Planning and Environmental Consultants

Proposed Wind Farm Development

Knockshanvo Wind Farm, Co. Clare

Planning Permission Application Drawings

P01

Schedule of Drawings

Drawing No.	Drawing Title	Scale
200513 – 01A	Location Context Map Sheet A	1: 50,000 @A3
200513 – 01B	Location Context Map Sheet B	1: 20,000 @A3
200513 – 02A	Site Location Map A (Site Notice Key Plan)	1: 20,000 @A1
200513 – 02A1	Site Notice Location Map A1	1:2,500 @A3
200513 – 02A2	Site Notice Location Map A2	1:2,500 @A3
200513 – 02A3	Site Notice Location Map A3	1:2,500 @A3
200513 – 02A4	Site Notice Location Map A4	1:2,500 @A3
200513 – 02A5	Site Notice Location Map A5	1:2,500 @A3
200513 – 02A6	Site Notice Location Map A6	1:2,500 @A3
200513 – 02A7	Site Notice Location Map A7	1:2,500 @A3
200513 – 02A8	Site Notice Location Map A8	1:2,500 @A3
200513 – 02A9	Site Notice Location Map A9	1:2,500 @A3
200513 – 02A10	Site Notice Location Map A10	1:2,500 @A3
200513 – 02A11	Site Notice Location Map A11	1:2,500 @A3
200513 – 02A12	Site Notice Location Map A12	1:2,500 @A3
200513 – 02A13	Site Notice Location Map A13	1:2,500 @A3
200513 – 02A14	Site Notice Location Map A14	1:2,500 @A3
200513 – 02A15	Site Notice Location Map A15	1:2,500 @A3
200513 – 02B	Site Location Map B (Site Notice Key Plan)	1: 5,000 @A1
200513 – 02B1	Site Notice Location Map B1	1:2,500 @A3
200513 – 03	Site Layout Key Plan A (1:5,000)	1: 20,000 @A1
200513 – 04	Site Layout (1:5,000) Sheet A1	1: 5,000 @A1
200513 – 05	Site Layout (1:5,000) Sheet A2	1: 5,000 @A1
200513 – 06	Site Layout (1:5,000) Sheet A3	1: 5,000 @A1
200513 – 07	Site Layout (1:5,000) Sheet A4	1: 5,000 @A1
200513 – 08	Site Layout (1:5,000) Sheet A5	1: 5,000 @A1
200513 – 09	Site Layout Key Plan A (1:2,500)	1: 20,000 @A1
200513 – 10	Site Layout (1:2,500) Sheet A6	1: 2,500 @A1
200513 – 11	Site Layout (1:2,500) Sheet A7	1: 2,500 @A1
200513 – 12	Site Layout (1:2,500) Sheet A8	1: 2,500 @A1
200513 – 13	Site Layout (1:2,500) Sheet A9	1: 2,500 @A1
200513 – 14	Site Layout (1:2,500) Sheet A10	1: 2,500 @A1
200513 – 15	Site Layout (1:2,500) Sheet A11	1: 2,500 @A1
200513 – 16	Site Layout (1:2,500) Sheet A12	1: 2,500 @A1
200513 – 17	Site Layout (1:2,500) Sheet A13	1: 2,500 @A1
200513 – 18	Site Layout (1:2,500) Sheet A14	1: 2,500 @A1
200513 – 19	Site Layout (1:2,500) Sheet A15	1: 2,500 @A1
200513 – 20	Site Layout (1:2,500) Sheet A16	1: 2,500 @A1
200513 – 21	Site Layout (1:2,500) Sheet A17	1: 2,500 @A1
200513 – 22	Site Layout (1:2,500) Sheet A18	1: 2,500 @A1
200513 – 23	Site Layout (1:2,500) Sheet A19	1: 2,500 @A1
200513 – 24	Site Layout Plan B (1:5,000)	1: 5,000 @A1
200513 – 25	Site Layout Plan B (1:2,500)	1: 2,500 @A1
200513 – 26	Turbine 1 Layout	1: 500 @A2
200513 – 27	Turbine 2 Layout	1: 500 @A2

200513 – 28	Turbine 3 Layout	1: 500 @A2
200513 – 29	Turbine 4 Layout	1: 500 @A2
200513 – 30	Turbine 5 Layout	1: 500 @A2
200513 – 31	Turbine 6 Layout	1: 500 @A2
200513 – 32	Turbine 7 Layout	1: 500 @A2
200513 – 33	Turbine 8 Layout	1: 500 @A2
200513 – 34	Turbine 9 Layout	1: 500 @A2
200513 – 35	Wind Turbine Elevations & Plan	1: 500 @A1
200513 – 36	Gravity Foundation Details	1: 200 @A3
200513 – 37	Bored Pile Foundation Details	1: 200 @A3
200513 – 38	Driven Pile Foundation Details	1: 200 @A3
200513 – 39	Site Construction Compound 1	1: 500 @A3
200513 – 40	Site Construction Compound 2	1: 500 @A3
200513 – 41	Site Construction Compound 3	1: 500 @A3
200513 – 42	Temporary Transition Compound	1: 1,000 @A3
200513 – 43	Free Standing Met Mast	1: 500 @A3
200513 – 44	Permanent Signage Typical Detail	1:20 @A3
200513 – 45	Proposed Bench Detail	1:10 @A3
200513 – 46	Security Cabin Detail	1:100 @ A3
200513 – 47	Wheel wash Details	1:50 @A3
200513 – 48	Steel Barrier Detail / Gate Detail	1:25 @A3
200513 – 49	Site Office & Staff Facilities Typical Detail	1:100 @ A3
200513 – 50	Field Gate Detail	1:20 @ A3
200513 – 51	Palisade Gate Detail	1:20 @ A3
200513 – 52	33kV Cable Trench Detail	1:10 @ A3
200513 – 53	Standard 33kV Culvert Crossing	1:20/1:50 @ A3
200513 – 54	Proposed Access Junction A	1:1,000 @ A3
200513 – 55	Proposed Access Junction B	1:1,000 @ A3
200513 – 56	Proposed Access Junction C	1:1,000 @ A3
200513 – 57	Proposed Access Junction D	1:1,000 @ A3
TLI		
05783-DR-150	Substation Layout Plan	1:250 @A1
05783-DR-151	Substation Elevations	1:250 @A1
05783-DR-152	Cut and Fill Area Layout Plan	1:500 @A1
05783-DR-153	Site Sections	Varies @A1
05783-DR-154	Control Building – Plan Elevations & Section	Varies @A1
05783-DR-155	IPP Building – Plan Elevations & Section	Varies@A1
05783-DR-156	Gate & Fence Details	1:25 @A1
05783-DR-157	Site Compound Details & Access Road Details	Varies @A1
05783-DR-158	Lightning Monopole Foundation Details 18m Masts	Varies @A1
05783-DR-159	Telecoms Pole Elevation View	1:100 @A1
05783-DR-160	Substation Compound Drainage, Retention Separator Tank, Foul Water Holding Tank Details	Varies @A1
Hydro Environmental Services		
P1625-0_D101	Proposed Drainage Layout – D101 – Rev C	1:2,000 @ A1
P1625-0_D102	Proposed Drainage Layout – D102 – Rev C	1:2,000 @ A1
P1625-0_D103	Proposed Drainage Layout – D103 – Rev C	1:2,000 @ A1
P1625-0_D104	Proposed Drainage Layout – D104 – Rev C	1:2,000 @ A1
P1625-0_D105	Proposed Drainage Layout – D105 – Rev C	1:2,000 @ A1

P1625-0_D106	Proposed Drainage Layout – D106 – Rev C	1:2,000 @ A1
P1625-0_D107	Proposed Drainage Layout – D107 – Rev C	1:2,000 @ A1
P1625-0_D501	Proposed Drainage Details – D501 – Rev A	Varies @ A1
P1625-0_D502	Proposed Drainage Details – D502 – Rev A	Varies @ A1
P1625-0_D503	Proposed Drainage Details – D503 – Rev A	Varies @ A1
P1625-0_D504	Proposed Drainage Details – D504 – Rev A	Varies @ A1
P1625-0_D101TTC	Proposed TDR Drainage Layout – D101_TTC – Rev C	Varies @ A4
Fehily Timoney		
P20-153-0600-0016	Type A- Upgrade of Existing Excavated Access Tracks	1:20 @ A1
P20-153-0600-0017	Type B– New Excavate and Replace Access Road	1:20 @ A1
P20-153-0600-0018	Borrow Pit 1 Plan and Section	Varies @ A1
P20-153-0600-0019	Borrow Pit 2 Plan and Section	Varies @ A1
P20-153-0600-0020	Borrow Pit 3 Plan and Section	Varies @A1
P20-153-0600-0021	Borrow Pit 4 Plan and Section	Varies @A1
P20-153-0600-0022	Borrow Pit 5 Plan and Section	Varies @A1

APPLICATION BOUNDARY

APPLICATION BOUNDARY

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Drawing Legend

- Planning Application Boundary
- Knockshanvo 110kV Grid Connection Boundary Line Subject to Separate Application

A

B

N.T.S

SITE LOCATION

N

SITE LOCATION - N.T.S

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Location Context Map Sheet A

PROJECT No.:	DRAWING No.:	SCALE:
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DRAWN BY: KD	CHECKED BY: EOS	DATE: 27.08.2024	REVISION.: P01

OS SHEET No.: OS1414,OS1416,OS1614, OS1616

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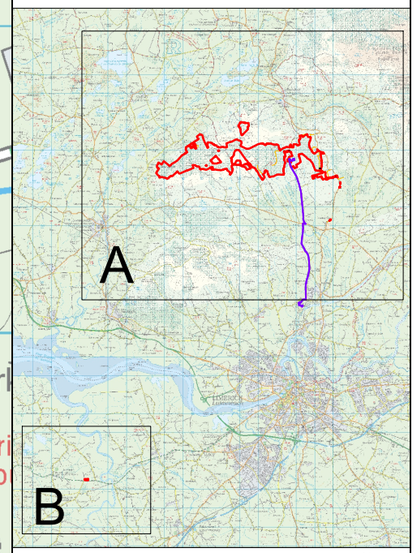
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Drawing Legend

Planning Application Boundary

Knockshanvo 110kV Grid Connection Boundary Line Subject to Separate Application



SITE LOCATION



SITE LOCATION - N.T.S

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Location Context Map Sheet B

PROJECT No.:	DRAWING No.:	SCALE:
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DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	EOS	27.08.2024	P01

OS SHEET No.: OS1414,OS1416,OS1614, OS1616

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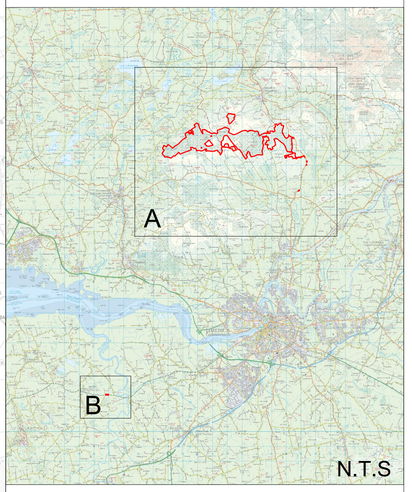
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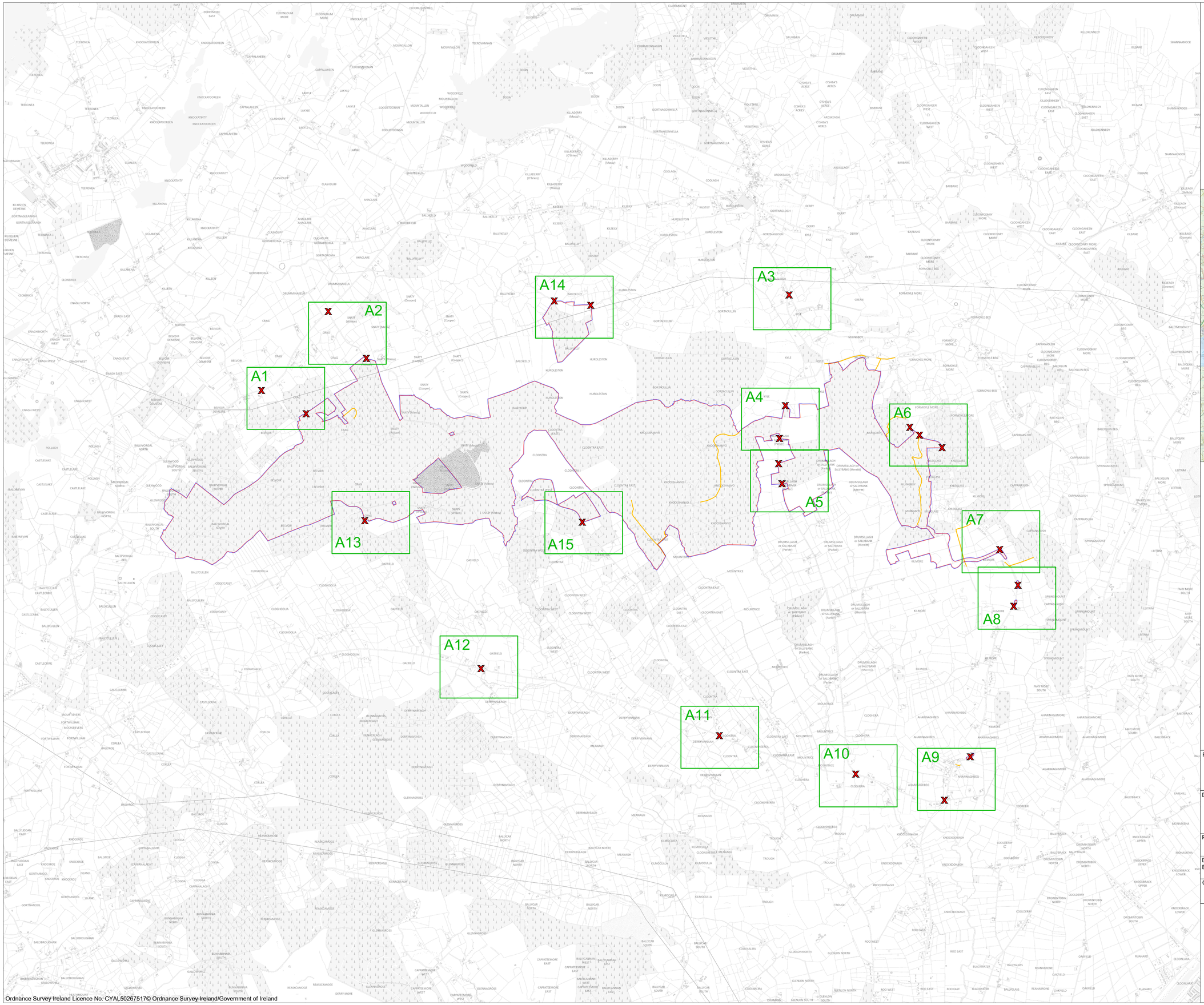
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Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- Site Notice
- Wayleave





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PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

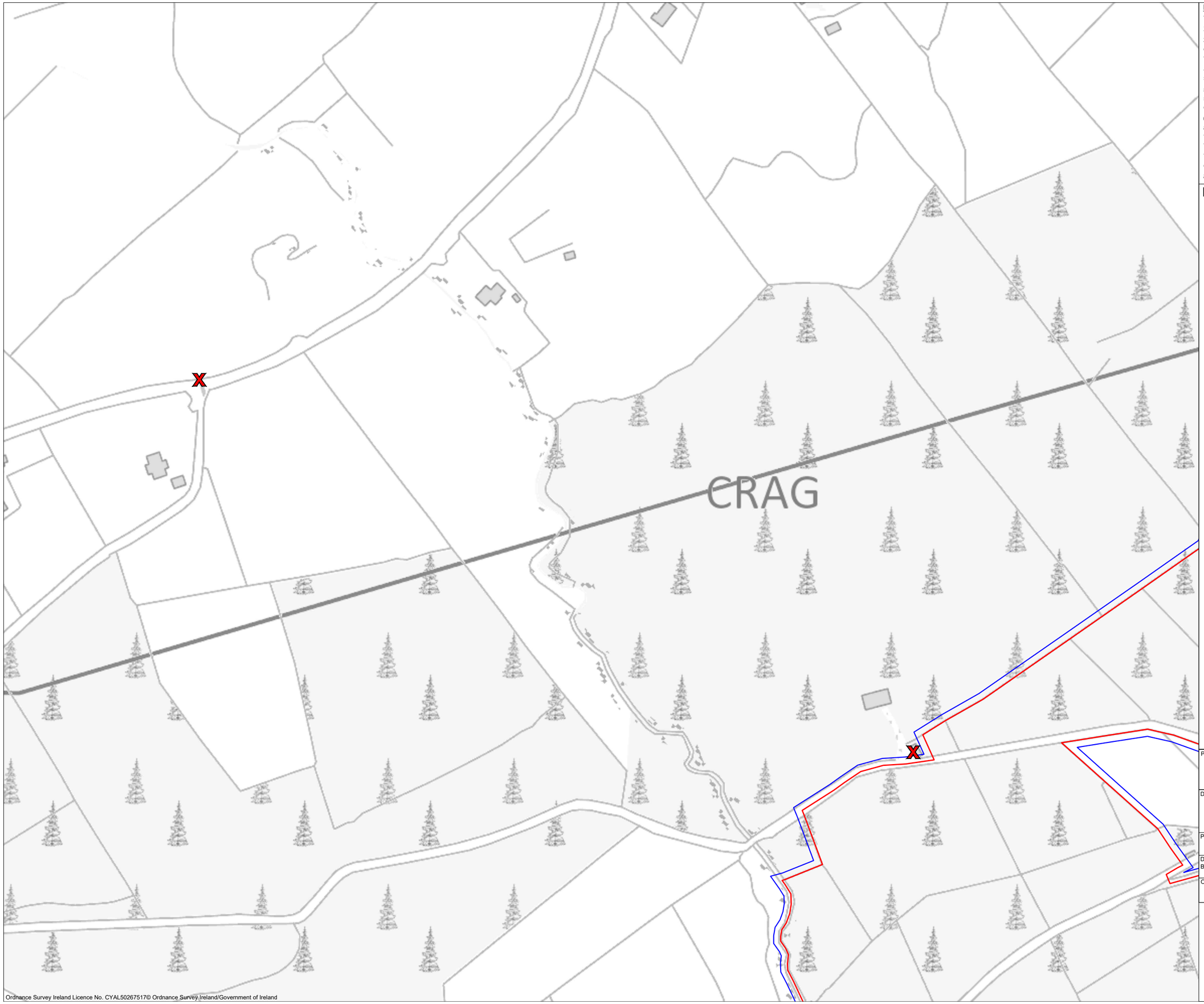
Site Location Map A (Site Notice Key Plan)

PROJECT No.:		DRAWING No.:	SCALE:
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DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

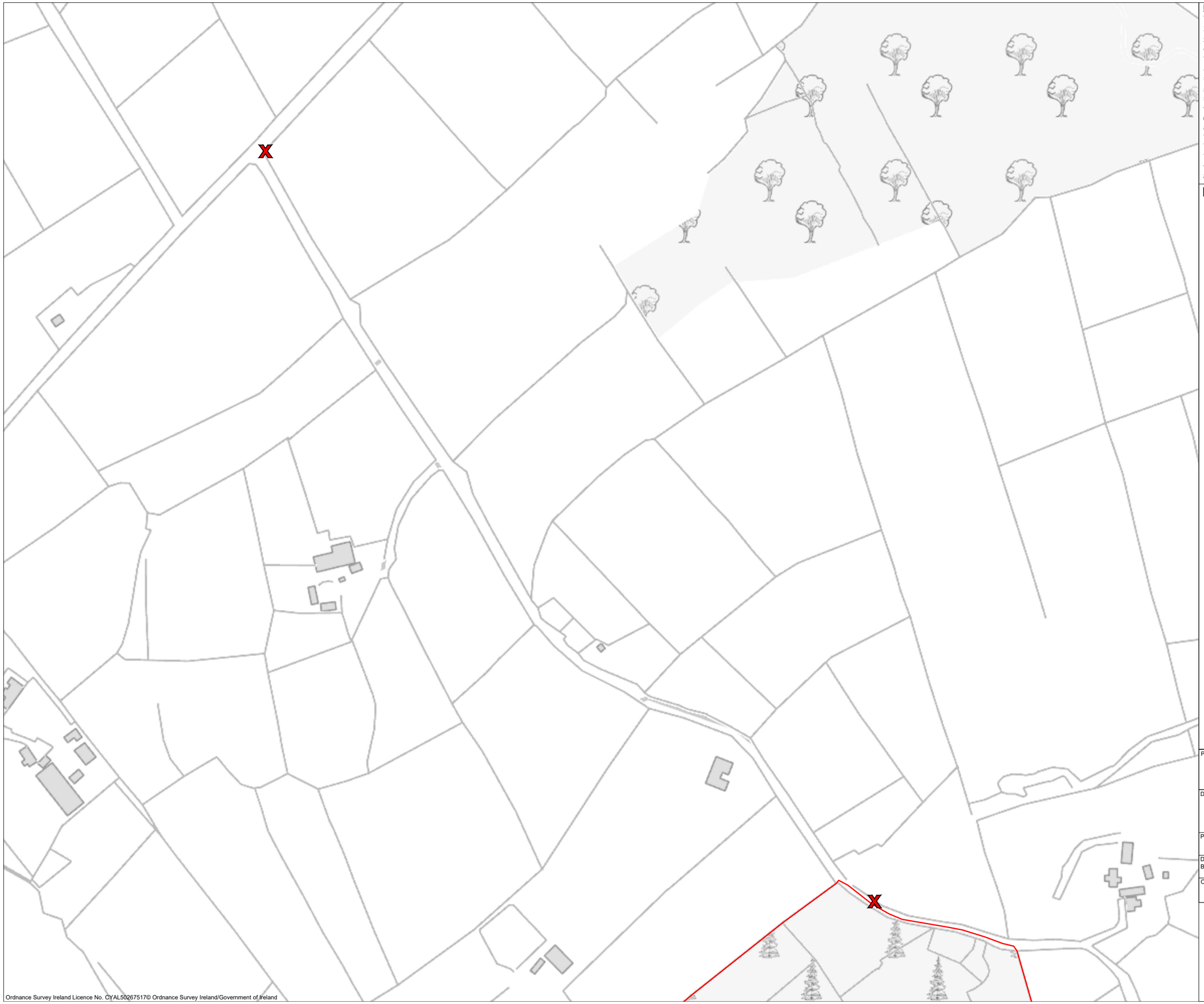
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Site Location Map Sheet A1

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DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

X Site Notice

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Site Location Map Sheet A2

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DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

X Site Notice

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Site Location Map Sheet A3

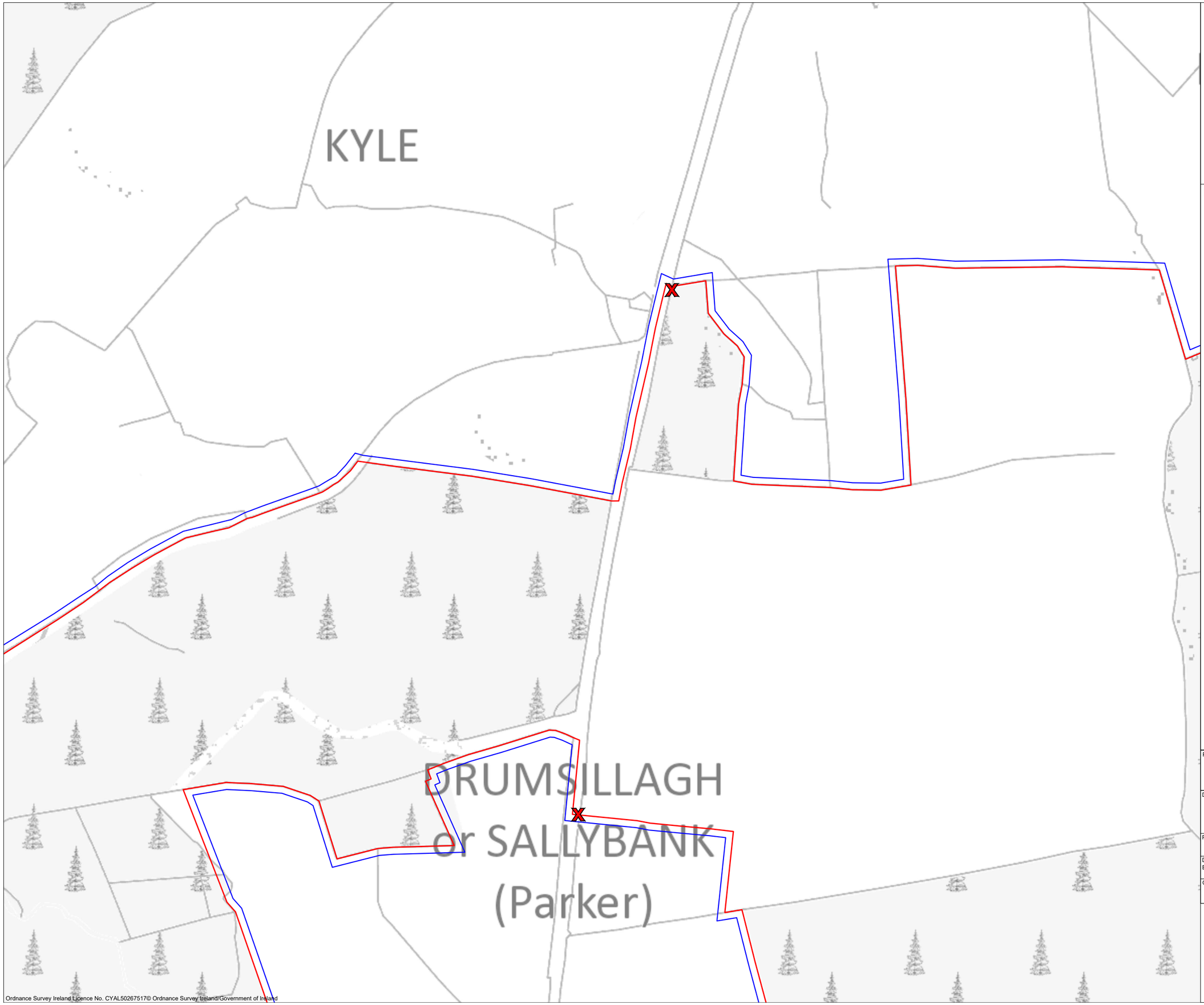
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DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
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8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Location Map Sheet A4

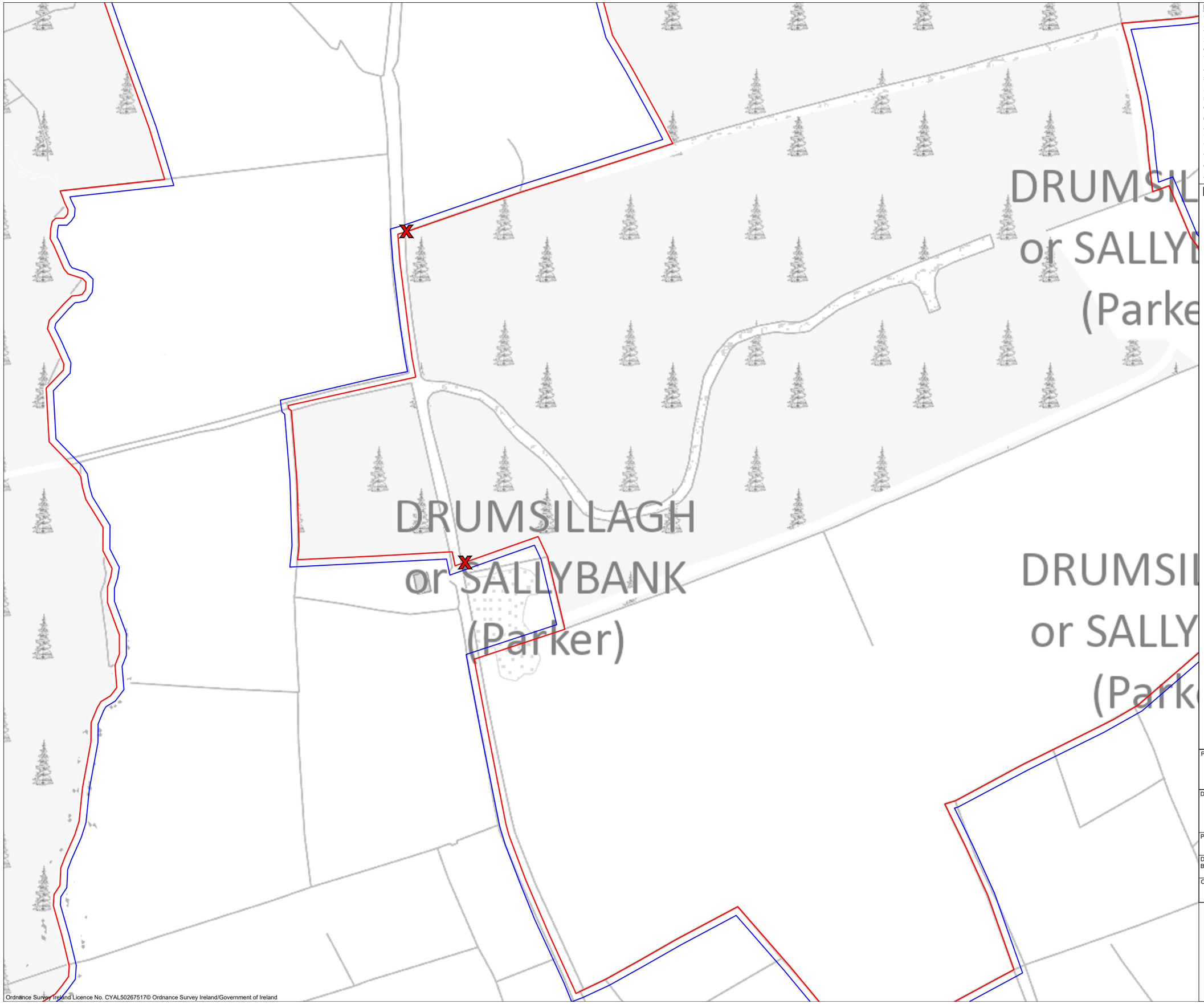
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DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
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8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X — Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Location Map Sheet A5

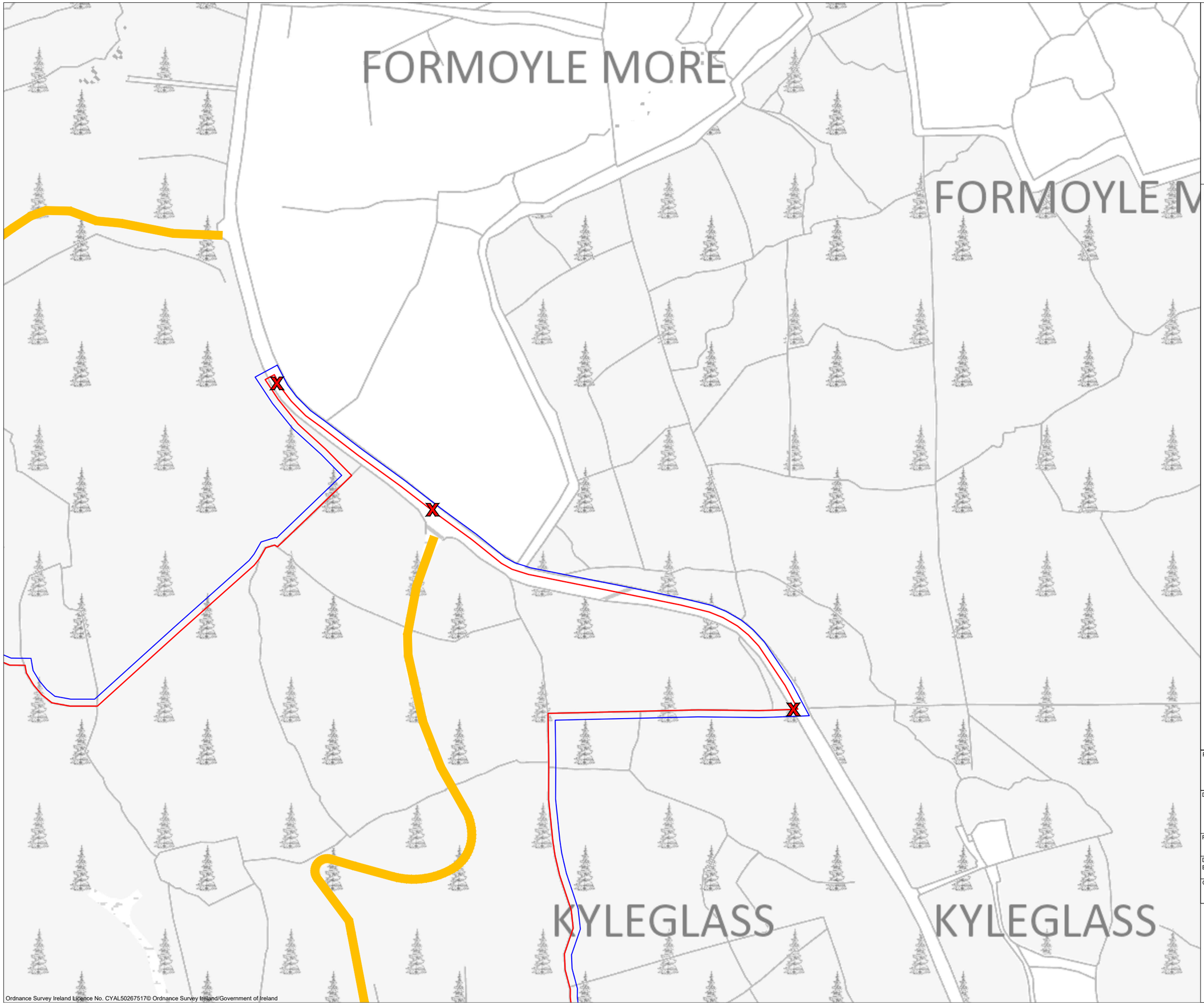
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8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X — Site Notice
- Wayleave

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

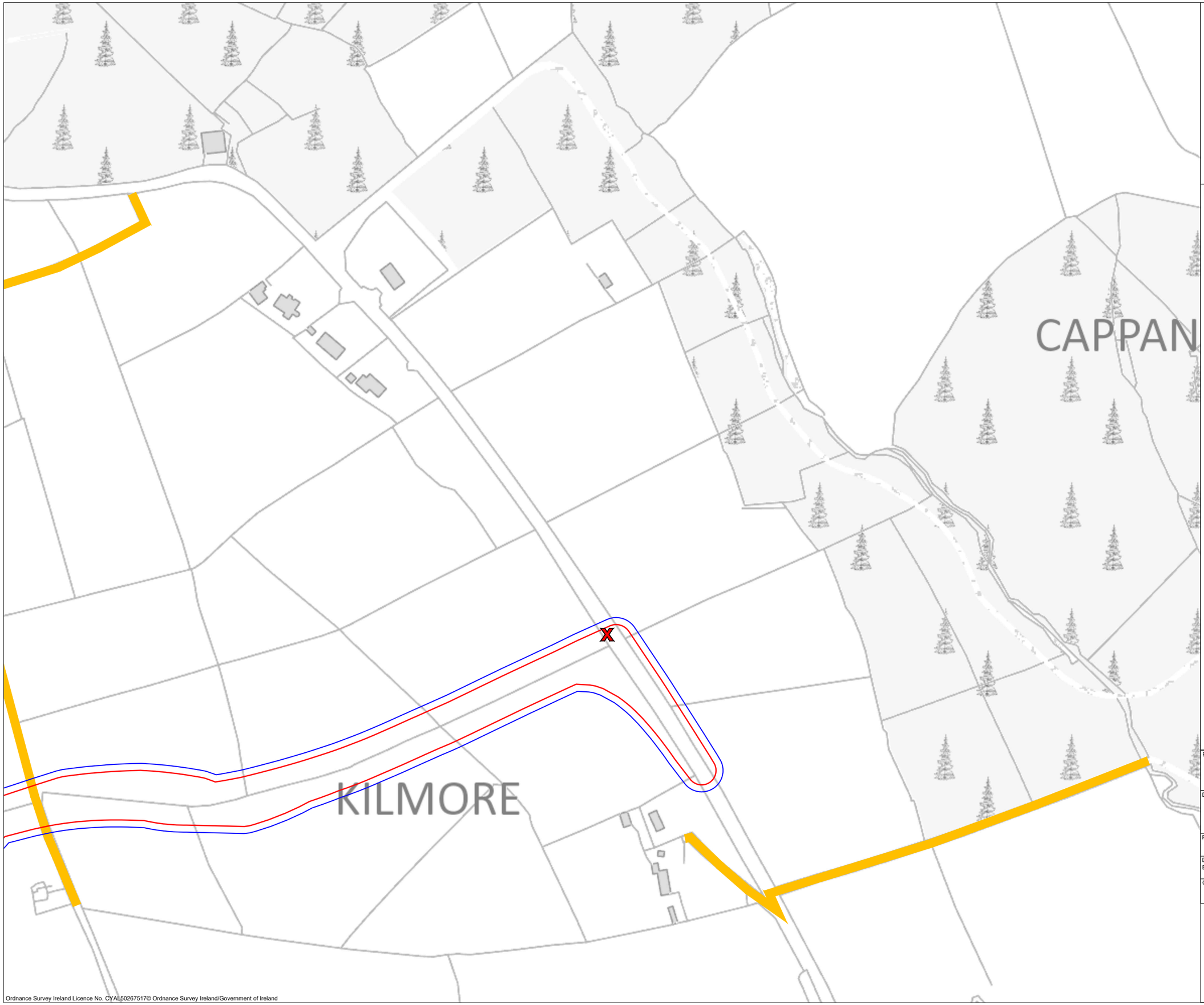
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Site Location Map Sheet A6

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OS SHEET No.:
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Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X — Site Notice
- Wayleave

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

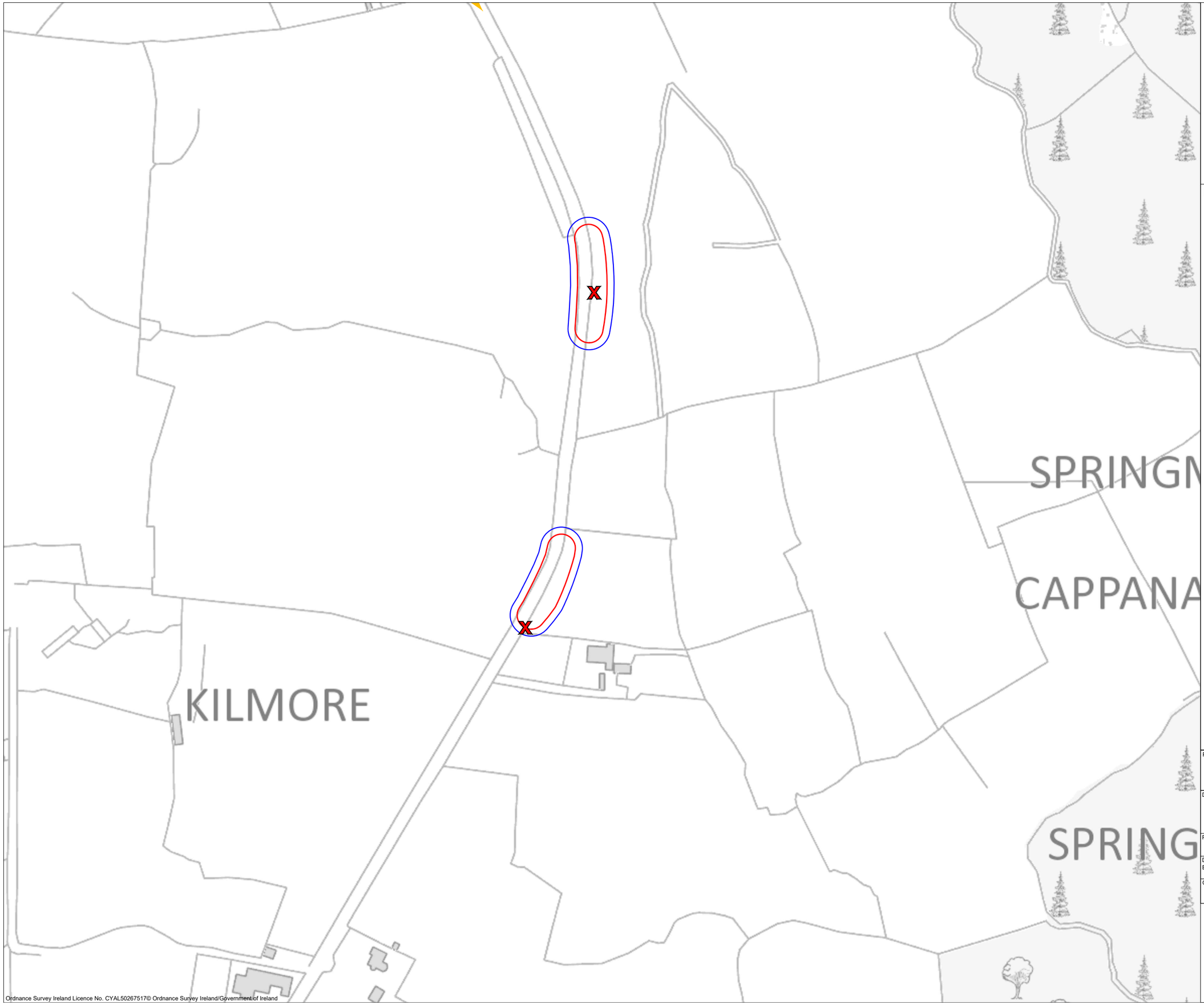
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Site Location Map Sheet A7

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200513	200513-02A7	1:2,500 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

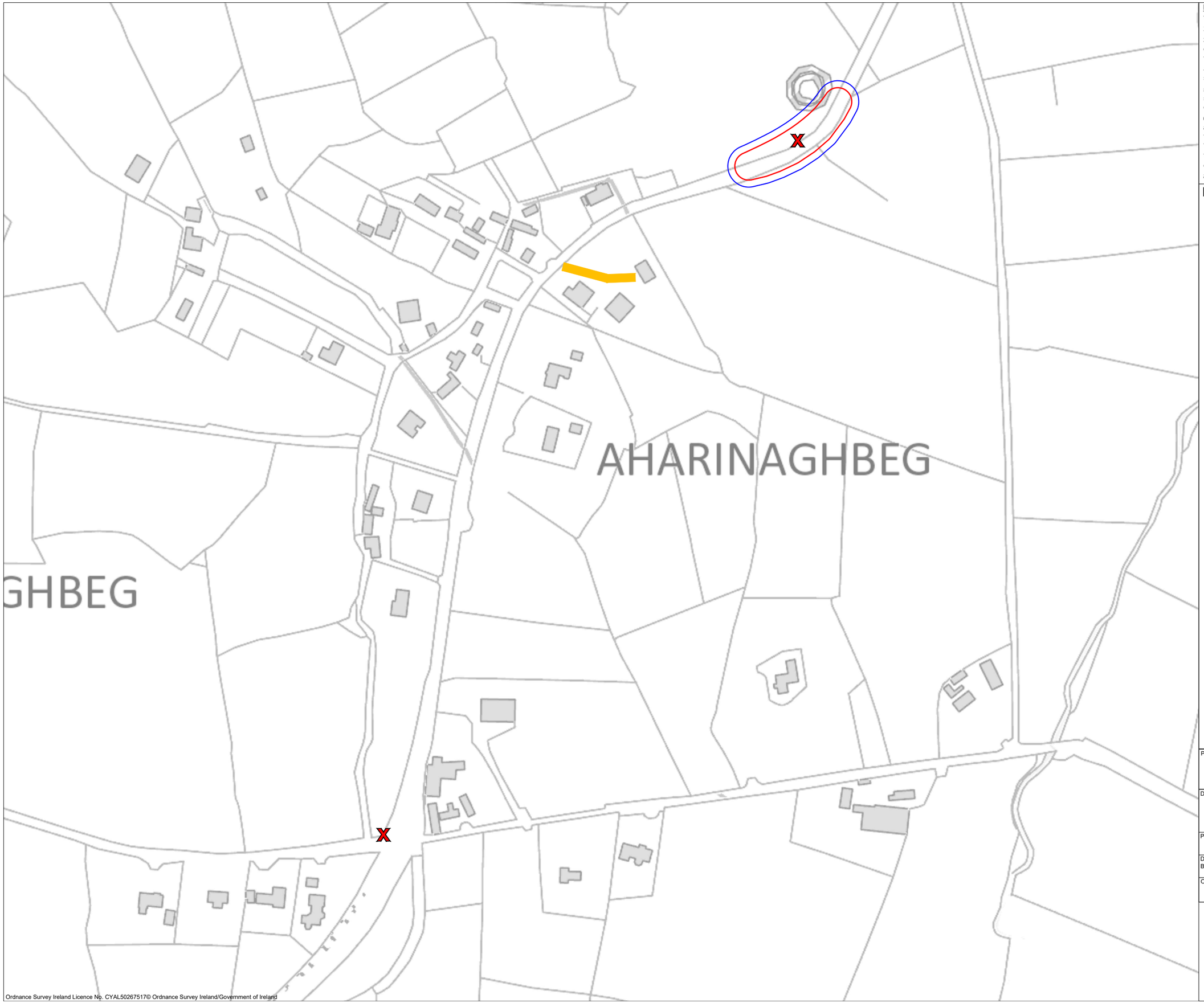
DRAWING TITLE:
Site Location Map Sheet A8

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513-02A8	1:2,500 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X Site Notice
- Wayleave

N

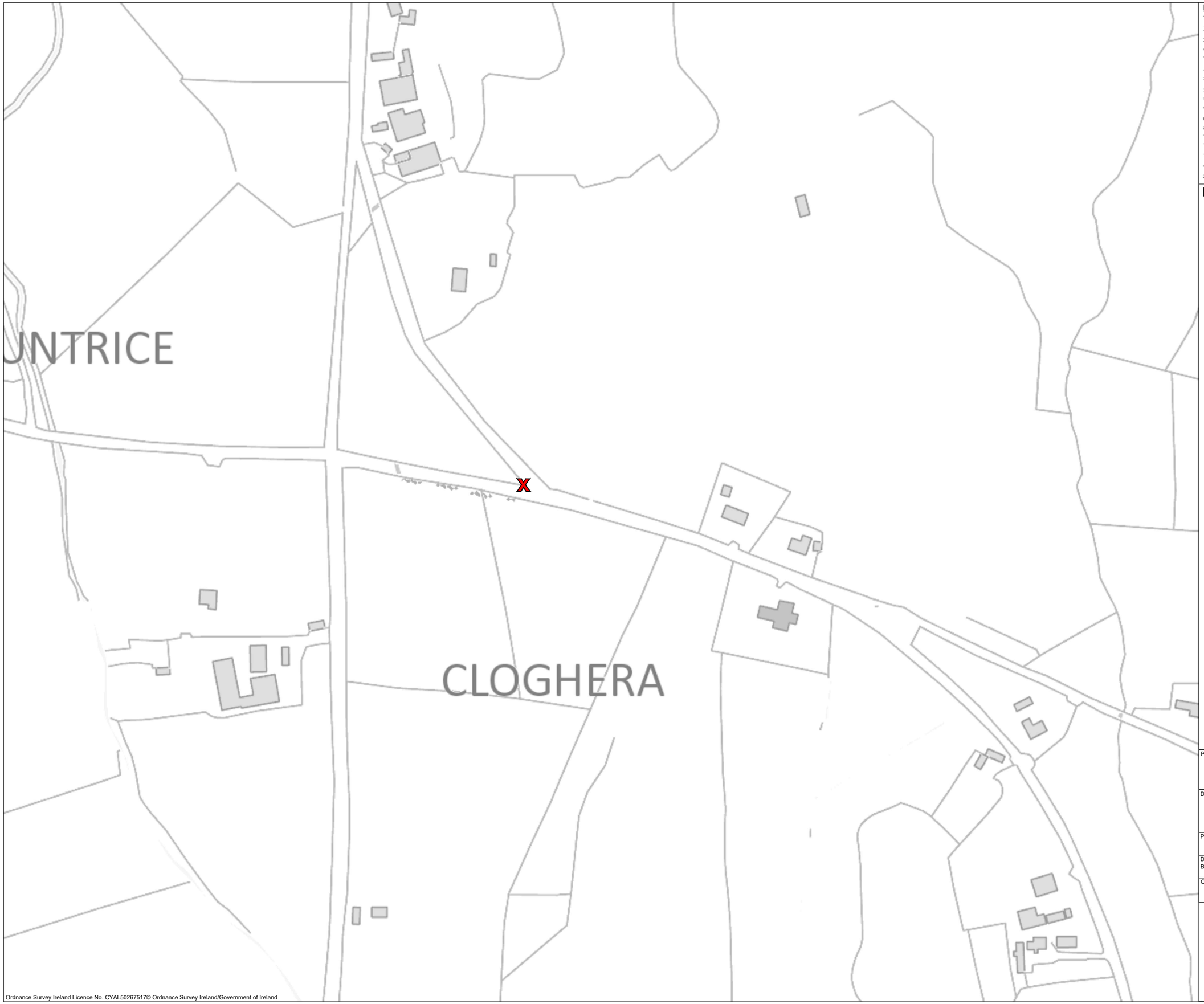
PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Location Map Sheet A9

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513-02A9	1:2,500 @ A3
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

X Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

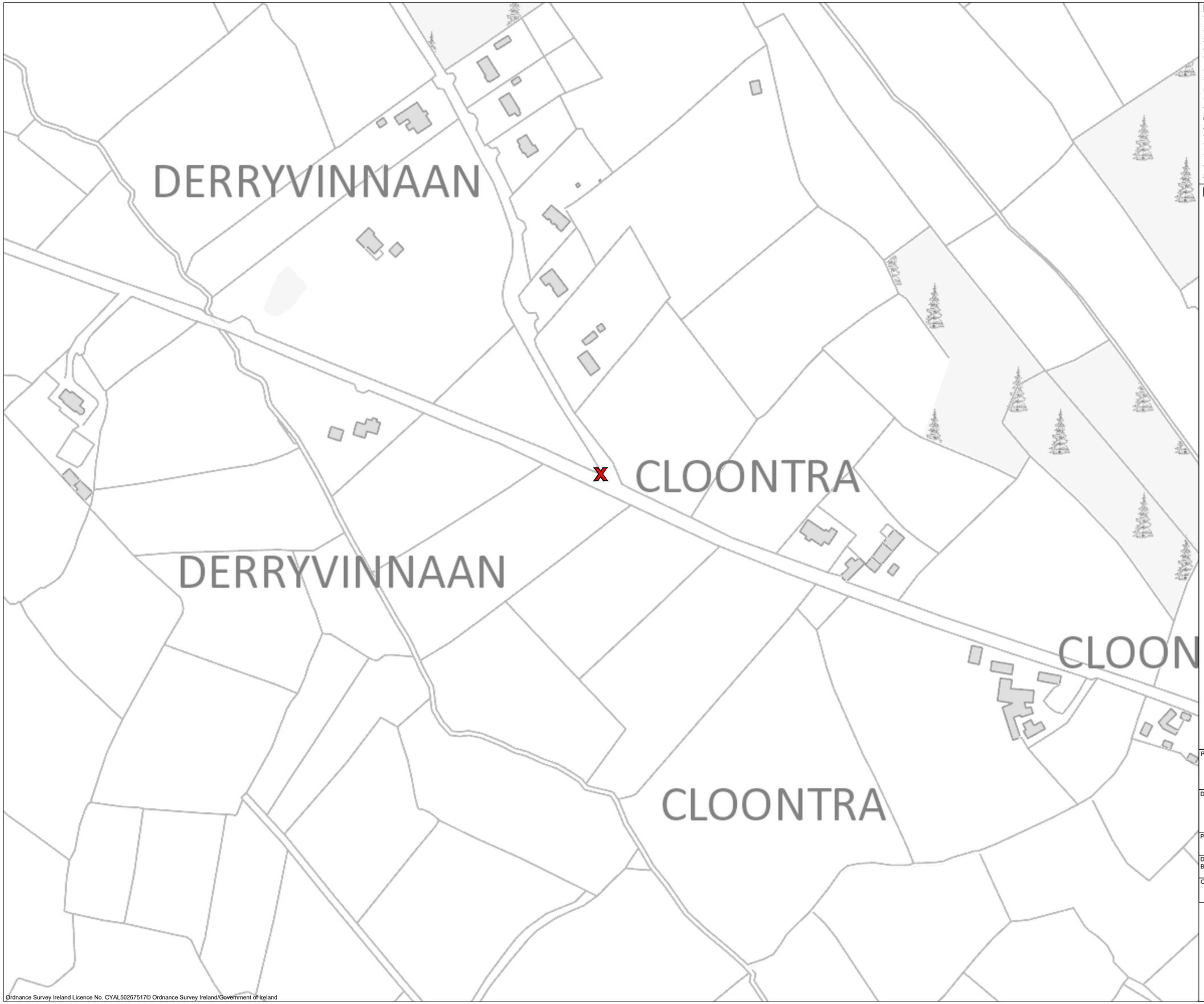
DRAWING TITLE:
Site Location Map Sheet A10

PROJECT No.:	DRAWING No.:	SCALE:
200513	**200513-02A10**	**1:2,500 @ A3**

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	**AC**	**19.08.2024**	P01

OS SHEET No.:
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

X Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Location Map Sheet A11

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513-02A11	1:2,500 @ A3
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

X Site Notice

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

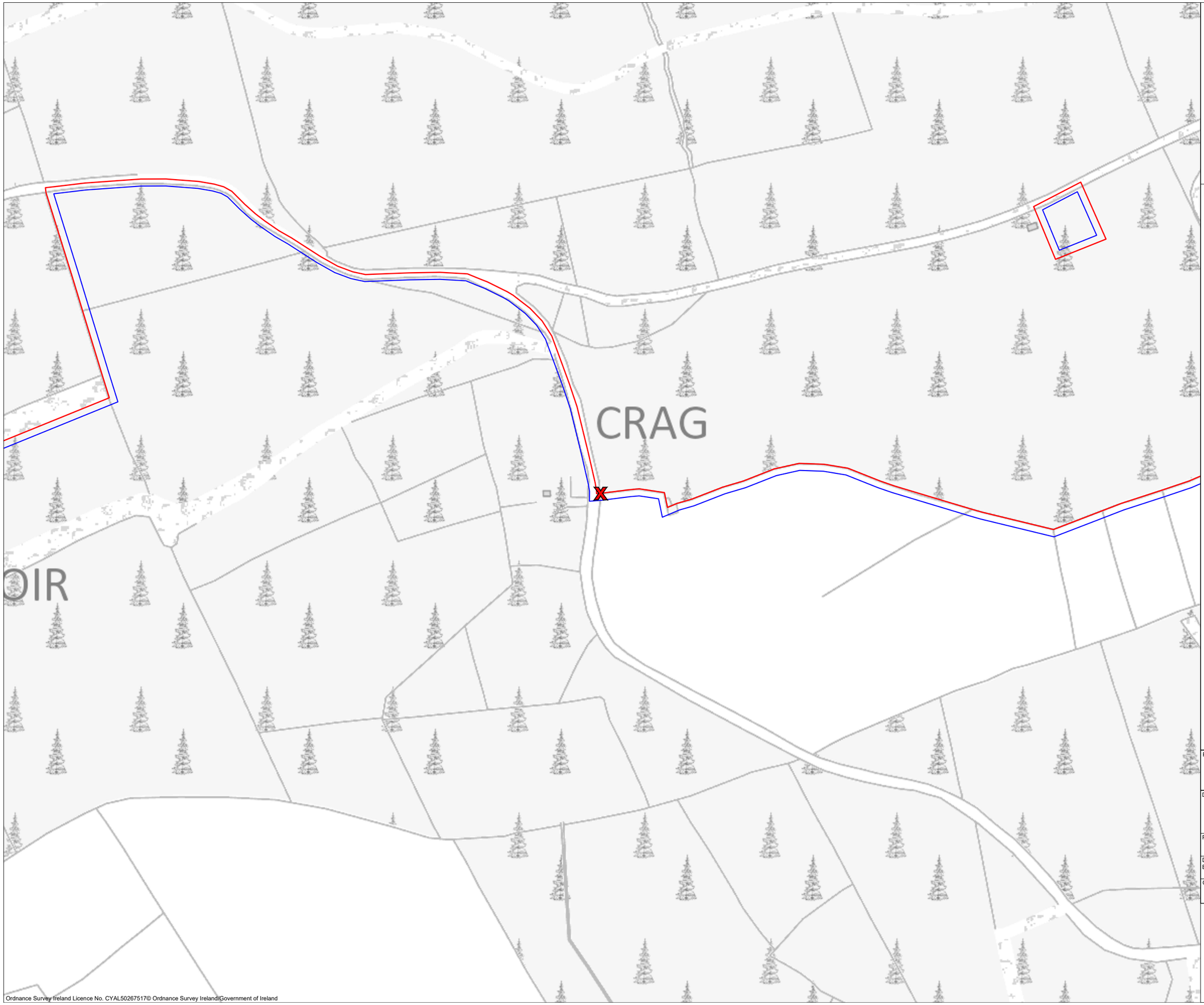
Site Location Map Sheet A12

PROJECT No.:		DRAWING No.:	SCALE:
200513		**200513-02A12**	**1:2,500 @ A3**
DRAWN BY: **KD**	CHECKED BY: **AC**	DATE: **19.08.2024**	REVISION.: P01

OS SHEET No.:

4384,4385,4386,4387,4442,4443,4444,4445, 4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

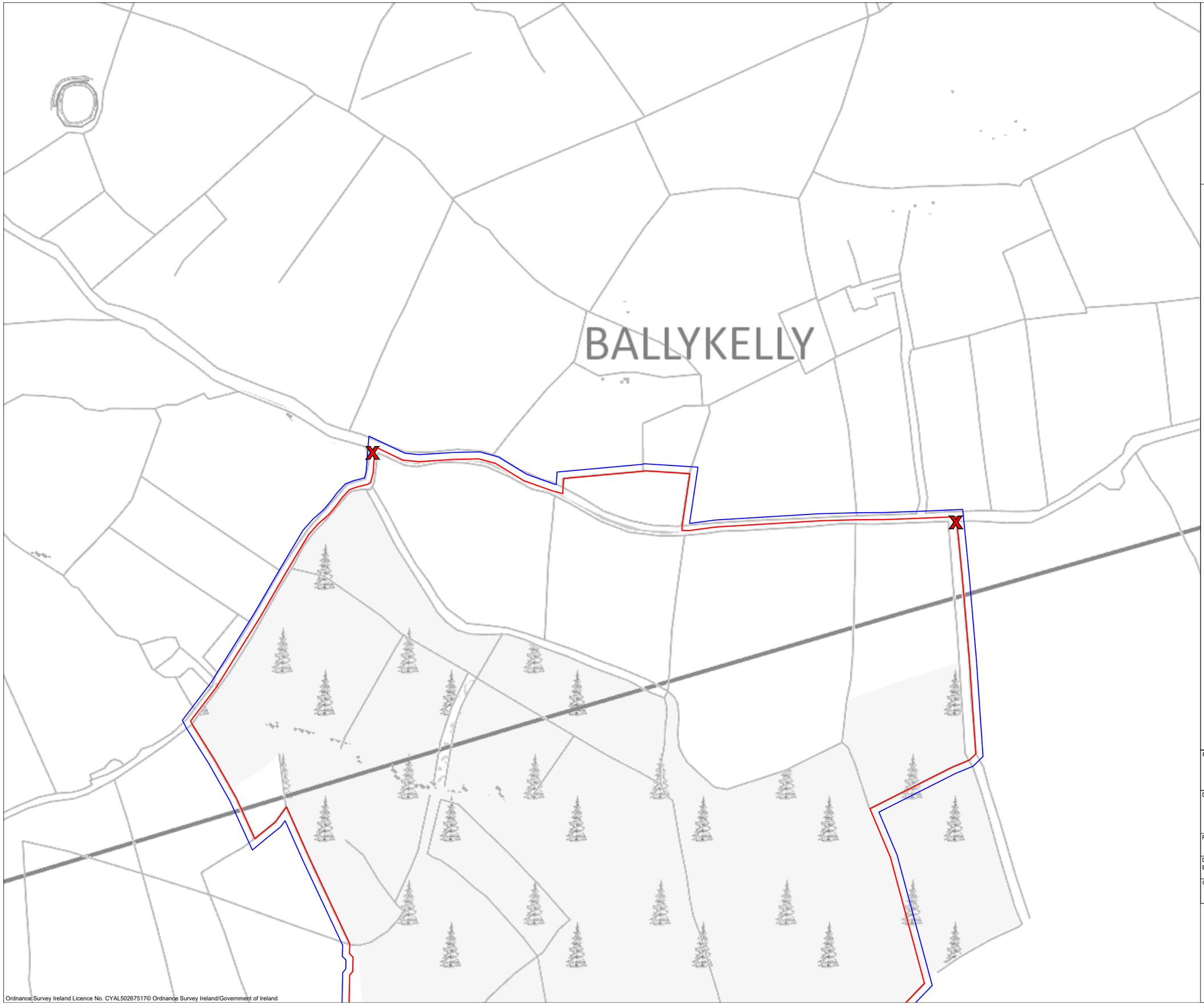
DRAWING TITLE:
Site Location Map Sheet A13

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513-02A13	1:2,500 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	EOS	21.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Location Map Sheet A14

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513-02A14	1:2,500 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Location Map Sheet A15

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513-02A15	1:2,500 @ A3
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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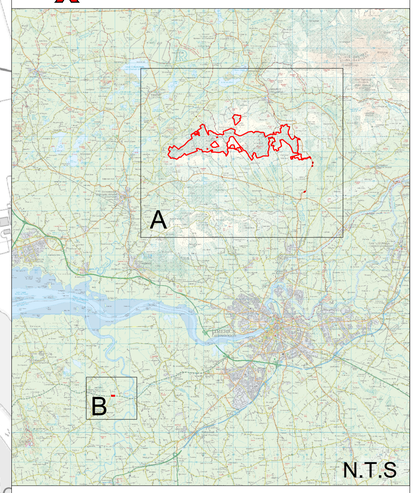
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Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- Site Notice



N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Location Map B (Site Notice Key Plan)

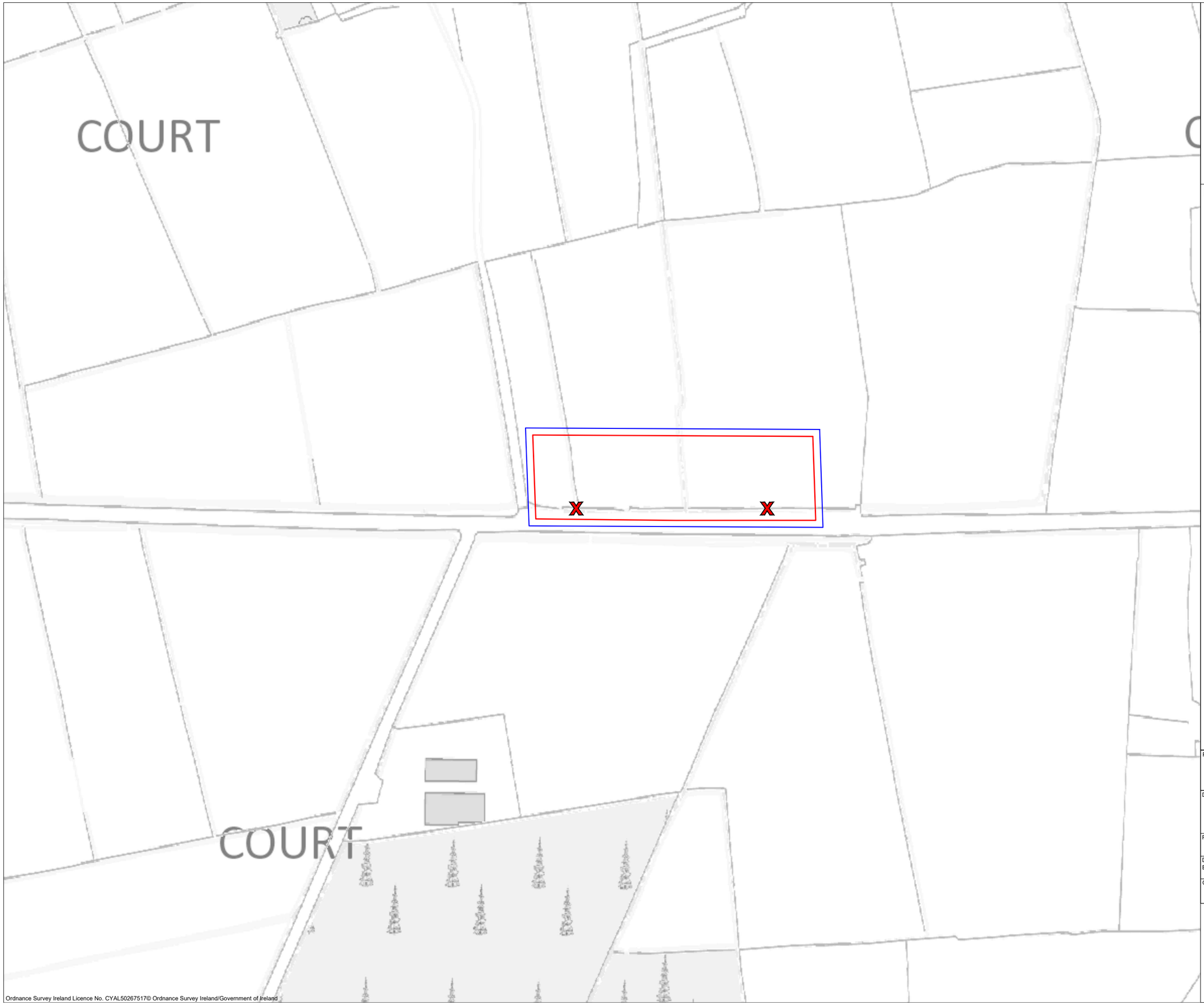
PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 02B	1:5,000 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.: 4800, 4801

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Landowners Boundary
- X Site Notice

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Location Map Sheet B1

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513-02B1	1:2,500 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4800, 4801

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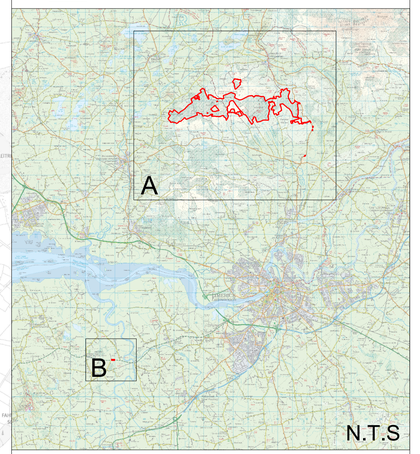
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Amenity Walking Trail
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Enhancement Area



N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout Key Plan A (1:5,000)

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 03	1:20,000 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Amenity Walking Trail
- Amenity Viewing Area
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill

T2
ITM 553422, 670076
Level = 232.5m O.D.

T1
ITM 553306, 669420
Level = 248m O.D.

Borrow Pit Refer to DWG P20-153-0600-0018 for Detail

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:5,000 Sheet A1

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 04	1:5,000 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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Temporary Construction Compound 01 Refer to DWG 200513 - 39

T3
ITM 553812, 669831
Level - 268.5m O.D.

Borrow Pit Refer to DWG P20-153-0600-0019 for Detail

T4
ITM 556212, 669444
Level - 221.5m O.D.

T5
ITM 556663, 670001
Level - 191.5m O.D.

Temporary Construction Compound 02 Refer to DWG 200513 - 40

T6
ITM 556896, 669601
Level - 180.5m O.D.

Borrow Pit Refer to DWG P20-153-0600-0021 for Detail

Borrow Pit Refer to DWG P20-153-0600-0020 for Detail

Met Mast
I.T.M. 556203, 669109
Level - 193m O.D.

T7
ITM 556727, 669042
Level - 176m O.D.

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Amenity Walking Trail
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill
- Enhancement Area

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:5,000 Sheet A2

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 05	1:5,000 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- TDR Accommodation Areas
- Cut
- Fill
- Enhancement Area

T8
ITM 558463, 669913
Level - 186m O.D.

T9
ITM 558864, 669557
Level - 196.5m O.D.

Temporary Construction Compound 03 Refer to DWG 200513 - 41

Proposed Substation Compound FFL = 197M Refer to TLI.S Drawings No 05783-DR-150 to160

Borrow Pit Refer to DWG P20-153-0600-0022 for Detail

Proposed Security Cabin Refer to DWG 200513-46

Proposed New Link Road To Facilitate The Delivery Of Large Turbine Components and Other Abnormal Loads

8896, 669601
180.5m O.D.

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:5,000 Sheet A3

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 06	1:5,000 @ A1
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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Proposed New Link Road
To Facilitate The Delivery Of
Large Turbine Components
and Other Abnormal Loads

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- TDR Accommodation Areas
- Cut
- Fill
- Enhancement Area

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:5,000 Sheet A4

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 07	1:5,000 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- TDR Accommodation Areas
- Cut
- Fill
- Enhancement Area

Temporary Construction Compound 01 Refer to DWG 200513 - 39

T5
ITM 596663, 670001
Level - 191.5m O.D.

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N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:5,000 Sheet A5

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 08	1:5,000 @ A1
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

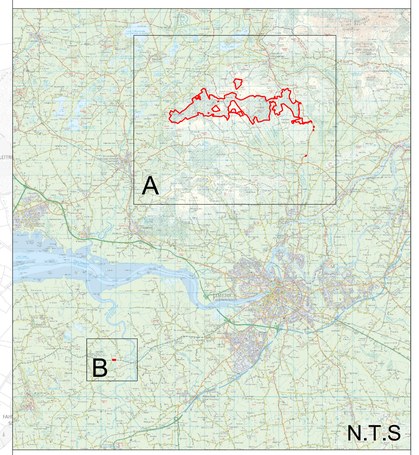
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Amenity Walking Trail
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Enhancement Area



N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout Key Plan A (1:2,500)

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 09	1:20,000 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- River/Stream

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Site Layout 1:2,500 Sheet A6

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 10	1:2,500 @ A1
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
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T1
ITM 553306, 669420
Level - 248m O.D.

Refer to DWG 200513 - 24

Borrow Pit Refer to DWG P20-153-0600-0018 for Detail

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill
- Watercourse Crossings Refer to HES Drainage Layouts Dwgs P1625-0_D101to P1625-0_D107

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:2,500 Sheet A7

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 11	1:2,500 @ A1
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Amenity Walking Trail
- Amenity Viewing Area
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill

Location of Amenity Viewing Area Refer to DWG 200513- 45 for Bench Detail

Location of Amenity Viewing Area Refer to DWG 200513- 45 for Bench Detail

Location of Amenity Viewing Area Refer to DWG 200513- 45 for Bench Detail

Refer to DWG 200513 - 25

9m

7m

11m

11m

234m

174m

25m

T2
ITM 553422, 670076
Level - 232.5m O.D.

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:2,500 Sheet A8

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 12	1:2,500 @ A1
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445, 4501,4502,4503,4504,4561,4562,4563.4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- River/Stream

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:2,500 Sheet A9

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 13	1:5,000 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill
- Watercourse Crossings Refer to HES Drainage Layouts Dwgs P1625-0_D101to P1625-0_D107
- Enhancement Area

Temporary Construction Compound 01
Refer to DWG 200513 - 39

Refer to DWG 200513 - 26

T3
ITM 559812, 669851
Level - 266.5m O.D.

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:2,500 Sheet A10

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 14	1:2,500 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445, 4501,4502,4503,4504,4561,4562,4563.4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill
- Enhancement Area

N

Refer to DWG 200513 - 28

T5
TM 556663, 670001
Level - 191.5m O.D.

T6
ITM 556896, 669601
Level - 180.5m O.D.

Refer to DWG 200513 - 29

Temporary Construction Compound 02
Refer to DWG 200513 - 40

Borrow Pit Refer to DWG P20-153-0600-0021 for Detail

Borrow Pit Refer to DWG P20-153-0600-0019 for Detail

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

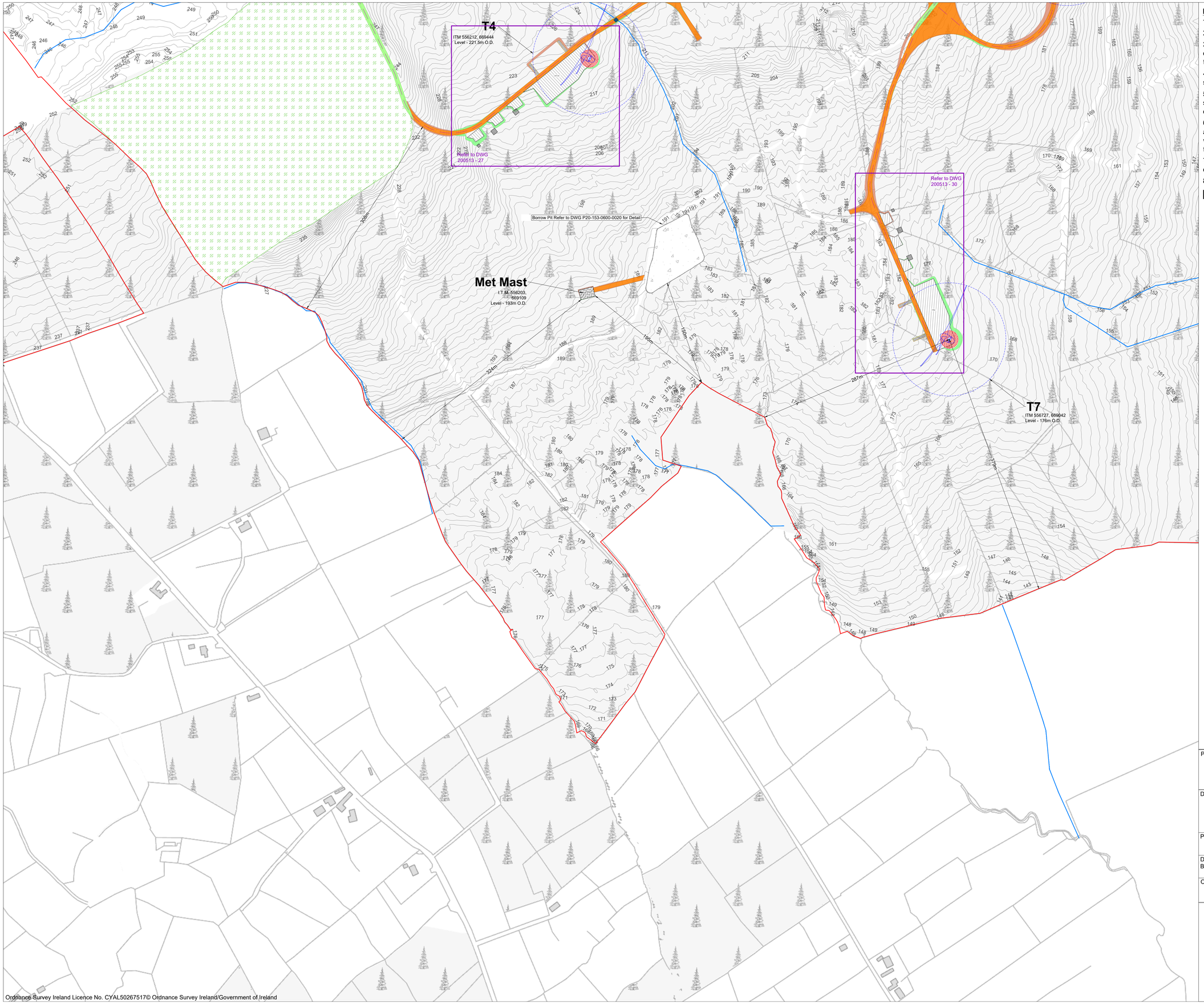
DRAWING TITLE:
Site Layout 1:2,500 Sheet A11

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 15	1:2,500 @ A1
DRAWN BY: KD	CHECKED BY: EOS	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill
- Watercourse Crossings Refer to HES Drainage Layouts Dwgs P1625-0_D101to P1625-0_D107
- Enhancement Area

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Site Layout 1:2,500 Sheet A12

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 16	1:2,500 @ A1
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:

4384,4385,4386,4387,4442,4443,4444,4445, 4501,4502,4503,4504,4561,4562,4563.4564

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Proposed Substation Compound. FFL = 197M Refer to TLLS Drawings No 05783-DR-150 to160

174m

30m

191m

119m

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill
- Enhancement Area

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:2,500 Sheet A13

PROJECT No.:		DRAWING No.:	SCALE:
200513		**200513 - 17**	**1:2,500 @ A1**
DRAWN BY: **KD**	CHECKED BY: **AC**	DATE: **19.08.2024**	REVISION.: P01

OS SHEET No.:
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill
- Watercourse Crossings Refer to HES Drainage Layouts Dwgs P1625-0_D101to P1625-0_D107
- Enhancement Area

Refer to DWG 200513-48 for Steel Gate Detail

Proposed Substation Compound .FFL = 197M Refer to TLI,S Drawings No 05783-DR-150 to160

T8
ITM 558463, 662913
Level - 186m O.D.

Refer to DWG 200513 - 31

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

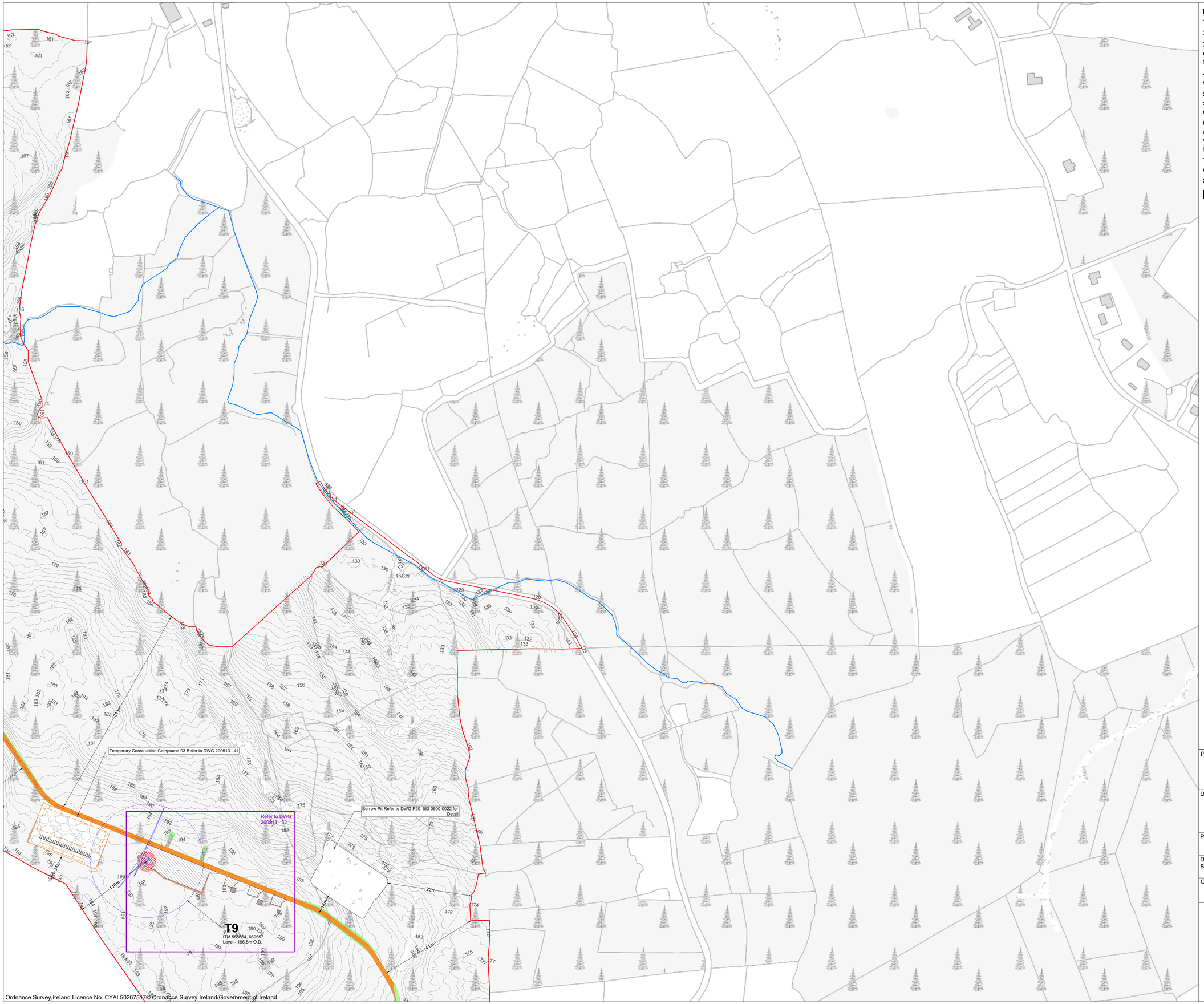
DRAWING TITLE:
Site Layout 1:2,500 Sheet A14

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 18	1:2,500 @ A1
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445, 4501,4502,4503,4504,4561,4562,4563.4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Borrow Pit
- Cut
- Fill

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:2,500 Sheet A15

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 19	1:2,500 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	EOS	19.08.2024	P01

OS SHEET No.:
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4501,4502,4503,4504,4561,4562,4563,4564

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Proposed SecurityCabin
Refer to DWG 200513-46

Location of Wheelwash
Refer to DWG 200513 - 47
for Detail

Main Construction and Operational
Phase Site Entrance Refer to DWG
200513-48 for Steel Gate Detail

Proposed New Link Road
To Facilitate The Delivery Of
Large Turbine Components
and Other Abnormal Loads

Accommodation Area To Facilitate The
Delivery Of Large Turbine Components
And Other Abnormal Loads.

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- TDR Accommodation Areas
- River/Stream
- Cut
- Fill
- Watercourse Crossings Refer to HES Drainage Layouts Dwgs P1625-0_D101to P1625-0_D107
- Enhancement Area

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:2,500 Sheet A16

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 20	1:2,500 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	21.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563,4564

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Main Construction and Operational Phase Site Entrance Refer to DWG 200513-48 for Steel Gate Detail

Location of Wheelwash Refer to DWG 200513 - 47 for Detail

Proposed New Link Road To Facilitate The Delivery Of Large Turbine Components and Other Abnormal Loads

Accommodation Area To Facilitate The Delivery Of Large Turbine Components And Other Abnormal Loads.

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Proposed Road
- TDR Accommodation Areas
- Cut
- Fill
- Enhancement Area

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Site Layout 1:2,500 Sheet A17

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 21	1:2,500 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	21.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563.4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- TDR Accommodation Areas

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Site Layout 1:2,500 Sheet A18

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 22	1:2,500 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	21.08.2024	P01

OS SHEET No.:

4384,4385,4386,4387,4442,4443,4444,4445, 4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

Planning Application Boundary

Enhancement Area

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Site Layout 1:2,500 Sheet A19

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 23	1:2,500 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563.4564

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Temporary Transition Compound Refer to DWG 200513 - 42

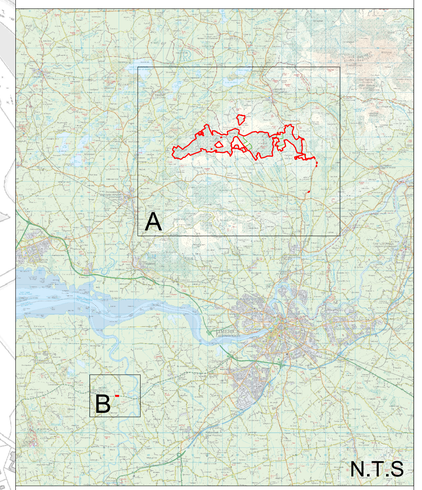
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

Planning Application Boundary



N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

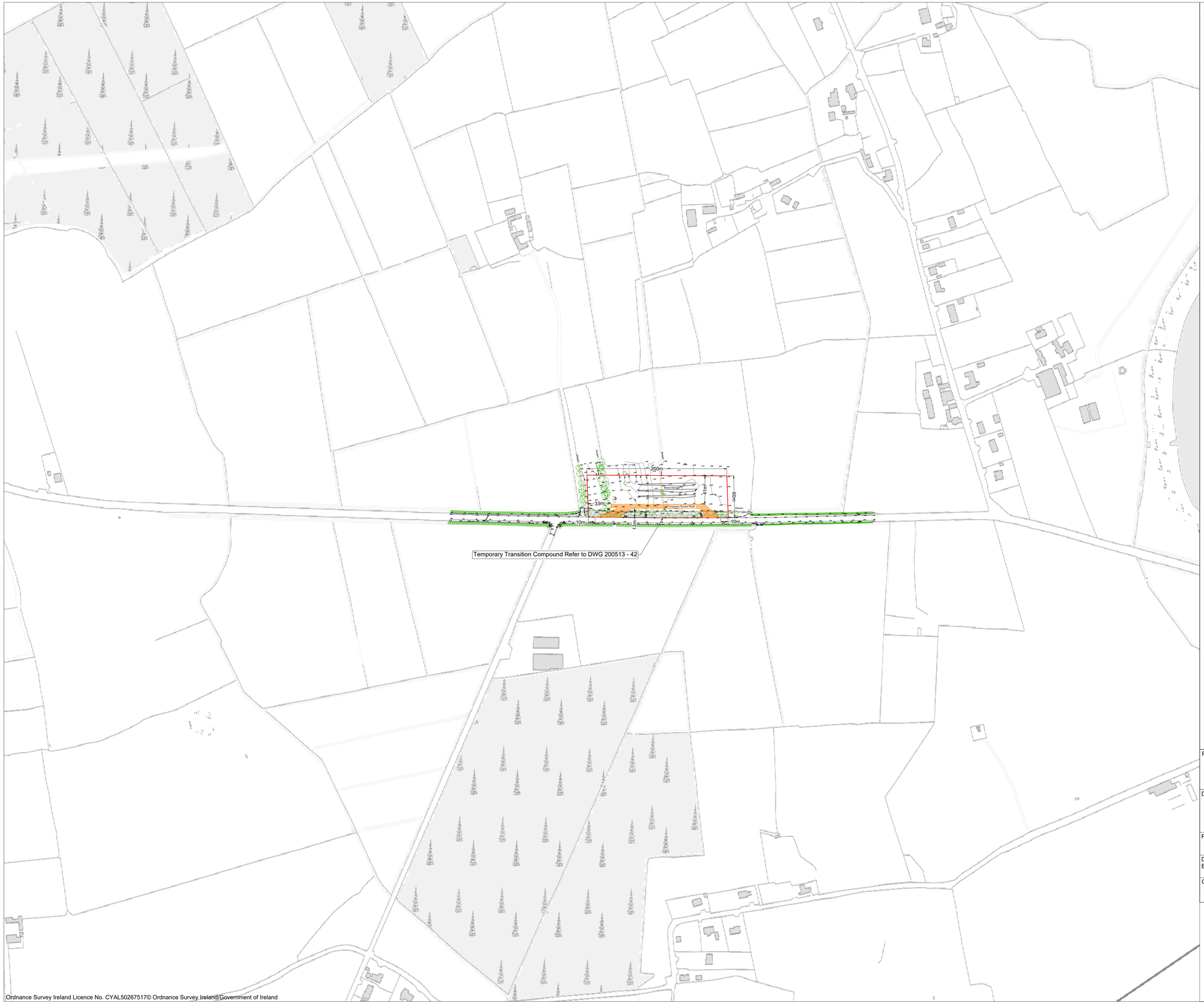
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Site Layout Plan B (1:5,000)

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 24	1:5,000 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

Planning Application Boundary

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

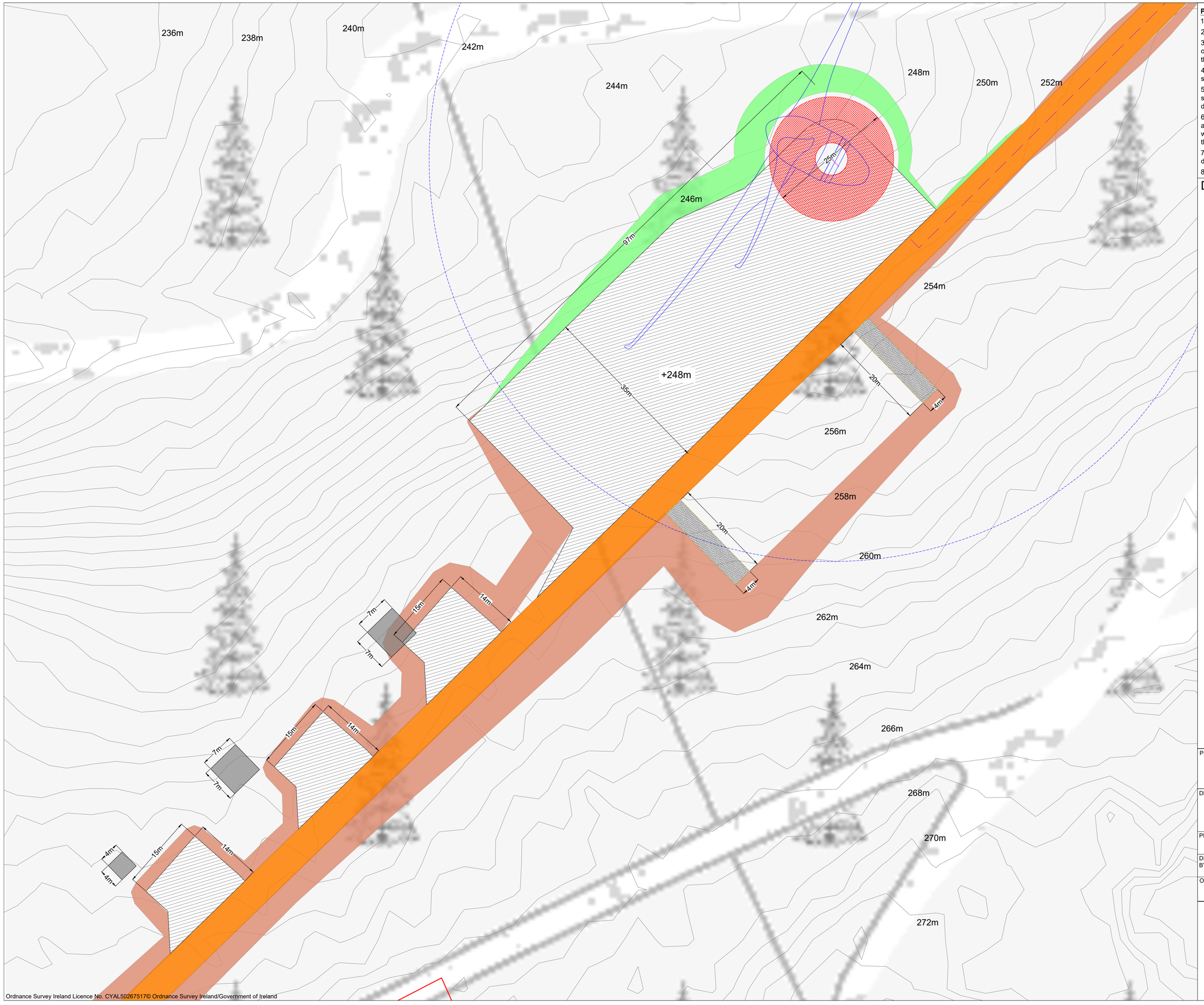
DRAWING TITLE:
Site Layout Plan B (1:2,500)

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 25	1:2,500 @ A1

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	21.08.2024	P01

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- Boom Support
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Cut
- Fill

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Turbine 1 Layout

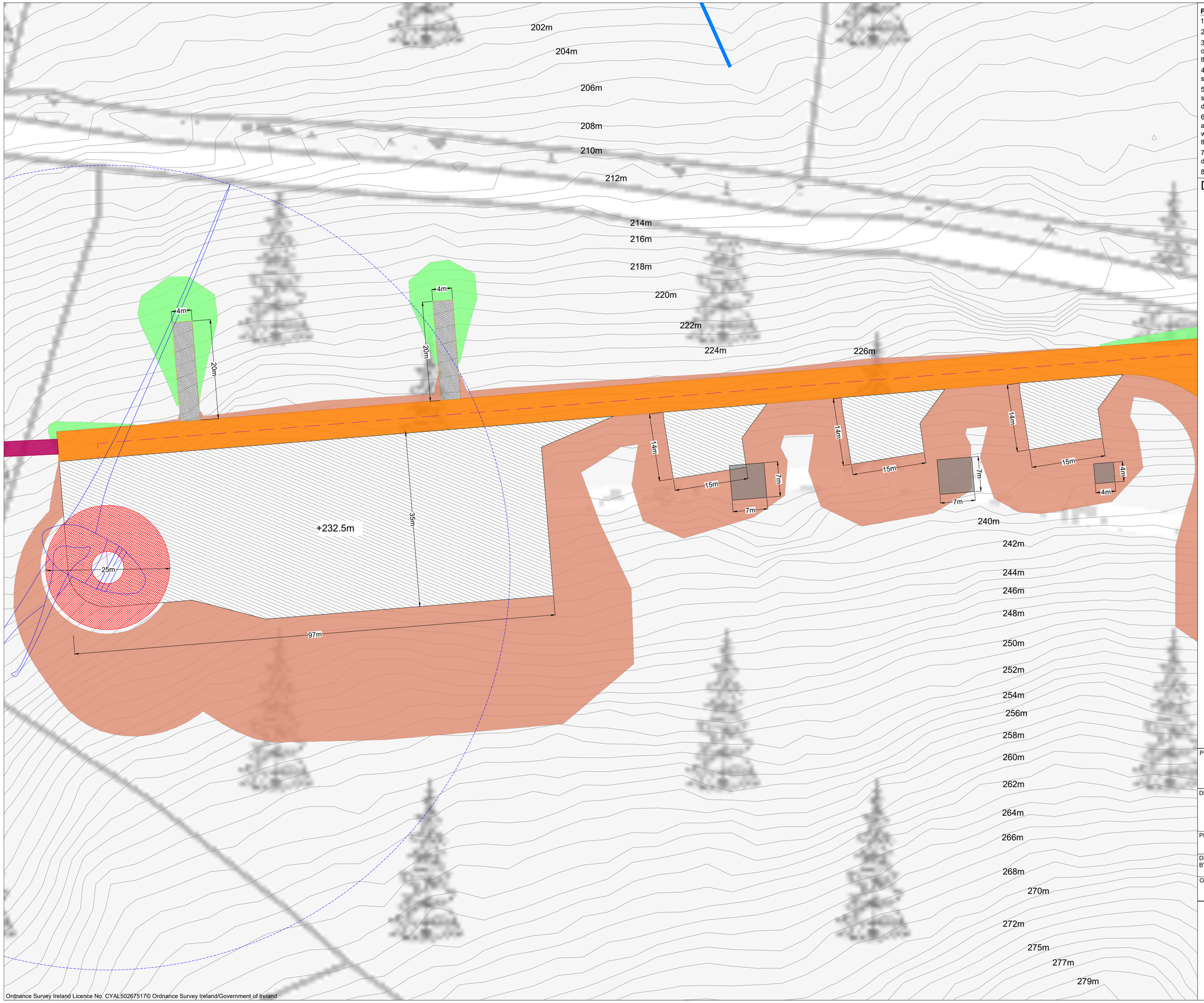
PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 26	1:500 @ A2

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Amenity Walking Trail
- Electrical Cable Trench
- River/Stream
- Boom Support
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Cut
- Fill

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

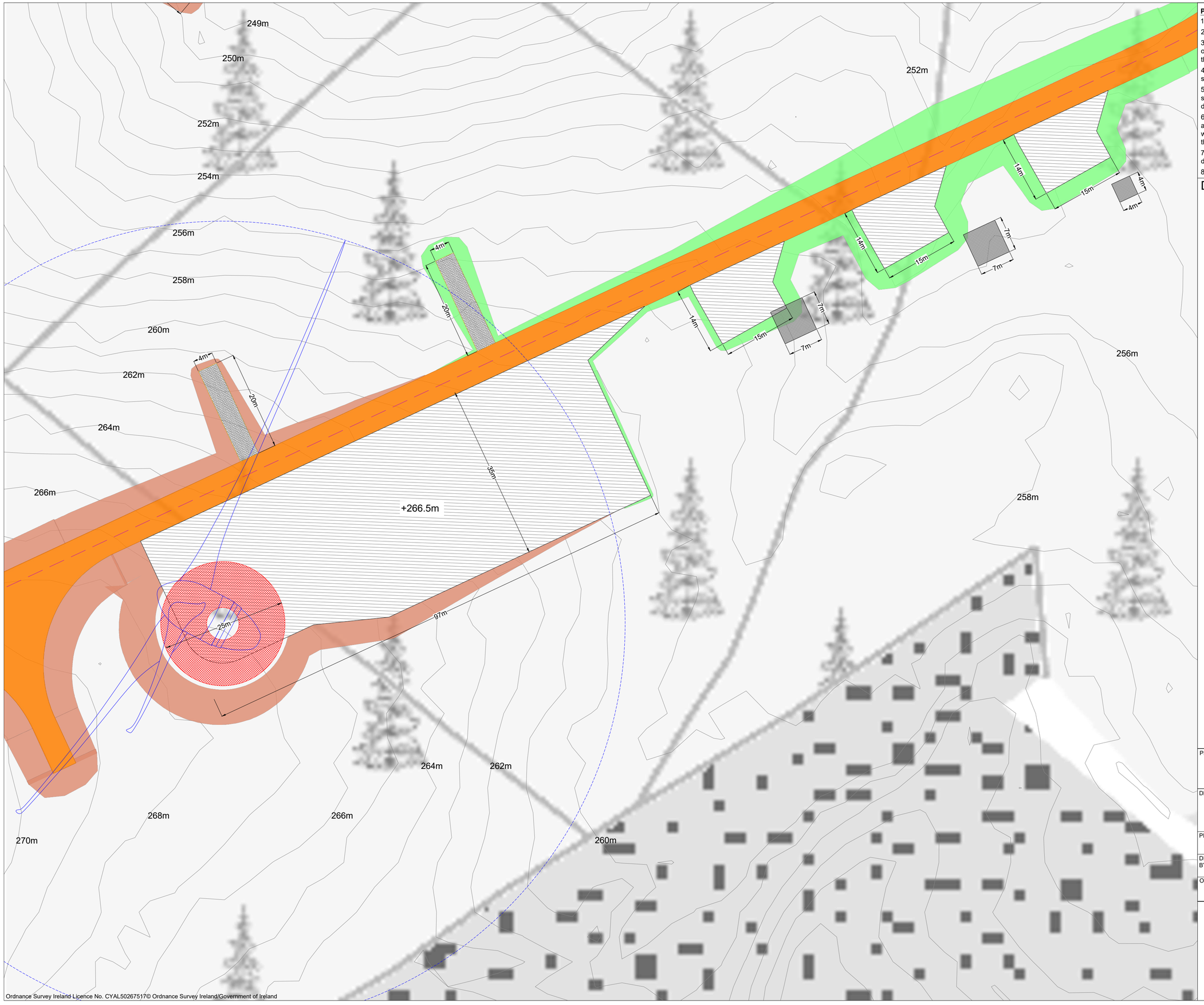
DRAWING TITLE:
Turbine 2 Layout

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 27	1:500 @ A2

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Boom Support
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Cut
- Fill

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Turbine 3 Layout

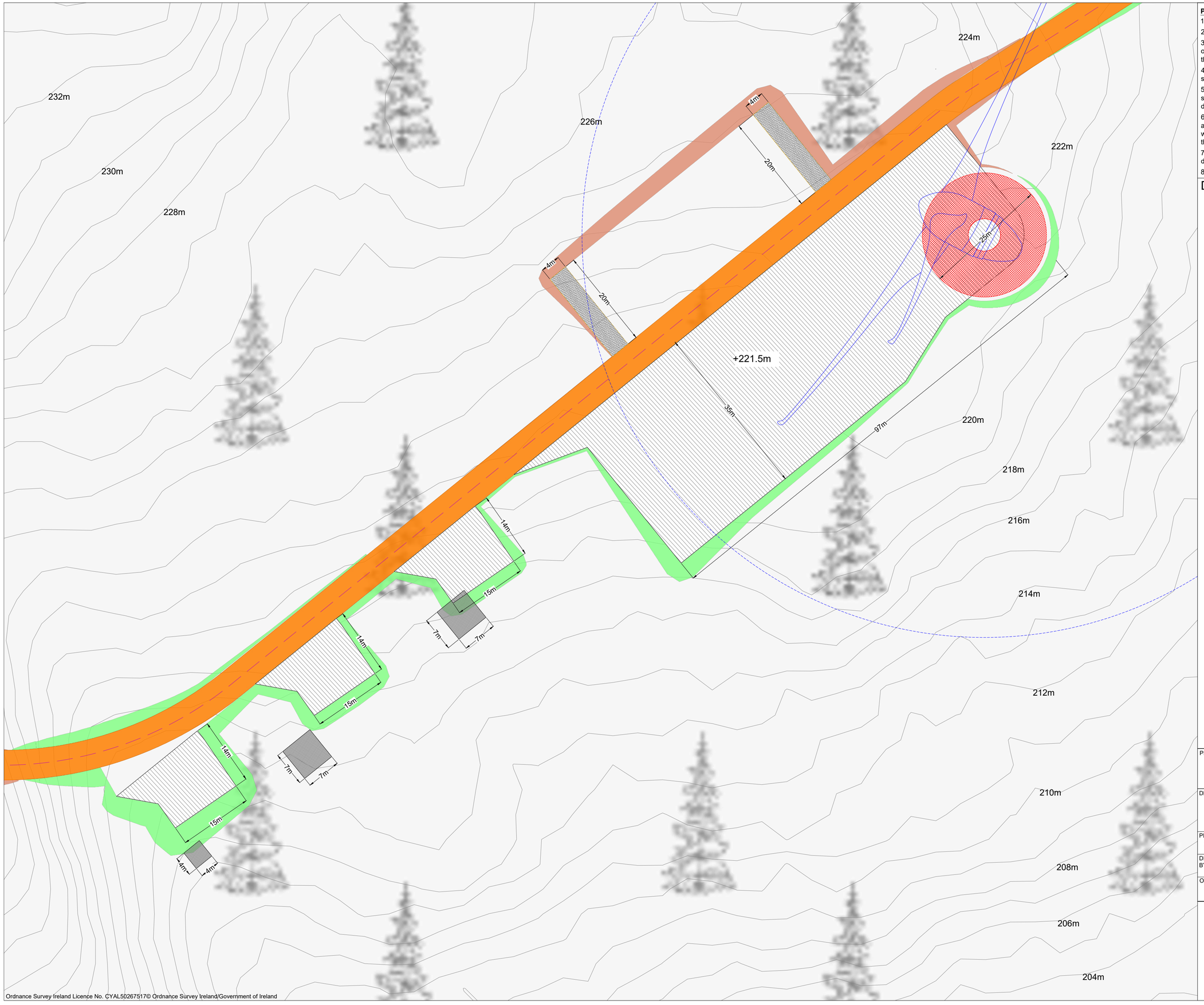
PROJECT No.:	DRAWING No.:	SCALE:
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DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Boom Support
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Cut
- Fill

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Turbine 4 Layout

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 29	1:500 @ A2
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.:

4384,4385,4386,4387,4442,4443,4444,4445,
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Boom Support
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Cut
- Fill

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Turbine 5 Layout

PROJECT No.:		DRAWING No.:	SCALE:
200513		200513 - 30	1:500 @ A2
DRAWN BY: KD	CHECKED BY: AC	DATE: 19.08.2024	REVISION.: P01

OS SHEET No.: 4384,4385,4386,4387,4442,4443,4444,4445, 4501,4502,4503,4504,4561,4562,4563.4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Boom Support
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Cut
- Fill

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Turbine 6 Layout

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 31	1:500 @ A2

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Boom Support
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Cut
- Fill

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Turbine 7 Layout

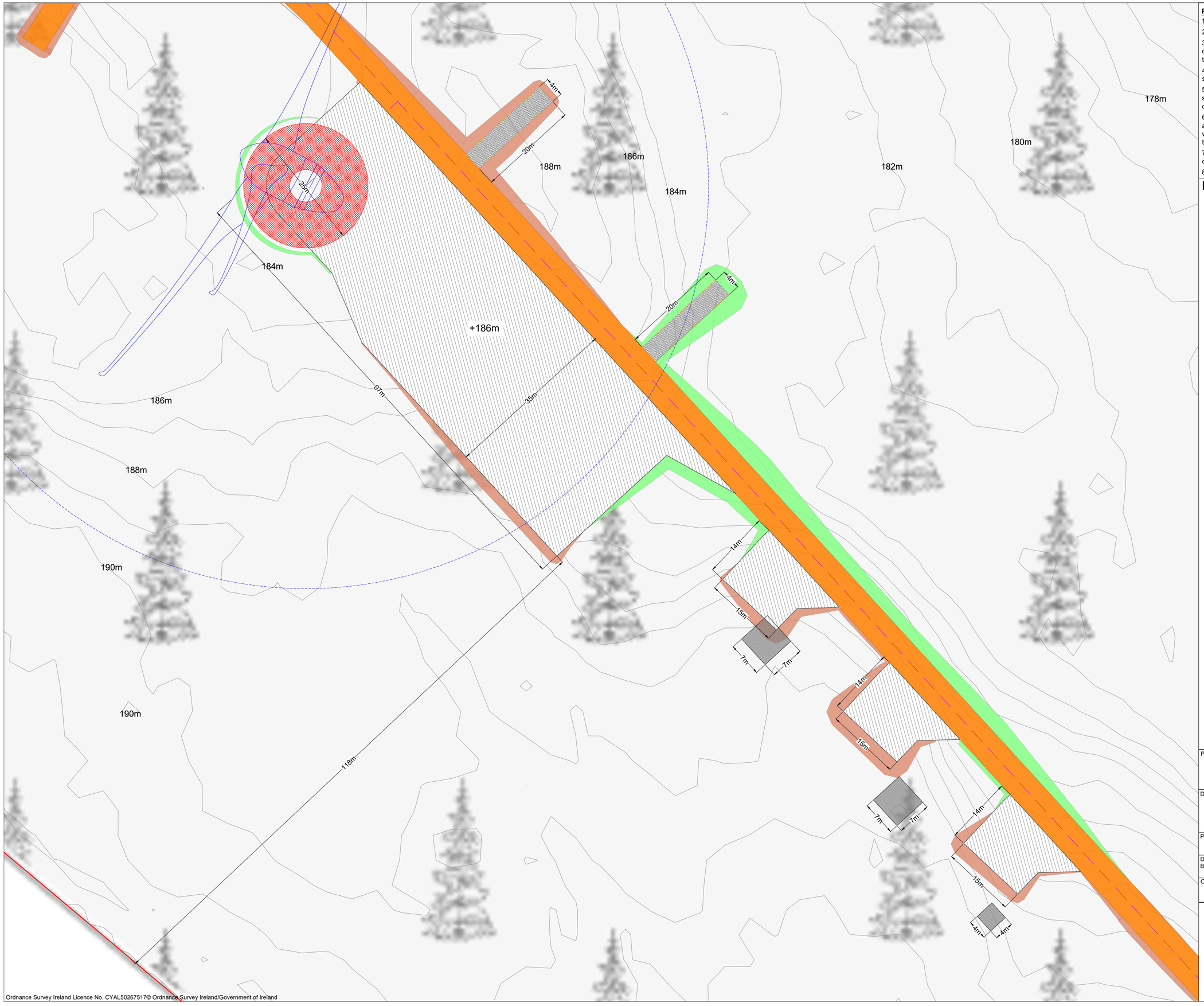
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DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Boom Support
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Cut
- Fill

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Turbine 8 Layout

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 33	1:500 @ A2

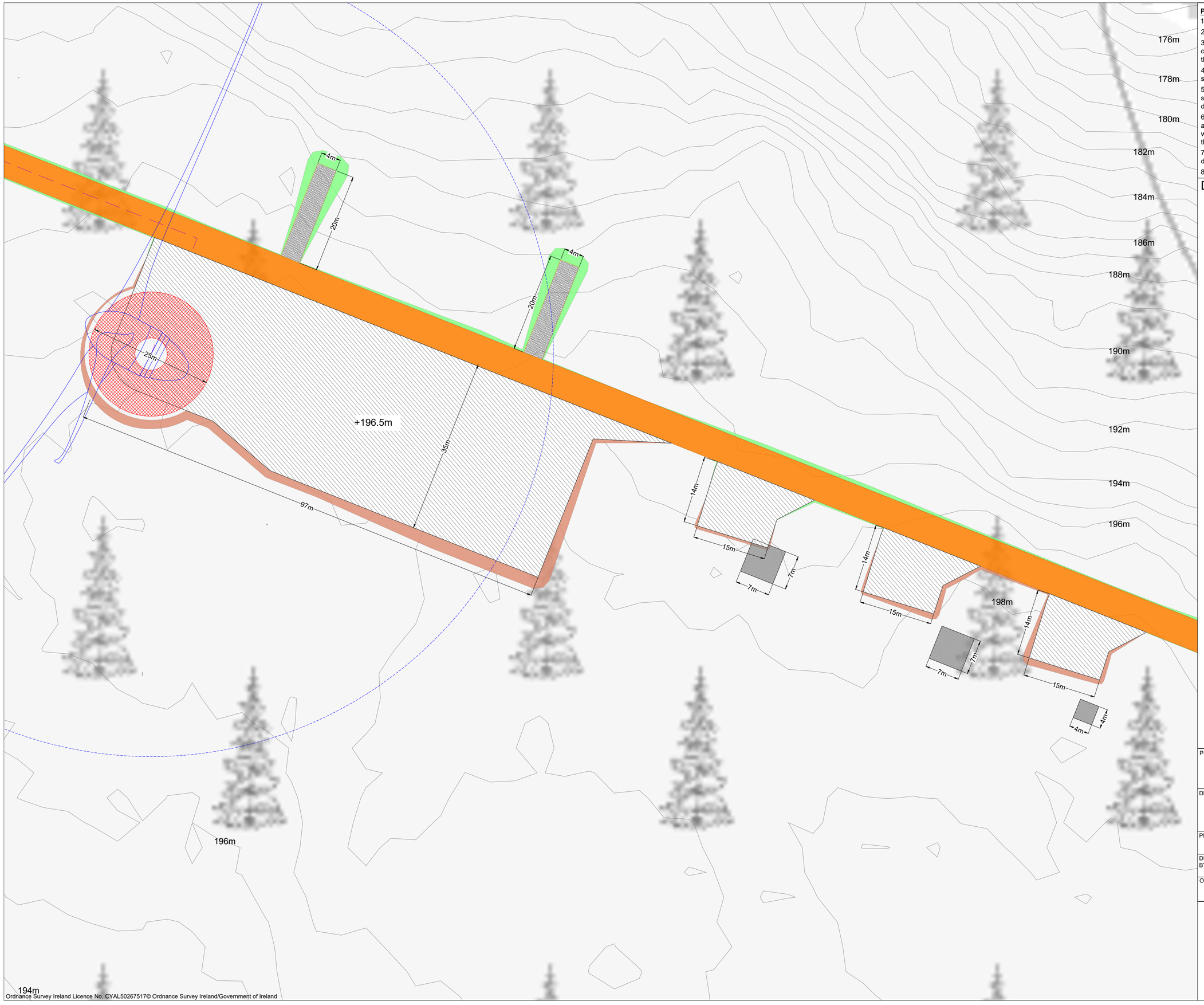
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KD	AC	19.08.2024	P01

OS SHEET No.:

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- River/Stream
- Boom Support
- Soft Levelled Area
- Hardstand
- Turbine Foundation
- Turbine Sweep Area
- Cut
- Fill

N

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Turbine 9 Layout

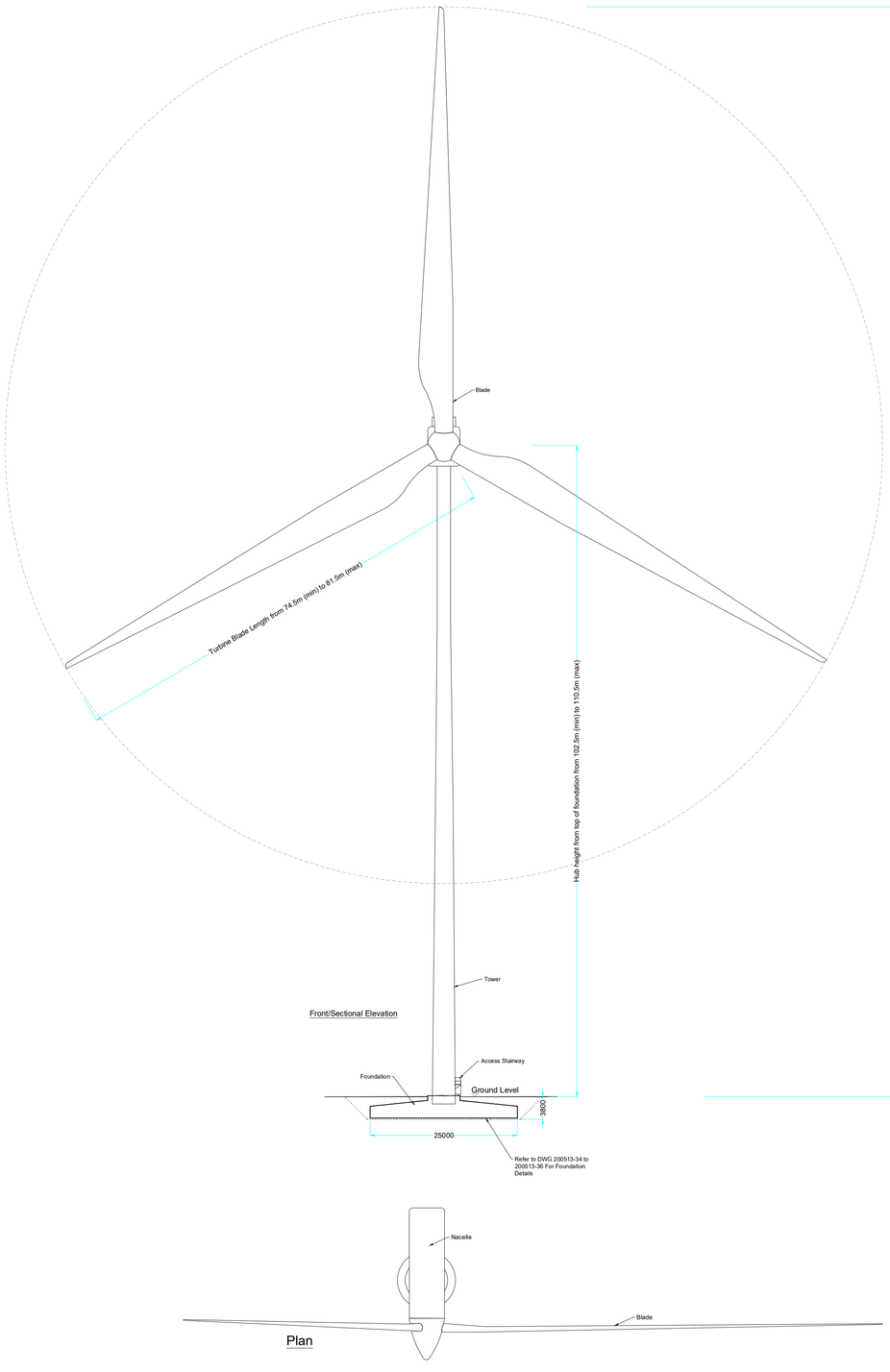
PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 34	1:500 @ A2

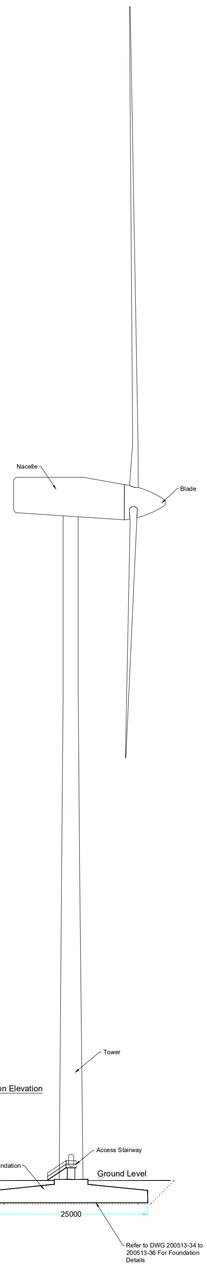
DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:

4384,4385,4386,4387,4442,4443,4444,4445,
4501,4502,4503,4504,4561,4562,4563.4564

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Drawing Notes

1. Proposed wind turbines to have a maximum ground to blade tip height of up to 185m.
2. Exact make and model of the turbine to be dictated by a competitive tender process.
3. Ground level represents the top of turbine foundation.

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

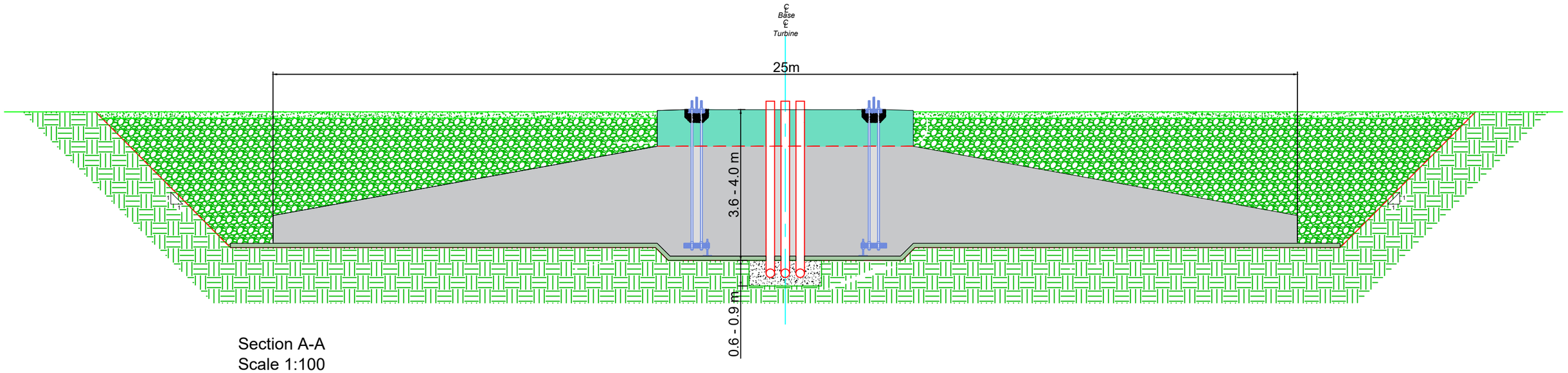
DRAWING TITLE:
Wind Turbine Elevations & Plan

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 35	1:500 @ A1

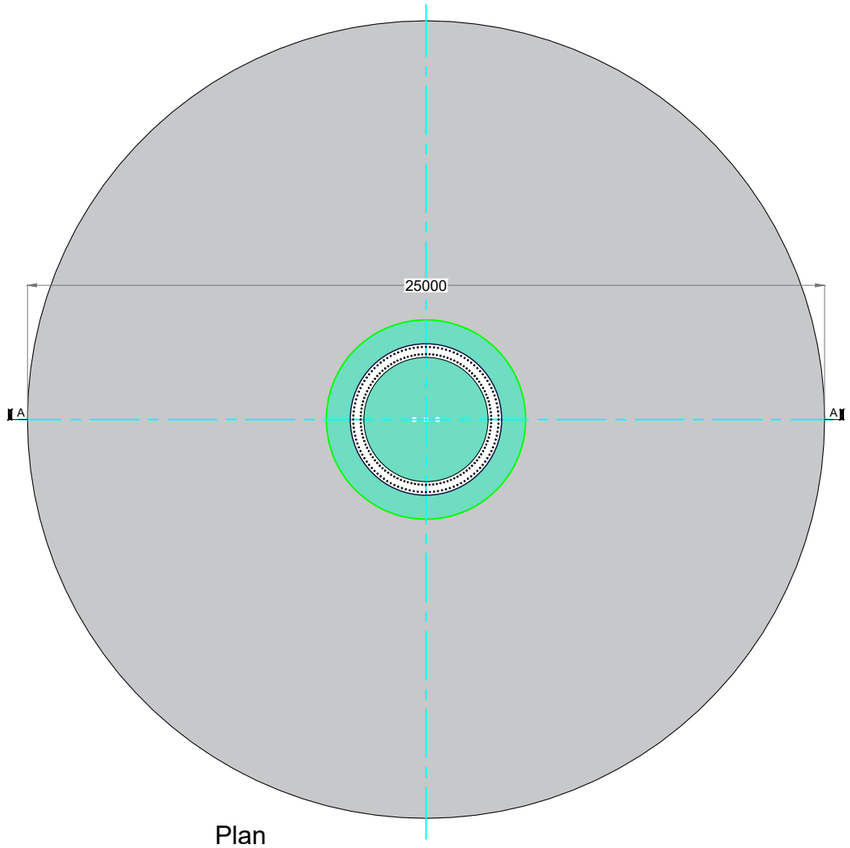
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KD	AC	13.08.2024	P01

OS SHEET No.:

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Section A-A
Scale 1:100



Plan
Scale: 1:200

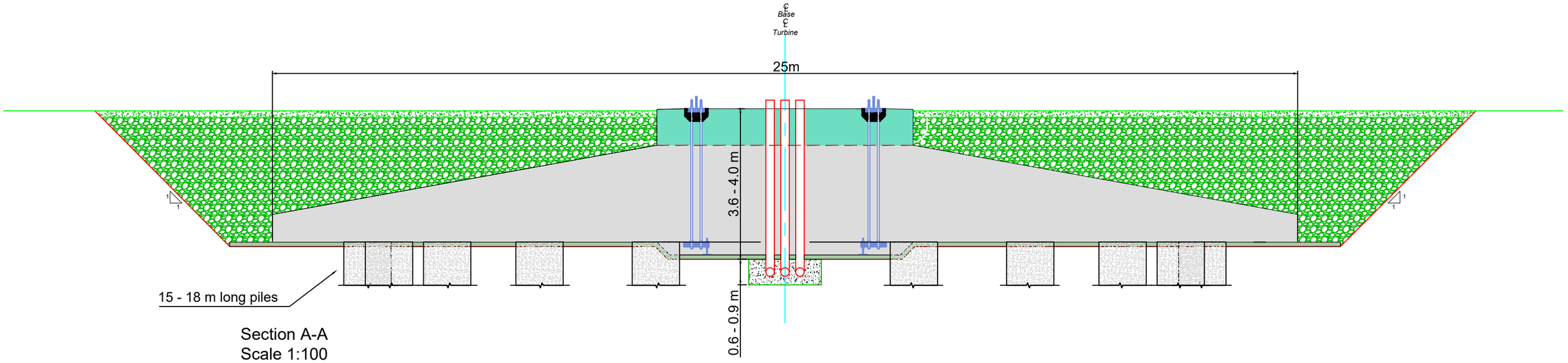
PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Gravity Foundation Details

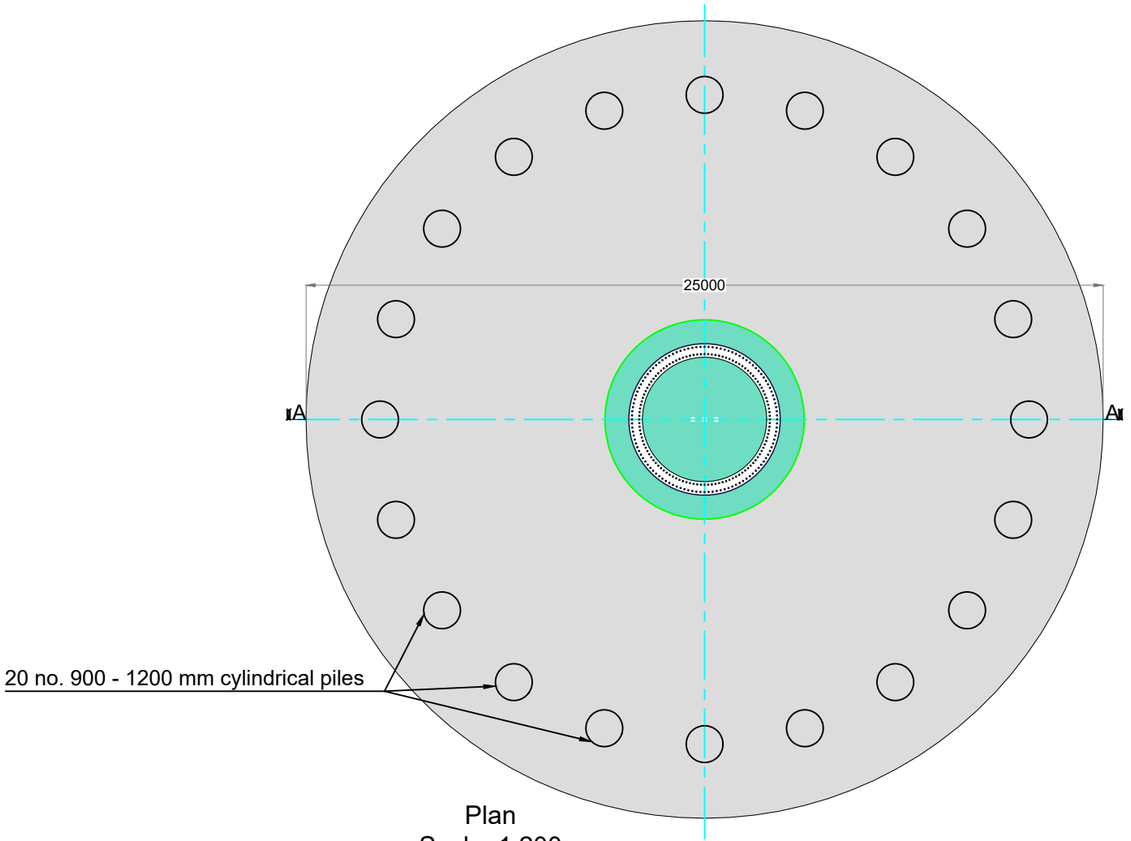
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200513	200513 - 36	As Shown @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	13.08.2024	P01

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Section A-A
Scale 1:100



Plan
Scale: 1:200

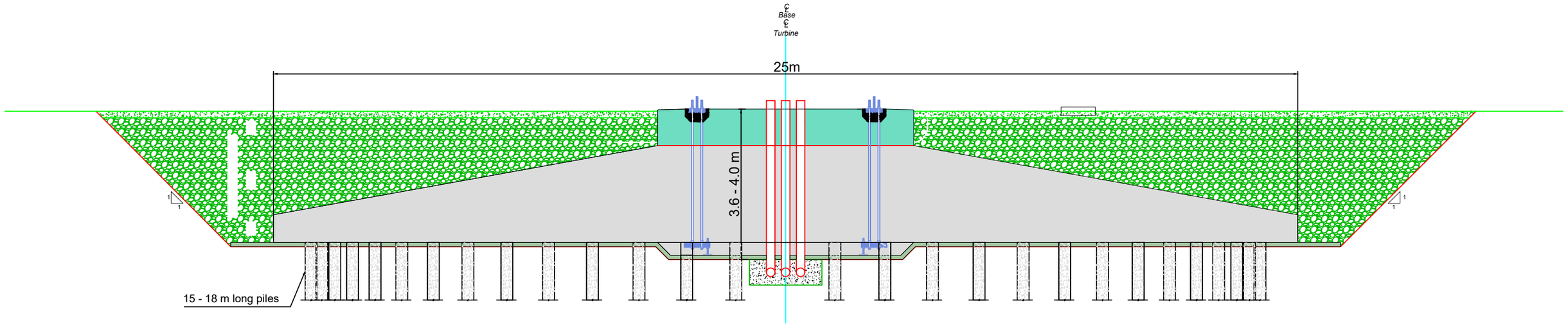
PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Bored Pile Foundation Details

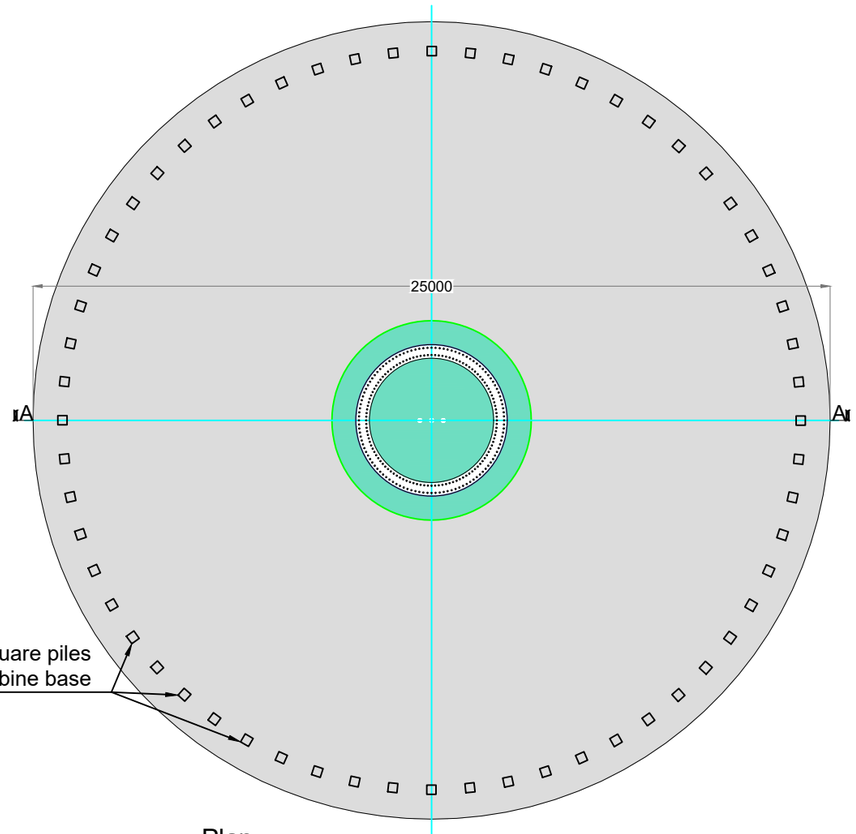
PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 37	As Shown @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	13.08.2024	P01

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Section A-A
Scale 1:100



50 - 70 no. 300 x 300 mm square piles
Spaced evenly around the perimeter of the turbine base

Plan
Scale: 1:200

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Driven Pile Foundation Details

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 38	As Shown @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	13.08.2024	P01

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Amenity Walking Trail
- Electrical Cable Trench
- Cut
- Fill

Site Construction Compound

Turbine Component / Material Storage
Temporary Parking Area
Staff & Visitor Car Parking
Site Offices & Staff Welfare Facilities

244m
245m
246m
247m
249m
248m
252m
250m
251m
253m
254m
255m
256m
242m
243m
249m
250m
252m

45m
68m
246m
246m
7m
1m

For Site Office and Staff Facilities Details Refer to DWG 211016-46

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Temporary Construction Compound 01

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 39	1:500 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- Borrow Pit
- Cut
- Fill

190m
191m
192m
193m
194m
195m
196m
197m
198m
199m
200m
201m
202m
203m
204m
205m
206m
207m
208m
209m
210m
211m
212m

45m
68m
13m
203m
203m

Site Construction Compound

Site Offices & Staff Welfare Facilities
Staff & Visitor Car Parking
Turbine Component / Material Storage
Temporary Parking Area

For Site Office and Staff Facilities Details Refer to DWG 211016-46

Borrow Pit

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Temporary Construction Compound 02

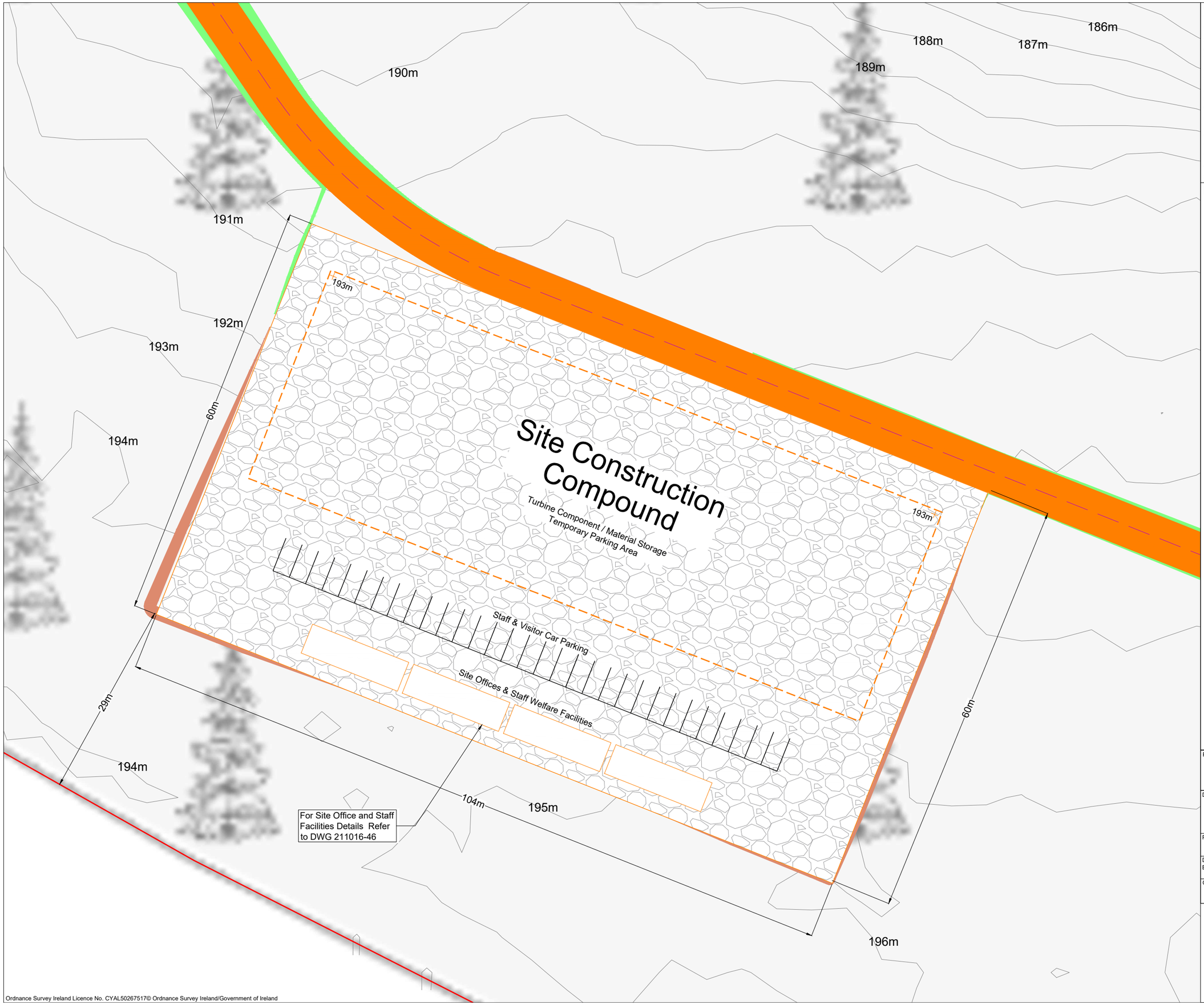
PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 40	1:500 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

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4501,4502,4503,4504,4561,4562,4563,4564

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7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

- Planning Application Boundary
- Existing Road to be Upgraded
- Proposed Road
- Electrical Cable Trench
- Cut
- Fill

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

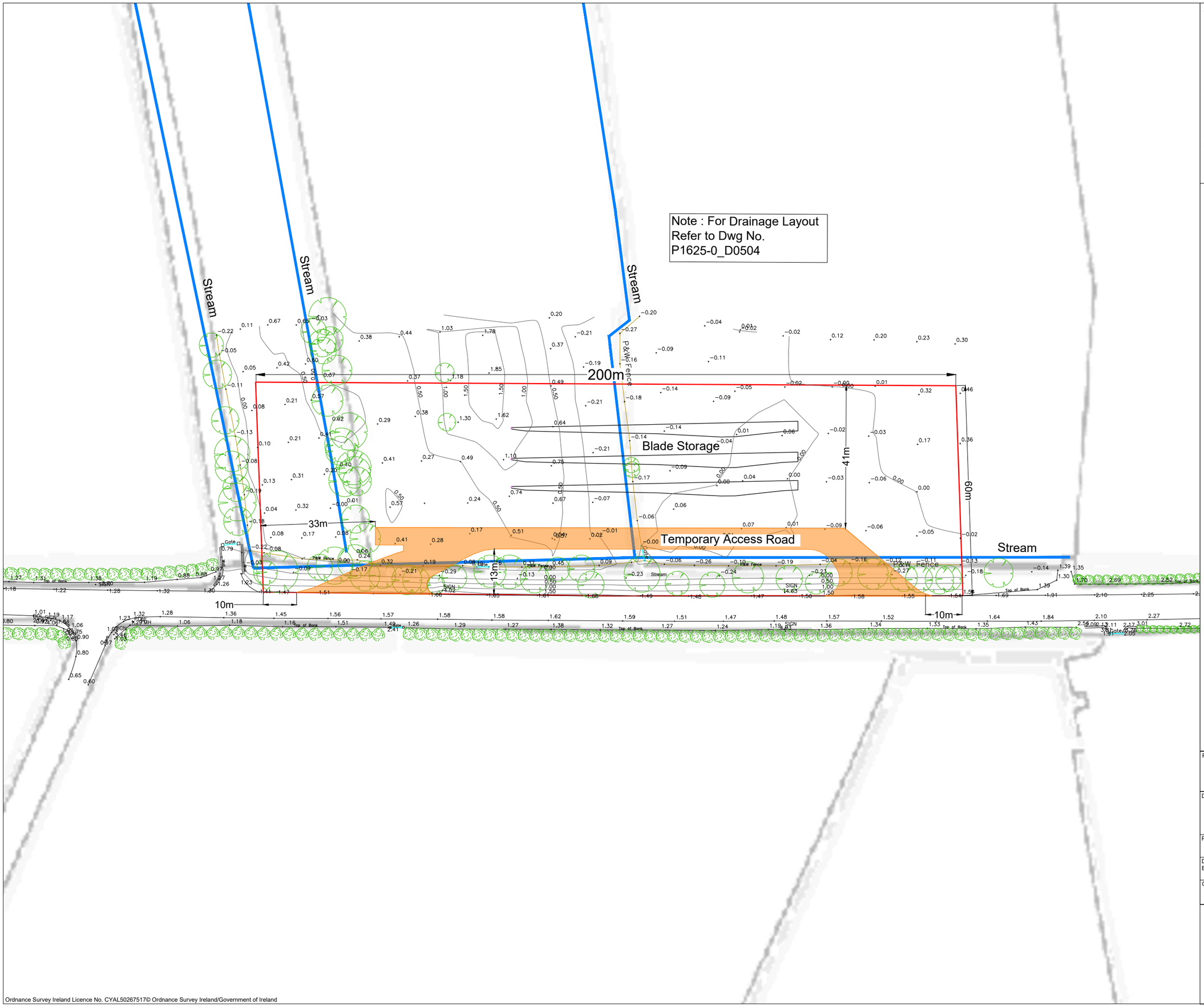
DRAWING TITLE:
Temporary Construction Compound 03

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 41	1:500 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

OS SHEET No.:
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6. The use of or reliance upon this drawing shall be deemed to be acceptance of these conditions of use unless otherwise agreed in writing, such written agreement to be sought from and issued by the copyright holder to the use or reliance upon this drawing.
7. Layout plans show typical Turbine rotor diameter as per turbine drawing.
8. Final levels may vary depending on local ground conditions.

Drawing Legend

Planning Application Boundary

N

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

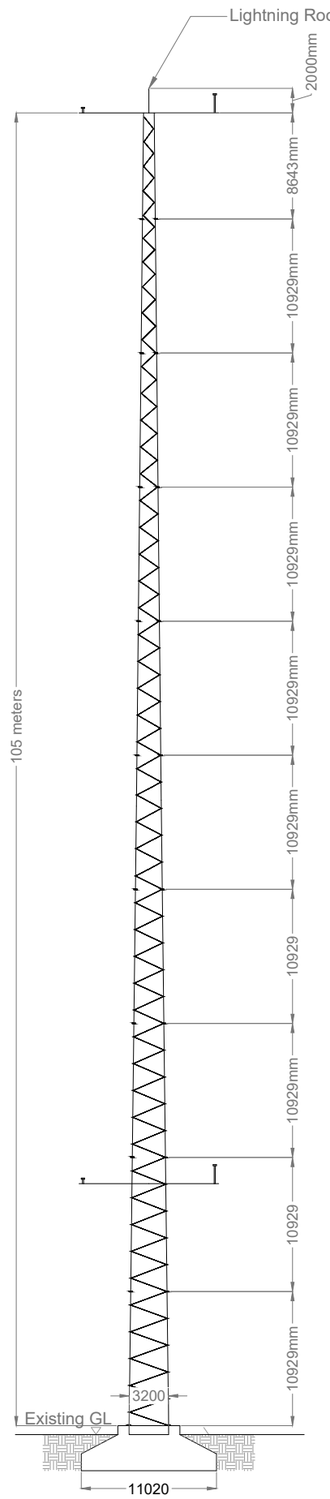
DRAWING TITLE:
Temporary Transition Compound

PROJECT No.:	DRAWING No.:	SCALE:
200513	**200513 - 42**	**1:1,000 @ A3**

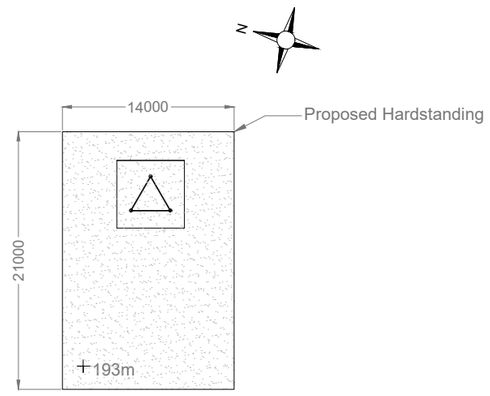
DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	**AC**	**21.08.2024**	P01

OS SHEET No.:
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4501,4502,4503,4504,4561,4562,4563,4564

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Met Mast Elevation
1:500



Met Mast Compound Plan
1:500

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

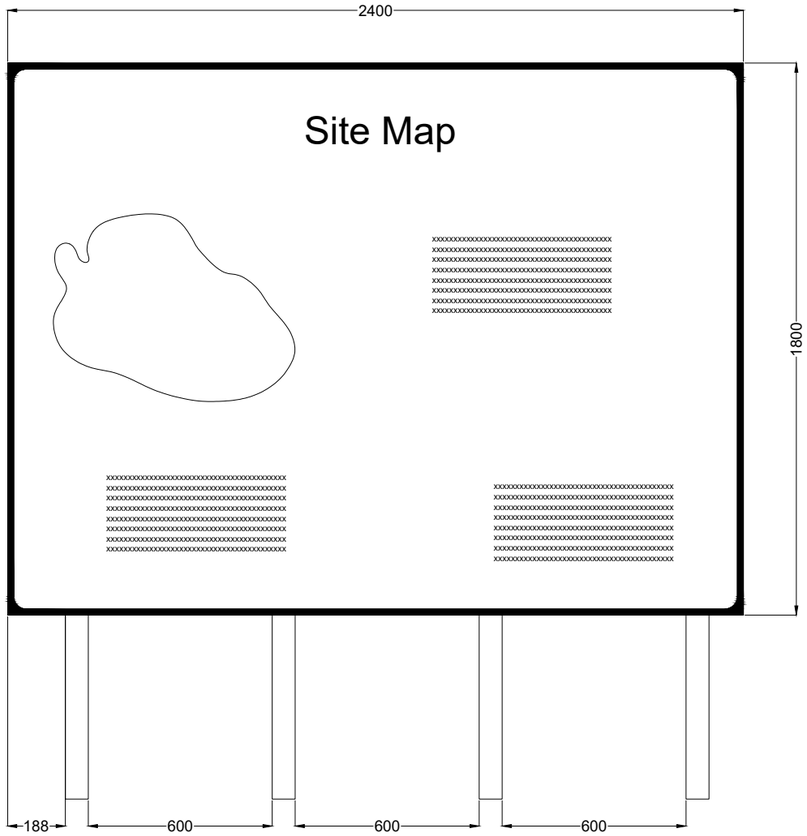
DRAWING TITLE:
Free Standing Met Mast

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513-43	1:500 @ A3

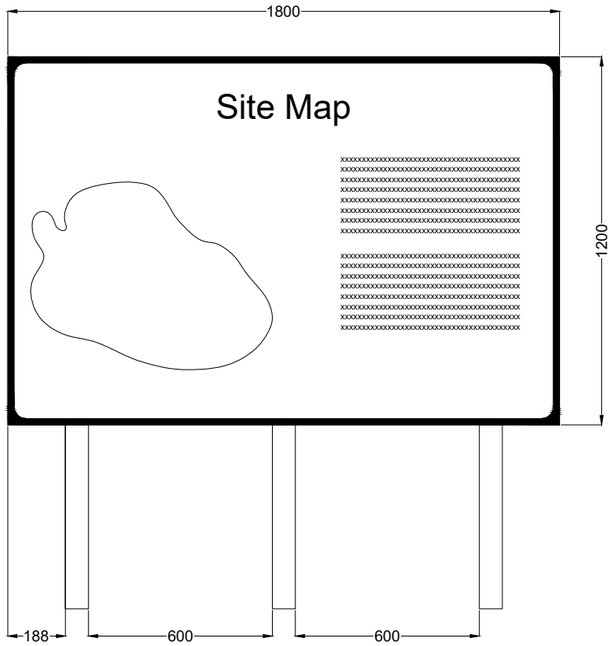
DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	13.08.2024	P01

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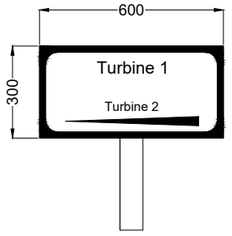
Note
For illustrative purposes only
exact details to be confirmed



Signage Type A - Waypoint Map Signage



Signage Type B -Entry Point Signage

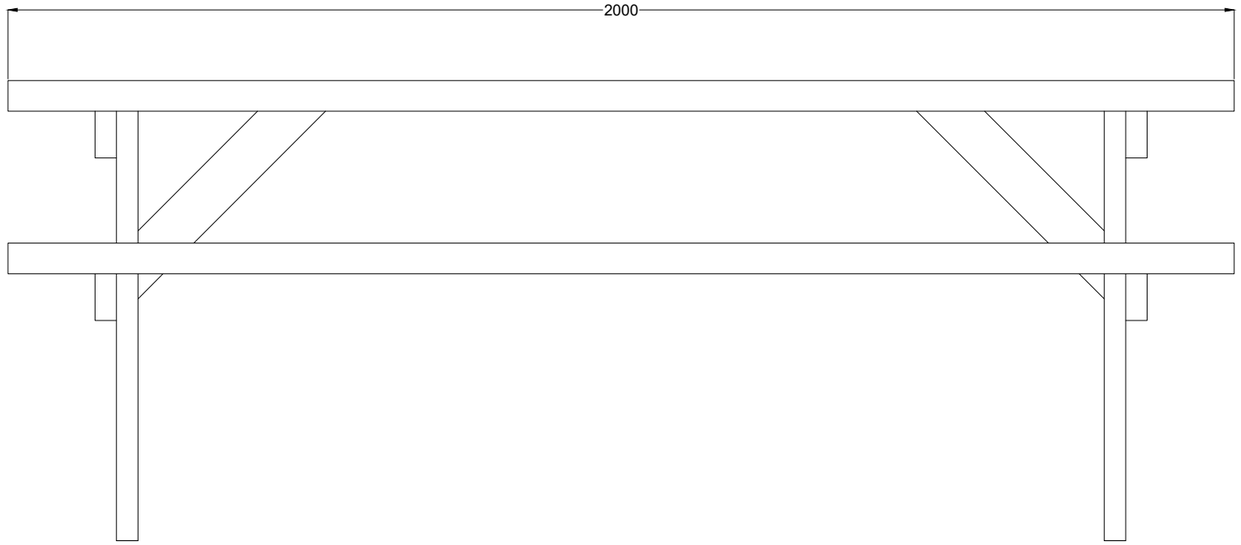


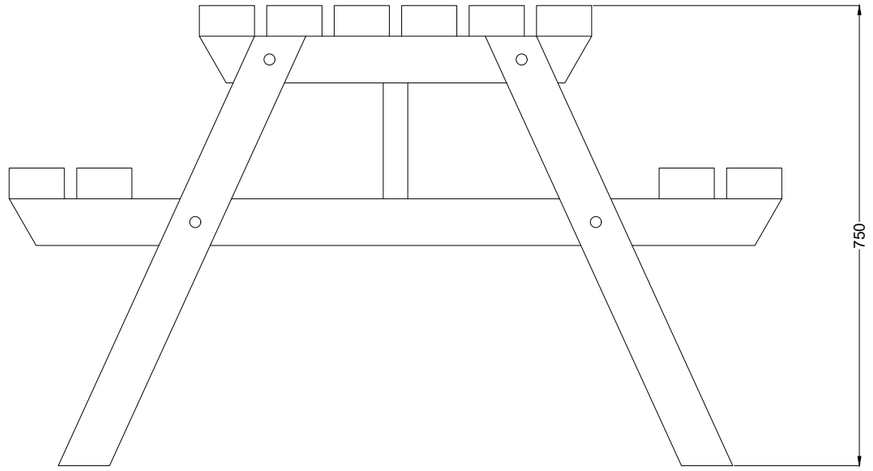
Signage Type C - Way Point Direction Signage

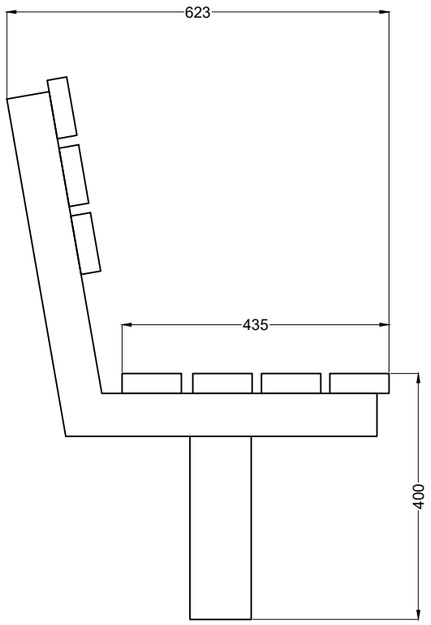
PROJECT TITLE: **Proposed Knockshanvo Wind Farm**			
DRAWING TITLE: **Signage Detail**			
PROJECT No.: **200513**	DRAWING No.: **200513 - 44**		SCALE: **1 :20 @ A3**
DRAWN BY: **KD**	CHECKED BY: **AC**	DATE: **13.08.2024**	REVISION.: P01

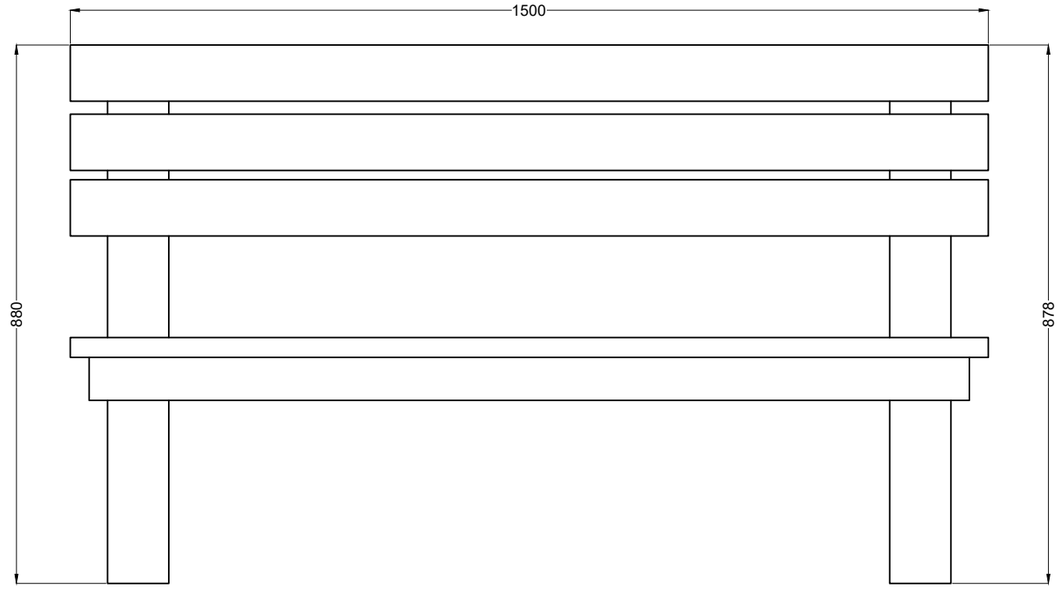
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Note
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exact details to be confirmed









PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Proposed Bench and Seating Detail

PROJECT No.:		DRAWING No.:	SCALE:
200513		**200513 - 45**	**1:10 @ A3**
DRAWN BY: **KD**	CHECKED BY: **AC**	DATE: **13.08.2024**	REVISION.: P01

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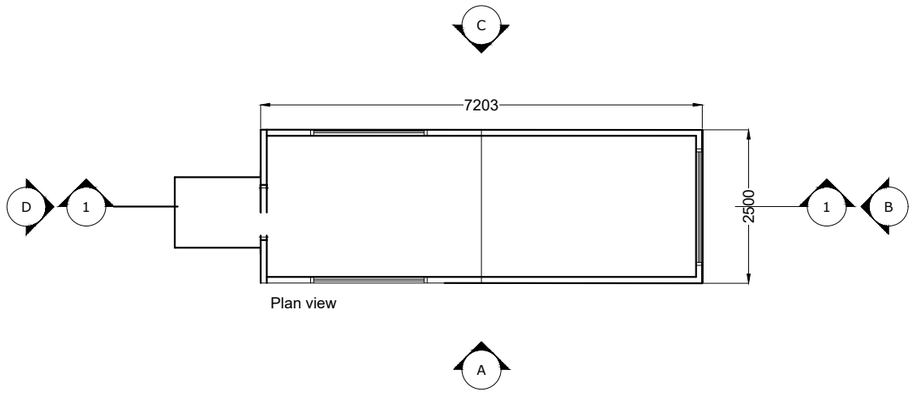
Note:

All dimensions are in millimetres, unless noted otherwise.

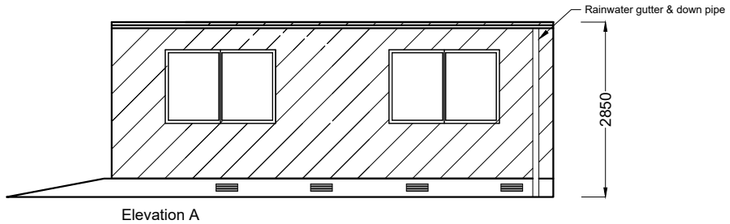
All dimensions to be checked on site and any discrepancy to be reported to the engineer.

Figured dimensions only to be used, drawings not to be scaled. If in doubt ask.

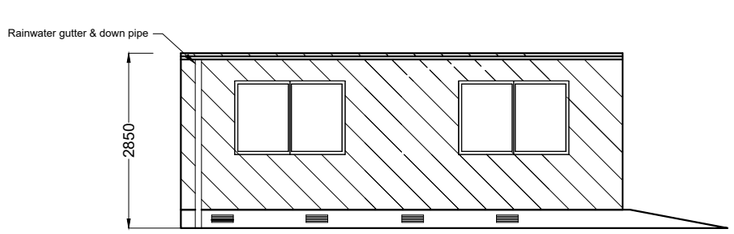
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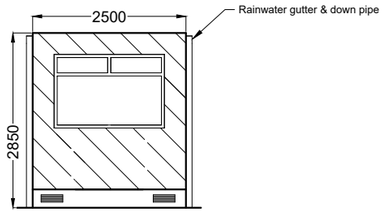
Plan view



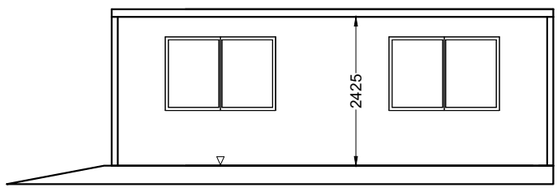
Elevation A



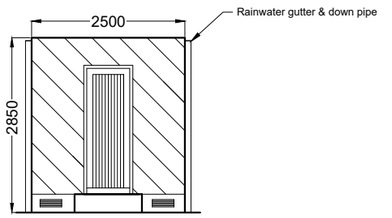
Elevation C



Elevation B



Section 1-1



Elevation D

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Security Cabin Detail

PROJECT No.:		DRAWING No.:	SCALE:
200513		**200513 - 46**	**1:100 @ A3**
DRAWN BY: **KD**	CHECKED BY: **AC**	DATE: **13.08.2024**	REVISION.: P01

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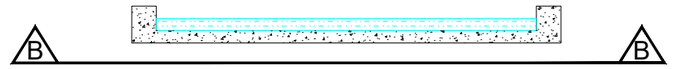
Note:

All dimensions are in millimetres, unless noted otherwise.

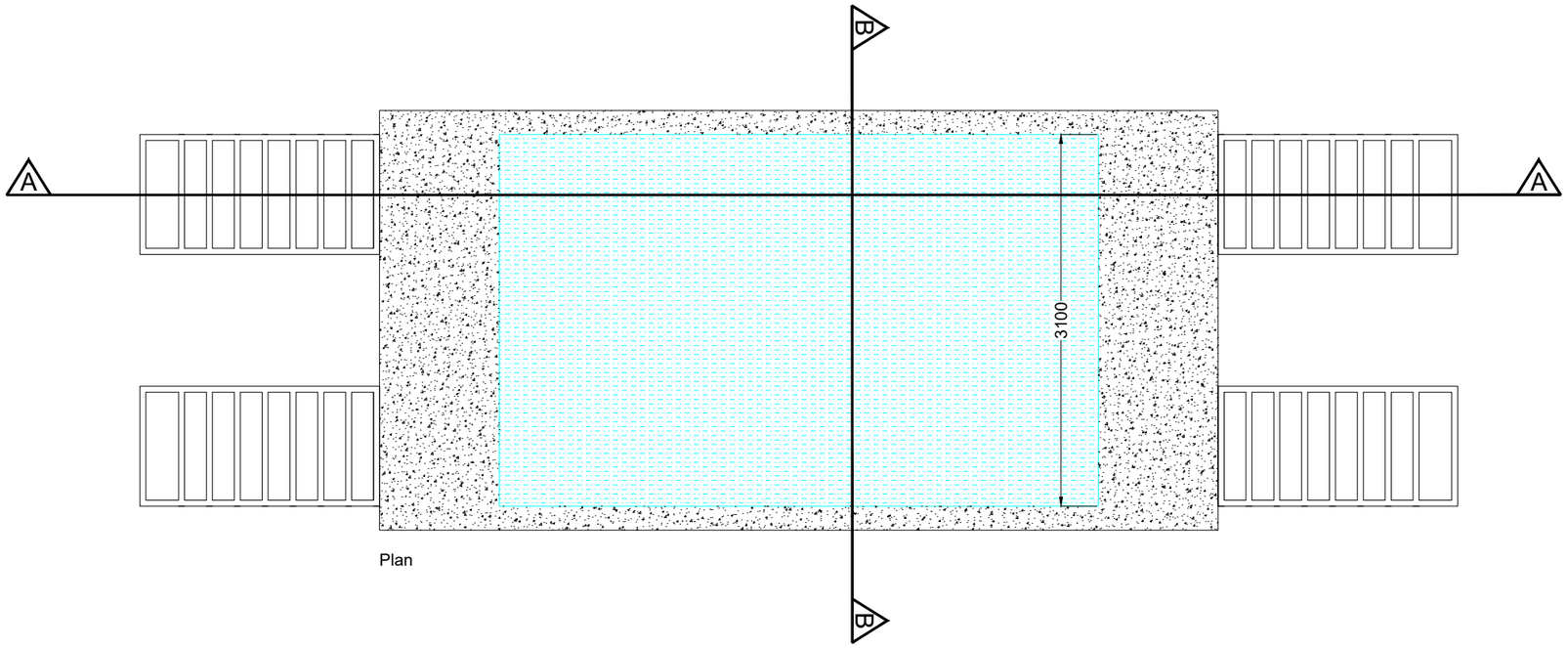
All dimensions to be checked on site and any discrepancy to be reported to the engineer.

Figured dimensions only to be used, drawings not to be scaled. If in doubt ask.

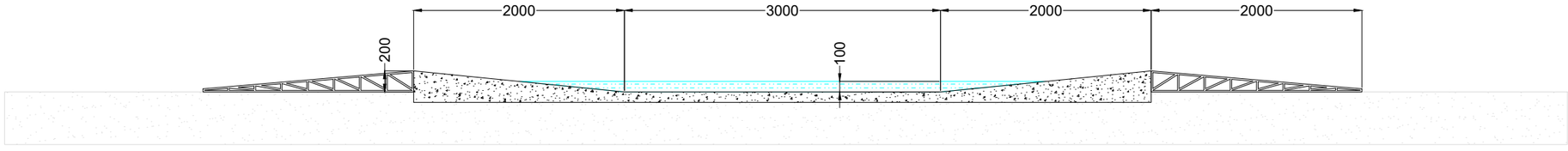
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Section B-B



Plan



Section A-A

PROJECT TITLE:

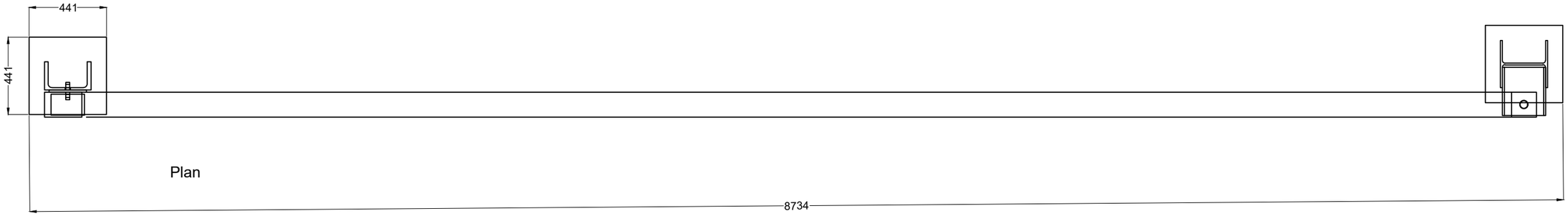
Proposed Knockshanvo Wind Farm

DRAWING TITLE:

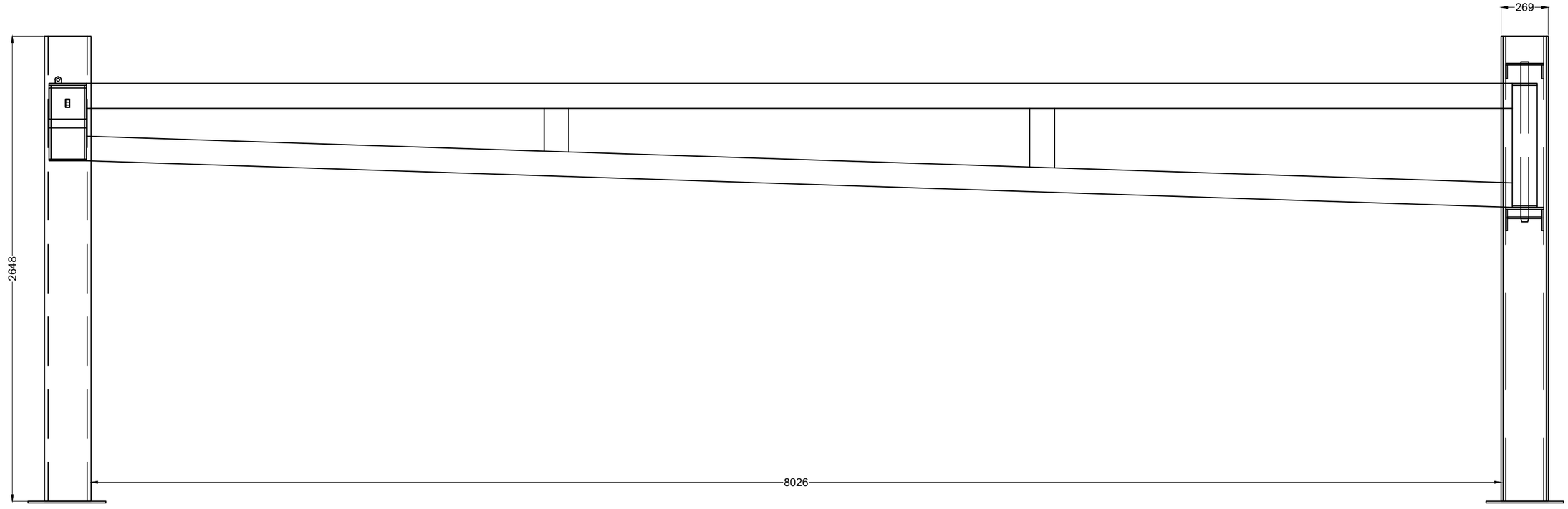
Wheel Wash Detail

PROJECT No.:		DRAWING No.:	SCALE:
200513		**200513 - 47**	**1:50 @ A3**
DRAWN BY: **KD**	CHECKED BY: **AC**	DATE: **13.08.2024**	REVISION.: P01

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



Plan



Elevation

Note:

All dimensions are in millimetres, unless noted otherwise.

All dimensions to be checked on site and any discrepancy to be reported to the engineer.

Figured dimensions only to be used, drawings not to be scaled. If in doubt ask.

For illustration purposes only. Exact size and appearance of unit subject to manufacturer selection.

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Steel Barrier/Gate Detail

PROJECT No.:	DRAWING No.:	SCALE:
200513	**200513 - 48**	**1:25 @ A3**

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	**AC**	**13.08.2024**	P01

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

Note:
To be located in Temporary Compound - refer to DWG 200513-35,36&37

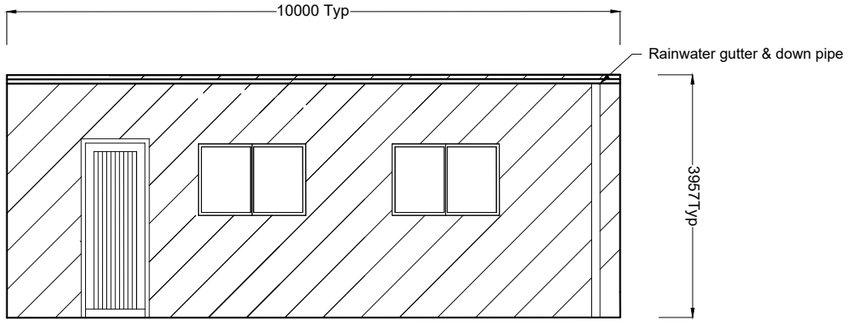
Note:

All dimensions are in millimetres, unless noted otherwise.

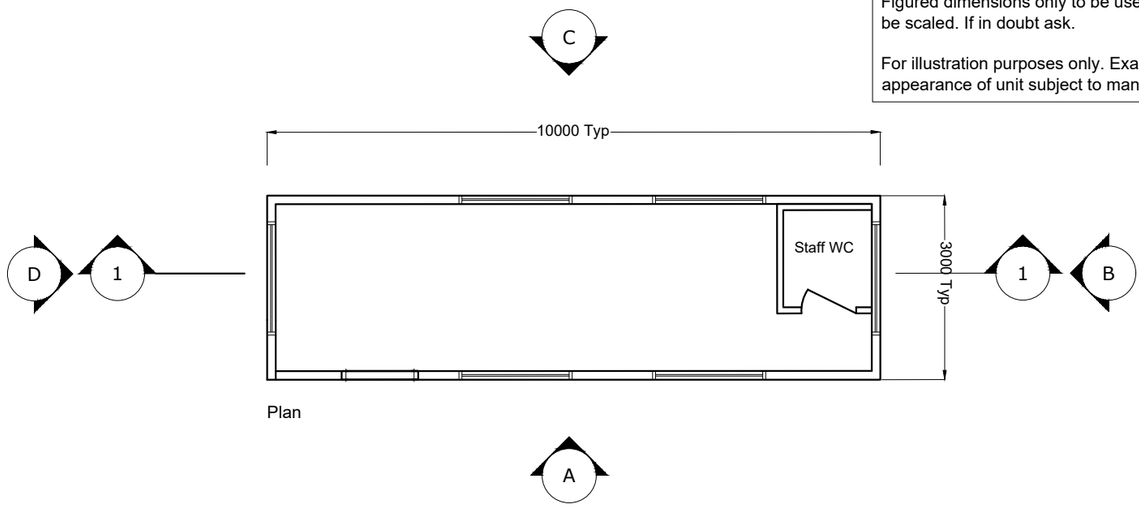
All dimensions to be checked on site and any discrepancy to be reported to the engineer.

Figured dimensions only to be used, drawings not to be scaled. If in doubt ask.

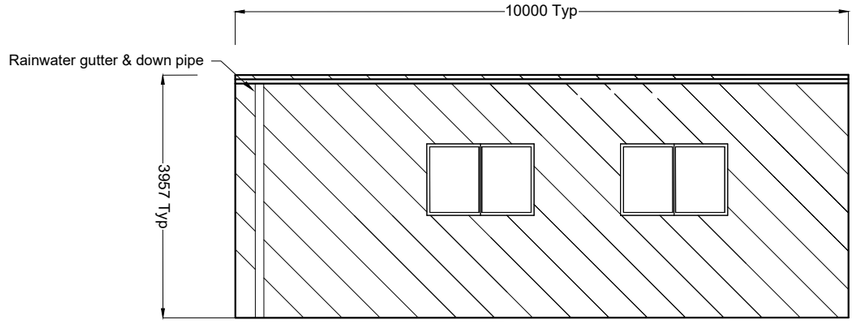
For illustration purposes only. Exact size and appearance of unit subject to manufacturer selection.



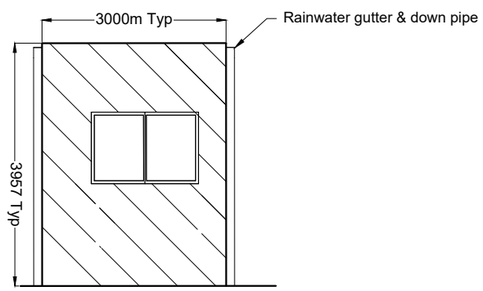
Elevation A



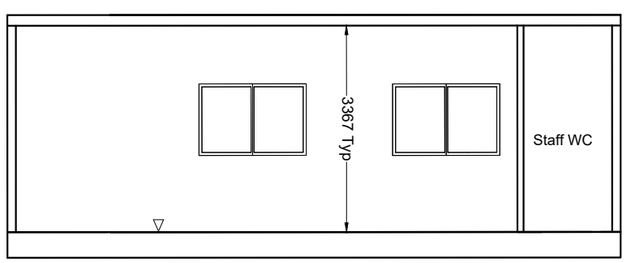
Plan



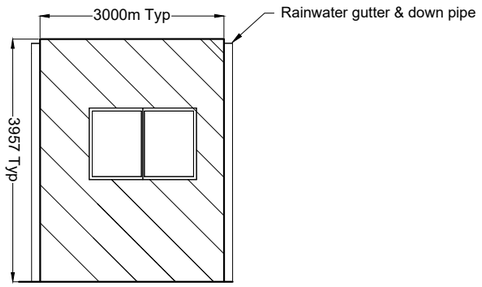
Elevation C



Elevation B



Section 1-1



Elevation D

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Site Office & Staff Facilities Detail

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 49	1:100 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	13.08.2024	P01

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

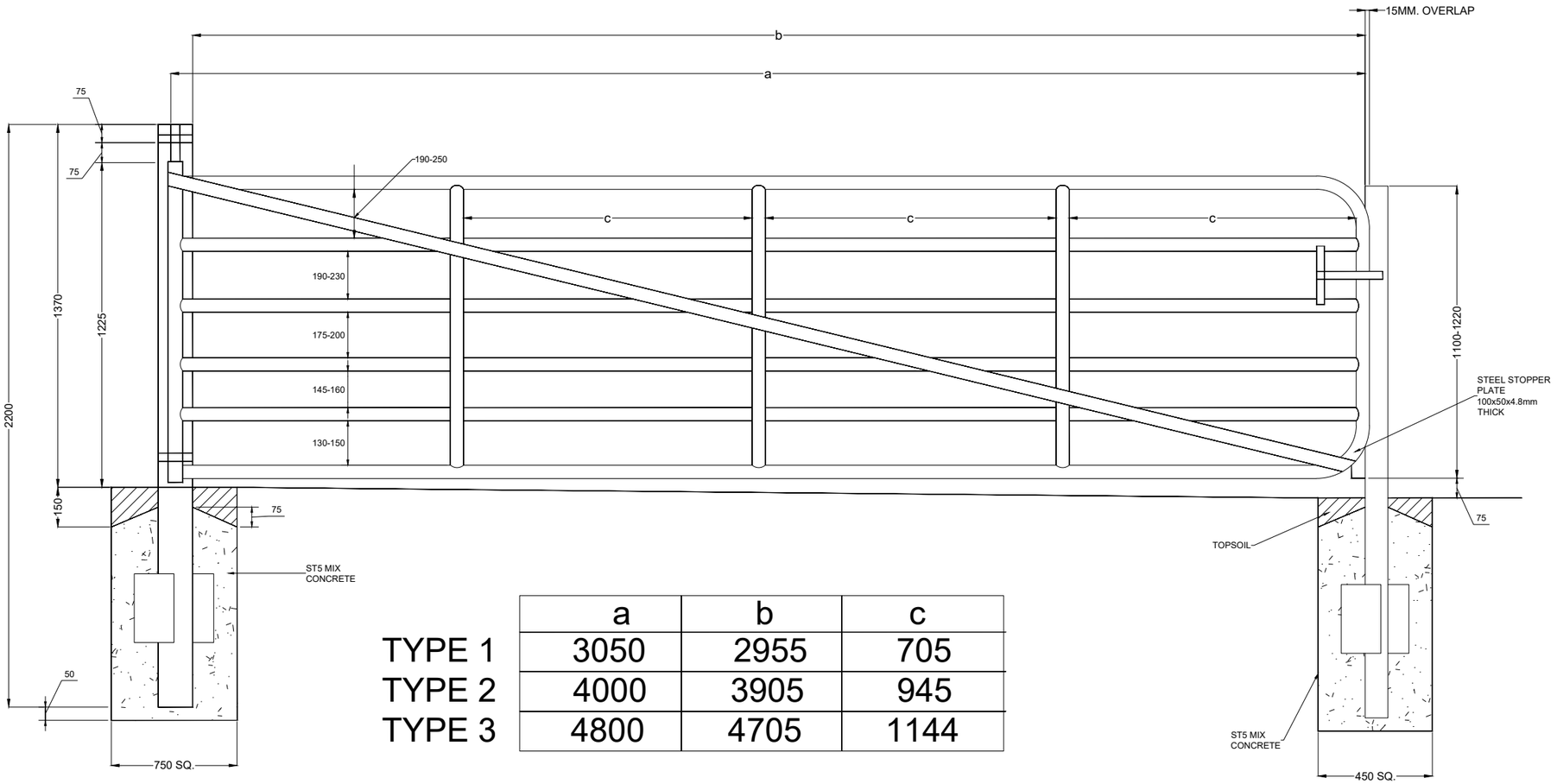
Note:

All dimensions are in millimetres, unless noted otherwise.

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For illustration purposes only. Exact size and appearance of unit subject to manufacturer selection.



	a	b	c
TYPE 1	3050	2955	705
TYPE 2	4000	3905	945
TYPE 3	4800	4705	1144

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Field Gate Detail

PROJECT No.:	DRAWING No.:	SCALE:
200513	**200513 - 50**	**1: 20 @ A3**

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	**AC**	**13.08.2024**	P01

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

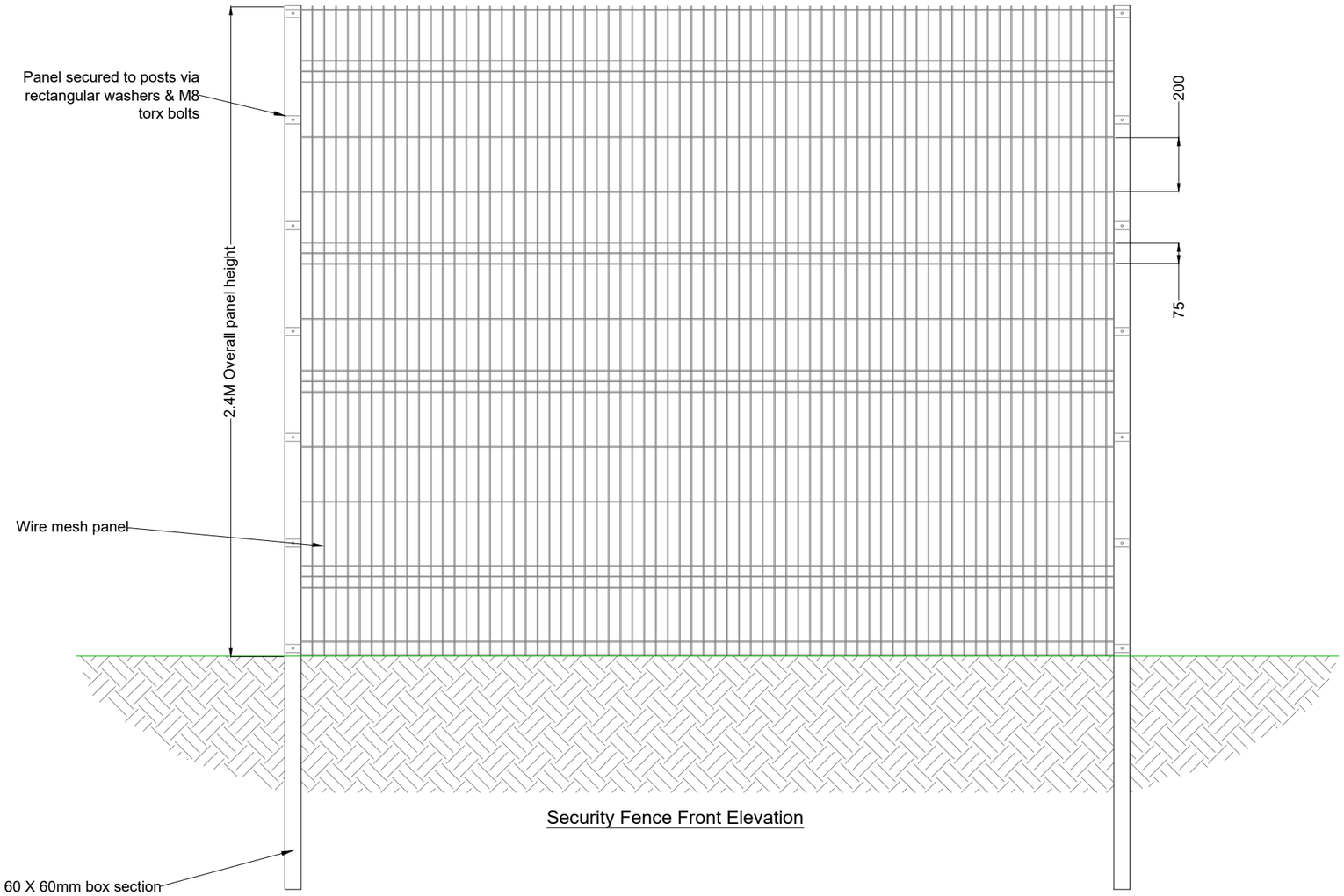
Note:

All dimensions are in millimetres, unless noted otherwise.

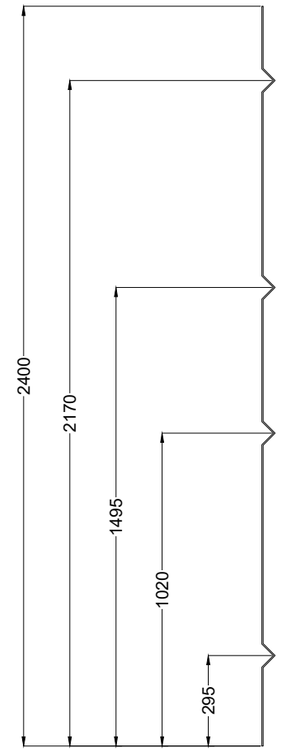
All dimensions to be checked on site and any discrepancy to be reported to the engineer.

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For illustration purposes only. Exact size and appearance of unit subject to manufacturer selection.



Security Fence Front Elevation



Security Fence Section



Security Fence Plan



INDICATIVE PALISADE FENCE IMAGE

FINISH COLOUR: RAL6005



INDICATIVE PALISADE FENCE IMAGE

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

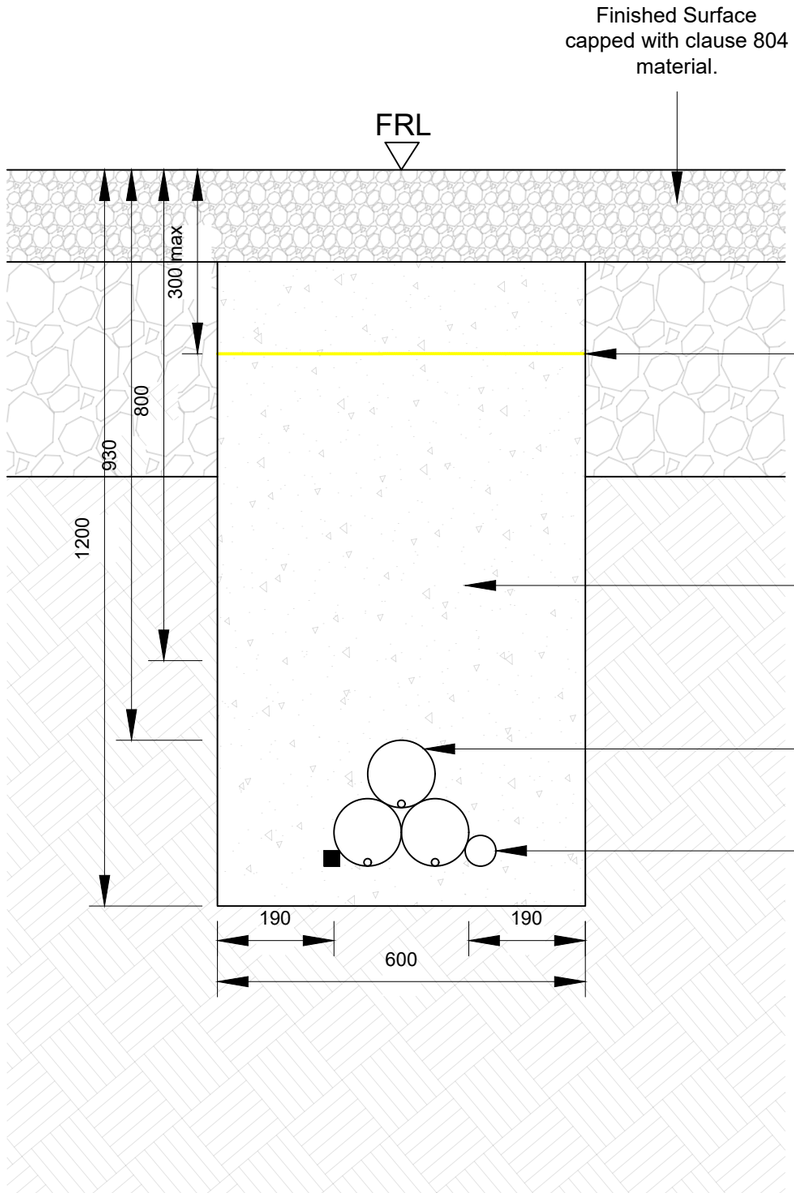
DRAWING TITLE:

Palisade Gate Detail

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 51	1 :20 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	13.08.2024	P01

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33kV Cable - On Road Trench Detail - Cross Section

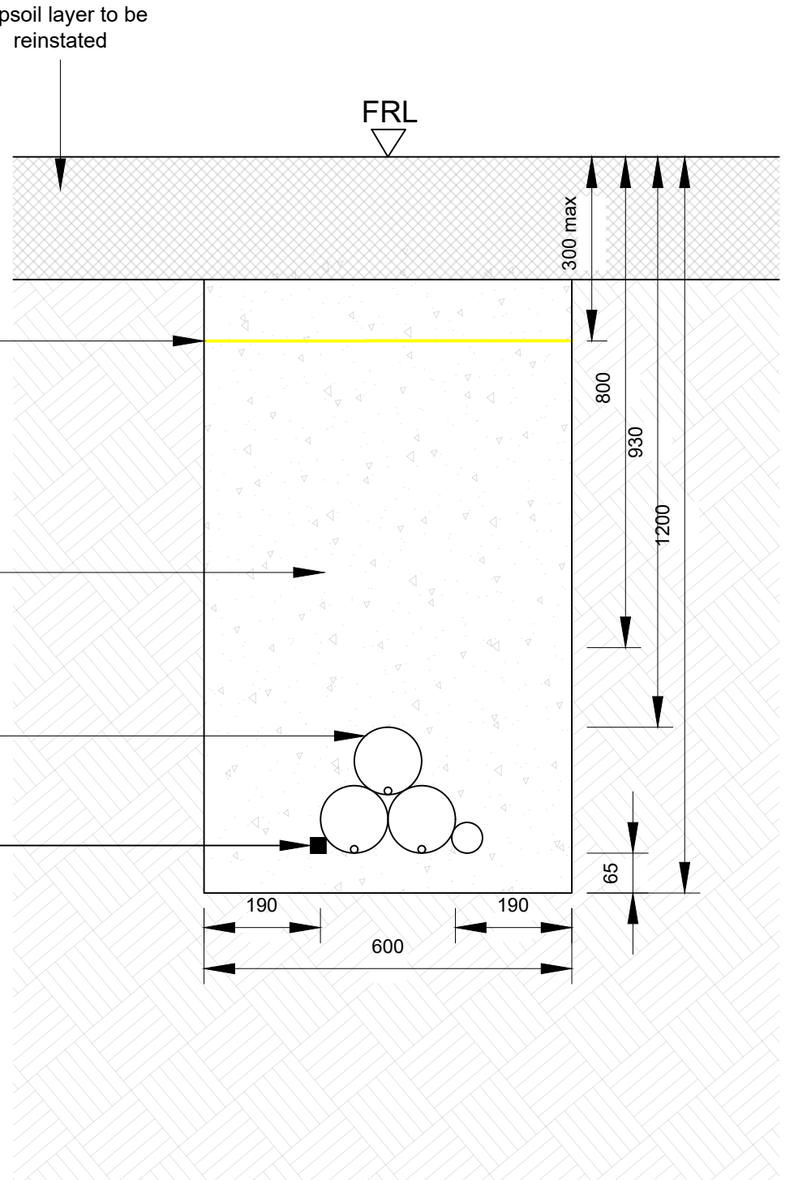
Yellow Marker Warning Tape.
across full width of trench

Trench backfilled with clause 804
material and compacted in accordance
with NRA guidlines.

110mm Diameter Ducts, complete with
12mm Diameter draw ropes.

50mm Diameter solid wall
fibre optic cable ducting.

25mm Square earth
conductor.



33kV Cable - Off Road Trench Detail - Cross Section

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
33kV Cable Trench Sections

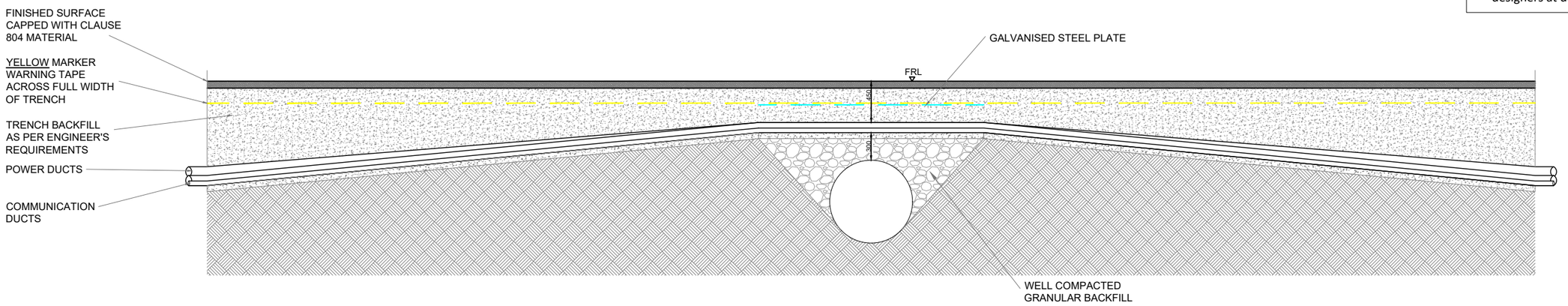
PROJECT No.:	DRAWING No.:	SCALE:
200513	200513-52	1:10 @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	N/A	13.08.2024	P01

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

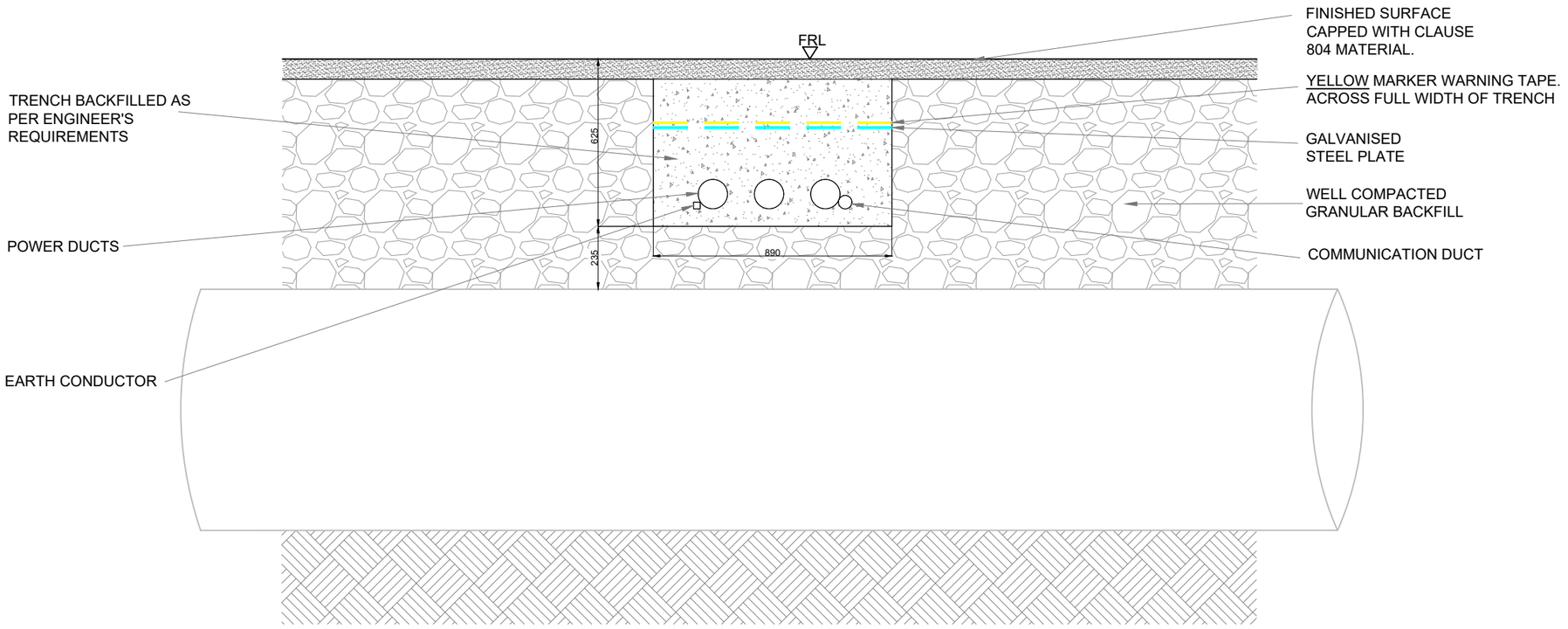
NOTES:

1. One circuit shown, no. of circuits to be determined by electrical design.
2. Crossings to be sized appropriately for 1 in 100yr flooding.
3. New culvert crossings to use 900mm pipes, or to be sized to engineer's requirements.
4. The cabling may be placed on either side of the roads, on both sides of the road or within the road.
5. The exact configuration of the underground cabling will be set by the requirements of the electrical designers at detailed design stage.



Culvert Crossing - 33kV - Longitudinal Section

SCALE 1:50



Culvert Crossing - 33kV - Cross Section

SCALE 1:20

PROJECT TITLE:

Proposed Knockshanvo Wind Farm

DRAWING TITLE:

Standard 33kV Culvert Crossing

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 53	As Shown @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	13.08.2024	P01

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

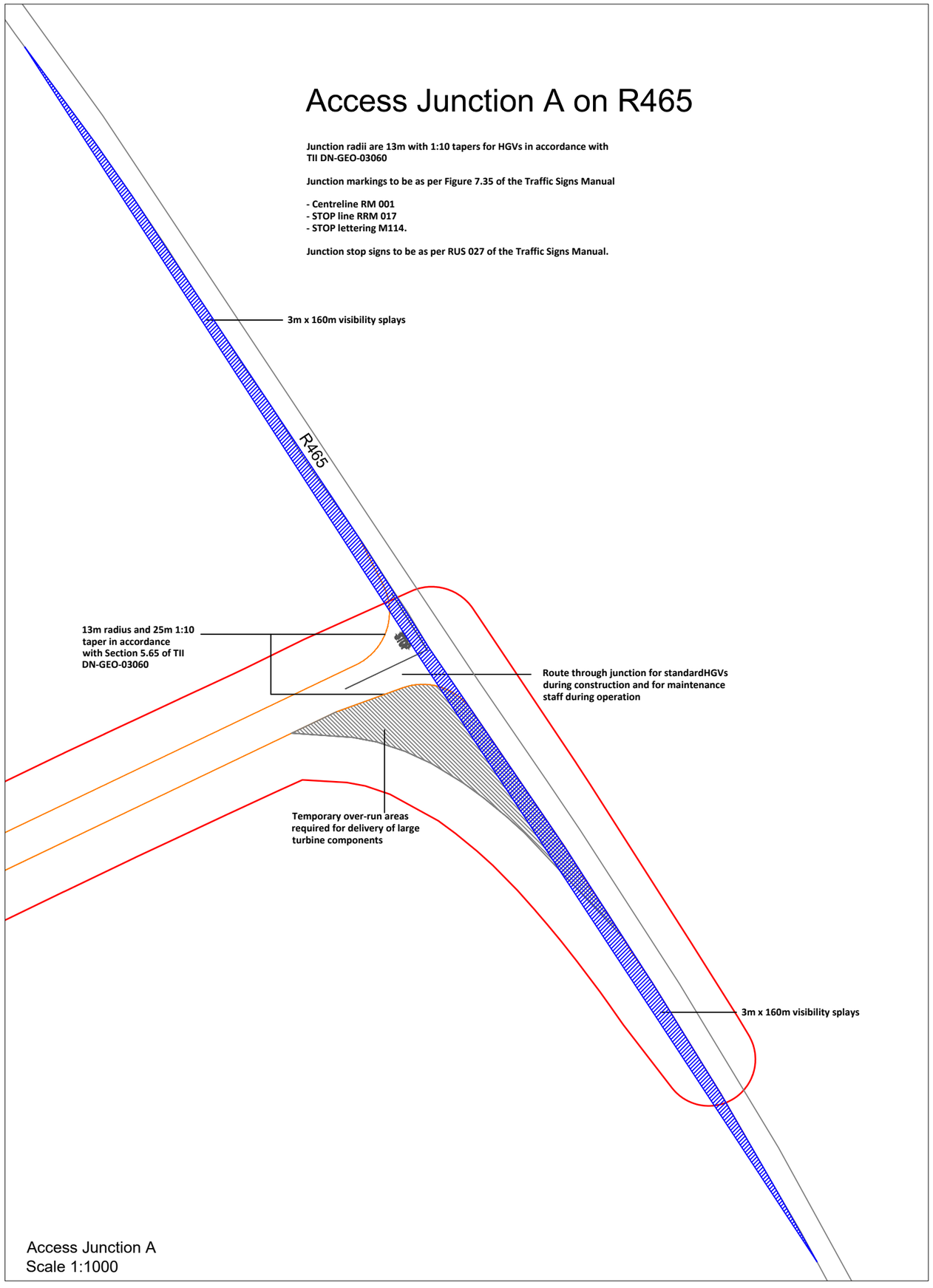
Access Junction A on R465

Junction radii are 13m with 1:10 tapers for HGVs in accordance with TII DN-GEO-03060

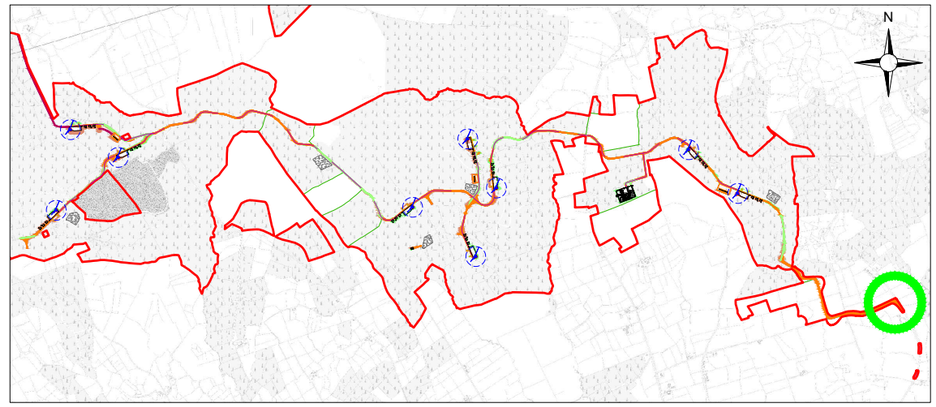
Junction markings to be as per Figure 7.35 of the Traffic Signs Manual

- Centreline RM 001
- STOP line RRM 017
- STOP lettering M114.

Junction stop signs to be as per RUS 027 of the Traffic Signs Manual.



Access Junction A
Scale 1:1000



1:50,000 Location on Context Map

Drawing Legend

- Application Boundary
- Proposed Site Road
- Existing Road
- Transport Runover Area
- Sight Line

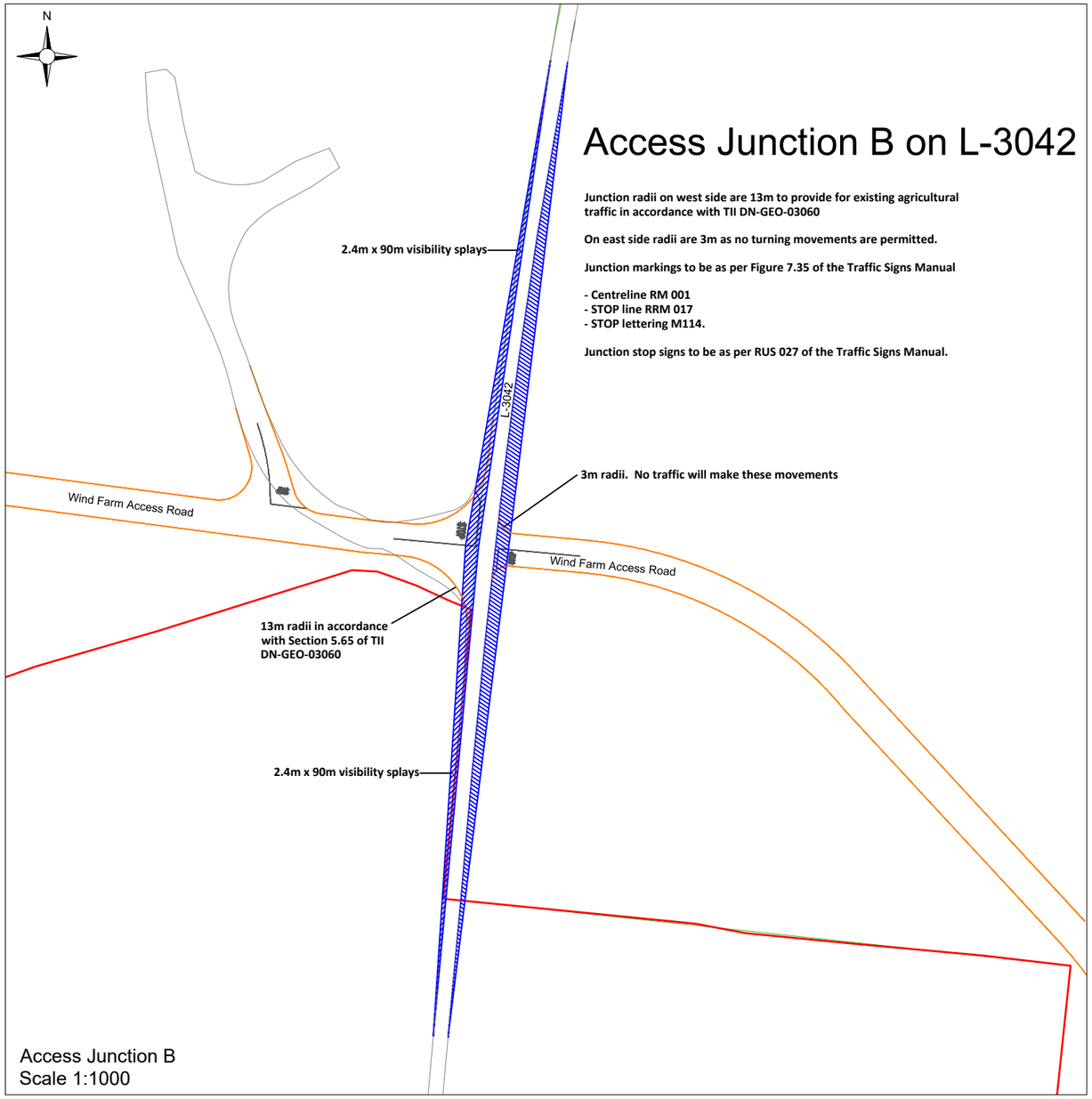
PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Proposed Access Junction A

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 54	As Shown @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

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



Access Junction B on L-3042

Junction radii on west side are 13m to provide for existing agricultural traffic in accordance with TII DN-GEO-03060

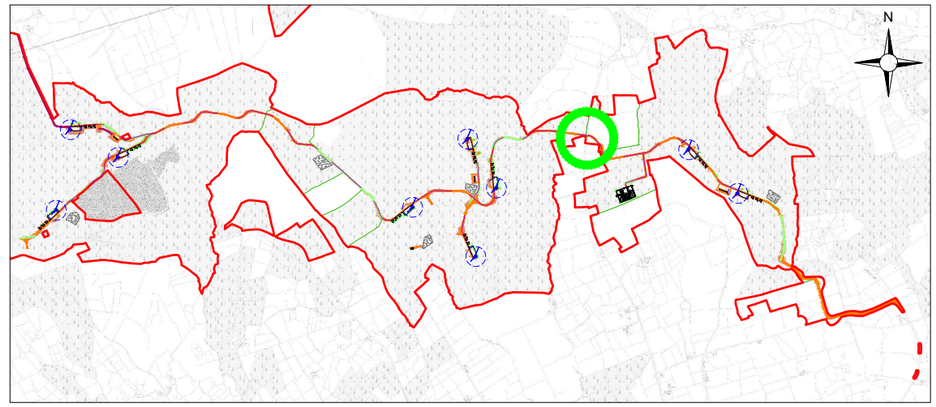
On east side radii are 3m as no turning movements are permitted.

Junction markings to be as per Figure 7.35 of the Traffic Signs Manual

- Centreline RM 001
- STOP line RRM 017
- STOP lettering M114.

Junction stop signs to be as per RUS 027 of the Traffic Signs Manual.

Access Junction B
Scale 1:1000



1:50,000 Location on Context Map

Drawing Legend

- Application Boundary
- Proposed Site Road
- Existing Road
- Transport Runover Area
- Sight Line

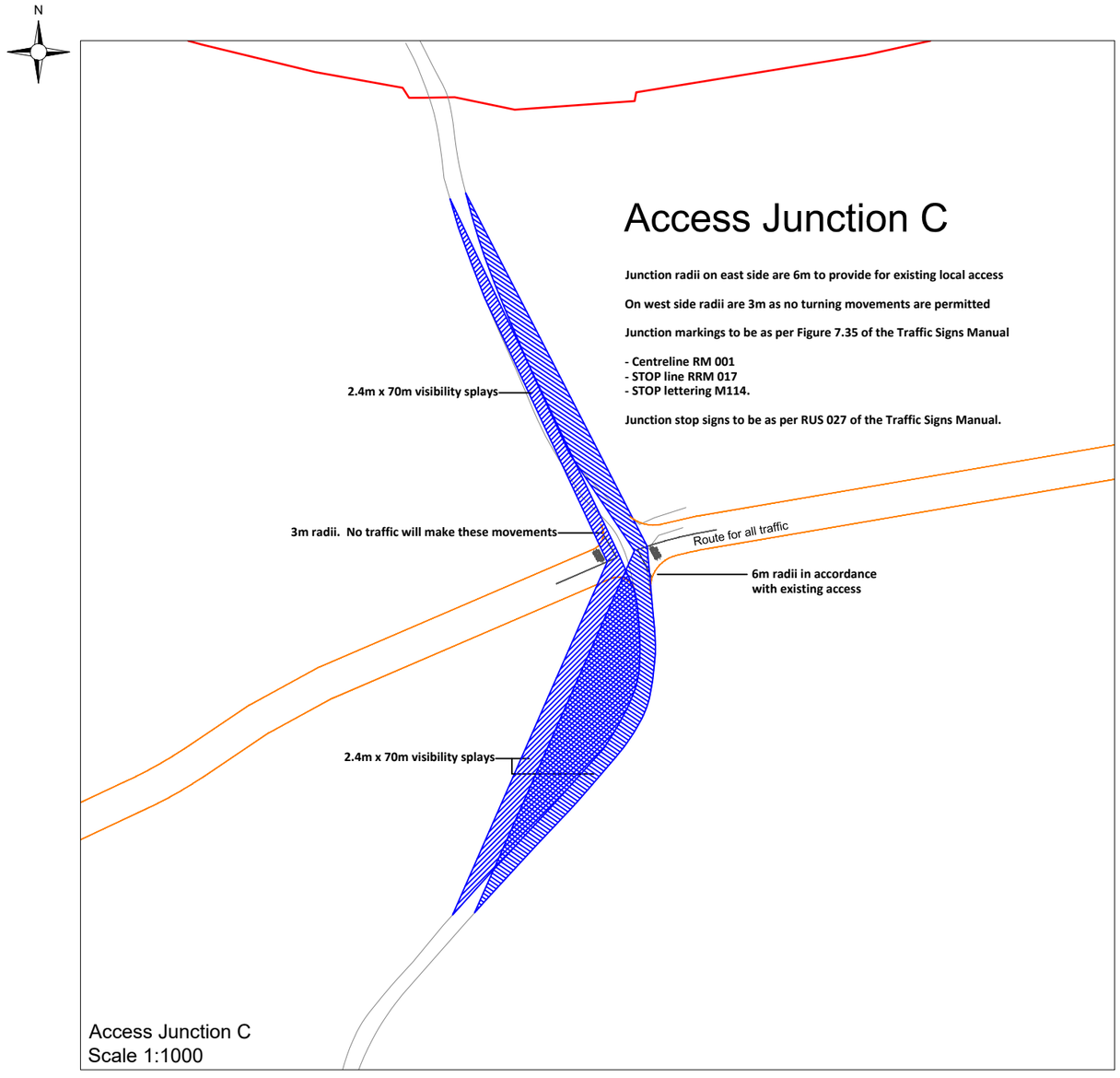
PROJECT TITLE:
Proposed Knockshanvo Wind Farm

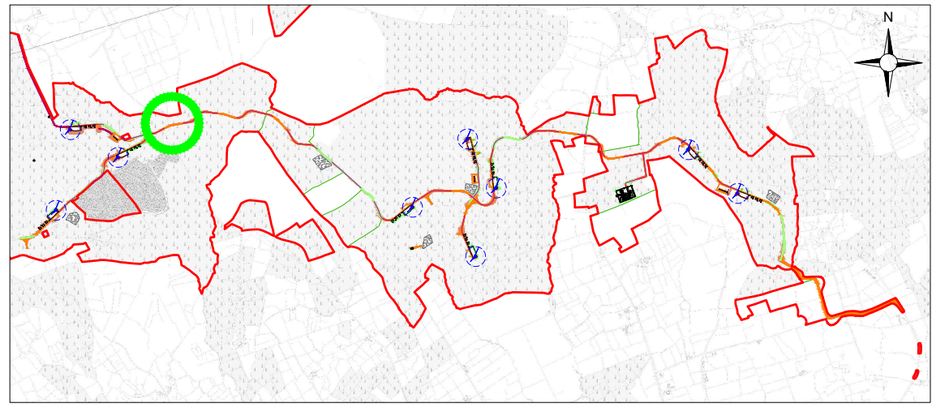
DRAWING TITLE:
Proposed Access Junction B

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 55	As Shown @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

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





1:50,000 Location on Context Map

Drawing Legend

- Application Boundary
- Proposed Site Road
- Existing Road
- Transport Runover Area
- Sight Line

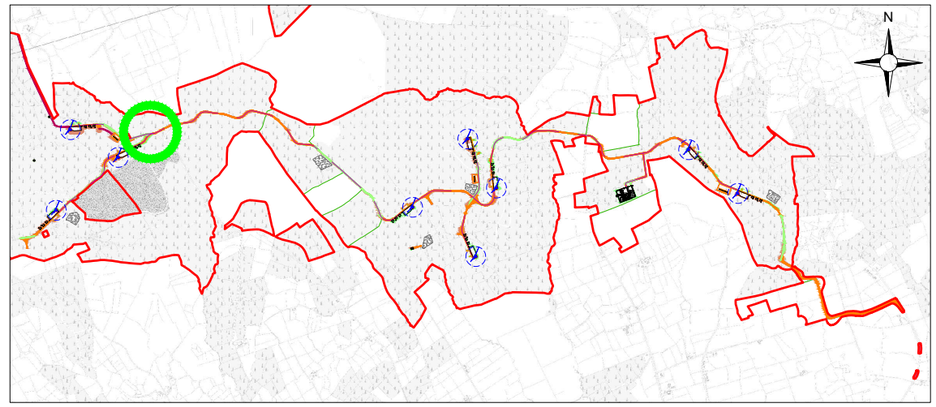
PROJECT TITLE:
Proposed Knockshanvo Wind Farm

DRAWING TITLE:
Proposed Access Junction C

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 56	As Shown @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

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



1:50,000 Location on Context Map

Drawing Legend

- Application Boundary
- Proposed Site Road
- Existing Road
- Transport Runover Area
- Sight Line

Access Junction D

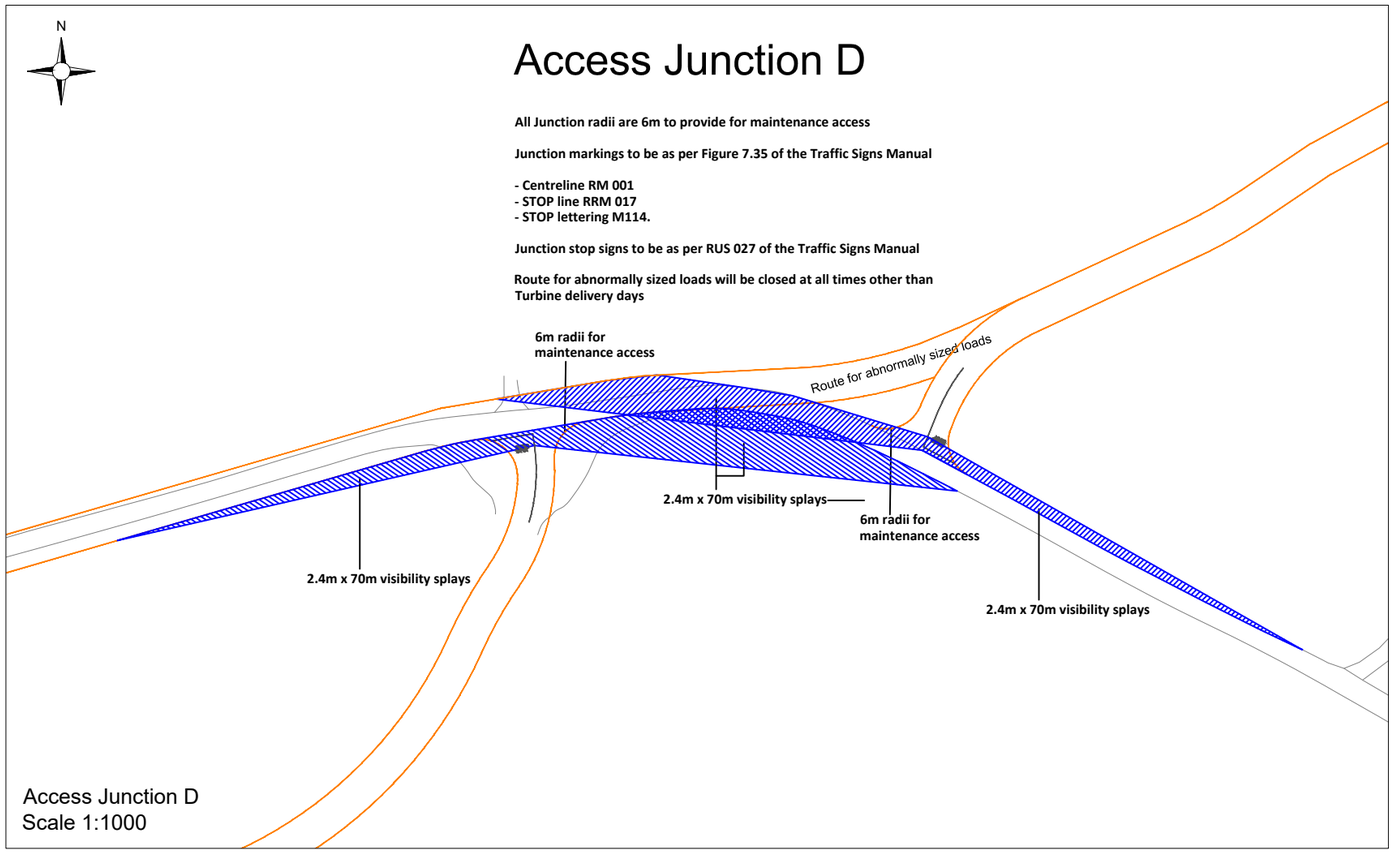
All Junction radii are 6m to provide for maintenance access

Junction markings to be as per Figure 7.35 of the Traffic Signs Manual

- Centreline RM 001
- STOP line RRM 017
- STOP lettering M114.

Junction stop signs to be as per RUS 027 of the Traffic Signs Manual

Route for abnormally sized loads will be closed at all times other than Turbine delivery days



Access Junction D
Scale 1:1000

PROJECT TITLE:
Proposed Knockshanvo Wind Farm

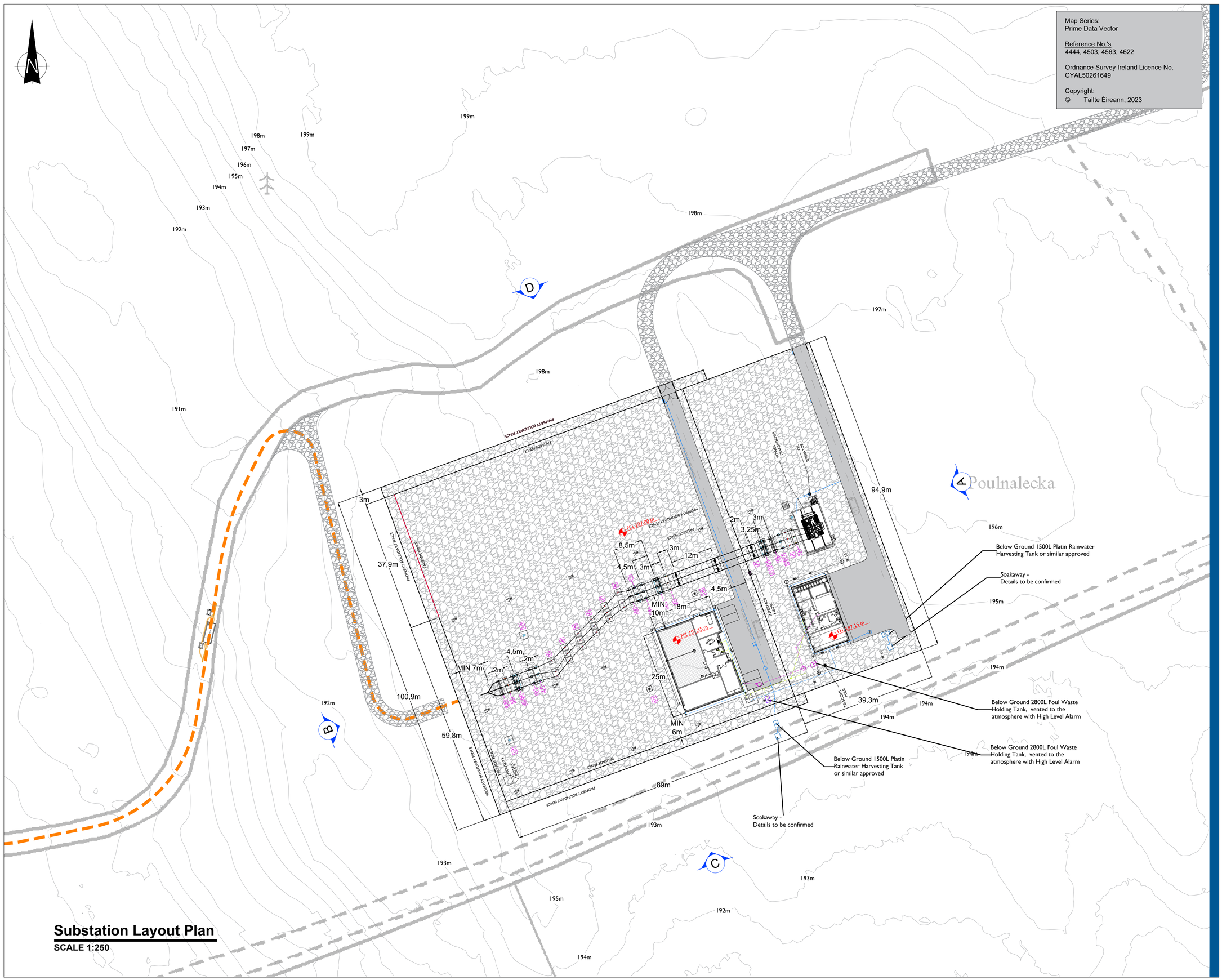
DRAWING TITLE:
Proposed Access Junction D

PROJECT No.:	DRAWING No.:	SCALE:
200513	200513 - 57	As Shown @ A3

DRAWN BY:	CHECKED BY:	DATE:	REVISION.:
KD	AC	19.08.2024	P01

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

ISO A1 594mm x 841mm



Substation Layout Plan

SCALE 1:250

Project Management Initials: Designer: JC Checked: GC Approved: DB

tli GROUP

Head Office
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Abbeydorney,
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Tel: 00353 66 7135710

Regional Office
Basepoint Business Centre
Stroudley Road, Basingstoke,
Hampshire,
RG24 8UP, UK
Tel: 00 44 1256406664

PROJECT

Knockshanvo Wind Farm
110kV Grid Connection

CLIENT

MKO

CONSULTANTS

NOTES: -

- This drawing is to be read in conjunction with relevant drawings, specifications and reports.
- Drawings are not to be scaled use figured dimensions only.
- All levels shown are in m O.D unless noted otherwise.
- For Elevation Ref. to Drawing 05783-DR-151.

LEGEND: -

UG Cable Route shown thus (1.5 km)
Contours 14.0
Access track

ISSUE/REVISION

I/R	DATE	DESCRIPTION
P3	01.08.24	Issued for Planning
P2	05.06.24	Issued for Planning
P1	10.11.22	Issued for Planning

PROJECT NUMBER

05-783

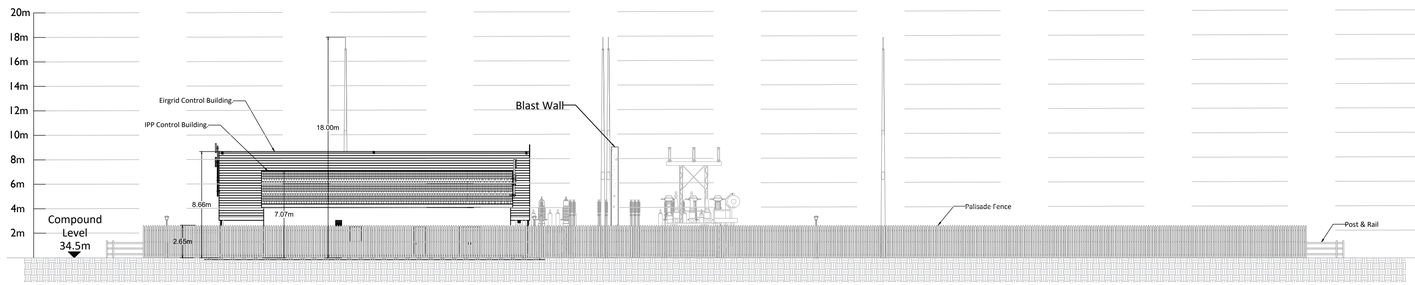
SHEET TITLE

Substation Layout Plan

SHEET NUMBER

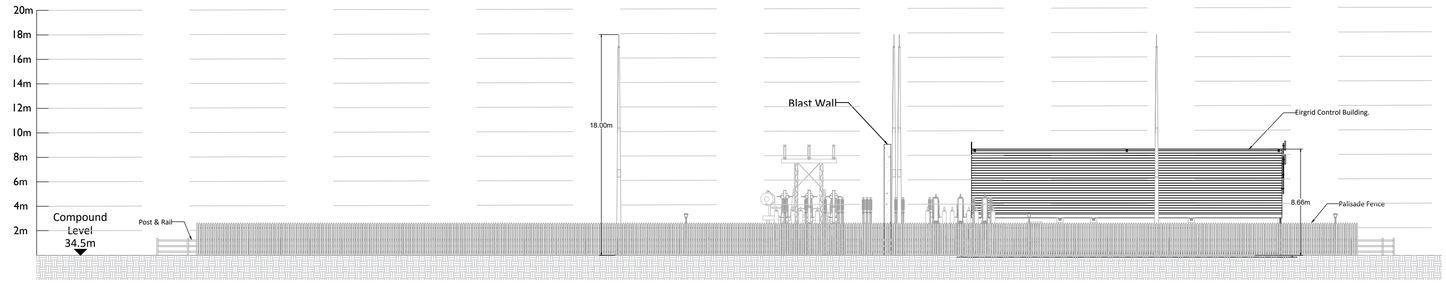
05783-DR-150

ISO A1 594mm x 841mm



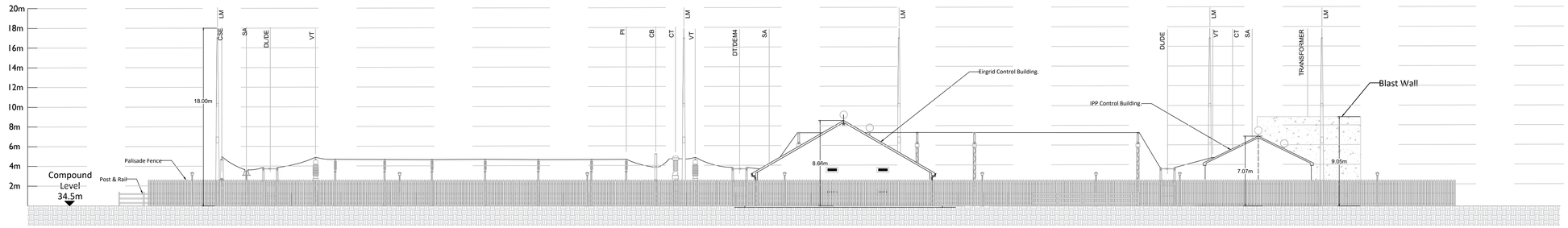
South-East Elevation

SCALE 1:250



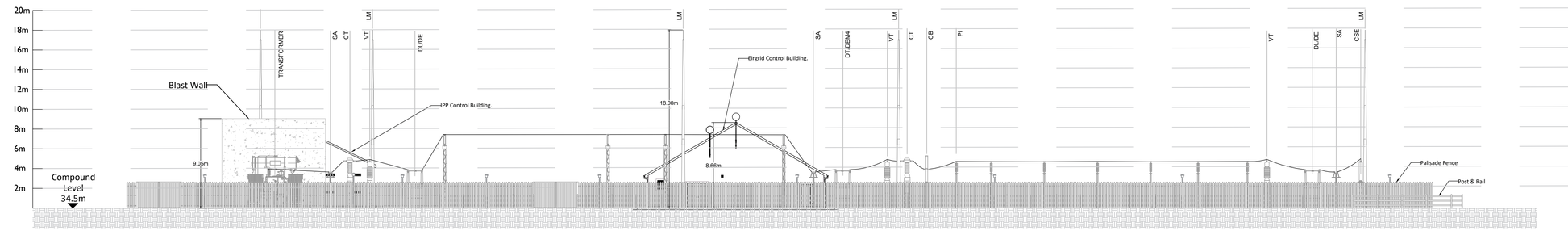
North-West Elevation

SCALE 1:250



North-East Elevation

SCALE 1:250



South-West Elevation

SCALE 1:250

Project Management Initials: Designer: JC Checked: GC Approved: DB

tli GROUP

Head Office
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Tel: 00353 66 7135710

Regional Office
Basepoint Business Centre
Stroudley Road, Basingstoke,
Hampshire,
RG24 8UP, UK
Tel: 00 44 1256406664

PROJECT

Knockshanvo Wind Farm
110kV Grid Connection

CLIENT

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CONSULTANTS

NOTES: -

1. Layout and Arrangements of Substation Building and Electrical Equipment is shown indicatively and for illustration purposes only.
2. Dimensions shown are as per current Eirgrid Specifications at the time of submission. Dimensions may vary at time of construction to reflect any revisions to EirGrid Specifications.
3. Final Specifications of Buildings and Electrical Equipment is to be as per EirGrid and ESB Specifications.
4. The Elevation of the Compound is indicative and will be finalised to project design to ensure Cut/Fill Earthworks associated with the construction of the Compound are balanced.

LEGEND: -

	Description
CSE	Cable Sealing End.
SA	Surge Arrester.
DL/DE	Line / Earth Disconnect.
VT	Voltage Transformer.
CT	Current Transformer.
CB	Circuit Breaker.
PI	Post Insulator.
LM	Lightning Mast.

ISSUE/REVISION

P2	05.06.24	Issued for Planning
P1	10.11.22	Issued for Planning
I/R	DATE	DESCRIPTION

PROJECT NUMBER

05-783

SHEET TITLE

Substation Elevations

SHEET NUMBER

05783-DR-151

ISO A1 594mm x 841mm

Finished Ground Level: 197m

CUT VOLUME: 9694 m³
FILL VOLUME: 3373 m³

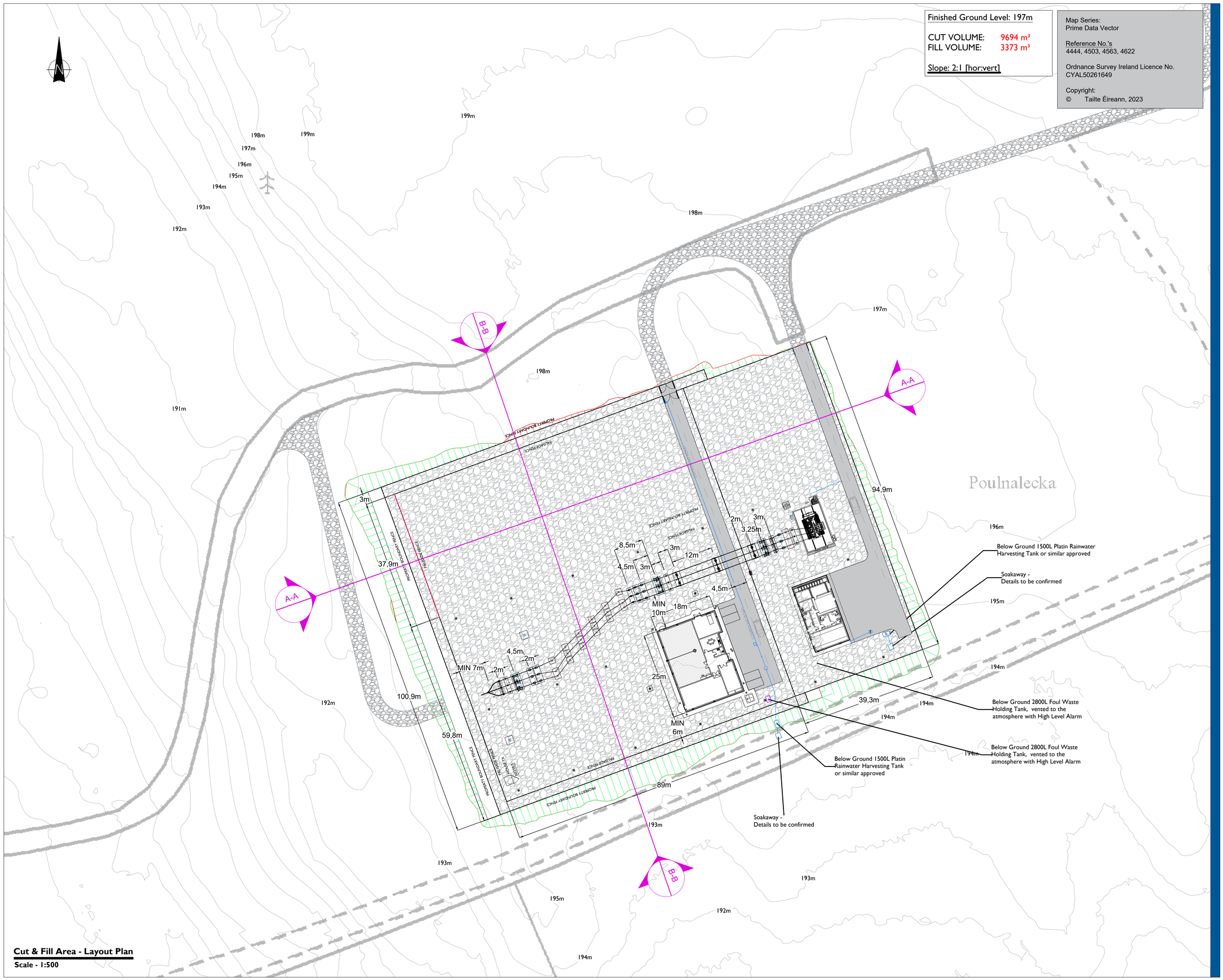
Slope: 2:1 [hor:vert]

Map Series:
Prime Data Vector

Reference No.'s
4444, 4503, 4563, 4622

Ordnance Survey Ireland Licence No.
CYAL50261649

Copyright:
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Cut & Fill Area - Layout Plan
Scale - 1:500

Project Management Initials: Designer: JC Checked: GC Approved: DB

tli GROUP

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Basepoint Business Centre
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RG24 8UP, UK
Tel: 00 44 1256406664

PROJECT

Knockshanvo Wind Farm
110kV Grid Connection

CLIENT

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CONSULTANTS

NOTES: -

- This drawing is to be read in conjuction with relevant drawings, specifications and reports.
- Dimensions are in millimetres, unless noted otherwise.
- Drawings are not to be scaled use figured dimensions only.
- All levels shown are in m O.D unless noted otherwise.

LEGEND: -

Cut Volume
Fill Volume
Access track

ISSUE/REVISION

I/R	DATE	DESCRIPTION
P3	01.08.24	Issued for Planning
P2	05.06.24	Issued for Planning
P1	10.11.22	Issued for Planning

PROJECT NUMBER

05-783

SHEET TITLE

Cut & Fill Area
Layout Plan

SHEET NUMBER

05783-DR-152

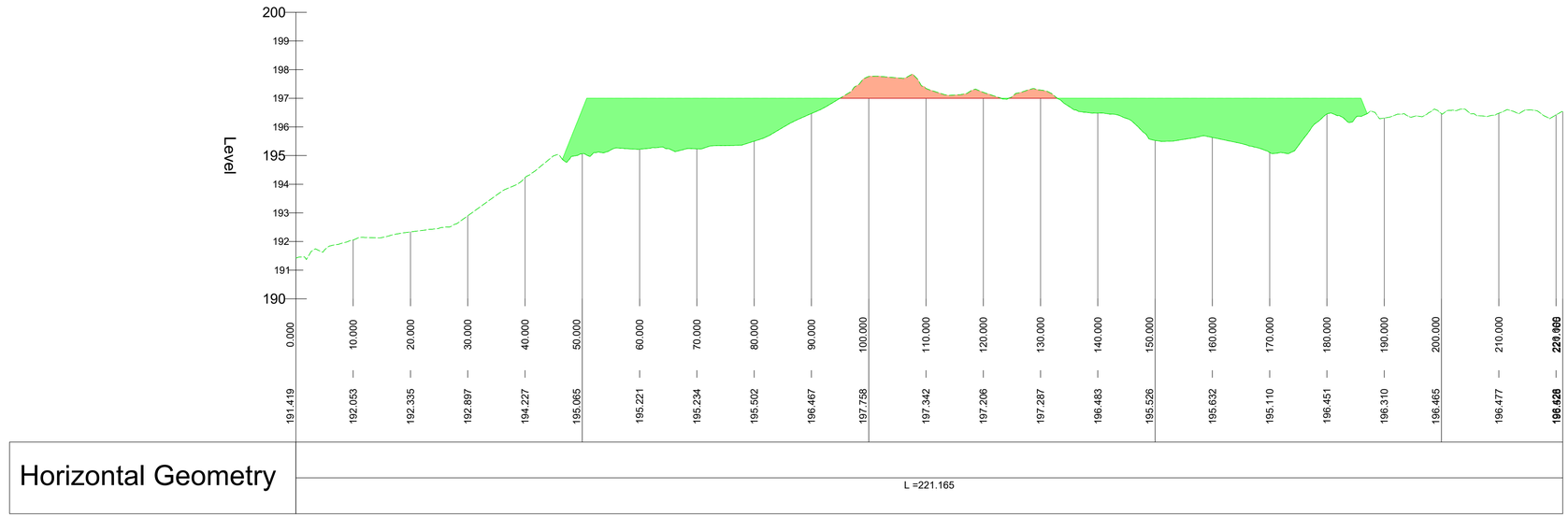
ISO A1 594mm x 841mm

Finished Ground Level: 197m

CUT VOLUME: 9694 m³
FILL VOLUME: 3373 m³

Slope: 2:1 [hor:vert]

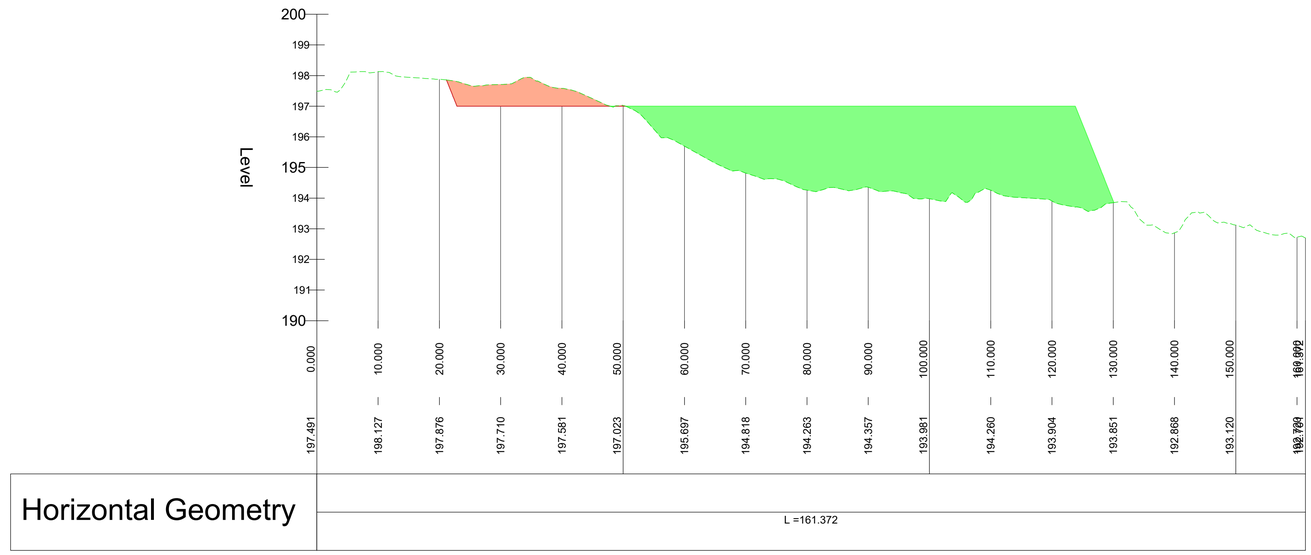
SECTION A-A - LONGSECTION
SCALE: H 1:500,V 1:100. DATUM: 190.000



Section A-A

Scale: - H 1:100 V 1:500

SECTION B-B - LONGSECTION
SCALE: H 1:500,V 1:100. DATUM: 190.000



Section B-B

Scale: - H 1:100 V 1:500

Project Management Initials: Designer: JC Checked: GC Approved: DB

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RG24 8UP, UK
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PROJECT

Knockshanvo Wind Farm
110kV Grid Connection

CLIENT

MKO

CONSULTANTS

NOTES: -

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LEGEND: -

Cut Volume
Fill Volume

ISSUE/REVISION

I/R	DATE	DESCRIPTION
P1	10.11.22	Issued for Planning

PROJECT NUMBER

05-783

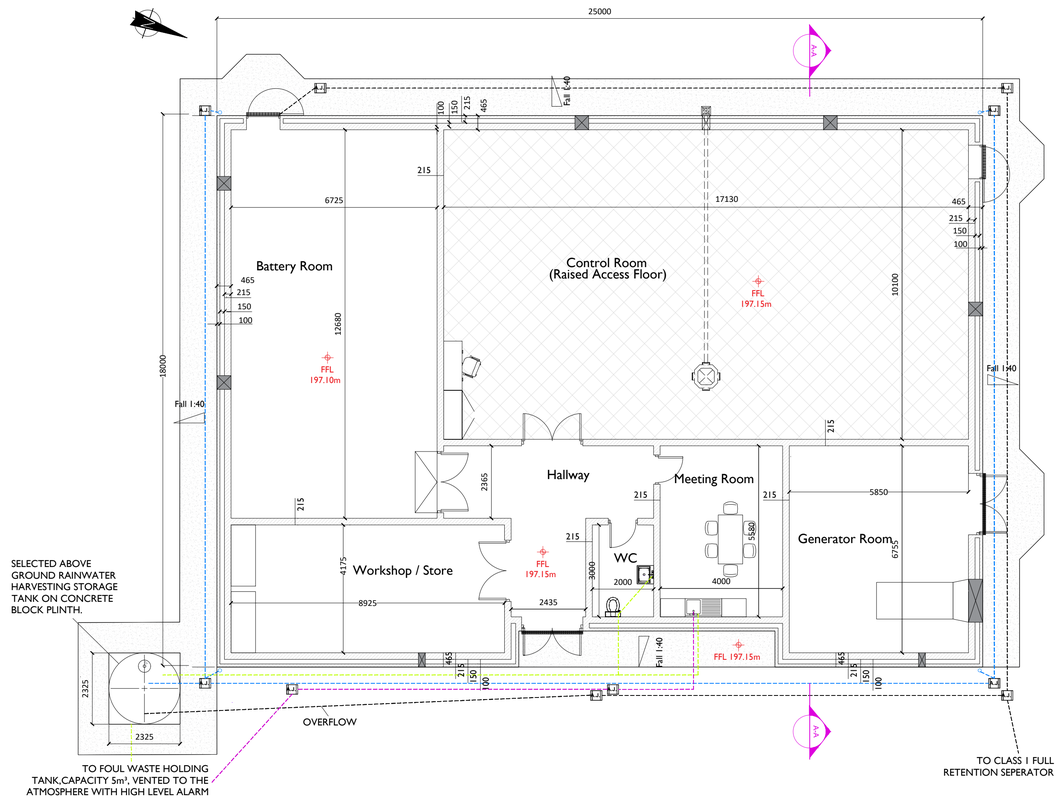
SHEET TITLE

Site Sections

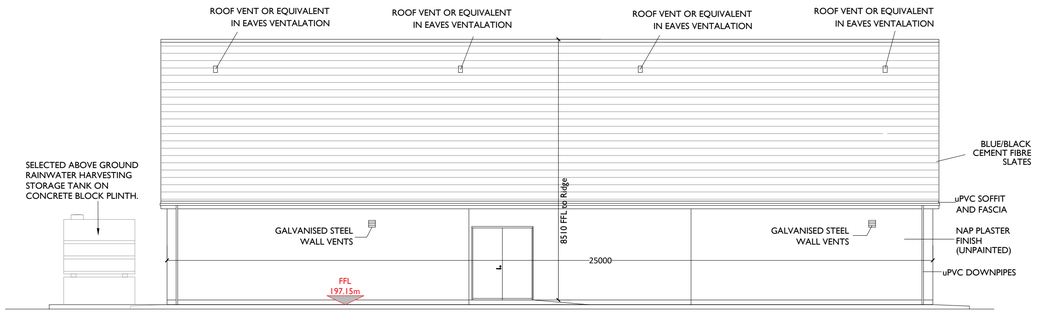
SHEET NUMBER

05783-DR-153

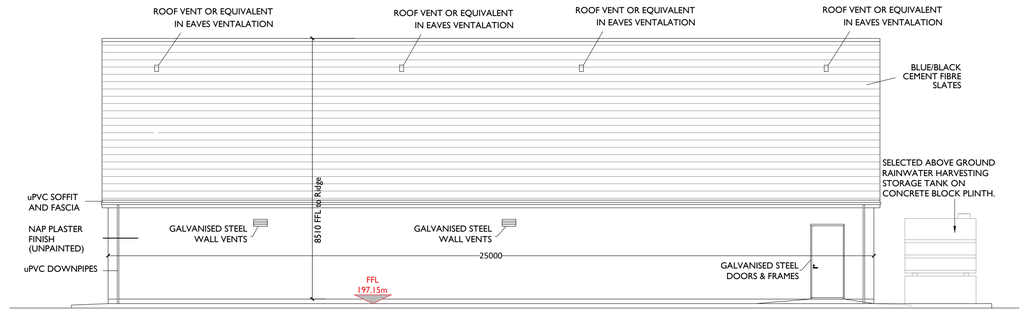
ISO A1 594mm x 841mm



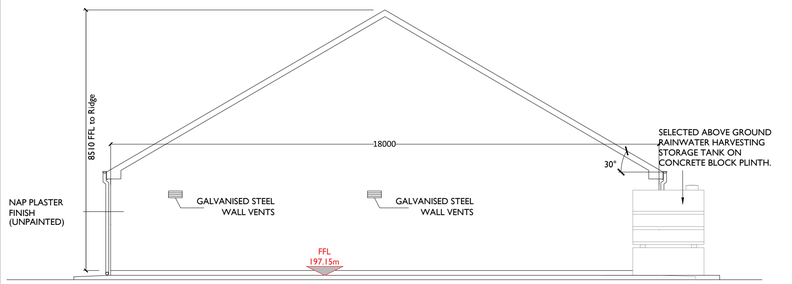
PLAN - CONTROL BUILDING
Scale : 1:100



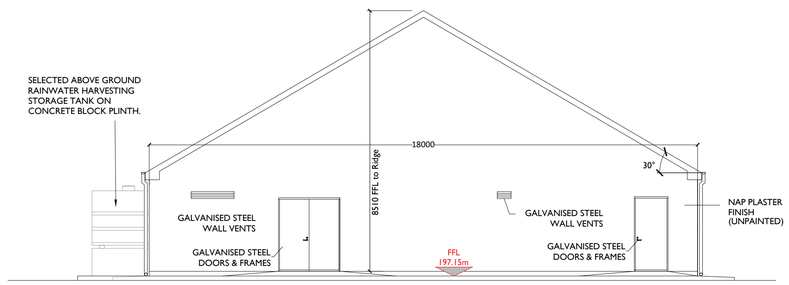
FRONT ELEVATION
Scale : 1:100



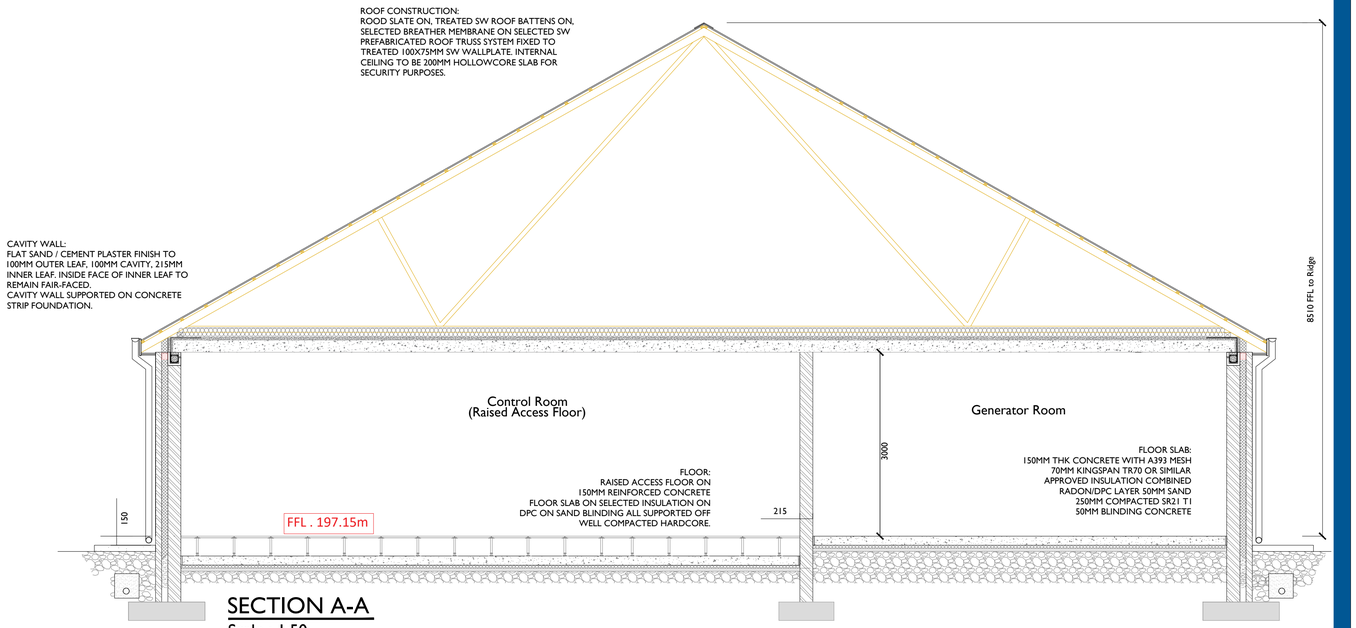
REAR ELEVATION
Scale : 1:100



RIGHT SIDE ELEVATION
Scale : 1:100



LEFT SIDE ELEVATION
Scale : 1:100



SECTION A-A
Scale : 1:50

Project Management Initials: Designer: JC Checked: GC Approved: DB

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PROJECT

Knockshanvo Wind Farm
110kV Grid Connection

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CONSULTANTS

NOTES: -

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4. The Elevation of the Compound will be depicted by localized Topography such that Cut/Fill Earthworks associated with the construction of the Compound are balanced.

LEGEND: -

Proposed Levels shown thus 379.10m
Concrete Footpath shown thus
Proposed Foul Sewer shown thus
Proposed Clean Storm Water shown thus
Proposed Dirty Storm Water shown thus
Water supply from Harvesting Tank shown thus

ISSUE/REVISION

P2	05.06.24	Issued for Planning
P1	10.11.23	Issued for Planning
I/R	DATE	DESCRIPTION

PROJECT NUMBER

05-783

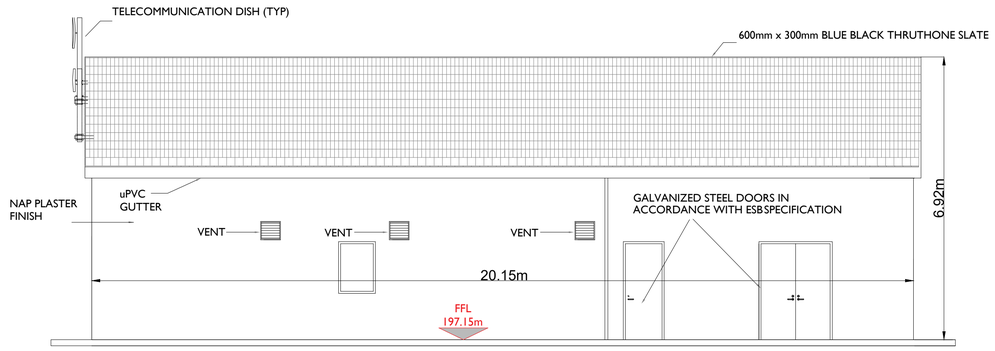
SHEET TITLE

Control Building - Plan & Elevations & Section

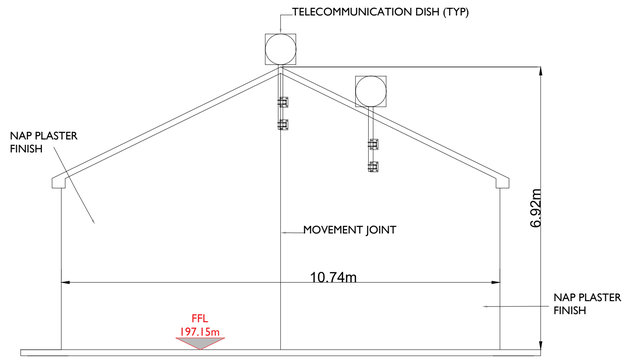
SHEET NUMBER

05783-DR-154

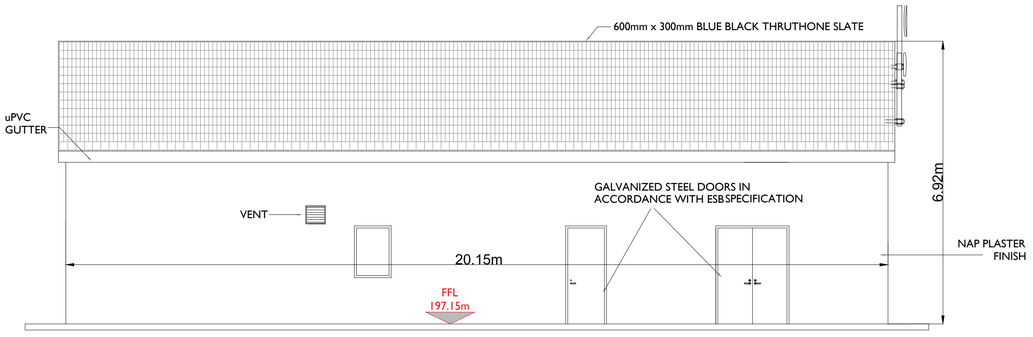
ISO A1 594mm x 841mm



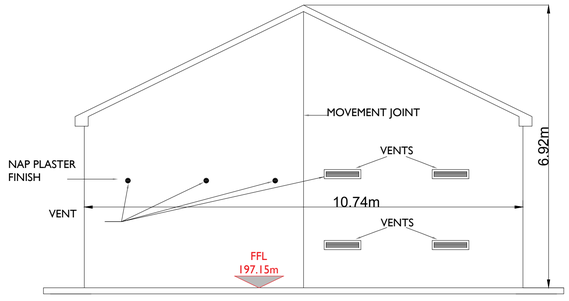
REAR ELEVATION
Scale : 1:75



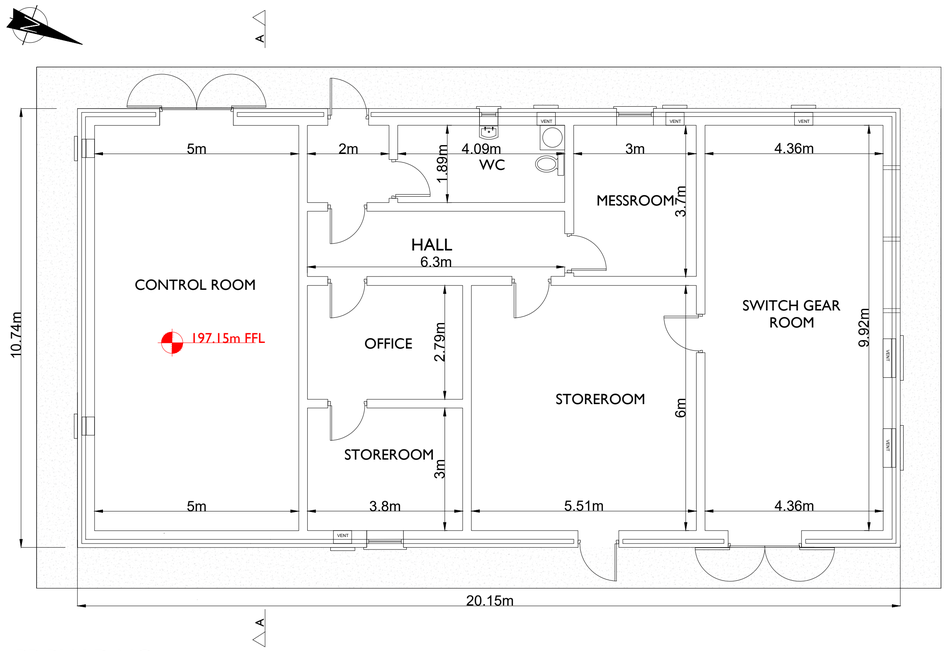
SIDE ELEVATION
Scale : 1:75



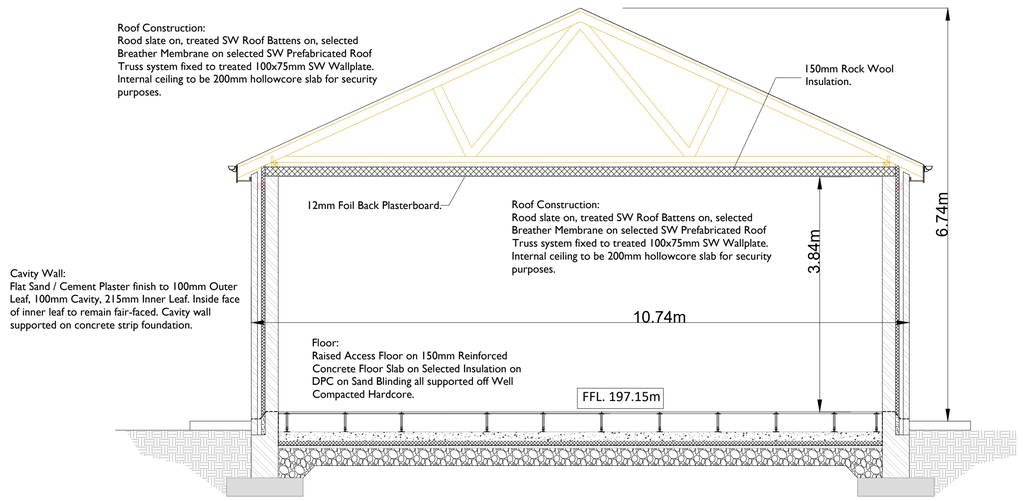
FRONT ELEVATION
Scale : 1:75



SIDE ELEVATION
Scale : 1:75



PLAN - IPP BUILDING
Scale : 1:100



SECTION A-A
Scale : 1:50

Project Management Initials: Designer: JC Checked: GC Approved: DB

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PROJECT

Knockshanvo Wind Farm
110kV Grid Connection

CLIENT

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CONSULTANTS

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LEGEND: -

Proposed Levels shown thus 279.10m

Concrete Footpath shown thus

ISSUE/REVISION

P2	05.06.24	Issued for Planning
P1	10.11.23	Issued for Planning
I/R	DATE	DESCRIPTION

PROJECT NUMBER

05-783

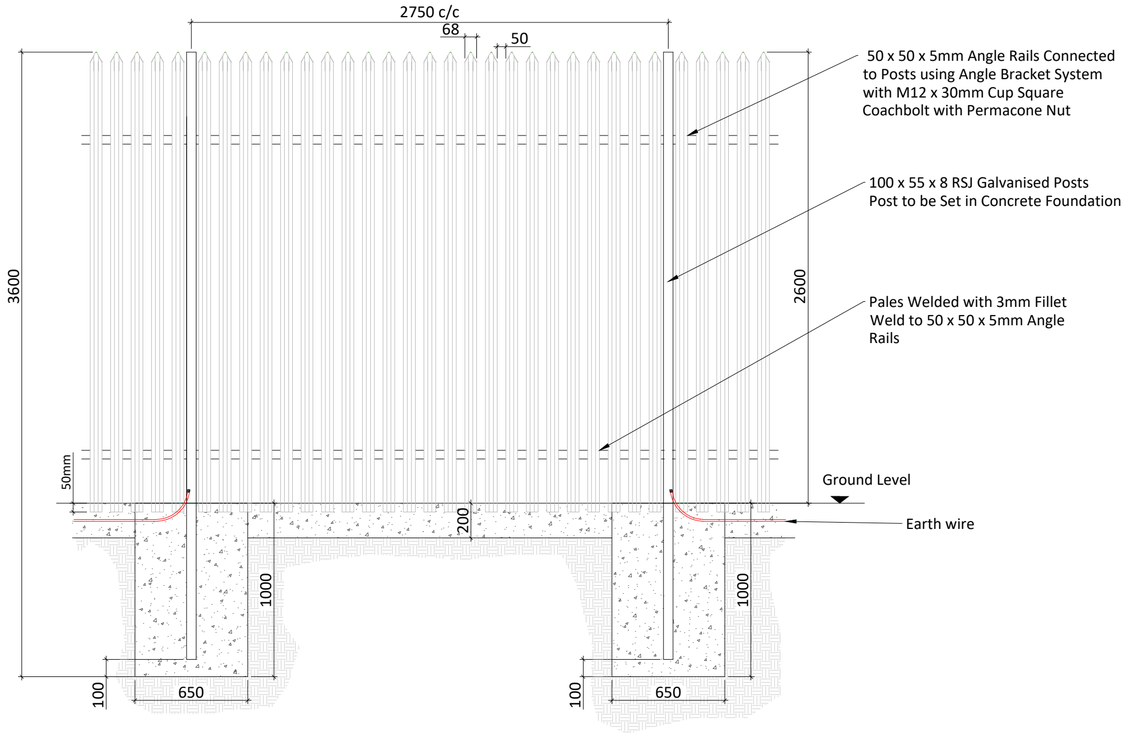
SHEET TITLE

IPP Building - Plan & Elevations & Section

SHEET NUMBER

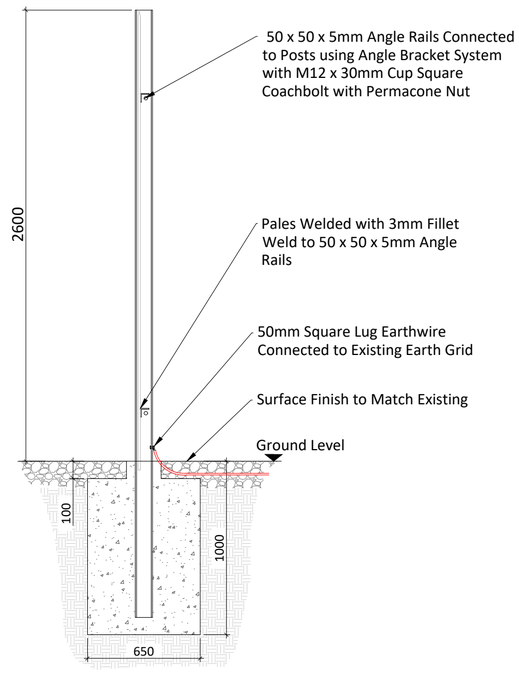
05783-DR-155

ISO A2 420mm x 594mm



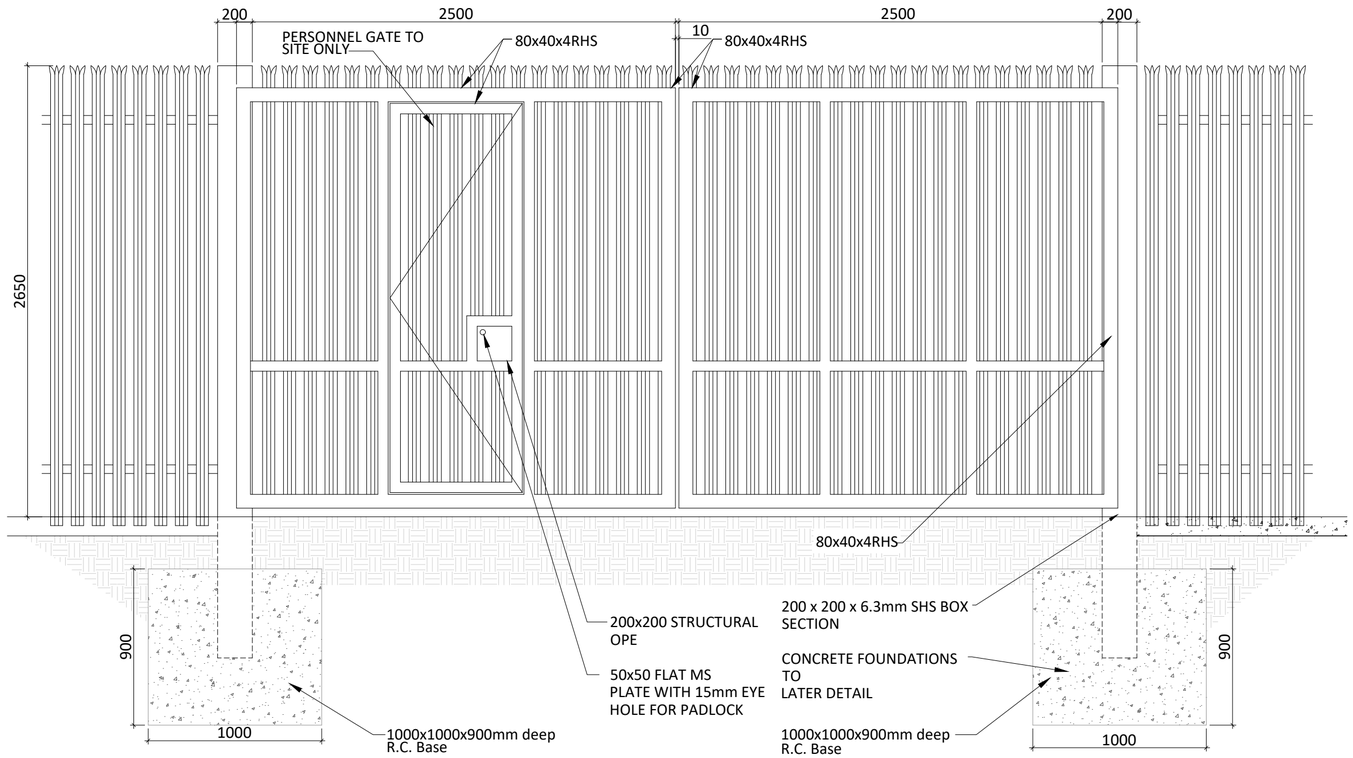
Palisade Fencing Details - Elevation

SCALE 1:25



Palisade Fencing Details - Section

SCALE 1:25



Gate Elevation

SCALE 1:25

Project Management Initials: Designer: JC Checked: GC Approved: DB

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Beenreigh, Abbeydorney,
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PROJECT

Knockshanvo Wind Farm
110kV Grid Connection

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CONSULTANTS

NOTES: -

LEGEND: -

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ISSUE/REVISION

I/R	DATE	DESCRIPTION
P1	10.11.23	Issued for Information

PROJECT NUMBER

05-783

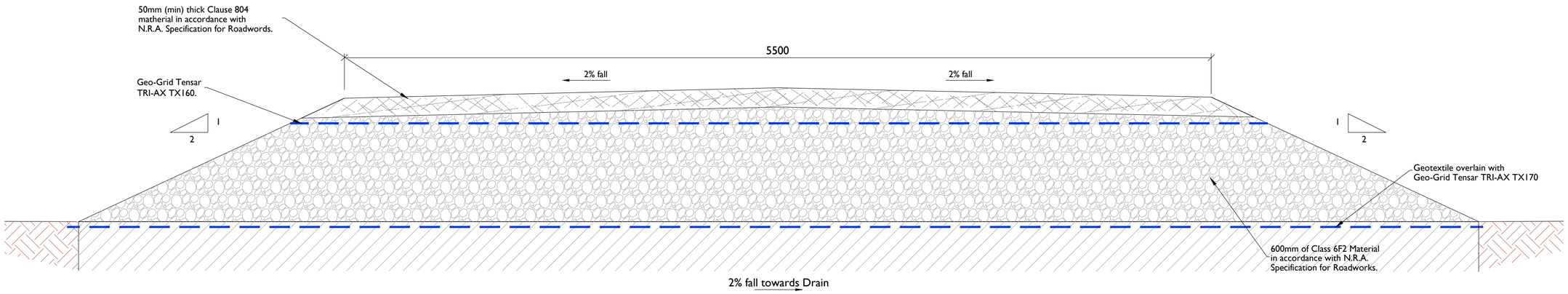
SHEET TITLE

Gate & Fence Details

SHEET NUMBER

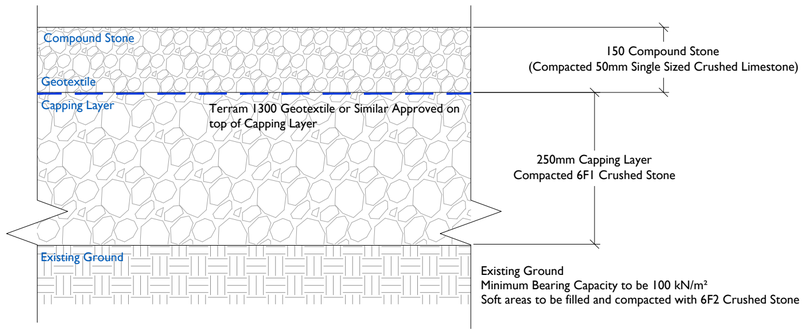
05783-DR-156

ISO A2 420mm x 594mm



Section Through Access Road

SCALE 1:20

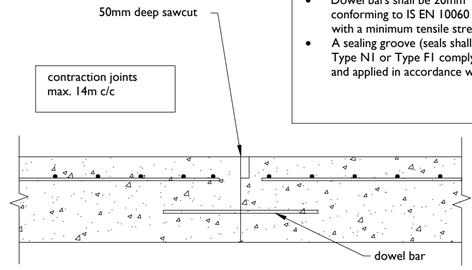


Compound Detail

SCALE 1:10

Contraction joints should comprise of the following:

- A sawn groove joint 10mm wide at least $\frac{1}{4}$ the slab depth
- Dowel bars shall be 20mm Ø at 300mm spacing conforming to IS EN 10060 and IS EN 13877-3 with a minimum tensile strength of 250 MPa
- A sealing groove (seals shall be hot applied sealants Type N1 or Type F1 complying with IS EN 14188-1 and applied in accordance with BS 2499-2)

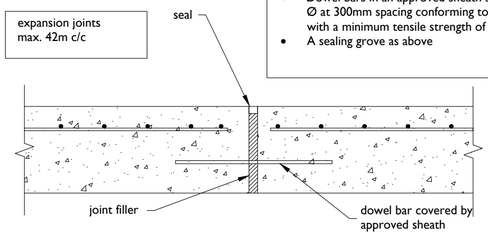


Concrete Access Road Contraction Joint

SCALE 1:10

Expansion joints should comprise of the following:

- A joint filler board 25mm thick self expanding cork seal or from another approved compressible material
- Dowel bars in an approved sheath shall be 25mm Ø at 300mm spacing conforming to IS EN 13877-3 with a minimum tensile strength of 250MPa
- A sealing grove as above

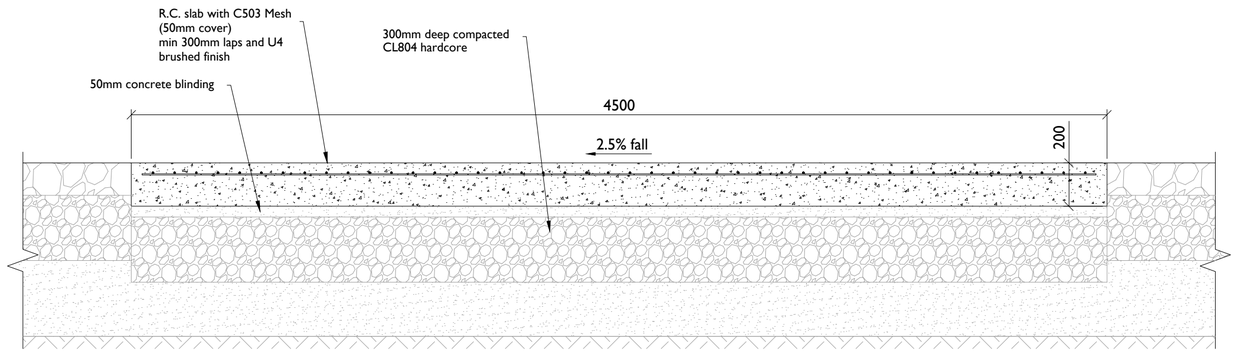


Concrete Access Road Expansion Joint

SCALE 1:10

Lighting Column & Surround Detail

SCALE 1:20



Section - Concrete Access Road

SCALE 1:20

tli GROUP

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PROJECT

Knockshanvo Wind Farm

110kV Grid Connection

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CONSULTANTS

NOTES: -

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LEGEND: -

ISSUE/REVISION

P2	05.06.24	Issued for Planning
P1	10.11.23	Issued for Information
I/R	DATE	DESCRIPTION

PROJECT NUMBER

05-783

SHEET TITLE

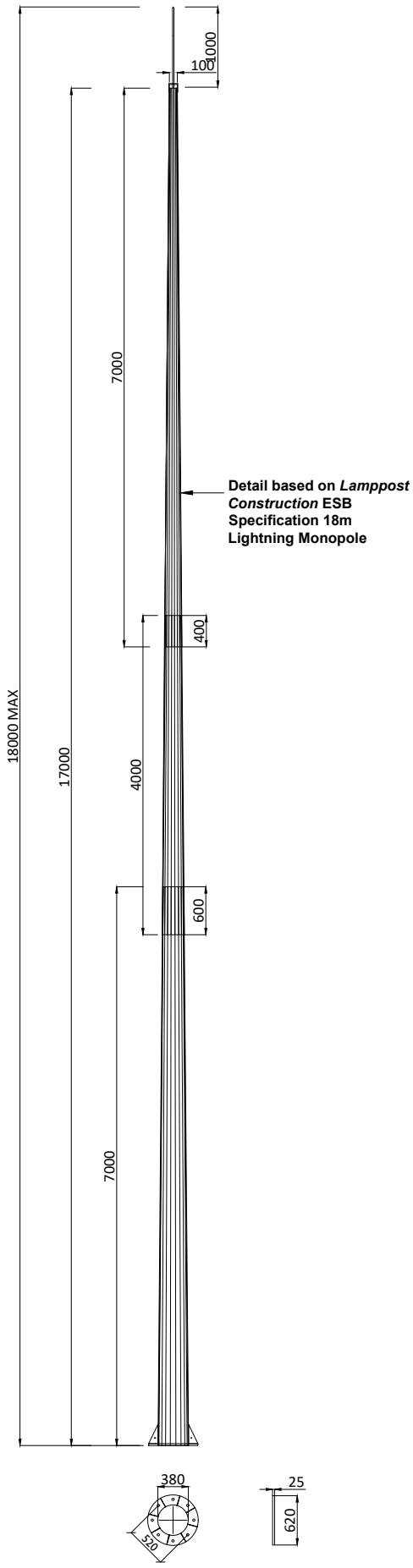
Site Compound Details
& Access Road Details.

SHEET NUMBER

05783-DR-157

Project Management Initials: Designer: JC Checked: GC Approved: DB

ISO A3 297mm x 420mm



Monopole Details

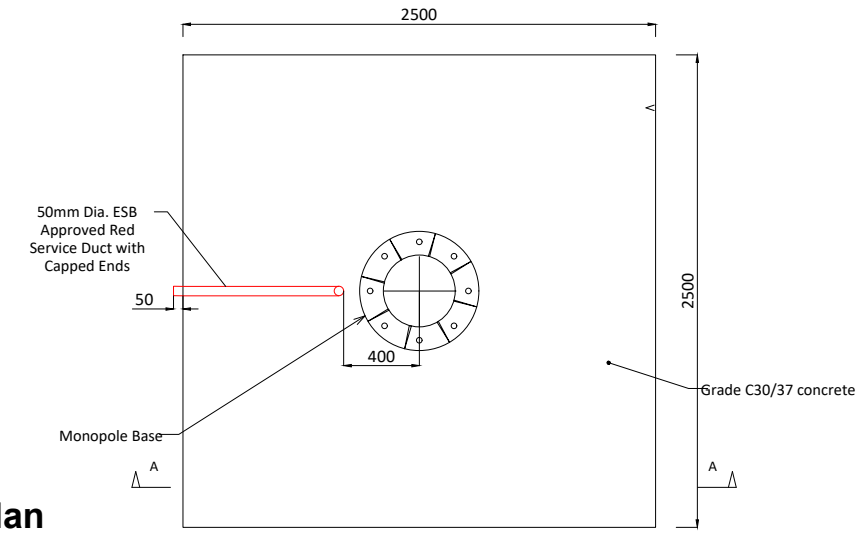
SCALE 1:75

GENERAL NOTES:

1. ALL DRAWINGS TO BE READ IN CONJUNCTION WITH THE SPECIFICATION AND ALL ENGINEERS AND ARCHITECTS DRAWINGS
2. ALL CONCRETE TO BE IN ACCORDANCE WITH I.S. EN 206-1:2002 WITH THE MIX DESIGNS SHOWN IN TABLE 1
3. CONCRETE FINISHES TO BE IN ACCORDANCE WITH TABLE 6.1 OF THE ESBI SPECIFICATION CS17-SO1-005.
4. ALL REINFORCEMENT SHALL BE IN ACCORDANCE WITH BS4449 AND SCHEDULED IN ACCORDANCE WITH BS.8666. 300MM LAPS FOR A142 MESH 600MM MIN LAPS FOR A393 MESH.
5. REFER ALWAYS TO RELEVANT EARTH GRID DRAWING PRIOR TO EXCAVATIONS & CONCRETE POURS
6. GEOMETRICAL TOLERANCES TO BE IN ACCORDANCE WITH TABLE 6.2 OF ESBI SPECIFICATION CS17-S01-005

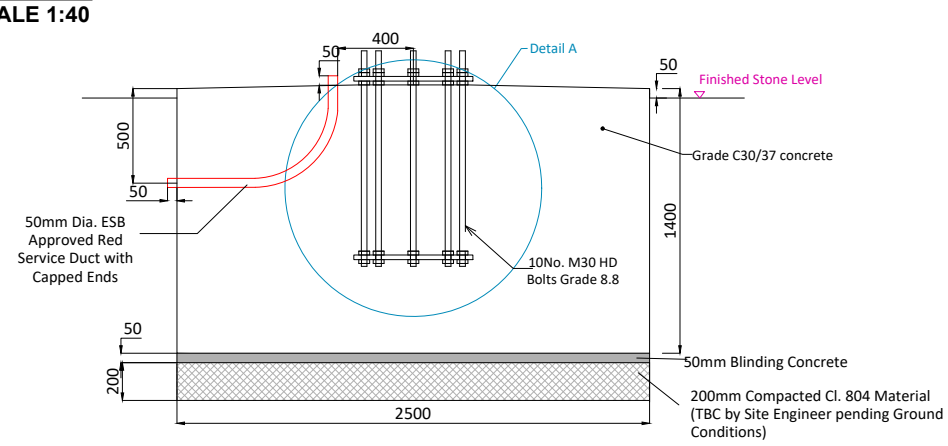
FOUNDATION NOTES:

7. GROUND TO HAVE A MINIMUM BEARING CAPACITY OF 100 kN/M².
8. FORMATION LEVEL AND FOUNDATIONS TO BE INSPECTED AND APPROVED BY THE ENGINEER PRIOR TO ANY CONCRETE BEING POURED.
9. ALL FOUNDATIONS ARE TO BE BLINDED IMMEDIATELY AFTER EXCAVATION WITH 50MM OF C16/20 CONCRETE BLINDING.
10. REFER ALWAYS TO THE RELEVANT EARTH WORK DRAWINGS PRIOR TO EXCAVATIONS & CONCRETE POURS.



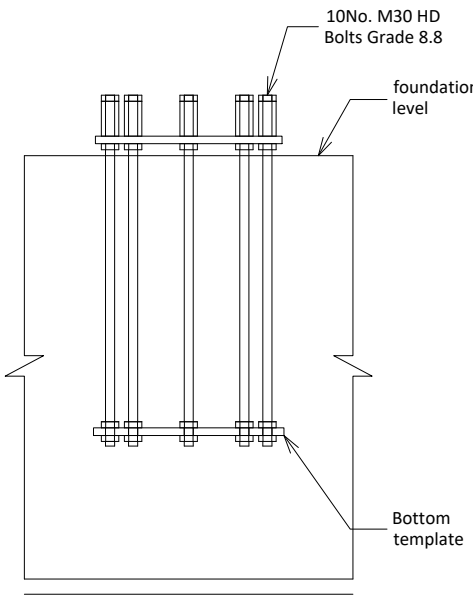
Plan

SCALE 1:40



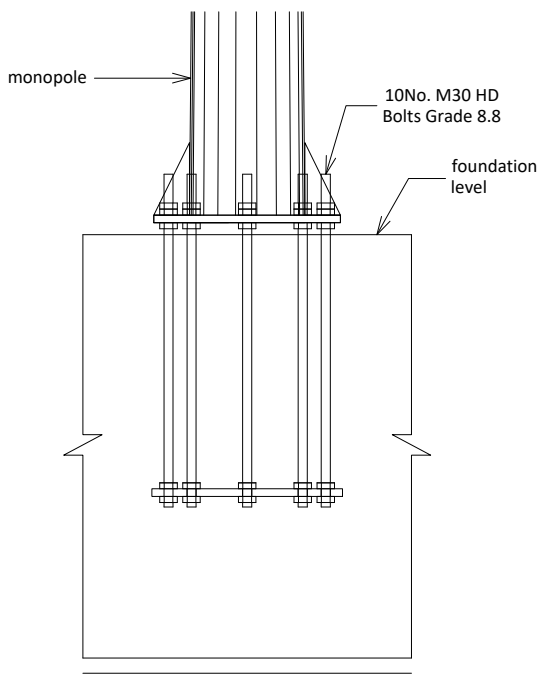
Section A-A: Foundation detail

SCALE 1:40



Detail A

Scale : 1:25



Monopole Base Plate to HDB Connection

Scale : 1:25

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ISSUE/REVISION

I/R	DATE	DESCRIPTION
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PROJECT
Knockshanvo Wind Farm
110kV Grid Connection

SHEET TITLE
Lightning Monopole Foundation Details
18m Masts

DRAWING STATUS
For Information

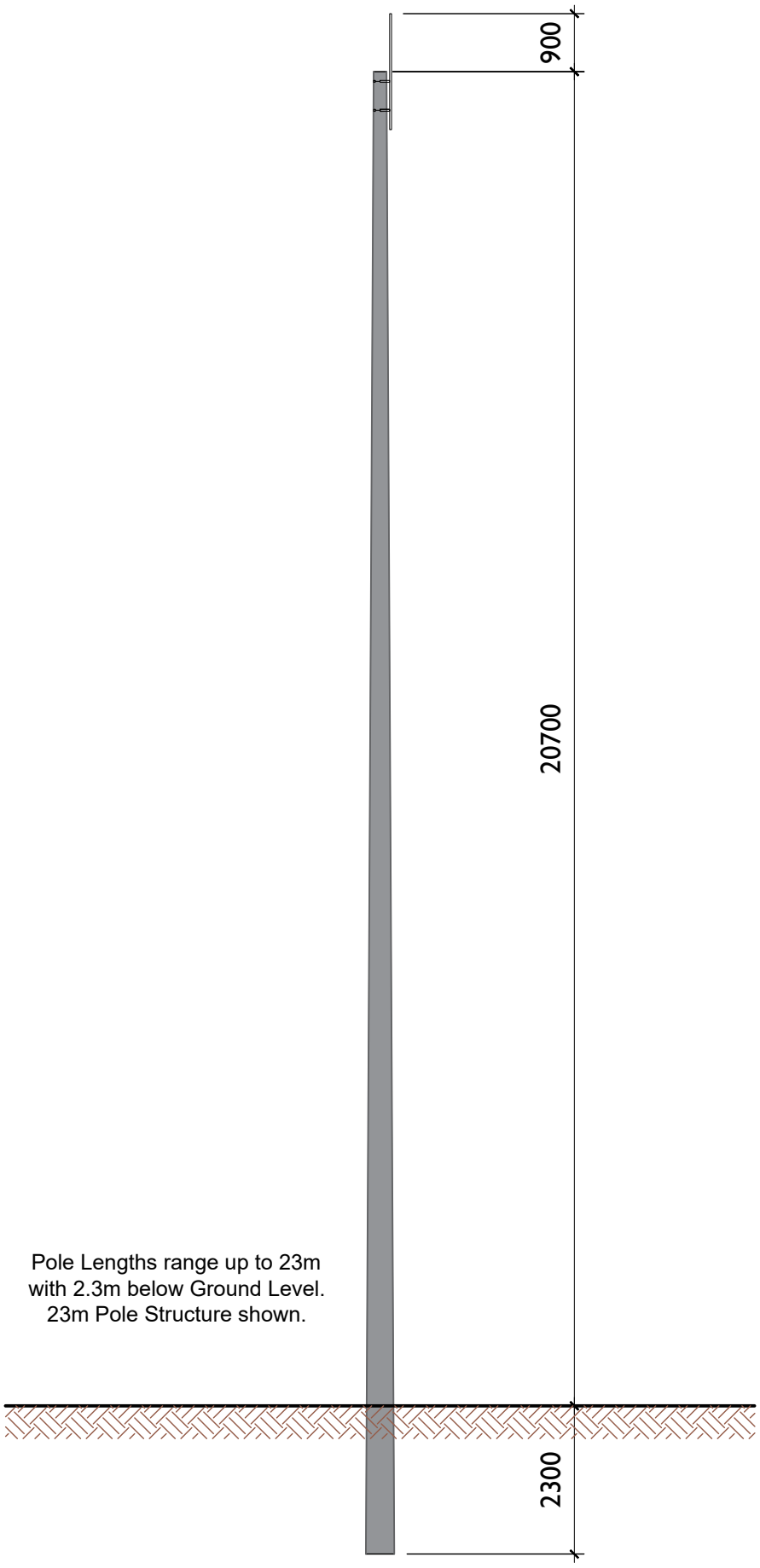
PROJECT NUMBER
05-783

SHEET NUMBER
05783-DR-158

LEGEND/NOTES: -

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ISO A3 297mm x 420mm



Pole Lengths range up to 23m
with 2.3m below Ground Level.
23m Pole Structure shown.

FRONT ELEVATION

Scale 1:100

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ISSUE/REVISION

I/R	DATE	DESCRIPTION
P1	10.11.23	Issued for Planning

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PROJECT
Knockshanvo Wind Farm
110kV Grid Connection

SHEET TITLE
Telecoms Pole Elevation View

DRAWING STATUS
Issued for Information

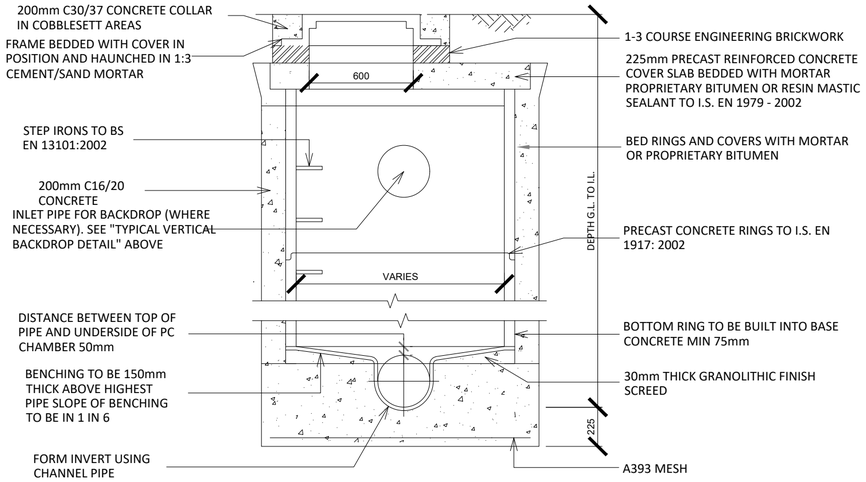
LEGEND/NOTES: -
All dimensions in mm unless noted otherwise

PROJECT NUMBER
05-783

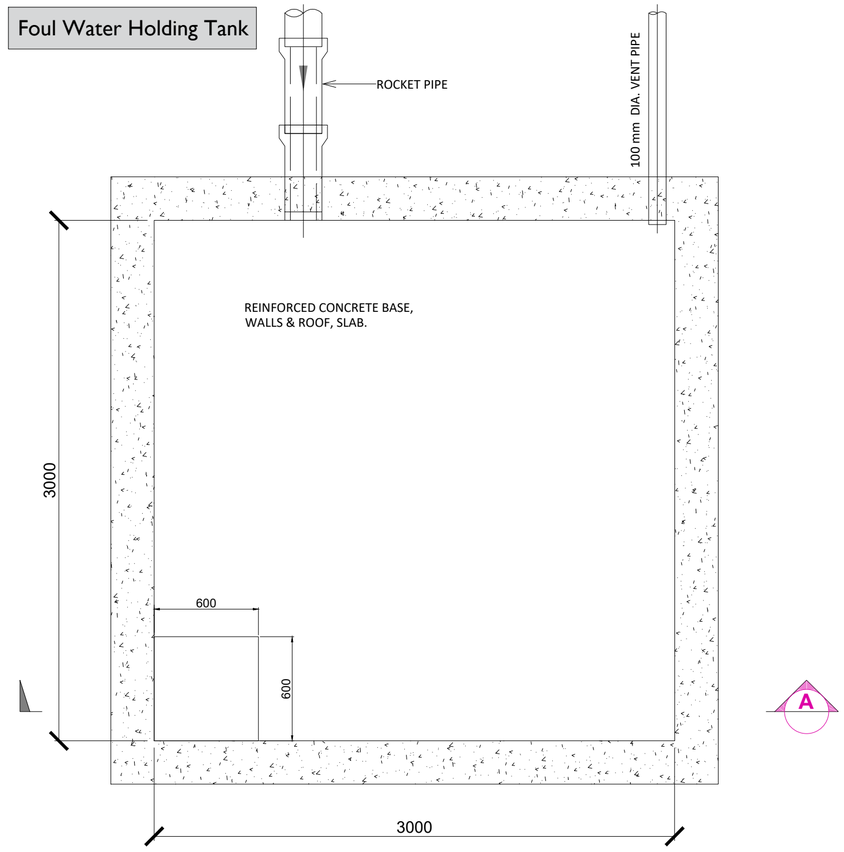
SHEET NUMBER
05783-DR-159

ISO A2 420mm x 594mm

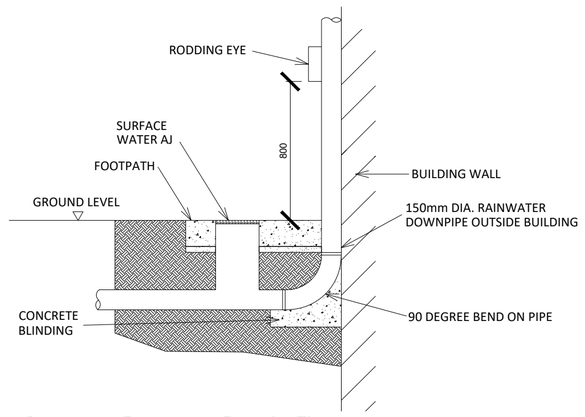
Manhole



Foul Water Holding Tank

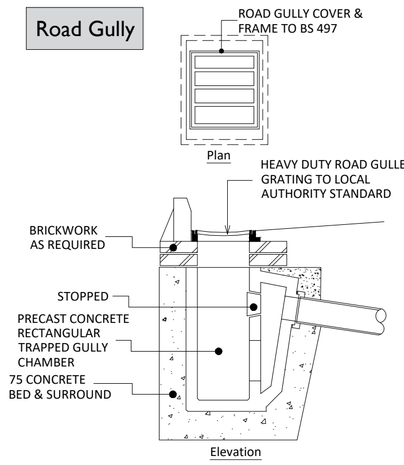


Foul Water Holding Tank - Plan
Scale : 1:25



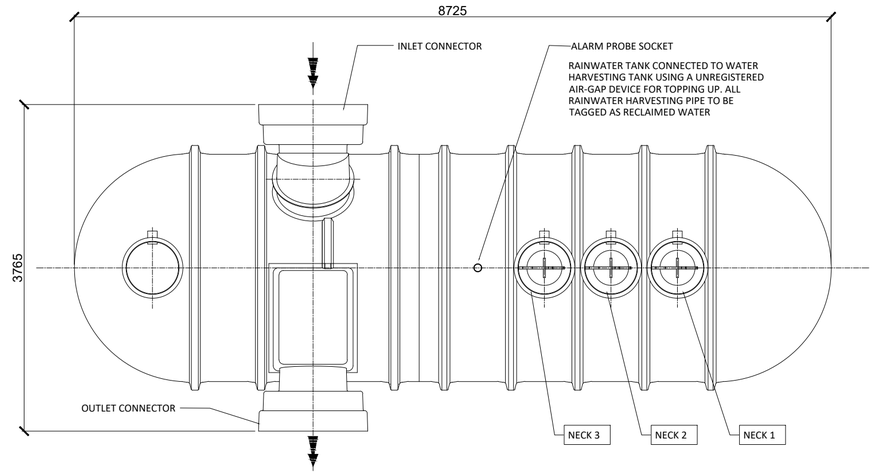
Rainwater Downpipe Detail - Elevation
Scale : 1:25

Road Gully



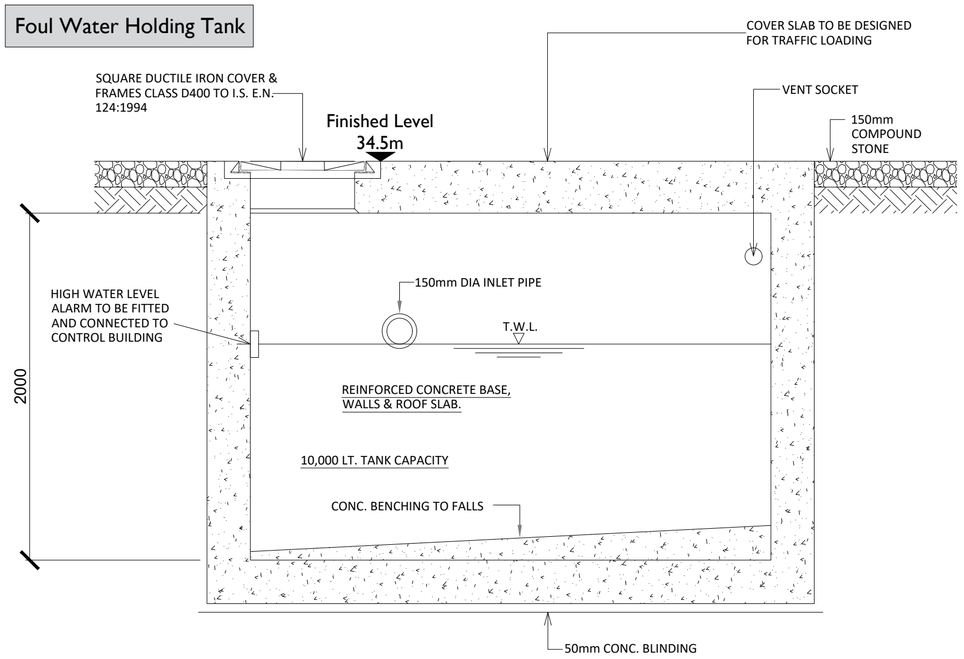
Road Gully Detail
Scale : 1:25

Retention Seperator Tank



Retention Separator Tank - Plan
Scale : 1:50

Foul Water Holding Tank



Foul Water Holding Tank - Elevation
Scale : 1:25

Project Management Initials: Designer: JC Checked: GC Approved: DB

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PROJECT

Knockshanvo Wind Farm
110kV Grid Connection

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LEGEND: -

ISSUE/REVISION

I/R	DATE	DESCRIPTION
P1	10.11.23	Issued for Planning

PROJECT NUMBER

05-783

SHEET TITLE

Substation Compound drainage, Rentention seperator tank, Foul water holding tank details

SHEET NUMBER

05783-DR-160

POLLUTION PREVENTION NOTES:

1. Site management proposals are intended to ensure protection against surface water and groundwater pollution, siltation and erosion.
2. Suitable drainage control measures should be in place at all times to prevent conveyance of significant volumes of silt to off site receiving watercourses.
3. Silty water can arise from dewatering excavations, erosion of exposed/disturbed ground, temporary stockpiles, plant and wheel wash, site roads/tracks, and disturbance of existing field drains and ditches.

Discharges

4. Water containing silt will not be pumped directly to any natural watercourse. All discharges to be made over open ground or into existing field drain with silt trap at a minimum of 20m from nearest watercourse unless otherwise stated.
5. No excavated material is to be stored within any surface water buffer zone.
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8. Vegetation will NOT be stripped from existing drains/ditches unless absolutely necessary.

Excavations

9. Where deep excavations are proposed cut-off drains will be use to reduce the amount of surface water entering the excavation. This will be the case around turbine base excavations.

Exposed Ground & Stockpiles

10. The amount of exposed ground and temporary stockpiles open at any one time will be minimised, as far as practicable.

Site tracks

11. Use of track side swales with check dams, and/or filtration check dams will reduce silt in runoff water as required.
12. Check dams to be inspected and cleaned regularly.

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13. Refuelling of mobile plant will be completed in designated refueling areas only, preferably on an impermeable surface and away from field drains / ditches and watercourses / waterbodies.
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15. Care will be taken when completing concrete works on site to ensure no discharges occur.
16. Concrete wash water, and waste concrete will be managed appropriately on site.

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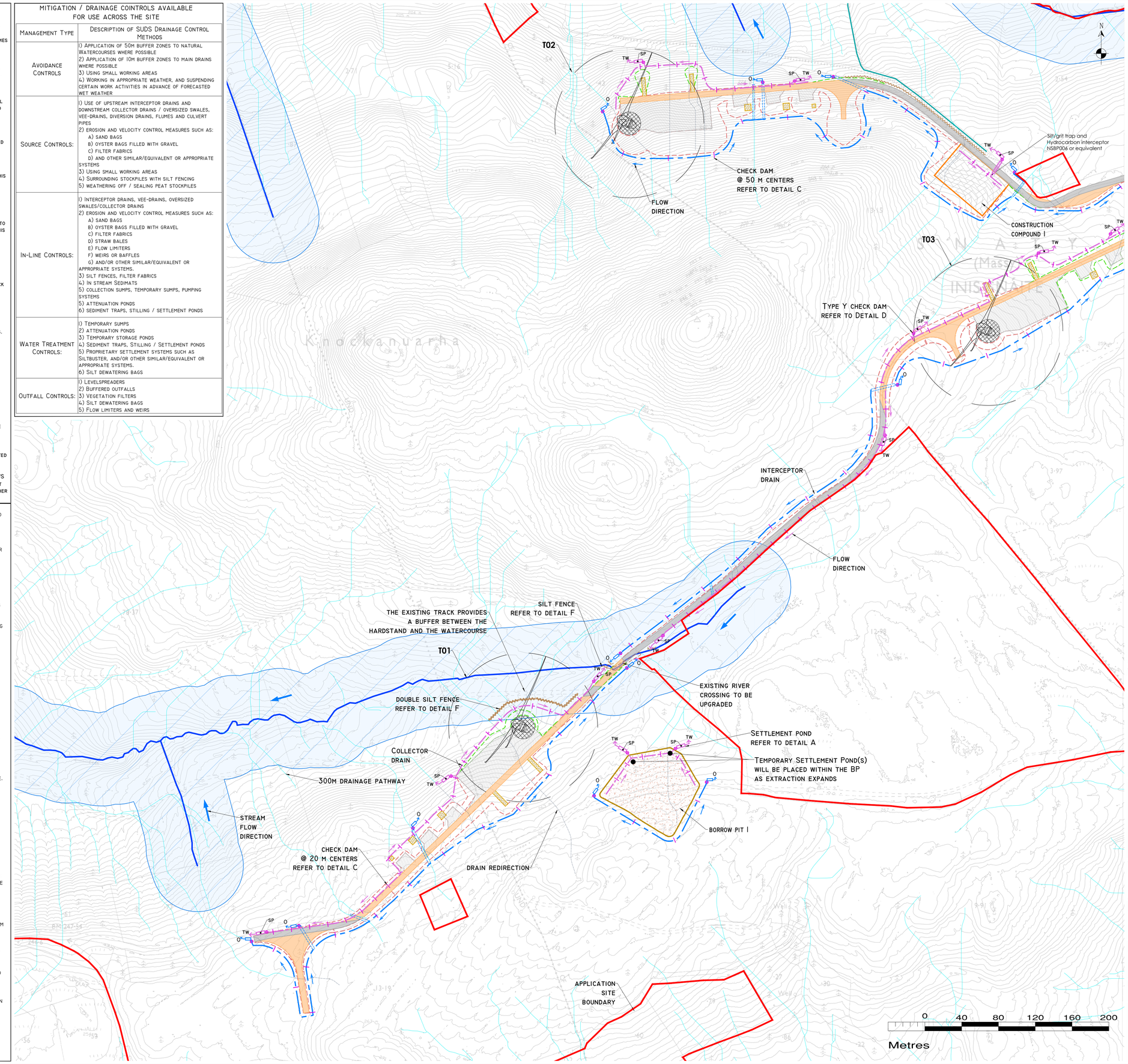
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3. SUDS system to be constructed prior to, or at the same time as the access tracks. Interim measures such as the placement of straw bales/silt fencing/or similar approved method or additional check dams and silt fences to be employed in all instances where work carried out to construct the access tracks is likely to cause adverse environmental effects through increased silt loadings being generated during the construction phase.
4. Suitable prevention measures should be in place at all times to prevent the conveyance of significant volumes of silt to receiving watercourses. See notes on pollution prevention.
5. Interceptor swales / ditches to be used to collect upstream surface water flows. Regular cross drains / discharge to field ditches/drains will be required to transfer / discharge surface water in interceptor drains to suitable field drain outfall points.
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8. Batters of all proposed swales / ditches to have a slope of between 1 : 1.5 to 1 : 2 depending upon depth of swale/ditch and will be left as cut to re-vegetate with local species.
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19. Oil fuel should be stored within bunded containment structures.
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Management Type	Description of SUDS Drainage Control Methods
Avoidance Controls	1) Application of 50m buffer zones to natural watercourses where possible 2) Application of 10m buffer zones to main drains where possible 3) Using small working areas 4) Working in appropriate weather, and suspending certain work activities in advance of forecasted wet weather
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In-Line Controls:	1) interceptor drains, vee-drains, oversized swales/collector drains 2) erosion and velocity control measures such as: A) sand bags B) oyster bags filled with gravel C) filter fabrics D) straw bales E) flow limiters F) weirs or baffles G) and/or other similar/equivalent or appropriate systems. 3) silt fences, filter fabrics 4) In stream Sedimats 5) collection sumps, temporary sumps, pumping systems 5) attenuation ponds 6) sediment traps, stilling / settlement ponds
Water Treatment Controls:	1) Temporary sumps 2) attenuation ponds 3) Temporary storage ponds 4) Sediment traps, Stilling / Settlement ponds 5) Proprietary settlement systems such as Siltbuster, and/or other similar/equivalent or appropriate systems. 6) Silt dewatering bags
Outfall Controls:	1) Levelspreaders 2) Buffered outfalls 3) Vegetation filters 4) Silt dewatering bags 5) Flow limiters and weirs



Drawing Legend :

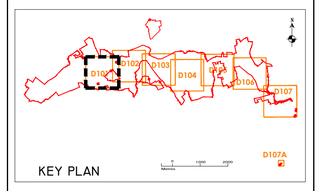
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- Rivers/Streams 50m buffer
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Revisions

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Client: FuturEnergy Ireland

Job: Knockshanvo WF, Co. Clare

Title: Proposed Drainage Layout

Figure No: D101

Drawing No: P1625-0-0824-A1-D101-00C	
Sheet Size: A1	Project No.: P1625-0
Scale: 1:2,000 (A1)	Drawn By: GA
Date: 07/08/2024	Checked By: MG

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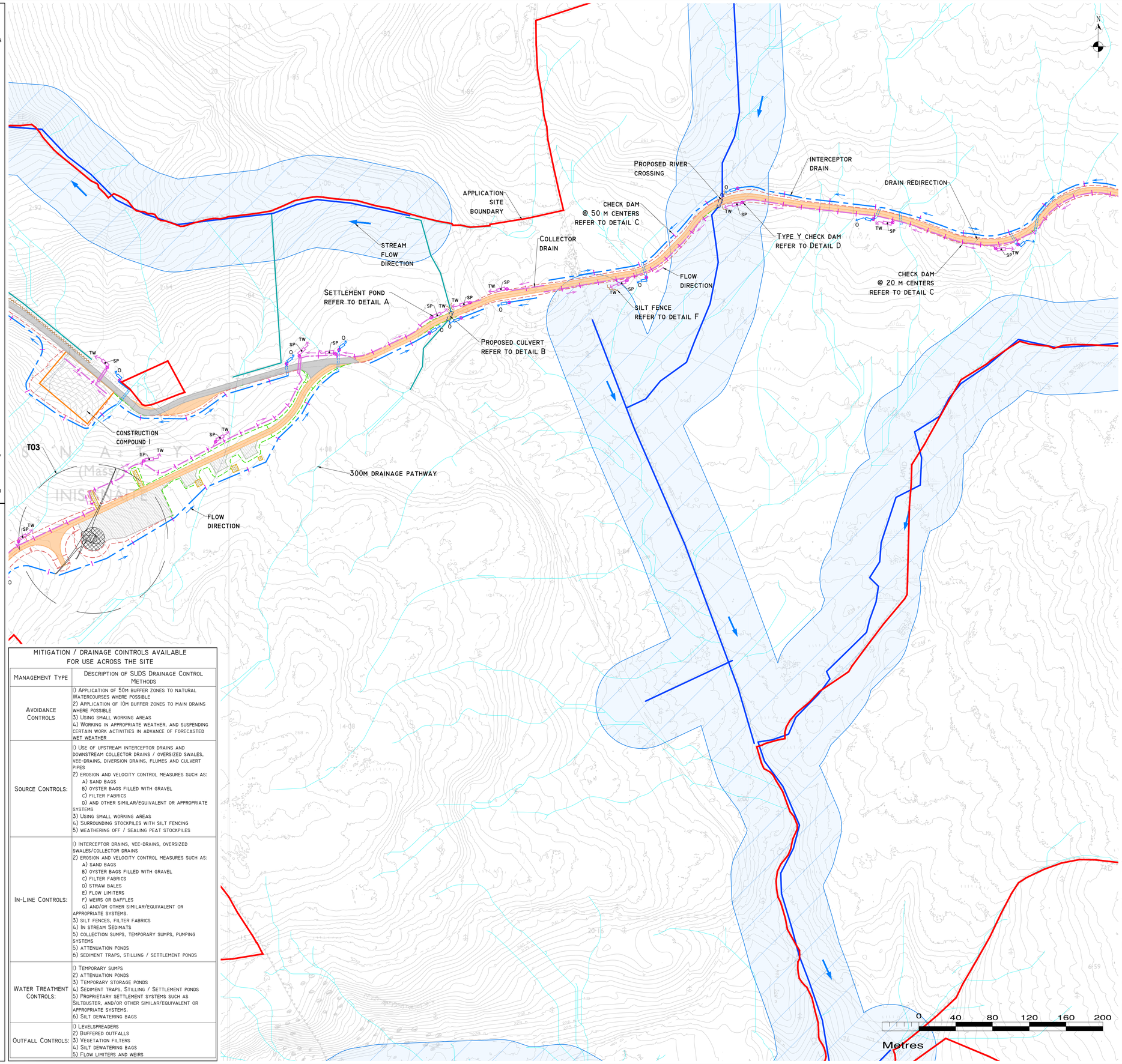
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DRAWING LEGEND :

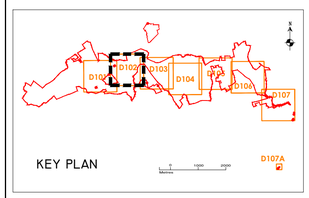
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Date	Description	Chkd	Signed

Revisions

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Client: FuturEnergy Ireland

Job: Knockshanvo WF, Co. Clare

Title: Proposed Drainage Layout

Figure No: DI02

Drawing No: P1625-0-0824-A1-D102-00C	
Sheet Size: A1	Project No.: P1625-0
Scale: 1:2,000 (A1)	Drawn By: GA
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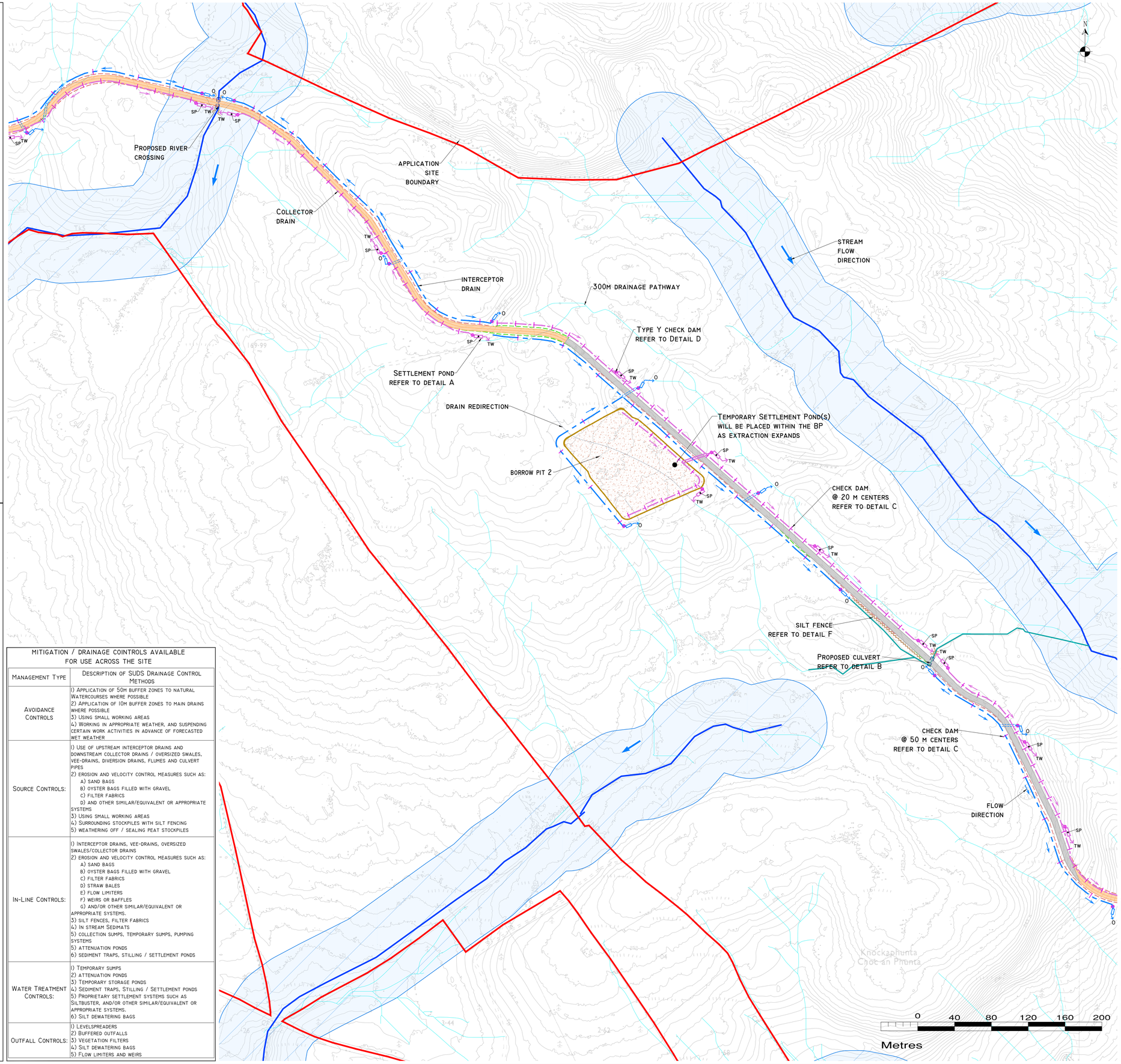
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Drawing Legend :

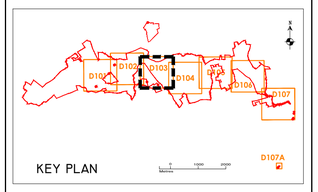
- Rivers/streams (WC - watercourse)
- Existing drains
- Rivers/streams 50m buffer
- Stream flow direction
- Drainage pathways >300m length
- Redirected drains

Existing Drainage

- Upstream Interceptor Drain
- Swales/Downstream Collector Drain
- Direction of flow
- Silt Fences
- Double/triple Silt Fences
- Settlement pond - level spreader
- Check Dam 'type A'
- Check Dam 'type B'
- proposed wc crossing
- existing wc crossing
- Interceptor Ditch Culvert
- Collector Ditch Culvert
- O — Overland Flow Discharge
- TW — Treated Water Discharge
- SP — Settlement Pond
- VS — Semi-Natural Vegetation Swale / Filter Bed /secondary sp
- Pumping Sump

Proposed Drainage

- Application site boundary
- Existing ground surface minor contour (1 m interval)
- Turbine and swept area
- Proposed hardcored areas
- Existing roads proposed to be upgraded
- Substation
- Construction compound
- Met mast
- Borrow pit
- Cut area
- Fill area



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Date	Description	Chkd	Signed

Revisions

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Client: FuturEnergy Ireland

Job: Knockshanvo WF, Co. Clare

Title: Proposed Drainage Layout

Figure No: DI03

Drawing No: P1625-0-0824-A1-D103-00C	
Sheet Size: A1	Project No.: P1625-0
Scale: 1:2,000 (A1)	Drawn By: GA
Date: 07/08/2024	Checked By: MG

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2. Suitable drainage control measures should be in place at all times to prevent conveyance of significant volumes of silt to off site receiving watercourses.
3. Silty water can arise from dewatering excavations, erosion of exposed/disturbed ground, temporary stockpiles, plant and wheel wash, site roads/tracks, and disturbance of existing field drains and ditches.

Discharges

4. Water containing silt will not be pumped directly to any natural watercourse. All discharges to be made over open ground or into existing field drain with silt trap at a minimum of 20m from nearest watercourse unless otherwise stated.
5. No excavated material is to be stored within any surface water buffer zone.
6. Pumped water will be directed into track side ditches and treated in settlement ponds and vegetation swales prior to overland discharge.
7. Pumping of clean water from excavations / or over-pumping in drains/ditches/streams will be completed in a manner that does not cause scour or erosion at the point of release/discharge. This will be done by reducing the flow velocities or by use of splash plates, and other similar discharge controls.
8. Vegetation will NOT be stripped from existing drains/ditches unless absolutely necessary.

Excavations

9. Where deep excavations are proposed cut-off drains will be use to reduce the amount of surface water entering the excavation. This will be the case around turbine base excavations.

Exposed Ground & Stockpiles

10. The amount of exposed ground and temporary stockpiles open at any one time will be minimised, as far as practicable.

Site tracks

11. Use of track side swales with check dams, and/or filtration check dams will reduce silt in runoff water as required.
12. Check dams to be inspected and cleaned regularly.

Refueling

13. Refuelling of mobile plant will be completed in designated refueling areas only, preferably on an impermeable surface and away from field drains / ditches and watercourses / waterbodies.
14. Spill kits and drip trays will be available on site for use as required.

Concrete

15. Care will be taken when completing concrete works on site to ensure no discharges occur.
16. Concrete wash water, and waste concrete will be managed appropriately on site.

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CONTAIN - the source of the pollution should be bunded using a suitable method. Natural watercourses should be temporarily diverted around the source of pollution.

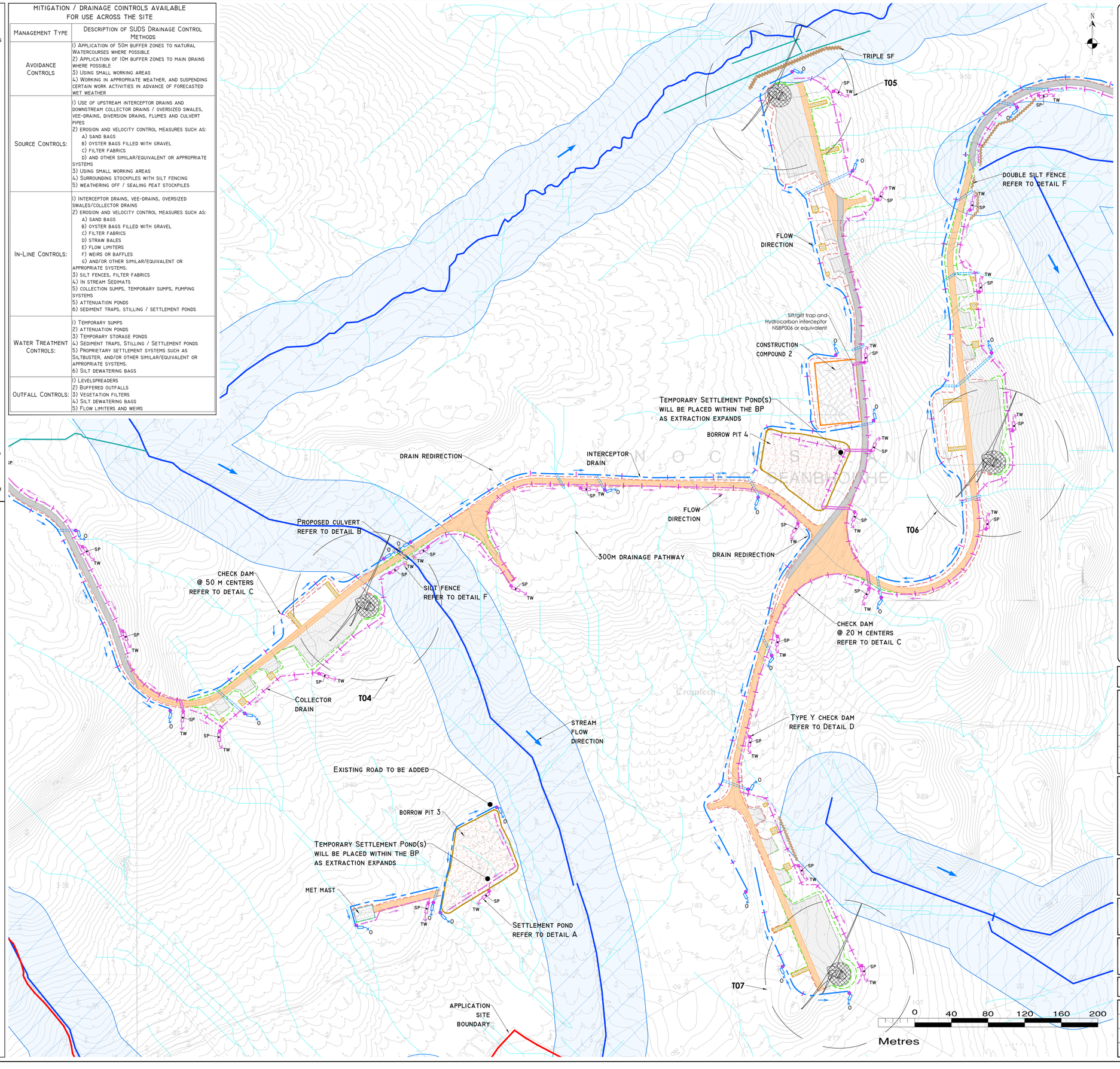
NOTIFY - The relevant authorities (Site Manager / Fisheries / NPWS / Local Authority etc.) should be notified immediately to ensure that measures can be implemented downstream to protect fisheries and other sensitive areas.

Drainage Notes:

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3. SUDS system to be constructed prior to, or at the same time as the access tracks. Interim measures such as the placement of straw bales/silt fencing/or similar approved method or additional check dams and silt fences to be employed in all instances where work carried out to construct the access tracks is likely to cause adverse environmental effects through increased silt loadings being generated during the construction phase.
4. Suitable prevention measures should be in place at all times to prevent the conveyance of significant volumes of silt to receiving watercourses. See notes on pollution prevention.
5. Interceptor swales / ditches to be used to collect upstream surface water flows. Regular cross drains / discharge to field ditches/drains will be required to transfer / discharge surface water in interceptor drains to suitable field drain outfall points.
6. Drainage swales / ditches to be excavated adjacent to the access tracks. Regular cross drains to be located along access tracks to prevent excessive volumes of water collecting in the swales / ditches. Locations of cross drains to be agreed with the Engineer on site. Surface water will not be allowed to discharge directly into existing watercourses.
7. Where possible, a buffer zone of >20m to any existing watercourse will be required where over land discharges are proposed from access track swales / ditches.
8. Batters of all proposed swales / ditches to have a slope of between 1 : 1.5 to 1 : 2 depending upon depth of swale/ditch and will be left as cut to re-vegetate with local species.
9. Track side swales / ditches to be shallow with moderate gradients to prevent scouring. In steep areas check dams should be installed to reduce flow velocities and provide source control of silt containment. Where necessary these have been designated in conjunction with settlement ponds and silt traps, prior to discharge.
10. Settlement ponds to be constructed for silt removal at turbine bases and hard stand areas. Pond sizes depends on the catchment area being served. Sample pond sizes for various catchment areas shown on Drawing D501.
11. Straw bales / or similar and silt fences to be used also around spoil heaps to mitigate silt runoff. Silt fences may be removed when suitable vegetation cover is established.
12. Silt fences to be provide along edge of existing watercourse where works comes within <15m of edge of any ditch / drain / ephemeral channels.
13. Slopes of the swales / ditches to be vegetated or protected from erosion until vegetation has been established. Stripped vegetative layer (peat 'sod' or 'scraw') from excavations to be stored locally and used to line slopes and base of swales / ditches or longitudinal mounds of vegetation swales at field drain discharge points.
14. Areas stripped of vegetation should be kept to a minimum.
15. Clean stone flow control check dams to be made of locally won / geologically similar well graded stone. Aggregate size for stone check dams to be typically 20- 40mm clean stone. On sloping sections of the access tracks, 40mm check dams to be protected from washing away through the placement of 100m stone on the downhill face of the check dam and by wrapping in geotextile.
16. Build up of silt levels at check dams to be removed and disposed of appropriately. Silt levels at check dams to be visually inspected as part of an ongoing drainage maintenance programme during the construction phase. Where check dams become clogged with silt or vegetation, stone check dam to be removed and replaced subsequent to the removal of silt.
17. Spacing and frequency of check dams will be dependent upon longitudinal gradient of swale.
18. Location of filtration check dams (if required) to be agreed on site with Engineer. Settlement ponds to be constructed in a manner where they may be easily infilled at a later date (post completion of the turbine base and hardstand construction). Only suitable materials excavated from the pond to be used to form part of the embankment around the pond.
19. Oil fuel should be stored within bunded containment structures.
20. Silt bags will be used on site at field drain discharge

MITIGATION / DRAINAGE COINTROLS AVAILABLE FOR USE ACROSS THE SITE

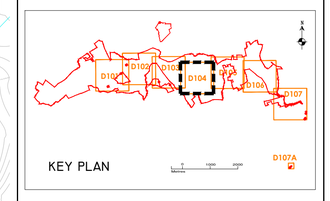
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RIVERS/STREAMS (WC - WATERCOURSE)
EXISTING DRAINS
RIVERS/STREAMS 50m BUFFER
STREAM FLOW DIRECTION
DRAINAGE PATHWAYS >300m LENGTH
REDIRECTED DRAINS
EXISTING DRAINAGE

UPSTREAM INTERCEPTOR DRAIN
SWALES/DOWNSTREAM COLLECTOR DRAIN
DIRECTION OF FLOW
SILT FENCES
DOUBLE/TRIPLE SILT FENCES
SETTLEMENT POND - LEVEL SPREADER
CHECK DAM 'TYPE A'
CHECK DAM 'TYPE B'
PROPOSED WC CROSSING
EXISTING WC CROSSING
INTERCEPTOR DITCH CULVERT
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SP SETTLEMENT POND
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PUMPING SUMP
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APPLICATION SITE BOUNDARY
EXISTING GROUND SURFACE MINOR CONTOUR (1 M INTERVAL)
TURBINE AND SWEPT AREA
PROPOSED HARDCORED AREAS
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FILL AREA



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Client: FuturEnergy Ireland

Job: Knockshanvo WF, Co. Clare

Title: Proposed Drainage Layout

Figure No: DI04

Drawing No: P1625-0-0824-A1-D104-00C	
Sheet Size: A1	Project No.: P1625-0
Scale: 1:2,000 (A1)	Drawn By: GA
Date: 07/08/2024	Checked By: MG

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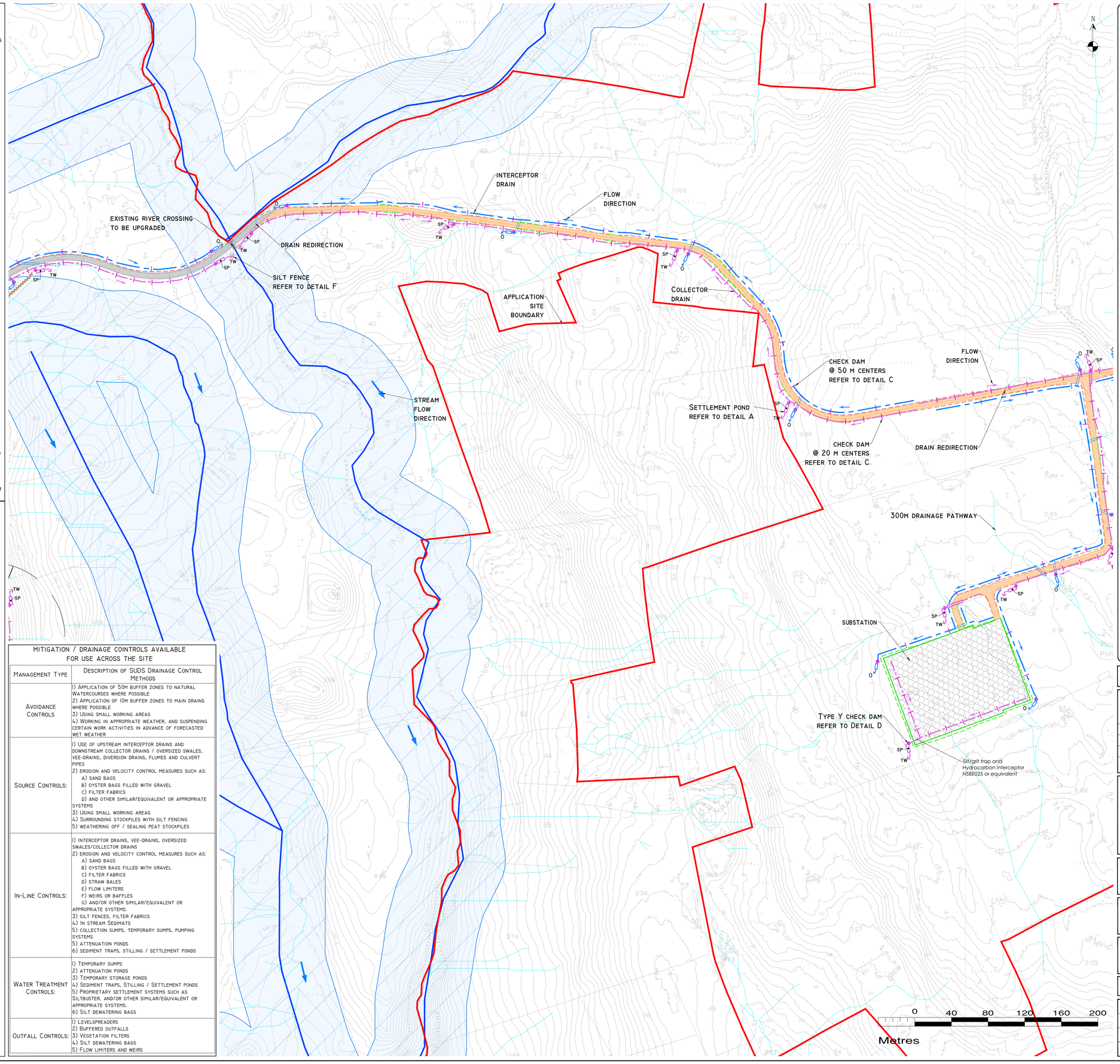
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KEY PLAN

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Revisions

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web: www.hydroenvironmental.ie

Client: FuturEnergy Ireland

Job: Knockshanvo WF, Co. Clare

Title: Proposed Drainage Layout

Figure No: DI05

Drawing No: P1625-0-0824-A1-D105-00E	
Sheet Size: A1	Project No.: P1625-0
Scale: 1:2,000 (A1)	Drawn By: GA
Date: 19/08/2024	Checked By: MG

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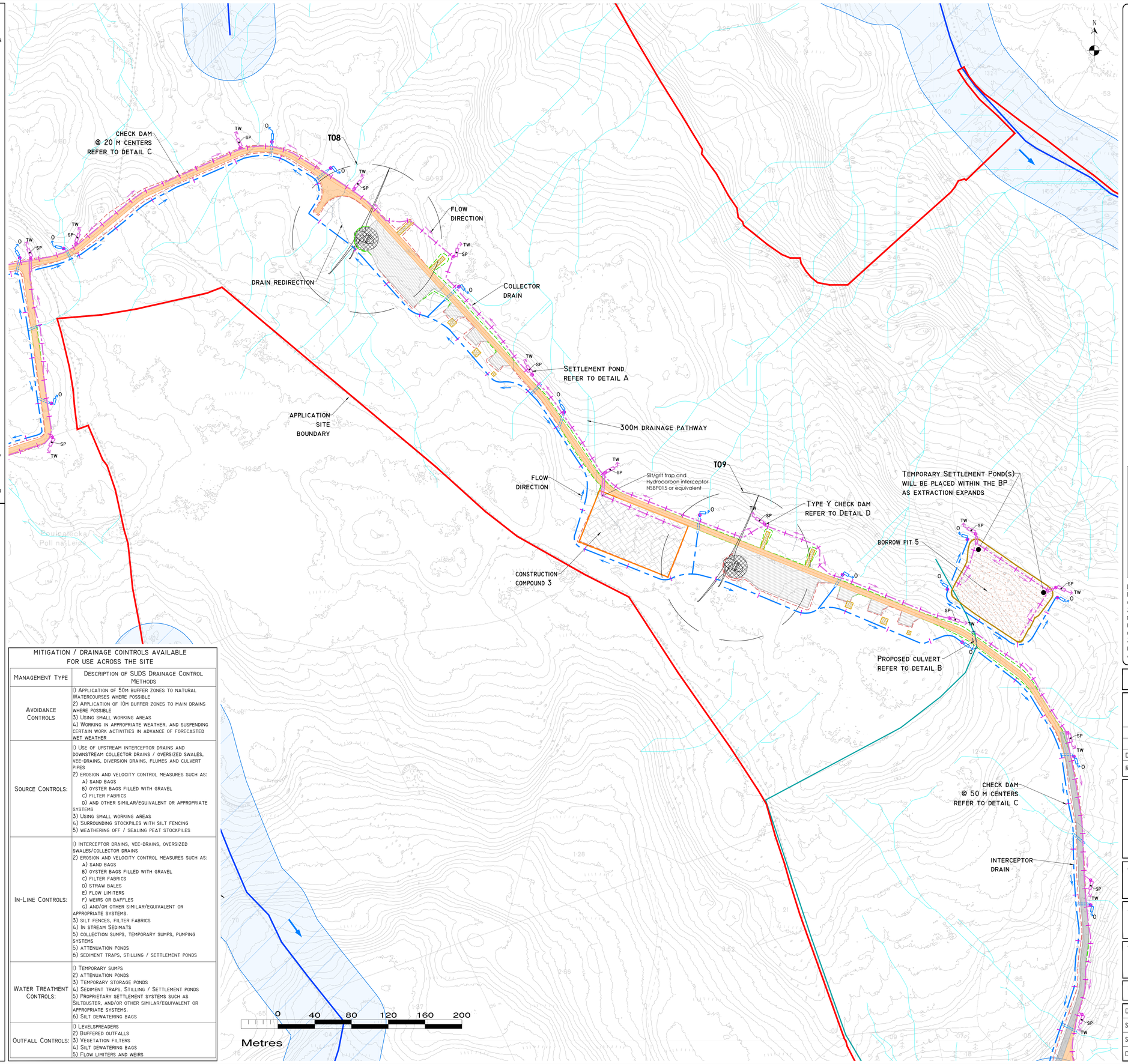
NOTIFY - The relevant authorities (Site Manager / Fisheries / NPWS / Local Authority etc.) should be notified immediately to ensure that measures can be implemented downstream to protect fisheries and other sensitive areas.

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3. SUDS system to be constructed prior to, or at the same time as the access tracks. Interim measures such as the placement of straw bales/silt fencing/or similar approved method or additional check dams and silt fences to be employed in all instances where work carried out to construct the access tracks is likely to cause adverse environmental effects through increased silt loadings being generated during the construction phase.
4. Suitable prevention measures should be in place at all times to prevent the conveyance of significant volumes of silt to receiving watercourses. See notes on pollution prevention.
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6. Drainage swales / ditches to be excavated adjacent to the access tracks. Regular cross drains to be located along access tracks to prevent excessive volumes of water collecting in the swales / ditches. Locations of cross drains to be agreed with the Engineer on site. Surface water will not be allowed to discharge directly into existing watercourses.
7. Where possible, a buffer zone of >20m to any existing watercourse will be required where over land discharges are proposed from access track swales / ditches.
8. Batters of all proposed swales / ditches to have a slope of between 1 : 1.5 to 1 : 2 depending upon depth of swale/ditch and will be left as cut to re-vegetate with local species.
9. Track side swales / ditches to be shallow with moderate gradients to prevent scouring. In steep areas check dams should be installed to reduce flow velocities and provide source control of silt containment. Where necessary these have been designated in conjunction with settlement ponds and silt traps, prior to discharge.
10. Settlement ponds to be constructed for silt removal at turbine bases and hard stand areas. Pond sizes depends on the catchment area being served. Sample pond sizes for various catchment areas shown on Drawing D501.
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12. silt fences to be provide along edge of existing watercourse where works comes within <15m of edge of any ditch / drain / ephemeral channels.
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14. Areas stripped of vegetation should be kept to a minimum.
15. Clean stone flow control check dams to be made of locally won / geologically similar well graded stone. Aggregate size for stone check dams to be typically 20- 40mm clean stone. On sloping sections of the access tracks, 40mm check dams to be protected from washing away through the placement of 100m stone on the downhill face of the check dam and by wrapping in geotextile.
16. Build up of silt levels at check dams to be removed and disposed of appropriately. Silt levels at check dams to be visually inspected as part of an ongoing drainage maintenance programme during the construction phase. Where check dams become clogged with silt or vegetation, stone check dam to be removed and replaced subsequent to the removal of silt.
17. Spacing and frequency of check dams will be dependent upon longitudinal gradient of swale.
18. Location of filtration check dams (if required) to be agreed on site with Engineer. Settlement ponds to be constructed in a manner where they may be easily infilled at a later date (post completion of the turbine base and hardstand construction). Only suitable materials excavated from the pond to be used to form part of the embankment around the pond.
19. Oil fuel should be stored within bunded containment structures.
20. Silt bags will be used on site at field drain discharge

MITIGATION / DRAINAGE COINTROLS AVAILABLE FOR USE ACROSS THE SITE

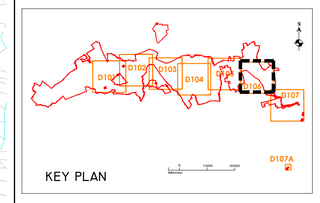
Management Type	Description of SUDS Drainage Control Methods
Avoidance Controls	1) Application of 50m buffer zones to natural watercourses where possible 2) Application of 10m buffer zones to main drains where possible 3) Using small working areas 4) Working in appropriate weather, and suspending certain work activities in advance of forecasted wet weather
Source Controls:	1) Use of upstream interceptor drains and downstream collector drains / oversized swales, vee-drains, diversion drains, flumes and culvert pipes 2) Erosion and velocity control measures such as: A) sand bags B) oyster bags filled with gravel C) filter fabrics D) and other similar/equivalent or appropriate systems 3) Using small working areas 4) Surrounding stockpiles with silt fencing 5) Weathering off / sealing peat stockpiles
In-Line Controls:	1) Interceptor drains, vee-drains, oversized swales/collector drains 2) Erosion and velocity control measures such as: A) sand bags B) oyster bags filled with gravel C) filter fabrics D) straw bales E) flow limiters F) weirs or baffles G) and/or other similar/equivalent or appropriate systems. 3) silt fences, filter fabrics 4) In stream Sedimats 5) collection sumps, temporary sumps, pumping systems 5) attenuation ponds 6) sediment traps, stilling / settlement ponds
Water Treatment Controls:	1) Temporary sumps 2) attenuation ponds 3) Temporary storage ponds 4) Sediment traps, Stilling / Settlement ponds 5) Proprietary settlement systems such as Siltbuster, and/or other similar/equivalent or appropriate systems. 6) Silt dewatering bags
Outfall Controls:	1) Levelspreaders 2) Buffered outfalls 3) Vegetation filters 4) Silt dewatering bags 5) Flow limiters and weirs



RIVERS/STREAMS (WC - WATERCOURSE)
EXISTING DRAINS
RIVERS/STREAMS 50M BUFFER
STREAM FLOW DIRECTION
DRAINAGE PATHWAYS >300M LENGTH
REDIRECTED DRAINS
EXISTING DRAINAGE

UPSTREAM INTERCEPTOR DRAIN
SWALES/DOWNSTREAM COLLECTOR DRAIN
DIRECTION OF FLOW
SILT FENCES
DOUBLE/TRIPLE SILT FENCES
SETTLEMENT POND - LEVEL SPREADER
CHECK DAM 'TYPE A'
CHECK DAM 'TYPE B'
PROPOSED WC CROSSING
EXISTING WC CROSSING
INTERCEPTOR DITCH CULVERT
COLLECTOR DITCH CULVERT
O OVERLAND FLOW DISCHARGE
TW TREATED WATER DISCHARGE
SP SETTLEMENT POND
VS SEMI-NATURAL VEGETATION SWALE / FILTER BED /SECONDARY SP
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APPLICATION SITE BOUNDARY
EXISTING GROUND SURFACE MINOR CONTOUR (1 M INTERVAL)
TURBINE AND SWEPT AREA
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SUBSTATION
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CUT AREA
FILL AREA



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Date	Description	Chkd	Signed

Revisions

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Client: FuturEnergy Ireland

Job: Knockshanvo WF, Co. Clare

Title: Proposed Drainage Layout

Figure No: D106

Drawing No: P1625-0-0824-A1-D106-00C	
Sheet Size: A1	Project No.: P1625-0
Scale: 1:2,000 (A1)	Drawn By: GA
Date: 07/08/2024	Checked By: MG

POLLUTION PREVENTION NOTES:

1. Site management proposals are intended to ensure protection against surface water and groundwater pollution, siltation and erosion.
2. Suitable drainage control measures should be in place at all times to prevent conveyance of significant volumes of silt to off site receiving watercourses.
3. Silty water can arise from dewatering excavations, erosion of exposed/disturbed ground, temporary stockpiles, plant and wheel wash, site roads/tracks, and disturbance of existing field drains and ditches.

Discharges

4. Water containing silt will not be pumped directly to any natural watercourse. All discharges to be made over open ground or into existing field drain with silt trap at a minimum of 20m from nearest watercourse unless otherwise stated.
5. No excavated material is to be stored within any surface water buffer zone.
6. Pumped water will be directed into track side ditches and treated in settlement ponds and vegetation swales prior to overland discharge.
7. Pumping of clean water from excavations / or over-pumping in drains/ditches/streams will be completed in a manner that does not cause scour or erosion at the point of release/discharge. This will be done by reducing the flow velocities or by use of splash plates, and other similar discharge controls.
8. Vegetation will NOT be stripped from existing drains/ditches unless absolutely necessary.

Excavations

9. Where deep excavations are proposed cut-off drains will be use to reduce the amount of surface water entering the excavation. This will be the case around turbine base excavations.

Exposed Ground & Stockpiles

10. The amount of exposed ground and temporary stockpiles open at any one time will be minimised, as far as practicable.

Site tracks

11. Use of track side swales with check dams, and/or filtration check dams will reduce silt in runoff water as required.
12. Check dams to be inspected and cleaned regularly.

Refueling

13. Refuelling of mobile plant will be completed in designated refueling areas only, preferably on an impermeable surface and away from field drains / ditches and watercourses / waterbodies.
14. Spill kits and drip trays will be available on site for use as required.

Concrete

15. Care will be taken when completing concrete works on site to ensure no discharges occur.
16. Concrete wash water, and waste concrete will be managed appropriately on site.

IF WATER POLLUTION IS IDENTIFIED THE FOLLOWING STEPS WOULD BE ADHERED TO:

STOP - work in the immediate area should be stopped and the source of the pollution identified.

CONTAIN - the source of the pollution should be binded using a suitable method. Natural watercourses should be temporarily diverted around the source of pollution.

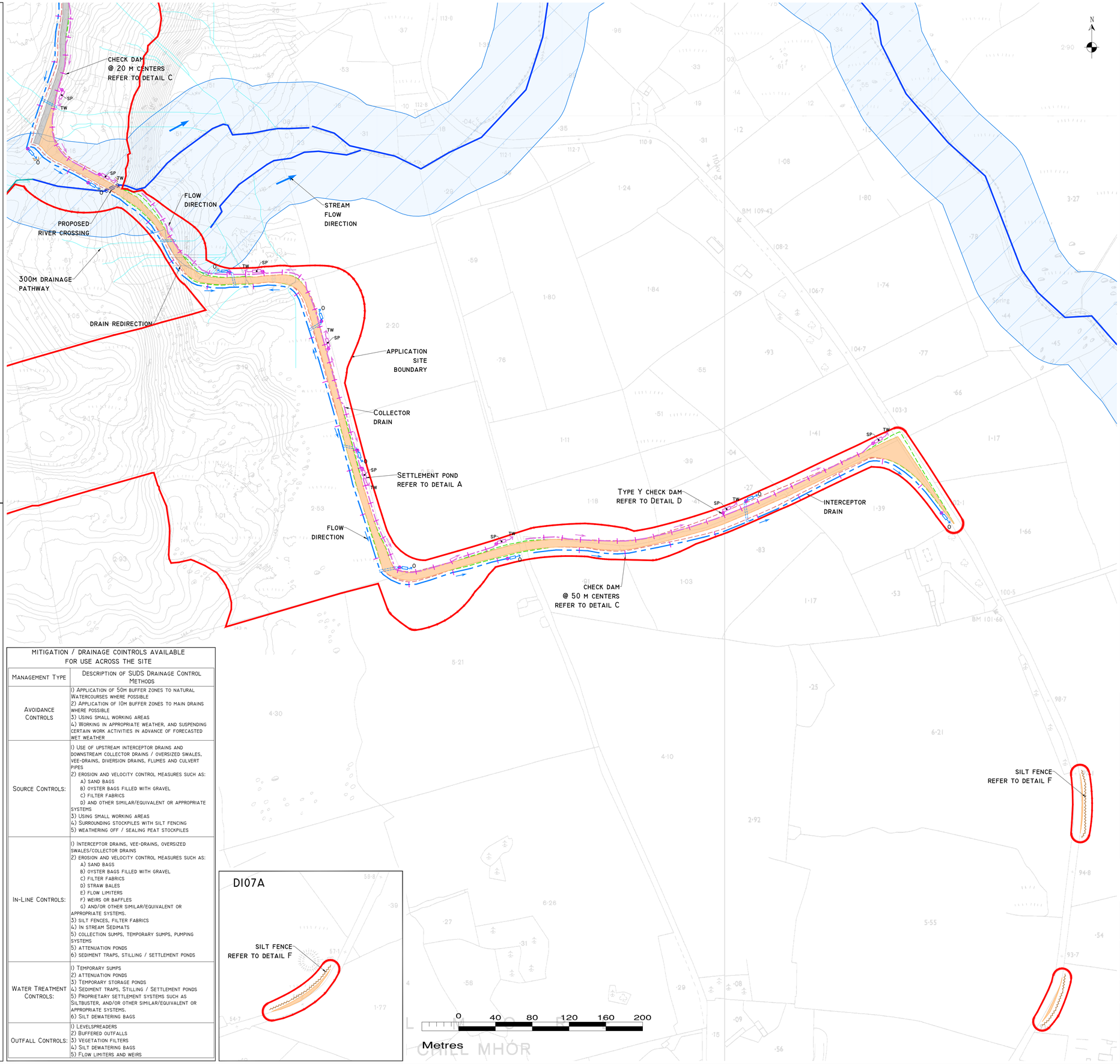
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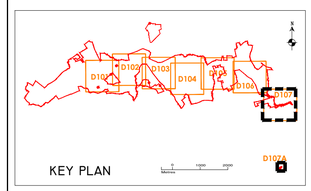
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RIVERS/STREAMS (WC - WATERCOURSE)
EXISTING DRAINS
RIVERS/STREAMS 50m BUFFER
STREAM FLOW DIRECTION
DRAINAGE PATHWAYS >300m LENGTH
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EXISTING DRAINAGE

UPSTREAM INTERCEPTOR DRAIN
SWALES/DOWNSTREAM COLLECTOR DRAIN
DIRECTION OF FLOW
SILT FENCES
DOUBLE/TRIPLE SILT FENCES
SETTLEMENT POND - LEVEL SPREADER
CHECK DAM 'TYPE A'
CHECK DAM 'TYPE B'
PROPOSED WC CROSSING
EXISTING WC CROSSING
INTERCEPTOR DITCH CULVERT
COLLECTOR DITCH CULVERT
O OVERLAND FLOW DISCHARGE
TW TREATED WATER DISCHARGE
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PUMPING SUMP
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APPLICATION SITE BOUNDARY
EXISTING GROUND SURFACE MINOR CONTOUR (1 m INTERVAL)
TURBINE AND SWEPT AREA
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SUBSTATION
CONSTRUCTION COMPOUND
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BORROW PIT
CUT AREA
FILL AREA



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Revisions

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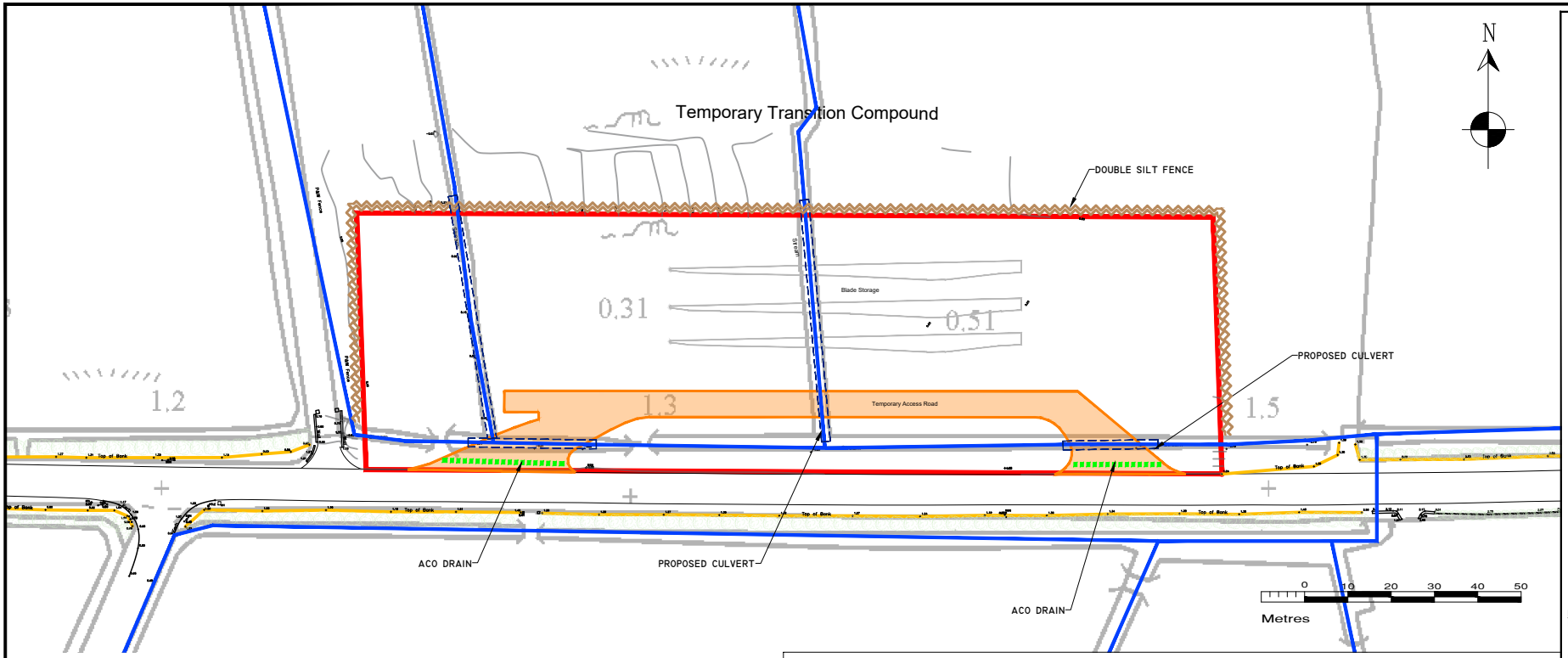
Client: FuturEnergy Ireland

Job: Knockshanvo WF, Co. Clare

Title: Proposed Drainage Layout

Figure No: DI07

Drawing No: P1625-0-0824-A1-D107-00C	
Sheet Size: A1	Project No.: P1625-0
Scale: 1:2,000 (A1)	Drawn By: GA
Date: 07/08/2024	Checked By: MG



DRAWING LEGEND :

- RIVERS/STREAMS (WC - WATERCOURSE)
- RIVERS/STREAMS 50M BUFFER

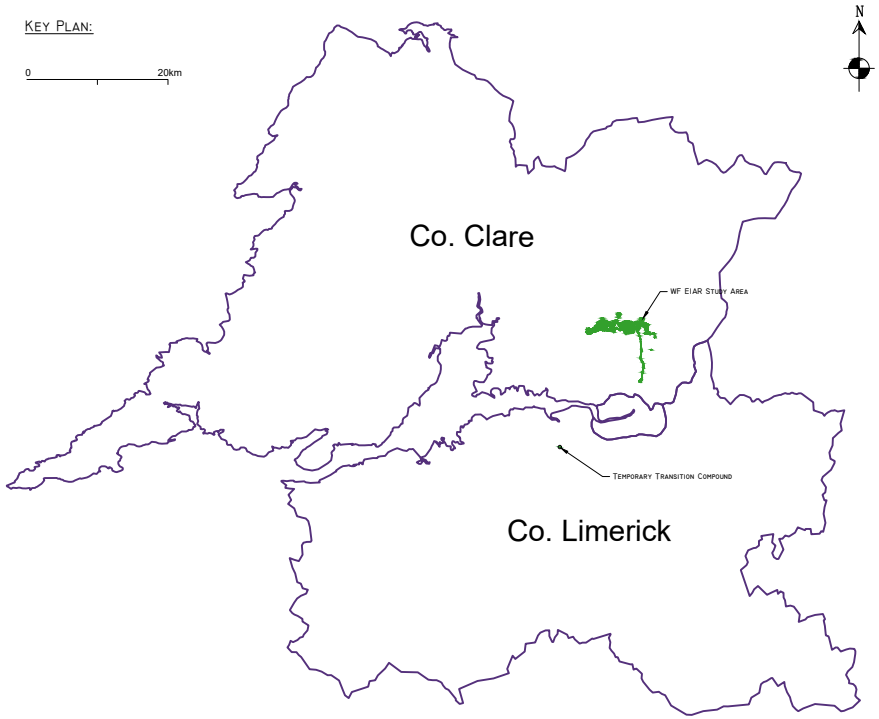
EXISTING DRAINAGE

- SILT FENCES
- PROPOSED TEMPORARY CULVERTS
- ACO DRAIN

PROPOSED DRAINAGE

- APPLICATION SITE BOUNDARY
- EXISTING GROUND SURFACE MINOR CONTOUR (1 M INTERVAL)
- PROPOSED TEMPORARY ROAD

KEY PLAN:



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web: www.hydroenvironmental.ie

Client: FUTURENERGY IRELAND

Job: TEMPORARY TRANSITION COMPOUND, CO. LIMERICK

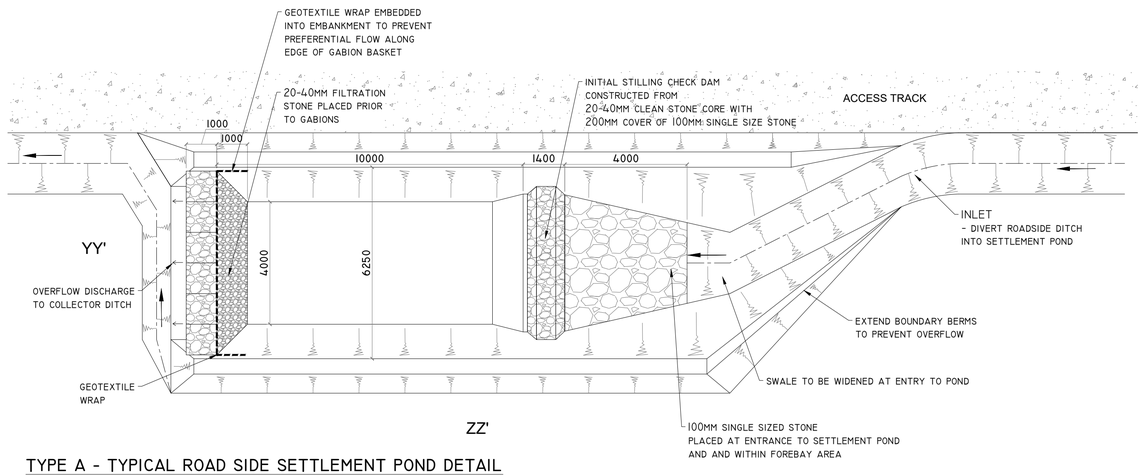
Title: PROPOSED DRAINAGE LAYOUT

Figure No: D101_TTC

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Scale: 1:1,500(A4)	Drawn By: GA
Date: 07/08/2024	Checked By: MG

DETAIL A1

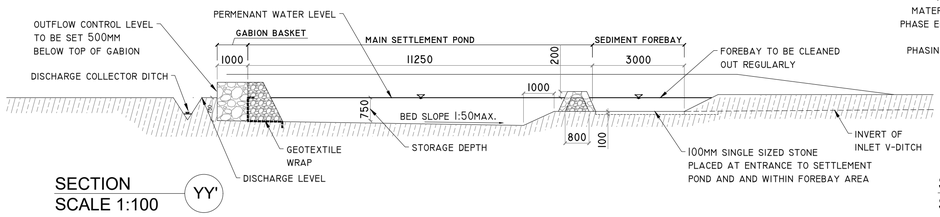
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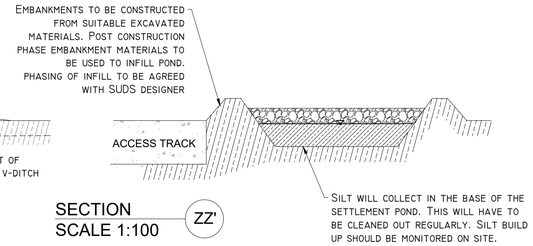
TYPE A - TYPICAL ROAD SIDE SETTLEMENT POND DETAIL
SCALE 1:200 (NOTE DIMENSIONS VARY DEPENDING ON CATCHMENT SIZE - SEE ATTACHED TABLE)

POND SIZE W [M] x L [M] x D [M]			TRACK/HARDSTAND CATCHMENT SIZE (M^2)			BORROW PIT (M^2)*		
RETURN PERIOD	*10 YRS*	STORM DURATION	500	1000	2000	5000	7500	10000
6HR RETENTION FOR COARSE SILT		6 HRS	3.5 x 10.5 x 1 M	4.5 x 16.5 x 1 M	6.5 x 22.5 x 1 M	N/A	N/A	N/A
11HR RETENTION FOR MEDIUM SILT		12 HRS	3.5 x 13.5 x 1 M	5.5 x 17 x 1 M	7.5 x 25 x 1 M	N/A	N/A	N/A
24HR RETENTION FOR FINE SILT		24 HRS	4.5 x 13 x 1 M	6 x 19.5 x 1 M	8 x 29.5 x 1 M	21 x 63 x 1 M**	25.5 x 77 x 1 M**	30 x 90 x 1 M**

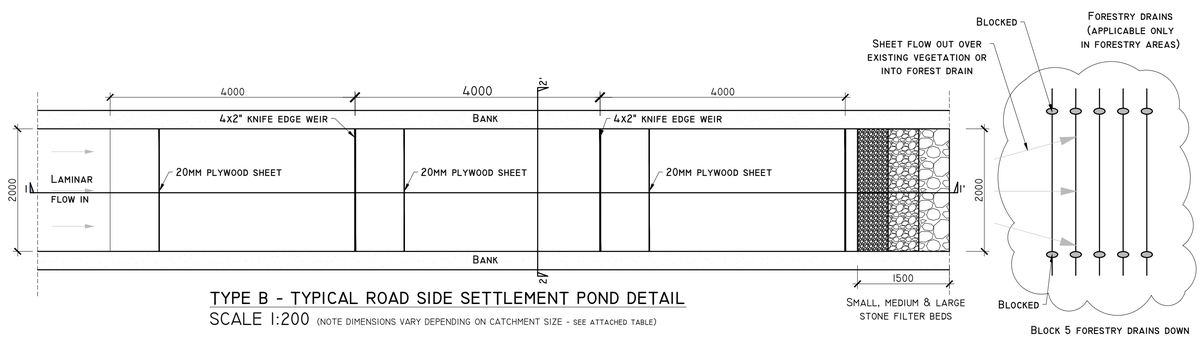
*INCLUDES GW INFLOW
**COMBINATIONS OF 2 OR 3 SMALLER PONDS MAY BE USED



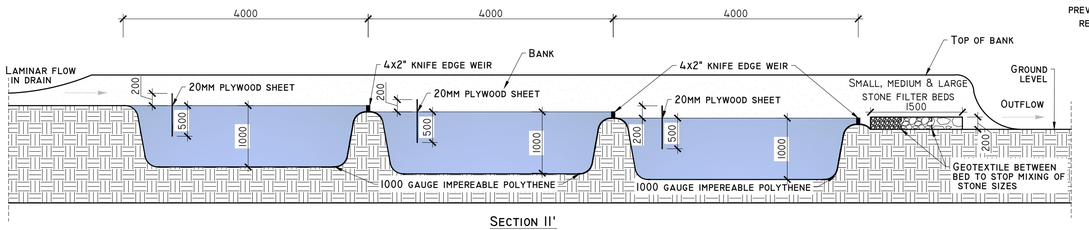
SECTION YY'
SCALE 1:100



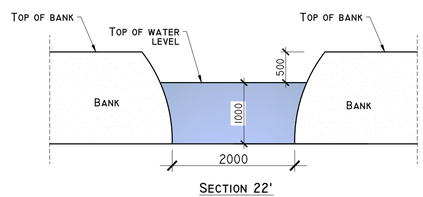
SECTION ZZ'
SCALE 1:100



TYPE B - TYPICAL ROAD SIDE SETTLEMENT POND DETAIL
SCALE 1:200 (NOTE DIMENSIONS VARY DEPENDING ON CATCHMENT SIZE - SEE ATTACHED TABLE)

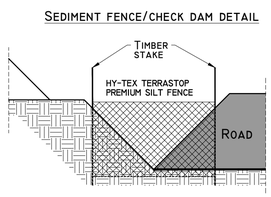


SECTION 11'



SECTION 22'

SEDIMENT FENCE/CHECK DAM DETAIL



DETAIL A2

16/01/24	Planning	MG	MG
Date	Description	Chkd	Signed

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web: www.hydroenvironmental.ie

Client: FUTURENERGY IRELAND

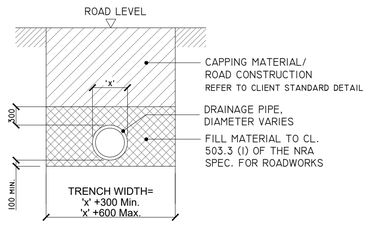
Job: KNOCKSHANVO WF, CO. CLARE

Title: DRAINAGE DETAILS 1

Figure No: D501

Drawing No: P1625-0-0124-A1-D501-00A	
Sheet Size: A1	Project No.: P1625-0
Scale: as shown (A1)	Drawn By: MG/GA
Date: 04/06/2024	Checked By: MG

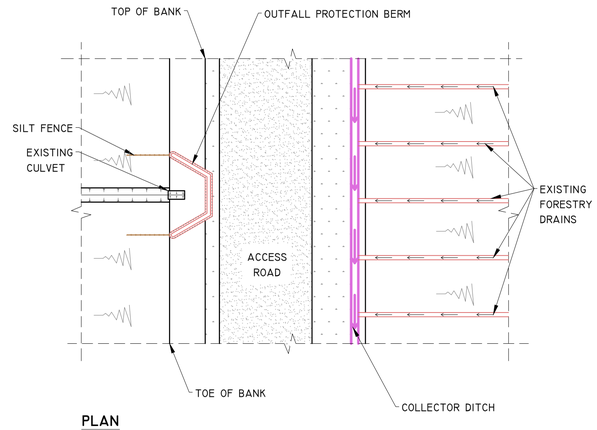
DETAIL B



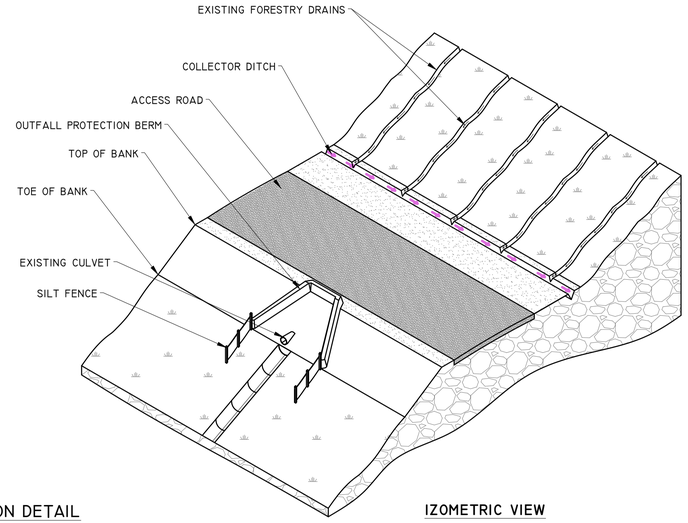
'TYPE B' CULVERT - DRAINAGE CROSSING BENEATH EXCAVATED ROAD

SCALE 1:50

DETAIL BI



PLAN



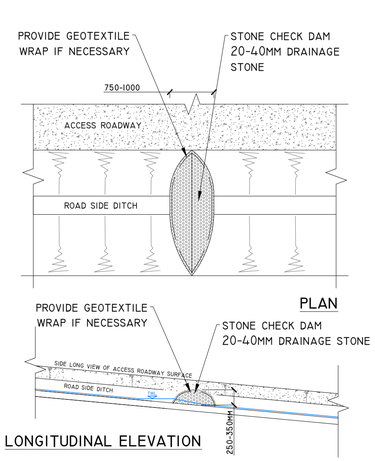
IZOMETRIC VIEW

CULVET - OUTFALL PROTECTION DETAIL

SCHEMATIC - NOT TO SCALE

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DETAIL C



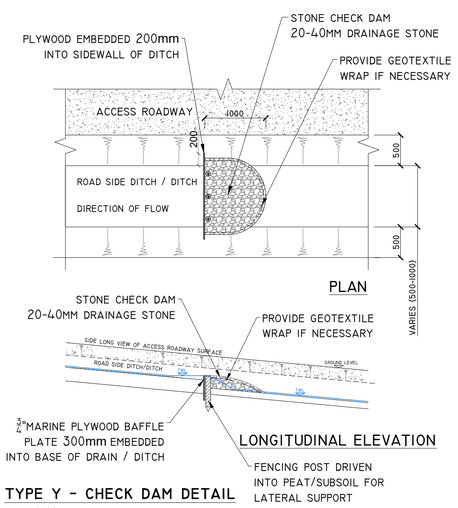
PLAN

LONGITUDINAL ELEVATION

TYPE X - CHECK DAM DETAIL

SCALE 1:50

DETAIL D

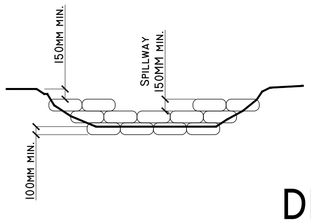


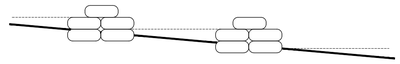
PLAN

LONGITUDINAL ELEVATION

TYPE Y - CHECK DAM DETAIL

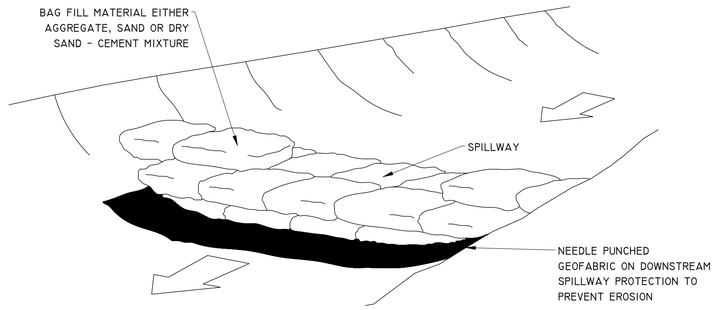
SCALE 1:100





NOTE: SPACING OF CHECK DAMS ALONG CENTRELINE AND SCOUR PROTECTION BELOW EACH CHECK DAM

DETAIL CI



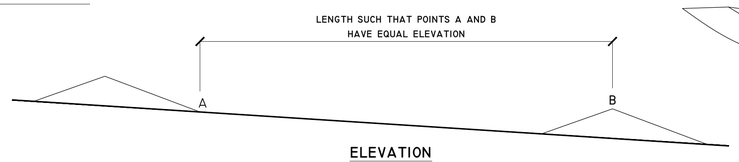
TEMPORARY CHECK DAM / SETTLEMENT POND OVERFLOW
SAND FILLED BAG CONSTRUCTION

SCHEMATIC - NOT TO SCALE

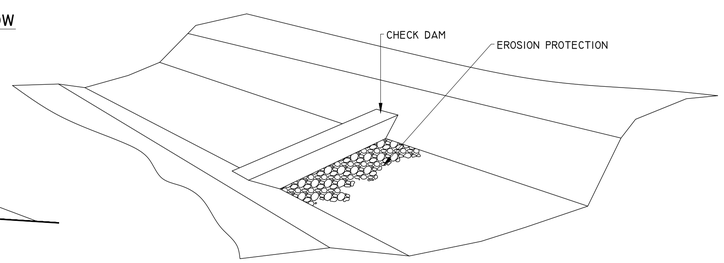
DETAIL C2

TEMPORARY CHECK DAM / SETTLEMENT POND OVERFLOW

SCHEMATIC - NOT TO SCALE



ELEVATION



16/01/24	Planning	MG	MG
Date	Description	Chkd	Signed

Revisions

HYDRO ENVIRONMENTAL SERVICES
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email: info@hydroenvironmental.ie
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Client: FUTURENERGY IRELAND

Job: KNOCKSHANVO WF, CO. CLARE

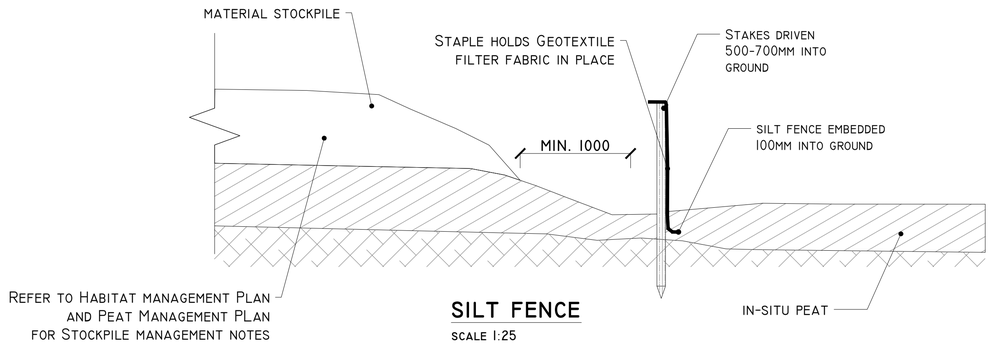
Title: DRAINAGE DETAILS 2

Figure No: D502

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Scale: as shown (A1)	Drawn By: MG/GA
Date: 04/06/2024	Checked By: MG

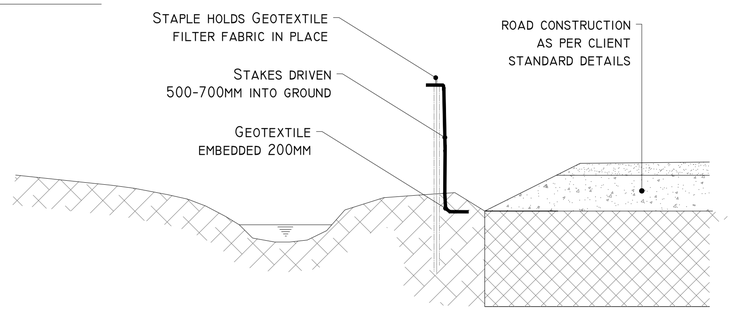
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DETAIL F-I



SILT FENCE
SCALE 1:25

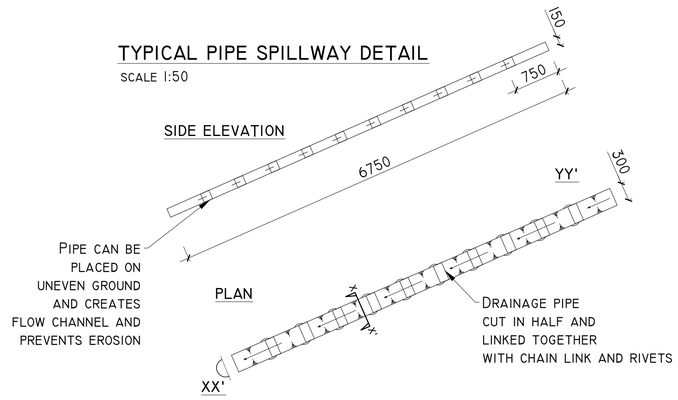
DETAIL F-II



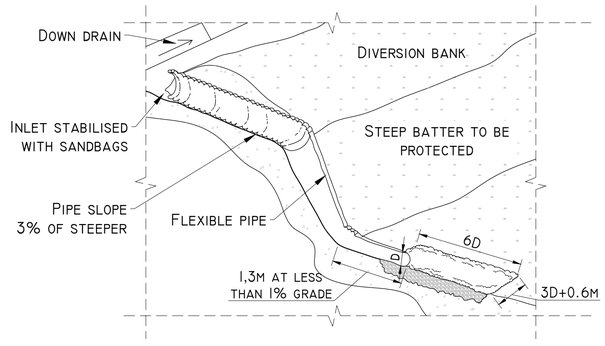
SILT FENCE FOR WATERCOURSE PROTECTION
SCALE 1:25

DETAIL G

TYPICAL PIPE SPILLWAY DETAIL
SCALE 1:50



TYPICAL PIPE SPILLWAY DETAIL
SCHEMATIC - NOT TO SCALE



16/01/24	Planning	MG	MG
Date	Description	Chkd	Signed

Revisions

HYDRO ENVIRONMENTAL SERVICES
22 Lower Main St
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tel: +353 (0) 58-44122
fax: +353 (0) 58-44244
email: info@hydroenvironmental.ie
web: www.hydroenvironmental.ie

Client:
FUTURENERGY IRELAND

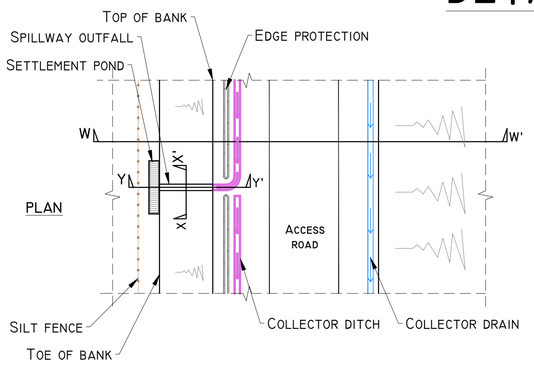
Job:
KNOCKSHANVO WF, CO. CLARE

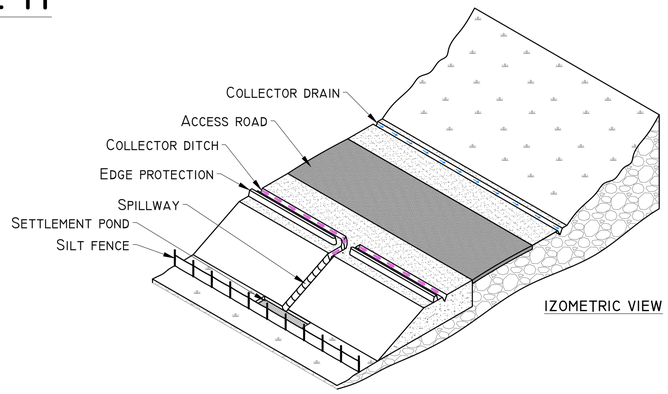
Title:
DRAINAGE DETAILS 3

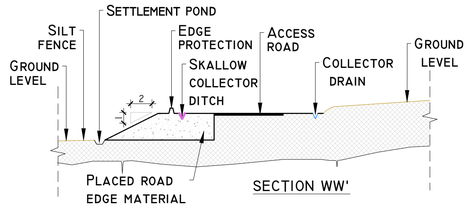
Figure No: D503

Drawing No: P1625-0-0124-A1-D503-00A	
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Scale: as shown (A1)	Drawn By: MG/GA
Date: 04/06/2024	Checked By: MG

DETAIL H





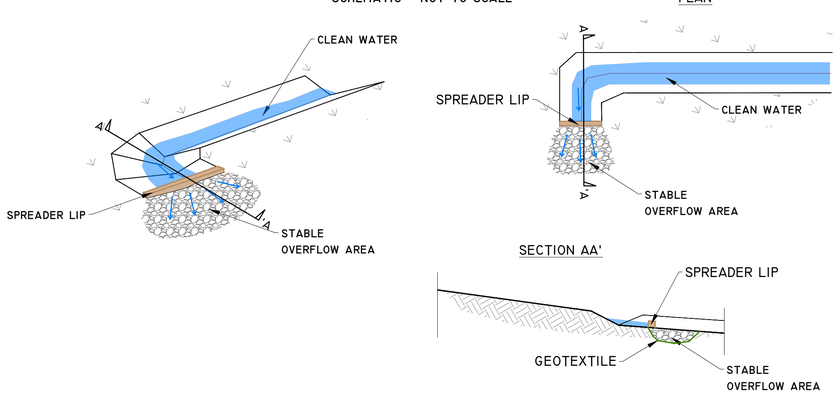


SPILLWAY OUTFALL PLAN
SCHEMATIC - NOT TO SCALE

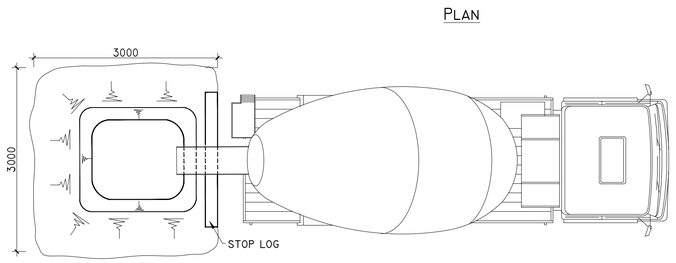
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DETAIL J-1

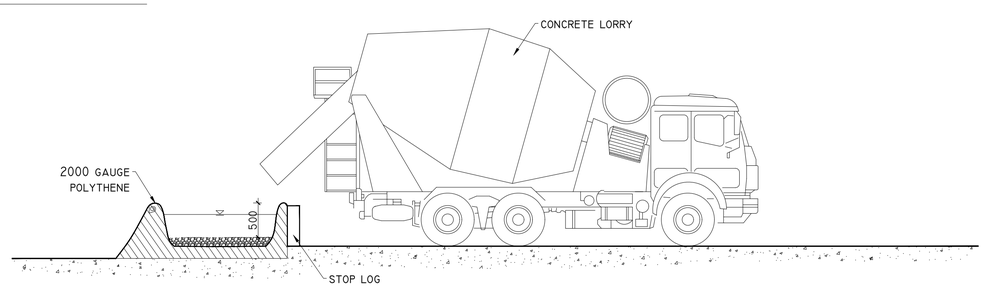
LEVEL SPREADER DETAIL
SCHEMATIC - NOT TO SCALE



TEMPORARY CONCRETE WASH OUT PIT
SCALE 1:50

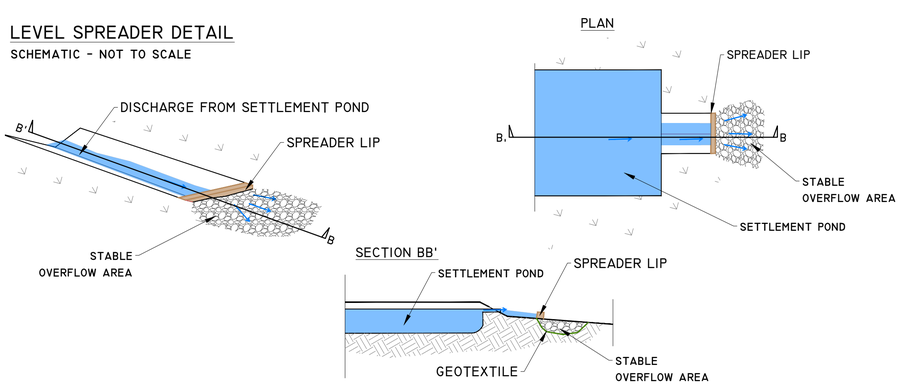


DETAIL I



DETAIL J-2

LEVEL SPREADER DETAIL
SCHEMATIC - NOT TO SCALE



16/01/24	Planning	MG	MG
Date	Description	Chkd	Signed

Revisions

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tel: +353 (0) 58-44122
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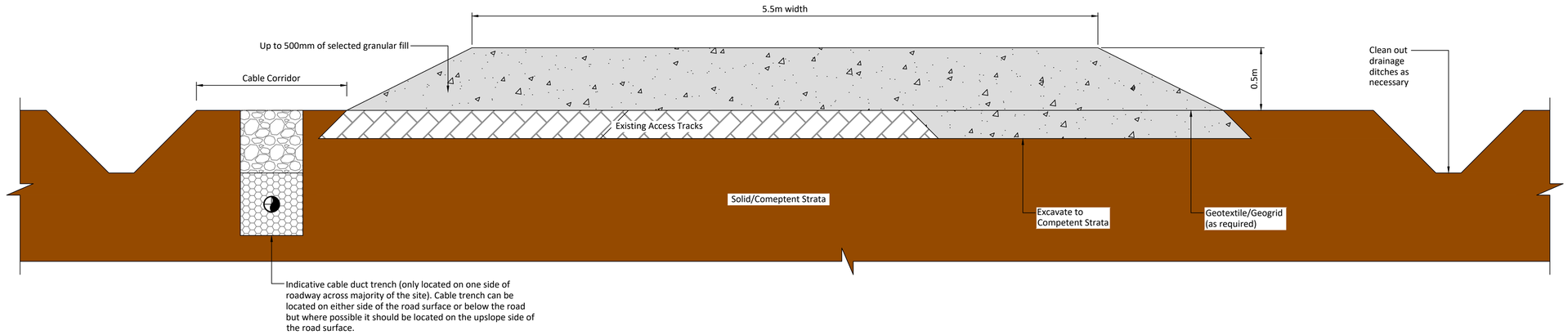
Client: FutureEnergy Ireland

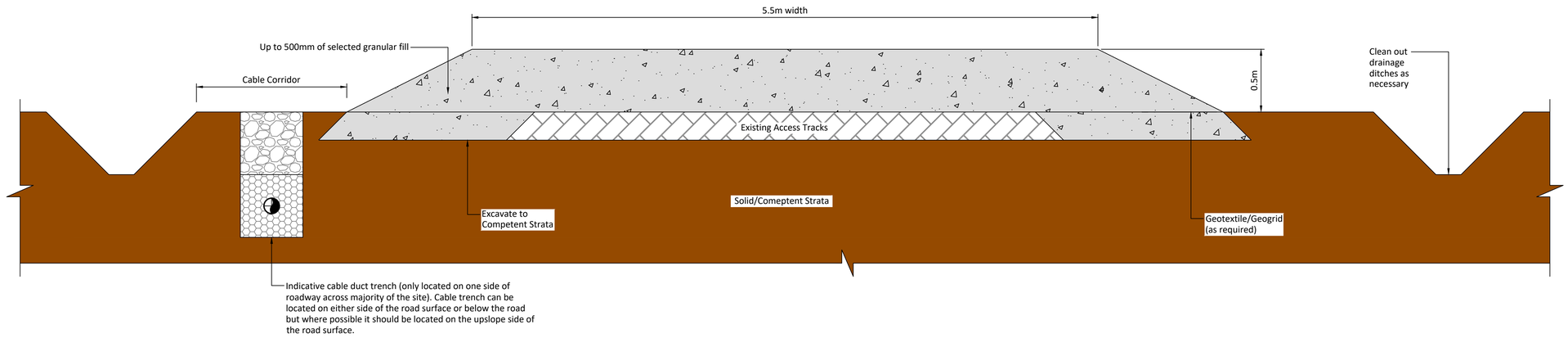
Job: Knockshanvo WF, Co. Clare

Title: Drainage Details 4

Figure No: D504

Drawing No: P1625-0-0124-A1-D504-00A	
Sheet Size: A1	Project No.: P1625-0
Scale: as shown (A1)	Drawn By: MG/GA
Date: 04/06/2024	Checked By: MG





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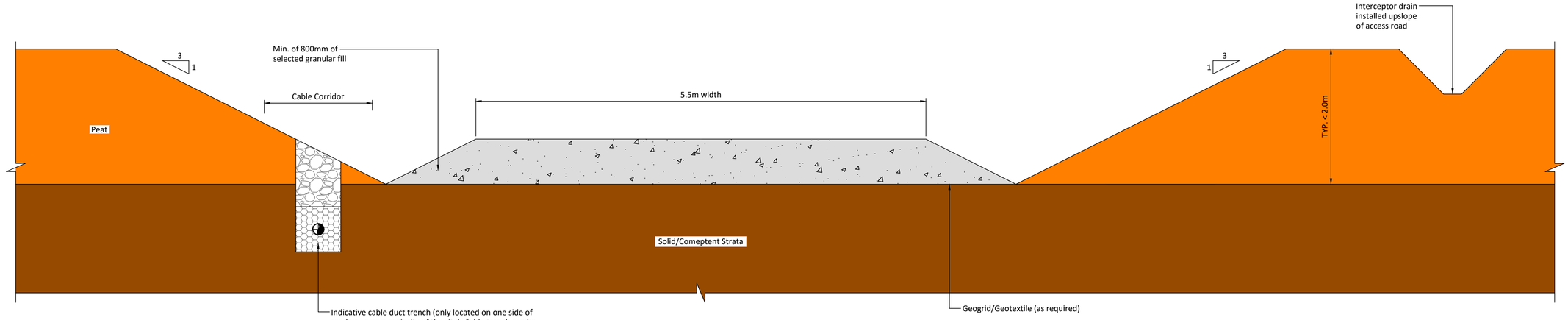
Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	02.08.23

PROJECT	KNOCKSHANVO WIND FARM
CLIENT	MKO
SHEET	TYPE A - UPGRADE OF EXISTING EXCAVATED ACCESS TRACKS

Date 02.08.23	Project number P20-153	Scale (@ A1) 1:20	
Drawn by POR	Drawing Number P20-153-0600-0016		Rev A
Checked by IH			

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2 August 2023



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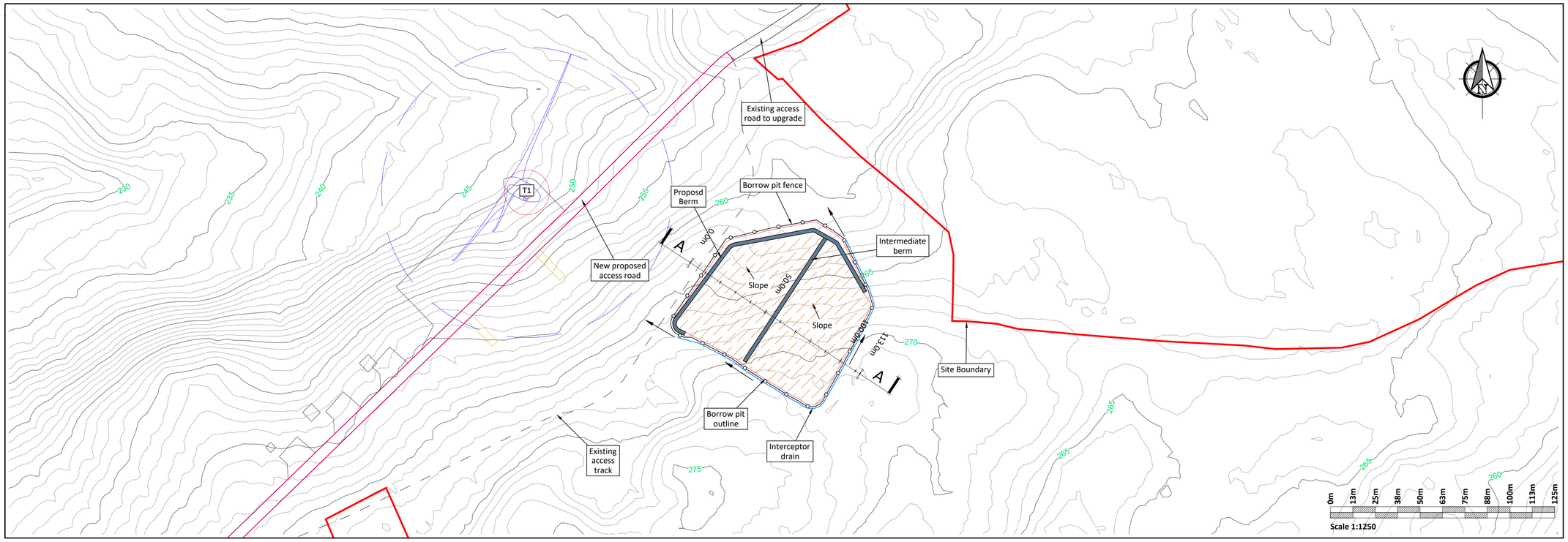
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Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	02.08.23
B	FOR INFORMATION	BDH	01.05.24

PROJECT: KNOCKSHANVO WIND FARM		CLIENT: MKO	
SHEET: TYPE B - NEW EXCAVATE AND REPLACE ACCESS ROAD	Date: 01.05.24	Project number: P20-153	Scale (@ A1): 1:25
	Drawn by: POR	Drawing Number: P20-153-0600-0017	Rev: B
	Checked by: IH		

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1 May 2024



PLAN

Scale 1:1250

Legend:

- EIAR Planning Boundary
- TXX — Turbine Location
- Existing Access Track (to be upgraded)
- New Proposed Access Track
- Substation
- Construction Compound
- Borrow Pit
- Grid Route Options
- Turbine Delivery Route

Borrow Pit Construction Notes:

(1) It is proposed to construct the borrow pit so that the base of the borrow pit is below the level of the adjacent section of access road.

(2) Slopes within the excavated rock formed around the perimeter of the borrow pit will be formed at stable inclinations to suit local in-situ rock conditions.

(3) Infilling of the peat & spoil will commence at the back edge of the borrow pit and progress towards the borrow pit entrance/rock buttress. Leaving in place upstands/segments of intact rock which will help to retain the placed peat & spoil and will allow the borrow pit to be developed and infilled in cells.

(4) A rock buttress is required at the downslope edge of the borrow pit to safely retain the infilled peat and spoil. The height of the rock buttresses constructed will be greater than the height of the infilled peat & spoil to prevent any surface peat & spoil run-off. A buttress up to 5m (approx.) in height is likely to be required.

(5) The rock buttress will be founded on competent strata. The founding stratum for the rock buttress will be inspected and approved by the project geotechnical engineer.

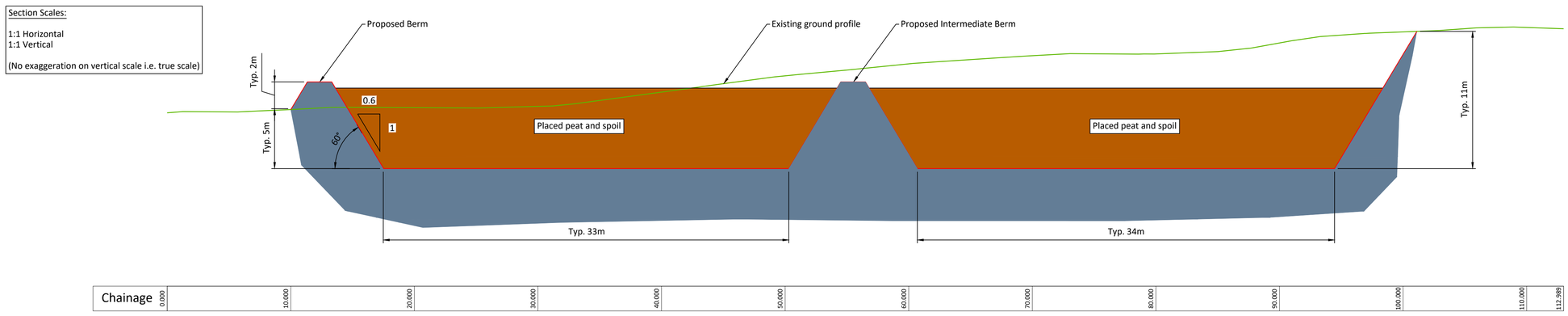
(6) In order to prevent water retention occurring behind the buttresses, the buttresses will be constructed of coarse boulder fill with a high permeability.

(7) The surface of the placed peat & spoil will be shaped to allow efficient run-off of surface water from the placed arising's.

(8) Control of groundwater within the borrow pit may be required and measures will be determined as part of the ground investigation programme.

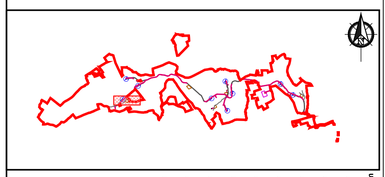
(9) All the above-mentioned general guidelines and requirements will be confirmed by the designer prior to construction.

(10) Further guidelines on the construction of the borrow pit are included within Section 7.4 of the Peat & Spoil Management Plan



SECTION A - A

Scale 1:200



KEYPLAN

Scale 1:100000

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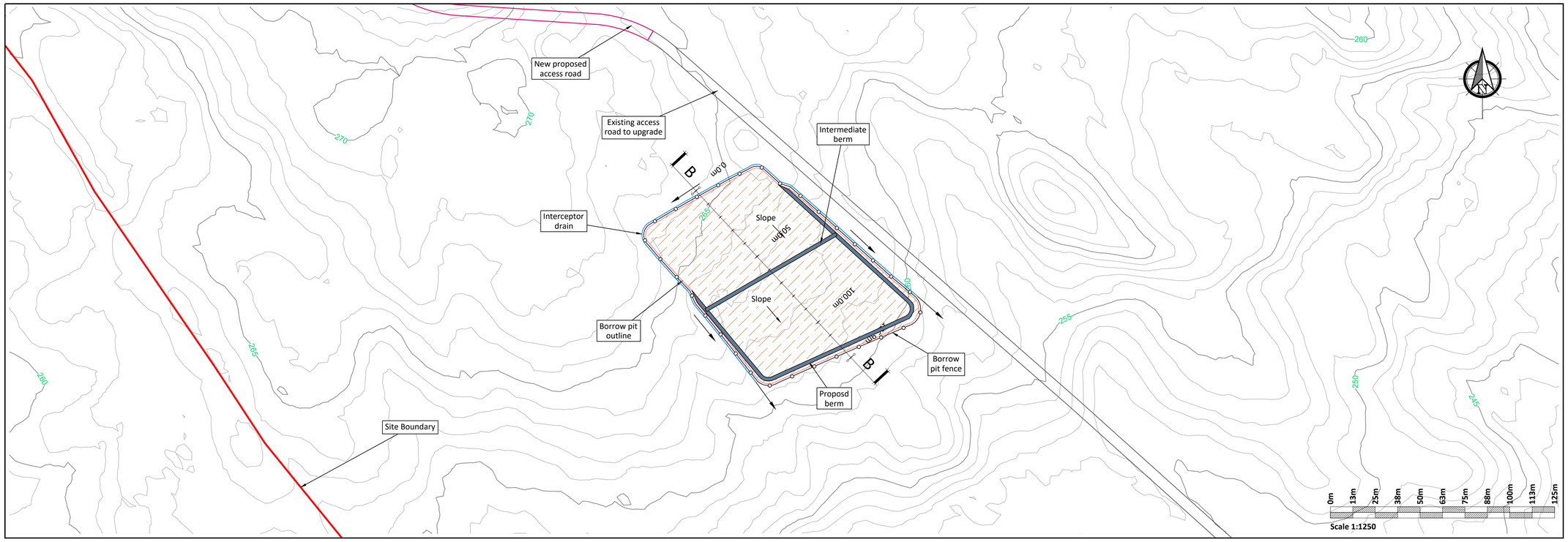
Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	08.11.23
B	FOR INFORMATION	BDH	01.05.24
C	FOR INFORMATION	BDH	14.06.24
D	FOR INFORMATION	BDH	18.07.24
E	FOR INFORMATION	BDH	19.08.24

PROJECT	KNOCKSHANVO WIND FARM
CLIENT	MKO
SHEET	BORROW PIT 1 PLAN AND SECTION

Date 19.08.24	Project number P20-153	Scale (@ A1) As Shown	
Drawn by POR	Drawing Number P20-153-0600-0018		Rev E
Checked by IH			

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19 August 2024



PLAN

Scale 1:1250

Legend:

- EIAR Planning Boundary
- Turbine Location
- Existing Access Track (to be upgraded)
- New Proposed Access Track
- Substation
- Construction Compound
- Borrow Pit
- Grid Route Options
- Turbine Delivery Route

Borrow Pit Construction Notes:

(1) It is proposed to construct the borrow pit so that the base of the borrow pit is below the level of the adjacent section of access road.

(2) Slopes within the excavated rock formed around the perimeter of the borrow pit will be formed at stable inclinations to suit local in-situ rock conditions.

(3) Infilling of the peat & spoil will commence at the back edge of the borrow pit and progress towards the borrow pit entrance/rock buttress. Leaving in place upstands/segments of intact rock which will help to retain the placed peat & spoil and will allow the borrow pit to be developed and infilled in cells.

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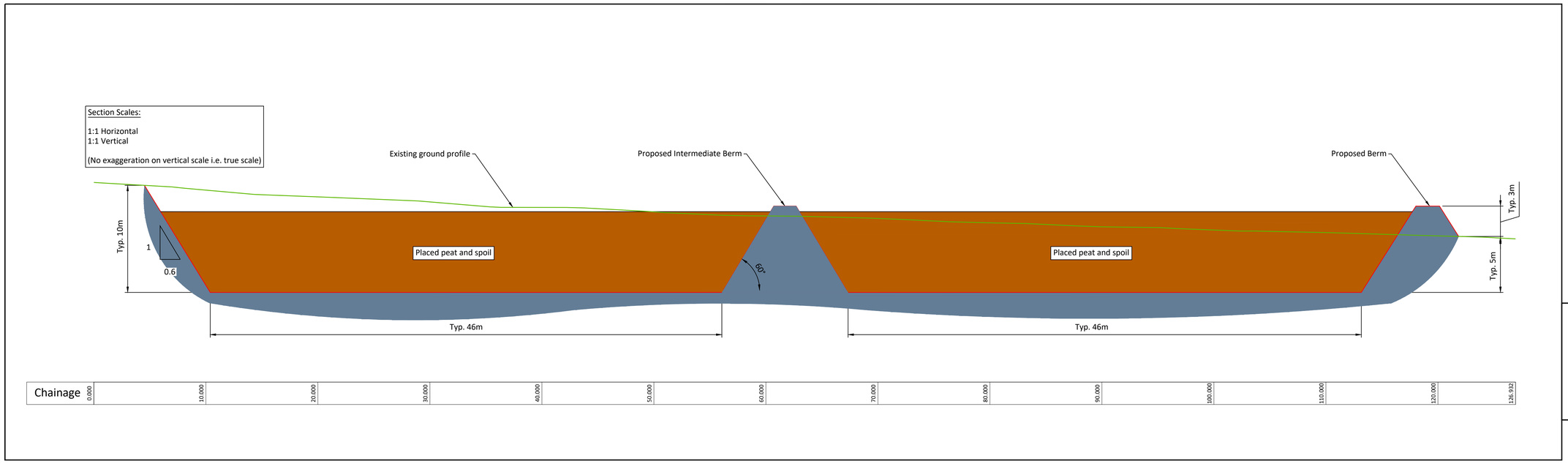
(6) In order to prevent water retention occurring behind the buttresses, the buttresses will be constructed of coarse boulder fill with a high permeability.

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(8) Control of groundwater within the borrow pit may be required and measures will be determined as part of the ground investigation programme.

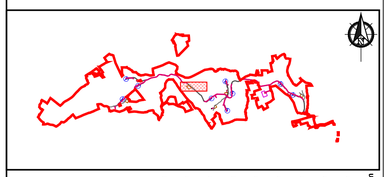
(9) All the above-mentioned general guidelines and requirements will be confirmed by the designer prior to construction.

(10) Further guidelines on the construction of the borrow pit are included within Section 7.4 of the Peat & Spoil Management Plan



SECTION B - B

Scale 1:200



KEYPLAN

Scale 1:100000

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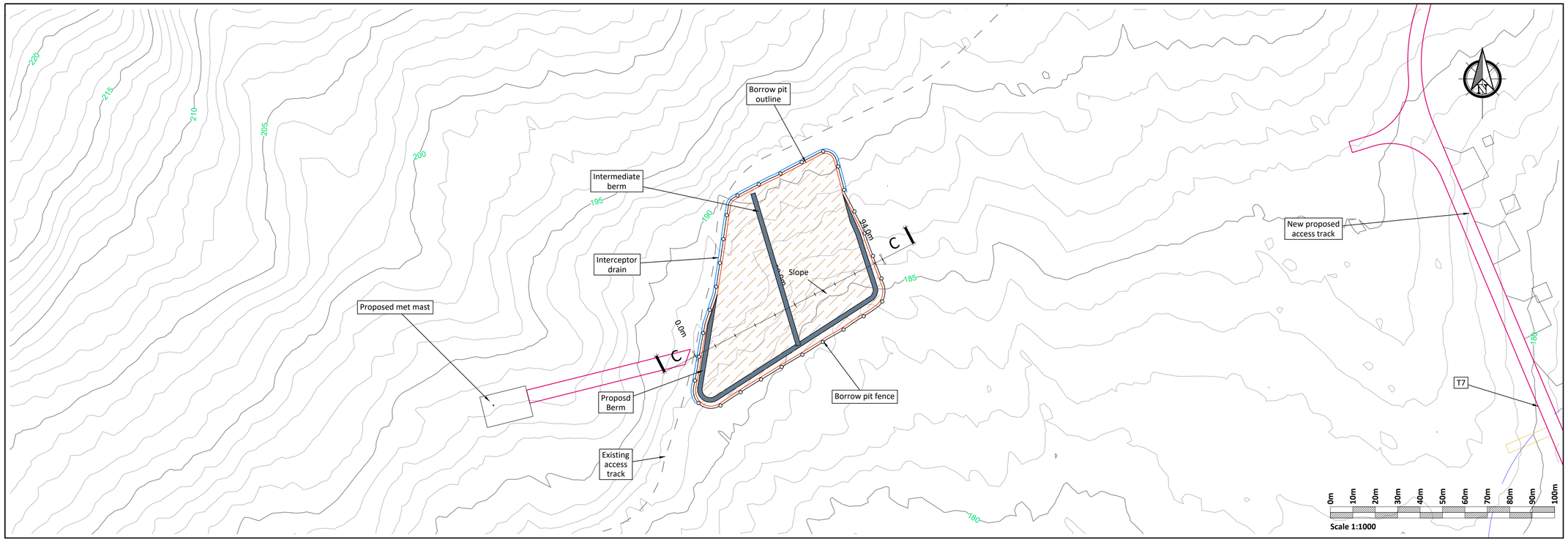
Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	08.11.23
B	FOR INFORMATION	BDH	14.06.24
C	FOR INFORMATION	BDH	18.07.24
D	FOR INFORMATION	BDH	19.08.24

PROJECT	KNOCKSHANVO WIND FARM
CLIENT	MKO
SHEET	BORROW PIT 2 PLAN AND SECTION

Date 19.08.24	Project number P20-153	Scale (@ A1) As Shown	
Drawn by POR	Drawing Number P20-153-0600-0019		Rev D
Checked by IH			

O:\ACAD\2020\P20-153\P20-153-0600-0019

19 August 2024



PLAN

Scale 1:1000

Legend:

- EIAR Planning Boundary
- Turbine Location
- Existing Access Track (to be upgraded)
- New Proposed Access Track
- Substation
- Construction Compound
- Borrow Pit
- Grid Route Options
- Turbine Delivery Route

Borrow Pit Construction Notes:

(1) It is proposed to construct the borrow pit so that the base of the borrow pit is below the level of the adjacent section of access road.

(2) Slopes within the excavated rock formed around the perimeter of the borrow pit will be formed at stable inclinations to suit local in-situ rock conditions.

(3) Infilling of the peat & spoil will commence at the back edge of the borrow pit and progress towards the borrow pit entrance/rock buttress. Leaving in place upstands/segments of intact rock which will help to retain the placed peat & spoil and will allow the borrow pit to be developed and infilled in cells.

(4) A rock buttress is required at the downslope edge of the borrow pit to safely retain the infilled peat and spoil. The height of the rock buttresses constructed will be greater than the height of the infilled peat & spoil to prevent any surface peat & spoil run-off. A buttress up to 5m (approx.) in height is likely to be required.

(5) The rock buttress will be founded on competent strata. The founding stratum for the rock buttress will be inspected and approved by the project geotechnical engineer.

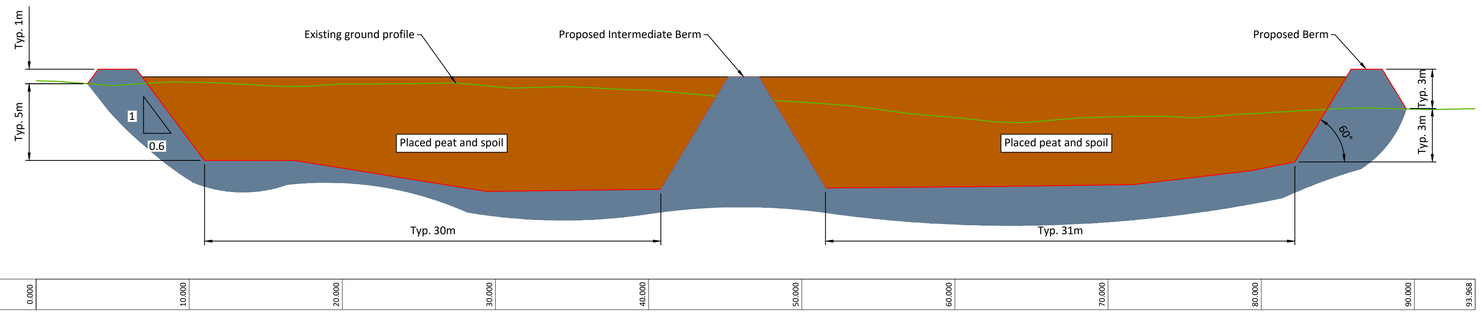
(6) In order to prevent water retention occurring behind the buttresses, the buttresses will be constructed of coarse boulder fill with a high permeability.

(7) The surface of the placed peat & spoil will be shaped to allow efficient run-off of surface water from the placed arising's.

(8) Control of groundwater within the borrow pit may be required and measures will be determined as part of the ground investigation programme.

(9) All the above-mentioned general guidelines and requirements will be confirmed by the designer prior to construction.

(10) Further guidelines on the construction of the borrow pit are included within Section 7.4 of the Peat & Spoil Management Plan



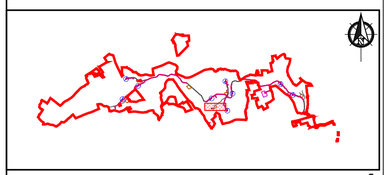
Section Scales:

1:1 Horizontal
1:1 Vertical

(No exaggeration on vertical scale i.e. true scale)

SECTION C - C

Scale 1:200



Scale 1:100000

KEYPLAN

Scale 1:100000

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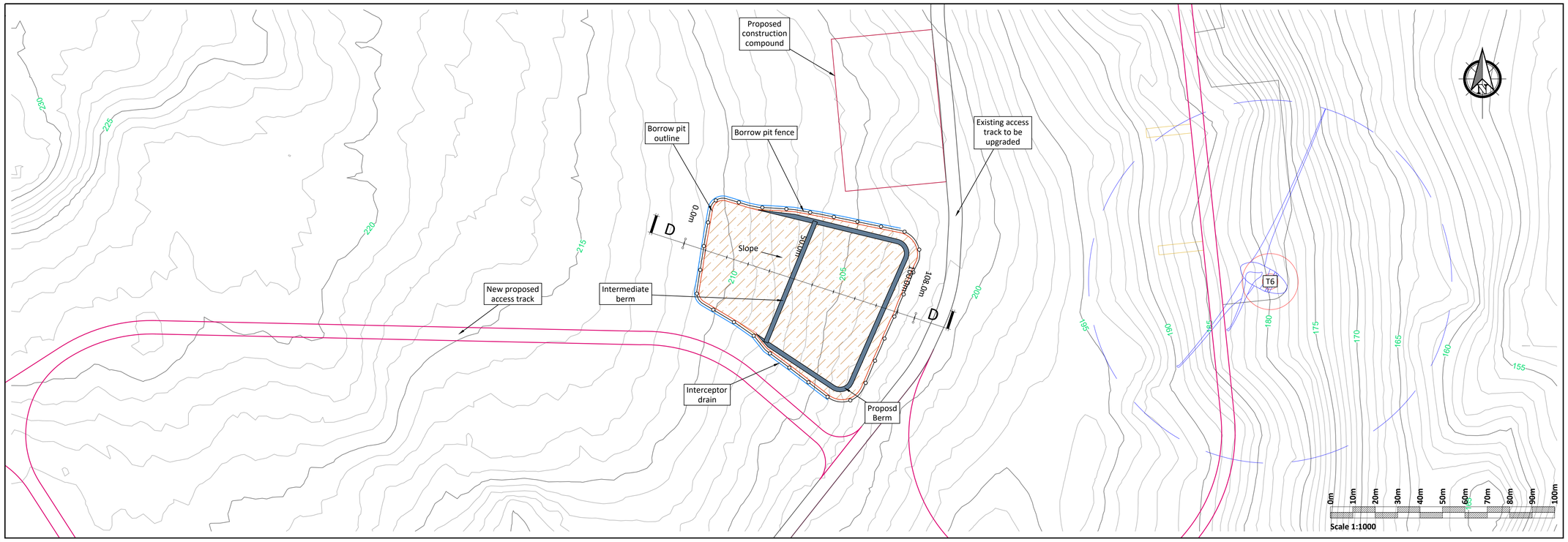
Rev.	Description	App By	Date
A	FOR INFORMATION	BDH	08.11.23
B	FOR INFORMATION	BDH	01.05.24
C	FOR INFORMATION	BDH	14.06.24
D	FOR INFORMATION	BDH	18.07.24
E	FOR INFORMATION	BDH	19.08.24

PROJECT	KNOCKSHANVO WIND FARM
CLIENT	MKO
SHEET	BORROW PIT 3 PLAN AND SECTION

Date 19.08.24	Project number P20-153	Scale (@ A1) As Shown	
Drawn by POR	Drawing Number P20-153-0600-0020		Rev E
Checked by IH			

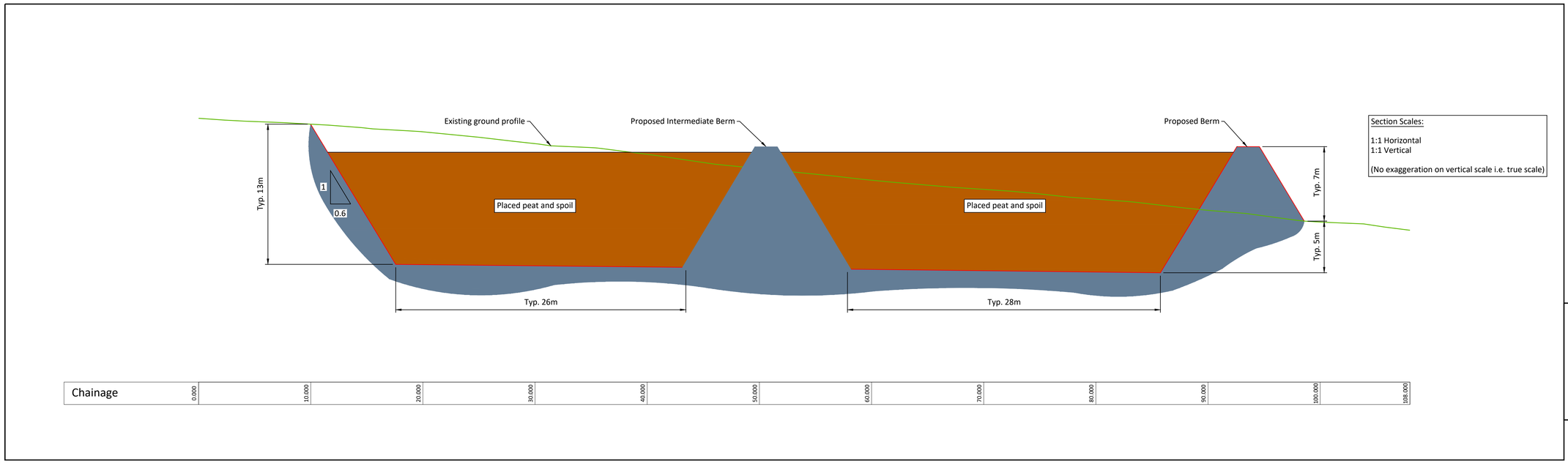
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19 August 2024



PLAN

Scale 1:1000



SECTION D - D

Scale 1:200

Legend:

- EIAR Planning Boundary
- Turbine Location
- Existing Access Track (to be upgraded)
- New Proposed Access Track
- Substation
- Construction Compound
- Borrow Pit
- Grid Route Options
- Turbine Delivery Route

Borrow Pit Construction Notes:

(1) It is proposed to construct the borrow pit so that the base of the borrow pit is below the level of the adjacent section of access road.

(2) Slopes within the excavated rock formed around the perimeter of the borrow pit will be formed at stable inclinations to suit local in-situ rock conditions.

(3) Infilling of the peat & spoil will commence at the back edge of the borrow pit and progress towards the borrow pit entrance/rock buttress. Leaving in place upstands/segments of intact rock which will help to retain the placed peat & spoil and will allow the borrow pit to be developed and infilled in cells.

(4) A rock buttress is required at the downslope edge of the borrow pit to safely retain the infilled peat and spoil. The height of the rock buttresses constructed will be greater than the height of the infilled peat & spoil to prevent any surface peat & spoil run-off. A buttress up to 5m (approx.) in height is likely to be required.

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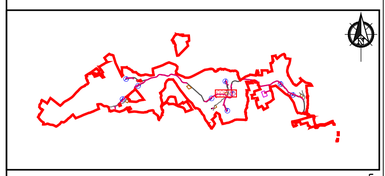
(6) In order to prevent water retention occurring behind the buttresses, the buttresses will be constructed of coarse boulder fill with a high permeability.

(7) The surface of the placed peat & spoil will be shaped to allow efficient run-off of surface water from the placed arising's.

(8) Control of groundwater within the borrow pit may be required and measures will be determined as part of the ground investigation programme.

(9) All the above-mentioned general guidelines and requirements will be confirmed by the designer prior to construction.

(10) Further guidelines on the construction of the borrow pit are included within Section 7.4 of the Peat & Spoil Management Plan



KEYPLAN

Scale 1:100000

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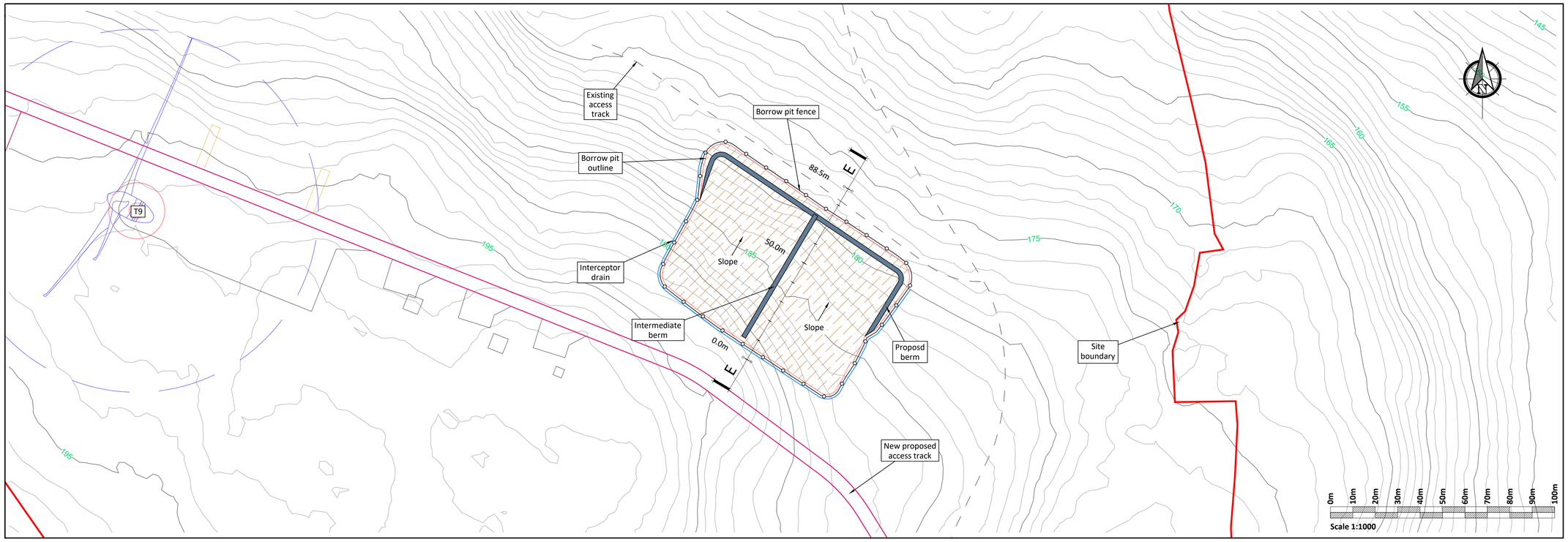
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D	FOR INFORMATION	BDH	19.08.24

PROJECT	KNOCKSHANVO WIND FARM
CLIENT	MKO
SHEET	BORROW PIT 4 PLAN AND SECTION

Date 19.08.24	Project number P20-153	Scale (@ A1) As Shown	
Drawn by POR	Drawing Number P20-153-0600-0021		Rev D
Checked by IH			

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19 August 2024



PLAN

Scale 1:1000

Legend:

- EIAR Planning Boundary
- TXX — Turbine Location
- Existing Access Track (to be upgraded)
- New Proposed Access Track
- Substation
- Construction Compound
- Borrow Pit
- Grid Route Options
- Turbine Delivery Route

Borrow Pit Construction Notes:

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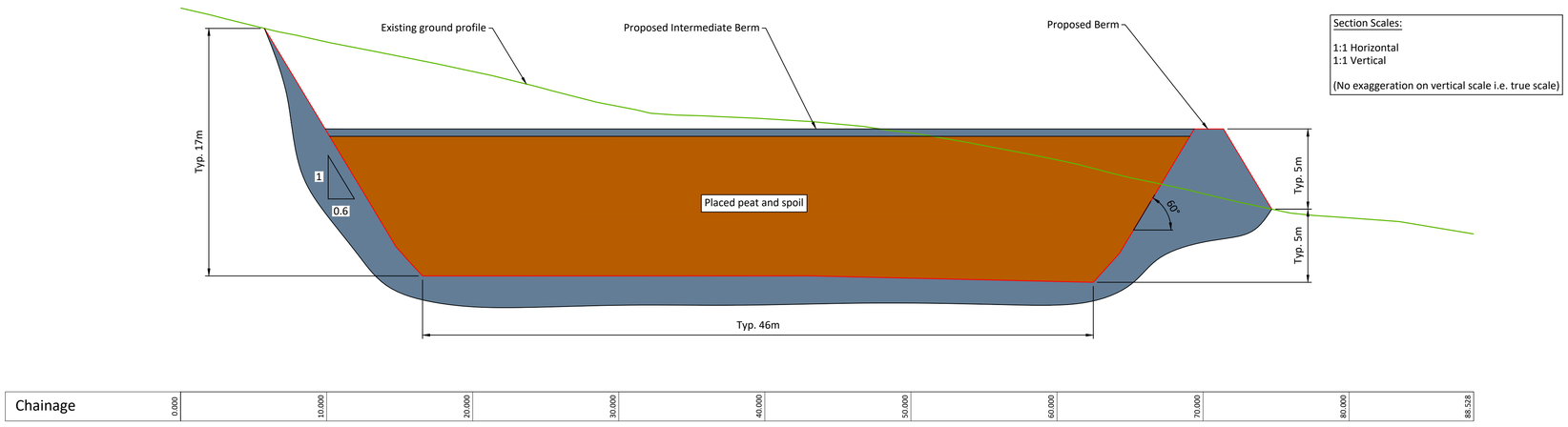
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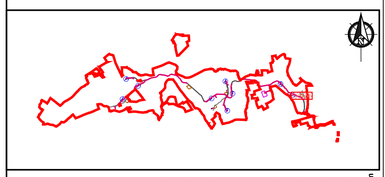
Section Scales:

1:1 Horizontal
1:1 Vertical

(No exaggeration on vertical scale i.e. true scale)

SECTION E - E

Scale 1:200



Scale 1:100000

KEYPLAN

Scale 1:100000

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PROJECT	KNOCKSHANVO WIND FARM
CLIENT	MKO
SHEET	BORROW PIT 5 PLAN AND SECTION

Date 19.08.24	Project number P20-153	Scale (@ A1) As Shown	
Drawn by POR	Drawing Number P20-153-0600-0022		Rev E
Checked by IH			

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19 August 2024