

# Drumlins Park Wind Farm

## Planning Drawings

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Prepared by:

[illegible]

<u>Date:</u>	<u>Rev:</u>	<u>Description:</u>	<u>Drawn By:</u>
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Agent Address:

Galetech Energy Services,  
Clondargan,  
Stradone,  
Co. Cavan

Job Title:

Drumlins Park Wind Farm

**Client:**

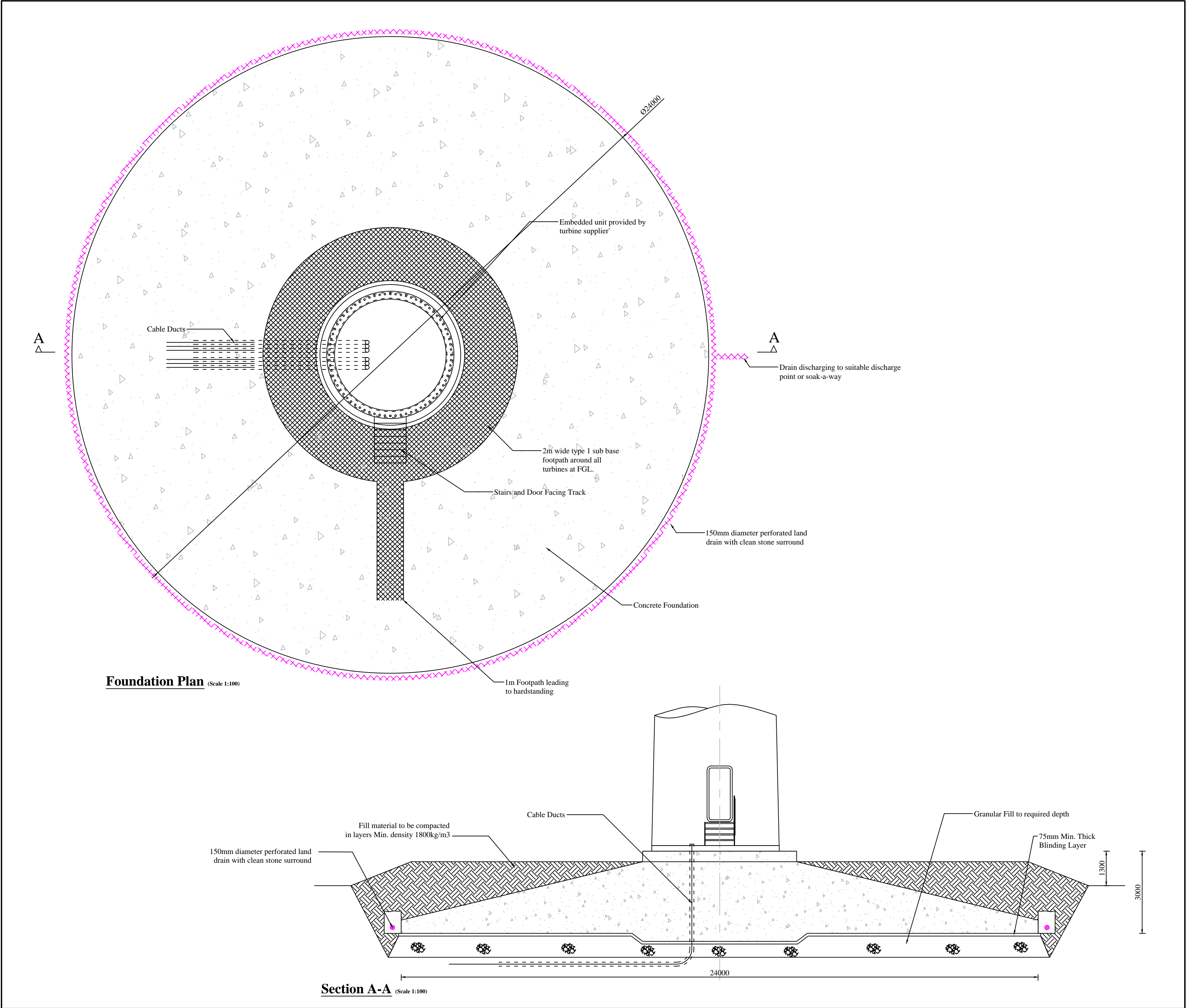
Drumlins Park Ltd

Drawing Title:

<u>Drawing No.:</u>	<u>Revision No.:</u>
	0

<u>Scale:</u>	<u>Date:</u> 08/10/2019
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Drawn By:	Checked By:	Confirmed By:
C.M.P	J.B	S.C



- Note:**
- 1) All dimensions in millimetres unless otherwise stated and must be checked on site and not scaled from this drawing
  - 2) Foundation type may vary depending on wind turbine manufacturer and ground conditions at individual locations


Date:	Rev:	Description:	Drawn By:
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Prepared by:



Gaitech Energy Services,  
Clondargan,  
Stradone,  
Co. Cavan

Client:

Drumlins Park Ltd

Job Title:

Drumlins Park Wind Farm

Drawing Title:

Figure 1: Typical Foundation Design

<u>Drawing No.:</u> DRU_PAS_ECS_001		<u>Revision No.:</u> 0	
<u>Scale:</u> (A2) 1:100		<u>Date:</u> 08/10/2019	
<u>Drawn By:</u> C.M.P		<u>Checked By:</u> J.B	
		<u>Confirmed By:</u> S.C	

75mm\*

75mm\*

Marker Tape

2No. Ducts - one with Fibre Optic Cable and One Spare

2No. Ducts - one with HV Cable and One Spare

Services Bedded and Surrounded in Stone Dust (if Required)

Earth Conductor

75mm\*

75mm Type 1 Material

350mm Type 3 Material

Warning Marker Tape

Suitably Graded Backfill Selected From Excavated Material

2No. Ducts - one with Fibre Optic Cable and One Spare

Marker Tape

2No. Ducts - one with HV Cable and One Spare

Services Bedded and Surrounded in Stone Dust (if Required)

Earth Conductor

500mm

Cable trench width may vary from 450mm to 600mm depending on local ground conditions

75

425

475

1000mm Min.

Diagram illustrating the cross-section of the cable bedding system, showing the following components and dimensions:

- Marker Tape
- H.V. Cable
- Fibre Optic Cable
- Services Bedded and Surrounded in Stone Dust (if Required)
- Earth Conductor
- Dimensions: 75mm\* (bedding layer thickness), 75mm\* (bedding layer width), 75mm\* (bedding layer depth)

Reinstated Turf/Vegetation

Reinstated Topsoil/Peat

Warning Marker Tape

Suitably Graded Backfill Selected From Excavated Material

Fibre Optic Cable

Marker Tape/Tiles (as Appropriate)

H.V. Cable

Services Bedded and Surrounded in Stone Dust (if Required)

Earth Conductor

500mm

250

Cable trench width may vary from 450mm to 600mm depending on local ground conditions



- 1) Depth of cable trenches to suit sub-surface conditions.  
i.e. to be located in stable soil conditions.
- 2) Dimensions with \* against them refer to specific clearances around the H.V. cable.

[illegible]

Date:	Rev:	Description:	Drawn By:
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Agent Address:

Galetech Energy Services,  
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**Client:**

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Drawing Title:

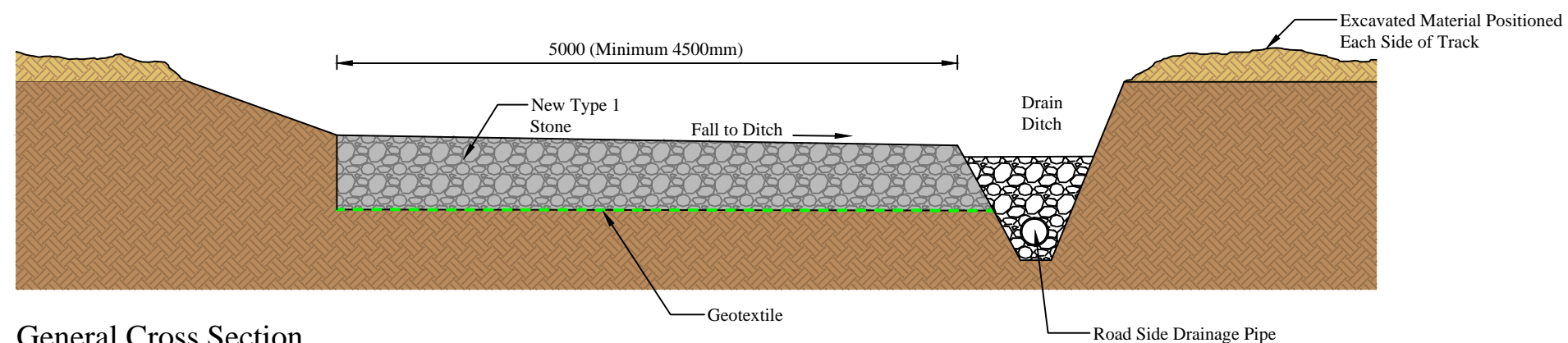
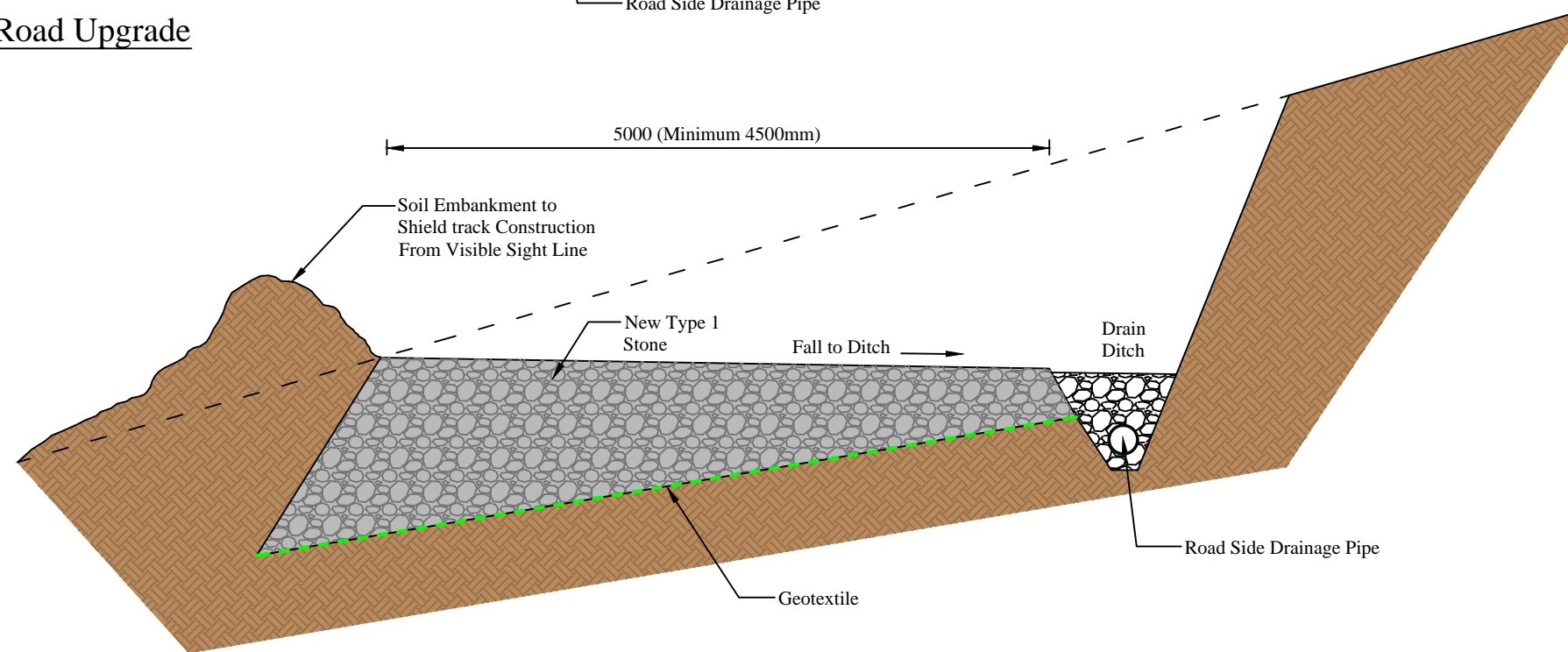
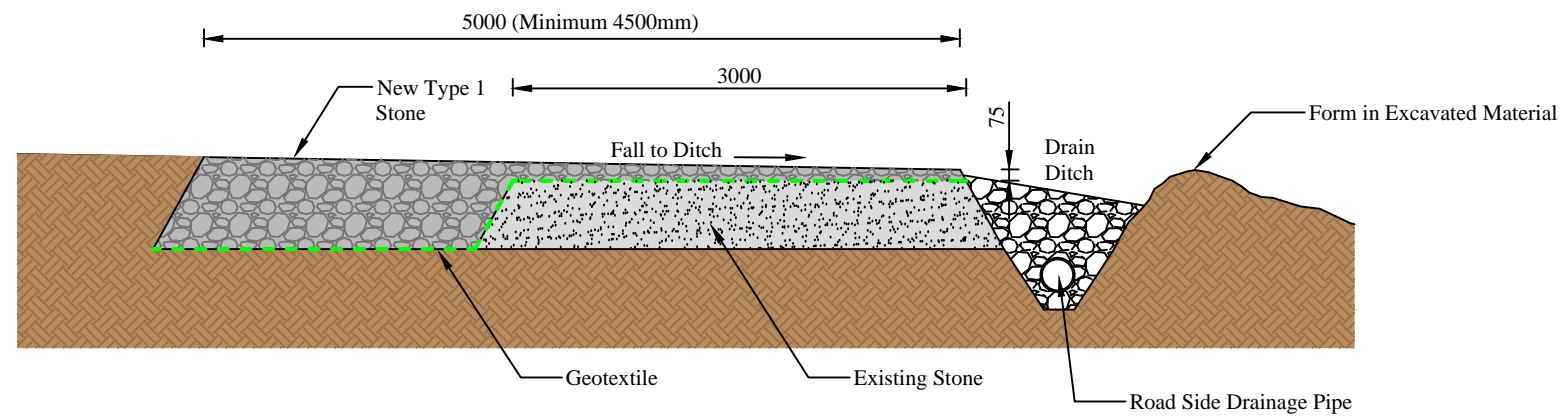
Figure 2: Typical Arrangement of Underground Cables

<u>Drawing No.:</u>	<u>Revision No.:</u>
DRU_PAS_ECS_002	0

<u>Scale:</u>	<u>Date:</u>
(A3) 1:10, 1:20	08/10/2019

<u>Drawn By:</u>	<u>Checked By:</u>	<u>Confirmed By:</u>
C.M.P	J.B	S.C





Prepared by:



**Note:**

- 1) All dimensions must be checked on site and not scaled from this drawing.
- 2) All dimensions in millimetres unless otherwise stated

Date:	Rev:	Description:	Drawn By:

Agent Address:

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Stradone,  
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Drawing Title:

Figure 3 : Typical Site Road Specification

<u>Drawing No.:</u> DRU_PAS_ECS_003		<u>Revision No.:</u> 0	
<u>Scale:</u> (A3) 1:50		<u>Date:</u> 08/10/2019	
<u>Drawn By:</u> C.M.P		<u>Checked By:</u> J.B	
		<u>Confirmed By:</u> S.C	





**Note:**

- 1) All dimensions must be checked on site and not scaled from this drawing.
- 2) All dimensions in millimetres unless otherwise stated


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Agent Address:

Galetech Energy Services,  
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Stradone,  
Co. Cavan

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Client:

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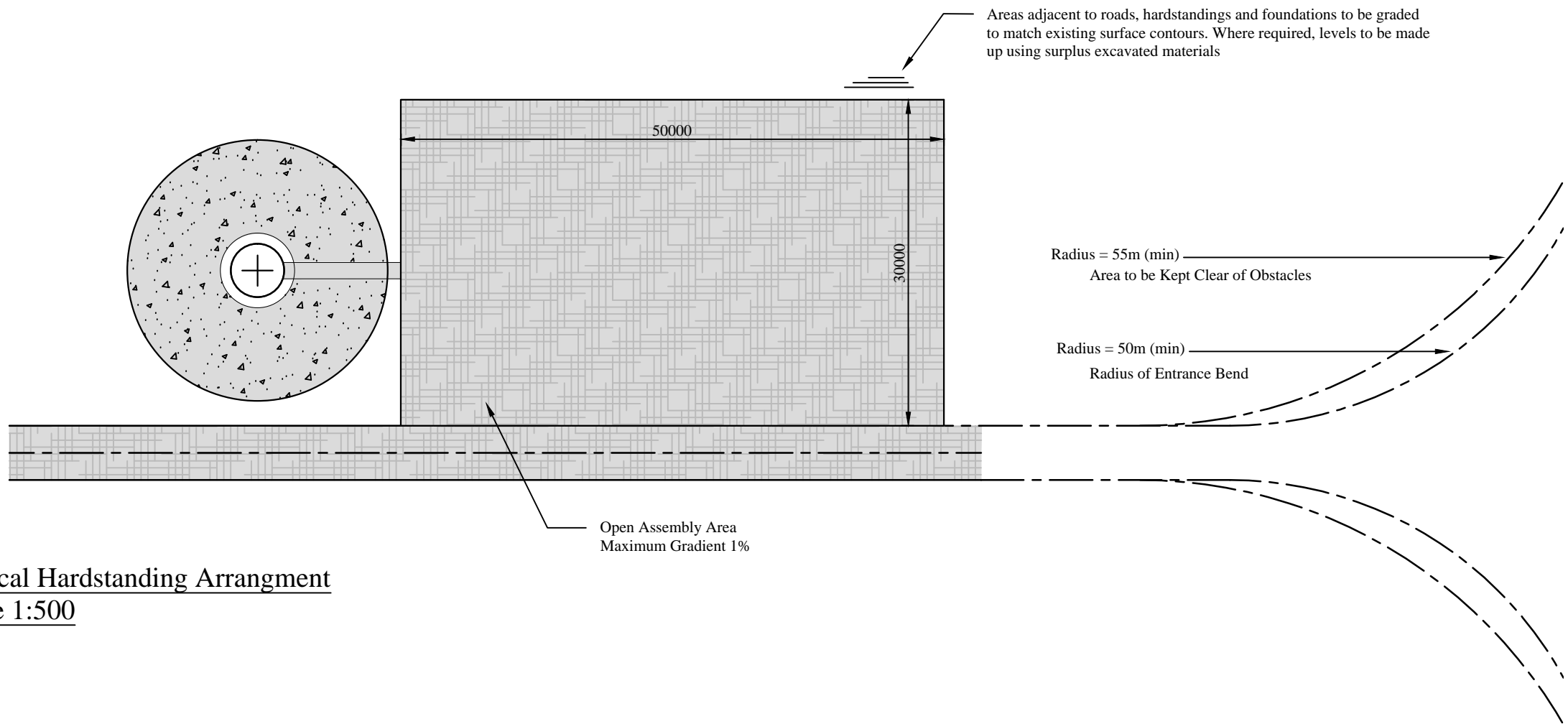
Drawing Title:

Figure 4: Typical Hardstand  
Specification

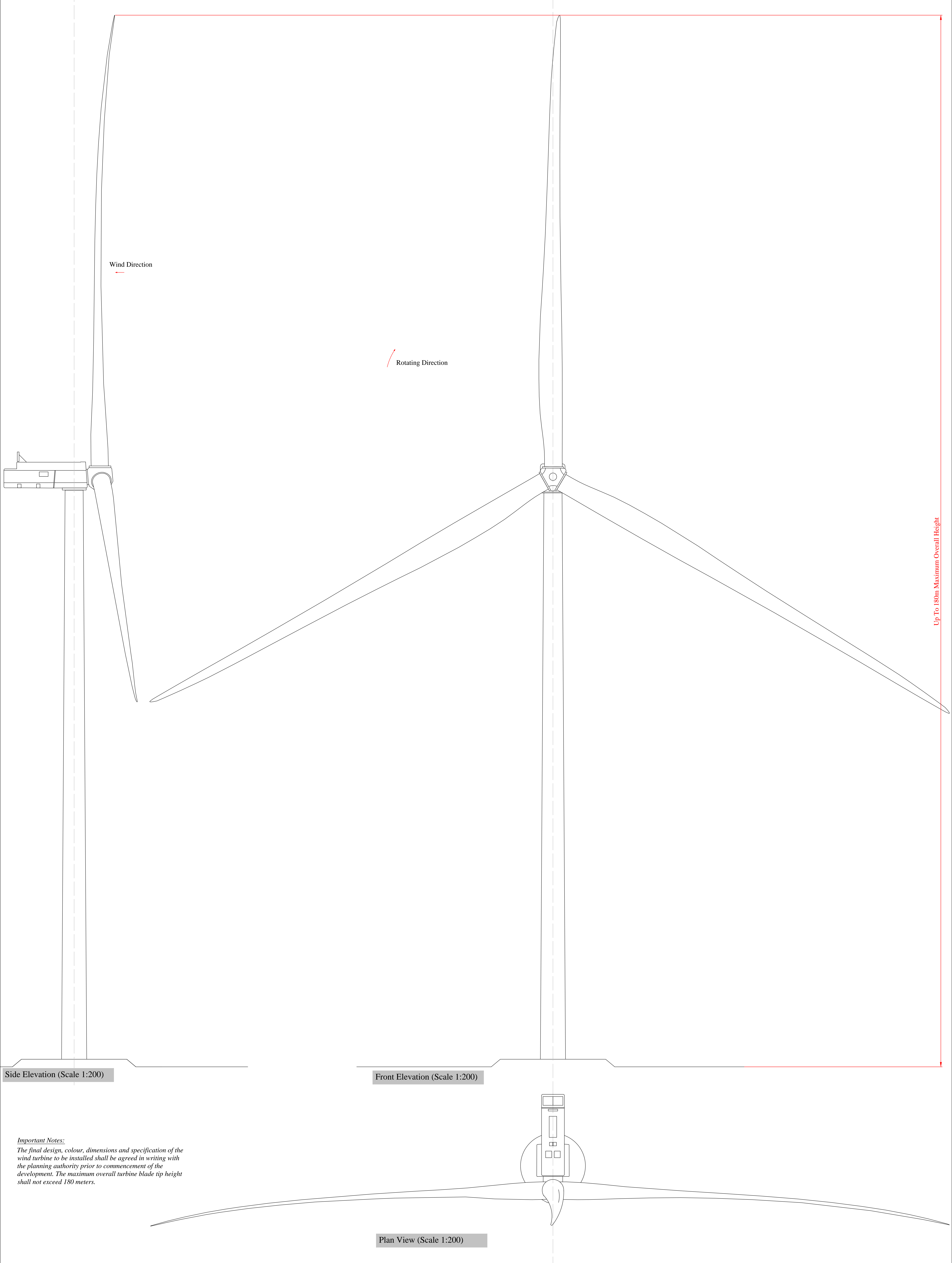
Drawing No.: DRU_PAS_ECS_004	Revision No.: 0
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Scale: (A3) 1:500	Date: 08/10/2019
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Drawn By: C.M.P	Checked By: J.B	Confirmed By: S.C
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Typical Hardstanding Arrangement  
Scale 1:500



**Important Notes:**  
The final design, colour, dimensions and specification of the wind turbine to be installed shall be agreed in writing with the planning authority prior to commencement of the development. The maximum overall turbine blade tip height shall not exceed 180 meters.

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Clondragan,  
Stradone,  
Co. Cavan

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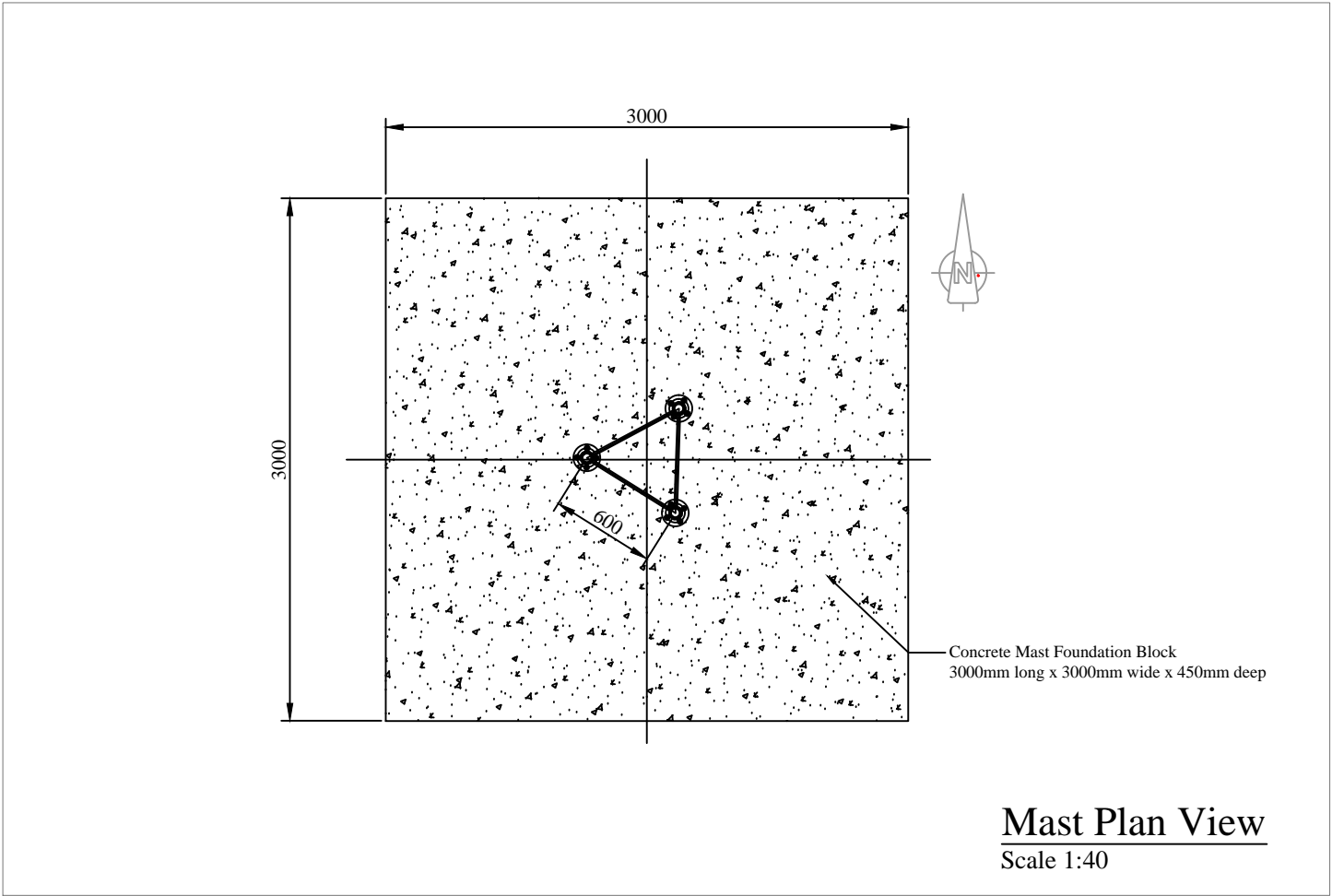
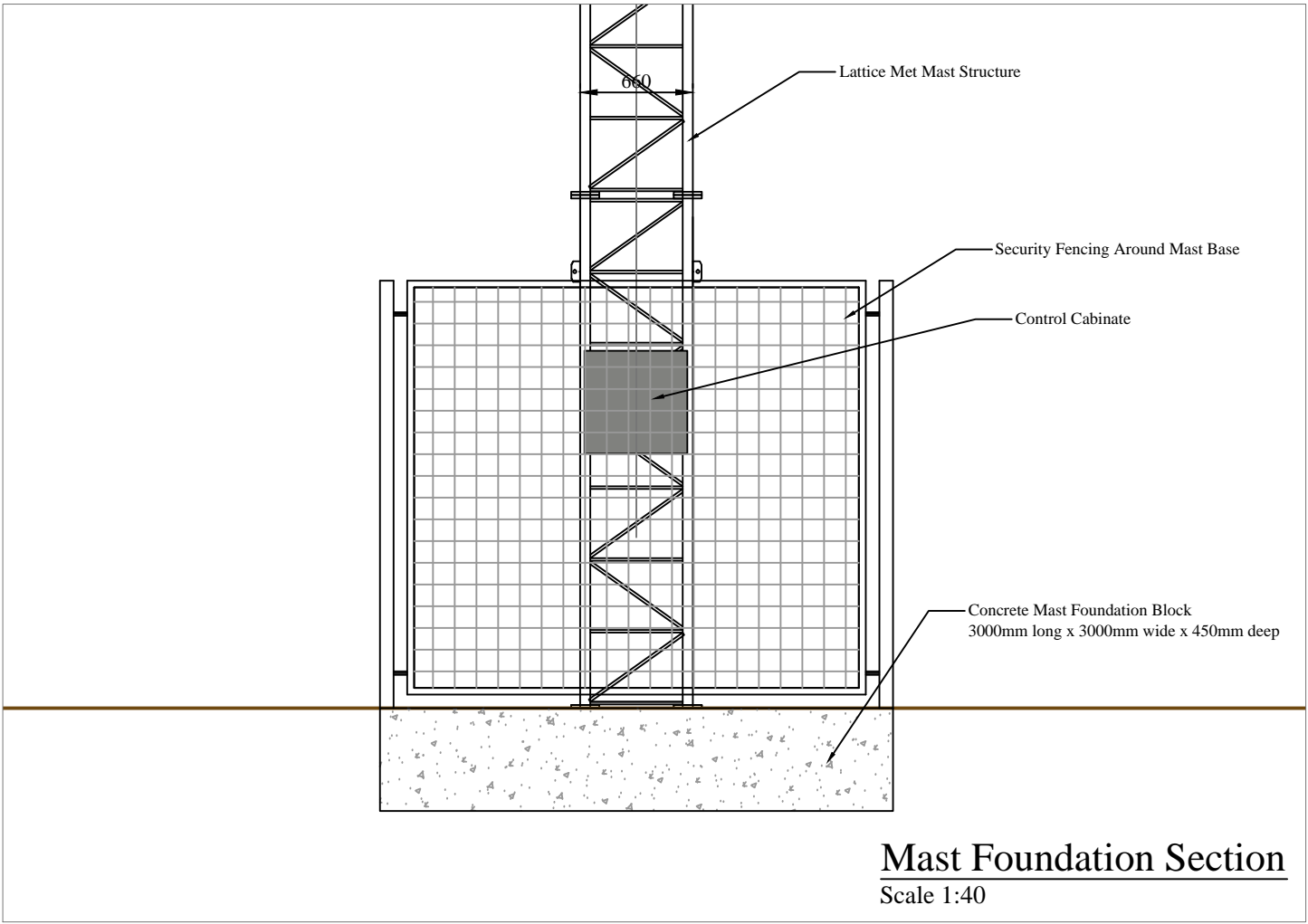
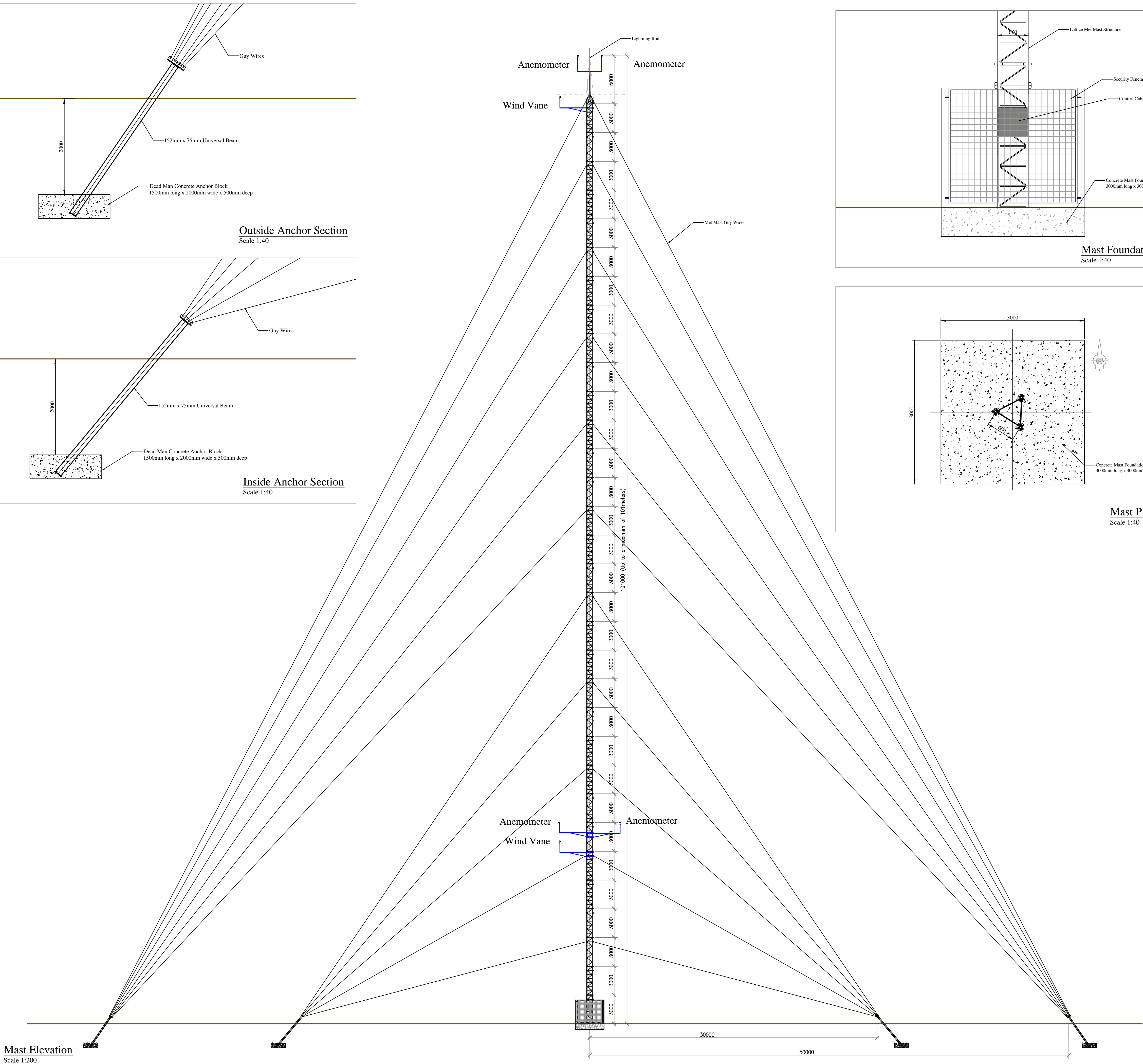
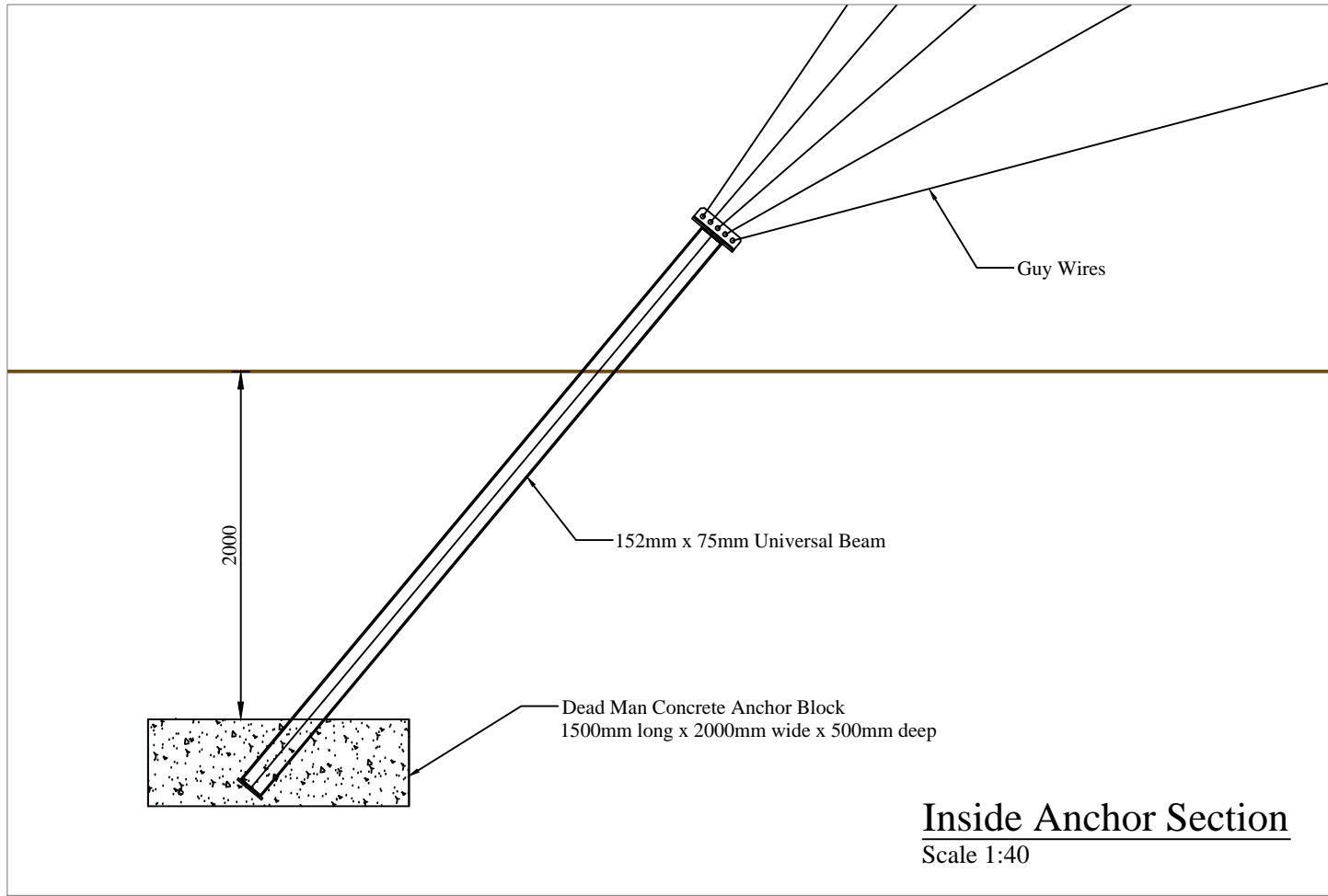
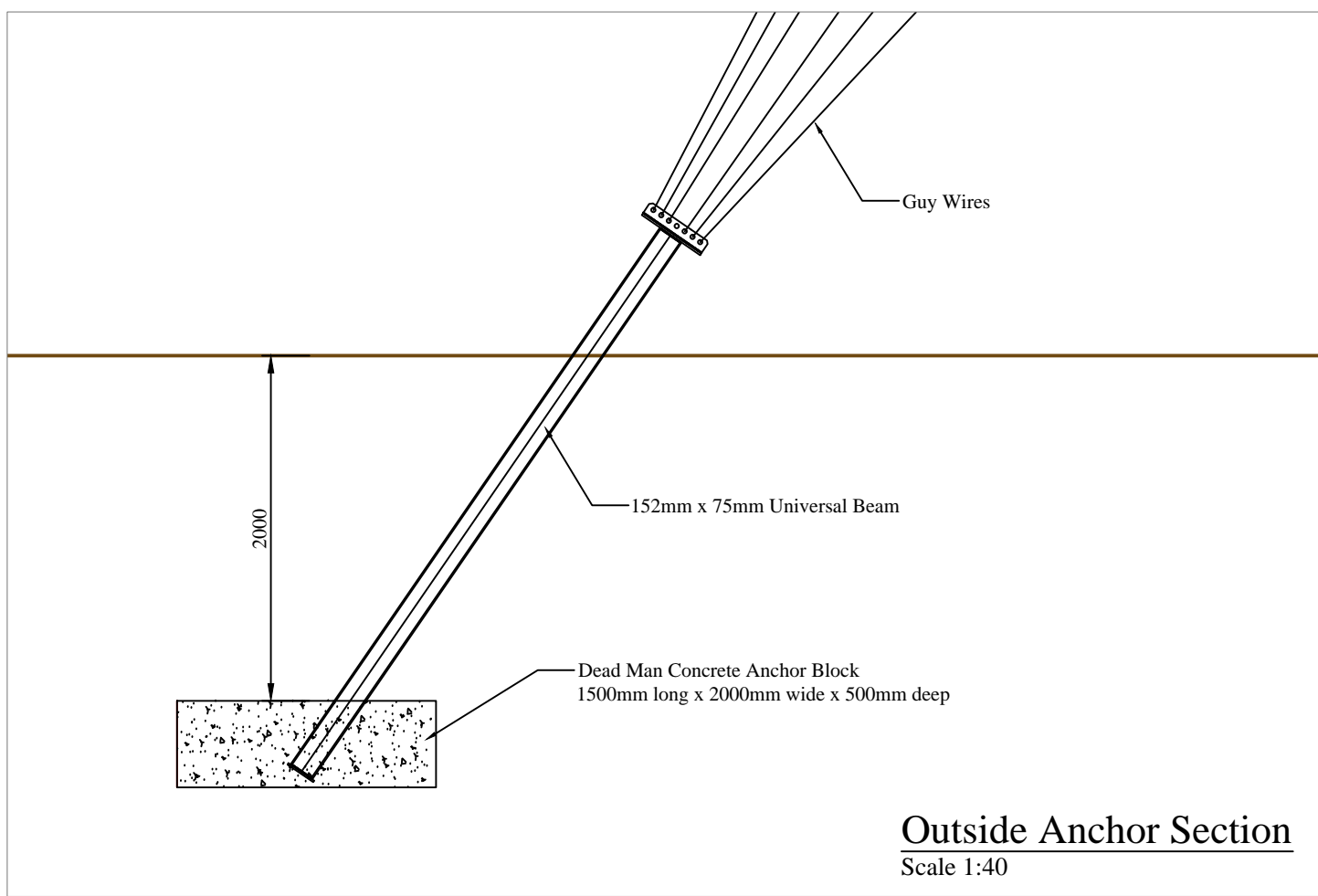
Job Title:

Drumlins Park Wind Farm

Drawing Title:

Figure 5 - Typical Turbine Elevations

Drawing No.: DRU_PAS_ECS_005		Revision No.: 0	
Scale: (A0) 1:200		Date: 08/10/2019	
Drawn By: C.M.P	Checked By: J.B	Confirmed By: S.C	

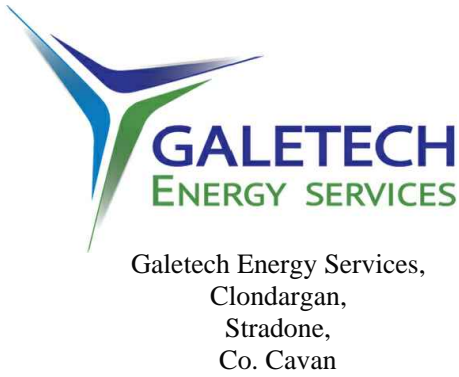


GENERAL NOTES:

1. ALL DIMENSIONS IN MILLIMETERS
2. MAST TO BE MANUFACTURED IN 3 METER SECTIONS AND BOLTS TOGETHER ON SITE
3. THE MAST ELEVATIONS WILL BE THE SAME ON ALL SIDES
4. DO NOT SCALE FROM THIS DRAWING. USE FIGURED DIMENSIONS ONLY.
5. ALL STEELWORK TO BE HOT DIPPED GALVANIZED TO MIN. 85  $\mu$ m.
6. ALL BOLTS TO BE MIN. M16 GR 8.8 UNO.
7. ALL WELDS TO BE FULL STRENGTH FILLET WELDS MIN. 6mm UNO.
8. THE FINAL HEIGHT & DESIGN OF THE MAST MAY VARY. THE FINAL HEIGHT WILL NOT EXCEED 101METERS
9. THE LOCATION OF THE INSTRUMENTS ON THE MAST MAY VARY DEPENDING ON THE MET MAST MANUFACTURER AND EIRGRID REQUIRMENTS
10. BOTTOM 3M OF MAST TO BE PROTECTED WITH ANTI-CLIMB FENCE TO BE FIXED AND SECURED IN ACCORDANCE WITH MANUFACTURER'S DETAILS.


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Client:

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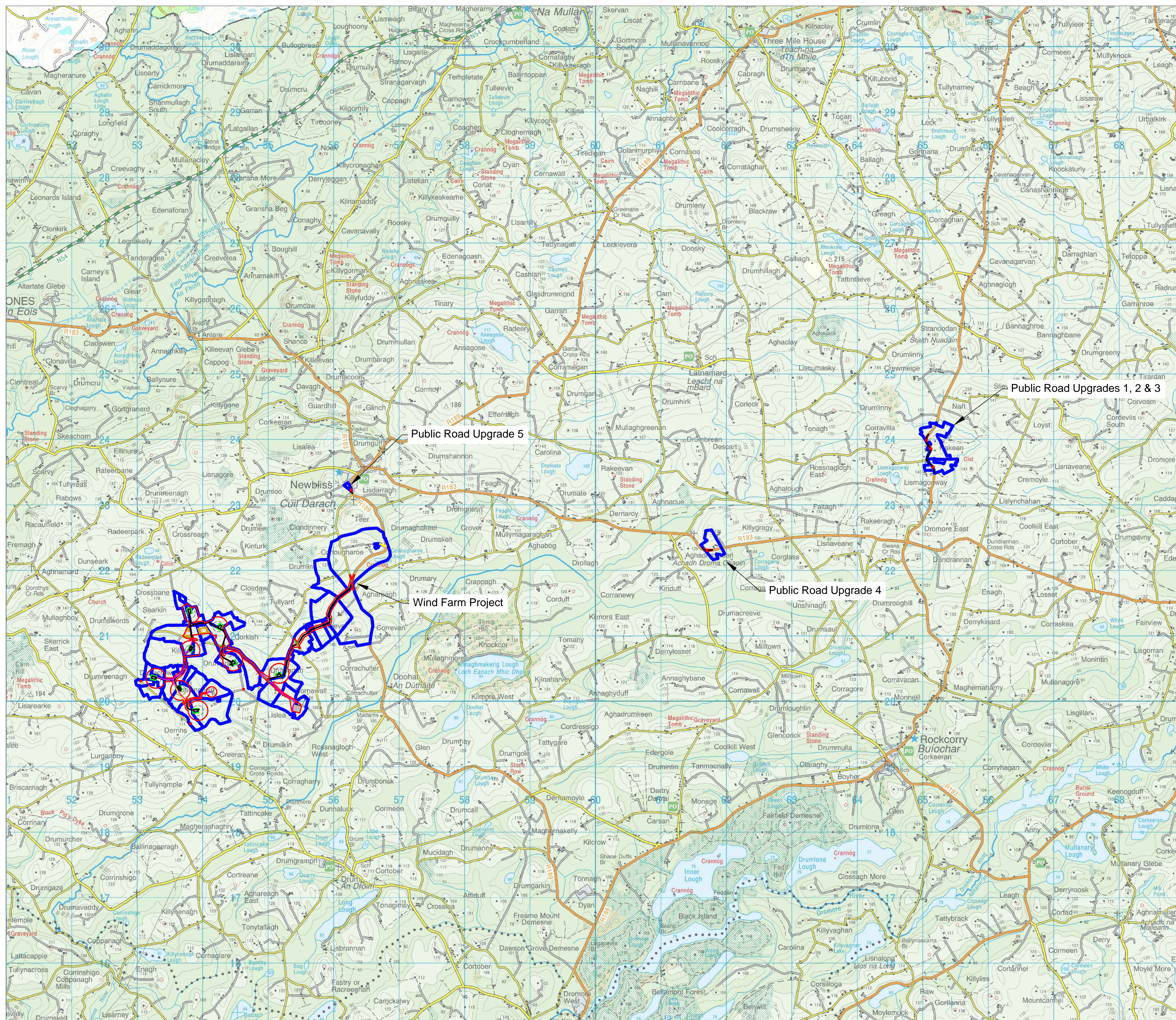
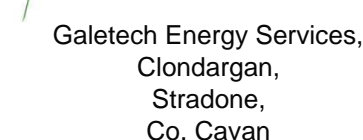
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Drawing Title:

Figure 6.0 - Typical Anemometer Mast Elevations

<u>Drawing No.:</u> DRU_PAS_ECS_006		<u>Revision No.:</u> 0	
<u>Scale:</u> (A1) 1:200,1:40		<u>Date:</u> 08/10/2019	
<u>Drawn By:</u> C.M.P		<u>Checked By:</u> J.B	<u>Confirmed By:</u> S.C



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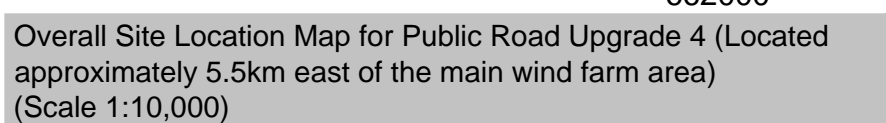
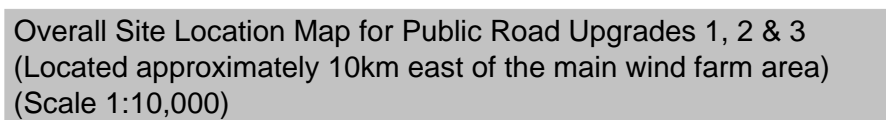
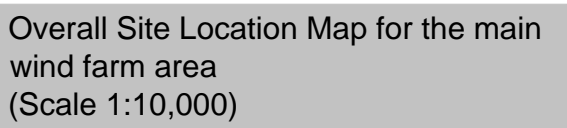
Drumlins Park Ltd

## Drumlins Park Wind Farm

Figure 7: Overall Project Location

Drawing No.: DRU_PAS_LOC_001		Revision No.: 0	
Scale: (A1) 1:30,000		Date: 08/10/2019	
Drawn By: C.M.P	Checked By: J.B	Confirmed By: S.C	





Legend:

Ownership Boundary

### Application Boundary

Wind Farm Access Tracks &amp; Crane Hardstanding Areas

### Indicative Cable Routes

Indicative Areas for be used for the storage and assembly of the turbine components prior to turbine erection. Area to be graded and leveled as required. Area to be reinstated after the wind farm has been constructed.

### Surplus Soil Deposition Areas

Registered Right of Way Areas

Notes:

- All dimension in meters unless otherwise stated
- Turbines may be micro-sited by up to a maximum of 20 meters
- Micro-sited of ancillary infrastructure to be permitted within the planning application boundary

[illegible]

Date:	Rev:	Description:	Drawn By:
Prepared by:			



Galetech Energy Services,  
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Stradone,  
Co. Cavan

Client:

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Job Title:

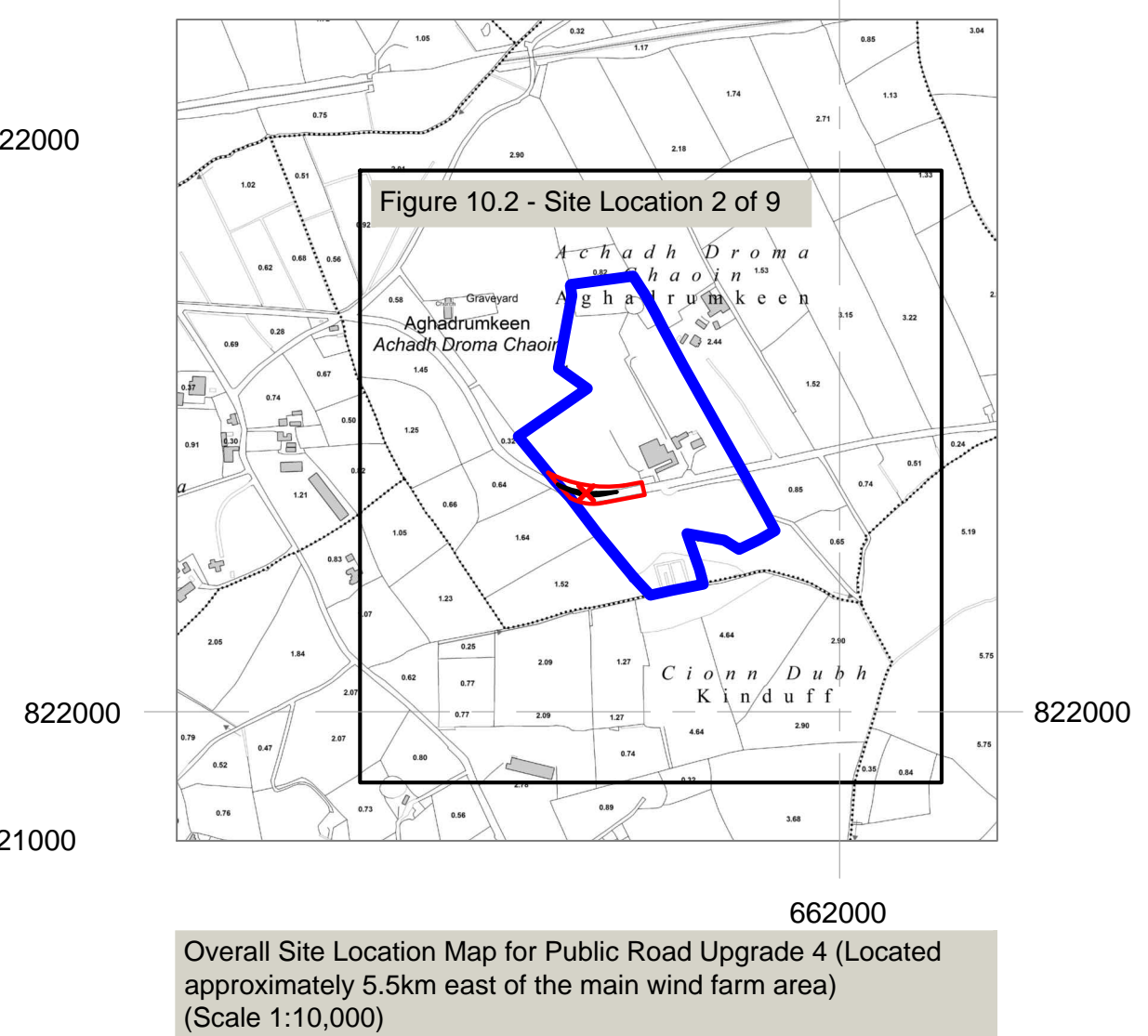
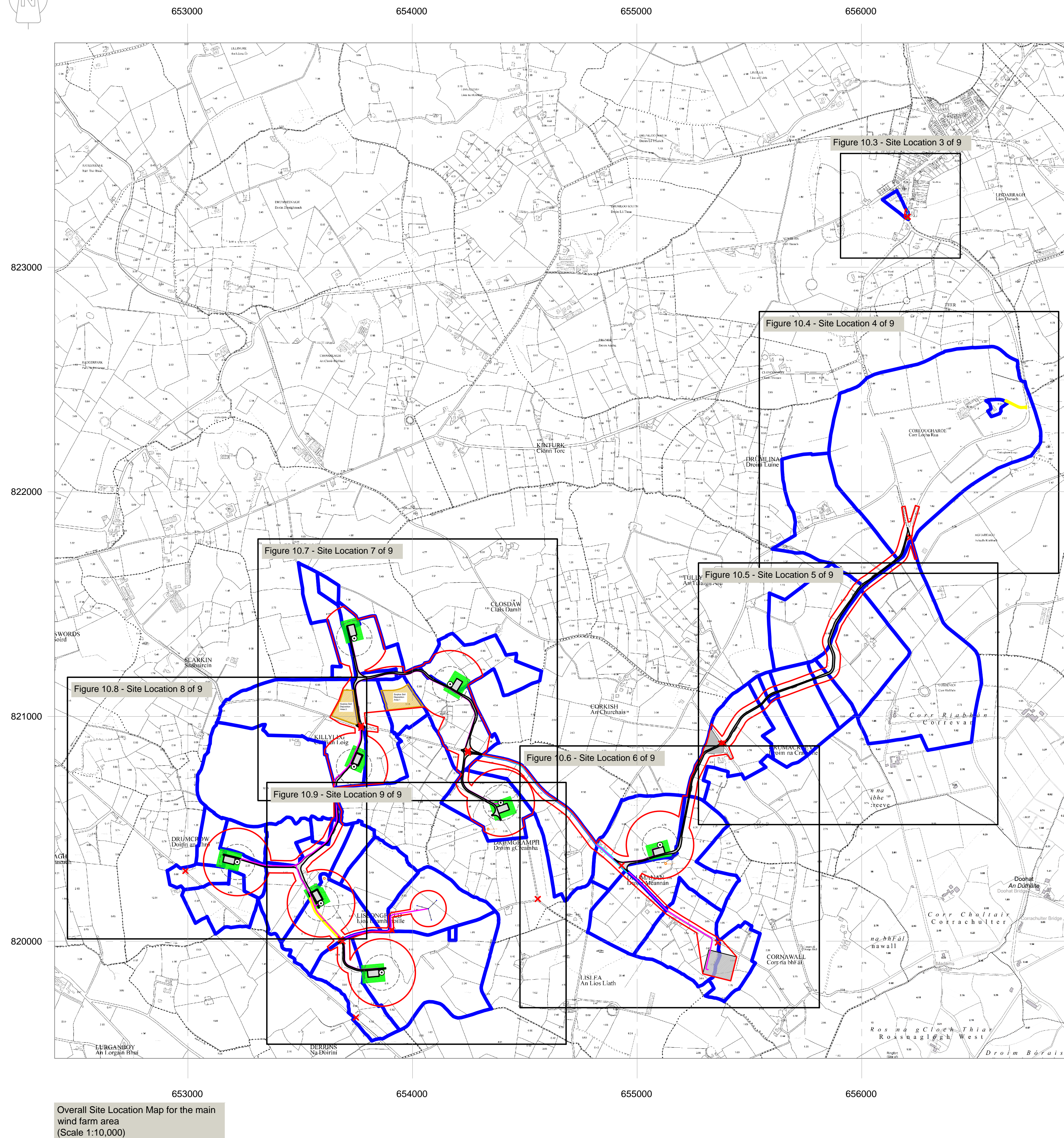
## Drumlins Park Wind Farm

Drawing Title:

Figure 8: Overall Site Location Map

Drawing No.: DRU_PAS_LOC_002		Revision No.: 0	
Scale: (A1) 1:10.000		Date: 08/10/2019	
Drawn By: C.M.P		Checked By: J.B	
		Confirmed By: S.C	





- All dimension in meters unless otherwise stated
- Turbines may be micro-sited by up to a maximum of 20 meters
- Micro-sited of ancillary infrastructure to be permitted within the planning application boundary

Prepared by:

The logo for Galetech Energy Services features a stylized, abstract graphic on the left composed of three curved, overlapping shapes in blue, green, and yellow. To the right of this graphic, the word "GALETECH" is written in a bold, blue, sans-serif font, and the words "ENERGY SERVICES" are written below it in a green, sans-serif font.

Galetech Energy Services,  
Clondargan,  
Stradone,  
Co. Cavan

Client:

Drumlins Park Ltd

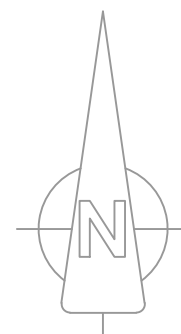
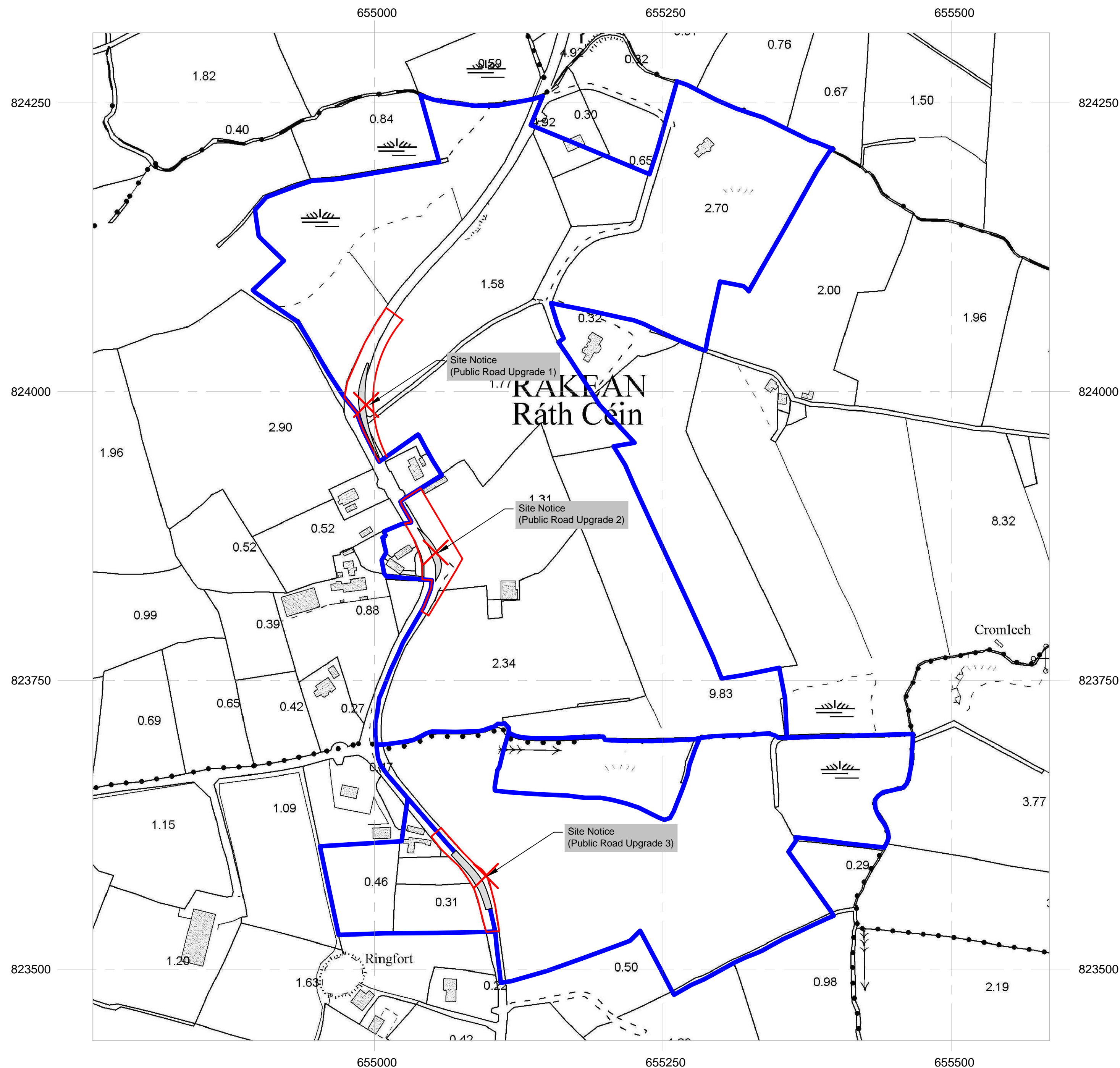
Job Title: Drumlins Park Wind Farm

Figure 9: Site Location Drawing Key

Drawing No.: DRU_PAS_LOC_003		Revision No.: 0	
Scale: (A1) 1:10.000		Date: 08/10/2019	
Drawn By: C.M.P	Checked By: J.B	Confirmed By: S.C	

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**Legend:**

- Ownership Boundary —
- Application Boundary —


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Prepared by:



Galetech Energy Services,  
Clondargan,  
Stradone,  
Co. Cavan

Client:

Drumlins Park Ltd

Job Title:

Drumlins Park Wind Farm

Drawing Title:

Figure 10.1: Site Location Map  
(Map 1 of 9)

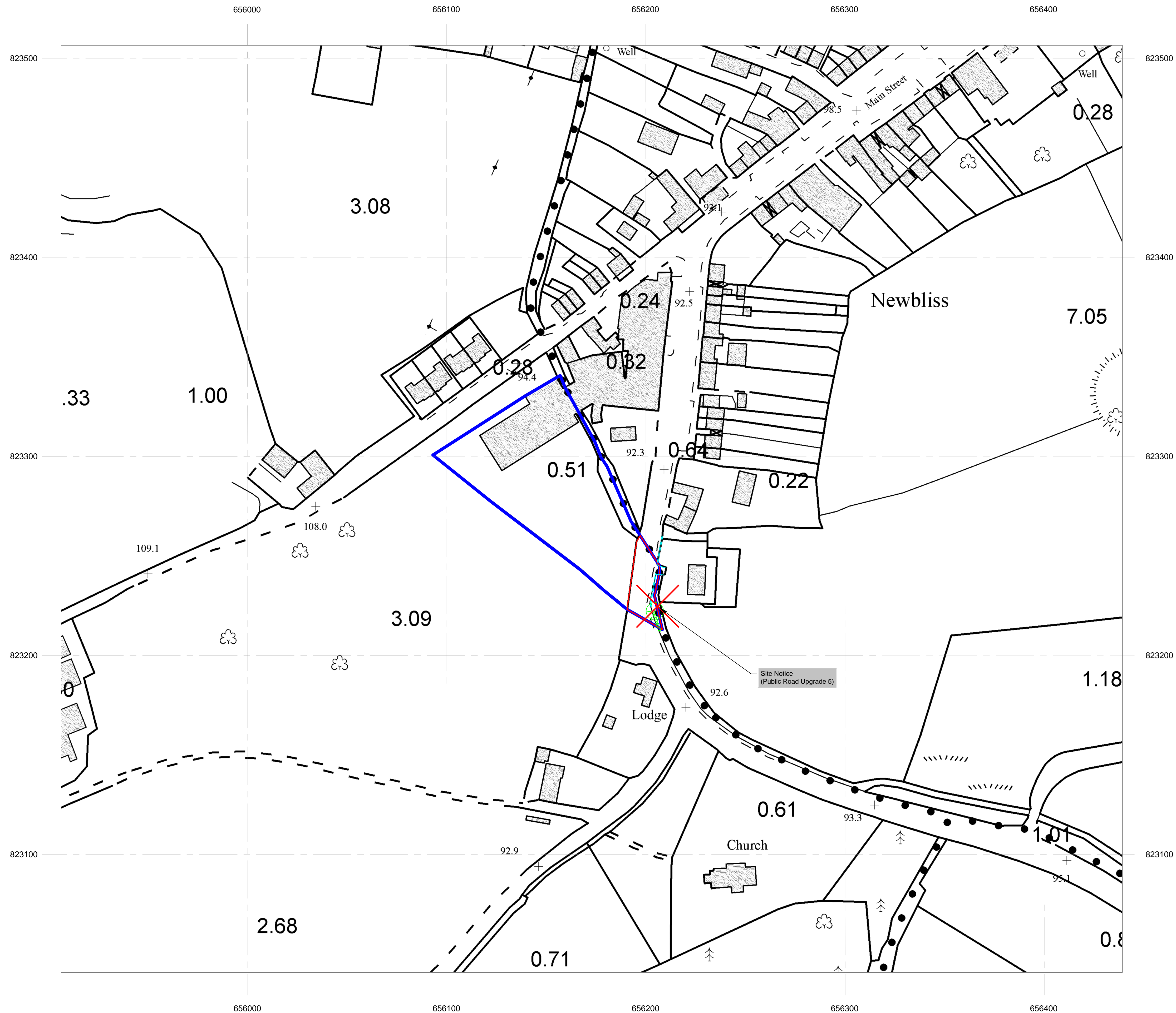
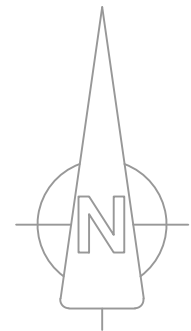
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<u>Drawn By:</u> C.M.P	<u>Checked By:</u> J.B	<u>Confirmed By:</u> S.C

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**Legend:**

- Ownership Boundary —
- Application Boundary —
- Wind Farm Access Tracks & Crane Hardstanding Areas
- Indicative Cable Routes —
- Indicative Areas for be used for the storage and assembly of the turbine components prior to turbine erection. Area to be graded and leveled as required. Area to be reinstated after the wind farm has been constructed.
- Surplus Soil Deposition Areas
- Registered Right of Way Areas —

**Notes:**

- All dimension in meters unless otherwise stated
- Turbines may be micro-sited by up to a maximum of 20 meters
- Micro-sited of ancillary infrastructure to be permitted within the planning application boundary


Date:	Rev:	Description:	Drawn By:
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Prepared by:



Client:

Drumlins Park Ltd

Job Title:

Drumlins Park Wind Farm

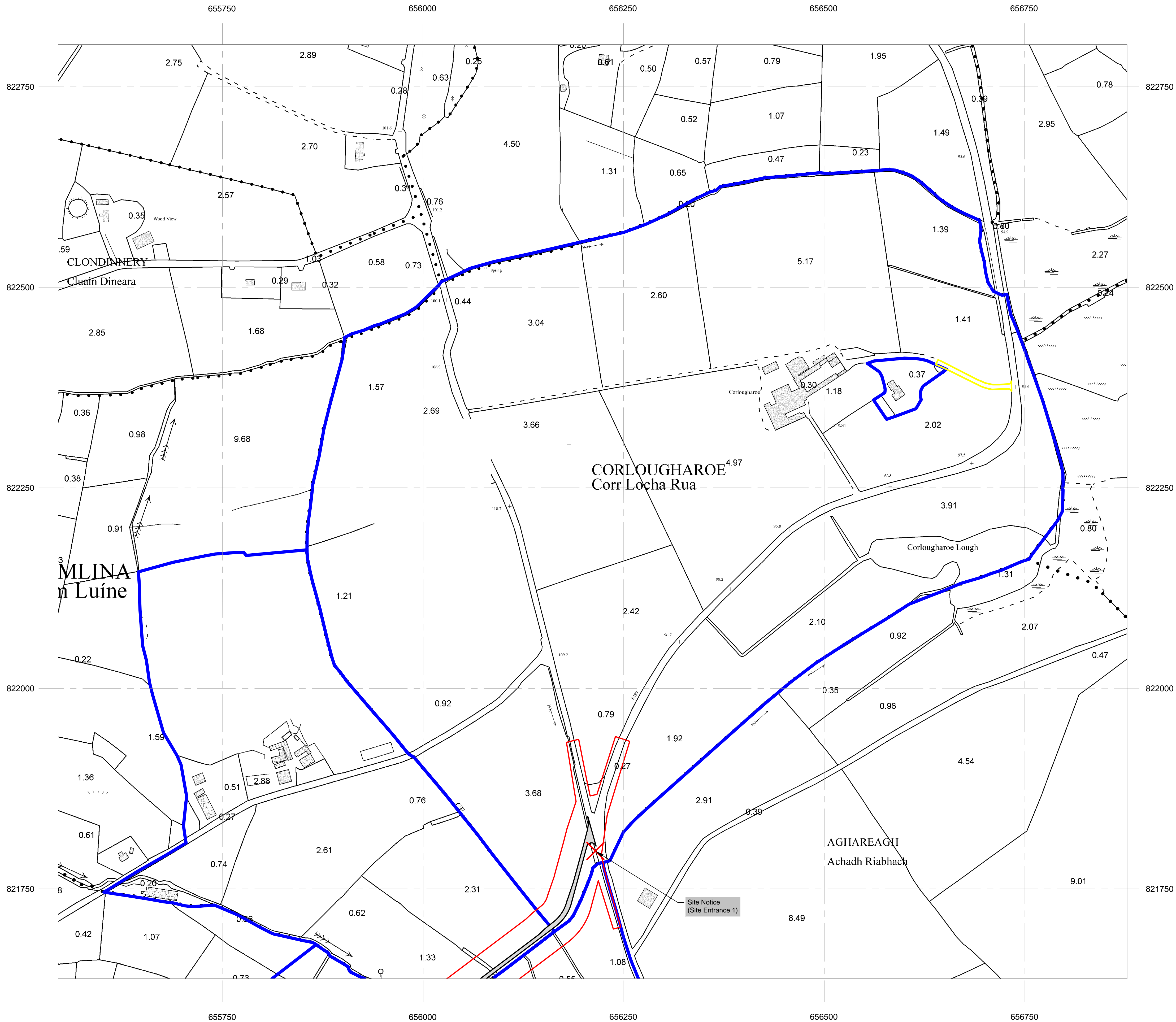
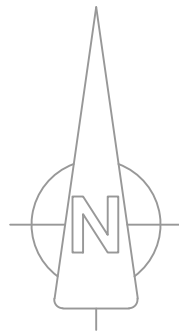
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Figure 10.3: Site Location Map  
(Map 3 of 9)

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<u>Drawn By:</u> C.M.P		<u>Checked By:</u> J.B	
		<u>Confirmed By:</u> S.C	

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#### Legend:

- Ownership Boundary
- Application Boundary
- Wind Farm Access Tracks & Crane Hardstanding Areas
- Indicative Cable Routes
- Indicative Areas for be used for the storage and assembly of the turbine components prior to turbine erection. Area to be graded and leveled as required. Area to be reinstated after the wind farm has been constructed.
- Surplus Soil Deposition Areas
- Registered Right of Way Areas

#### Notes:

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- Turbines may be micro-sited by up to a maximum of 20 meters
- Micro-sited of ancillary infrastructure to be permitted within the planning application boundary


Date:	Rev:	Description:	Drawn By:

Prepared by:



Client:

Drumlins Park Ltd

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Drumlins Park Wind Farm

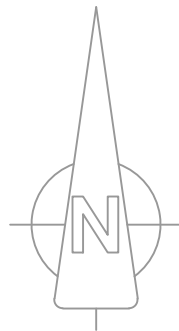
Drawing Title:

Figure 10.4: Site Location Map  
(Map 4 of 9)

<u>Drawing No.:</u> DRU_PAS_LOC_007		<u>Revision No.:</u> 0
<u>Scale:</u> (A1) 1:2,500		<u>Date:</u> 08/10/2019
<u>Drawn By:</u> C.M.P	<u>Checked By:</u> J.B	<u>Confirmed By:</u> S.C

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YARD  
laigh Ard

# DRUMACREEVE

## Droim na Craoibhe

Legend:

Ownership Boundary

### Application Boundary

Wind Farm Access Tracks &amp; Crane Hardstanding Areas

### Indicative Cable Routes

Indicative Areas for be used for the storage and assembly of the turbine components prior to turbine erection. Area to be graded and leveled as required. Area to be reinstated after the wind farm has been constructed.

### Surplus Soil Deposition Areas

Registered Right of Way Areas

Notes:

- All dimension in meters unless otherwise stated
- Turbines may be micro-sited by up to a maximum of 20 meters
- Micro-sited of ancillary infrastructure to be permitted within the planning application boundary


Date:	Rev:	Description:	Drawn By:
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Client:

Drumlins Park Ltd

Job Title:	
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## Drumlins Park Wind Farm

Drawing Title:

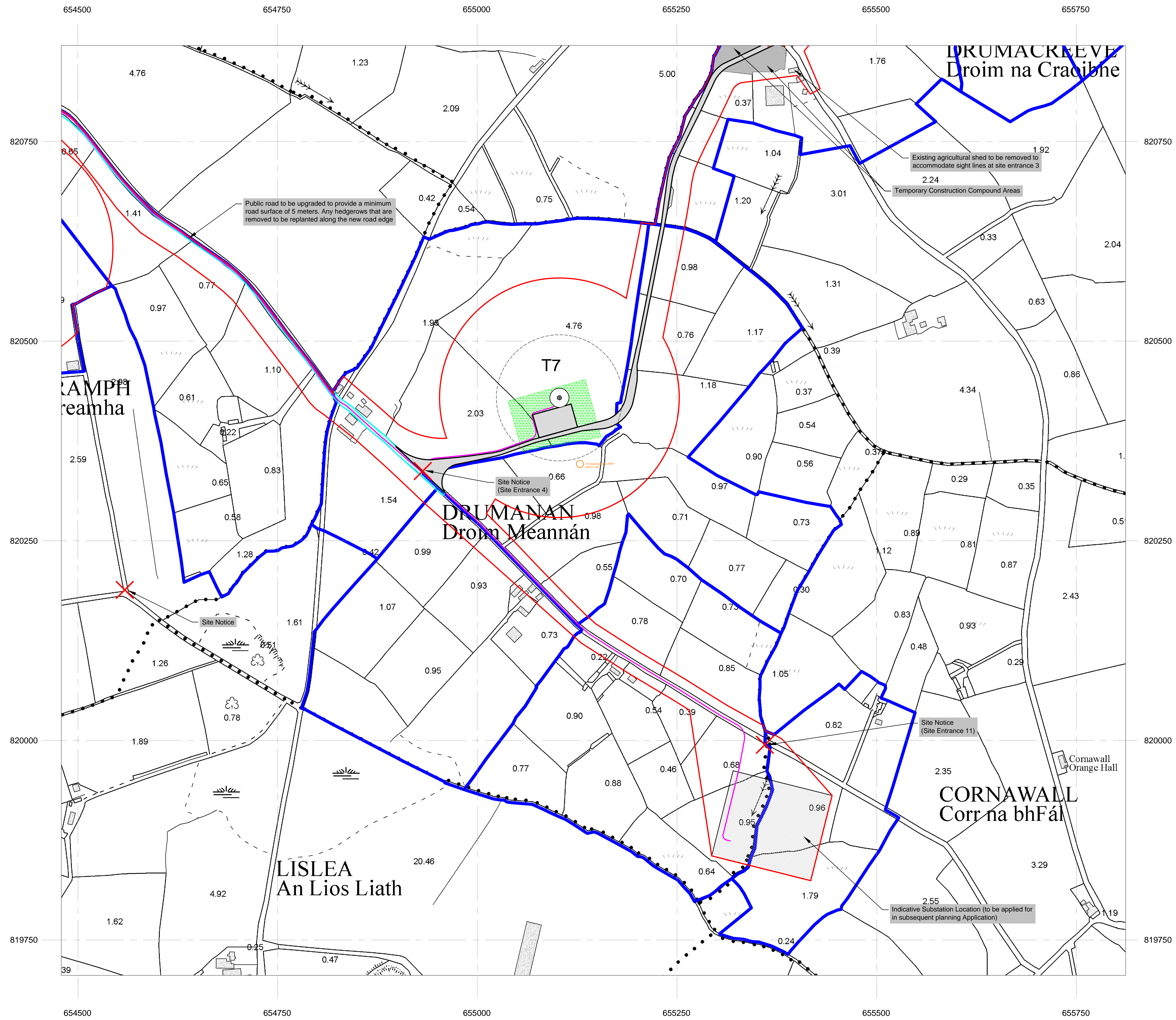
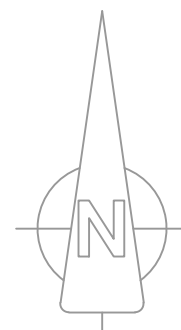
Figure 10.5: Site Location Map  
(Map 5 of 9)

Drawing No.:	Revision No.:
DRU_PAS_LOC_008	0

<u>Scale:</u>	<u>Date:</u>
(A1) 1:2,500	08/10/2019

Drawn By:	Checked By:	Confirmed By:
C.M.P	J.B	S.C





**Legend:**

- Ownership Boundary
- Application Boundary
- Wind Farm Access Tracks & Crane Hardstanding Areas
- Indicative Cable Routes
- Indicative Areas for be used for the storage and assembly of the turbine components prior to turbine erection. Area to be graded and leveled as required. Area to be reinstated after the wind farm has been constructed.
- Surplus Soil Deposition Areas
- Registered Right of Way Areas

**Notes:**

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- Turbines may be micro-sited by up to a maximum of 20 meters
- Micro-sited of ancillary infrastructure to be permitted within the planning application boundary


Date:	Rev:	Description:	Drawn By:

Prepared by:



Client:

Drumlins Park Ltd

Job Title:

Drumlins Park Wind Farm

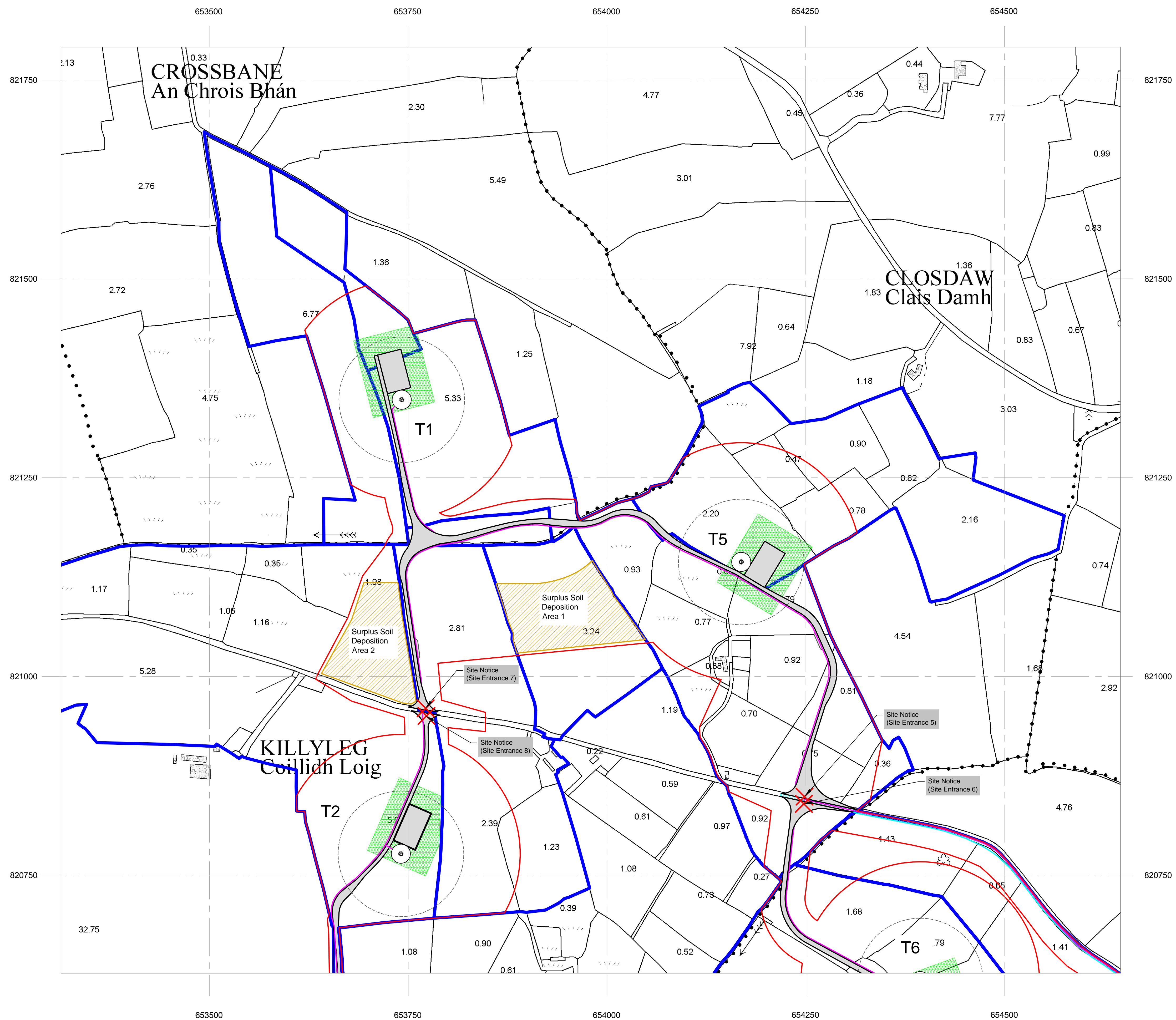
Drawing Title:

Figure 10.6: Site Location Map  
(Map 6 of 9)

<u>Drawing No.:</u> DRU_PAS_LOC_009		<u>Revision No.:</u> 0	
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<u>Drawn By:</u> C.M.P	<u>Checked By:</u> J.B		<u>Confirmed By:</u> S.C

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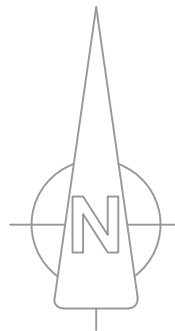


- All dimension in meters unless otherwise stated
- Turbines may be micro-sited by up to a maximum of 20 meters
- Micro-sited of ancillary infrastructure to be permitted within the planning application boundary

Drawn By:	Checked By:	Confirmed By:
C.M.P	J.B	S.C

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Legend:

Ownership Boundary

### Application Boundary

### Wind Farm Access Tracks & Crane Hardstanding Areas

### Indicative Cable Routes

Indicative Areas for be used for the storage and assembly of the turbine components prior to turbine erection. Area to be graded and leveled as required. Area to be reinstated after the wind farm has been constructed.

### Surplus Soil Deposition Areas

Registered Right of Way Areas

Notes:

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- Turbines may be micro-sited by up to a maximum of 20 meters
- Micro-sited of ancillary infrastructure to be permitted within the planning application boundary

[illegible]

<u>Date:</u>	<u>Rev:</u>	<u>Description:</u>	<u>Drawn By:</u>
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Client:

Drumlins Park Ltd

Job Title:

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Drawing Title:

Figure 10.8: Site Location Map  
(Map 8 of 9)

Drawing No.:	Revision No.:
DRU_PAS_LOC_011	0

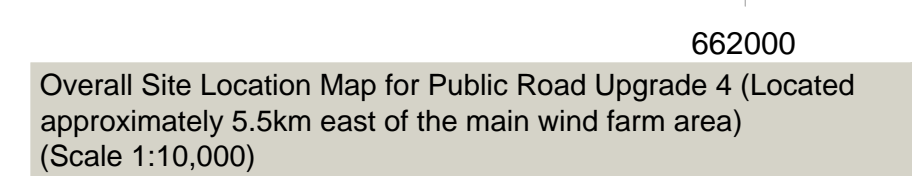
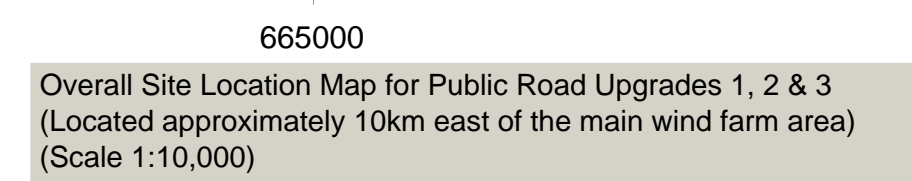
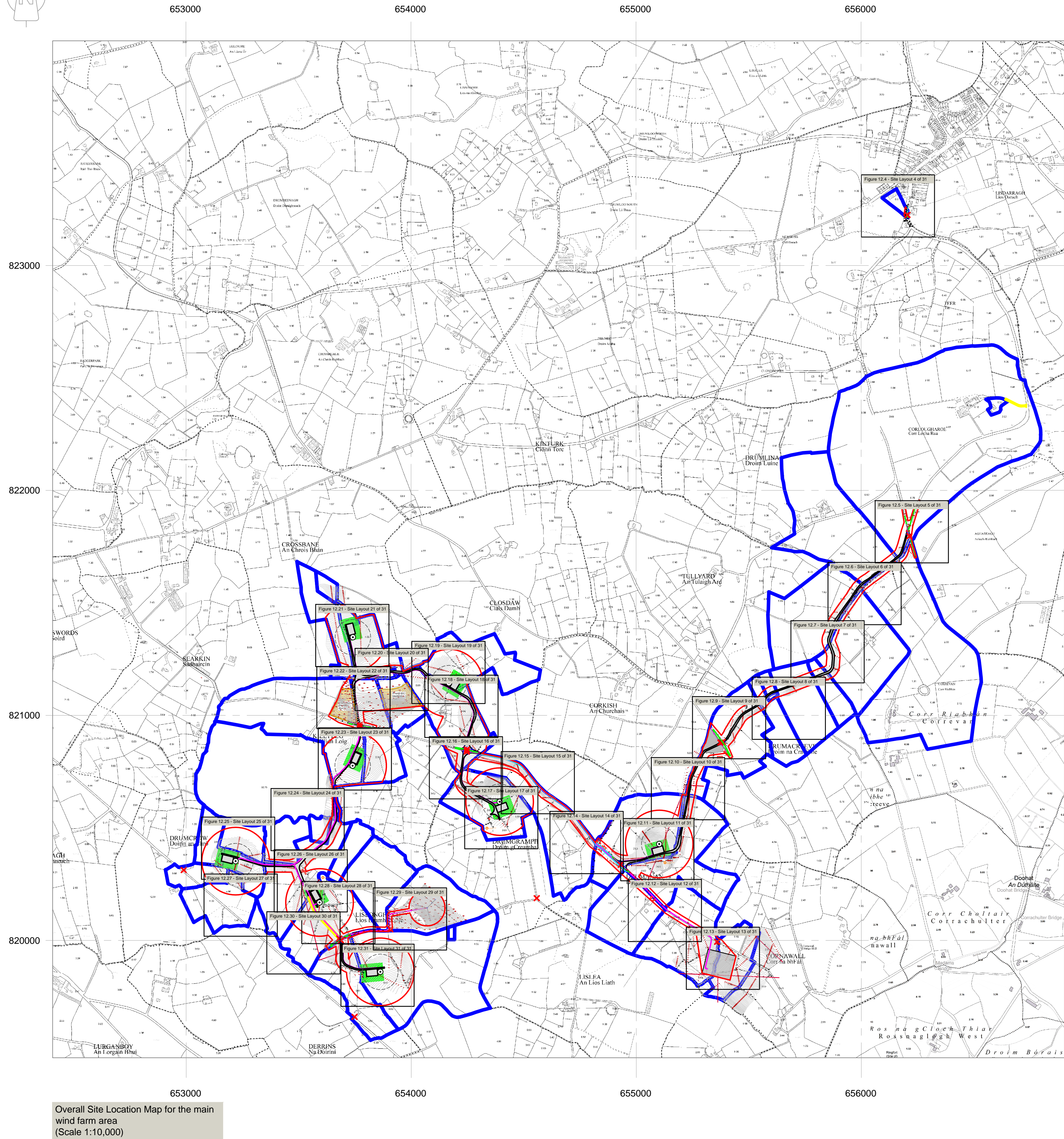
<u>Scale:</u>	<u>Date:</u>
(A1) 1:2,500	08/10/2019

<u>Drawn By:</u> C.M.P	<u>Checked By:</u> J.B	<u>Confirmed By:</u> S.C
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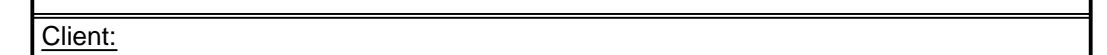






- All dimension in meters unless otherwise stated
- Turbines may be micro-sited by up to a maximum of 20 meters
- Micro-sited of ancillary infrastructure to be permitted within the planning application boundary

Prepared by:	
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Job Title:
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Drawing Title:	
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Drawn By:		Checked By:	Confirmed By:
C.M.P		J.B	S.C