

Watten Wind Farm

Caithness, Scottish Highlands

Environmental Impact Assessment Volume 2 of 4: Supporting Figures and Visualisations - Chapter 1 to 5

August 2023



Prepared by Natural Power
on behalf of EDF Energy
Renewables Limited.

Volume 2: Supporting Figures and Visualisations

Contents

Chapter 1 – Introduction

Figure 1.1: Site Location

Figure 1.2: Site Layout

Chapter 4 – Site Selection and Design Evolution

Figure 4.1: Constraints to Site Design

Figure 4.2: Layout Design Evolution

Chapter 5 – Project Description

Figure 5.1: Indicative Turbine Marking Detail

Figure 5.2: Indicative Wind Turbine Specification

Figure 5.3: Indicative Transformer

Figure 5.4: Indicative Turbine Hardstand

Figure 5.5: Indicative Wind Turbine Foundation

Figure 5.6: Indicative Control Building

Figure 5.7: Indicative Underground Cabling

Figure 5.8: Indicative Access Track with Drainage Ditch

Figure 5.9: Indicative Temporary Concrete Batching Plant

Figure 5.10: Indicative Construction Compound

Figure 5.11: Indicative Directional Signage

Figure 5.12: Indicative Battery Energy Storage System Compound Layout

Figure 5.13: Indicative Watercourse Crossing Section

Chapter 6 – Landscape and Visual

Figure 6.1: LVIA Study Area

Figure 6.2: Cumulative Study Areas

Figure 6.3a: ZTV to Tip Height (A3 size)

Figure 6.3b: ZTV to Tip Height (A0 size)

Figure 6.4: ZTV to hub height (A3 size)

Figure 6.5: ZTV Theoretical Visibility of Aviation Lighting by Intensity (worst case)

Figure 6.6: ZTV Theoretical Visibility of Aviation Lighting by Intensity individual turbines (1-7)

Figure 6.6a: Theoretical Visibility of Aviation Lighting by Intensity (Turbines 1-&)

Figure 6.7: Predicted Light Pollution in areas of Theoretical Visibility of Aviation Lighting

Figure 6.7.1: Residential Receptors

Figure 6.8: Landscape Character

Figure 6.9: Protected and Designated Landscapes

Figure 6.10: Visual Receptors

Figure 6.11: Sequential Receptors- Key Routes

Figure 6.11a: Sequential Route ZTV- A9

Figure 6.11b: Sequential Route ZTV - A99

Figure 6.11c: Sequential Route ZTV- A882

Figure 6.11d: Sequential Route ZTV - B876

Figure 6.11e: Sequential Route ZTV- B874

Figure 6.11f: Sequential Route ZTV- B870

Figure 6.12: Core Paths within 10km

Figure 6.13: Cumulative Wind Farms within 60k

Figure 6.14: Wind Farms considered in the Cumulative Assessment

Figure 6.15: Cumulative 45km ZTV to Tip Height - Scenario 1 (Baseline) & Wind Farms in Operational/Under-construction sites

Figure 6.16a: Cumulative 45km ZTV- Scenario 2 Scenario 1 with Consented Wind Farms

Figure 6.16b: Cumulative 45km ZTV- Scenario 3 Scenario 2 with Submitted Wind Farms

Visualisations

Figure 6.17: NatureScot Visualisation - Thurso

Figure 6.18: NatureScot Visualisation – B876, North of Hoy

Figure 6.19: NatureScot Visualisation – Georgemas

Figure 6.20: NatureScot Visualisation – North Watten
Figure 6.21: NatureScot Visualisation – Scotscalder
Figure 6.22: NatureScot Visualisation – Ben Dorrey
Figure 6.23: NatureScot Visualisation - Harpsdale Cross Roads
Figure 6.24: NatureScot Visualisation - Watten
Figure 6.25: NatureScot Visualisation - A882, East of Watten
Figure 6.26: NatureScot Visualisation - Spittal
Figure 6.27: NatureScot Visualisation – A99, North of Wick
Figure 6.28: NatureScot Visualisation - Westerdale
Figure 6.29: NatureScot Visualisation – Minor road north of Grey Cairns of Camster
Figure 6.30: NatureScot Visualisation – Loch More Cottage
Figure 6.31: NatureScot Visualisation – Loch of Yarrows Trail
Figure 6.32: NatureScot Visualisation – A9, North of Rangag
Figure 6.33: NatureScot Visualisation – Coire na Beinne
Figure 6.34: NatureScot Visualisation – Ben Alisky
Figure 6.35: NatureScot Visualisation - Scaraben
Figure 6.36: NatureScot Visualisation – Dunnet Head

RVAA Figures

Figure 6.7.1: Residential Receptors
Figure 6.7.2: VP1 – Shielton
Figure 6.7.3: VP2 – 22 West Watten
Figure 6.7.4: VP3 – 19 West Watten
Figure 6.7.5: VP4 – 18 West Watten
Figure 6.7.6: VP5 – Scouthall
Figure 6.7.7: VP6 – Milton
Figure 6.7.8: VP7 – Achingale
Figure 6.7.9: VP8 – Banks/Properties to the south
Figure 6.7.10: VP9 – West Watten/Strathview cottage
Figure 6.7.11: VP10 – Knockfarrie
Figure 6.7.12: VP11 – Ballacharn/Alijolichsa
Figure 6.7.13: VP12 – 14 Watten
Figure 6.7.14: VP13 – 10 Watten

Figure 6.7.15: VP14 – Newton
Figure 6.7.16: VP15 – The Smiddy
Figure 6.7.17: VP 16 – Backlass (new build)
Figure 6.7.18: VP 16a – Backlass Cottage
Figure 6.7.19: VP17 – Leanmore
Figure 6.7.20: VP18 – Houstry of Dunn
Figure 6.7.21: VP19 – Backlass Hill Cottage
Figure 6.7.22: VP20 – Backlass Croft
Figure 6.7.23: VP21 – Balnasmurich/Markethill
Figure 6.7.24: VP22 – Lanergill Farm
Figure 6.7.25: VP23 – Knockglass

Chapter 7 – Ecology

Figure 7.1: Ecological Designated Sites, Nominated World Heritage Site and Ancient Woodland within 5 km
Figure 7.2: Carbon and Peatland Map 2016
Figure 7.3: National Vegetation Classification Survey Area and Survey Results
Figure 7.4a-e: Potential Groundwater Dependent Terrestrial Ecosystems (GWDTEs) Survey Area and Survey Results
Figure 7.5a&b: Protected Species Survey Area and Survey Results 2020
Figure 7.5Ca&b: Confidential Protected Species Survey Results 2020 (hard copy not included)
Figure 7.6: Bat Survey Area and Anabat Locations (2015 & 2020) and Preliminary Bat Roost Assessment Results
Figure 7.7: Overall Risk Assessment 2020 (July – October) – Common pipistrelle
Figure 7.8: Overall Risk Assessment 2020 (July – October) – Soprano Pipistrelle
Figure 7.9: Overall Risk Assessment 2020 (July – October) – Nathusius' pipistrelle
Figure 7.10: Overall Risk Assessment 2015 (May – September) – Common pipistrelle
Figure 7.11: Overall Risk Assessment 2015 (May – September) – Soprano pipistrelle
Figure 7.12: Electrofishing Locations
Figure 7.13: Outline Biodiversity Enhancement Management Plan

Chapter 8 – Ornithology

Figure 8.1: Ornithological Designated Sites within 20 km

Figure 8.2: Proposed Development Area and Study Areas
Figure 8.2.1: CONFIDENTIAL Barn Owl Activity: 2013 to 2022 (hard copy not included)
Figure 8.2.2: CONFIDENTIAL Hen Harrier Activity: 2013 to 2022 (hard copy not included)
Figure 8.2.3: CONFIDENTIAL Merlin Activity: 2013 to 2022 (hard copy not included)
Figure 8.2.4: CONFIDENTIAL Osprey Activity: 2013 to 2022 (hard copy not included)
Figure 8.2.5: CONFIDENTIAL Diver Activity: 2013 to 2022 (hard copy not included)
Figure 8.3: Vantage Points and Viewsheds
Figure 8.4: Non-breeding Raptor and Owl Activity: 2013 to 2022
Figure 8.5: Flight Activity: Hen Harrier
Figure 8.6: Flight Activity: Merlin
Figure 8.7: Flight Activity: Osprey
Figure 8.8: Flight Activity: Red-throated diver
Figure 8.9: Flight Activity: Peregrine falcon and red kite
Figure 8.10: Breeding Wader Activity: 2013 to 2022
Figure 8.11: Non-breeding Wader Activity: 2013 to 2022
Figure 8.12: Flight Activity: Curlew
Figure 8.13: Flight Activity: Golden Plover
Figure 8.14: Flight Activity: Lapwing
Figure 8.15: Flight Activity: Whimbrel
Figure 8.16: Non-Breeding Wildfowl Activity: 2013 to 2022
Figure 8.17: Flight Activity: Greylag goose
Figure 8.18: Flight Activity: Pink-footed Goose
Figure 8.19: Flight Activity: Whooper Swan
Figure 8.20: Breeding and Non-Breeding Seabird Activity: 2013 to 2022
Figure 8.21: Flight Activity: Arctic Skua
Figure 8.22: Flight Activity: Great Black-backed Gull
Figure 8.23: Flight Activity: Herring Gull
Figure 8.24: Cumulative Impact Assessment, Natural Heritage Zone 5

Chapter 9 – Hydrology, Geology and Hydrogeology

Figure 9.1: Proposed Development Area and Study Areas
Figure 9.2: Hydrological Constraints

Figure 9.3: Watercourse Crossings (1:25,000)
Figure 9.4: Watercourse Crossings (Aerial)
Figure 9.5: Bedrock Geology
Figure 9.6: Superficial Geology
Figure 9.7: Hydrological Catchments
Figure 9.8a-c: Phase 1 & 2 Peat Depth Sample & Coring Locations
Figure 9.9: Phase 1 & 2 Peat Depth Sample Results
Figure 9.10: Phase 1 & 2 Interpolated Peat Depth
Figure 9.11a-d: Proposed Development Infrastructure and Peat Excavation
Figure 9.12: Hydrology Study Area and Identified Private Water Supply Locations

Chapter 10 – Cultural Heritage

Figure 10.1: Known Cultural Heritage Assets within the Inner Study Area (ISA)
Figure 10.2: Cultural Heritage Viewpoints (CHVP) within the outer Study Area (OSA) and Zone of Theoretical Visibility (ZTV)
Figure 10.3: CHVP1, View from the north on approach to Cat A LB LB14976 ACHINGALE MILL.
Figure 10.4: CHVP2, View from Cat A LB LB14976 ACHINGALE MILL.
Figure 10.5: CHVP3, View from the north on approach to SM13632 Carn A' Chladha, broch.
Figure 10.6: CHVP4, View from SM13632 Carn A' Chladha, Broch.
Figure 10.7: CHVP5, View from SM13634 Bail A' Chairn, Broch.
Figure 10.8: CHVP6, View towards SM13634 Bail A' Chairn, Broch. from Scouthal Burn
Figure 10.9a: CHVP7a, SM450 View from Gallow Hillock, Cairn on Backlass Hill.
Figure 10.9b: CHVP7b, SM450 View from Gallow Hillock, Cairn on Backlass Hill.
Figure 10.10: CHVP8, View from SM721 Scouthal Burn, Chapel & The Clow. Also showing view from east towards SM13632 Carn A'Chlada, Broch
Figure 10.11: CHVP9, View from MHG1979 Possible Stone Circle, Acharole.
Figure 10.12: CHVP10, View towards SM90056 Grey Cairns of Camster from roadside parking and access

Chapter 11 – Forestry

Figure 11.1: Current Species Plan
Figure 11.2: Felling Plan
Figure 11.3: Restocking Plan

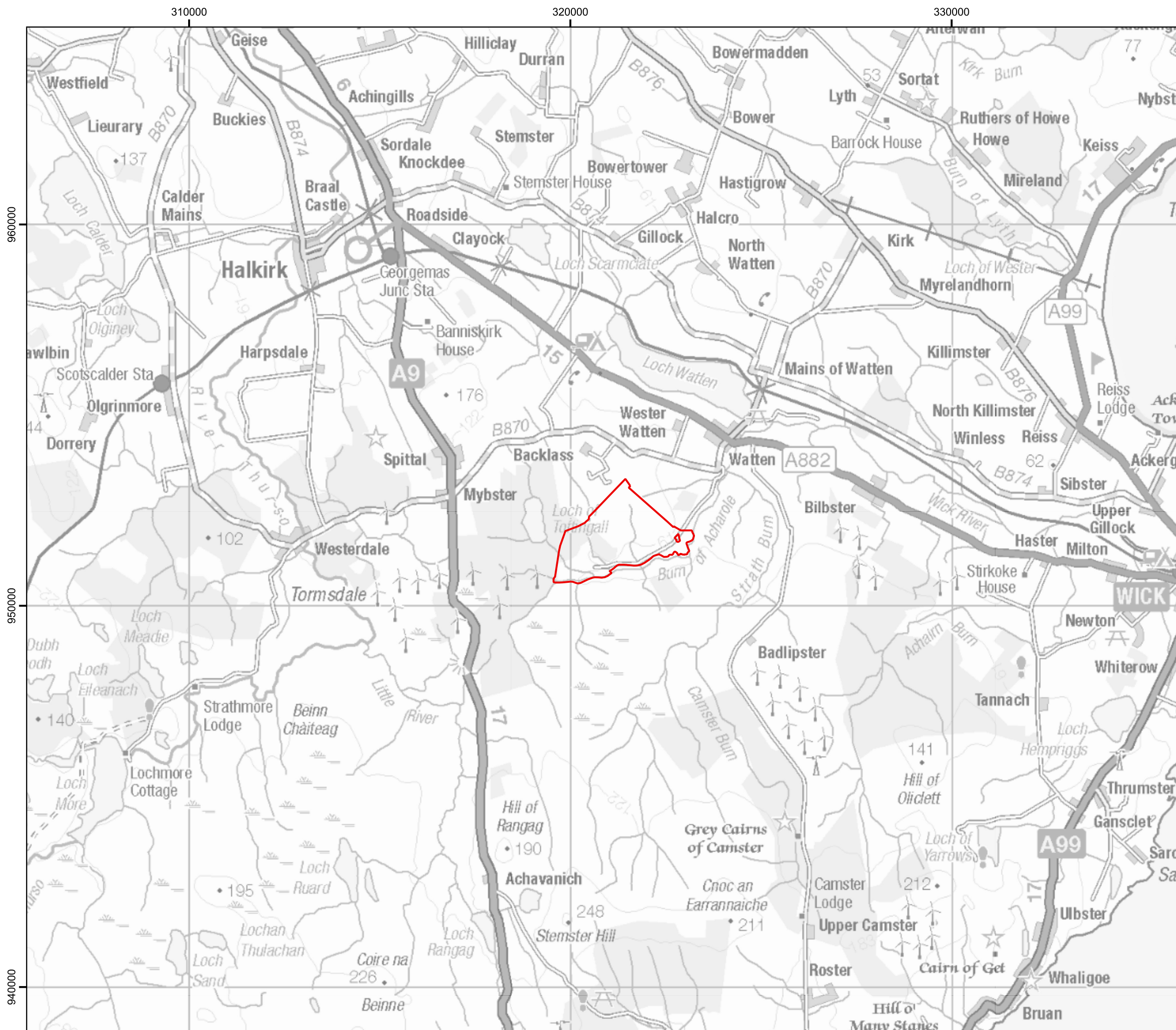
Chapter 12 – Traffic and Transport

Figure 12.1: Traffic Count Locations

Chapter 15 – Socioeconomics, Recreation and Tourism

Figure 15.1: Sites considered Popular within the area of Caithness East and Accommodation Providers within 15 km of the Proposed Development

Figure 15.2: Recreational Paths and Trails

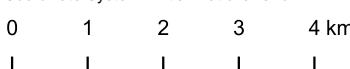



Project:
**Watten Wind Farm,
 Caithness, Scottish
 Highlands**

Title:
Figure 1.1: Location Plan

Key
 Proposed Development Area

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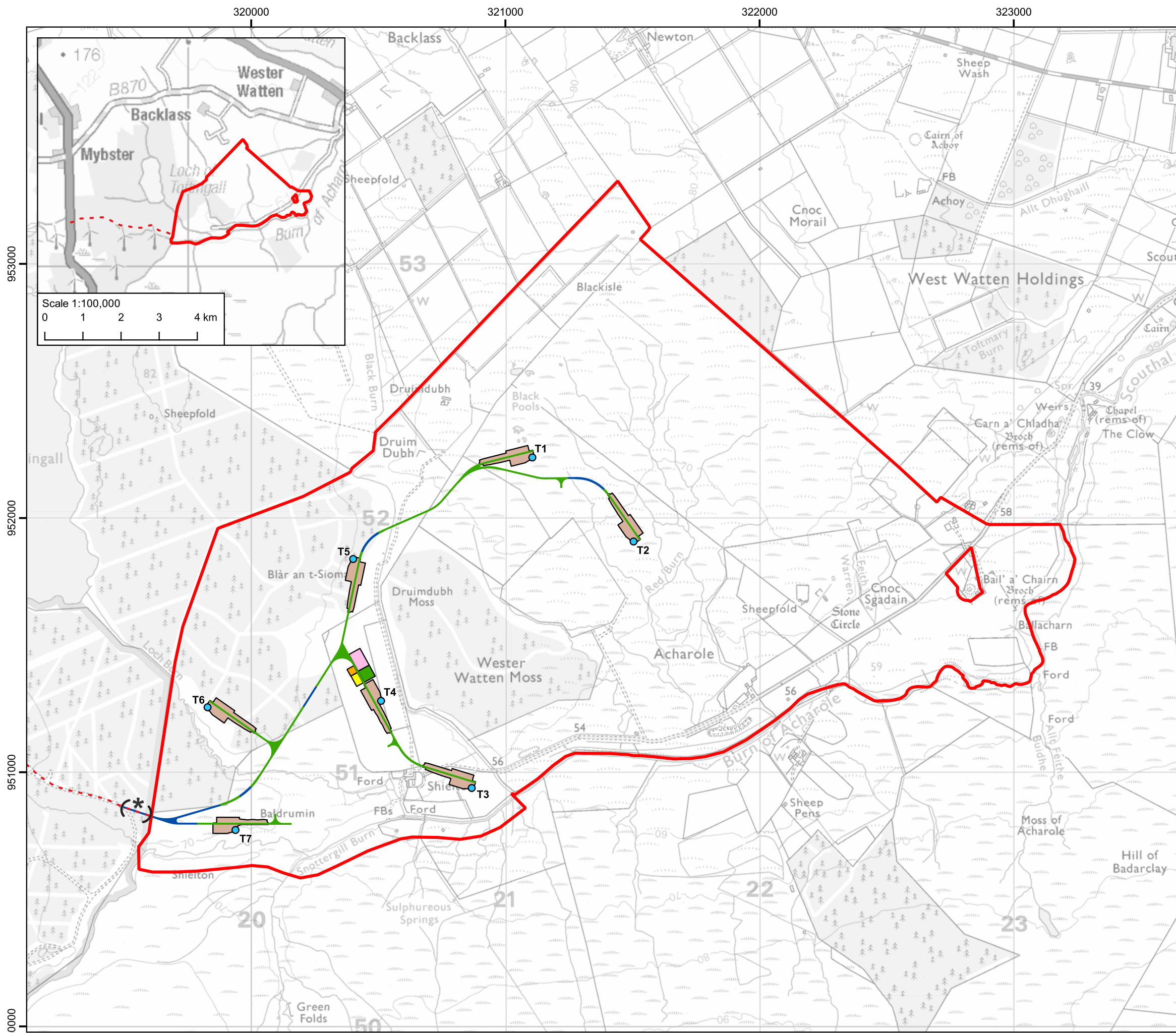
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Project:
**Watten Wind Farm,
 Caithness, Scottish
 Highlands**

Title:
Figure 1.2: Site Layout

- Key**
- Proposed Development Area
 - Proposed turbine
 - Proposed crane hardstanding
 - Proposed track
 - Proposed floating track
 - Proposed access track
 - Proposed substation
 - Proposed battery storage
 - Proposed construction compound
 - Proposed batching plant

*The Applicant is not applying for consent to complete the works of this section of track outwith the redline, it would be the subject of a separate application however this section of track has been assessed to show that it can be delivered and therefore has been included on the plan.
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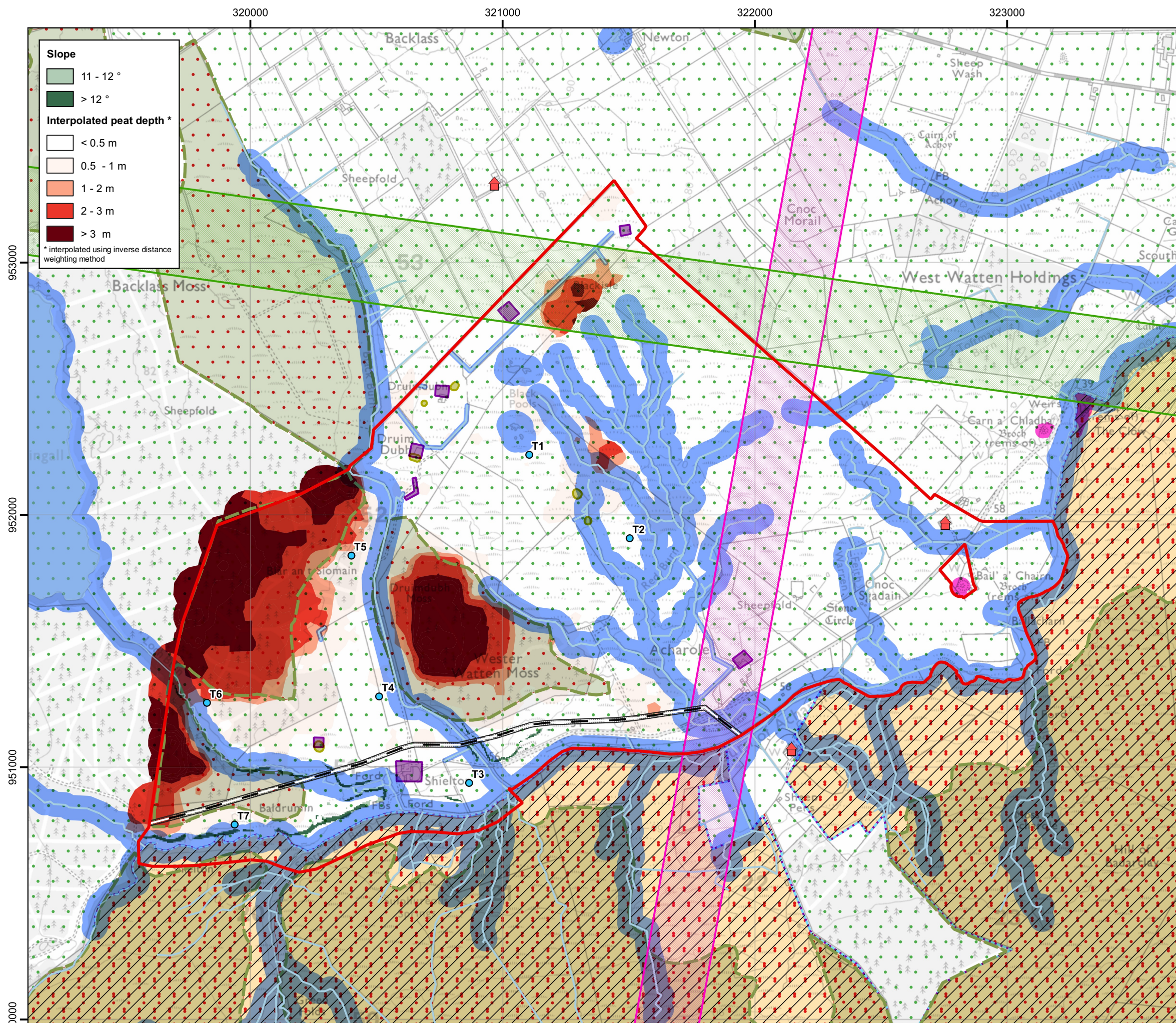
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Slope

- 11 - 12 °
- > 12 °

Interpolated peat depth *

- < 0.5 m
- 0.5 - 1 m
- 1 - 2 m
- 2 - 3 m
- > 3 m

* interpolated using inverse distance weighting method

Project:
**Watten Wind Farm,
 Caithness, Scottish
 Highlands**

Title:
**Figure 4.1: Constraints to Site
 Design**

Key

- Proposed Development Area
- Proposed turbine
- Potentially noise sensitive properties (over 1 km from nearest turbine)
- JRC link exclusion zone
- Vodafone link exclusion zone
- Underground cable
- Underground cable servitude corridor
- 10 m buffer of cultural heritage asset
- 10 m buffer of potential cultural heritage asset
- Watercourses and bodies with 50 m buffer
- Carbon-rich soils, deep peat and priority peatland habitat
- Scheduled Ancient Monument (SAM)
- Special Area of Conservation (SAC)
- Special Protection Area (SPA)
- Site of Special Scientific Interest (SSSI)
- Ramsar site

Highland Council Spatial Framework for Wind Energy

- Areas of significant protection
- Areas with potential for wind farm development

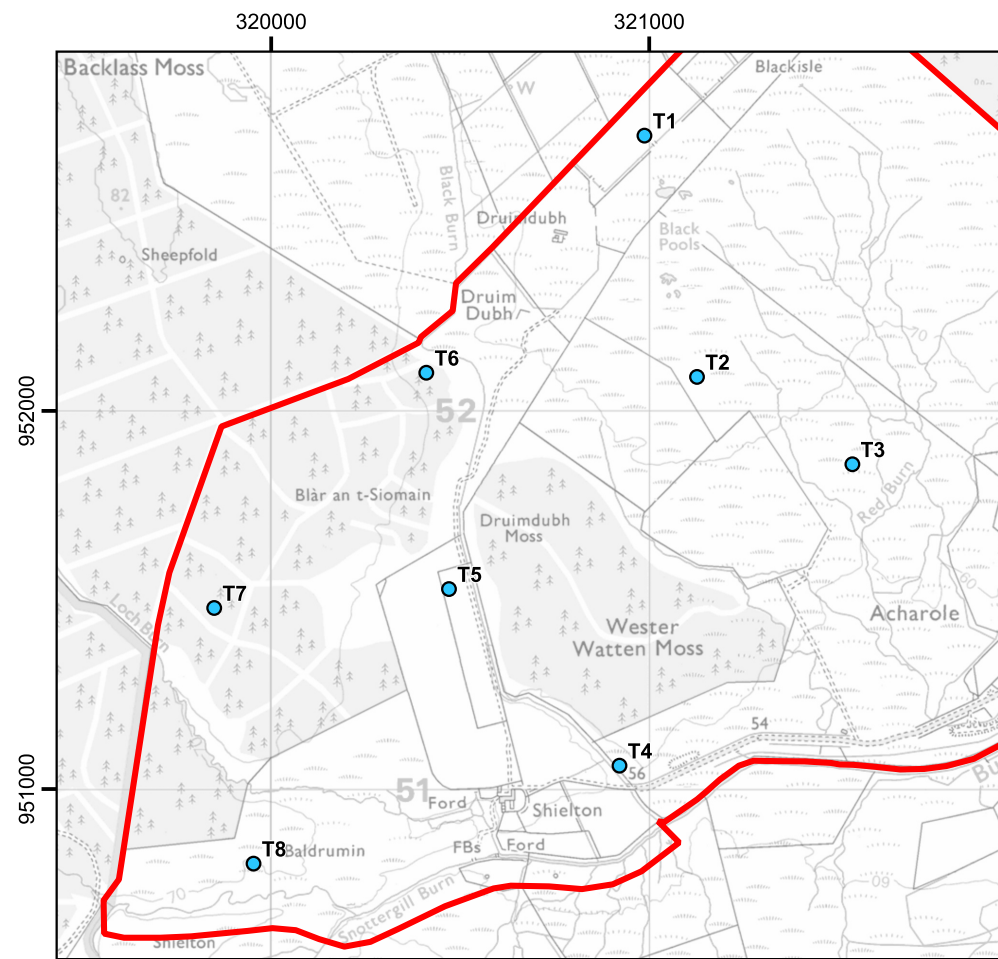
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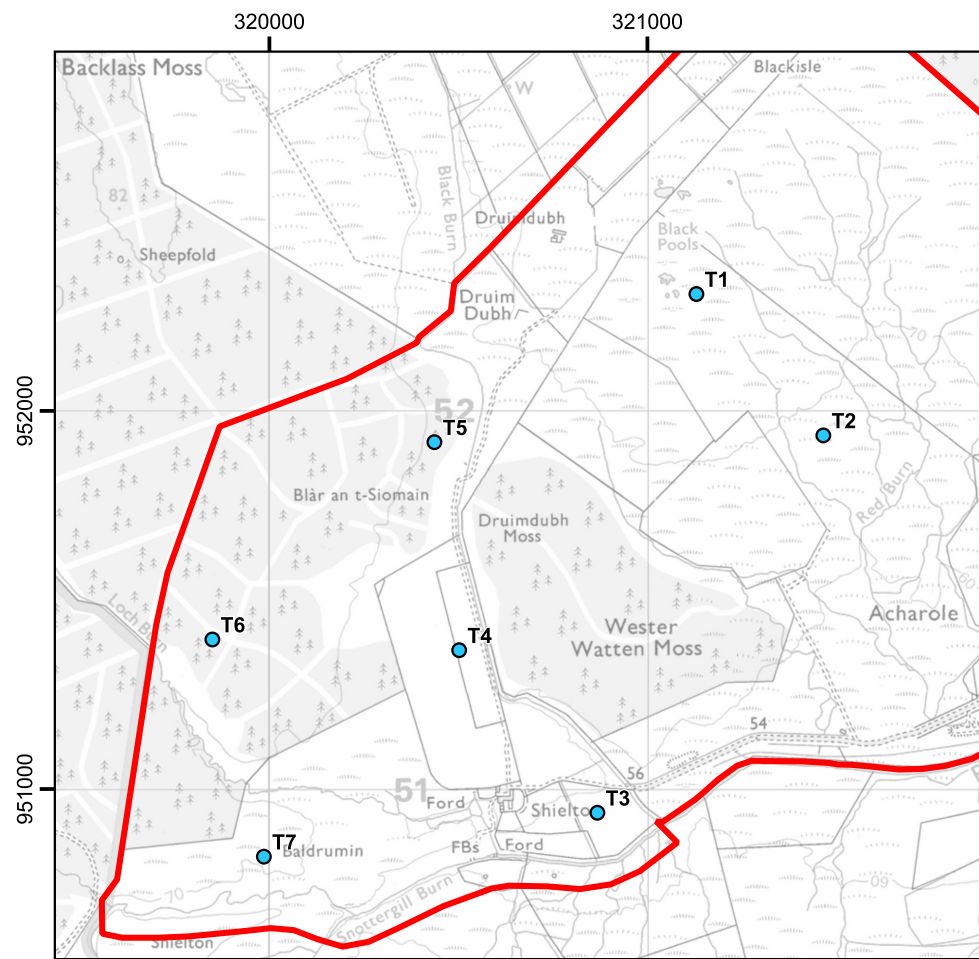
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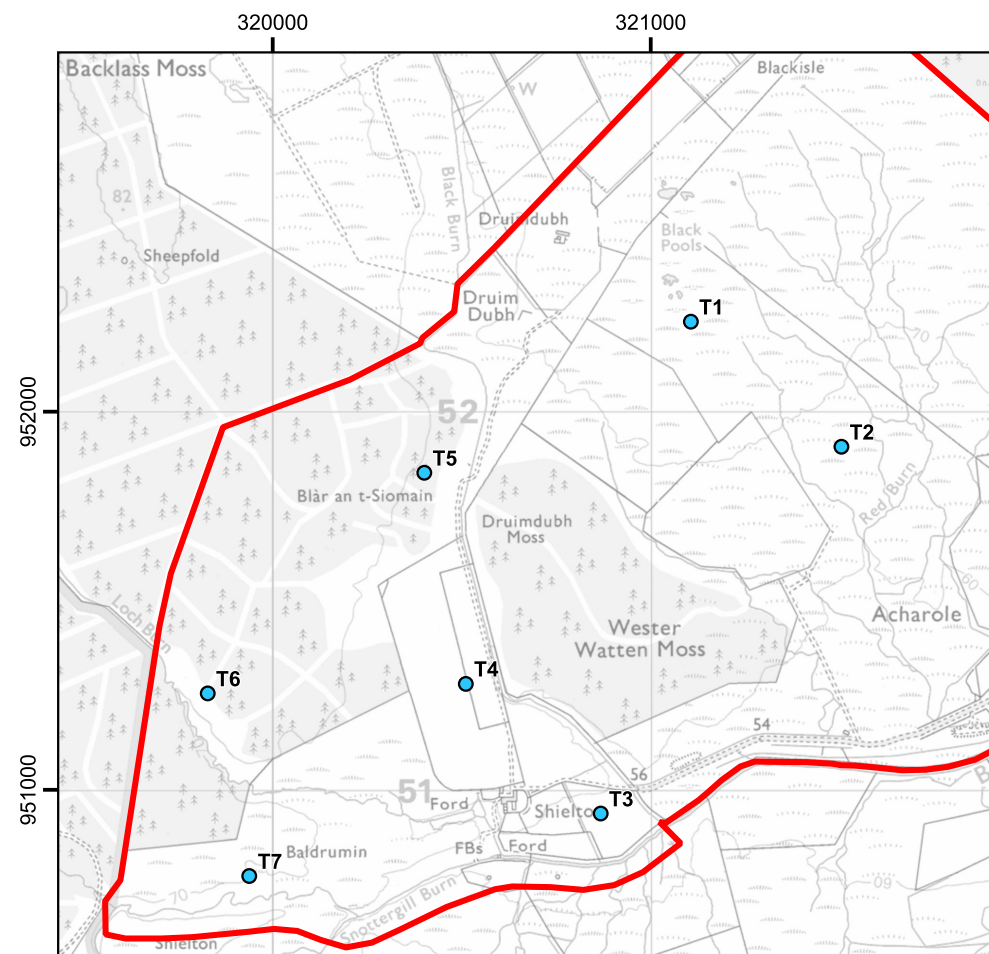
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Design 1: 8 turbines



Design 2: 7 turbines



Design 3: 7 turbines (design freeze)

Project:
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Caithness, Scottish
Highlands**

Title:
**Figure 4.2: Layout Design
Evolution**

Key

- Proposed Development Area
- Proposed turbine (220 m tip height)

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Coordinate System: British National Grid

0 0.25 0.5 0.75 1 km

N



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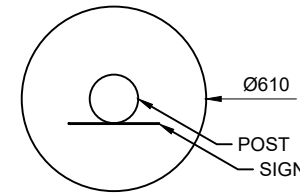


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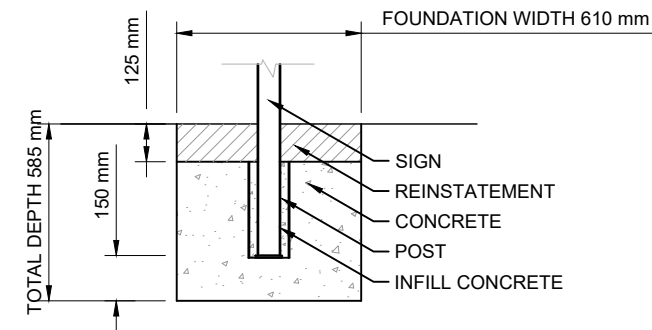
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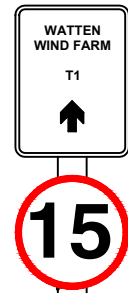
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**SIGN POST FOUNDATION AND BASE FIXING
DETAIL VIEW**

SCALE 1:25

SCALE AT 1:25

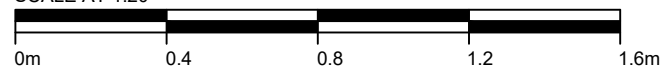


**FRONT ELEVATION VIEW
SINGLE SIGN**



**SIDE ELEVATION VIEW
SINGLE SIGN
BOTH SIDES**

SCALE AT 1:20



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INDICATIVE TURBINE MARKING DETAIL

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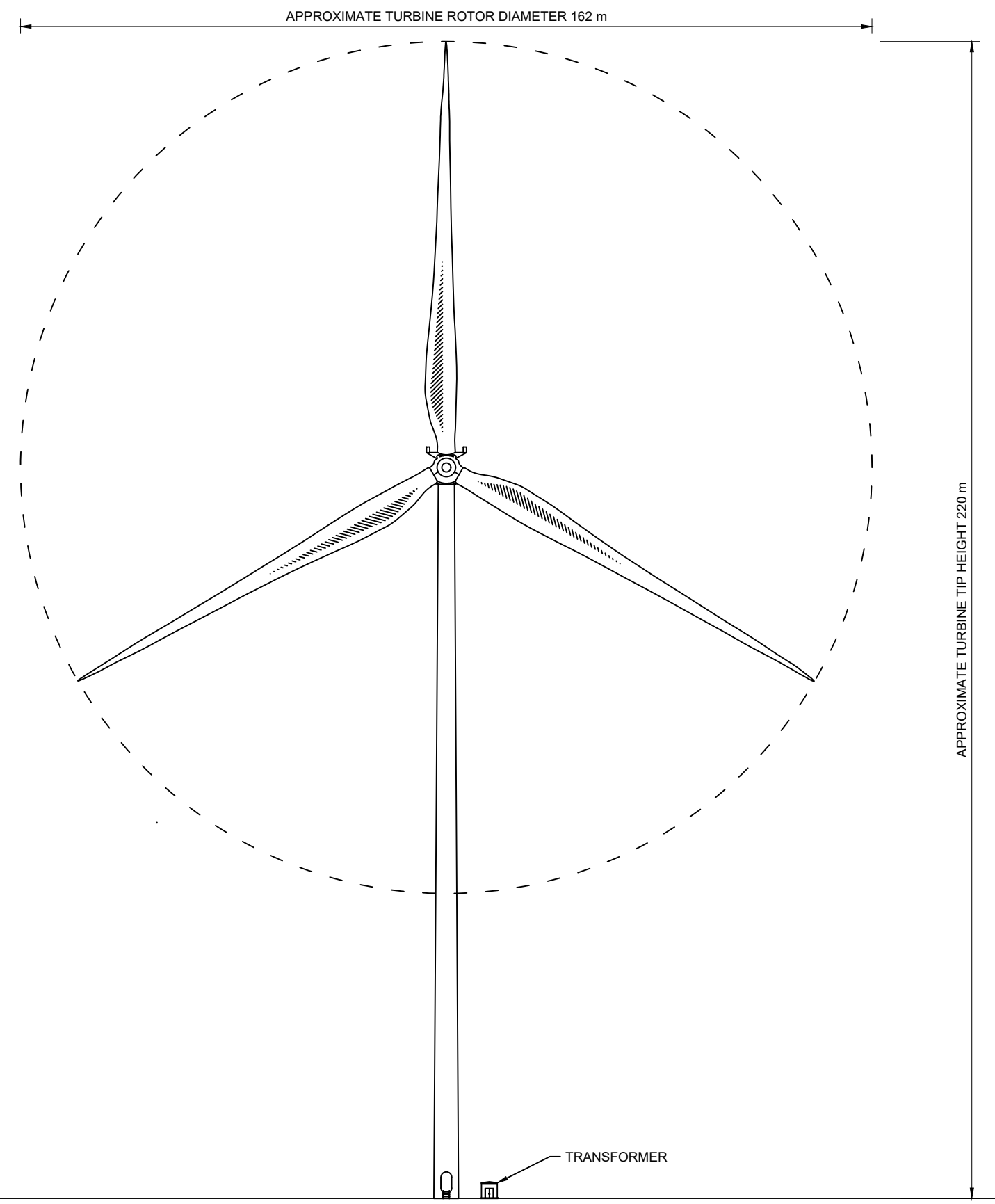
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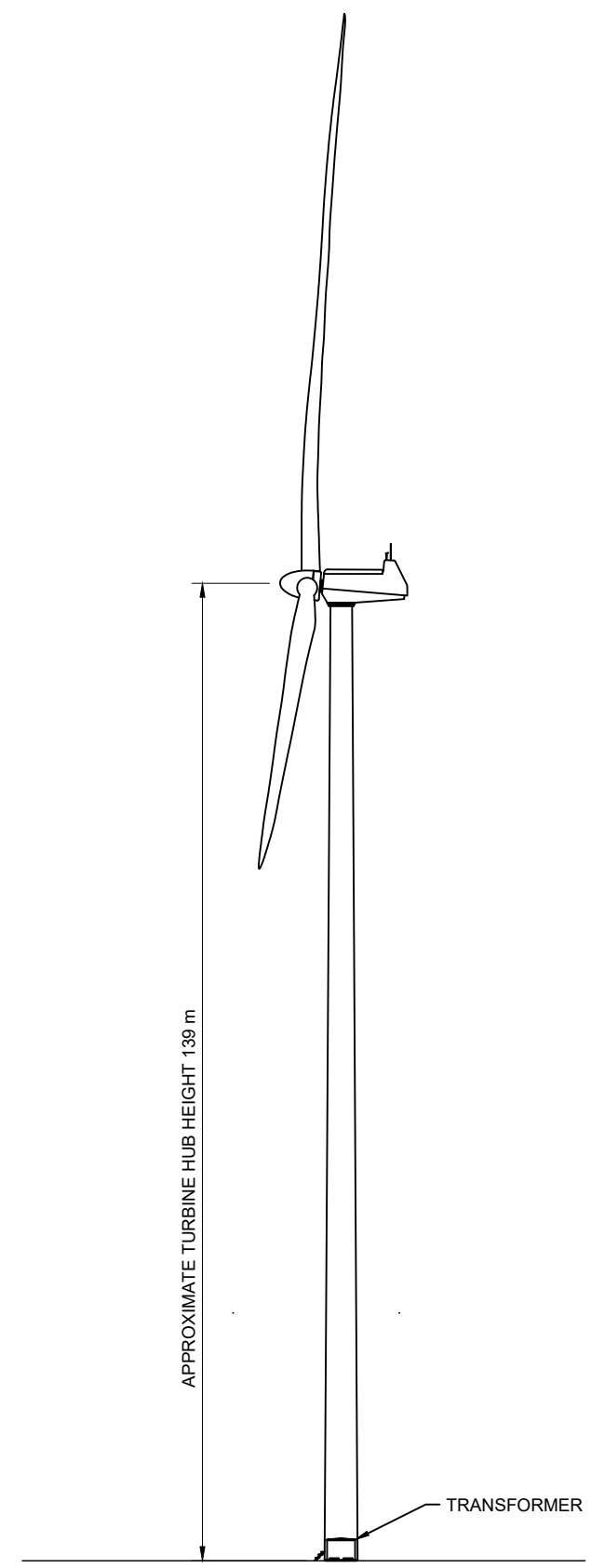
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INDICATIVE WIND TURBINE
SPECIFICATION

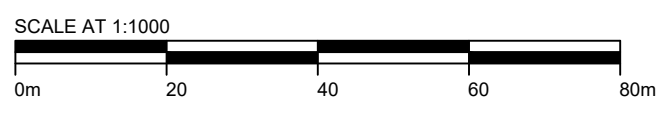
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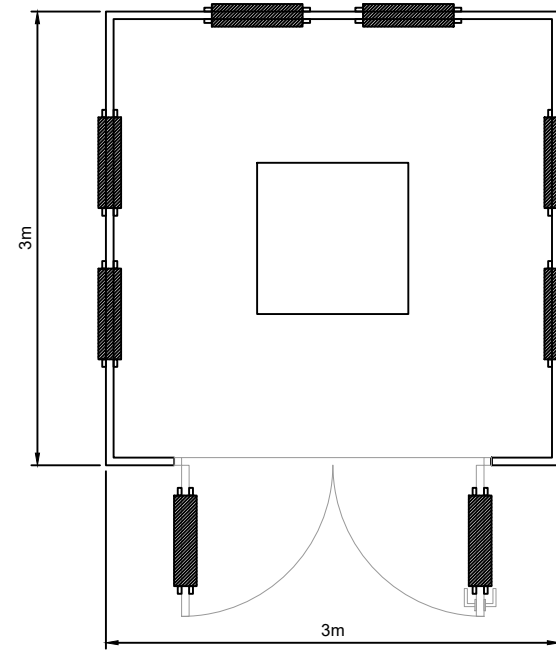
SIDE ELEVATION VIEW
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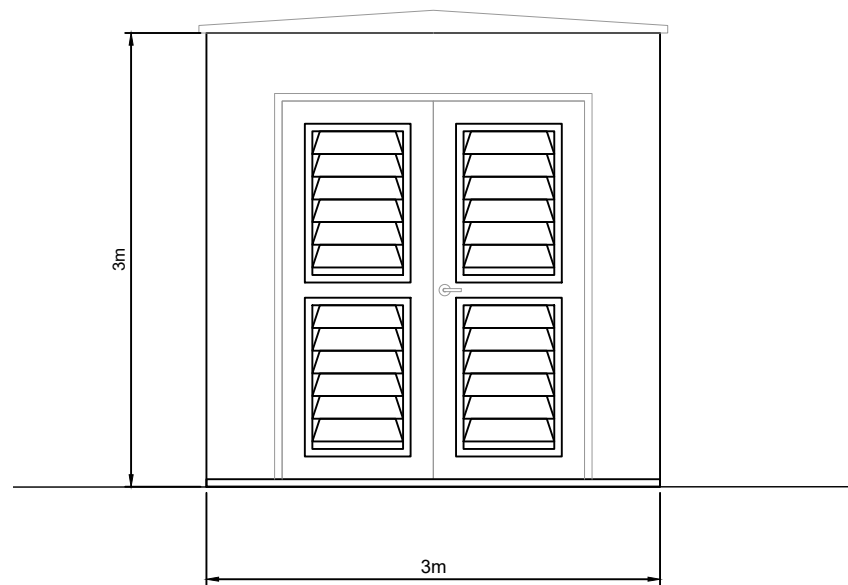
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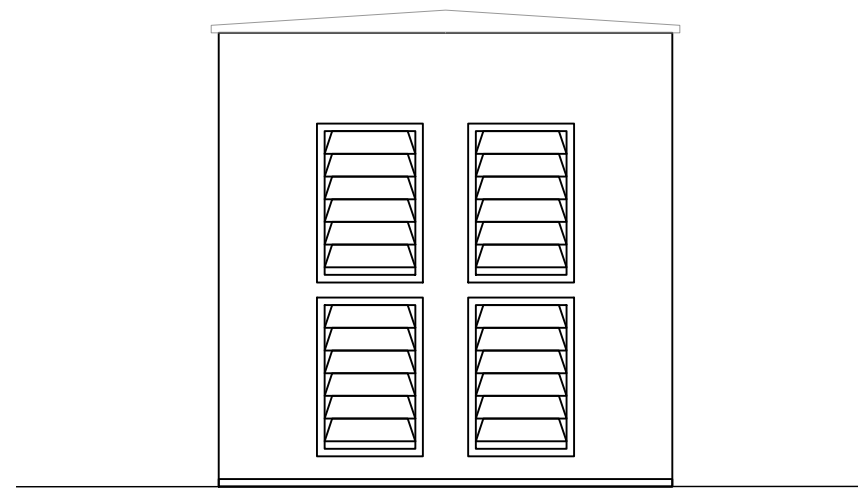
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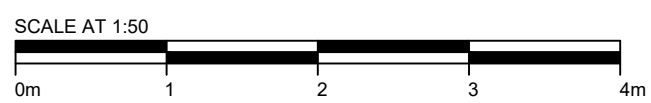
PLAN VIEW
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FRONT ELEVATION
SCALE 1:50



REAR / SIDE ELEVATIONS
SCALE 1:50



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INDICATIVE TRANSFORMER






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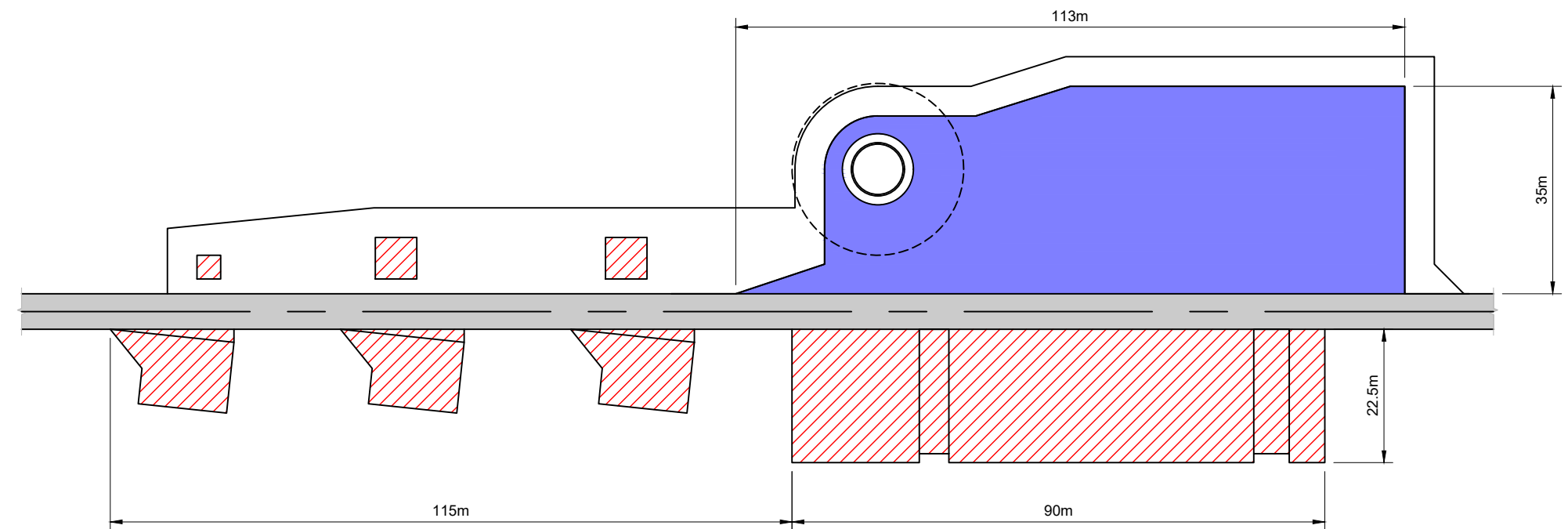
LEGAL: NATURAL POWER CONSULTANTS LTD TAKE NO RESPONSIBILITY FOR THE ACCURACY OF DATA PROVIDED BY THIRD PARTIES.

NOTES:

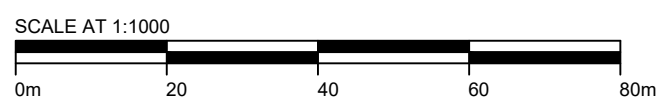
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KEY:

-  HARDSTAND - PERMANENT
-  HARDSTAND - ASSEMBLY AREA - TEMP
-  WIND TURBINE
-  TRACK
-  WORKING AREA AROUND HARDSTAND



PLAN VIEW
SCALE 1:1000



A	FIRST ISSUE	GC	RC	CG	06/01/23
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IFS DOC NO.: 1303771 IFS ACTIVITY: 30.306

SCALE: 1:1000 @ A3 SHEET NO.: 1 OF 1

STATUS: **FOR INFORMATION**

PROJECT: WATTEN WIND FARM

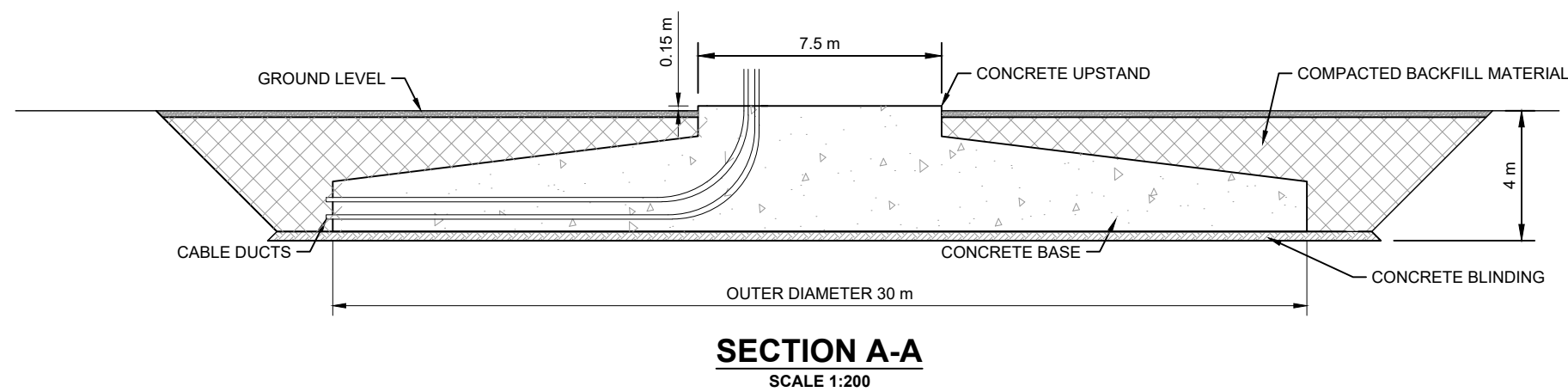
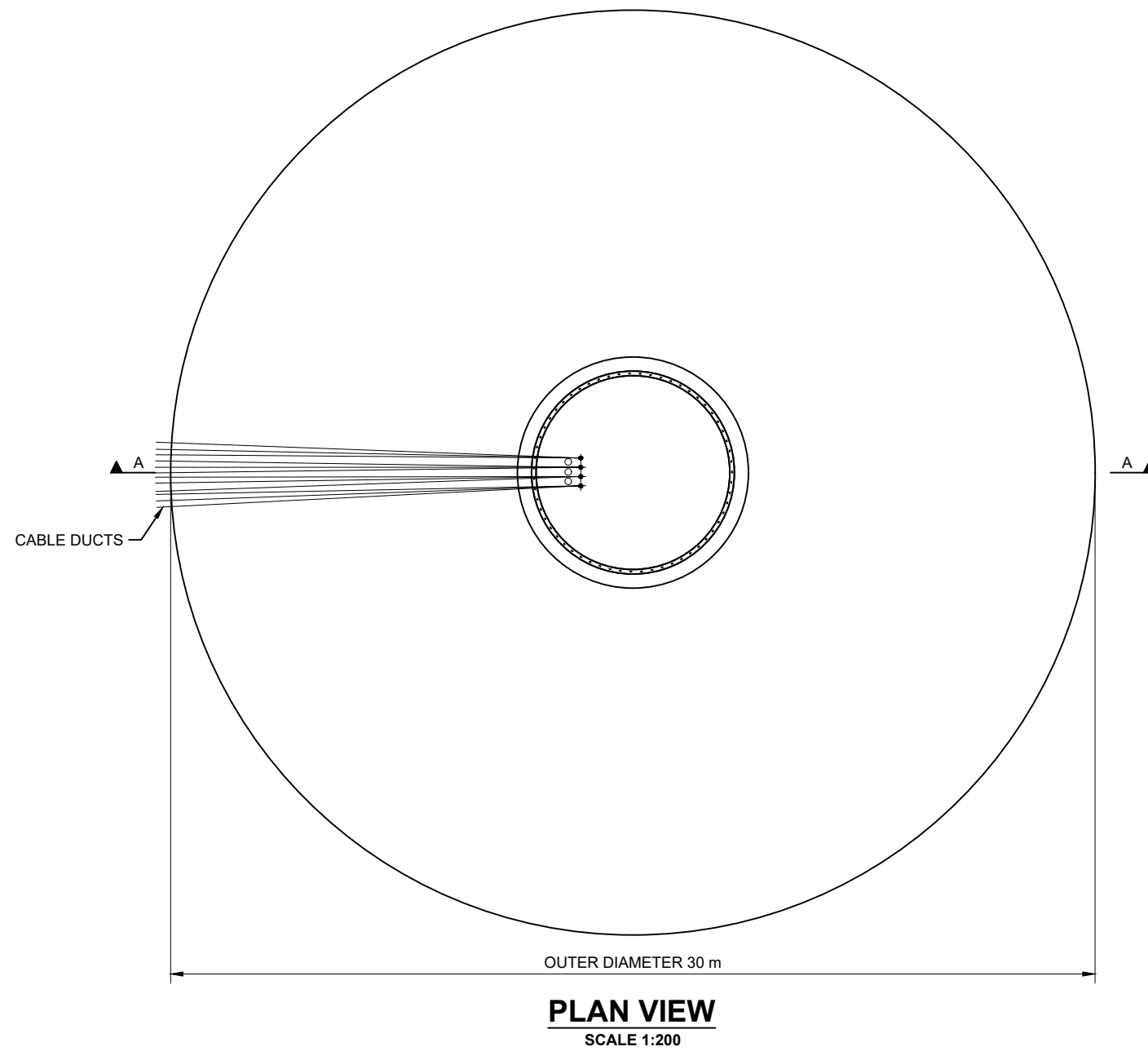
DRAWING TITLE: FIGURE 5.4
INDICATIVE WIND TURBINE HARDSTAND

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IFS DOC NO.: 1303757	IFS ACTIVITY: 30.306
SCALE: 1:200 @ A3	SHEET NO.: 1 OF 1

STATUS: **FOR INFORMATION**

PROJECT: WATTEN WIND FARM

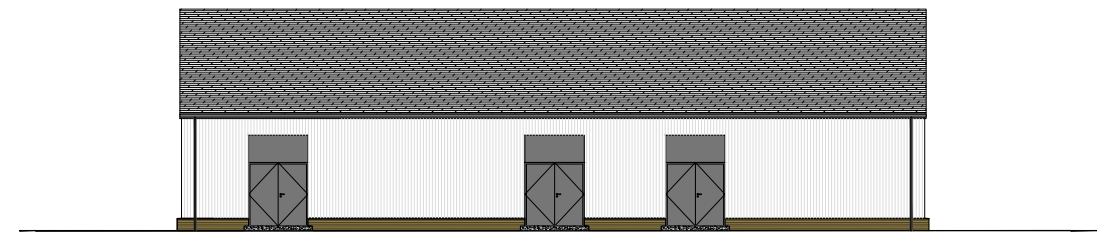
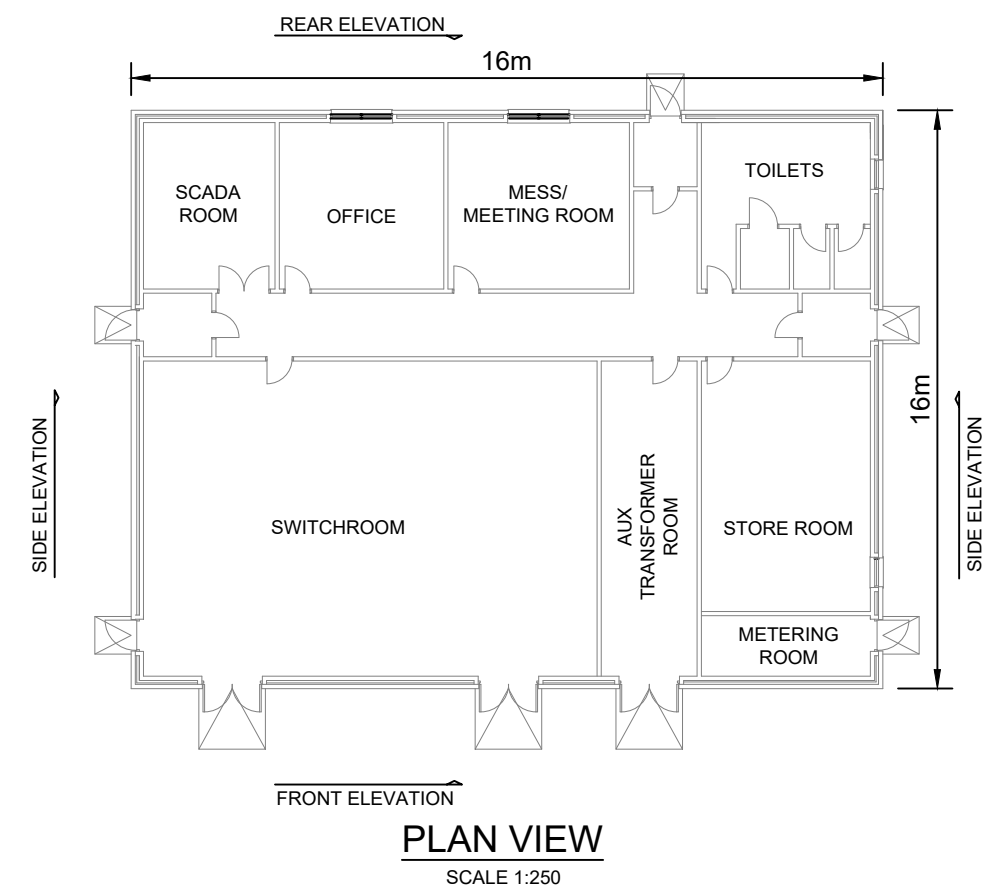
DRAWING TITLE: FIGURE 5.5
INDICATIVE WIND TURBINE FOUNDATION

DRAWING NO.: 15558_DET_3002	REVISION A
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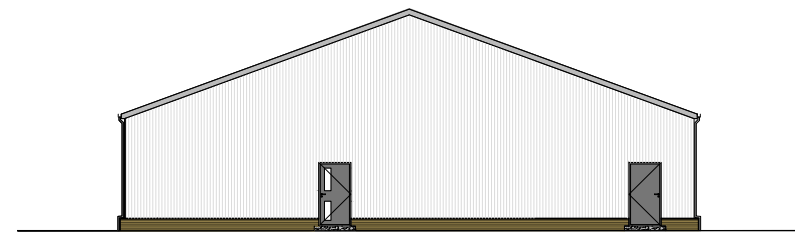
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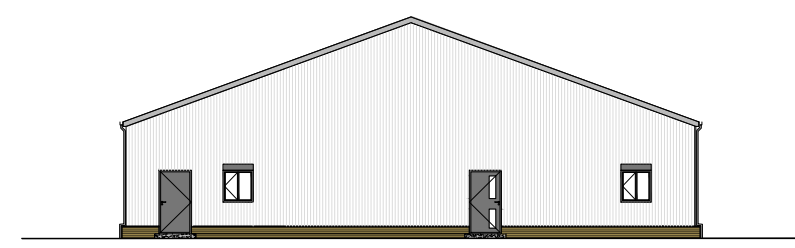
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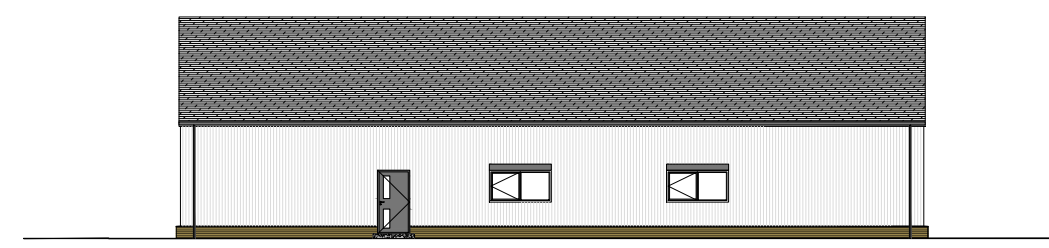
FRONT ELEVATION
SCALE 1:250



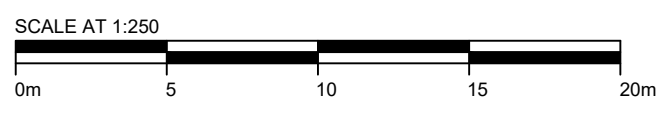
SIDE ELEVATION
SCALE 1:250



SIDE ELEVATION
SCALE 1:250



REAR ELEVATION
SCALE 1:250



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SCALE: 1:1000 @ A3	SHEET NO.: 1 OF 1

STATUS: **FOR INFORMATION**

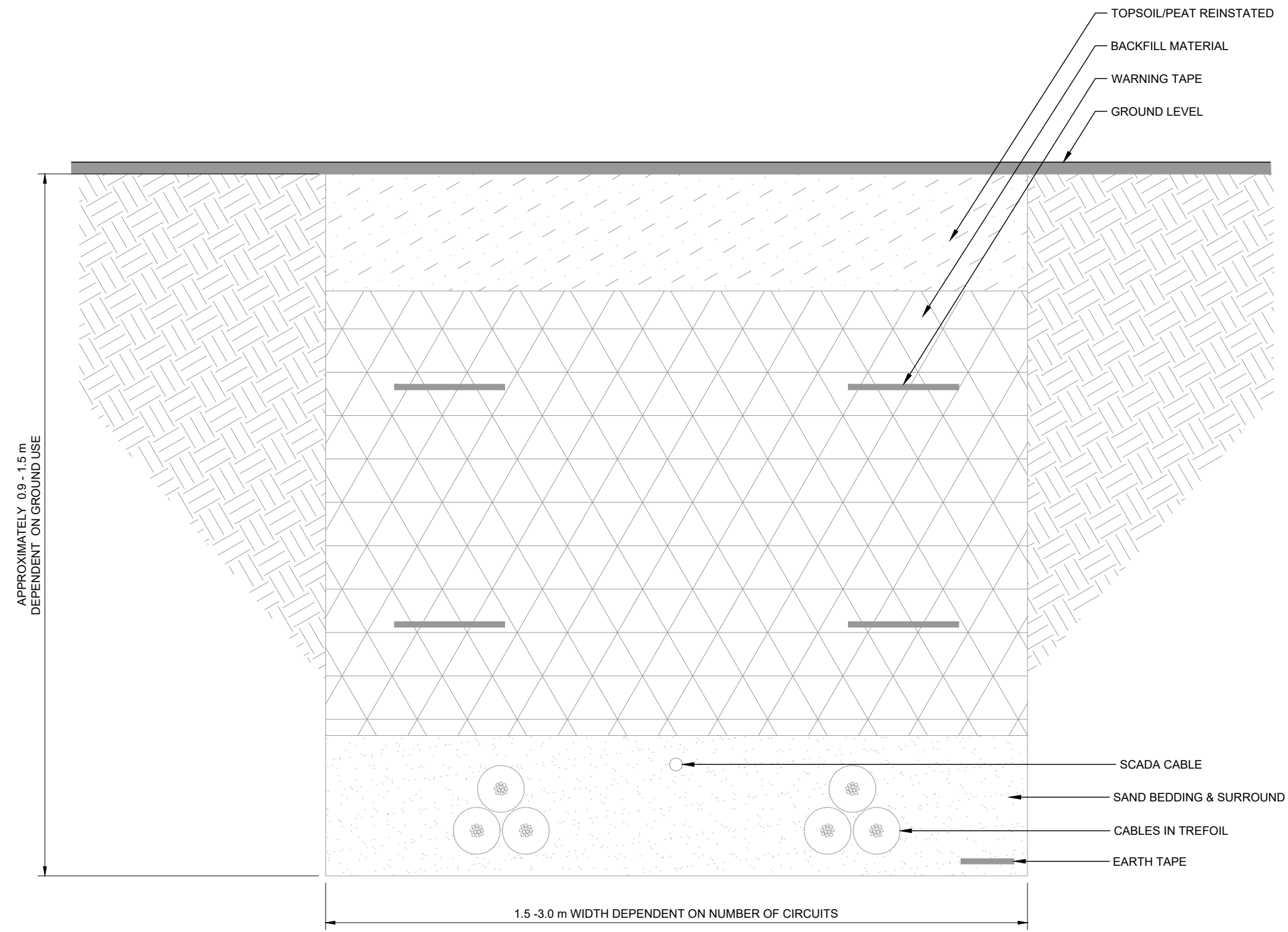
PROJECT: WATTEN WIND FARM

DRAWING TITLE: FIGURE 5.6
INDICATIVE CONTROL BUILDING

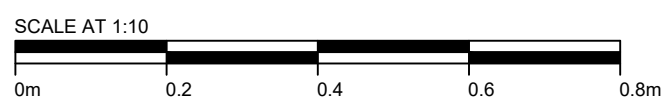
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TYPICAL SECTION
SCALE 1:10



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SCALE:	1:10 @ A3	SHEET NO.:	1 OF 1
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STATUS: **FOR INFORMATION**

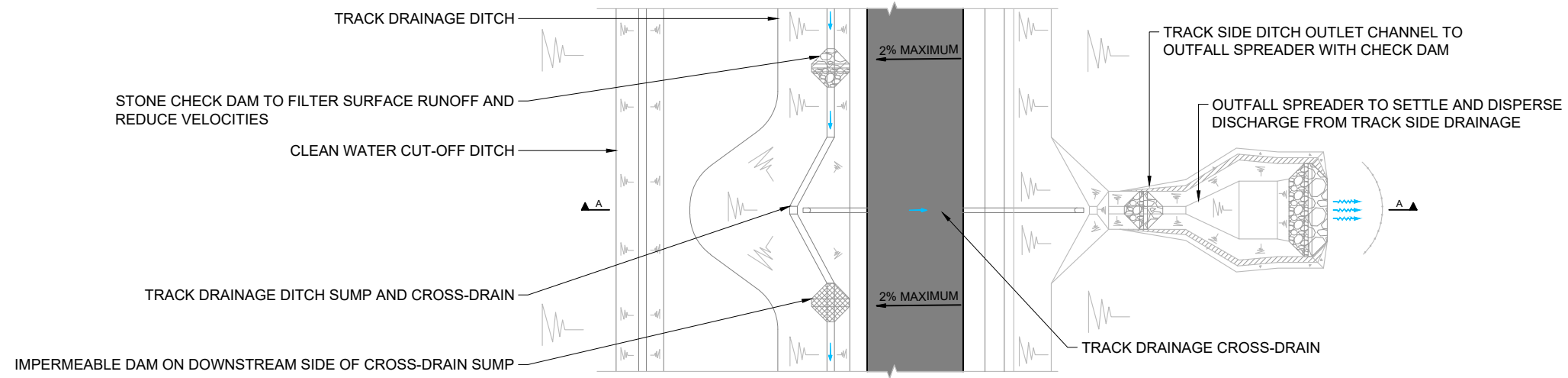
PROJECT: WATTEN WIND FARM

DRAWING TITLE: FIGURE 5.7
INDICATIVE UNDERGROUND CABLING

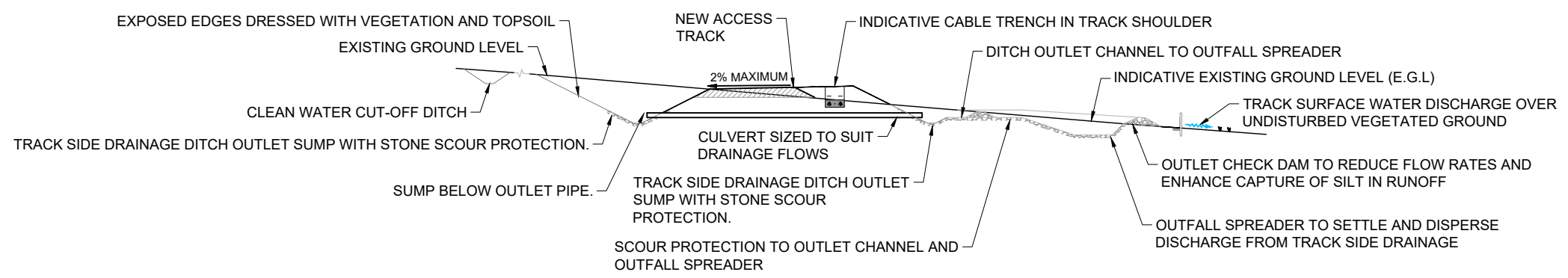
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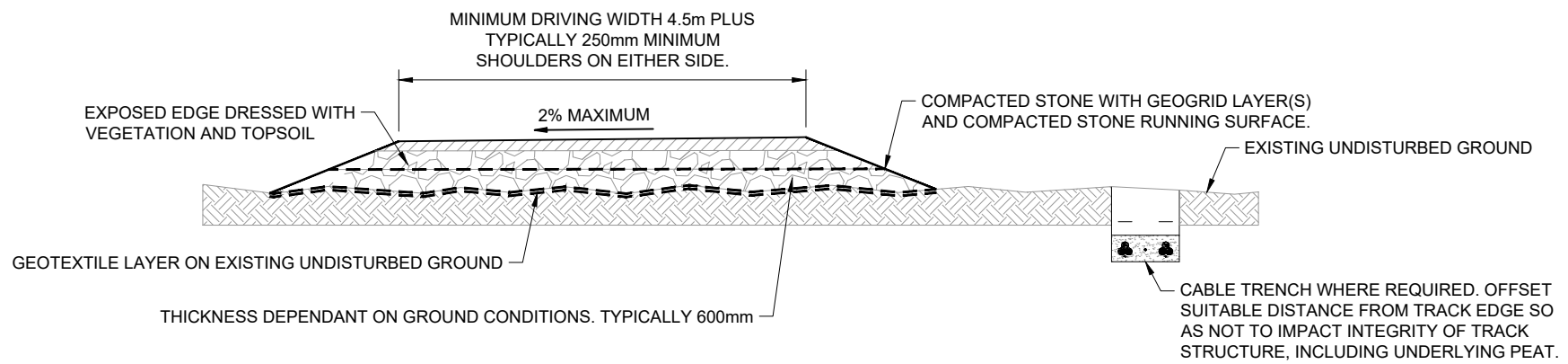
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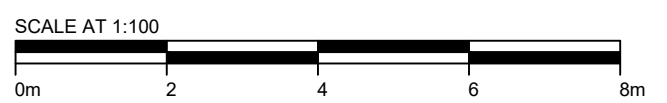
TYPICAL TRACK DRAINAGE PLAN
SCALE 1:300



SECTION A - A TYPICAL CROSS-SECTION OF CULVERTED CROSS DRAIN
SCALE 1:300



TYPICAL FLOATING ACCESS TRACK SECTION
SCALE 1:100



B	FLOATING TRACK ADDED	MH	TN	CG	15/06/23
A	FIRST ISSUE	GC	RC	CG	06/01/23
REV	DESCRIPTION	BY	CH	APP	DATE

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SCALE:	VARIOUS @ A3	SHEET NO.:	1 OF 1

STATUS: **FOR INFORMATION**

PROJECT: WATTEN WIND FARM

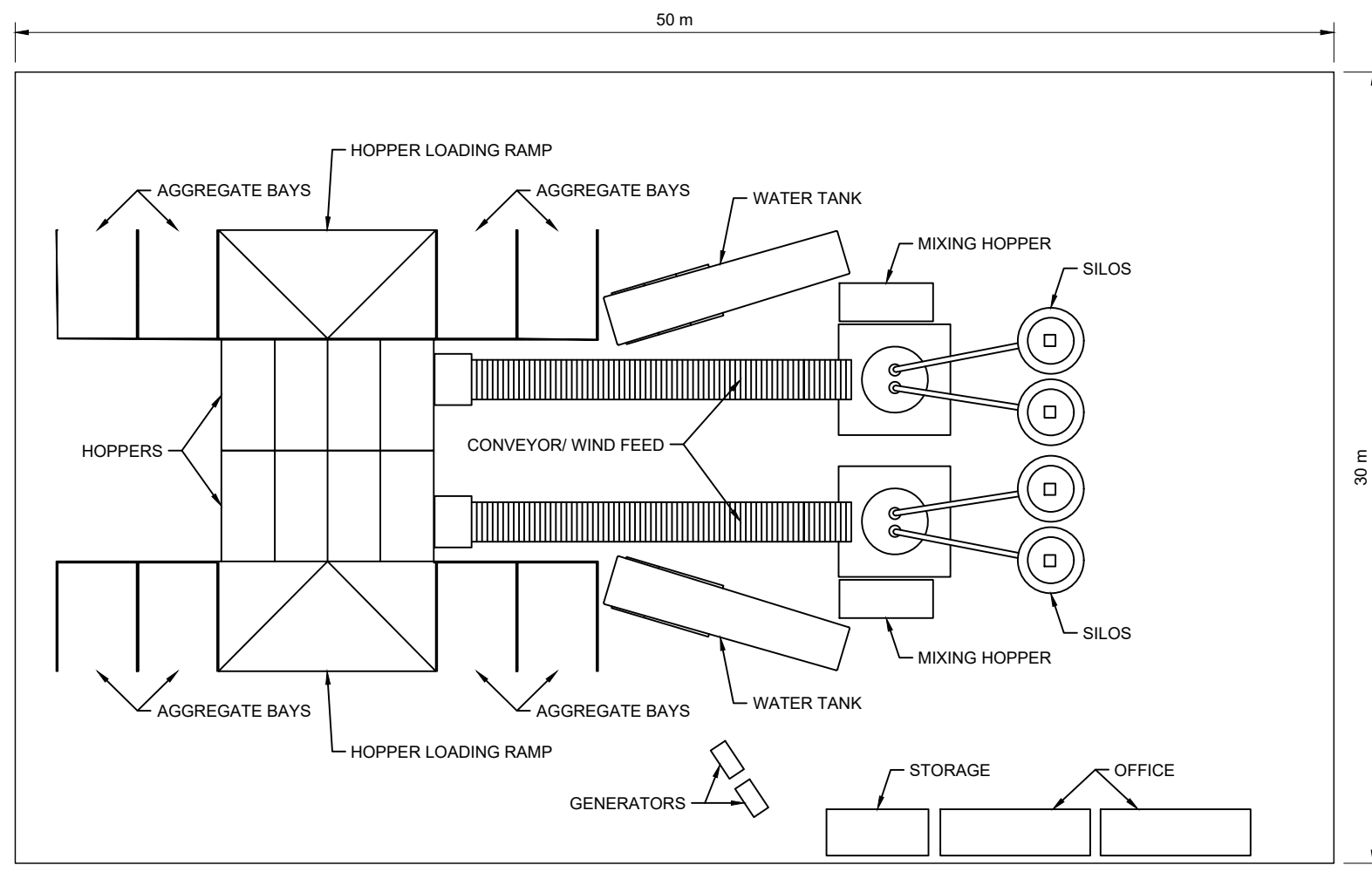
DRAWING TITLE: FIGURE 5.8
INDICATIVE ACCESS TRACK
WITH DRAINAGE DITCH

DRAWING NO.:	15558_DET_3007	REVISION	B
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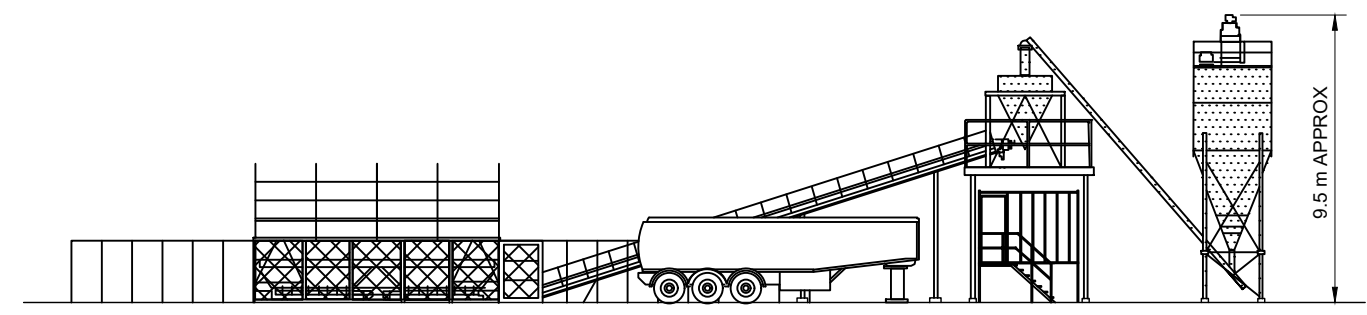
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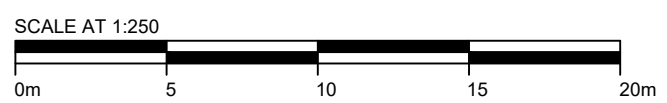


SIDE ELEVATION

PLAN VIEW
SCALE 1:250



ELEVATION VIEW
SCALE 1:250



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SCALE: 1:250 @ A3	SHEET NO.: 1 OF 1

STATUS: **FOR INFORMATION**

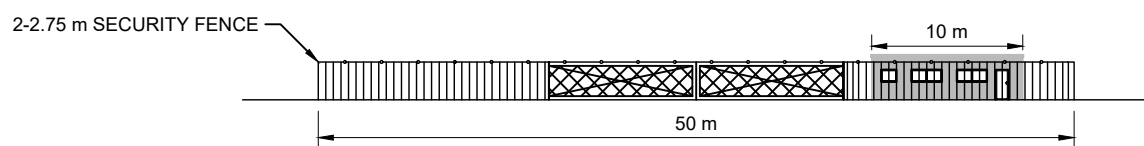
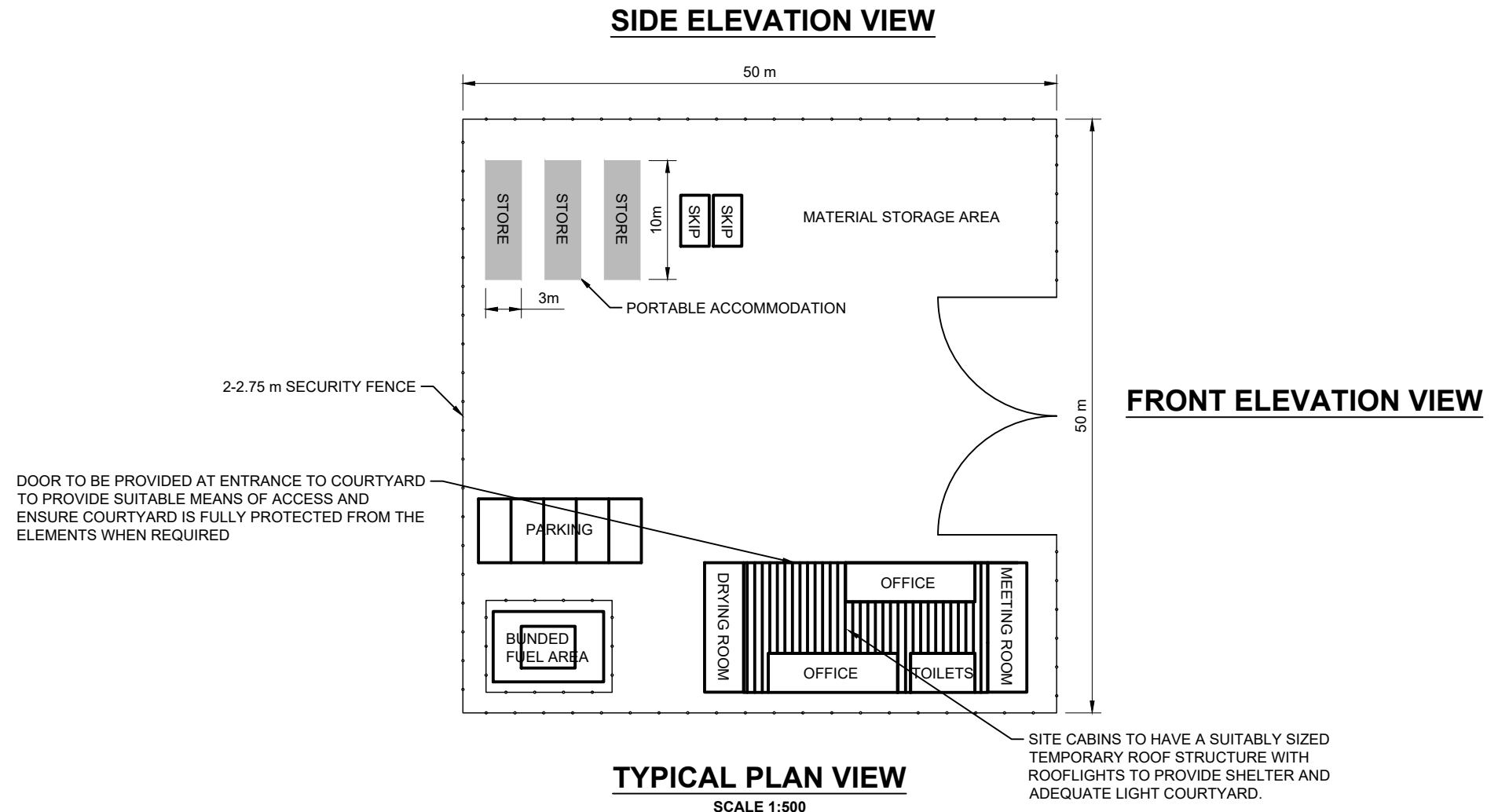
PROJECT: WATTEN WIND FARM

DRAWING TITLE: FIGURE 5.9
INDICATIVE TEMPORARY CONCRETE
BATCHING PLANT

DRAWING NO.: 15558_DET_3009	REVISION A
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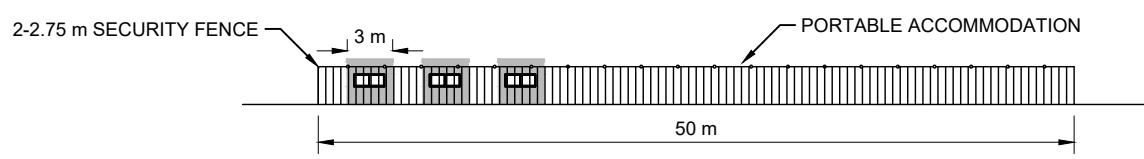
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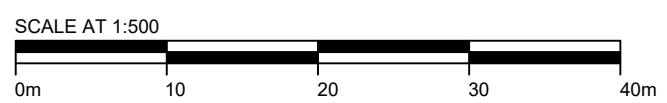
TYPICAL FRONT VIEW

SCALE 1:500



TYPICAL ELEVATION VIEW

SCALE 1:500



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SCALE:	1:500 @ A3	SHEET NO.:	1 OF 1
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STATUS: **FOR INFORMATION**

PROJECT: WATTEN WIND FARM

DRAWING TITLE: FIGURE 5.10
 INDICATIVE TEMPORARY
 CONSTRUCTION COMPOUND

DRAWING NO.:	15558_DET_3008	REVISION	A
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FRONT ELEVATION VIEW
SINGLE SIGN



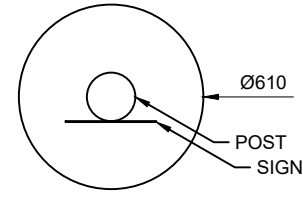
SIDE ELEVATION VIEW
SINGLE SIGN
BOTH SIDES



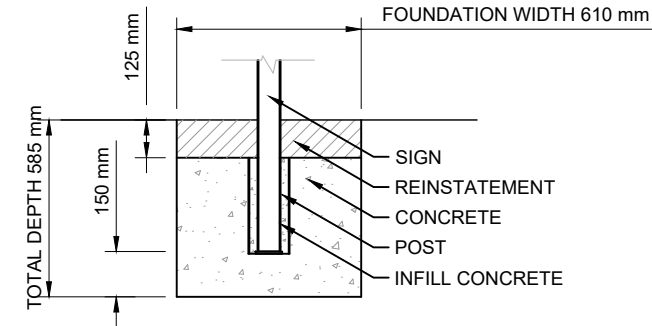
FRONT ELEVATION VIEW
SINGLE ROUND SIGN



SIDE ELEVATION VIEW
SINGLE ROUND SIGN
BOTH SIDES



**SIGN POST AND FOUNDATION
PLAN VIEW**
SCALE 1:25



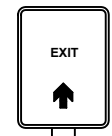
**SIGN POST FOUNDATION AND BASE FIXING
DETAIL VIEW**
SCALE 1:25



FRONT ELEVATION VIEW
DOUBLE SIGN



SIDE ELEVATION VIEW
DOUBLE SIGN
ONE SIDE



FRONT ELEVATION VIEW
DOUBLE SIGN



SIDE ELEVATION VIEW
DOUBLE SIGN
BOTH SIDE



FRONT ELEVATION VIEW
TRIPLE SIGN



SIDE ELEVATION VIEW
TRIPLE SIGN
BOTH SIDE

PROPOSED DISPLAY VARIATIONS
SCALE 1:25



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SCALE:	1:25 @ A3	SHEET NO.:	1 OF 1

STATUS: **FOR INFORMATION**

PROJECT: WATTEN WIND FARM

DRAWING TITLE: FIGURE 5.11
INDICATIVE DIRECTIONAL SIGNAGE

DRAWING NO.:	15558_DET_3010	REVISION	A
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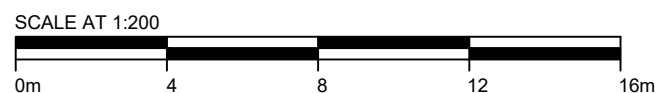
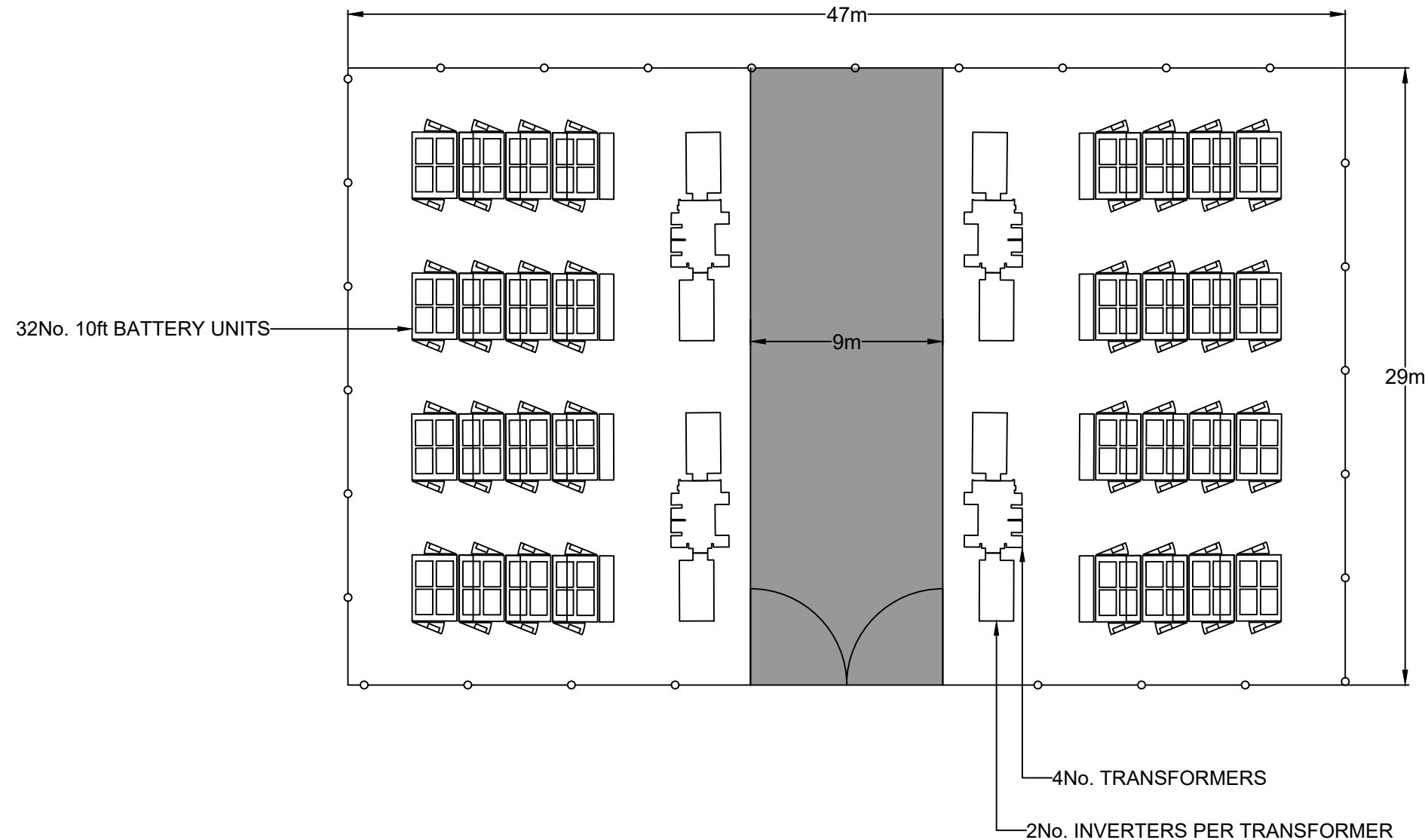
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4. ALL BUILDINGS AND DESIGNS SHOWN ARE SUBJECT TO DETAILED DESIGN FOR CONSTRUCTION PURPOSES.
5. BATTERY UNITS AND INVERTERS PROVIDED BY CLIENT.

KEY

- FENCING
- NEW ROAD

ASSUMPTIONS:

1. 3m x 2.44 (10ft x 8ft) BATTERY UNIT CONTAINERS.
2. 3m SEPARATION FROM SITE BOUNDARY TO ALLOW FOR MAINTENANCE VEHICLE ACCESS.
3. 3m SEPARATION BETWEEN CONTAINERS AS PER INDUSTRY STANDARD.
4. SITE DESIGN IS BASED ON SPACE AND PRELIMINARY ELECTRICAL OPTIMISATION. DOES NOT CONSIDER ANY STRUCTURAL OR MECHANICAL OPTIMISATIONS.



REV	DESCRIPTION	BY	CH	APP	DATE
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IFS DOC NO.: 1300420	IFS ACTIVITY: 302
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SCALE: 1:200 @ A3	SHEET NO.: 1 OF 1
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STATUS: **FOR INFORMATION**

PROJECT: WATTEN WIND FARM

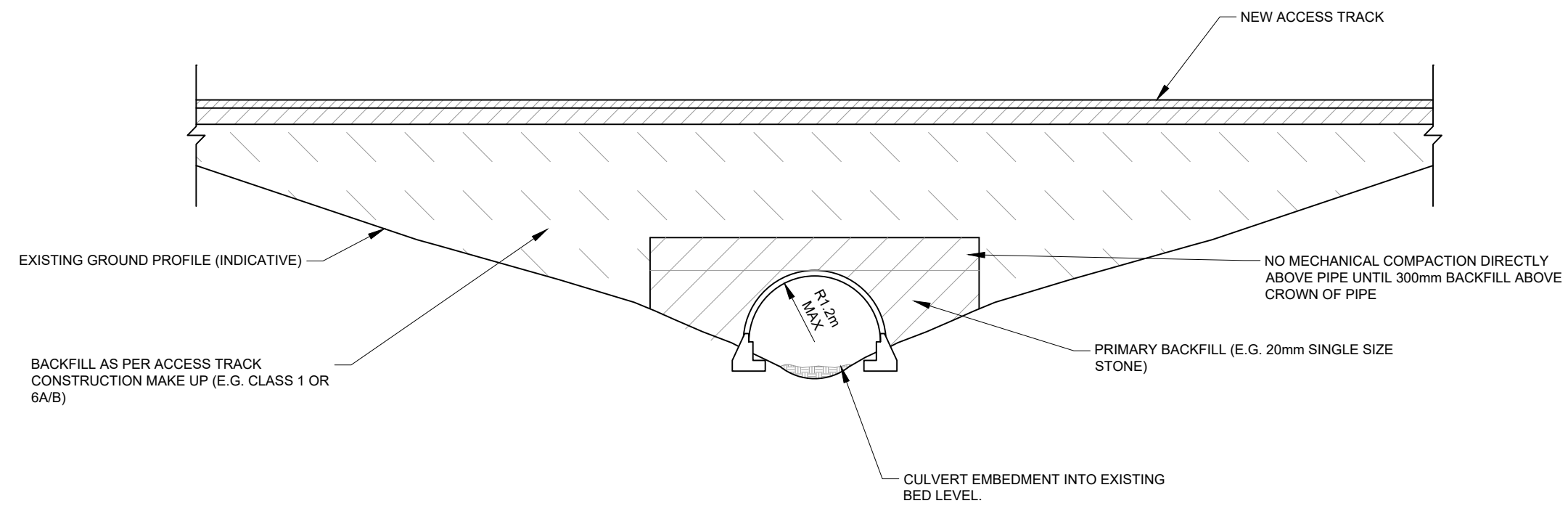
DRAWING TITLE: FIGURE 5.12 INDICATIVE BESS COMPOUND LAYOUT

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TYPICAL WATERCOURSE CROSSING SECTION (MAX 2.4m WIDTH)

SCALE 1:100



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SCALE: 1:100 @ A3	SHEET NO.: 1 OF 1

STATUS: **FOR INFORMATION**

PROJECT: WATTEN WIND FARM

DRAWING TITLE: FIGURE 5.13
INDICATIVE WATERCOURSE CROSSING SECTION

DRAWING NO.: 15558_DET_3014	REVISION A
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