Appendix 3.2: Borrow Pit Assessment

Pell Frischmann

Dunside Wind Farm

Appendix 3.2: Borrow Pit Assessment

June 2023

Report Ref.		**106452_Dunside Borrow Pit Assessment.Docx**				
File Path		**https://pellf.sharepoint.com/sites/EdinburghOfficeTeam/Shared Documents/General/Projects/106452 LUC Dunside/01 - WIP/Reports/Borrow Pit Assessment/106452_Dunside Borrow Pit Assessment.docx**				
Rev	**Suit**	**Description**	**Date**	**Originator**	**Checker**	**Approver**
01		Initial Issue	02-May-23	R Lucey	S McGarva	S McGarva
02		Updated following client and legal comments	09-June-23	R Lucey	S McGarva	S McGarva

Ref. reference. Rev revision. Suit suitability.

Prepared for

EDF Energy Renewables Ltd

Alexander House
1 Mandarin Road
Rainton Bridge Business Park
Houghton le Spring
DH4 5RA

Prepared by

Pell Frischmann

93 George Street
Edinburgh
EH2 3ES

Contents

Figures

Tables

Drawings and Appendices

1 Introduction

1.1 Purpose of the Report

Pell Frischmann (PF) has been commissioned by EDF Energy Renewables Ltd (EDF) to undertake a Borrow Pit Assessment for the Proposed Development at Dunside Wind Farm, located approximately 6 km north of Westruther within the administrative boundary of Scottish Borders Council.

This Borrow Pit Assessment forms an appendix (Appendix 3.2) to the Dunside Wind Farm Environmental Impact Assessment (EIA) Report. The report is intended to identify potential areas of material extraction and summarise the likely measures that will be implemented during the extraction of materials from the Site.

Detailed proposals for such measures will be documented prior to construction and will provide the same or greater provision in terms of protecting the water environment as those described in this document. The measures are proportionate to the risk and, where greater risk is highlighted at specific locations prior to construction, specific measures would be agreed at that time.

It should be noted that no intrusive geotechnical investigation or testing has been carried out at this stage.

2 Site Location and Overview

This report addresses the borrow pit requirement for construction of the Proposed Development located to the north of Westruther in the Scottish Borders Council administrative area. The site is approximately centred on National Grid Co-ordinates NT 611 584 and is located adjacent to the operational Fallago Rig Wind Farm.

A full description of the site components is provided in Chapter 3: Development Description of the EIA Report whilst the site layout is presented in Figure 1 below.

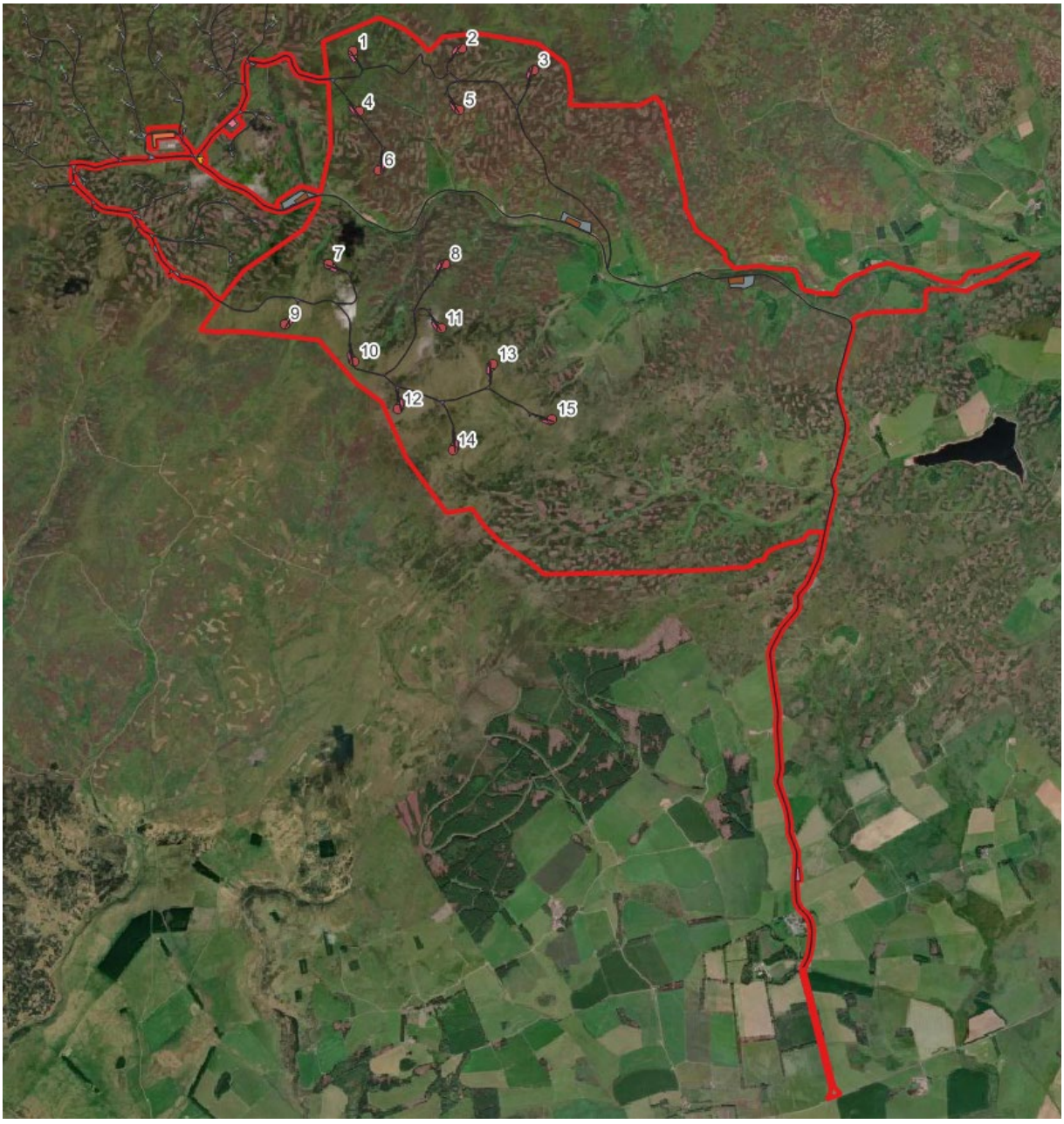


Figure 1 Site Layout

The topography varies over the site, with a central valley from east to west associated with the Dye Water. The Proposed Development is generally split across three main topographically distinct areas (north-west, north-east and south), comprising separate high points or ridges. There are a number of steep slopes within the site, generally located in the vicinity of watercourses.

Ordnance Survey mapping indicates the height of the site varies between 210m above ordnance datum (AOD) at the site entrance and the highest point of the site at 472m AOD along the southern ridge.

The Proposed Development comprises of 15 wind turbines, an expansion to the existing Fallago Rig Wind Farm substation, approximately 14.6 km of proposed site tracks, approximately 1.1 km of proposed light vehicle tracks and other ancillary infrastructure, within a total site area of approximately 2005 ha.

The proposed infrastructure requires a large quantity of graded crushed rock fill material that will be sourced from borrow pits on site rather than being imported on to site, thus reducing HGV movements on the public road network. It is noted, however, that the Transport Assessment has assumed that 50% of the material required will be imported to provide a worst-case assessment.

This borrow pit assessment is based on both Superficial and Bedrock 1:50k mapping available from the British Geological Survey and a walkover site survey undertaken by Pell Frischmann civil engineers.

3 Geology and Hydrogeology

3.1 Superficial

Superficial deposits are shown to be sporadic across the site, consisting of peat on higher ground, with alluvium consisting of clay, silt, and gravel present in the vicinity of watercourses.

A plan showing the superficial geology is included as Figure 8.4 of the EIA Report.

3.2 Bedrock

Review of the 1:50,000 scale British Geological Survey (BGS) maps indicate the underlying bedrock geology across the site to be predominantly Wacke from the Gala Group. This sedimentary bedrock was formed approximately 443.8 and 433.4 million years ago in the Silurian Period.

A plan showing the bedrock geology is included as Figure 8.4 of the EIA Report.

3.3 Suitability of Bedrock as Aggregate

The primary use of the aggregate extracted from borrow pits will be the construction of tracks using unbound aggregate, with further aggregate required for construction of hardstandings, crane pads, the extension to the existing substation and construction compounds. General experience indicates that the bedrock geology present onsite will be suitable for use in these applications. This is further supported by the fact the same formations as present onsite have been successfully used for aggregate extraction at the existing/adjacent Fallago Rig Wind Farm.

Geotechnical testing will be required post-consent to establish that the aggregate within the proposed borrow pits is suitable aggregate material.

3.4 Hydrogeology

Bedrock underlying the site is classified as a low productivity aquifer comprised of highly indurated greywacke with limited groundwater in near surface weathered zone and secondary fractures.

Where well sorted fluvially deposited superficials are present, groundwater flows may be more significant. However, the majority of the site is overlain with relatively lower permeability peat and glacial tills.

4 Borrow Pit Design

4.1 Borrow Pit Siting

A total of three borrow pits are proposed as part of the Proposed Development, with the borrow pits (shown as brown polygons) and the associated search areas (shown as grey polygons) shown in Figure 2 below.

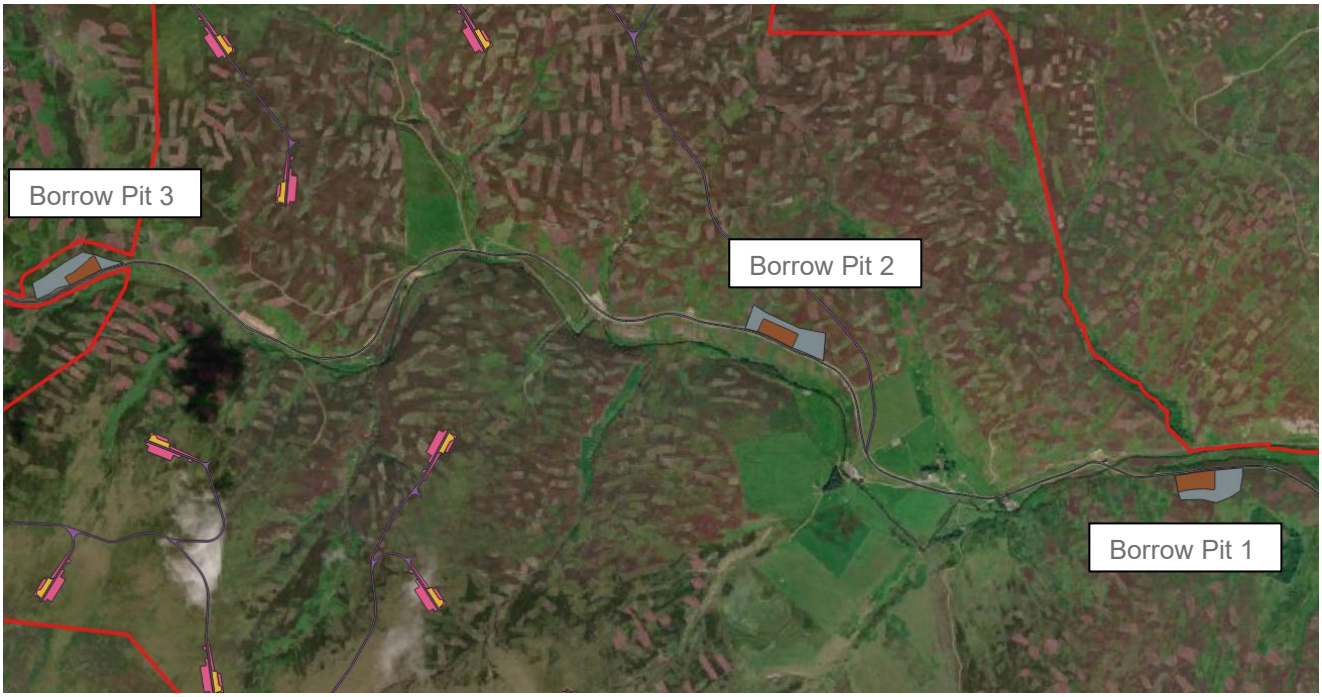


Figure 2 Proposed Borrow Pit Locations

The proposed borrow pit locations have been selected taking due consideration of the known environmental constraints within the site boundary. Where possible, borrow pits have been located outside of environmental constraints and designations. Borrow Pit 3 is located approximately 20m within a 50m buffer of the Dye Water; however, it is adjacent to the existing access track so it is considered that moving it outside the buffer would cause more environmental impact due to the requirement for additional track than its current proposed location.

The borrow pits are located along the existing Fallago Rig access track. This will allow for all stone to be extracted to build out the tracks and hardstandings in a sequential manner.

4.2 Material Requirement Calculations

Due to the length of the proposed access track network (approximately 14.6 km of proposed wind farm tracks and approximately 1.1 km of proposed light vehicle track), combined with the proposed ancillary infrastructure, a large volume of material is required. As indicated in Section 4, the geology of the site indicates that the material extracted should be suitable for use in construction of the infrastructure required.

The estimated calculations, summarised in Table 1 below take into account the proposed access tracks, turbine hardstandings, substation extension and construction compounds.

Table 1 Estimated Material Requirements

Design Element	Proposed Construction Thickness (m)	Total Area (m^2)	Volume (m^3)
Cut track	0.5	116,700	58,350
Floating track	0.8	4,100	3,280
Existing track widening	0.5	11,540	5,770

Design Element	Proposed Construction Thickness (m)	Total Area (m^2)	Volume (m^3)
Turbine hardstanding	0.7	53,550	37,485
Substation extension	0.7	13,500	9,450
Construction compound	0.5	21,150	10,575
Concrete aggregate	N/A	N/A	2,000
		TOTAL VOLUME:	**126,910**

4.3 Borrow Pit Calculations

An estimate of the material generation from each of the borrow pits is presented in Table 2 below.

Table 2 Borrow Pit Material Generation

Parameter	Borrow Pit 1	Borrow Pit 2	Borrow Pit 3
Approximate coordinates	363770, 658000	362240, 658550	359700, 658770
Total footprint (m^2)	8,880	7,350	5,940
Cut volume (from Civil3D) (m^3)	68,230	54,590	50,580
Volume reduction coefficient	0.8	0.8	0.8
Volume (m^3)	54,584	43,672	40,464
TOTAL VOLUME (m^3):	**138,720**		

The calculation material volume extracted from each borrow pit has been reduced by a factor of 0.8 to account for poor recovery, dilution, increased superficial cover and areas of unsuitable/poor strata as well as cut/fill inaccuracies and the conceptual status of design.

Further detailed design will allow track and hardstanding level variations to be designed for and the true cut & fill quantities to be calculated.

The high-level calculations in Table 2 indicate that the proposed borrow pits will provide the volume of material required to construct the on-site infrastructure (as per Table 1). A summary of the calculations is included in Appendix A.

4.4 Borrow Pit Reinstatement

The borrow pit will be partially reinstated with surplus excavated material to provide a more aesthetic appearance and prevent any unstable and steep rock faces. An indicative restoration profile is included in the borrow pit drawing cross-sections (Drawings BP-001, 002 and 003). SEPA guidelines state that complete infilling of borrow pits should not be undertaken as loose or unstable infill can pose a risk to walkers and animal life.

4.5 Borrow Pit Drainage

A Sustainable Drainage System (SuDS) scheme will be designed and installed for the borrow pits. The SuDS system should follow the SuDS management train as defined in The SuDS Manual[1].

It is anticipated the arrangements will include a high-level clean water cut-off drain at the crest of the excavation slope to divert existing runoff around the excavation area and maintain hydraulic continuity. The borrow pits will also be graded to allow positive drainage within the excavation area. Runoff from these areas will be conveyed to SuDS features to allow removal of sediment and silt prior to discharge to match pre-development arrangements.

[1] *CIRIA C753, The SuDS Manual, Version 6, 2018*

5 Conclusion

Three locations have been identified as proposed borrow pit locations following an engineering walkover and desktop assessment. All borrow pits are located adjacent to the existing Fallago Rig access track which is being re-used for the Proposed Development.

All borrow pits identified have been sited with due considerations of environmental constraints and designations. Approximate borrow pit dimensions and potential material extraction volumes have been estimated alongside material requirements for construction of infrastructure. It is estimated that a total material volume of approximately 138,000 m^3 could be extracted, with an estimated 125,000 m^3 required for construction, meaning it is likely that no material import will be required to construct the Proposed Development.

Detailed ground investigations, slope stability assessments and geotechnical testing will be undertaken across the whole wind farm area prior to construction and this will feed into the final borrow pit designs. If the Proposed Development is consented, it is anticipated that a Borrow Pit Scheme of Works will be required as a planning condition. This would include:

- details of the precise location, size, depths, dimensions, and proposed volume of material to be extracted in each borrow pit;
- a detailed working method statement based on site survey information and ground investigations;
- details of the handling of any overburden (including peat, soil and rock);
- drainage, including measures to prevent impacts upon surrounding sensitives; and
- a fully detailed restoration scheme with landscaping, planting and timescale information.

Appendix A – Borrow Pit High-Level Material Calculations

Calculation sheet

Subject / Project : Dunside Wind Farm
Job No. / Project No : 106452 Ref : Material Requirements Date : 09/06/2023
Prepared by : RL Checked : SM

Material Requirements

Dunside Wind Farm

The following calculations have been prepared to determine high-level material requirements to construct Dunside Wind Farm

Revision history

Rev1	For inclusion in Borrow Pit Assessment	Dated	28/03/2023
Rev2	Addition of concrete aggregate	Dated	09/06/2023

Calculation sheet

Subject / Project : Dunside Wind Farm
Job No. / Project No : 106452 Ref : Material Requirements Date : 09/06/2023
Prepared by : RL Checked : SM

Material Requirements (Based on Layout 13 - Design Freeze)

General Parameters

Cut track thickness =	0.5	m	
Floating track thickness =	0.8	m	
Hardstand thickness =	0.7	m	
Substation thickness =	0.7	m	
Construction compound thickness =	0.5	m	

Infrastructure Areas

Cut track area =	116,700	m^2	
Cut track volume =	**58,350**	**m^3**	
Floating track area =	4,100	m^2	
Floating track volume =	**3,280**	**m^3**	
Existing track widening area =	11,540	m^2	
Existing track widening volume =	**5,770**	**m^3**	
Turbine hardstand nr. =	15	m	
Turbine hardstand area =	3,570	m^2	(per hardstand)
Total turbine hardstand area =	53,550	m^2	
Total turbine hardstand volume =	**37,485**	**m^3**	
Substation area =	13,500	m^2	
Substation volume =	**9,450**	**m^3**	
Construction compound area =	21,150	m^2	(new areas only)
Construction compound volume =	**10,575**	**m^3**	
Concrete aggregate volume =	**2,000**	**m^3**	
TOTAL VOLUME REQUIREMENT =	**126,910**	**m^3**	

Borrow Pit - Initial Volume Calculations

Borrow Pit 1 (East)

Total Footprint (exc tie-in) =	7,940	m^2	
Total Footprint (inc tie-in) =	8,880	m^2	
Cut volume (from Civil3D) =	68,230	m^3	
Volume reduction coefficient =	0.8		(to account for overburden and any losses during processing)
Total volume =	**54,584**	**m^3**	

Borrow Pit 2 (Central)

Total Footprint (exc tie-in) =	6,440	m^2	
Total Footprint (inc tie-in) =	7,350	m^2	
Cut volume (from Civil3D) =	54,590	m^3	
Volume reduction coefficient =	0.8		(to account for overburden and any losses during processing)
Total volume =	**43,672**	**m^3**	

Borrow Pit 3 (West)

Total Footprint (exc tie-in) =	5,071	m^2	
Total Footprint (inc tie-in) =	5,940	m^2	
Cut volume (from Civil3D) =	50,580	m^3	
Volume reduction coefficient =	0.8		(to account for overburden and any losses during processing)
Total volume =	**40,464**	**m^3**	

TOTAL =	**138,720**	**m^3**

Overall Balance

Material required =	126,910	m^3	
Material generated =	138,720	m^3	
OVERALL BALANCE =	**11,810**	**m^3**	(-ve is shortfall)

BP-001 – Borrow Pit 1 General Arrangement and Cross-Section

PLAN VIEW
1:400

NOTE:

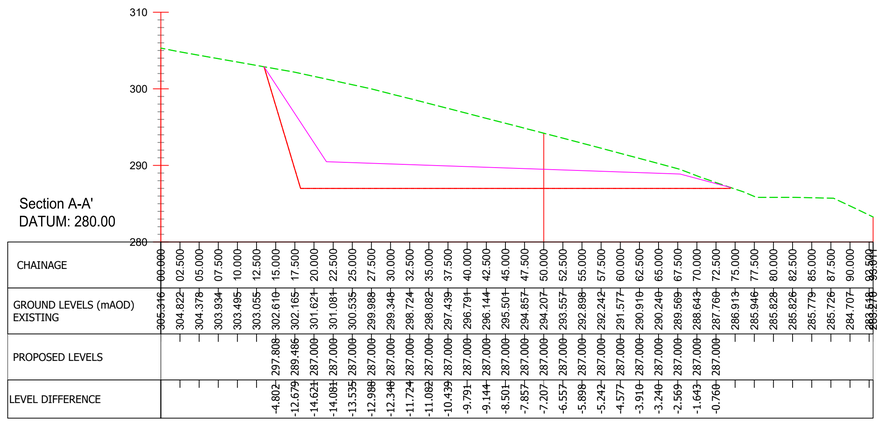
1. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATION FOR HIGHWAY WORKS AND THE TURBINE MANUFACTURERS STANDARDS AND ALL RELEVANT DRAWINGS WITHIN THE PROJECT DESIGN PACKAGE.
2. ALL WORKS TO BE EXECUTED IN ACCORDANCE WITH THE DMRB, THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, DESIGN MANUAL FOR ROADS AND BRIDGES, AND TRAFFIC SIGNS MANUAL.
3. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE. ALL LEVELS ARE IN METRES AND RELATE TO ORDNANCE DATUM.
4. DO NOT SCALE FROM ANY DRAWING. WORK TO FIGURED DIMENSIONS ONLY. ANY DISCREPANCIES IN DIMENSIONS ARE TO BE REFERRED TO THE DESIGNER BEFORE WORK IS PUT TO HAND.
5. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARING ANY WORKING DRAWINGS OR COMMENCING ON SITE.
6. ALL WORKS BY THE CONTRACTOR MUST BE CARRIED OUT IS SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY AT WORK ACT ARE SATISFIED.
7. ALL WORKS ARE TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENT OF THE STATUTORY AUTHORITIES AND CONSTRUCTION DESIGN MANAGEMENT REGULATIONS.

KEY – PLAN VIEW:

- PROPOSED MAJOR CONTOUR (5m)
- PROPOSED MINOR CONTOUR (1m)
- EXISTING ACCESS TRACK

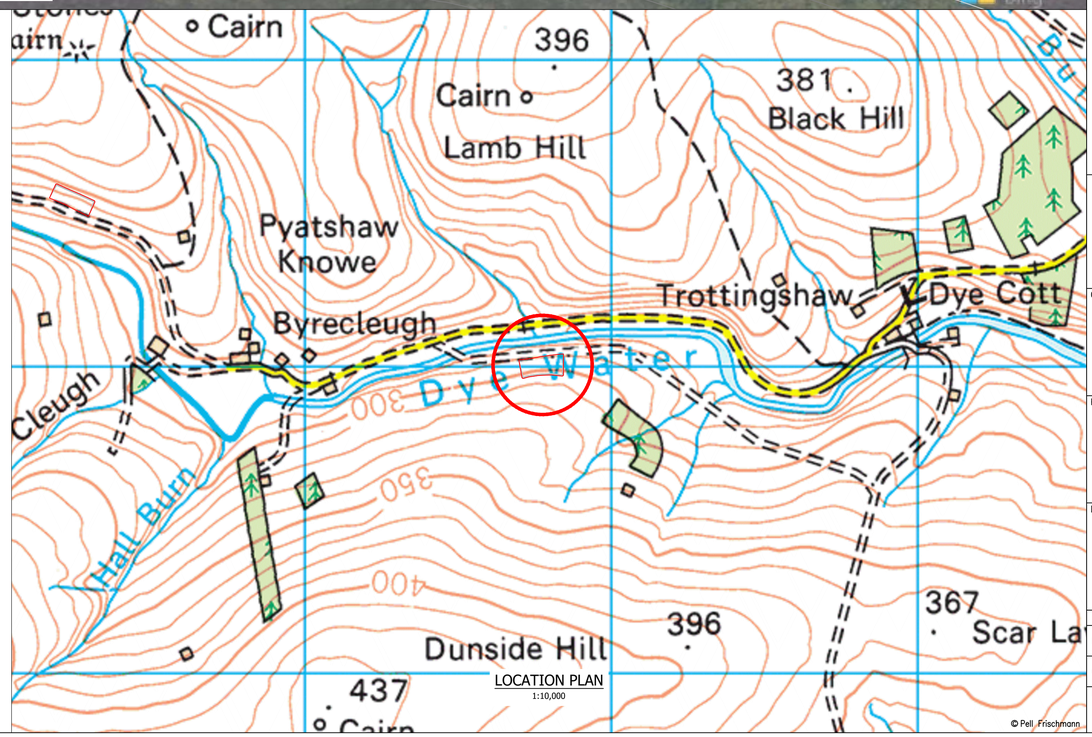
KEY – CROSS-SECTION:

- EXISTING GROUND PROFILE
- PROPOSED GROUND PROFILE
- PROPOSED RESTORATION PROFILE



CHAINAGE	00.000	02.500	05.000	07.500	10.000	12.500	15.000	17.500	20.000	22.500	25.000	27.500	30.000	32.500	35.000	37.500	40.000	42.500	45.000	47.500	50.000	52.500	55.000	57.500	60.000	62.500	65.000	67.500	70.000	72.500	75.000	77.500	80.000	82.500	85.000	87.500	90.000	92.500	93.841
GROUND LEVELS (mAOD) EXISTING	305.916	304.822	304.378	303.934	303.495	303.055	302.610	302.165	301.624	301.084	300.535	299.988	299.348	298.724	298.082	297.439	296.794	296.144	295.501	294.857	294.207	293.557	292.898	292.242	291.577	290.916	290.240	289.569	288.643	287.760	286.913	285.946	285.828	285.826	285.779	285.726	284.707	283.518	283.518
PROPOSED LEVELS							297.808	289.485	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000	287.000									
LEVEL DIFFERENCE							-4.802	-12.679	-14.621	-14.084	-13.535	-12.988	-12.348	-11.724	-11.082	-10.439	-9.791	-9.144	-8.501	-7.857	-7.207	-6.557	-5.896	-5.242	-4.577	-3.910	-3.240	-2.569	-1.643	-0.760									

SECTION A-A'
1:400



LOCATION PLAN
1:10,000

© Pell Frischmann

Pell Frischmann
93 GEORGE STREET, EDINBURGH, EH2 3ES
Tel: +44 (0)131 240 1270
Email: pfedinburgh@pellfrischmann.com
www.pellfrischmann.com

Client
EDF RENEWABLES LTD

Project
DUNSIDE WIND FARM

Drawing Title
BORROW PIT 1
GENERAL ARRANGEMENT AND CROSS-SECTION

	Name	Date	
Designed	RL	28.03.2023	Scale AS SHOWN @ A1
Checked	SM	28.03.2023	File 106452_Borrow Pit Assessment
			Drawing Status DRAFT

Drawing No. BP-001
Revision P1

BP-002 – Borrow Pit 2 General Arrangement and Cross-Section

PLAN VIEW
1:400

NOTE:

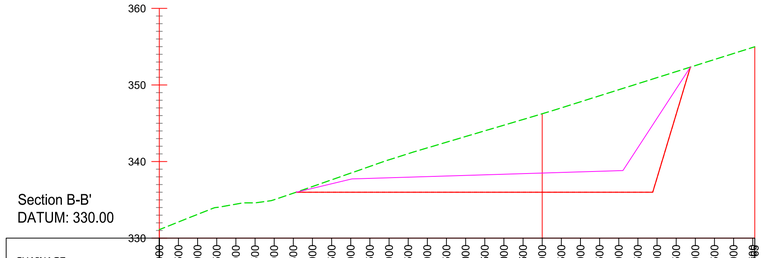
1. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATION FOR HIGHWAY WORKS AND THE TURBINE MANUFACTURERS STANDARDS AND ALL RELEVANT DRAWINGS WITHIN THE PROJECT DESIGN PACKAGE.
2. ALL WORKS TO BE EXECUTED IN ACCORDANCE WITH THE DMRB, THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, DESIGN MANUAL FOR ROADS AND BRIDGES, AND TRAFFIC SIGNS MANUAL.
3. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE. ALL LEVELS ARE IN METRES AND RELATE TO ORDNANCE DATUM.
4. DO NOT SCALE FROM ANY DRAWING. WORK TO FIGURED DIMENSIONS ONLY. ANY DISCREPANCIES IN DIMENSIONS ARE TO BE REFERRED TO THE DESIGNER BEFORE WORK IS PUT TO HAND.
5. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARING ANY WORKING DRAWINGS OR COMMENCING ON SITE.
6. ALL WORKS BY THE CONTRACTOR MUST BE CARRIED OUT IS SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY AT WORK ACT ARE SATISFIED.
7. ALL WORKS ARE TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENT OF THE STATUTORY AUTHORITIES AND CONSTRUCTION DESIGN MANAGEMENT REGULATIONS.

KEY – PLAN VIEW:

- PROPOSED MAJOR CONTOUR (5m)
- PROPOSED MINOR CONTOUR (1m)
- EXISTING ACCESS TRACK

KEY – CROSS-SECTION:

- EXISTING GROUND PROFILE
- PROPOSED GROUND PROFILE
- PROPOSED RESTORATION PROFILE



CHAINAGE	00.000	02.500	05.000	07.500	10.000	12.500	15.000	17.500	20.000	22.500	25.000	27.500	30.000	32.500	35.000	37.500	40.000	42.500	45.000	47.500	50.000	52.500	55.000	57.500	60.000	62.500	65.000	67.500	70.000	72.500	75.000	77.568
GROUND LEVELS (mAOD) EXISTING									336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	337.873	346.182				
PROPOSED LEVELS									336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000	336.000				
LEVEL DIFFERENCE									0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000				

SECTION B-B'
1:400

LOCATION PLAN
1:10,000

© Pell Frischmann

Pell Frischmann
93 GEORGE STREET, EDINBURGH, EH2 3ES
Tel: +44 (0)131 240 1270
Email: pfedinburgh@pellfrischmann.com
www.pellfrischmann.com

Client
EDF RENEWABLES LTD

Project
DUNSIDE WIND FARM

Drawing Title
BORROW PIT 2
GENERAL ARRANGEMENT AND CROSS-SECTION

	Name	Date	
			Scale AS SHOWN @ A1
Designed	RL	28.03.2023	File 106452_Borrow Pit Assessment
Checked	SM	28.03.2023	Drawing Status DRAFT
Drawing No. BP-002			Revision P1

C:\OneDrive\Pell Frischmann Consultants\Edinburgh Office Team – General\Projects\106452 - LUC Dunside\01 – WIP\Drawings\Borrow Pit Assessment

BP-003 – Borrow Pit 3 General Arrangement and Cross-Section

PLAN VIEW
1:400

NOTE:

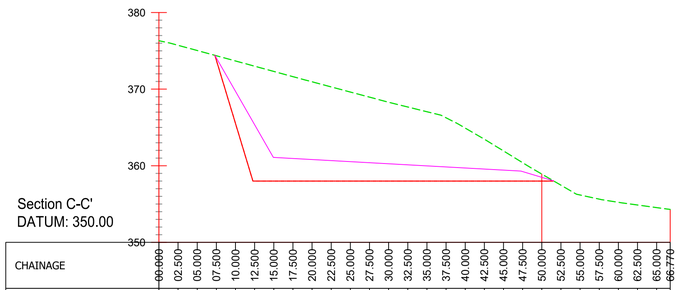
1. ALL DRAWINGS ARE TO BE READ IN CONJUNCTION WITH THE SPECIFICATION FOR HIGHWAY WORKS AND THE TURBINE MANUFACTURERS STANDARDS AND ALL RELEVANT DRAWINGS WITHIN THE PROJECT DESIGN PACKAGE.
2. ALL WORKS TO BE EXECUTED IN ACCORDANCE WITH THE DMRB, THE MANUAL OF CONTRACT DOCUMENTS FOR HIGHWAY WORKS, DESIGN MANUAL FOR ROADS AND BRIDGES, AND TRAFFIC SIGNS MANUAL.
3. ALL DIMENSIONS ARE IN METRES UNLESS STATED OTHERWISE. ALL LEVELS ARE IN METRES AND RELATE TO ORDNANCE DATUM.
4. DO NOT SCALE FROM ANY DRAWING. WORK TO FIGURED DIMENSIONS ONLY. ANY DISCREPANCIES IN DIMENSIONS ARE TO BE REFERRED TO THE DESIGNER BEFORE WORK IS PUT TO HAND.
5. ALL DIMENSIONS AND LEVELS ARE TO BE CHECKED ON SITE BY THE CONTRACTOR PRIOR TO PREPARING ANY WORKING DRAWINGS OR COMMENCING ON SITE.
6. ALL WORKS BY THE CONTRACTOR MUST BE CARRIED OUT IS SUCH A WAY THAT ALL REQUIREMENTS UNDER THE HEALTH AND SAFETY AT WORK ACT ARE SATISFIED.
7. ALL WORKS ARE TO BE CARRIED OUT IN COMPLIANCE WITH THE REQUIREMENT OF THE STATUTORY AUTHORITIES AND CONSTRUCTION DESIGN MANAGEMENT REGULATIONS.

KEY – PLAN VIEW:

- PROPOSED MAJOR CONTOUR (5m)
- PROPOSED MINOR CONTOUR (1m)
- EXISTING ACCESS TRACK

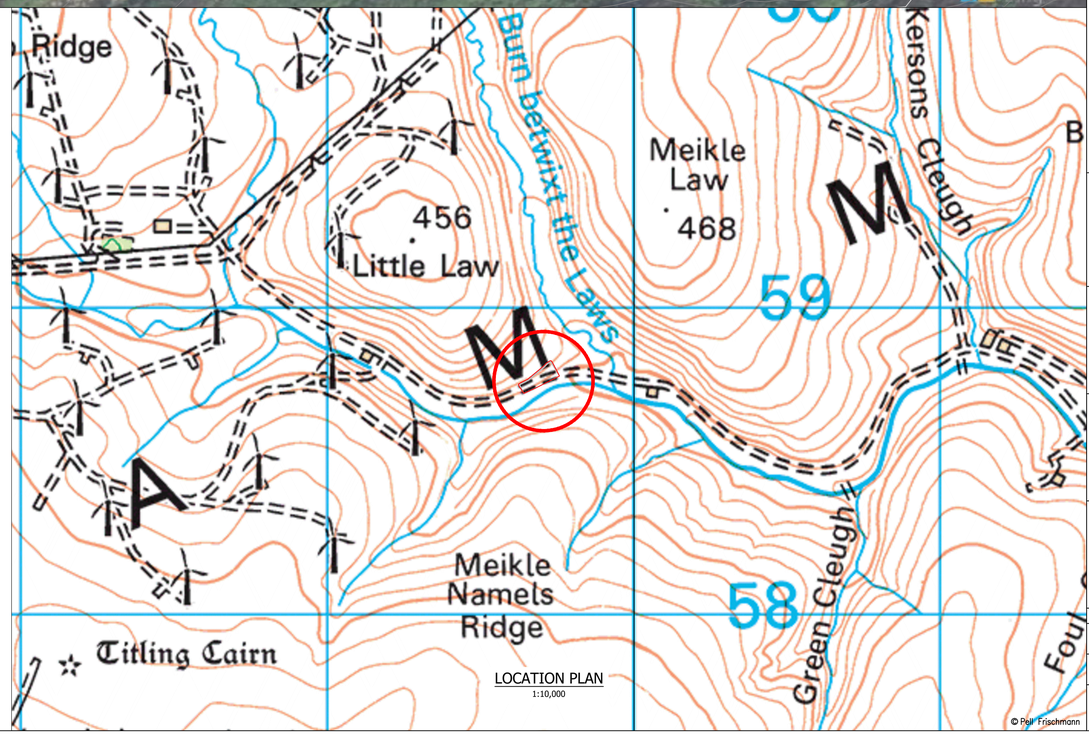
KEY – CROSS-SECTION:

- EXISTING GROUND PROFILE
- PROPOSED GROUND PROFILE
- PROPOSED RESTORATION PROFILE



CHAINAGE	00.000	02.500	05.000	07.500	10.000	12.500	15.000	17.500	20.000	22.500	25.000	27.500	30.000	32.500	35.000	37.500	40.000	42.500	45.000	47.500	50.000	52.500	55.000	57.500	60.000	62.500	65.000	66.770
GROUND LEVELS (mAOD) EXISTING				373.780	365.521	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000							
PROPOSED LEVELS				373.780	365.521	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000	358.000							
LEVEL DIFFERENCE				0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000							

SECTION C-C'
1:400



LOCATION PLAN
1:10,000

Pell Frischmann
93 GEORGE STREET, EDINBURGH, EH2 3ES
Tel: +44 (0)131 240 1270
Email: pfedinburgh@pellfrischmann.com
www.pellfrischmann.com

Client
EDF RENEWABLES LTD

Project
DUNSIDE WIND FARM

Drawing Title
BORROW PIT 3
GENERAL ARRANGEMENT AND CROSS-SECTION

	Name	Date	Scale
Designed	RL	28.03.2023	AS SHOWN @ A1
Checked	SM	28.03.2023	File: 106452_Borrow Pit Assessment
			Drawing Status: DRAFT

Drawing No.: BP-003
Revision: P1

C:\OneDrive\Pell Frischmann Consultants\Edinburgh Office Team - General\Projects\106452 LDC Dunside\01 - WIP\Drawings\Borrow Pit Assessment