



Melgarve Cluster Project

Appendix 10.3: Schedule of Watercourse Crossings

ASH design+assessment

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Basis of Report

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1.0 Introduction

This Technical Appendix contains information relating to the proposed permanent and temporary watercourse crossings required to facilitate the Proposed Development.

This report presents photographs and dimensions for each proposed new crossing point. The final design of each crossing solution would be agreed with Scottish Environment Protection Agency (SEPA) prior to construction and be determined as part of the detailed site design.

The survey of the proposed watercourse crossings was undertaken in November 2023 and February 2024 by experienced SLR hydrologists.

The location of the watercourse crossings is shown in **Figure 10.1** of the EIA Report.

1.1 Relevant Legislation

The Water Framework Directive (2000/60/EC) (WFD) has been transposed into Scottish legislation as the Water Environment and Water Services (Scotland) Act 2003¹ (or WEWS) and has given Scottish ministers powers to introduce regulatory controls over activities in order to protect and improve Scotland's water environment. The water environment includes wetlands, rivers, lochs, transitional waters (estuaries), coastal waters and groundwater. These regulatory controls, known as the Water Environment (Controlled Activities) (Scotland) Regulations 2011² (CAR) came into force in 2011 and have since been amended in 2013, 2017, and 2021.

With respect to watercourse crossings, CAR requires that all engineering works in inland surface waters and wetlands are subject to authorisation and allow for proportionate risk-based regulation which is outlined in the CAR Practical Guide³. SEPA provide authorisation for watercourse crossings shown on the 1:50,000 scale Ordnance Survey (OS) maps (Landranger Series). All other watercourses are classed as "minor watercourse" and are exempt under CAR.

The design, construction and/or improvements to the crossings would be agreed with SEPA prior to any construction works commencing in accordance with CAR as part of the detailed development design.



¹ Water Environment and Water Services (Scotland) Act 2003, available at <https://www.legislation.gov.uk/asp/2003/3/contents> [Accessed January 2024]

² Water Environment (Controlled Activities) (Scotland) Regulations 2011, available at <https://www.legislation.gov.uk/ssi/2011/209/contents/made> [Accessed January 2024]



³ SEPA (December 2022) The Water Environment (Controlled Activities) (Scotland) Regulations 2011 (as amended), A Practical Guide, available at https://www.sepa.org.uk/media/34761/car_a_practical_guide.pdf [Accessed January 2024]





2.0 Watercourse Crossing Details

Watercourse Crossing ID	WX01
Watercourse Crossing Details	<p>NGR: NH 50115 05808</p> <p>Status: New Temporary Track Crossing and New Permanent Crossing associated with proposed UGC.</p> <p>Watercourse Width: 2m</p> <p>Watercourse Depth: 0.1m</p> <p>Notes: Surveyed during winter months so water depth may be an underestimate. Incised in peat within a channel approximately 0.5m deep.</p>
Photograph Looking Upstream	 <p>A photograph showing a narrow, shallow watercourse cutting through a snow-covered peat bog. The water is dark and still, reflecting the sky. The surrounding peat is covered in a thick layer of snow, with some brown vegetation visible. In the background, a wind turbine is visible on a distant ridge under a clear blue sky.</p>
Photograph Looking Downstream	 <p>A photograph showing a similar view of the watercourse from a downstream perspective. The water flows through a narrow channel in the peat, surrounded by snow. The landscape is flat and covered in snow, with a wind turbine visible in the distance under a clear blue sky.</p>





Watercourse Crossing ID	WX02
Watercourse Crossing Details	<p>NGR: NH 49270 05065</p> <p>Status: New Permanent Crossing associated with proposed UGC.</p> <p>Watercourse Width: 10m</p> <p>Watercourse Depth: 0.6m</p> <p>Notes: Approximately 15m downstream of an existing crossing which is 1.5m diameter plastic culvert.</p>
Photograph Looking Upstream	 A photograph showing a narrow watercourse flowing through a field of snow-dusted vegetation. In the background, several large wind turbines are visible against a cloudy sky. The water in the stream is dark and reflects the sky and the surrounding landscape.
Photograph Looking Downstream	 A wide-angle photograph looking downstream from a watercourse crossing. The water is calm and reflects the overcast sky. The surrounding landscape is a mix of brown, snow-dusted grass and low-lying vegetation. The horizon is flat and distant.





Watercourse Crossing ID	WX03
Watercourse Crossing Details	<p>NGR: NH 48511 04012</p> <p>Status: New Permanent Crossing associated with proposed UGC.</p> <p>Watercourse Width: 2m</p> <p>Watercourse Depth: 0.3m</p> <p>Notes: Approximately 20m downstream of an existing crossing.</p>
Photograph Looking Upstream	 A photograph taken from an elevated position looking upstream along a narrow watercourse. The water is dark and reflects the sky. A red surveying pole is visible in the foreground on the right bank. In the background, several white wind turbines are visible on a grassy hill under a cloudy sky.
Photograph Looking Downstream	 A photograph taken from an elevated position looking downstream along a watercourse. The water is dark and reflects the sky. A red surveying pole is visible in the foreground on the right bank. The background shows a wide valley with rolling hills and a sunset or sunrise sky with long shadows.





Watercourse Crossing ID	WX04
Watercourse Crossing Details	<p>NGR: NH 47459 02142</p> <p>Status: New Temporary Track Crossing and New Permanent Crossing associated with proposed UGC.</p> <p>Watercourse Width: 4m</p> <p>Watercourse Depth: 2m</p> <p>Notes: Surveyed approximately 15m downstream of the crossing point. Incised in peat.</p>
Photograph Looking Upstream	 A photograph showing a narrow, winding watercourse flowing through a peat bog landscape. The water is dark and reflects the surrounding vegetation. The bog is covered in dense, brownish-yellow peat mosses and grasses. The watercourse appears to be incised into the peat.
Photograph Looking Downstream	 A photograph showing a wider, more irregularly shaped watercourse in a peat bog landscape. The water is dark and reflects the surrounding vegetation. The bog is covered in dense, brownish-yellow peat mosses and grasses. The watercourse appears to be incised into the peat.





Watercourse Crossing ID	WX05
Watercourse Crossing Details	<p>NGR: NH 48009 01596</p> <p>Status: New Temporary Track Crossing and New Permanent Crossing associated with proposed UGC.</p> <p>Watercourse Width: 8m</p> <p>Watercourse Depth: 1.5m</p> <p>Notes: Surveyed approximately 20m upstream of the crossing point. Incised in peat.</p>
Photograph Looking Upstream	 A photograph showing a wide, shallow watercourse flowing through a peat landscape. The water is dark and still, reflecting the overcast sky. The banks are covered in dense, brownish peat vegetation. In the distance, rolling hills are visible under a grey, overcast sky.
Photograph Looking Downstream	 A photograph showing a watercourse flowing through a peat landscape, viewed from a different angle than the upstream view. The water is dark and still, reflecting the overcast sky. The banks are covered in dense, brownish peat vegetation. In the foreground, there is a large, dark rock. The watercourse flows towards the right side of the frame.





Watercourse Crossing ID	WX06 to WX09
Watercourse Crossing Details	<p>NGR: NH 48435 01529</p> <p>Status: New Temporary Track Crossing, New Permanent Track Crossing and Two New Permanent Crossings associated with proposed UGC.</p> <p>Watercourse Width: 2.5m</p> <p>Watercourse Depth: 0.3m</p> <p>Notes: Incised in peat. Peat hags noted within channel.</p>
Photograph Looking Upstream	 A photograph showing a watercourse flowing through a peat bog landscape. The water is dark and narrow, winding through patches of brown peat hags. In the background, there are rolling hills under a cloudy sky. A tall, thin pole is visible in the distance.
Photograph Looking Downstream	 A photograph showing a watercourse flowing through a peat bog landscape, viewed from a different angle than the upstream view. The water is dark and narrow, winding through patches of brown peat hags. In the background, there are rolling hills under a cloudy sky. A tall, thin pole is visible in the distance.





Watercourse Crossing ID	WX10
Watercourse Crossing Details	NGR: NH 48685 01288 Status: New Permanent Track Crossing Watercourse Width: 0.5m Watercourse Depth: 0.2m Notes: Minor watercourse incised in peat and peaty soils.
Photograph Looking Upstream	 A photograph showing a narrow, shallow watercourse flowing through a peat bog landscape. The water is dark and still. The surrounding vegetation is brown and peaty. A red surveying pole is visible in the foreground, extending into the water.
Photograph Looking Downstream	 A photograph showing a wider view of the watercourse flowing through a peat bog landscape. The water is dark and still. The surrounding vegetation is brown and peaty. A red surveying pole is visible in the foreground, extending into the water.





Watercourse Crossing ID	WX11
Watercourse Crossing Details	NGR: NH 48953 01018 Status: New Permanent Track Crossing Watercourse Width: 1.5m Watercourse Depth: 0.3m Notes: Boulders and cobbles noted within the channel bed.
Photograph Looking Upstream	 A photograph showing a narrow, shallow watercourse flowing through a landscape of brown, scrubby vegetation. The water is dark and appears to be moving over a rocky or pebbly bed. The sky is overcast and grey.
Photograph Looking Downstream	 A photograph showing the same watercourse from a downstream perspective. The water is flowing away from the viewer through the same scrubby landscape. The terrain appears to be a gentle slope.





Watercourse Crossing ID	WX12
Watercourse Crossing Details	<p>NGR: NH 49118 00857</p> <p>Status: New Permanent Track Crossing</p> <p>Watercourse Width: 4m</p> <p>Watercourse Depth: 1.2m</p> <p>Notes: Watercourse incised in peat with large boulders noted within the channel.</p>
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX13
Watercourse Crossing Details	<p>NGR: NN 50147 99827 Status: New Temporary Track Crossing Watercourse Width: 2m Watercourse Depth: 0.2m Notes: Incised in bedrock with cobbles and boulders noted within the channel.</p>
Photograph Looking Upstream	 A photograph showing a narrow, rocky watercourse flowing through a grassy field. The water is dark and reflects the sky. The banks are covered in tall, dry grass and scattered rocks. A red surveying pole is visible on the right bank, extending into the water.
Photograph Looking Downstream	 A photograph showing a rocky watercourse flowing through a grassy field, viewed from a downstream perspective. The water is dark and reflects the sky. The banks are covered in tall, dry grass and scattered rocks. A red surveying pole is visible on the left bank, extending into the water.




Watercourse Crossing ID	WX14
Watercourse Crossing Details	NGR: NN 50580 98856 Status: New Permanent Track Crossing Watercourse Width: 5 to 6m Watercourse Depth: 0.2m Notes: Rock bed.
Photograph Looking Upstream	 A photograph showing a rocky watercourse crossing in a rural landscape. The water is shallow and flows over a bed of large, reddish-brown rocks. A red surveying pole is positioned in the water, likely for measurement. The surrounding area is covered in grass and low-lying vegetation, with hills in the background under a cloudy sky.
Photograph Looking Downstream	 A photograph showing a rocky watercourse crossing from a downstream perspective. The water flows over a bed of large, reddish-brown rocks. The surrounding area is covered in grass and low-lying vegetation, with hills in the background under a cloudy sky.





Watercourse Crossing ID	WX15
Watercourse Crossing Details	NGR: NN 51130 98064 Status: New Temporary Track Crossing Watercourse Width: 1m Watercourse Depth: 0.2m Notes: Minor watercourses with reeds and peaty soils.
Photograph Looking Upstream	
Photograph Looking Downstream	



Watercourse Crossing ID	WX16
Watercourse Crossing Details	NGR: NN 51124 97543 Status: New Temporary Track Crossing Watercourse Width: 0.6m Watercourse Depth: 0.2m Notes: Minor watercourse with reeds and peaty soils.
Photograph Looking Upstream	 A landscape photograph showing a valley with a watercourse. The terrain is covered in dense, tall grasses and reeds, typical of peaty soils. In the background, there are rolling hills under a clear sky. A red survey pole is visible in the middle ground, marking a point along the watercourse.
Photograph Looking Downstream	 A landscape photograph showing a valley with a watercourse, viewed from a different angle than the upstream view. The terrain is covered in dense, tall grasses and reeds. A red survey pole is visible in the middle ground, marking a point along the watercourse. The background shows rolling hills.



Watercourse Crossing ID	WX17
Watercourse Crossing Details	<p>NGR: NN 51119 97337</p> <p>Status: New Permanent Track Crossing</p> <p>Watercourse Width: N/A</p> <p>Watercourse Depth: N/A</p> <p>Notes: No visible watercourse noted during survey. Wider channel is between 1.5 to 2m wide and 0.3m high with peaty soils and reeds.</p>
Photograph Looking Upstream	 <p>A landscape photograph showing a valley with a red survey pole in the foreground. The terrain is covered in dense, brownish vegetation, likely reeds or peaty soils. The background shows rolling hills under a clear sky.</p>
Photograph Looking Downstream	 <p>A landscape photograph showing a field with a red survey pole in the foreground. The field is covered in tall, golden-brown grasses. In the background, there is a line of trees and rolling hills under a cloudy sky.</p>





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