts of Britain and Ireland - a field guide'* (British Bryological Society, 2010).

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730000

725000

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T32 T30 T31 T29 T27 T28 T23 T46 T45 T44 T24 T42 T26 T43 T25 T41 T40 T22 T39 T36 T37 T21 T20 T10 T38 T17 T19 T35 T18 T09 T07 T34 T16 T33 T06 T15 T01 T08 T11 T05 T03 T12 T13 T04 T02 T14

0 1 2 km

0 100 200 m

Map Legend

- Project Site
- Relevé Locations

Proposed Turbine Layout

- 220
- 200
- Proposed Relay Mast
- Proposed Met Mast
- Proposed Telecommunications Tower
- Joint Bays
- Existing OHL
- Internal 33kV Cable Trench
- Proposed Internal 33kV Cabling
- Proposed OHL
- Proposed Grid Connection Underground 220KV electrical cabling
- New Road
- Upgrades to Existing Roads
- TDR Accommodation
- Proposed Amenity Links Centreline
- Proposed Pedestrian Amenity Boardwalk
- Proposed Equestrian Amentiy Links Centreline
- Turbine Hardstands
- Temporary Construction Compounds
- Proposed Peat and Spoil Areas
- Proposed Security Hut
- Proposed Car parking
- Proposed Set Down Area
- Proposed Onsite 110kV GIS Substation
- Proposed Onsite 220kV GIS Substation
- Proposed Offsite Substation Tower Build Area
- Proposed Offsite 220kV GIS Substation
- Proposed Offsite Substation Crane Pad
- Proposed Internal Access Road
- Upgrades to Existing Road
- Proposed Turning Bay
- Proposed Dedicated Amenity Track
- Proposed Dedicated Amenity Board Walk
- Proposed Dedicated Amenity Equestrian Track

Spatial Reference
Name: IRENET95 Irish Transverse Mercator
Datum: IRENET95
Projection: Transverse Mercator

N

SITE LOCATION - NOT TO SCALE

Drawing Title

Relevé Locations

Project Title

Ballydermot Wind Farm
Co. Offaly & Co. Kildare

Project No.	Drawing No.	Scale
250708	6-1-1	1:42,000
Drawn By	Checked By	Date
TS	KB	22/10/2026

Email: info@mkoireland.ie/ Website: www.mkoireland.ie

1.2.2 Habitat and Vegetation Composition Analysis

The data from all relevés undertaken were analysed in accordance with the Irish Vegetation Classification (IVC) system. The IVC is a project which aims to classify, describe, and map in detail all aspects of natural and semi-natural vegetation in Ireland within a single, unified framework. The National Vegetation Database (NVD), upon which the IVC is based, holds data for over 30,000 relevés and is the core resource upon which the classification system is based.

A fundamental requirement of the IVC is to "*aid in definition and* ***identification*** *of EU Habitat Directive (92/43/EEC) Annex I habitats*" and to "*inform the planning process, for example through environmental impact assessments"*.

The Engine for Relevés to Irish Communities Assignment (ERICA)[1] web application was used to analyse all relevés and to assign vegetation data to communities defined by the IVC. The quantitative vegetation cover data collected from relevés within the Project Site were uploaded to ERICA, checked for errors, analysed and the results were downloaded. ERICA covers grassland, woodland, duneland, saltmarsh, heath, bog, fen and mire, freshwater, saline water and rocky habitats, and weed communities (Perrin, 2025).

The ERICA analysis procedure uses a clustering process to assign classification affinity to vegetation plots based on a degree of membership to each of the communities defined by the IVC. Table 1-1 details the categorising types of plots utilising the clustering analysis (Perrin, 2025).

Table 1-1 Categorising types of plots using clustering analysis (after Wiser & de Cáceres, 2013).

Plot Type	Definition
Assigned	The plot has membership ≥ 0.5 for one of the vegetation communities and therefore relates to the core definition of that vegetation community.
Unassigned	The plot has membership ≥ 0.5 for the noise class and is poorly represented by the current classification scheme
Transitional	The plot has membership < 0.5 for all vegetation communities and for the noise class. It falls within the scope of the current classification scheme but does not relate to the core definition of any of the vegetation communities.

No habitats were identified as being 'Unassigned' as per Table 1-1 above. However, due to the modified nature of many of the habitats within the Project Site, the habitats at several of the relevé locations surveyed and described within the Botanical Assessment Report were identified as being 'Transitional' in nature. In these cases, the IVC community identified using the ERICA software is marked with an asterisk (*) in each table.

This categorising procedure was then utilised to determine if any of the habitats within the Project Site had affinities to Annex I habitats and whether further assessment was required. For those relevés undertaken within the Proposed Project infrastructure footprint, the IVC classification data were used to provide more detail on the vegetation communities present within habitats proposed to be lost as part of the Proposed Project. These data were used to inform the design of the Proposed Project where relevant.

[1] *Perrin, 2025, ERICA – Engine for Relevés to Irish Communities Assignment V6.4 User's Manual [online]. Available at: https://biodiversityireland.shinyapps.io/vegetation-classification/_w_9cd4889a/manual.pdf [Accessed 14/09/2026]*

1.2.3 Annex I Habitat Assessments

Where habitats were considered to have potential to conform to Annex I habitats, reference was made to the European Commission's *Interpretation manual of European Union habitats* (2013)[2] and the latest NPWS Article 17 Habitats Assessments (NPWS, 2025)[3]. These included areas of uncut raised bog with the potential to conform to Annex I Active raised bog [7110] or Degraded raised bogs still capable of natural regeneration [7120]. Detailed habitat assessments were undertaken within these habitats in line with the guidance documents outlined in the following subsections.

As outlined in Section 6.3.2.1.2 of the Biodiversity Chapter, the potential for cutover bog habitats within the Project Site to correspond to either Annex I ARB [7110] or Annex I DRB [7120] has also been considered. The NPWS Article 17 Reporting for 2019 states:

> *"In an Irish context, ARB (which is currently defined as occurring only on the high bog) encompasses active peat --forming ecotopes (central and sub--central) as defined by Kelly (1993) and Kelly & Schouten (2002), and actively peat --forming flushes."*

The 2025 Article 17 Report (NPWS, 2025) recognises the publication of the classification and appraisal system for cutover raised bog habitats (Smith and Crowley, 2020). Regarding this system it is stated,

> *"This is the first time that ARB has been recognised as occurring on cutover in the Irish context. In general, however, regenerating ombrotrophic vegetation on cutover characterised by a high Sphagnum cover (i.e. greater than 40- 50% cover), lacks the diversity of Sphagnum species, microtopographical features and good quality indicators associated with ARB. These cutover areas have the capacity to develop into embryonic ARB but longer time periods (>30 years) are likely to be required for high quality ARB to develop."*

With regard to the definition of DRB, the 2025 Article 17 Report states,

> *"Currently cutover areas are not considered to support DRB. However, the potential of cutovers to support peat-forming vegetation is recognised. Potential peat-forming habitat (PPFH) on cutover is defined using similar methods to that for DRB on the high bog. PPFH is not included under the definition of DRB as it is believed that these areas will require periods longer than 30 years to develop into ARB."*

1.2.3.1 Active raised bog [7110] and Degraded raised bogs still capable of natural regeneration [7120]

Vegetation-based Assessments

Where areas of remnant, uncut raised bog were identified within the likely ZoI of the Proposed Project, detailed relevés and vegetation assessments were carried out in line with Irish Wildlife Manual 81 '*Raised Bog Monitoring and Assessment Survey 2013'* (Fernandez *et al.,* 2014)[4] and the references and

[2] *European Commission (2013) Interpretation manual of European Union habitats. Eur 28. European Commission DG Environment.*
[3] *NPWS (2025). The Status of EU Protected Habitats and Species in Ireland. Volume 2: Habitat Assessments. Unpublished NPWS report. Edited by: Domhnall Finch, Aoife Delany, Fionnuala O'Neill and Deirdre Lynn.*
[4] *Fernandez, F., Connolly K., Crowley W., Denyer J., Duff K. & Smith G. (2014) Raised Bog Monitoring and Assessment Survey 2013. Irish Wildlife Manuals, No. 81. National Parks and Wildlife Service, Department of Arts, Heritage and Gaeltacht, Dublin, Ireland.*

appendices therein. These surveys were undertaken in order to assess the conformity of these habitat areas to the Annex I habitats Active raised bog [7110] (ARB) and Degraded raised bogs still capable of natural regeneration [7120] (DRB).

Per this guidance document, 4m x 4m relevés were undertaken within areas of remnant uncut raised bog. As well as this vegetation cover data, the following data were collected:

- Ground firmness;
- Physical indicators (i.e. burning, bare peat, erosion channels, algae);
- *Calluna vulgaris* height and cover;
- Macro-topography (i.e. steep slope, slight slope, flat, depression);
- Micro-topography (i.e. hummocks, flats, hollows, pools);
- Pools type (i.e. regular, interconnected, tear) and cover (if present);
- Tussocks type (*Trichophorum cespitosum* or *Eriophorum vaginatum*);
- Evidence of degradation or regeneration;
- Cover of *Cladonia* and *Sphagnum* species and *Narthecium ossifragum*;
- Dominant species cover and
- Any additional comments.

Following this, these data were collated and the habitats were aligned with an ecotope (Face-bank, Marginal, Sub-marginal, Sub-central, Central) based on the local physical characteristics and characteristic/dominant species - see Table 2.2 of Fernandez *et al.* (2014) for details on the criteria for each ecotope classification.

These assessments, together with reference to Article 17 Reporting (2025, 2019), were used to assess whether any areas of raised bog within the likely ZoI of the Proposed Project conformed to the Annex I habitats Active raised bog or Degraded raised bogs still capable of natural regeneration.

Eco-Hydrological Modelling

As per the latest Article 17 habitats reporting (2025),

> *"DRB is now defined by an ecohydrological model that was developed based on LiDAR (Light Detection and Ranging) data. The model predicts where there is potential to restore active conditions on the high bog (NPWS, 2017). As a result, only those areas with the right combination of physical conditions (including surface shape, slope and drainage patterns) ultimately capable of supporting Active Raised Bog (ARB) are now considered as DRB. These are the areas of raised bogs whose hydrology has been disturbed so that their surfaces have dried out and suffered some species change or loss. Bog species of drier conditions now dominate, and peat formation has ceased. The water level is generally 10 cm or more below the surface and drops to 30+ cm below during dry summer weather. To qualify as DRB, these areas must still be capable of natural regeneration to active bog within 30 years if their hydrology is repaired (usually after restoration works, particularly blocking of drains). The remainder of the high bog that is neither ARB nor DRB is now referred to as 'Supporting Raised bog habitat'."*

Therefore, in order to supplement the vegetation data and analysis outlined in the preceding section, eco-hydrological modelling was carried out to identify those areas considered to have significant potential to rewet with limited interventions (e.g. through blocking of main outlets and drain-blocking).

The approach utilised was adapted from the protocol outlined within Appendix 2 of the *National Raised Bog Special Areas of Conservation Management Plan 2017–2022* (NPWS, 2017), for modelling of restoration potential on raised bog. The 1m resolution Digital Terrain Model (DTM) acquired in 2020 was generalised by resampling the DTM to a resolution of 5m to 'smooth' the confounding effects of micro-topography and the depression evaluation tool (ArcHydro) used to identify areas of enclosed

depressions (>0.5 ha). This model was developed to predict areas of greatest restoration potential or re-wetting potential on raised bog using measures such as drain blocking.

2. PROPOSED INFRASTRUCTURE

During surveys undertaken in 2026, a ground-truthing exercise was undertaken and all 46 no. Proposed Turbines and associated infrastructure were resurveyed. All habitats were readily identifiable at the time of survey. Where habitats were found to have evolved since surveys undertaken in 2024, where design had moved and/or where additional survey data was required, updated relevé data is presented. In all other areas, vegetation data from 2024 was found to remain representative of the habitats currently present at each of these locations.

2.1 Proposed Turbine 1

Proposed Turbine 1 is located within an area of cutover bog which is revegetating with a mosaic of pioneer **Poor fen (PF2)** dominated by common cottongrass (*Eriophorum angustifolium*) (Plate 2-1) and **Scrub (WS1)** dominated by downy birch (*Betula pubescens*) (Plate 2-2). Two relevés were undertaken in these areas in order to represent this habitat mosaic. These relevés are presented in Table 2-1 and Table 2-2 below.

Table 2-1 Botanical Survey Results Proposed Turbine 1 – Relevé 1

Proposed Turbine 1	Grid Reference: ITM X 669584, Y 723416	Date: 13/08/2024
Species	Common Name	Percentage cover (%)
Vascular Plants		
Betula pubescens	Downy birch	60
Eriophorum angustifolium	Common cottongrass	15
Molinia caerulea	Purple moor-grass	10
Rubus fruticosus agg.	Brambles	5
Fragaria vesca	Wild strawberry	3
Juncus effusus	Soft-rush	2
Calluna vulgaris	Ling heather	1
Equisetum palustre	Marsh horsetail	0.5
Cirsium palustre	Marsh thistle	0.5
Non-Vascular		
Polytrichum juniperinum	Juniper haircap	4
%Bare Peat		10%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Scrub (WS1)**

IVC Classification	**HE2B – *Calluna vulgaris* – *Hypnum jutlandicum* heath***
Affinity to Annex I habitat	**No**



Plate 2-1 Proposed Turbine 1 is partially located within an area of cutover bog which has revegetated with Scrub (WS1)

Table 2-2 Botanical Survey Results Proposed Turbine 1 – Relevé 2

Proposed Turbine 1	**Grid Reference: ITM X 669552, Y 723424**	**Date: 13/08/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	60
Holcus lanatus	Yorkshire-fog	20
Leontodon hispidus	Rough hawkbit	15
Betula pendula	Silver birch	10
Equisetum palustre	Marsh horsetail	10
Betula pubescens	Downy birch	5
Calluna vulgaris	Ling heather	3
Salix cinerea	Grey willow	3
Juncus effusus	Soft-rush	1
Potentilla sterilis	Barren strawberry	1
Non-vascular		

Cladonia chlorophaea	Pixie cup lichen	1
%Bare Peat		60%
Fossitt (2000) Habitat Classification		**Cutover Bog (PB4) revegetating with Poor fen (PF2) vegetation**
IVC Classification		**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-2 Area of pioneer Poor fen (PF2) within the footprint of the hardstand of Proposed Turbine 1

2.2 Proposed Turbine 2

Proposed Turbine 2 is located within an area of cutover bog dominated by bare peat, with only a small amount of revegetation at the time of survey (Plate 2-3). A relevé was taken in this area and is presented in Table 2-3. A small area of pioneer **Poor fen (PF2)** establishing on the cutover bog was also identified within the footprint of the Proposed Turbine 2 hardstand

Table 2-3 Botanical Survey Results Proposed Turbine 2

Proposed Turbine 2	**Grid Reference: ITM X 667956, Y 722329**	**Date: 25/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Molinia caerulea	Purple moor-grass	3
Juncus bufonius	Toad rush	1
Calluna vulgaris	Ling heather	1

Non-vascular		
Campylopus introflexus	Heath star-moss	2
%Bare Peat		93%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**BG1C – *Schoenus nigricans* – *Eriophorum angustifolium* bog***
Affinity to Annex I habitat		**No**



Plate 2-3 Proposed Turbine 2 is largely located within Cutover bog (PB4) consisting of bare peat with little revegetation

2.3 Proposed Turbine 3

Proposed Turbine 3 is located within an area of cutover bog which has become revegetated by species of pioneer **Poor fen (PF2)** and **Scrub (WS1)** consisting predominantly of soft-rush (*Juncus effusus*), purple moor-grass (*Molinia caerulea*), downy birch (*Betula pubescens*) and grey willow (*Salix cinerea*) (Plate 2-4 and Plate 2-5). This area consists of a mosaic of varying degrees of bare peat and revegetated areas, therefore two relevés were taken in order to accurately represent this mosaic. These relevés are presented in Table 2-4 and Table 2-5.

Table 2-4 Botanical Survey Results Proposed Turbine 3 – Relevé 1

Proposed Turbine 3	**Grid Reference: ITM X 668639, Y 722889**	**Date: 25/07/2024**

Species	Common Name	Percentage cover (%)
Vascular Plants		
Juncus effusus	Soft-rush	20
Holcus lanatus	Yorkshire-fog	15
Agrostis capillaris	Common bent	15
Betula pubescens	Downy birch	15
Calluna vulgaris	Ling heather	10
Juncus bufonius	Toad rush	3
Hypochaeris radicata	Cat's-ear	3
Potentilla erecta	Tormentil	1
Chamaenerion angustifolium	Rosebay willowherb	1
Non-vascular		
Campylopus introflexus	Heath star-moss	20
%Bare Peat		60%
Fossitt (2000) Habitat Classification		**Cutover Bog (PB4) revegetating with Poor fen (PF2)/Scrub (WS1) vegetation**
IVC Classification		**GL2D – *Juncus effusus* – *Rumex acetosa* grassland***
Affinity to Annex I habitat		**No**



Plate 2-4 Proposed Turbine 3 is located within cutover bog revegetating with pioneer Poor fen (PF2) and Scrub (WS1)

Table 2-5 Botanical Survey Results Proposed Turbine 3 – Relevé 2

Proposed Turbine 3	**Grid Reference: ITM X 668653, Y 722907**	**Date: 25/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus effusus	Soft-rush	35
Molinia caerulea	Purple moor-grass	30
Salix cinerea	Grey willow	25
Betula pubescens	Downy birch	20
Equisetum palustre	Marsh horsetail	15
Holcus lanatus	Yorkshire-fog	10
Agrostis capillaris	Common bent grass	10
Potentilla erecta	Tormentil	8
Juncus articulatus	Jointed rush	8
Calluna vulgaris	Ling heather	7
Carex echinata	Star sedge	4

Hypochaeris radicata	Cat's-ear	3
Eriophorum angustifolium	Common cottongrass	3
%Bare Peat		5%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Scrub (WS1)**
IVC Classification		**WL4C – *Betula pubescens* – *Sphagnum palustre* woodland***
Affinity to Annex I habitat		**No**



Plate 2-5 Some areas of the Proposed Turbine 3 hardstand are more densely revegetated by pioneer Poor fen (PF2) and Scrub (WS1)

2.4 Proposed Turbine 4

Proposed Turbine 4 is located within an area of **Cutover bog (PB4)** comprising predominantly bare peat with little revegetation (Plate 2-6). For this reason, no relevé was taken at this location. Small amounts of ling heather (*Calluna vulgaris*), downy birch (*Betula pubescens*) seedlings, common cottongrass (*Eriophorum angustifolium*), hare's-tail cottongrass (*Eriophorum vaginatum*) and the moss *Campylopus* were recorded in very small amounts in the area of the Proposed Turbine 4 hardstand.



Plate 2-6 Cutover bog (PB4) consisting of bare peat with small amounts of ling heather, downy birch seedlings, common cottongrass and hare's-tail cottongrass and the moss Campylopus at the location of Proposed Turbine 4

2.5 Proposed Turbine 5

Proposed Turbine 5 is located within an area of cutover bog which has revegetated with a mosaic of pioneer **Poor fen (PF2)** primarily dominated by soft-rush (*Juncus effusus*) and **Scrub (WS1)** dominated by grey willow (*Salix cinerea*) and downy birch (*Betula pubescens*) (Plate 2-7). A relevé was taken in this location and is presented in Table 2-6 below. A small area of **Dry calcareous and neutral grassland (GS1)** was also identified within the footprint of the Proposed Turbine 5 hardstand.

Table 2-6 Botanical Survey Results Proposed Turbine 5

Proposed Turbine 5	Grid Reference: ITM X 666807, Y 722920	Date: 18/07/2024
Species	Common Name	Percentage cover (%)
Vascular Plants		
Juncus effusus	Soft-rush	30
Salix cinerea	Grey willow	20
Betula pubescens	Downy birch	20
Equisetum palustre	Marsh horsetail	10
Eriophorum angustifolium	Common cottongrass	10
Mentha aquatica	Water mint	8

Equisetum arvense	Field horsetail	5
Holcus lanatus	Yorkshire-fog	2
Cirsium palustre	Marsh thistle	2
Juncus articulatus	Jointed rush	2
Daucus carota	Wild carrot	1
Fragaria vesca	Wild strawberry	1
Tussilago farfara	Colt's-foot	0.5
Epilobium palustre	Marsh willowherb	0.5
Non-vascular		
Calliergonella cuspidata	Pointed spear moss	10
Rhytidiadelphus squarrosus	Springy turf-moss	5
%Bare Peat		2%
Fossitt (2000) Habitat Classification		**Cutover Bog (PB4) revegetating with Poor fen (PF2)/Scrub (WS1)**
IVC Classification		**WL3E – *Salix cinerea – Galium palustre* woodland***
Affinity to Annex I habitat		**No**



Plate 2-7 A mosaic of pioneer Poor fen (PF2) and Scrub (WS1) present at the location of Proposed Turbine 5.

2.6 Proposed Turbine 6

The habitats within the footprint of Proposed Turbine 6 comprise a mosaic of revegetating **Cutover bog (PB4)** habitats. Parts of the hardstand are in the early stages of revegetation, dominated by bare peat and with small amounts of field horsetail (*Equisetum arvense*) present at the time of survey (Plate 2-8). A relevé was taken in this area and is presented in Table 2-7 below. This transitions into areas of higher vegetation cover, comprising **Poor fen (PF2)** vegetation and **Scrub (WS1)** mosaic with smaller areas of wet grassland (Plate 2-9). A second relevé was taken within this habitat and is presented in Table 2-8 below. A small part of the Proposed Turbine 6 hardstand is also located within **Bog woodland (WN7)** highly dominated by downy birch (Plate 2-10), and a third relevé was taken within this habitat in order to accurately assess the mosaic of habitats present. This relevé is presented in Table 2-9 below.

Table 2-7 Botanical Survey Results Proposed Turbine 6 – Relevé 1

Proposed Turbine 6	Grid Reference: ITM X 667265, Y 723629	Date: 18/07/2024
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Equisetum arvense	Field horsetail	40
Betula pubescens	Downy birch	0.5
Juncus effusus	Soft-rush	0.5
Cerastium fontanum	Common mouse-ear	0.5
Rubus fruticosus agg.	Brambles	0.5
Hypochaeris radicata	Cat's-ear	0.5
%Bare Peat		60%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**None***
Affinity to Annex I habitat		**No**



Plate 2-8 Areas within the hardstand of Proposed Turbine 6 are in the early stages of revegetation, dominated by field horsetail (Equisetum arvense) at the time of surveys

Table 2-8 Botanical Survey Results Proposed Turbine 6 – Relevé 2

Proposed Turbine 6	**Grid Reference: ITM X 667244, Y 723601**	**Date: 18/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Equisetum arvense	Field horsetail	85
Holcus lanatus	Yorkshire-fog	25
Betula pubescens	Downy birch	15
Juncus effusus	Soft-rush	2
Epilobium palustre	Marsh willowherb	0.5
Cerastium fontanum	Common mouse-ear	0.5
Cirsium palustre	Marsh thistle	0.5
Hypochaeris radicata	Cat's-ear	0.5
Non-vascular		
Bryum capillare	Capillary thread-moss	5

%Bare Peat	0%
Fossitt (2000) Habitat Classification	**Cutover Bog (PB4) with revegetating Poor fen (PF2) and Scrub (WS1) mosaic**
IVC Classification	**GL2B – *Juncus effusus* – *Holcus lanatus* grassland***
Affinity to Annex I habitat	**No**



Plate 2-9 The habitats within the hardstand of Proposed Turbine 6 transition into a mosaic of Poor fen (PF2) and revegetating Scrub (WS1)

Table 2-9 Botanical Survey Results Proposed Turbine 6 – Relevé 3

Proposed Turbine 6	**Grid Reference: ITM X 667290, Y 723608**	**Date: 18/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Betula pubescens	Downy birch	98
Hedera helix	Ivy	25
Salix cinerea	Grey willow	2

Rubus fruticosus agg.	Brambles	2
Dryopteris dilatata	Broad buckler fern	2
Fragaria vesca	Wild strawberry	1
%Bare Peat		30%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**WL4F – *Betula pubescens* – *Pteridium aquilinum* woodland**
Affinity to Annex I habitat		**No**



Plate 2-10 Proposed Turbine 6 is partially located within Bog woodland (WN7) highly dominated by downy birch (Betula pubescens)

2.7 Proposed Turbine 7

Proposed Turbine 7 is located within **Cutover bog (PB4)** which is revegetating with a number of species typical of disturbed ground, including colt's foot (*Tussilago farfara*), and with some indicators of early pioneer poor fen, such as jointed rush (*Juncus articulatus*) and water mint (*Mentha aquatica*), however ground conditions were largely dry at the time of survey (Plate 2-11). A relevé was taken within this area and is presented in Table 2-10 below. An area in the south of the Proposed Turbine 7 hardstand along the proposed access road is located within an area of **Poor fen (PF2)** dominated by jointed rush (*Juncus articulatus*) with some open water present (Plate 2-12). A second relevé was taken in this habitat and is presented in Table 2-11.

Table 2-10 Botanical Survey Results Proposed Turbine 7 – Relevé 1

Proposed Turbine 7	**Grid Reference: ITM X 666845, Y 724155**	**Date: 18/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Tussilago farfara	Colt's-foot	40
Juncus articulatus	Jointed rush	15
Equisetum arvense	Field horsetail	10
Holcus lanatus	Yorkshire-fog	5
Eupatorium cannabinum	Hemp agrimony	4
Hypochaeris radicata	Cat's-ear	3
Medicago lupulina	Black medick	3
Dactylorhiza fuchsii	Common spotted orchid	2
Mentha aquatica	Water mint	1
Angelica sylvestris	Wild angelica	1
Daucus carota	Wild carrot	1
Plantago major	Broadleaf plantain	1
Cerastium fontanum	Common mouse-ear	1
Epilobium hirsutum	Great willowherb	1
Centaurium erythraea	Common centaury	1
Cirsium palustre	Marsh thistle	1
Molinia caerulea	Purple moor-grass	1
%Bare Peat		15%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**None***
Affinity to Annex I habitat		**No**



Plate 2-11 Proposed Turbine 7 is located within an area of revegetating Cutover bog (PB4)

Table 2-11 Botanical Survey Results Proposed Turbine 7 – Relevé 2

Proposed Turbine 7	**Grid Reference: ITM X 666812, Y 724007**	**Date: 18/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus articulatus	Jointed rush	95
Juncus effusus	Soft-rush	5
Mentha aquatica	Water mint	3
Potamogeton sp.	Pondweed sp.	2
%Bare Peat/Open water		3%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating Poor fen (PF2)**
IVC Classification		**None***
Affinity to Annex I habitat		**No**



Plate 2-12 An area in the south of the hardstand of Proposed Turbine 7 is characterised by Poor fen (PF2) with some standing water.

2.8 Proposed Turbine 8

Proposed Turbine 8 is located within an area of **Cutover bog (PB4)** largely dominated by bare peat with little revegetation. Part of the Proposed Turbine 8 hardstand has become revegetated with species representative of **Wet grassland (GS4)** (Plate 2-13). A relevé was taken within this habitat and is presented in Table 2-12 below.

Table 2-12 Botanical Survey Results Proposed Turbine 8

Proposed Turbine 8	Grid Reference: ITM X 666049, Y 723389	Date: 06/07/2026
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Hypericum perforatum	Perforate St. John's-wort	10
Carex flacca	Glaucous sedge	8
Equisetum arvense	Field horsetail	7
Lotus corniculatus	Common bird's-foot-trefoil	5
Hypochaeris radicata	Cat's-ear	5
Aira caryophyllea	Silver hair-grass	5
Triglochin palustris	Marsh arrowgrass	4
Prunella vulgaris	Self-heal	3
Taraxacum officinale agg.	Dandelion	3
Carex panicea	Carnation sedge	3

Agrostis stolonifera	Creeping bent	3
Holcus lanatus	Yorkshire-fog	3
Juncus effusus	Soft-rush	3
Carex viridula	Short-fruited yellow sedge	3
Rumex obtusifolius	Broad-leaved dock	2
Cirsium palustre	Marsh thistle	2
Potentilla anserina	Silverweed	2
Luzula multiflora	Heath wood-rush	2
Ulex europaeus	European gorse	1
Molinia caerulea	Purple moor-grass	1
Daucus carota	Wild carrot	1
Eriophorum angustifolium	Common cottongrass	1
Carex echinata	Star sedge	1
Trifolium repens	White clover	0.5
Calluna vulgaris	Ling heather	0.5
Juncus articulatus	Jointed rush	0.5
Cerastium fontanum	Common mouse-ear	0.25
%Bare Peat		40%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Wet grassland (GS4)**
IVC Classification		**DU3D – *Festuca rubra – Bellis perennis* grassland***
Affinity to Annex I habitat		**No**



Plate 2-13 Area of dry revegetating grassland present at the location of Proposed Turbine 8.

2.9 Proposed Turbine 9

Proposed Turbine 9 is located in an area of **Cutover bog (PB4)** dominated by bare peat with little revegetation present at the time of survey (Plate 2-14). A relevé was taken in this area and is presented in Table 2-13 below.

Table 2-13 Botanical Survey Results Proposed Turbine 9

Proposed Turbine 9	Grid Reference: ITM X 666000, Y 724409	Date: 18/07/2024
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus bufonius	Toad rush	3
Calluna vulgaris	Ling heather	1
Non-vascular		
Polytrichum juniperinum	Juniper haircap moss	10
%Bare Peat		90%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**WE2B *Juncus bufonius* – *Triglochin palustre* inundation community**
Affinity to Annex I habitat		**No**



Plate 2-14 Proposed Turbine 9 is located within Cutover bog (PB4) dominated by bare peat.

2.10 Proposed Turbine 10

Proposed Turbine 10 is located within an area of **Cutover bog (PB4)** that has largely revegetated by a secondary ***Calluna*-dominated community**, with some cross-leaved heath (*Erica tetralix*) also present (Plate 2-15). A relevé was taken in this area and is presented in Table 2-14 below.

Table 2-14 Botanical Survey Results Proposed Turbine 10

Proposed Turbine 10	**Grid Reference: ITM X 665716, Y 725149**	**Date: 18/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	60
Erica tetralix	Cross-leaved heath	10
Betula pubescens	Downy birch	2
Molinia caerulea	Purple moor-grass	60
Potentilla erecta	Tormentil	15
Eriophorum angustifolium	Common cottongrass	5
Luzula multiflora	Heath wood-rush	1
Non-vascular		

Sphagnum capillifolium	Acute leaved bog-moss	30
Pseudoscleropodium purum	Neat feather-moss	10
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with *Calluna*-dominated vegetation**
IVC Classification		**BG2C – *Erica tetralix* – *Molinia caerulea* – *Cladonia portentosa* peatland***
Affinity to Annex I habitat		**No**



Plate 2-15 Proposed Turbine 10 is located within Cutover bog (PB4) which has revegetated with a secondary Calluna-dominated community

2.11 Proposed Turbine 11

Proposed Turbine 11 is located within an area of cutover bog that has largely revegetated with a mosaic of **Scrub (WS1)** and pioneer **Poor fen (PF2)** (*Molinia caerulea*) (Plate 2-16). A relevé was taken within this area and is presented in Table 2-15 below. A small portion of Proposed Turbine 11 is also located within an area of more developed **Poor fen and flush (PF2)** (Plate 2-17). An additional relevé was taken in this area and is presented in Table 2-16.

Table 2-15 Botanical Survey Results Proposed Turbine 11 – Relevé 1

Proposed Turbine 11	Grid Reference: ITM X 665247, Y 723071	Date: 16/07/2024
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Betula pubescens	Downy birch	50
Juncus effusus	Soft-rush	25
Molinia caerulea	Purple moor-grass	20
Salix cinerea	Grey willow	10
Anthoxanthum odoratum	Sweet vernal grass	5
Eriophorum angustifolium	Common cottongrass	5
Hypericum pulchrum	Slender St John's-wort	1
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Poor fen (PF2)/Scrub (WS1)**
IVC Classification		**WL4C – *Betula pubescens* – *Sphagnum palustre* woodland**
Affinity to Annex I habitat		**No**



Plate 2-16 Proposed Turbine 11 is located within cutover bog which has revegetated with a mosaic of Scrub (WS1) and pioneer Poor fen (PF2)

Table 2-16 Botanical Survey Results Proposed Turbine 11 – Relevé 2

Proposed Turbine 11	Grid Reference: ITM X 665209, Y 723125	Date: 16/07/2024
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	60
Juncus acutiflorus	Sharp-flowered rush	15
Juncus bufonius	Toad rush	7
Juncus effusus	Soft-rush	5
Ranunculus flammula	Lesser spearwort	5
Mentha aquatica	Water mint	5
Potamogeton polygonifolius	Bog pondweed	4
Epilobium hirsutum	Great willowherb	2
Hydrocotyle vulgaris	Marsh pennywort	1
Non-vascular		
Bryum pseudotriquetrum	Marsh Bryum	40
Calliergonella cuspidata	Pointed spear moss	10
Marchantia polymorpha	Star-headed liverwort	1
Aneura pinguis	Greasewort	1
%Bare Peat		5%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) which has revegetated with Poor fen and flush (PF2)**
IVC Classification		**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog***
Affinity to Annex I habitat		**No**



Plate 2-17 Proposed Turbine 11 is partially located within an area of developed Poor fen and flush (PF2)

2.12 Proposed Turbine 12

Proposed Turbine 12 is located within **Cutover bog (PB4)** comprising 100 percent bare peat with no revegetation (Plate 2-18). For this reason, no relevé was taken at this location. Small amounts of vegetation were associated with the drainage ditches within the wider hardstand area, with small amounts of ling heather (*Calluna vulgaris*), downy birch (*Betula pubescens*) and grey willow (*Salix cinerea*) recorded growing on the fringes.



Plate 2-18 Proposed Turbine 12 is located within Cutover bog (PB4) consisting of 100 percent bare peat with no revegetation.

2.13 Proposed Turbine 13

Proposed Turbine 13 is largely located within an area of **Cutover bog (PB4)** highly dominated by bare peat with little revegetation recorded at the time of survey (Plate 2-19). A relevé was taken in this area and is presented in Table 2-17 below. The western portion of the hardstand is located within an area of more highly revegetated cutover bog comprised of a mosaic of common cottongrass (*Eriophorum angustifolium*) dominated pioneer **Poor fen (PF2)** and **Scrub (WS1)** (Plate 2-20). A second relevé was taken in this area in order to accurately represent the mosaic of habitats, and is presented in Table 2-18.

Table 2-17 Botanical Survey Results Proposed Turbine 13 – Relevé 1

Proposed Turbine 13	**Grid Reference: ITM X 664715, Y 722388**	**Date: 18/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus bufonius	Toad rush	1
Eriophorum angustifolium	Common cottongrass	1
%Bare Peat		98%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**

IVC Classification	**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat	**No**



Plate 2-19 Proposed Turbine 13 is largely located within an area of Cutover bog (PB4) dominated by bare peat

Table 2-18 Botanical Survey Results Proposed Turbine 13 – Relevé 2

Proposed Turbine 13	**Grid Reference: ITM X 664688, Y 722425**	**Date: 18/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	80
Juncus effusus	Soft-rush	5
Tussilago farfara	Colt's foot	3
Chamaenerion angustifolium	Rosebay willowherb	3
Hypochaeris radicata	Cat's-ear	2
Senecio vulgaris	Groundsel	2
Cerastium fontanum	Common mouse-ear	2
Betula pubescens	Downy birch	1

Epilobium palustre	Marsh willowherb	1
%Bare Peat		5%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Poor fen (PF2) and Scrub (WS1)**
IVC Classification		**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog***
Affinity to Annex I habitat		**No**



Plate 2-20 The Proposed Turbine 13 hardstand area has been partially revegetated with a mosaic of pioneer Poor fen (PF2) and Scrub (WS1)

2.14 Proposed Turbine 14

Proposed Turbine 14 is located in an area of **Cutover bog (PB4)** comprising a mosaic of revegetating habitats. Much of the area of Proposed Turbine 14 is made up of bare peat with little revegetation (Plate 2-21). A relevé was taken in this habitat and is presented in Table 2-19. However, some areas within the Proposed Turbine 14 hardstand have become revegetated with species representing pioneer **Poor fen (PF2)** (Plate 2-22). This habitat was dominated by soft-rush (*Juncus effusus*), jointed rush (*Juncus articulatus*) and marsh horsetail (*Equisetum palustre*) therefore an additional relevé was taken in this area in order to accurately represent the mosaic of habitats present. This relevé is presented in Table 2-20 below.

Table 2-19 Botanical Survey Results Proposed Turbine 14 – Relevé 1

Proposed Turbine 14	**Grid Reference: ITM X 665129, Y 721822**	**Date: 18/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		

Juncus effusus	Soft-rush	2
Triglochin palustris	Marsh arrowgrass	2
Anthoxanthum odoratum	Sweet vernal grass	1
%Bare Peat		95%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**None***
Affinity to Annex I habitat		**No**



Plate 2-21 Proposed Turbine 14 is located within an area of Cutover bog (PB4) with large areas of bare peat

Table 2-20 Botanical Survey Results Proposed Turbine 14 – Relevé 2

Proposed Turbine 14	**Grid Reference: ITM X 665121, Y 721820**	**Date: 18/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus effusus	Soft-rush	70
Chamaenerion angustifolium	Rosebay willowherb	20

Holcus lanatus	Yorkshire-fog	15
Arrhenatherum elatius	False oat grass	10
Hypochaeris radicata	Cat's-ear	5
Cirsium palustre	Marsh thistle	4
Rubus fruticosus agg.	Brambles	3
Salix caprea	Goat willow	2
Cerastium fontanum	Common mouse-ear	2
Equisetum palustre	Marsh horsetail	1
Taraxacum officinale	Dandelion	1
Betula pubescens	Downy birch	1
Non-vascular		
Campylopus introflexus	Heath star-moss	8
%Bare Peat		5%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Poor fen (PF2)**
IVC Classification		**GL2D – *Juncus effusus* – *Rumex acetosa* grassland**
Affinity to Annex I habitat		**No**



Plate 2-22 The bare peat at Proposed Turbine 14 forms a mosaic with revegetating pioneer Poor fen (PF2) species

2.15 Proposed Turbine 15

Proposed Turbine 15 is partially located within **Cutover bog (PB4)** with early revegetation of species such as marsh horsetail (*Equisetum palustre*) present at the time of survey (Plate 2-23). A relevé was taken within this habitat and is presented in Table 2-21 below. These areas form a mosaic with secondary recolonising ***Calluna*-dominated community** and encroaching **Scrub (WS1)**, with abundant marsh horsetail (*Equisetum palustre*), purple moor-grass (*Molinia caerulea*) and common cottongrass (*Eriophorum angustifolium*) within the understorey (Plate 2-24). A second relevé was taken within this area of the Proposed Turbine 15 hardstand in order to represent this habitat mosaic and is presented in Table 2-22 below.

Table 2-21 Botanical Survey Results Proposed Turbine 15 – Relevé 1

Proposed Turbine 15	**Grid Reference: ITM X 664794, Y 723506**	**Date: 16/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Equisetum palustre	Marsh horsetail	15
Carex flacca	Glaucous sedge	5
Eriophorum angustifolium	Common cottongrass	3
Carex demissa	Common yellow sedge	2

%Bare Peat	80%
Fossitt (2000) Habitat Classification	**Cutover bog (PB4)**
IVC Classification	**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog***
Affinity to Annex I habitat	**No**



Plate 2-23 Proposed Turbine 15 is partially located within Cutover bog (PB4) with only early revegetation present at the time of survey.

Table 2-22 Botanical Survey Results Proposed Turbine 15 – Relevé 2

Proposed Turbine 15	**Grid Reference: ITM X 664770, Y 723521**	**Date: 16/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Equisetum palustre	Marsh horsetail	30
Calluna vulgaris	Ling heather	15
Molinia caerulea	Purple moor-grass	10
Eriophorum angustifolium	Common cottongrass	10
Betula pubescens	Downy birch	8

Ulex europaeus	European gorse	5
Anthoxanthum odoratum	Sweet vernal grass	5
Succisa pratensis	Devil's bit scabious	5
Cirsium palustre	Marsh thistle	3
Pinus sylvestris	Scots pine	3
Pilosella officinarum	Mouse-ear hawkweed	3
Hypericum pulchrum	Slender St John's-wort	2
Rubus fruticosus agg.	Brambles	2
Hypochaeris radicata	Cat's-ear	1
Fragaria vesca	Wild strawberry	1
Holcus lanatus	Yorkshire-fog	0.5
Prunella vulgaris	Self-heal	0.5
Non-vascular		
Calliergonella cuspidata	Pointed spear moss	10
Polytrichum strictum	Bog haircap moss	5
Kindbergia praelonga	Common feather-moss	5
Brachythecium rutabulum	Rough-stalked feather-moss	3
Cladonia portentosa	Reindeer lichen	2
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with *Calluna*-dominated community / Scrub (WS1)**
IVC Classification		**GL1C – *Molinia caerulea – Succisa pratensis* grassland***
Affinity to Annex I habitat		**No**



Plate 2-24 Part of the hardstand of Proposed Turbine 15 is comprised of a mosaic of a secondary Calluna-dominated community and Scrub (WS1)

2.16 Proposed Turbine 16

Proposed Turbine 16 is located partially within a wide area of open water in which common reed (*Phragmites australis*) and soft-rush (*Juncus effusus*) were recorded growing at the margins (Plate 2-25). The surrounding habitats of **Cutover bog (PB4)** dominated by bare peat with small amounts of recolonising vegetation (Plate 2-26). A relevé was taken in this area of cutover bog in which part of the Proposed Turbine 16 hardstand is located and is presented in Table 2-23 below.



Plate 2-25 Proposed Turbine 16 is partially located within a wide area of open water

Table 2-23 Botanical Survey Results Proposed Turbine 16

Proposed Turbine 16	**Grid Reference: ITM X 664330, Y 724001**	**Date: 16/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus effusus	Soft-rush	5
Eriophorum angustifolium	Common cottongrass	5
Calluna vulgaris	Ling heather	5
Betula pubescens	Downy birch	1
Salix cinerea	Grey willow	1
Juncus bufonius	Toad rush	0.5
Hypochaeris radicata	Cat's-ear	0.5
Non-vascular		
Campylopus introflexus	Heath star-moss	4
%Bare Peat		85%

Fossitt (2000) Habitat Classification	**Cutover bog (PB4)**
IVC Classification	**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat	**No**



Plate 2-26 Proposed Turbine 16 is partially located in an area of Cutover bog (PB4) dominated by bare peat

2.17 Proposed Turbine 17

Proposed Turbine 17 is located in an area of cutover bog that has revegetated with **Scrub (WS1)** dominated by downy birch (*Betula pubescens*) (Plate 2-27). A relevé was taken in this location and is presented in Table 2-24 below. The Proposed Turbine 17 hardstand also extends into an area of **Cutover bog (PB4)** dominated by bare peat with early revegetation of species such as common cottongrass (*Eriophorum angustifolium*) present at the time of survey (Plate 2-28). A relevé was taken in this area and is presented in Table 2-25 below.

Table 2-24 Botanical Survey Results Proposed Turbine 17 – Relevé 1

Proposed Turbine 17	**Grid Reference: ITM X 664370, Y 724900**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus effusus	Soft-rush	35
Betula pubescens	Downy birch	25

Picea sitchensis	Sitka spruce	10
Calluna vulgaris	Ling heather	6
Non-vascular		
Campylopus introflexus	Heath star-moss	35
Polytrichum juniperinum	Juniper haircap-moss	20
%Bare Peat		30%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetated by Scrub (WS1)**
IVC Classification		**GL2D – *Juncus effusus* - *Rumex acetosa* grassland***
Affinity to Annex I habitat		**No**



Plate 2-27 Area of birch Scrub (WS1) at the location of Proposed Turbine 17

Table 2-25 Botanical Survey Results Proposed Turbine 17 – Relevé 2

Proposed Turbine 17	**Grid Reference: ITM X 664326, Y 724891**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	30
Betula pubescens	Downy birch	20
Leontodon hispidus	Rough hawkbit	8

Holcus lanatus	Yorkshire-fog	2
Salix cinerea	Grey willow	1
Non-vascular		
Campylopus introflexus	Heath star-moss	15
Polytrichum commune	Common haircap	8
Cladonia chlorophaea	Pixie cup lichen	4
Cladonia portentosa	Reindeer lichen	2
%Bare Peat		45%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**BG1D – *Eriophorum angustifolium* - *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-28 Area of Cutover bog (PB4) dominated by bare peat, within the Proposed Turbine 17 hardstand

2.18 Proposed Turbine 18

Proposed Turbine 18 is largely located in an area of **Cutover bog (PB4)** that has revegetated with **Wet grassland (GS4)** species. This area was being used as a drying area for peat bricks associated with ongoing local turbary at the time of survey (Plate 2-29). A relevé was taken in this area and is presented in Table 2-26 below. The Proposed Turbine 18 hardstand also extends into a small area of cutover bog that has begun to recolonise with species representative of **Reed and large sedge swamp (FS1)**, with a high cover of bulrush (*Typha latifolia*) present with standing water (Plate 2-30). A second relevé was

taken within this habitat and is presented in Table 2-27 below. An area of **Scrub (WS1)** is also present around the margins of the swamp within the Proposed Turbine 18 hardstand.

Table 2-26 Botanical Survey Results Proposed Turbine 18 – Relevé 1

Proposed Turbine 18	**Grid Reference: ITM X 665153, Y 724289**	**Date: 16/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Holcus lanatus	Yorkshire-fog	90
Agrostis capillaris	Common bent grass	2
Juncus effusus	Soft-rush	10
Rumex acetosella	Sheep's sorrel	2
Potentilla reptans	Creeping cinquefoil	0.5
Anthoxanthum odoratum	Sweet vernal grass	0.5
Trifolium repens	White clover	0.5
Stellaria graminea	Lesser stitchwort	0.5
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Wet grassland (GS4)**
IVC Classification		**GL2B *Juncus effusus* – *Holcus lanatus* grassland**
Affinity to Annex I habitat		**No**



Plate 2-29 Proposed Turbine 18 is located in an area of Cutover bog (PB4) revegetated with wet grassland species, being used for ongoing local turbary.

Table 2-27 Botanical Survey Results Proposed Turbine 18 – Relevé 2

Proposed Turbine 18	**Grid Reference: ITM X 665124, Y 724311**	**Date: 16/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	60
Typha latifolia	Bulrush	30
Juncus effusus	Soft-rush	25
Betula spp.	Birch saplings	10
Anthoxanthum odoratum	Sweet vernal grass	2
Holcus lanatus	Yorkshire-fog	2
Epilobium hirsutum	Great willowherb	1
Narthecium ossifragum	Bog asphodel	1
Rumex acetosella	Sheep's sorrel	1
Lemna minor	Common duckweed	1

Salix cinerea	Grey willow	1
Epilobium palustre	Marsh willowherb	1
Juncus articulatus	Jointed rush	1
Hypochaeris radicata	Cat's-ear	1
%Bare Peat		5%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Reed and large sedge swamp (FS1)**
IVC Classification		**BG1D – *Eriophorum angustifolium* - *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-30 The Proposed Turbine 18 hardstand extends into an area of early revegetating Reed and large sedge swamp (FS1) with some standing water

2.19 Proposed Turbine 19

Proposed Turbine 19 is located within an area of birch-dominated **Bog woodland (WN7)**, characterised by downy birch (*Betula pubescens*) with an understorey largely comprising ivy (*Hedera helix*) and brambles (*Rubus fruticosus* agg.) (Plate 2-31). A relevé was taken in this woodland and is presented in Table 2-28. The Proposed Turbine 19 hardstand also extends into an area of cutover bog with **Conifer plantation (WD4)**, in this location with only sparse lodgepole pine (*Pinus contorta*) and sitka spruce (*Picea sitchensis*) with areas of bare peat and ling heather (*Calluna vulgaris*) (Plate 2-32). A second relevé was taken in this area and is presented in Table 2-29 below.

Table 2-28 Botanical Survey Results Proposed Turbine 19 – Relevé 1

Proposed Turbine 19	**Grid Reference: ITM X 663529, Y 724680**	**Date: 16/07/2024**

Species	Common Name	Percentage cover (%)
Vascular Plants		
Betula pubescens	Downy birch	90
Hedera helix	Ivy	60
Rubus fruticosus agg.	Brambles	30
Pinus contorta	Lodgepole pine	5
Salix cinerea	Grey willow	3
Salix aurita	Eared willow	2
Rubus idaeus	Raspberry	2
Geranium robertianum	Herb Robert	1
Viola riviniana	Common dog violet	1
Crataegus monogyna	Hawthorn	1
Non-vascular		
Thuidium tamariscinum	Common tamarisk moss	1
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**WL4F – *Betula pubescens* – *Pteridium aquilinum* woodland**
Affinity to Annex I habitat		**No**



Plate 2-31 Birch-dominated Bog woodland (WN7) present at the location of Proposed Turbine 19

Table 2-29 Botanical Survey Results Proposed Turbine 19 – Relevé 2

Proposed Turbine 19	**Grid Reference: ITM X 663578, Y 724720**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	50
Pinus contorta	Lodgepole pine	5
Picea sitchensis	Sitka spruce	2
Non-vascular		
Campylopus introflexus	Heath star-moss	2
%Bare Peat		50%
Fossitt (2000) Habitat Classification		**Conifer plantation (WD4)**
IVC Classification		**HE2B – *Calluna vulgaris* - *Hypnum jutlandicum* heath**
Affinity to Annex I habitat		**No**



Plate 2-32 Area of cutover bog with encroachment of Conifer species and ling heather (Calluna vulgaris) within the Proposed Turbine 19 hardstand

2.20 Proposed Turbine 20

Proposed Turbine 20 is located in an area of cutover bog that has begun to recolonise with species typical of pioneer **Poor fen (PF2)**, including soft-rush (*Juncus effusus*), common cottongrass (*Eriophorum angustifolium*) and marsh horsetail (*Equisetum palustre*) (Plate 2-33). A relevé was taken in this area and is presented in Table 2-30 below.

Table 2-30 Botanical Survey Results Proposed Turbine 20

Proposed Turbine 20	Grid Reference: ITM X 663223, Y 725285	Date: 19/05/2026
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Equisetum palustre	Marsh horsetail	40
Juncus effusus	Soft-rush	20
Eriophorum angustifolium	Common cottongrass	15
Hypericum pulchrum	Slender St. John's-wort	10
Calluna vulgaris	Ling heather	10
Potentilla erecta	Tormentil	6
Persicaria maculosa	Redshank	5
Leontodon hispidus	Rough hawkbit	5
Holcus lanatus	Yorkshire-fog	5
Fragaria vesca	Wild strawberry	4

Leontodon saxatilis	Lesser hawkbit	3
Cirsium palustre	Marsh thistle	2
Chamaenerion angustifolium	Rosebay willowherb	2
Non-vascular		
Cladonia chlorophaea	Pixie cup lichen	2
%Bare Peat		25%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating Poor fen (PF2)**
IVC Classification		**GL2D – *Juncus effusus* – *Rumex acetosa* grassland***
Affinity to Annex I habitat		**No**



Plate 2-33 Proposed Turbine 20 is located in an area of cutover bog that is being colonised largely by species typical of pioneer Poor fen (PF2)

2.21 Proposed Turbine 21

Proposed Turbine 21 is located within an area of cutover bog that has revegetated with species typical of **Wet grassland (GS4)** (Plate 2-34). Grasses dominate, including purple moor-grass (*Molinia caerulea*), sweet vernal-grass (*Anthoxanthum odoratum*) and Yorkshire-fog (*Holcus lanatus*) (Plate 2-34, Plate 2-35). Two relevés were taken within this area and are presented in Table 2-31 and Table 2-32 below. The Proposed Turbine 21 hardstand also partially extends into the decommissioned railway line to the east, which is classified as **Recolonising bare ground (ED3)** in this area, and a narrow section of **Bog woodland (WN7)** is also located in the west of the Proposed Turbine hardstand.

Table 2-31 Botanical Survey Results Proposed Turbine 21 – Relevé 1

Proposed Turbine 21	**Grid Reference: ITM X 664053, Y 725389**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Molinia caerulea	Purple moor-grass	35
Holcus lanatus	Yorkshire-fog	25
Anthoxanthum odoratum	Sweet vernal-grass	15
Betula pubescens	Downy birch	8
Centaurea nigra	Common knapweed	6
Lotus corniculatus	Common bird's-foot-trefoil	6
Rubus fruticosus agg.	Brambles	5
Bellis perennis	Common daisy	4
Hypericum pulchrum	Slender St. John's-wort	4
Leontodon hispidus	Rough hawkbit	4
Cirsium palustre	Marsh thistle	4
Polygala vulgaris	Common milkwort	2
Salix cinerea	Grey willow	2
Non-vascular		
Calliergonella cuspidata	Pointed spear-moss	15
%Bare Peat		60%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Wet grassland (GS4)**
IVC Classification		**GL1D *Molinia caerulea – Potentilla erecta – Agrostis stolonifera* grassland***
Affinity to Annex I habitat		**No**



Plate 2-34 Proposed Turbine 21 is located in an area of cutover bog that has revegetated with species typical of Wet grassland (GS4)

Table 2-32 Botanical Survey Results Proposed Turbine 21 – Relevé 2

Proposed Turbine 21	**Grid Reference: ITM X 664026, Y 725417**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Molinia caerulea	Purple moor-grass	40
Holcus lanatus	Yorkshire-fog	35
Carex panicea	Carnation sedge	20
Calluna vulgaris	Ling heather	12
Betula pubescens	Downy birch	10
Filipendula ulmaria	Meadowsweet	8
Salix cinerea	Grey willow	8
Potentilla erecta	Tormentil	5
Centaurea nigra	Common knapweed	4
Erica tetralix	Cross-leaved heath	2
Polygala vulgaris	Common milkwort	2

%Bare Peat	0%
Fossitt (2000) Habitat Classification	**Cutover bog (PB4) revegetating with Wet grassland (GS4)**
IVC Classification	**GL1D *Molinia caerulea – Potentilla erecta – Agrostis stolonifera* grassland***
Affinity to Annex I habitat	**No**



Plate 2-35 Area of purple moor-grass (Molinia caerulea) dominated Wet grassland (GS4) at the location of Proposed Turbine 21

2.22 Proposed Turbine 22

Proposed Turbine 22 is located in an area of cutover bog that is revegetating with a mosaic of **Scrub (WS1)** and species of pioneer **Poor fen (PF2)**, and is dominated by soft-rush (*Juncus effusus*) and saplings of grey willow (*Salix cinerea*) (Plate 2-36). A relevé was taken in this area and is presented in Table 2-33 below.

Table 2-33 Botanical Survey Results Proposed Turbine 22

Proposed Turbine 22	**Grid Reference: ITM X 663035, Y 726140**	**Date: 27/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus effusus	Soft-rush	60
Chamaenerion angustifolium	Rosebay willowherb	10
Salix cinerea	Grey willow	10

Cirsium palustre	Marsh thistle	10
Rumex acetosa	Common sorrel	0.5
Potentilla erecta	Tormentil	0.5
Equisetum palustre	Marsh horsetail	0.5
Silene flos-cuculi	Ragged-robin	0.5
Rubus fruticosus agg.	Brambles	0.5
Hypochaeris radicata	Cat's-ear	0.5
Non-vascular		
Calliergonella cuspidata	Pointed spear-moss	25
%Bare Peat		5%
Fossitt (2000) Habitat Classification		**Cutover bog revegetating with Poor fen (PF2)/Scrub (WS1)**
IVC Classification		**GL2D – *Juncus effusus* – *Rumex acetosa* grassland**
Affinity to Annex I habitat		**No**



Plate 2-36 Proposed Turbine 22 is located in an area of cutover bog that is revegetating with pioneer soft-rush (Juncus effusus) dominated Poor fen (PF2) and Scrub (WS1)

2.23 Proposed Turbine 23

Proposed Turbine 23 is located within cutover bog which has become waterlogged and dominated by common cottongrass (*Eriophorum angustifolium*), marsh arrowgrass (*Triglochin palustris*) and some

encroaching grey willow (*Salix cinerea*), representing a **Reed and large sedge swamp (FS1)** with bulrush (*Typha latifolia*) and common reed (*Phragmites australis*) in the wider area (Plate 2-38). Two relevés were taken in this habitat and are presented in Table 2-34 and Table 2-35 below.

Table 2-34 Botanical Survey Results Proposed Turbine 23 – Relevé 1

Proposed Turbine 23	**Grid Reference: ITM X 665573, Y 728202**	**Date: 27/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	80
Salix cinerea	Grey willow	10
Typha latifolia	Bulrush	10
Equisetum fluviatile	Water horsetail	5
Equisetum palustre	Marsh horsetail	5
%Bare Peat (Open water)		20%
Fossitt (2000) Habitat Classification		**Cutover Bog (PB4) revegetating with Reed and large sedge swamp (FS1)**
IVC Classification		**BG1D – *Eriophorum angustifolium* - *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-37 Area of Reed and large sedge swamp (FS1) present at the location of Proposed Turbine 23

Table 2-35 Botanical Survey Results Proposed Turbine 23 – Relevé 2

Proposed Turbine 23	**Grid Reference: ITM X 665531, Y 728203**	**Date: 29/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Salix cinerea	Grey willow	15
Triglochin palustris	Marsh arrowgrass	10
Eriophorum angustifolium	Common cottongrass	10
Betula pubescens	Downy birch	5
Juncus articulatus	Jointed rush	5
Equisetum fluviatile	Water horsetail	5
Typha latifolia	Bulrush	5
Nasturtium officinale	Watercress	3
Juncus tenuis	Slender rush	2
Epilobium palustre	Marsh willowherb	1
Persicaria maculosa	Redshank	1
%Bare Peat (Open water)		70%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Reed and large sedge swamp (FS1)**
IVC Classification		**FW3G *Equisetum fluviatile* – *Eleocharis palustris* swamp***
Affinity to Annex I habitat		**No**



Plate 2-38 Proposed Turbine 23 is located within cutover bog that has become waterlogged and developed into a Reed and large sedge swamp (FS1)

2.24 Proposed Turbine 24

Proposed Turbine 24 is located in an area of **Cutover bog (PB4)** dominated by bare peat with a small amount of revegetation at the time of survey (Plate 2-39). A relevé was taken in this area and is presented in Table 2-36.

Table 2-36 Botanical Survey Results Proposed Turbine 24

Proposed Turbine 24	**Grid Reference: ITM X 664831, Y 727515**	**Date: 27/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	15
Betula pubescens	Downy birch	5
Non-vascular		
Polytrichum commune	Common haircap	5
Campylopus introflexus	Heath star-moss	2
%Bare Peat		80%

Fossitt (2000) Habitat Classification	**Cutover bog (PB4)**
IVC Classification	**BG1D – *Eriophorum angustifolium* - *Campylopus introflexus* bog**
Affinity to Annex I habitat	**No**



Plate 2-39 Proposed Turbine 24 is located in an area of Cutover bog (PB4) comprising mostly bare peat with little revegetation

2.25 Proposed Turbine 25

Proposed Turbine 25 is located within **Cutover bog (PB4)** dominated by bare peat with a small amount of revegetation at the time of survey (Plate 2-40). A relevé was taken in this location and is presented in Table 2-37 below. Other species recorded in small amounts in the wider area included cat's-ear (*Hypochaeris radicata*), sheep's sorrel (*Rumex acetosella*) soft-rush (*Juncus effusus*), downy birch (*Betula pubescens*) seedlings and the moss *Campylopus introflexus*.

Table 2-37 Botanical Survey Results Proposed Turbine 25

Proposed Turbine 25	**Grid Reference: ITM X 664594, Y 726851**	**Date: 27/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus bulbosus	Bulbous rush	5
Eriophorum angustifolium	Common cottongrass	5
%Bare Peat		90%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**

IVC Classification	**BG1D – *Eriophorum angustifolium* - *Campylopus introflexus* bog**
Affinity to Annex I habitat	**No**



Plate 2-40 Proposed Turbine 25 is located within Cutover bog (PB4) dominated by bare peat with little revegetation

2.26 Proposed Turbine 26

Proposed Turbine 26 is located in an area of **Cutover bog (PB4)** dominated by bare peat, with a small amount of revegetation present at the time of survey (Plate 2-41). A relevé was taken in this area and is presented in Table 2-38 below.

Table 2-38 Botanical Survey Results Proposed Turbine 26

Proposed Turbine 26	**Grid Reference: ITM X 663881, Y 727214**	**Date: 27/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Betula pubescens	Downy birch	10
Chamaenerion angustifolium	Rosebay willowherb	5
Aira praecox	Early hair-grass	5
Hypochaeris radicata	Cat's-ear	5
Spergula arvensis	Corn spurrey	3
Holcus lanatus	Yorkshire-fog	2
Cerastium fontanum	Common mouse-ear	0.5
Non-vascular		

Polytrichum juniperinum	Juniper haircap-moss	10
%Bare Peat		60%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**RH2E – *Aira caryophyllea* – *Polytrichum juniperinum* wall community***
Affinity to Annex I habitat		**No**



Plate 2-41 Proposed Turbine 26 is located in an area of Cutover bog (PB4) dominated by bare peat

2.27 Proposed Turbine 27

Proposed Turbine 27 is located within an area of cutover bog that has revegetated with dry downy birch (*Betula pubescens*) dominated **Scrub (WS1)** with an understory of dry grasses including a high cover of Yorkshire-fog (*Holcus lanatus*) (Plate 2-42). A relevé was undertaken in this location and is presented in Table 2-39 below.

Table 2-39 Botanical Survey Results Proposed Turbine 27

Proposed Turbine 27	**Grid Reference: ITM X 666654, Y 728790**	**Date: 29/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Holcus lanatus	Yorkshire-fog	40
Chamaenerion angustifolium	Rosebay willowherb	20
Betula pubescens	Downy birch	15

Juncus effusus	Soft-rush	15
Cirsium palustre	Marsh thistle	7
Betula pendula	Silver birch	5
Salix cinerea	Grey willow	5
Plantago lanceolata	Ribwort plantain	1
Potentilla erecta	Tormentil	1
Epilobium hirsutum	Great willowherb	1
Equisetum arvense	Field horsetail	1
Rumex acetosella	Sheep's sorrel	1
Rubus fruticosus agg.	Brambles	1
Poa trivialis	Rough meadow-grass	1
Hypochaeris radicata	Cat's-ear	1
Non-vascular		
Calliergonella cuspidata	Pointed spear-moss	1
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) which has revegetated with Scrub (WS1)**
IVC Classification		**GL2B – *Juncus effusus* – *Holcus lanatus* grassland***
Affinity to Annex I habitat		**No**



Plate 2-42 Proposed Turbine 27 is located within an area of cutover bog which has revegetated with Scrub (WS1) with a dry grassland understorey.

2.28 Proposed Turbine 28

Part of the Proposed Turbine 28 hardstand is located within an area of **Cutover bog (PB4)** dominated by bare peat with some revegetation of soft rush (*Juncus effusus*) and downy birch (*Betula pubescens*) (Plate 2-43), as shown in a relevé taken in this area, which is presented in Table 2-40 below. Part of the Proposed Turbine 28 hardstand has also become revegetated by mature **Scrub (WS1)** dominated by downy birch (*Betula pubescens*) and silver birch (*Betula pendula*) (Plate 2-44). A second relevé was taken in this area in order to accurately represent the mosaic of habitats, and is presented in Table 2-41.

Table 2-40 Botanical Survey Results Proposed Turbine 28 – Relevé 1

Proposed Turbine 28	Grid Reference: ITM X 667385, Y 728406	Date: 29/07/2024
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus effusus	Soft-rush	20
Betula pubescens	Downy birch	15
Holcus lanatus	Yorkshire-fog	7
Hypochaeris radicata	Cat's-ear	5
Calluna vulgaris	Ling heather	4
Potentilla erecta	Tormentil	4
Cirsium palustre	Marsh thistle	2
%Bare Peat		50%

Fossitt (2000) Habitat Classification	**Cutover bog (PB4)**
IVC Classification	**GL2D – *Juncus effusus – Rumex acetosa* grassland**
Affinity to Annex I habitat	**No**



Plate 2-43 Part of the Proposed Turbine 28 hardstand is located within Cutover bog (PB4) dominated by bare peat with early revegetation.

Table 2-41 Botanical Survey Results Proposed Turbine 28 – Relevé 2

Proposed Turbine 28	**Grid Reference: ITM X 667450, Y 728388**	**Date: 29/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	30
Betula pendula	Silver birch	30
Betula pubescens	Downy birch	30
Juncus effusus	Soft-rush	30
Salix cinerea	Grey willow	15
Holcus lanatus	Yorkshire-fog	15

Rubus fruticosus agg.	Brambles	10
Cirsium palustre	Marsh thistle	8
Tussilago farfara	Colt's foot	3
Non-vascular		
Bryum pseudotriquetrum	Marsh Bryum	5
Brachythecium rutabulum	Rough-stalked feather-moss	1
Fissidens taxifolius	Common pocket-moss	1
%Bare Peat		5%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) which has revegetated with Scrub (WS1)**
IVC Classification		**WL4E – *Betula pubescens – Salix cinerea* woodland***
Affinity to Annex I habitat		**No**



Plate 2-44 Much of the Proposed Turbine 28 hardstand has been revegetated by mature birch Scrub (WS1)

2.29 Proposed Turbine 29

Proposed Turbine 29 is located within an area of cutover bog which has revegetated with a mosaic of **Scrub (WS1)** dominated by silver birch (*Betula pendula*) and grey willow (*Salix cinerea*) and pioneer **Poor fen (PF2)** primarily dominated by soft-rush (*Juncus effusus*) (Plate 2-45). A relevé was taken in this location and is presented in Table 2-42 below.

Table 2-42 Botanical Survey Results Proposed Turbine 29

Proposed Turbine 29	Grid Reference: ITM X 667538, Y 729309	Date: 29/07/2024
Species	Common Name	Percentage cover (%)
Vascular Plants		
Betula pubescens	Downy birch	60
Equisetum arvense	Field horsetail	25
Holcus lanatus	Yorkshire-fog	25
Salix cinerea	Grey willow	10
Cirsium palustre	Marsh thistle	10
Juncus effusus	Soft-rush	10
Hypochaeris radicata	Cat's-ear	8
Filipendula ulmaria	Meadowsweet	5
Rubus fruticosus agg.	Brambles	5
Tussilago farfara	Colt's-foot	5
Angelica sylvestris	Wild angelica	2
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating Poor fen (PF2)/Scrub (WS1)**
IVC Classification		**GL2B – *Juncus effusus* – *Holcus lanatus* grassland***
Affinity to Annex I habitat		**No**



Plate 2-45 Proposed Turbine 29 is located within an area of cutover bog that has revegetated with Scrub (WS1) and pioneer Poor fen (PF2)

2.30 Proposed Turbine 30

The location of Proposed Turbine 30 is largely dominated by **Cutover bog (PB4)** comprising 100 percent bare peat (Plate 2-46). Due to the lack of any vegetation, no relevé was taken in this area. A small section of the Proposed Turbine 30 hardstand has become revegetated with a secondary ***Calluna*-dominated community** which forms a mosaic with immature **Scrub (WS1)** (Plate 2-47). A relevé was taken within this area of revegetation and is presented in Table 2-43 below.



Plate 2-46 Proposed Turbine 30 is largely located within Cutover bog (PB4) entirely dominated by bare peat

Table 2-43 Botanical Survey Results Proposed Turbine 30

Proposed Turbine 30	**Grid Reference: ITM X 667355, Y 730120**	**Date: 29/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	70
Molinia caerulea	Purple moor-grass	40
Juncus bulbosus	Bulbous rush	2
Betula pendula	Silver birch	1
Non-vascular		
Campylopus introflexus	Heath star-moss	5
%Bare Peat		10%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with *Calluna*-dominated community/Scrub (WS1)**
IVC Classification		**HE2D – *Calluna vulgaris* - *Molinia caerulea* - *Erica cinerea* heath**
Affinity to Annex I habitat		**No**



Plate 2-47 The Proposed Turbine 30 hardstand is partially located within cutover bog characterised by secondary Calluna-dominated community and Scrub (WS1)

2.31 Proposed Turbine 31

Proposed Turbine 31 is located within **Cutover bog (PB4)** highly dominated by bare peat, showing early signs of revegetation of species including rosebay willowherb (*Chamaenerion angustifolium*), colt's-foot (*Tussilago farfara*) and grey willow (*Salix cinerea*) saplings (Plate 2-48). A relevé was taken in this area and is presented in Table 2-44 below.

Table 2-44 Botanical Survey Results Proposed Turbine 31

Proposed Turbine 31	Grid Reference: ITM X 666425, Y 729889	Date: 29/07/2024
Species	Common Name	Percentage cover (%)
Vascular Plants		
Chamaenerion angustifolium	Rosebay willowherb	10
Tussilago farfara	Colt's-foot	10
Salix cinerea	Grey willow	5
Juncus effusus	Soft-rush	3
Leontodon hispidus	Rough hawkbit	3
Juncus articulatus	Jointed rush	2
Betula pubescens	Downy birch	2
Epilobium palustre	Marsh willowherb	1
%Bare Peat		60%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**None***
Affinity to Annex I habitat		**No**



Plate 2-48 Proposed Turbine 31 is located within Cutover bog (PB4) dominated by bare peat

2.32 Proposed Turbine 32

Proposed Turbine 32 is located within **Cutover bog (PB4)** dominated by bare peat, with some early revegetation of species including colt's-foot (*Tussilago farfara*) and soft-rush (*Juncus effusus*) recorded at the time of survey (Plate 2-49). A relevé was taken in this area and is presented in Table 2-45 below. The Proposed Turbine 32 hardstand also extends into an area which has revegetated with a higher cover of **Scrub (WS1)**, dominated by downy birch (*Betula pubescens*) (Plate 2-50). A second relevé was taken in this area in order to accurately represent the habitats present and is presented in Table 2-46.

Table 2-45 Botanical Survey Results Proposed Turbine 32 – Relevé 1

Proposed Turbine 32	Grid Reference: ITM X 665914, Y 730398	Date: 29/07/2024
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Tussilago farfara	Colt's-foot	10
Juncus effusus	Soft-rush	5
Epilobium palustre	Marsh willowherb	5
Chamaenerion angustifolium	Rosebay willowherb	5
Cerastium fontanum	Common mouse-ear	5
Sagina nodosa	Knotted pearlwort	4

Molinia caerulea	Purple moor-grass	3
Rumex acetosa	Common sorrel	3
Salix cinerea	Grey willow	2
Juncus articulatus	Jointed rush	2
Leontodon hispidus	Rough hawkbit	1
%Bare Peat		80%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**None***
Affinity to Annex I habitat		**No**



Plate 2-49 Proposed Turbine 32 is located within Cutover bog (PB4) dominated by bare peat with early revegetation

Table 2-46 Botanical Survey Results Proposed Turbine 32 – Relevé 2

Proposed Turbine 32	**Grid Reference: ITM X 665959, Y 730411**	**Date: 29/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		

Betula pubescens	Downy birch	40
Juncus articulatus	Jointed rush	20
Juncus effusus	Soft-rush	10
Calluna vulgaris	Ling heather	2
Chamaenerion angustifolium	Rosebay willowherb	2
Non-vascular		
Campylopus introflexus	Heath star-moss	35
%Bare Peat		40%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) which is revegetating with Scrub (WS1)**
IVC Classification		**WL4C – *Betula pubescens* – *Sphagnum palustre* woodland***
Affinity to Annex I habitat		**No**



Plate 2-50 Downy birch (Betula pubescens) Scrub (WS1) revegetating within a section of the Proposed Turbine 32 hardstand

2.33 Proposed Turbine 33

Proposed Turbine 33 is located within dense **Bog woodland (WN7)** dominated by downy birch (*Betula pubescens*) and grey willow (*Salix cinerea*) with an understorey consisting primarily of brambles (*Rubus fruticosus* agg.) (Plate 2-51). A relevé was taken in this area of woodland and is presented in Table 2-47.

Table 2-47 Botanical Survey Results Proposed Turbine 33

Proposed Turbine 33	Grid Reference: ITM X 668748, Y 723730	Date: 25/07/2024
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Rubus fruticosus agg.	Brambles	60
Hedera helix	Ivy	40
Betula pubescens	Downy birch	30
Fragaria vesca	Wild strawberry	20
Salix cinerea	Grey willow	10
Equisetum palustre	Marsh horsetail	1
Dryopteris affinis	Golden scaly male fern	1
Dryopteris dilatata	Broad buckler fern	0.5
Non-vascular		
Eurhynchyium striatum	Common striated feather moss	20
Kindbergia praelonga	Common feather-moss	15
Loeskeobryum brevirostre	Short-beaked wood-moss	15
Frullania dilatata	Dilated scalewort	10
Orthotrichum affine	Wood bristle-moss	5
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**WL4D – *Betula pubescens* – *Rubus fruticosus* woodland**
Affinity to Annex I habitat		**No**



Plate 2-51 Dense birch-dominated Bog woodland (WN7) present at the location of Proposed Turbine 33

2.34 Proposed Turbine 34

Proposed Turbine 34 is partially located within an area of cutover bog which has become revegetated by a secondary ***Calluna*-dominated community** (Plate 2-52). A relevé was taken in this area and is presented in Table 2-48. Proposed Turbine 34 also extends into an area of dense **Bog woodland (WN7)** dominated by downy birch (*Betula pubescens*) with an understorey consisting primarily of brambles (*Rubus fruticosus* agg.) (Plate 2-53). A second relevé was taken in this area and is presented in Table 2-49 below.

Table 2-48 Botanical Survey Results Proposed Turbine 34 – Relevé 1

Proposed Turbine 34	Grid Reference: ITM X 668264, Y 724104	Date: 25/07/2024
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	75
Betula pubescens	Downy birch	10
Eriophorum angustifolium	Common cottongrass	5
Non-vascular		
Campylopus introflexus	Heath star-moss	30
Cladonia portentosa	Reindeer lichen	4

Cladonia chlorophaea	Pixie cup lichen	2
Cladonia floerkeana	Devil's matchsticks	2
%Bare Peat		20%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating *Calluna*-dominated community**
IVC Classification		**HE2B – *Calluna vulgaris* – *Hypnum jutlandicum* heath**
Affinity to Annex I habitat		**No**



Plate 2-52 Proposed Turbine 34 is partially located within an area of cutover bog recolonised by a secondary Calluna-dominated community

Table 2-49 Botanical Survey Results Proposed Turbine 34 – Relevé 2

Proposed Turbine 34	**Grid Reference: ITM X 668232, Y 724134**	**Date: 25/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Rubus fruticosus agg.	Brambles	70
Betula pubescens	Downy birch	60

Hedera helix	Ivy	10
Sorbus aucuparia	Rowan	5
Lonicera periclymenum	Honeysuckle	5
Non-vascular		
Kindbergia praelonga	Common feather-moss	10
Eurhynchyium striatum	Common striated feather moss	5
Orthotrichum affine	Wood bristle-moss	3
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**WL4F – *Betula pubescens – Pteridium aquilinum* woodland**
Affinity to Annex I habitat		**No**



Plate 2-53 Proposed Turbine 34 is partially located within an area of Bog woodland (WN7)

2.35 Proposed Turbine 35

Proposed Turbine 35 is located within a mosaic of habitats that have recolonised cutover bog. This mosaic comprises areas that have revegetated with sparse, immature **Scrub (WS1)** (Plate 2-54), which transitions into dense downy birch (*Betula pubescens*) dominated scrub in other areas (Plate 2-55). Two relevés were taken within these areas in order to accurately represent the mosaic of habitats present at the time of survey and are presented in Table 2-50 and Table 2-51. The Proposed Turbine 35 hardstand also extends into an area of scrub which has formed a mosaic with pioneer **Poor fen (PF2)** type vegetation (Plate 2-56), therefore a third relevé was also taken within this habitat and is presented in Table 2-52.

Table 2-50 Botanical Survey Results Proposed Turbine 35 – Relevé 1

Proposed Turbine 35	Grid Reference: ITM X 667699, Y 724706	Date: 23/07/2024
Species	Common Name	Percentage cover (%)
Vascular Plants		
Betula pubescens	Downy birch	25
Betula pendula	Silver birch	25
Eriophorum angustifolium	Common cottongrass	15
Salix cinerea	Grey willow	5
Calluna vulgaris	Ling heather	3
Equisetum arvense	Field horsetail	0.5
Dryopteris dilatata	Broad buckler fern	0.5
Non-vascular		
Polytrichum commune	Common haircap	15
Cladonia floerkeana	Devil's matchsticks	2
Cladonia portentosa	Reindeer lichen	0.5
%Bare Peat		30%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Scrub (WS1)**
IVC Classification		**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog***
Affinity to Annex I habitat		**No**



Plate 2-54 Cutover bog revegetating with immature birch and willow Scrub (WS1) present at the location of Proposed Turbine 35

Table 2-51 Botanical Survey Results Proposed Turbine 35 – Relevé 2

Proposed Turbine 35	**Grid Reference: ITM X 667703, Y 724696**	**Date: 23/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Betula pubescens	Downy birch	96
Equisetum arvense	Field horsetail	2
Calluna vulgaris	Ling heather	0.5
Hypericum pulchrum	Slender St. John's-wort	0.5
Rubus fruticosus	Bramble	0.5
Potentilla erecta	Tormentil	0.5
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) which has revegetated with Scrub (WS1)**
IVC Classification		**WL4F – *Betula pubescens – Pteridium aquilinum* woodland**

Affinity to Annex I habitat	**No**



Plate 2-55 Dense downy birch (Betula pubescens) dominated Scrub (WS1) present at the location of Proposed Turbine 35

Table 2-52 Botanical Survey Results Proposed Turbine 35 – Relevé 3

Proposed Turbine 35	**Grid Reference: ITM X 667710, Y 724666**	**Date: 23/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	40
Salix cinerea	Grey willow	35
Juncus effusus	Soft-rush	30
Equisetum arvense	Field horsetail	15
Valeriana officinalis	Common valerian	2
Mentha aquatica	Water mint	1
Epilobium palustre	Marsh willowherb	1
Dryopteris dilatata	Broad buckler-fern	0.5
Betula pubescens	Downy birch	0.5

%Bare Peat	0%
Fossitt (2000) Habitat Classification	**Cutover bog (PB4) with revegetating Poor fen (PF2)**
IVC Classification	**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat	**No**



Plate 2-56 Cutover bog (PB4) revegetating with a mosaic of Scrub (WS1) and Poor fen (PF2) type vegetation present within the Proposed Turbine 35 hardstand.

2.36 Proposed Turbine 36

Proposed Turbine 36 is located within **Cutover bog (PB4)** comprising 100 percent bare peat with no revegetation (Plate 2-57). For this reason, no relevé was taken at this location. Immature birch (*Betula* spp.) saplings and common cottongrass (*Eriophorum angustifolium*) were recorded growing in the vicinity in small amounts.



Plate 2-57 Proposed Turbine 36 is located in an area of Cutover bog (PB4) comprising bare peat.

2.37 Proposed Turbine 37

Proposed Turbine 37 is located within an area of birch-dominated **Bog woodland (WN7)**, with an understorey dominated by purple moor-grass (*Molinia caerulea*) (Plate 2-59). A relevé was taken in this area and is presented in Table 2-53. Round-leaved wintergreen (*Pyrola rotundifolia* ssp. *rotundifolia*), a species listed as Near Threatened (NT) on the Irish Red List of Vascular Plants (Wyse Jackson *et al.,* 2016), was recorded elsewhere within the Proposed Turbine 37 hardstand and wider area. A small area of the Proposed Turbine 37 hardstand also extends into an area of bare peat which is used as a machinery track.

Table 2-53 Botanical Survey Results Proposed Turbine 37

Proposed Turbine 37	Grid Reference: ITM X 668441, Y 725418	Date: 23/07/2024
Species	Common Name	Percentage cover (%)
Vascular Plants		
Molinia caerulea	Purple moor-grass	80
Betula pubescens	Downy birch	40
Betula pendula	Silver birch	40
Rubus fruticosus	Bramble	15
Calluna vulgaris	Ling heather	15

Equisetum palustre	Marsh horsetail	2
Pinus sylvestris	Scots pine	0.5
Anthoxanthum odoratum	Sweet vernal grass	0.5
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**HE4D – *Molinia caerulea* - *Potentilla erecta* - *Erica tetralix* heath***
Affinity to Annex I habitat		**No**



Plate 2-58 Bog woodland (WN7) present at the location of Proposed Turbine 37

2.38 Proposed Turbine 38

Proposed Turbine 38 is located in an area of cutover bog which has been revegetated by soft-rush (*Juncus effusus*) dominated **Poor fen (PF2)** (Plate 2-59). A relevé was taken within this area and is presented in Table 2-54. This poor fen forms a mosaic with bare peat in the wider area and is often dominated by common cottongrass (*Eriophorum angustifolium*), marsh horsetail (*Equisetum palustre*) and marsh arrowgrass (*Triglochin palustre*).

Table 2-54 Botanical Survey Results Proposed Turbine 38

Proposed Turbine 38	**Grid Reference: ITM X 667000, Y 725068**	**Date: 26/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus effusus	Soft-rush	50
Eriophorum angustifolium	Common cottongrass	20
Equisetum arvense	Field horsetail	15
Mentha aquatica	Water mint	10
Agrostis stolonifera	Creeping bent	10
Juncus articulatus	Jointed rush	5
Salix cinerea	Grey willow	1
Cardamine pratensis	Cuckooflower	1
Non-vascular		
Marchantia polymorpha	Star-headed liverwort	15
Bryum pseudotriquetrum	Marsh Bryum	10
Calliergonella cuspidata	Pointed spear-moss	5
%Bare Peat		5%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating Poor fen (PF2)**
IVC Classification		**GL2D – *Juncus effusus* – *Rumex acetosa* grassland**
Affinity to Annex I habitat		**No**



Plate 2-59 Proposed Turbine 38 is located within cutover bog revegetating with pioneer Poor fen (PF2)

2.39 Proposed Turbine 39

Proposed Turbine 39 is located within an area of **Scrub (WS1)** comprising grey willow (*Salix cinerea*), downy birch (*Betula* spp.), hawthorn (*Crataegus monogyna*), European gorse (*Ulex europaeus*), brambles (*Rubus fruticosus* agg.) and rowan (*Sorbus aucuparia*) (Plate 2-60). This scrub forms a mosaic with a ***Calluna*-dominated community** (Plate 2-61), and transitions into a mosaic with pioneer **Poor fen (PF2)** vegetation. A relevé was taken in this mosaic habitat and is presented in Table 2-55.



Plate 2-60 Dense Scrub (WS1) and Calluna-dominated community present at the location of Proposed Turbine 39

Table 2-55 Botanical Survey Results Proposed Turbine 39

Proposed Turbine 39	Grid Reference: ITM X 666515, Y 725758	Date: 23/07/2024
Species	Common Name	Percentage cover (%)

Vascular Plants		
Eriophorum angustifolium	Common cottongrass	75
Molinia caerulea	Purple moor-grass	15
Carex demissa	Common yellow-sedge	10
Mentha aquatica	Water mint	10
Anthoxanthum odoratum	Sweet-vernal-grass	10
Calluna vulgaris	Ling heather	10
Potentilla erecta	Tormentil	10
Hypericum perforatum	Perforate St John's-wort	5
Iris pseudacorus	Yellow iris	5
Betula pubescens	Downy birch	5
Erica tetralix	Cross-leaved heath	5
Crisium palustre	Marsh thistle	5
Sorbus acuparia	Rowan	3
Betula pendula	Silver birch	1
Holcus lanatus	Yorkshire-fog	1
Centaurea nigra	Common knapweed	0.5
Anthriscus sylvestris	Cow parsley	0.5
Non-vascular		
Calliergonella cuspidata	Pointed spear moss	20
Fissidens taxifolius	Common pocket-moss	0.5
Lophocolea bidentata	Bifid crestwort	0.5
Rhytidiadelphus squarossus	Springy turf moss	0.5
Aulacomnium palustre	Bog bead-moss	0.5
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating Poor fen (PF2) / *Calluna*-dominated community**
IVC Classification		**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog***

Affinity to Annex I habitat	**No**



Plate 2-61 Mosaic of pioneer Poor fen (PF2) and a Calluna-dominated community present within the Proposed Turbine 39 hardstand.

2.40 Proposed Turbine 40

The Proposed Turbine 40 hardstand is largely located in an area of **Cutover bog (PB4)** with little recolonising vegetation at the time of survey (Plate 2-62). No relevé was taken in this area due to the absence of vegetation within the hardstand area, however in the wider vicinity, small amounts of common cottongrass (*Eriophorum angustifolium*), common reed (*Phragmites australis*), some downy birch samplings (*Betula pubescens*), round leaved sundew (*Drosera rotundifolia*), broad buckler fern (*Dryopteris dilatata*) along with the bryophytes *Campylopus introflexus* and *Polytrichum juniperinum*. were recorded. Proposed Turbine 40 and its associated hardstand also extend into an area which comprises a mosaic of **Scrub (WS1)** and pioneer **Poor fen (PF2)** dominated by common cottongrass (*Eriophorum angustifolium*) (Plate 2-63). A relevé was taken in this area and is presented in Table 2-56 below. Round-leaved wintergreen (*Pyrola rotundifolia* ssp. *rotundifolia*), a species listed as Near Threatened (NT) on the Irish Red List of Vascular Plants (Wyse Jackson *et al.,* 2016), was recorded elsewhere within the Proposed Turbine 40 hardstand and wider area. The southern margins of the Proposed Turbine 40 also extend into the margins of an area of **Bog woodland (WN7).**



Plate 2-62 The Proposed Turbine 40 hardstand is largely comprised of Cutover bog (PB4) with little recolonising vegetation.

Table 2-56 Botanical Survey Results Proposed Turbine 40

Proposed Turbine 40	**Grid Reference: ITM X 667297, Y 726306**	**Date: 23/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	75
Betula pubescens	Downy birch	45
Juncus effusus	Soft-rush	20
Salix cinerea	Grey willow	15
Eupatorium cannabinum	Hemp-agrimony	10
Rubus fruticosus agg	Brambles	3
Mentha aquatica	Water mint	0.5
Non-vascular		
Fissidens taxifolius	Common pocket-moss	10
Bryum pseudotriquetrum	Marsh Bryum	0.5

%Bare Peat	0
Fossitt (2000) Habitat Classification	**Cutover bog (PB4) with revegetating Scrub (WS1) / Poor fen (PF2) mosaic**
IVC Classification	**BG1D – *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat	**No**



Plate 2-63 Proposed Turbine 40 extends into an area of Scrub (WS1) and Poor fen (PF2) mosaic on cutover bog.

2.41 Proposed Turbine 41

Proposed Turbine 41 is located within an area of developing **Bog woodland (WN7)** comprising of primarily silver birch (*Betula pendula*) and grey willow (*Salix cinerea*) (Plate 2-64). Two relevés were taken in this area and are presented in Table 2-57 and Table 2-58 below.

Table 2-57 Botanical Survey Results Proposed Turbine 41 – Relevé 1

Proposed Turbine 41	**Grid Reference: ITM X 666751, Y 726676**	**Date: 20/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Betula pendula	Silver birch	20
Fragaria vesca	Wild strawberry	20

Rubus fruticosus agg.	Brambles	15
Salix cinerea	Grey willow	10
Holcus lanatus	Yorkshire-fog	7
Angelica sylvestris	Wild angelica	3
Hedera hibernica	Ivy	2
Dryopteris dilatata	Broad buckler-fern	2
Eupatorium cannabinum	Hemp-agrimony	1
Cirsium palustre	Marsh thistle	1
Dryopteris affinis	Golden-scaled male-fern	1
Viola riviniana	Common dog-violet	1
Equisetum palustre	Marsh horsetail	0.5
Non-vascular		
Kindbergia praelonga	Common feather-moss	2
Eurhynchium striatum	Common striated feather-moss	2
Thuidium tamariscinum	Common tamarisk-moss	2
Polytrichum commune	Common haircap	0.5
%Bare Peat		30%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**WL3D - *Salix cinerea –Urtica dioica* woodland***
Affinity to Annex I habitat		**No**

Table 2-58 Botanical Survey Results Proposed Turbine 41 – Relevé 2

Proposed Turbine 41	**Grid Reference: ITM X 666724, Y 726685**	**Date: 23/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Betula pendula	Silver birch	80
Betula pubescens	Downy birch	20
Anthoxanthum odoratum	Sweet vernal grass	20

Salix cinerea	Grey willow	15
Rubus fruticosus agg.	Brambles	10
Agrostis capillaris	Common bent-grass	10
Calluna vulgaris	Ling heather	5
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**WL4E – *Betula pubescens - Salix cinerea* woodland***
Affinity to Annex I habitat		**No**



Plate 2-64 Bog woodland (WN7) recorded at the location of Proposed Turbine 41

2.42 Proposed Turbine 42

Proposed Turbine 42 is located within an area of cutover bog that has revegetated with **Scrub (WS1)** comprising of immature silver birch (*Betula pendula*) with an understorey of sparse common cottongrass (*Eriophorum angustifolium*) (Plate 2-65). A relevé was taken in this area and is presented in Table 2-59 below.

Table 2-59 Botanical Survey Results Proposed Turbine 42

Proposed Turbine 42	**Grid Reference: ITM X 667205, Y 727467**	**Date: 20/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		

Betula pendula	Silver birch	40
Eriophorum angustifolium	Common cottongrass	20
Anthoxanthum odoratum	Sweet vernal-grass	5
Holcus lanatus	Yorkshire-fog	5
Non-vascular		
Polytrichum commune	Common haircap	2
Cladonia chlorophaea	Pixie cup lichen	0.5
%Bare ground		30%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) which has revegetated with Scrub (WS1)**
IVC Classification		**BG1D – *Eriophorum angustifolium* - *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-65 Area of immature birch Scrub (WS1) recorded at the location of Proposed Turbine 42

2.43 Proposed Turbine 43

Proposed Turbine 43 is located within an area of **Bog woodland (WN7)** with small pockets of open space, dominated by grey willow (*Salix cinerea*) and downy birch (*Betula pubescens*) with some encroachment of conifers including lodgepole pine (*Pinus contorta*) and sitka spruce (*Picea sitchensis*) recorded (Plate 2-66). A relevé was taken in this area and is presented in Table 2-60.

Table 2-60 Botanical Survey Results Proposed Turbine 43

Proposed Turbine 43	**Grid Reference: ITM X 668309, Y 727114**	**Date: 25/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Salix cinerea	Grey willow	25
Betula pubescens	Downy birch	10
Salix aurita	Eared willow	5
Pinus contorta	Lodgepole pine	5
Picea sitchensis	Sitka spruce	3
Fragaria vesca	Wild strawberry	3
Dryopteris dilatata	Broad buckler fern	3
Agrostis capillaris	Common bent	2
Calluna vulgaris	Ling heather	2
Eriophorum angustifolium	Common cottongrass	0.5
Quercus sp.	Oak saplings	0.5
Non-vascular		
Polytrichum juniperinum	Juniper haircap moss	10
Kindbergia praelonga	Common feather-moss	2
Eurhynchyium striatum	Common striated feather-moss	2
Calliergonella cuspidata	Pointed spear-moss	2
Lophocolea bidentata	Heath star-moss	1
%Bare Ground/Leaf litter		65%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**WL3E –*Salix cinerea - Galium palustre* woodland***
Affinity to Annex I habitat		**No**



Plate 2-66 Bog Woodland (WN7) present at the location of Proposed Turbine 43

2.44 Proposed Turbine 44

Proposed Turbine 44 is partially located within an area of **Bog Woodland (WN7)** dominated by downy birch (Betula pubescens) with an understorey comprised of brambles (Rubus fruticosus agg.) and a rush, fern and grass ground layer (Plate 2-67). A relevé was taken in this area and is presented in Table 2-61. The Proposed Turbine 44 hardstand also extends into an area of pioneer soft-rush (Juncus effusus) dominated Poor fen (PF2) at the margins of the woodland (Plate 2-68). A second relevé was taken in this area and is presented in Table 2-62 below.

Table 2-61 Botanical Survey Results Proposed Turbine 44 - Relevé 1

Proposed Turbine 44	Grid Reference: ITM X 668928, Y 727701	Date: 25/07/2024
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Betula pubescens	Downy birch	60
Rubus fruticosus agg.	Brambles	30
Betula pendula	Silver birch	10
Dryopteris dilatata	Broad buckler-fern	5
Juncus conglomeratus	Hard rush	5
Agrostis capillaris	Common bent	3
Salix aurita	Eared willow	2
Crataegus monogyna	Hawthorn	1
Juncus articulatus	Jointed rush	1

Arrhenatherum elatius	False oat-grass	0.5
Sorbus aucuparia	Rowan	0.5
Quercus petraea	Sessile oak	0.5
Epolibium palustre	Marsh willowherb	0.5
Galium palustre	Marsh bedstraw	0.5
Glyceria fluitans	Floating sweet-grass	0.5
Non-vascular		
Eurhynchyium striatum	Common striated feather-moss	2
Kindbergia praelonga	Common feather-moss	1
Campylopus introflexus	Heath star-moss	1
%Bare Ground		15%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**WL4F – *Betula pubescens – Pteridium aquilinum* woodland**
Affinity to Annex I habitat		**No**



Plate 2-67 Proposed Turbine 44 is located in an area of Bog woodland (WN7)

Table 2-62 Botanical Survey Results Proposed Turbine 44 - Relevé 2

Proposed Turbine 44	**Grid Reference: ITM X 668899, Y 727727**	**Date: 25/07/2024**

Species	Common Name	Percentage cover (%)
Vascular Plants		
Molinia caerulea	Purple moor-grass	40
Juncus effusus	Soft-rush	35
Salix cinerea	Grey willow	20
Mentha aquatica	Water mint	10
Holcus lanatus	Yorkshire-fog	3
Eriophorum angustifolium	Common cottongrass	3
Epilobium ciliatum	American willowherb	3
Ranunculus flammula	Lesser spearwort	2
Betula pendula	Silver birch	2
Betula pubescens	Downy birch	2
Salix caprea	Goat willow	1
Galium palustre	Marsh bedstraw	1
Hydrocotyle vulgaris	Marsh pennywort	1
Juncus articulatus	Jointed rush	0.5
Non-vascular		
Calliergonella cuspidata	Pointed spear-moss	40
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with establishing Poor fen (PF2)**
IVC Classification		**WL3E – *Salix cinerea* – *Galium palustre* woodland***
Affinity to Annex I habitat		**No**



Plate 2-68 Area of soft-rush (Juncus effusus) dominated Poor fen (PF2) present within the Proposed Turbine 44 hardstand

2.45 Proposed Turbine 45

Proposed Turbine 45 is predominantly located within an area of dense **Bog woodland (WN7)** dominated by downy birch (*Betula pubescens*), grey willow (*Salix cinerea*) and brambles (*Rubus fruticosus* agg.) (Plate 2-69). A relevé was taken in this area and is presented in Table 2-63. The Proposed Turbine 45 hardstand also partially extends in the southwest into an area of bare **Cutover bog (PB4)** between woodland blocks.

Table 2-63 Botanical Survey Results Proposed Turbine 45

Proposed Turbine 45	Grid Reference: ITM X 668092, Y 727861	Date: 20/05/2026
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Rubus fruticosus agg.	Brambles	25
Betula pendula	Silver birch	20
Juncus effusus	Soft-rush	15
Salix cinerea	Grey willow	7
Anthoxanthum odoratum	Sweet vernal grass	5
Betula pubescens	Downy birch	2
Dryopteris carthusiana	Narrow buckler-fern	2
Holcus lanatus	Yorkshire-fog	1
Cirsium palustre	Marsh thistle	0.5
Dryopteris dilatata	Broad buckler-fern	0.5

Non-vascular		
Kindbergia praelonga	Common feather-moss	15
Polytrichum commune	Common haircap	2
Eurhynchium striatum	Common striated feather-moss	1
Hypnum cupressiforme	Cypress-leaved plait-moss	1
Thuidium tamariscinum	Common tamarisk-moss	1
Campylopus introflexus	Heath star-moss	0.25
%Bare Peat		25%
Fossitt (2000) Habitat Classification		**Bog woodland (WN7)**
IVC Classification		**WL4F – *Betula pubescens – Pteridium aquilinum* woodland***
Affinity to Annex I habitat		**No**



Plate 2-69 Bog woodland (WN7) present at the location of Proposed Turbine 45

2.46 Proposed Turbine 46

Proposed Turbine 46 is located within an area of cutover bog which has become revegetated with a mosaic of **Scrub (WS1)** and pioneer **Poor fen (PF2)** dominated by soft-rush (*Juncus effusus*) (Plate 2-70). A relevé was taken in this area and is presented in Table 2-64.

Table 2-64 Botanical Survey Results Proposed Turbine 46

Proposed Turbine 46	**Grid Reference: ITM X 669560, Y 728265**	**Date: 25/07/2024**

Species	Common Name	Percentage cover (%)
Vascular Plants		
Juncus effusus	Soft-rush	25
Eriophorum angustifolium	Common cottongrass	10
Betula pubescens	Downy birch	10
Triglochin palustris	Marsh arrowgrass	10
Salix cinerea	Grey willow	5
Mentha aquatica	Water mint	3
Holcus lanatus	Yorkshire-fog	2
Lycopus europaeus	Gypsywort	2
Equisetum palustre	Marsh horsetail	1
Cirsium palustre	Marsh thistle	1
Galium palustre	Marsh bedstraw	1
Filipendula ulmaria	Meadowsweet	1
Hypochaeris radicata	Cats ear	1
Sagina nodosa	Knotted pearlwort	0.5
Dactylorhiza fuchsii	Common spotted orchid	0.5
Daucus carota	Wild carrot	0.5
Non-vascular		
Calliergonella cuspidata	Pointed spear moss	2
%Bare Ground		5%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating Poor fen (PF2) / Scrub (WS1) mosaic**
IVC Classification		**GL2D – *Juncus effusus – Rumex acetosa* grassland***
Affinity to Annex I habitat		**No**



Plate 2-70 Proposed Turbine 46 is located in an area of Scrub (WS1) and pioneer Poor fen (PF2)

2.47 Proposed Onsite Substation

The Proposed Onsite Substation is located in the north of Lodge Bog, Co. Kildare. The habitats in this location are dominated by **Cutover bog (PB4)** comprising areas of bare peat, with early revegetation of species such as common cottongrass (*Eriophorum angustifolium*) and downy birch (*Betula pubescens*) saplings (Plate 2-91). Where ground conditions are wetter, pioneer **Poor fen (PF2)** occurs in a mosaic with **Scrub (WS1)** (Plate 2-72), with small areas of standing water present. A second relevé was taken within this habitat and is presented in Table 2-66. A small section of cutover bog within the footprint of the Proposed Onsite Substation was also very dry in nature, with a gravel substrate, and therefore was classified as **Recolonising bare ground (ED3)** (Plate 2-73). An additional relevé was taken in this area in order to represent the mosaic of habitats present and is presented in Table 2-67 below.

A small section of the Proposed Onsite Substation is located within a high field previously used for material storage. This area occurs as a narrow strip approximately 30m wide in the westernmost area of the Proposed Onsite Substation and is bordered by a vertical facebank approximately 1.2-2m high. As the acrotelm has previously been removed from this area it is classified as cutover bog. This area has revegetated with a ***Calluna*-dominated community** with a small amount of downy birch (*Betula pubescens*) and grey willow (*Salix cinerea*) saplings, bracken (*Pteridium aquilinum*) and *Campylopus introflexus* colonisation also present (Plate 2-74). A relevé was taken in this area and is presented in Table 2-68 below. A deep drain approximately 4m in depth is also present through the centre of this area.

Table 2-65 Botanical Survey Results Proposed Onsite Substation – Relevé 1

Proposed Onsite Substation	Grid Reference: ITM X 672554, Y 725790	Date: 13/05/2026
Species	Common Name	Percentage cover (%)
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	35
Juncus bufonius	Toad rush	2

Juncus effusus	Soft-rush	2
Betula pubescens	Downy birch	1
Erica tetralix	Cross-leaved heath	1
Hypochaeris radicata	Cat's-ear	0.5
Non-vascular		
Campylopus introflexus	Heath star-moss	3
%Bare Peat		45%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating pioneer Poor fen (PF2)**
IVC Classification		**BG1D *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-71 Area of cutover bog revegetating with early common cottongrass (Eriophorum angustifolium) dominated Poor fen (PF2) at the location of the Proposed Onsite Substation

Table 2-66 Botanical Survey Results Proposed Onsite Substation – Relevé 2

Proposed Onsite Substation	**Grid Reference: ITM X 672535, Y 725642**	**Date: 13/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	40

Eriophorum vaginatum	Hare's tail cottongrass	10
Salix cinerea	Grey willow	10
Juncus effusus	Soft-rush	8
Betula pubescens	Downy birch	2
Cirsium palustre	Marsh thistle	2
Taraxacum officinale agg.	Dandelion	0.5
Non-vascular		
Bryum pseudotriquetrum	Marsh Bryum	3
Campylium stellatum	Yellow starry feather-moss	0.5
%Bare Peat		15%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating Poor fen (PF2) / Scrub (WS1) mosaic**
IVC Classification		**BG1D *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-72 A mosaic of pioneer Poor fen (PF2) and Scrub (WS1) on cutover bog at the location of the Proposed Onsite Substation

Table 2-67 Botanical Survey Results Proposed Onsite Substation – Relevé 3

Proposed Onsite Substation	Grid Reference: ITM X 672525, Y 725609	Date: 13/05/2026
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Agrostis stolonifera	Creeping bent	5
Salix cinerea	Grey willow	5
Betula pubescens	Downy birch	3
Hypochaeris radicata	Cat's-ear	3
Tussilago farfara	Colt's-foot	3
Equisetum arvense	Field horsetail	2
Potentilla sterilis	Barren Strawberry	2
Daucus carota	Wild carrot	1
Senecio jacobaea	Common ragwort	1
Centaurea nigra	Common knapweed	0.5
Cirsium palustre	Marsh thistle	0.5
Trifolium dubium	Lesser trefoil	0.5
%Bare Peat		50%
Fossitt (2000) Habitat Classification		**Recolonising bare ground (ED3)**
IVC Classification		**SM6B *Agrostis stolonifera* – *Triglochin maritimum* grassland***
Affinity to Annex I habitat		**No**



Plate 2-73 Areas of dry Recolonising bare ground (ED3) at the location of the Proposed Onsite Substation

Table 2-68 Botanical Survey Results Proposed Onsite Substation – Relevé 4

Proposed Onsite Substation	**Grid Reference: ITM X 672455, Y 725768**	**Date: 13/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	90
Pteridium aquilinum	Bracken	5
Betula pubescens	Downy birch	2
Salix cinerea	Grey willow	2
Erica tetralix	Cross-leaved heath	1
Non-vascular		
Hypnum jutlandicum	Heath plait-moss	4
%Bare Peat		5%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetated with *Calluna*-dominated vegetation**

IVC Classification	**HE2B *Calluna vulgaris – Hypnum jutlandicum* heath**
Affinity to Annex I habitat	**No**



Plate 2-74 Calluna-dominated community on the high field present at the location of the Proposed Onsite Substation

2.48 Proposed Offsite Substation

The Proposed Offsite Substation is located partially within a highly managed field classified as **Improved agricultural grassland (GA1)**, dominated by perennial rye grass (*Lolium perenne*) (Plate 2-75). A relevé was taken in this area and is presented in Table 2-69. The southern portion of the Proposed Offsite Substation area is located within an area of rush-dominated **Wet grassland (GS4)** (Plate 2-76) which transitions to the east into drier **Dry meadows and grassy verges (GS2)** (Plate 2-77). Two relevés were taken in these areas and are presented in Table 2-70 and Table 2-71.

Table 2-69 Botanical Survey Results Proposed Offsite Substation – Relevé 1

Proposed Offsite Substation	**Grid Reference: ITM X 683392, Y 725866**	**Date: 13/08/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Lolium perenne	Perennial rye grass	88
Holcus lanatus	Yorkshire-fog	8
Trifolium repens	White clover	2
Ranunculus repens	Creeping buttercup	2
%Bare Peat		0%

Fossitt (2000) Habitat Classification	**Improved agricultural grassland (GA1)**
IVC Classification	**GL2C – *Holcus lanatus – Lolium perenne* grassland**
Affinity to Annex I habitat	**No**



Plate 2-75 The Proposed Offsite Substation is partially located within an Improved agricultural grassland (GA1) field

Table 2-70 Botanical Survey Results Proposed Offsite Substation – Relevé 2

Proposed Offsite Substation	**Grid Reference: ITM X 683305, Y 725846**	**Date: 13/08/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Juncus inflexus	Hard rush	30
Holcus lanatus	Yorkshire-fog	20
Juncus acutiflorus	Sharp flowered rush	20
Poa trivialis	Rough meadow grass	15
Ranunculus repens	Creeping buttercup	7
Anthoxanthum odoratum	Sweet vernal grass	5
Carex disticha	Brown sedge	5

Filipendula ulmaria	Meadowsweet	5
Mentha aquatica	Water mint	5
Phleum pratense	Timothy grass	5
Epilobium hirsutum	Great willowherb	5
Carex hirta	Hairy sedge	2
Lathyrus pratensis	Meadow vetchling	2
Plantago lanceolata	Ribwort plantain	1
Carex flacca	Glaucous sedge	1
Stachys palustris	Marsh woundwort	1
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Wet grassland (GS4)**
IVC Classification		**GL1A – *Juncus acutifolrus – Holcus lanatus* grassland**
Affinity to Annex I habitat		**No**



Plate 2-76 The southern portion of the Proposed Offsite Substation is located a field of rush-dominated Wet grassland (GS4)

Table 2-71 Botanical Survey Results Proposed Offsite Substation – Relevé 3

Proposed Offsite Substation	**Grid Reference: ITM X 683405, Y 725807**	**Date: 13/08/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Dactylis glomerata	Cock's foot grass	30
Poa trivialis	Rough meadow grass	30
Holcus lanatus	Yorkshire-fog	30
Ranunculus repens	Creeping buttercup	20
Rumex obtusifolius	Broad-leaved dock	20
Phleum pratense	Timothy grass	10
Potentilla anserina	Silverweed	8
Lathyrus pratensis	Meadow vetchling	6
Cynosurus cristatus	Crested dog's tail	5
Plantago lanceolata	Ribwort plantain	5
Urtica dioica	Nettles	4
Carex hirta	Hairy sedge	4
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Dry meadows and grassy verges (GS2)**
IVC Classification		**SC1F – *Galium aparine – Urtica dioica* wayside community***
Affinity to Annex I habitat		**No**



Plate 2-77 The area of the Proposed Offsite Substation is classified as Dry meadows and grassy verges (GS2) in the east

2.49 Proposed Met Mast 1

The Proposed Met Mast 1 is located within an area of **Cutover bog (PB4)** dominated by bare peat, with early revegetation of small amounts of ling heather (*Calluna vulgaris*) present at the time of survey (Table 2-72). A relevé taken in this area is presented in Table 2-72. The proposed internal site access road to the Proposed Met Mast 1 also extends into an area more highly revegetated with common cottongrass (*Eriophorum angustifolium*) dominated **Poor fen (PF2)** also with white beaked sedge (*Rhynchospora alba*) and ling heather (*Calluna vulgaris*) (Plate 2-79). A second relevé was taken in this habitat and is presented in Table 2-73.

Table 2-72 Botanical Survey Results Proposed Met Mast 1– Relevé 1

Proposed Met Mast 1	Grid Reference: ITM X 664392, Y 723508	Date: 19/05/2026
Species	Common Name	Percentage cover (%)
Vascular Plants		
Calluna vulgaris	Ling heather	7
Betula pubescens	Downy birch	2
Eriophorum vaginatum	Hare's tail cottongrass	1
Erica tetralix	Cross-leaved heath	0.5
Non-vascular		

Campylopus introflexus	Heath star-moss	0.5
%Bare Peat		90%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**BG2E – *Calluna vulgaris* – *Eriophorum* spp. bog***
Affinity to Annex I habitat		**No**



Plate 2-78 Proposed Met Mast 1 is located in an area of Cutover bog (PB4) with small amounts of revegetation of ling heather (Calluna vulgaris)

Table 2-73 Botanical Survey Results Proposed Met Mast 1 – Relevé 2

Proposed Met Mast 1	**Grid Reference: ITM X 664367, Y 723505**	**Date: 16/07/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	20
Betula pubescens	Downy birch	7
Rhynchospora alba	White beaked sedge	20

Eriophorum vaginatum	Hare's tail cottongrass	30
Eriophorum angustifolium	Common cottongrass	20
Erica tetralix	Cross-leaved heath	7
Andromeda polifolia	Bog rosemary	1
Non-vascular		
Sphagnum capillifolium	Acute-leaved bog-moss	25
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) with revegetating Poor fen (PF2)**
IVC Classification		**BG2E – *Calluna vulgaris* – *Eriophorum* spp. bog**
Affinity to Annex I habitat		**No**



Plate 2-79 The access road for the Proposed Met Mast 1 partially extends into an area of Cutover bog (PB4) revegetating with Poor fen (PF2) vegetation

2.50 Proposed Met Mast 2

Proposed Met Mast 2 is located at the margins of an area of dense birch **Scrub (WS1)** that has revegetated on cutover bog, bordered by an area of bare peat (Plate 2-80). A relevé was taken at the met mast location and is presented in Table 2-74 below.

Table 2-74 Botanical Survey Results Proposed Met Mast 2

Proposed Met Mast 2	**Grid Reference: ITM X 664352, Y 723505**	**Date: 20/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Betula pubescens	Downy birch	30
Rubus fruticosus agg.	Brambles	30
Fragaria vesca	Wild strawberry	3
Luzula multiflora	Heath wood-rush	0.5
Picea sitchensis	Sitka spruce	0.5
Dryopteris dilatata	Broad buckler fern	0.25
Non-vascular		
Campylopus introflexus	Heath star-moss	5
Polytrichum commune	Common haircap	5
Eurhynchium striatum	Common striated feather-moss	2
%Bare Peat		50%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) which has revegetated with Scrub (WS1)**
IVC Classification		**SC1E *Rubus fruticosus* agg. – *Holcus lanatus* wayside community**
Affinity to Annex I habitat		**No**



Plate 2-80 Proposed Met Mast 2 is located at the margins of an area of Scrub (WS1) adjacent to bare cutover bog.

2.51 Proposed Temporary Construction Compound 1 – Codd 1 Bog (northwest)

Proposed Construction Compound 1 is located within an area of **Cutover bog (PB4)** dominated by bare peat, with a small amount of revegetation present at the time of survey, and a high cover of the bryophyte *Campylopus introflexus* (Plate 2-81). A relevé was taken in this area and is presented in Table 2-75.

Table 2-75 Botanical Survey Results Proposed Temporary Construction Compound 1

Proposed Temporary Construction Compound 1	Grid Reference: ITM X 662773, Y 726378	Date: 27/05/2026
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Potentilla erecta	Tormentil	3
Calluna vulgaris	Ling heather	2
Hypochaeris radicata	Cat's-ear	1
Agrostis capillaris	Common bent	0.5
Molinia caerulea	Purple moor-grass	0.5
Pilosella officinarum	Mouse-ear hawkweed	0.5
Non-vascular		
Campylopus introflexus	Heath star-moss	25
Polytrichum juniperinum	Juniper haircap-moss	2

%Bare Ground	70%
Fossitt (2000) Habitat Classification	**Cutover bog (PB4)**
IVC Classification	**HE2E *Calluna vulgaris* – *Trichophorum cespitosum/ germanicum* heath***
Affinity to Annex I habitat	**No**



Plate 2-81 Proposed Temporary Construction Compound 1 is located within Cutover bog (PB4) dominated by bare peat

2.52 Proposed Temporary Construction Compound 2 – Ballydermot North Bog (south)

Proposed Temporary Construction Compound 2 is located within an area of **Cutover bog (PB4)** that is generally dry in nature, and varies from areas dominated by bare peat and spoil (Plate 2-82) to sections that are more highly revegetated with communities representing **Wet grassland (GS4)** (Plate 2-83). Small areas of **Bog woodland (WN7)** and **Recolonising bare ground (ED3)** were also identified within the footprint of the Proposed Temporary Construction Compound 2. Two relevés were taken within the footprint of the Proposed Temporary Construction Compound 2 in order to represent the mosaic of habitats present, and these are presented in Table 2-76 and Table 2-77 below.

Table 2-76 Botanical Survey Results Proposed Temporary Construction Compound 2 – Relevé 1

Proposed Temporary Construction Compound 2	**Grid Reference: ITM X 664080, Y 724362**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Holcus lanatus	Yorkshire-fog	20

Equisetum arvense	Field horsetail	15
Potentilla anserina	Silverweed	15
Potentilla erecta	Tormentil	15
Carex flacca	Glaucous sedge	10
Centaurea nigra	Common knapweed	8
Polygala vulgaris	Common milkwort	6
Bellis perennis	Common daisy	4
Leontodon saxatilis	Lesser hawkbit	4
Taraxacum officinale agg.	Dandelion	4
Tussilago farfara	Colt's-foot	4
Hypericum maculatum	Imperforate St John's-wort	2
Leontodon hispidus	Rough hawkbit	2
Leucanthemum vulgare	Oxeye daisy	2
%Bare Ground		10%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) recolonising with Wet grassland (GS4) vegetation**
IVC Classification		**DU3D *Festuca rubra – Bellis perennis* grassland***
Affinity to Annex I habitat		**No**



Plate 2-82 Area of Cutover bog (PB4) with revegetation present within the Proposed Temporary Construction Compound 2

Table 2-77 Botanical Survey Results Proposed Temporary Construction Compound 2 – Relevé 2

Proposed Temporary Construction Compound 2	**Grid Reference: ITM X 664065, Y 724304**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Cirsium palustre	Marsh thistle	35
Holcus lanatus	Yorkshire-fog	30
Equisetum arvense	Field horsetail	30
Molinia caerulea	Purple moor-grass	15
Centaurea nigra	Common knapweed	10
Potentilla erecta	Tormentil	10
Tussilago farfara	Colt's-foot	10
Cirsium arvense	Creeping thistle	8
Potentilla anserina	Silverweed	5
Rumex obtusifolius	Broad-leaved dock	4
Taraxacum officinale agg.	Dandelion	4
Bellis perennis	Common daisy	3
Leucanthemum vulgare	Oxeye Daisy	3
Daucus carota	Wild carrot	2
Picea sitchensis	Sitka spruce	2
Hypericum tetrapterum	Square-stalked St John's-wort	1
Non-vascular		
Calliergonella cuspidata	Pointed spear-moss	5
%Bare Ground		10%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) recolonising with Wet grassland (GS4) vegetation**
IVC Classification		**GL1D *Molinia caerulea – Potentilla erecta – Agrostis stolonifera* grassland***
Affinity to Annex I habitat		**No**



Plate 2-83 Area of revegetated Wet grassland (GS4) within the footprint of the Proposed Temporary Construction Compound 2

2.53 Proposed Temporary Construction Compound 3 – Ballydermot South Bog (southeast)

Proposed Temporary Construction Compound 3 is located to the south of Ballydermot South Bog, adjacent to the buildings at Ballydermot Works. The habitat in this location is classified as **Recolonising bare ground (ED3)**, with a number of calcareous species recolonising the existing hardstand, particularly around the margins, and with some encroaching brambles (*Rubus fruticosus* agg.) (Plate 2-84). A relevé was taken in this location and is presented in Table 2-78

Table 2-78 Botanical Survey Results Proposed Temporary Construction Compound 3

Proposed Temporary Construction Compound 3	Grid Reference: ITM X 664007, Y 724327	Date: 07/06/2026
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Molinia caerulea	Purple moor-grass	10
Rubus fruticosus agg.	Brambles	10
Centaurea nigra	Common knapweed	5
Potentilla reptans	Creeping cinquefoil	5
Carex flacca	Glaucous sedge	3
Daucus carota	Wild carrot	3
Leucanthemum vulgare	Oxeye daisy	3
Lotus corniculatus	Common bird's-foot-trefoil	3
Plantago lanceolata	Ribwort plantain	3

Taraxacum officinale agg.	Dandelion	2
Leontodon hispidus	Rough hawkbit	1
Polygala vulgaris	Common milkwort	1
Sanguisorba minor	Salad burnet	1
Trifolium dubium	Lesser trefoil	0.5
%Bare Ground		50%
Fossitt (2000) Habitat Classification		**Recolonising bare ground (ED3)**
IVC Classification		**SC1E *Rubus fruticosus* agg. – *Holcus lanatus* wayside community***
Affinity to Annex I habitat		**No**



Plate 2-84 Area of Recolonising bare ground (ED3) at the location of Proposed Temporary Construction Compound 3

2.54 Proposed Temporary Construction Compound 4 – Blackriver Bog (west)

Proposed Temporary Construction Compound 4 is located in an area of **Cutover bog (PB4)** highly dominated by bare peat, with a small amount of revegetation of common cottongrass (*Eriophorum*

angustifolium) and downy birch (*Betula pubescens*) seedlings and saplings present at the time of survey (Plate 2-85). A relevé was taken in this location and is presented in Table 2-79 below.

Table 2-79 Botanical Survey Results Proposed Temporary Construction Compound 4

Proposed Temporary Construction Compound 4	**Grid Reference: ITM X 665839, Y 723664**	**Date: 07/06/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	30
Betula pubescens	Downy birch	2
%Bare Ground		70%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**BG1D *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-85 Proposed Temporary Construction Compound 4 is located within an area of largely bare peat with some revegetation of common cottongrass (Eriophorum angustifolium)

2.55 Proposed Temporary Construction Compound 5 – Barnaran Bog (west)

Proposed Temporary Construction Compound 5 is located within an existing area of hardstanding which has developed into **Recolonising bare ground (ED3)** with a number of grass and herb species recorded (Plate 2-86). A relevé was taken in this location and is presented in Table 2-80 below.

Table 2-80 Botanical Survey Results Proposed Temporary Construction Compound 5

Proposed Temporary Construction Compound 5	**Grid Reference: ITM X 667800, Y 723633**	**Date: 20/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Holcus lanatus	Yorkshire-fog	18
Molinia caerulea	Purple moor-grass	15
Lotus corniculatus	Common bird's-foot-trefoil	8
Carex panicea	Carnation sedge	5
Tussilago farfara	Colt's-foot	5
Leontodon hispidus	Rough hawkbit	4
Leucanthemum vulgare	Oxeye daisy	3
Bellis perennis	Common daisy	2
Taraxacum officinale agg.	Dandelion	2
Carex flacca	Glaucous sedge	1
Anagallis arvensis	Scarlet pimpernel	0.5
%Bare Ground		40%
Fossitt (2000) Habitat Classification		**Recolonising bare ground (ED3)**
IVC Classification		**GL1D *Molinia caerulea* – *Potentilla erecta* – *Agrostis stolonifera* grassland***
Affinity to Annex I habitat		**No**



Plate 2-86 Recolonising bare ground (ED3) habitat present at the location of Proposed Temporary Construction Compound 5

2.56 Proposed Temporary Construction Compound 6 – Glashabaun South Bog (southwest)

Proposed Temporary Construction Compound 6 is located partially within an area of cutover bog with large areas of bare peat. In wetter sections, standing water was present at the time of survey and **Poor fen (PF2)** vegetation dominated by common cottongrass (*Eriophorum angustifolium*) also occurred (Plate 2-87). This poor fen also formed a mosaic with willow and birch **Scrub (WS1)** within the northeastern areas of the Proposed Temporary Construction Compound (Plate 2-88). A relevé was taken within this mosaic habitat and is presented in Table 2-81 below.



Plate 2-87 Areas of bare peat and Cutover bog (PB4) revegetating with Poor fen (PF2) recorded at the location of Proposed Temporary Construction Compound 6, with standing water present at the time of survey

Table 2-81 Botanical Survey Results Proposed Temporary Construction Compound 6

Proposed Temporary Construction Compound 6	Grid Reference: ITM X 666960, Y 726004	Date: 20/05/2026
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	65
Juncus effusus	Soft-rush	10
Betula pendula	Silver birch	8
Typha latifolia	Bulrush	5
Rubus fruticosus agg.	Brambles	5
Salix cinerea	Grey willow	5
Anthoxanthum odoratum	Sweet vernal-grass	5
Hypericum pulchrum	Slender St John's-wort	3
Molinia caerulea	Purple moor-grass	3
Potentilla erecta	Tormentil	1
Cirsium palustre	Marsh thistle	0.5
%Bare Ground		3%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Poor fen and flush (PF2) / Scrub (WS1) mosaic**
IVC Classification		**BG1D *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-88 Proposed Temporary Construction Compound 6 is located within an area of Cutover bog (PB4) revegetating with a mosaic of Poor fen (PF2) and Scrub (WS1)

2.57 Proposed Temporary Construction Compound 7 – Glashabaun North Bog (west)

Proposed Temporary Construction Compound 7 is located within an area of **Cutover bog (PB4)** highly dominated by bare peat, with small patches of revegetation of species including common cottongrass (*Eriophorum angustifolium*) and soft-rush (*Juncus effusus*) (Plate 2-89). A relevé was taken in this area and is presented in Table 2-82 below.

Table 2-82 Botanical Survey Results Proposed Temporary Construction Compound 7

Proposed Temporary Construction Compound 7	**Grid Reference: ITM X 665259, Y 727861**	**Date: 27/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	5
Juncus effusus	Soft-rush	5
Carex flacca	Glaucous sedge	0.5
Anthoxanthum odoratum	Sweet vernal-grass	0.5
Molinia caerulea	Purple moor-grass	0.5
Juncus bulbosus	Bulbous rush	0.5
%Bare Ground		90%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**

IVC Classification	**BG1D *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat	**No**



Plate 2-89 Proposed Temporary Construction Compound 7 is located in an area of Cutover bog (PB4) highly dominated by bare peat

2.58 Proposed Temporary Construction Compound 8 – Glashabaun North Bog (northeast)

Proposed Temporary Construction Compound 8 is located within an area of cutover bog that has revegetated with a mosaic of pioneer common cottongrass (*Eriophorum angustifolium*) dominated **Poor fen (PF2)** and downy birch (*Betula pubescens*) and grey willow (*Salix cinerea*) **Scrub (WS1)** (Plate 2-90). A relevé was taken in this location and is provided in Table 2-83 below.

Table 2-83 Botanical Survey Results Proposed Temporary Construction Compound 8

Proposed Temporary Construction Compound 8	**Grid Reference: ITM X 667322, Y 729208**	**Date: 26/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	60
Juncus effusus	Soft-rush	5
Betula pubescens	Downy birch	5
Cirsium palustre	Marsh thistle	5
Hypochaeris radicata	Cat's-ear	2

Campylopus introflexus	Heath star-moss	5
Campylopus atrovirens	Bristly swan-neck moss	2
%Bare Ground		0%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4) revegetating with Poor fen and flush (PF2) / Scrub (WS1) mosaic**
IVC Classification		**BG1D *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-90 Proposed Temporary Construction Compound 8 is located within an area of pioneer Poor fen (PF2) and Scrub (WS1)

2.59 Proposed Temporary Construction Compound 9 – Lodge Bog (Proposed Onsite Substation)

Proposed Temporary Construction Compound 9 is associated with the Proposed Onsite Substation within Lodge Bog. It is located within an area of **Cutover bog (PB4)** with large areas of bare peat and early revegetation of species including common cottongrass (*Eriophorum angustifolium*) (Plate 2-91). A relevé was taken in this area and is presented in Table 2-84 below.

Table 2-84 Botanical Survey Results Proposed Temporary Construction Compound 9 (Proposed Onsite Substation)

Proposed Temporary Construction Compound 9	Grid Reference: ITM X 672511, Y 725548	Date: 13/05/2026
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum angustifolium	Common cottongrass	25
Juncus bufonius	Toad rush	2
Juncus effusus	Soft-rush	2
Betula pubescens	Downy birch	1
Erica tetralix	Cross-leaved heath	1
Hypochaeris radicata	Cat's-ear	0.5
Non-vascular		
Campylopus introflexus	Heath star-moss	3
%Bare Peat		70%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**BG1D *Eriophorum angustifolium* – *Campylopus introflexus* bog**
Affinity to Annex I habitat		**No**



Plate 2-91 Area of Cutover bog (PB4) dominated by bare peat at the location of Proposed Temporary Construction Compound 9 associated with the Proposed Onsite Substation, with early revegetation present at the time of survey

2.60 Proposed Temporary Construction Compound 10 – Killybegs, Co. Kildare (Proposed Offsite Substation)

Proposed Temporary Construction Compound 10 is associated with the Proposed Offsite Substation in the townland of Killybegs, Co. Kildare. It is located to the west of the Proposed Offsite Substation, primarily in an area of willow-dominated **Scrub (WS1)/ Wet grassland (GS4)** mosaic habitat (Plate 2-92). A relevé was taken in this habitat and is presented in Table 2-85.

Table 2-85 Botanical Survey Results Proposed Temporary Construction Compound 10 (Proposed Offsite Substation)

Proposed Temporary Construction Compound 10	**Grid Reference: ITM X 683256, Y 725916**	**Date: 13/08/2024**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Salix cinerea	Grey willow	30
Holcus lanatus	Yorkshire-fog	30
Filipendula ulmaria	Meadowsweet	25
Juncus acutiflorus	Sharp-flowered rush	15
Juncus effusus	Soft-rush	12
Agrostis stolonifera	Creeping bent grass	7
Phragmites australis	Common reed grass	5
Rumex obtusifolius	Broad-leaved dock	5
Plantago lanceolata	Ribwort plantain	5
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Wet grassland (GS4)/Scrub (WS1)**
IVC Classification		**GL1A – *Juncus acutifolrus – Holcus lanatus* grassland**
Affinity to Annex I habitat		**No**



Plate 2-92 The location of the Proposed Temporary Construction Compound 10 associated with the Proposed Offsite Substation is located within a field of Wet grassland (GS4)/Scrub (WS1)

3. REMNANT RAISED BOG

A number of areas of uncut remnant raised bog are present within the Proposed Wind Farm site, and are largely located outside of but within 150m of the Proposed Project infrastructure footprint, with the exception of a proposed amenity boardwalk in the south of Ballydermot South Bog. Relevés were undertaken in order to aid in the evaluation of their correspondence to the Annex I habitats Active raised bog [7110] (ARB) and Degraded raised bogs still capable of natural regeneration [7120] (DRB). These relevés are presented in the following subsections. As outlined in Section 1.2.3.1 above, surveys in line with Fernandez *et al.* (2014) were also undertaken, and the results of the ecotope assessments are also outlined in each subsection below together with the findings of the eco-hydrological modelling.

The results of the eco-hydrological modelling are shown in Figures 6-1-2 below.

3.1 Amenity Track, Ballydermot South Bog

An area of remnant raised bog was identified at the location of a proposed amenity track in the southernmost area of Ballydermot South Bog (Plate 3-1). This area is bordered to the north by a facebank which is approximately 1.5m in height, and a deep drain.

A 4mx4m relevé was taken within the footprint of the proposed amenity track, and is presented in Table 3-1 below. At this location, *Sphagnum* cover was over 65% with hummocks of *S. capillifolium* noted, however ground conditions were firm underfoot and occasional dry patches were present, with no pools recorded in the vicinity. The average height of ling heather (*Calluna vulgaris*) was approximately 25cm and also occurred in hummocks. There was no evidence of burning or erosion in this area of raised bog, no bare peat was present and an overall slight southwards slope was observed. This area was found to best align with the *Marginal* raised bog ecotope, per Fernandez *et al.* (2014), however using hydro-ecological modelling it was not found to conform to Annex I DRB. As such, in line with Article 17 Reporting (NPWS, 2025), this habitat is considered *'Supporting Raised bog habitat'*.

Table 3-1 Botanical Survey Results Raised Bog - Amenity Track, Ballydermot South Bog

Raised Bog - Amenity Track, Ballydermot South Bog	Grid Reference: ITM X 665529, Y 721369	Date: 19/05/2026
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	40
Rhynchospora alba	White beaked sedge	25
Erica tetralix	Cross-leaved heath	20
Narthecium ossifragum	Bog asphodel	7
Eriophorum angustifolium	Common cottongrass	3
Andromeda polifolia	Bog rosemary	1
Drosera rotundifolia	Round-leaved sundew	0.5
Non-vascular		
Sphagnum capillifolium	Acute leaved bog-moss	20

Cladonia portentosa	Reindeer lichen	20
Sphagnum papillosum	Papillose bog-moss	15
Sphagnum tenellum	Soft bog-moss	15
Sphagnum subnitens	Lustrous bog-moss	10
Sphagnum austinii	Austin's bog-moss	5
Hypnum jutlandicum	Heath plait-moss	3
Campylopus atrovirens	Bog hair-moss	1
Odontoschisma sphagni	Bog flapwort	1
Cladonia uncialis	Thorn lichen	1
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Raised bog (PB1)**
IVC Classification		**BG2B – *Erica tetralix* - *Andromeda polifolia* bog**
Affinity to Annex I habitat		**No**



Plate 3-1 Remnant Raised bog (PB1) present at the location of a proposed amenity trail in the southernmost area of Ballydermot South Bog

3.2 North of Proposed Turbine 10, Blackriver Bog

An area of uncut remnant raised bog was identified approximately 120m to the north of the Proposed Turbine 10 hardstand (approximately 90m from the proposed internal cabling route associated with Proposed Turbine 10 at its closest) in the north of Blackriver Bog (Plate 3-2). This area is bordered by a

facebank which is approximately 2.5m in height, and a deep drain (Plate 3-3), with ongoing turbary occurring at the margins.

A 4mx4m relevé was taken approximately 180m to the north of Proposed Turbine 10, and is presented in Table 3-2 below. The relevé was located approximately 30m from the facebank, with a slight slope observed in the direction of the bog margin. Ground conditions in this location were dry underfoot with *Sphagnum* cover approximately 20%. No pools were recorded at the time of survey, however evidence of white beak sedge (*Rhynchospora alba*) lawns were noted in the vicinity. There was no evidence of burning or erosion in this area of raised bog, with a low (approximately 2%) cover of bare peat. This area was found to best align with the *Marginal* raised bog ecotope, per Fernandez *et al.* (2014), and using hydro-ecological modelling it was found to be located on the margins of Annex I DRB. The identified area of DRB is located approximately 200m to the north of the Proposed Turbine 10 hardstand, and approximately 170m north of the proposed internal cabling route and peat and spoil area associated with Proposed Turbine 10 at its closest.

Table 3-2 Botanical Survey Results Raised Bog - North of Proposed Turbine 10, Blackriver Bog

Raised Bog - North of Proposed Turbine 10, Blackriver Bog	Grid Reference: ITM X 665804, Y 725331	Date: 19/05/2026
Species	Common Name	Percentage cover (%)
Vascular Plants		
Calluna vulgaris	Ling heather	40
Erica tetralix	Cross-leaved heath	20
Narthecium ossifragum	Bog asphodel	15
Eriophorum vaginatum	Hare's tail cottongrass	5
Rhynchospora alba	White beaked sedge	5
Trichophorum germanicum	Deergrass	4
Eriophorum angustifolium	Common cottongrass	3
Andromeda polifolia	Bog rosemary	0.5
Non-vascular		
Cladonia portentosa	Reindeer lichen	30
Sphagnum capillifolium	Acute leaved bog-moss	10
Sphagnum papillosum	Papillose bog-moss	10
Hypnum jutlandicum	Heath plait-moss	8
Sphagnum cuspidatum	Feathery bog-moss	2
Cladonia uncialis	Thorn lichen	2
Aulacomnium palustre	Bog bead-moss	1

%Bare Peat	2%
Fossitt (2000) Habitat Classification	**Raised bog (PB1)**
IVC Classification	**BG2B – *Erica tetralix* - *Andromeda polifolia* bog**
Affinity to Annex I habitat	**Degraded raised bogs still capable of natural regeneration [7120]**



Plate 3-2 Remnant Raised bog (PB1) located to the north of Proposed Turbine 10, Blackriver Bog



Plate 3-3 2.5m high facebank and drain at the margin of the Raised bog (PB1) to the north of Proposed Turbine 10, Blackriver Bog

3.3 Northwest of Proposed Turbine 39, Blackriver Bog

An area of uncut remnant raised bog also occurs within Blackriver Bog approximately 100m northwest of the Proposed Turbine 39 hardstand (approximately 65m from the internal cabling route and peat and spoil area associated with Proposed Turbine 39 at its closest), to the north and east of the area described in Section 3.2 above. This area is also bordered by a high facebank approximately 3m in height, and a deep drain, with ongoing turbary occurring at the margins.

A 4mx4m relevé was taken approximately 130m to the northwest of Proposed Turbine 39, and is presented in Table 3-3 below. The relevé was located approximately 25m from the facebank, with a slight slope observed in the direction of the bog margin. Ground conditions in this location were very dry at the time of survey with a high cover of ling heather (*Calluna vulgaris*) which averaged 20cm in height, and *Sphagnum* cover approximately 20%. There was no evidence of burning however erosion cracks were noted in the area, and a low (approximately 3%) cover of bare peat. There were no pools present at the time of survey, however wetter areas were noted as holding *S. cuspidatum*. This area was found to best align with the *Marginal* raised bog ecotope, per Fernandez *et al.* (2014). Using hydro-ecological modelling, the raised bog was not found to conform to either Annex I ARB or DRB at the relevé location. As such, in line with Article 17 Reporting (NPWS, 2025), this habitat is considered *'Supporting Raised bog habitat'*. However, hydro-ecological modelling shows that Annex I DRB is present within the more central section of this bog remnant, approximately 40m to the west of the relevé location and over 190m from the Proposed Turbine 39.

Table 3-3 Botanical Survey Results Raised Bog – Northwest of Proposed Turbine 39, Blackriver Bog

Raised Bog – Northwest of Proposed Turbine 39, Blackriver Bog	Grid Reference: ITM X 666349, Y 725894	Date: 20/05/2026
Species	Common Name	Percentage cover (%)
Vascular Plants		
Calluna vulgaris	Ling heather	50
Eriophorum vaginatum	Hare's tail cottongrass	20
Erica tetralix	Cross-leaved heath	15
Eriophorum angustifolium	Common cottongrass	5
Narthecium ossifragum	Bog asphodel	3
Trichophorum germanicum	Deergrass	3
Andromeda polifolia	Bog rosemary	0.5
Rhynchospora alba	White beaked sedge	0.5
Drosera rotundifolia	Round-leaved sundew	0.25
Non-vascular		
Cladonia portentosa	Reindeer lichen	20
Sphagnum capillifolium	Acute leaved bog-moss	15
Campylopus introflexus	Heath star-moss	3
Hypnum jutlandicum	Heath plait-moss	3
Sphagnum cuspidatum	Feathery bog-moss	2
Sphagnum subnitens	Lustrous bog-moss	2
Sphagnum tenellum	Soft bog-moss	2
Odontoschisma sphagni	Bog flapwort	1
Cladonia uncialis	Thorn lichen	0.5
Cladonia floerkeana	Devil's matchsticks	0.25
%Bare Peat		3%
Fossitt (2000) Habitat Classification		**Raised bog (PB1)**
IVC Classification		**BG2B – *Erica tetralix* - *Andromeda polifolia* bog**

Affinity to Annex I habitat	**No***

**at the relevé location – see text above on DRB in the vicinity*



Plate 3-4 Area of uncut remnant Raised bog (PB1) located to the northwest of Proposed Turbine 39

3.4 Northwest of Proposed Turbine 9, Blackriver Bog

An area of remnant raised bog was identified approximately 130m northwest of the Proposed Turbine 9 hardstand (approximately 47m from the internal cabling route associated with Proposed Turbine 9 at its closest) in the west of Blackriver Bog. This area is bordered by a facebank approximately 1m in height, and vegetated drains.

A 4mx4m relevé was taken approximately 170m to the northwest of Proposed Turbine 9, and is presented in Table 3-4 below. The relevé was located approximately 40m from the bog margin. At this location, *Sphagnum* cover was approximately 55%, however ground conditions were firm underfoot and no hummocks or pools were recorded in the vicinity. No burning, bare peat or erosion were recorded and macrotopography was flat overall. This area was found to best align with the *Marginal* raised bog ecotope, per Fernandez *et al.* (2014), however using hydro-ecological modelling it was not found to conform to either Annex I ARB or DRB. As such, in line with Article 17 Reporting (NPWS, 2025), this habitat is considered *'Supporting Raised bog habitat'*.

Table 3-4 Botanical Survey Results Raised Bog – Northwest of Proposed Turbine 9, Blackriver Bog

Raised Bog – Northwest of Proposed Turbine 9, Blackriver Bog	**Grid Reference: ITM X 665880, Y 724565**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	35
Erica tetralix	Cross-leaved heath	20

Eriophorum vaginatum	Hare's tail cottongrass	20
Narthecium ossifragum	Bog asphodel	10
Eriophorum angustifolium	Common cottongrass	2
Trichophorum germanicum	Deergrass	2
Andromeda polifolia	Bog rosemary	1
Non-vascular		
Cladonia portentosa	Reindeer lichen	25
Sphagnum capillifolium	Acute leaved bog-moss	20
Sphagnum papillosum	Papillose bog-moss	20
Sphagnum tenellum	Soft bog-moss	7
Sphagnum cuspidatum	Feathery bog-moss	5
Sphagnum austinii	Austin's bog-moss	3
Odontoschisma sphagni	Bog flapwort	2
Cladonia uncialis	Thorn lichen	1
Hypnum jutlandicum	Heath plait-moss	0.5
Campylopus atrovirens	Bog hair-moss	0.25
%Bare Peat		0.5%
Fossitt (2000) Habitat Classification		**Raised bog (PB1)**
IVC Classification		**BG2B – *Erica tetralix* - *Andromeda polifolia* bog**
Affinity to Annex I habitat		**No**



Plate 3-5 Area of remnant Raised bog (PB1) located to the northwest of Proposed Turbine 9

3.5 Northwest of Proposed Turbine 42, Glashabaun South Bog

An area of remnant raised bog was identified approximately 160m to the northwest of the Proposed Turbine 42 hardstand (approximately 90m from the internal cabling route associated with Proposed Turbine 42 at its closest) in the north of Glashabaun South Bog. This area is bordered by a high facebank which is approximately 4m in height, and deep drains.

A 4mx4m relevé was taken approximately 190m to the northwest of Proposed Turbine 42, and is presented in Table 3-5 below. The relevé was located approximately 30m from the facebank, with a slight slope observed in the direction of the bog margin. The raised bog in this location was highly degraded in nature. While no evidence of burning or erosion were noted, areas of bare peat were frequent throughout the bog remnant. This area also had firm ground conditions, low species diversity and low (<5%) *Sphagnum* cover with no pools recorded in the vicinity, but with some standing water in areas of bare peat. This area was found to represent an ecotope grading between *Facebank* and *Marginal*, per Fernandez *et al.* (2014), and using hydro-ecological modelling it was not found to conform to either Annex I ARB or DRB. As such, in line with Article 17 Reporting (NPWS, 2025), this habitat is considered *'Supporting Raised bog habitat'*.

Table 3-5 Botanical Survey Results Raised Bog – Northwest of Proposed Turbine 42, Glashabaun South Bog

Raised Bog – Northwest of Proposed Turbine 42, Glashabaun South Bog	**Grid Reference: ITM X 667056, Y 727586**	**Date: 20/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Erica tetralix	Cross-leaved heath	25
Calluna vulgaris	Ling heather	15
Eriophorum vaginatum	Hare's tail cottongrass	10

Trichophorum germanicum	Deergrass	10
Rhynchospora alba	White beaked sedge	5
Eriophorum angustifolium	Common cottongrass	2
Non-vascular		
Hypnum jutlandicum	Heath plait-moss	5
Cladonia portentosa	Reindeer lichen	3
Sphagnum tenellum	Soft bog-moss	3
Odontoschisma sphagni	Bog flapwort	1
Campylopus introflexus	Heath star-moss	0.25
%Bare Peat		15%
Fossitt (2000) Habitat Classification		**Raised bog (PB1)**
IVC Classification		**BG2B – *Erica tetralix* - *Andromeda polifolia* bog**
Affinity to Annex I habitat		**No**



Plate 3-6 Area of dry, degraded remnant Raised bog (PB1) recorded to the northwest of Proposed Turbine 42.

3.6 West of Proposed Turbine 13, Ballydermot South Bog

A large area of uncut remnant raised bog was identified approximately 70m to the west of the Proposed Turbine 13 hardstand (approximately 45m from the peat and spoil area associated with Proposed

Turbine 13 at its closest) in Ballydermot South Bog. This area is also known as Cloonroosk Bog. This bog remnant is bordered to the east by a facebank which is approximately 3m in height, and a deep drain. This area is traversed by regular parallel drains and has been subject to drain blocking efforts.

Two 4mx4m relevés were taken within Cloonroosk Bog, at varying distances from the facebank and from Proposed Turbine 13. The first relevé was located at the margins of the high bog, approximately 35m from Proposed Turbine 13 (Plate 3-7), and is presented in Table 3-6 below. This area was characterised by a high cover of bare peat (approximately 40%) due to the presence of tyre tracks along the bog margins. Due to previous works in this area involving the removal of the acrotelm, this section has been classified as **Cutover bog (PB4)** revegetated with a ***Calluna*-dominated community** with a small amount of hare's-tail cottongrass (*Eriophorum vaginatum*) and *Campylopus introflexus* colonisation also present (Plate 3-7).

A second relevé was undertaken to the west of the first, approximately 100m to the west of Proposed Turbine 13 (Plate 3-8), and is presented in Table 3-7 below. At this location, *Sphagnum* cover was very high, over 85%, with a diversity of species including *S. capillifolium, S. pulchrum, S. tenellum, S. subnitens, S. medium* and *S. papillosum* recorded at the relevé location, and with drains containing *S. cuspidatum* (Plate 3-9). Ground conditions were generally firm with softer areas also present. No burning, bare peat or signs of erosion were recorded, and macrotopography was flat overall. No significant hummocks or hollows were present, and there were no pools in the vicinity of the relevé location. This area was found to represent an ecotope grading between *Marginal* and *Sub-Marginal* per Fernandez *et al.* (2014), and using hydro-ecological modelling was found to be located on the margins of Annex I DRB.

Table 3-6 Botanical Survey Results - Cutover Bog 35m West of Proposed Turbine 13, Ballydermot South Bog

Cutover Bog – 35m West of Proposed Turbine 13, Ballydermot South Bog	**Grid Reference: ITM X 664628, Y 722422**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	40
Eriophorum vaginatum	Hare's tail cottongrass	6
Erica tetralix	Cross-leaved heath	1
Non-vascular		
Campylopus introflexus	Heath star-moss	10
Cladonia portentosa	Reindeer lichen	0.25
%Bare Peat		40%
Fossitt (2000) Habitat Classification		**Cutover bog (PB4)**
IVC Classification		**BG2E – *Calluna vulgaris* – *Eriophorum* spp. bog***
Affinity to Annex I habitat		**No**



Plate 3-7 Marginal area of the high Cutover bog (PB4) located to the west of Proposed Turbine 13

Table 3-7 Botanical Survey Results Raised Bog – 100m West of Proposed Turbine 13, Ballydermot South Bog

Raised Bog – 100m West of Proposed Turbine 13, Ballydermot South Bog	**Grid Reference: ITM X 664557, Y 722368**	**Date: 19/05/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Eriophorum vaginatum	Hare's-tail cottongrass	35
Calluna vulgaris	Ling heather	25
Erica tetralix	Cross-leaved heath	20
Eriophorum angustifolium	Common cottongrass	5
Andromeda polifolia	Bog rosemary	2
Drosera rotundifolia	Round-leaved sundew	1
Narthecium ossifragum	Bog asphodel	0.25
Non-vascular		
Sphagnum capillifolium	Acute leaved bog-moss	60
Sphagnum pulchrum	Golden bog-moss	15
Hypnum jutlandicum	Heath plait-moss	5
Sphagnum tenellum	Soft bog-moss	5

Sphagnum subnitens	Lustrous bog-moss	3
Odontoschisma sphagni	Bog flapwort	2
Sphagnum medium	Magellanic bog-moss	2
Sphagnum papillosum	Papillose bog-moss	2
Campylopus introflexus	Heath star-moss	1
%Bare Peat		0%
Fossitt (2000) Habitat Classification		**Raised bog (PB1)**
IVC Classification		**BG2B – *Erica tetralix* - *Andromeda polifolia* bog**
Affinity to Annex I habitat		**Degraded raised bogs still capable of natural regeneration [7120]**



Plate 3-8 Area of Raised bog (PB1) at Cloonroosk Bog, in the southwest of Ballydermot South Bog



Plate 3-9 A drainage ditch within Cloonroosk Bog which has been subject to drain blocking efforts, now showing abundant Sphagnum cuspidatum

3.7 East of Proposed Turbine 28, Glashabaun North Bog

An area of remnant raised bog was identified approximately 100m to the east of the Proposed Turbine 28 hardstand (approximately 60m from the peat and spoil area associated with Proposed Turbine 28 at its closest) in the southeast of Glashabaun North Bog (Plate 3-10). This area is bordered by a facebank approximately 1.5m in height and deep drains, with ongoing turbary occurring in the southern section of this bog remnant.

A 4mx4m relevé was taken approximately 170m to the east of Proposed Turbine 28, and is presented in Table 3-8 below. The relevé was located approximately 45m from the facebank. The raised bog in this location was highly degraded in nature, with very dry ground conditions at the time of survey and no *Sphagnum* cover or pools recorded at the relevé location. While no evidence of burning was noted, areas of bare peat were frequent throughout the bog remnant and dry erosion cracks were noted. Ling heather (*Calluna vulgaris*) was dominant and averaged 40cm in height. This area was found to best align with the *Facebank* raised bog ecotope, per Fernandez *et al.* (2014), and using hydro-ecological modelling it was not found to conform to either Annex I ARB or DRB. As such, in line with Article 17 Reporting (NPWS, 2025), this habitat is considered *'Supporting Raised bog habitat'*.

Table 3-8 Botanical Survey Results Raised Bog – East of Proposed Turbine 28, Glashabaun North Bog

Raised Bog – East of Proposed Turbine 28, Glashabaun North Bog	**Grid Reference: ITM X 667648, Y 728378**	**Date: 06/07/2026**
Species	**Common Name**	**Percentage cover (%)**
Vascular Plants		
Calluna vulgaris	Ling heather	85
Erica tetralix	Cross-leaved heath	15
Eriophorum vaginatum	Hare's tail cottongrass	10

Eriophorum angustifolium	Common cottongrass	3
Non-vascular		
Cladonia portentosa	Reindeer lichen	5
Campylopus introflexus	Heath star-moss	1
Cladonia floerkeana	Devil's matchsticks	0.25
Cladonia chlorophaea	Pixie-cup lichen	0.25
%Bare Peat		8%
Fossitt (2000) Habitat Classification		**Raised bog (PB1)**
IVC Classification		**BG2B – *Erica tetralix* - *Andromeda polifolia* bog***
Affinity to Annex I habitat		**No**



Plate 3-10 Area of degraded, ling heather (Calluna vulgaris) dominated raised bog to the east of Proposed Turbine 28

665000

670000

730000

725000

N

T32 T30 T31 T29 T27 T28 T23 T46 T45 T44 T24 T42 T26 T43 T25 T41 T22 T40 T39 T36 T37 T21 T20 T10 T38 T17 T19 T35 T18 T09 T34 T16 T07 T33 T06 T15 T08 T01 T11 T05 T03 T12 T13 T04 T02 T14

0 1 2 km

Microsoft Vantor

Map Legend

- Project Site
- Degraded raised bogs still capable of natural regeneration [7120]

Proposed Turbine Layout

- 220
- 200
- Proposed Relay Mast
- Proposed Met Mast
- Proposed Telecommunications Tower
- Joint Bays
- Existing OHL
- Internal 33kV Cable Trench
- Proposed Internal 33kV Cabling
- Proposed OHL
- Proposed Grid Connection Underground 220KV electrical cabling
- New Road
- Upgrades to Existing Roads
- TDR Accommodation
- Proposed Amenity Links Centreline
- Proposed Pedestrian Amenity Boardwalk
- Turbine Hardstands
- Temporary Construction Compounds
- Proposed Peat and Spoil Areas
- Proposed Security Hut
- Proposed Car parking
- Proposed Set Down Area
- Proposed Onsite 110kV GIS Substation
- Proposed Onsite 220kV GIS Substation
- Proposed Offsite Substation Tower Build Area
- Proposed Offsite Substation Crane Pad
- Proposed Offsite 220kV GIS Substation

Spatial Reference
Name: IRENET95 Irish Transverse Mercator
Datum: IRENET95
Projection: Transverse Mercator

N

SITE LOCATION - NOT TO SCALE

Drawing Title
Eco-hydrological Modelling Results

Project Title
Ballydermot Wind Farm
Co. Offaly & Co. Kildare

Project No.	Drawing No.	Scale
250708	6-1-2	1:42,000
Drawn By	Checked By	Date
OM	KB	22/10/2026

Email: info@mkoireland.ie/ Website: www.mkoireland.ie

665000

730000

N

T32

0 0.25 0.5 km

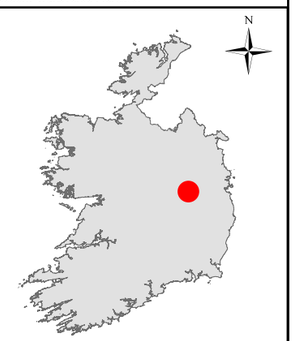
Map Legend

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Datum: IRENET95
Projection: Transverse Mercator



SITE LOCATION - NOT TO SCALE

Drawing Title

Eco-hydrological Modelling Results

Project Title

Ballydermot Wind Farm
Co. Offaly & Co. Kildare

Project No.	Drawing No.	Scale
250708	6-1-2a	1:7,000
Drawn By	Checked By	Date
MNR	KB	23/10/2026

Email: info@mkoireland.ie/ Website: www.mkoireland.ie

N

T40

T39

T10

T38

725000

0 0.25 0.5 km

Map Legend

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Proposed Turbine Layout

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Projection: Transverse Mercator

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SITE LOCATION - NOT TO SCALE

Drawing Title

Eco-hydrological Modelling Results

Project Title

Ballydermot Wind Farm
Co. Offaly & Co. Kildare

Project No.	Drawing No.	Scale
250708	6-1-2b	1:7,000
Drawn By	**Checked By**	**Date**
MNR	KB	23/10/2026

Email: info@mkoireland.ie/ Website: www.mkoireland.ie

665000

N

T11

T13

T14

0 0.25 0.5 km

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Map Legend

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Datum: IRENET95
Projection: Transverse Mercator

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SITE LOCATION - NOT TO SCALE

Drawing Title

Eco-hydrological Modelling Results

Project Title

Ballydermot Wind Farm
Co. Offaly & Co. Kildare

Project No.	Drawing No.	Scale
250708	6-1-2c	1:7,000
Drawn By	**Checked By**	**Date**
MNR	KB	23/10/2026

Email: info@mkoireland.ie/ Website: www.mkoireland.ie

N

T06

T08

T05

T12

T04

0 0.25 0.5 km

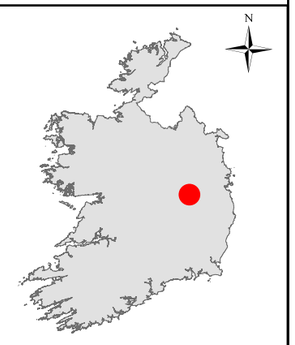
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Datum: IRENET95
Projection: Transverse Mercator



SITE LOCATION - NOT TO SCALE

Drawing Title

Eco-hydrological Modelling Results

Project Title

Ballydermot Wind Farm
Co. Offaly & Co. Kildare

Project No.	Drawing No.	Scale
250708	6-1-2d	1:7,000
Drawn By	Checked By	Date
MNR	KB	23/10/2026

Email: info@mkoireland.ie/ Website: www.mkoireland.ie

4. CONCLUSION

No Annex I habitats were recorded within the footprint of the Proposed Project.

The cutover bog habitats within the construction footprint of the Proposed Project were not found to correspond to ARB. The vast majority of the cutover bog was found to be dry in nature and have either no or low *Sphagnum* cover and did not meet the criteria to be considered ARB as per Smith and Crowley (2020).

While ERICA did best categorise a number of the cutover bog habitats as fen communities, these communities do not correspond to Annex I fen habitats. They comprise pioneer poor fen establishing on bare peat and areas of more established poor fen and flush. These are transitioning habitats on the cutover bog that will likely, over time, further transition towards a mosaic of wetland peatland and woodland habitats. No areas of Alkaline fens [7230] were recorded and no habitats that correspond to either Annex I Calcareous fens with *Cladium mariscus* and species of the *Caricion davallianae* [7210] or Transition mires and quaking bogs [7140] were recorded within the Proposed Project footprint.

Similarly, while ERICA best categorised some of the cutover habitats as heath communities, these do not correspond to any Annex I heath habitats. As stated by Smith and Crowley (2020):

> *"Cutover bog habitats should only rarely be considered examples of dry siliceous heath (HH1) or wet heath (HH3). These habitats are defined by peat depths of less than 0.5 m (Fossitt, 2000), which seldom occur on cutover bog. Only where a habitat is underlain by shallow peat and good indicators of heath are present, such as Carex binervis, Galium saxatile and Juncus squarrosus, should heath habitats be considered for cutover bog."*

The *Calluna*-dominated communities which have established on the cutover bog within the Proposed Wind Farm site occur on peat with a depth of >0.5m and none of the good heath indicator species were recorded within these habitats during the field surveys undertaken. Therefore, the *Calluna*-dominated communities growing on cutover bog within the Proposed Wind Farm site do not conform to Annex I heath habitats. They are secondary, cutover bog habitats that are located on deep peat and level ground. They do not conform to Annex I wet heath habitat as defined by the Irish Wildlife Manual (Perrin *et.al.* 2014). Neither do they conform to Annex I raised bog habitats or any other Annex I habitat.

Furthermore, the bog woodlands within the Proposed Wind Farm site were recorded growing on cutover bog which is predominantly dry in nature with little to no *Sphagnum* cover. As such, no areas of this habitat growing upon cutover bog were found to conform to Annex I Bog woodland [91D0].

A number of areas of remnant, uncut raised bog were identified within the Proposed Wind Farm site but outside of the Proposed Project construction footprint and were subject to vegetation and eco-hydrological analyses in order to determine whether they correspond to Annex I ARB or DRB. As shown in Figure 6-1-2, a number of areas of raised bog were found to correspond to Annex I DRB, in Ballydermot South, Blackriver and Ticknevin Bogs. The Proposed Project has been designed to avoid the vast majority of raised bog within the Proposed Wind Farm site, with only a proposed amenity boardwalk located within this habitat in the south of Ballydermot South Bog. However, this raised bog remnant was not found to correspond to either Annex I ARB or DRB, following vegetation and eco-hydrological analyses, and there will be no loss of any of this habitat to facilitate the installation of the boardwalk.

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