



Wylfa Newydd Project

8.6 Wylfa Newydd Code of Construction Practice

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Contents

Executive Summary.....	1
1 Introduction	1
1.1 General	1
1.2 Responsibilities	2
1.3 CoCP structure	2
2 Approach to environmental management.....	4
2.1 Introduction	4
2.2 Environmental Impact Assessment	4
<i>Mitigation</i>	4
2.3 Code of Construction Practice	7
2.4 Construction Environmental Management Plans	8
2.5 Environmental management system	8
2.6 Enforcement.....	9
3 Communications and community/stakeholder liaison management strategy .	10
3.1 General	10
3.2 Wylfa Newydd engagement framework.....	10
<i>Engagement Groups</i>	10
<i>Community Liaison Group</i>	10
<i>Other communication matters</i>	11
3.3 Enquiries and complaints.....	12
3.4 Community safety management.....	12
<i>Community Safety Management Scheme</i>	12
<i>Safeguarding</i>	13
4 General site management strategy	15
4.1 General	15
4.2 Working hours.....	15
4.3 Site layout	15
4.4 Site lighting	16
4.5 On-site communications	17
4.6 Security	17
<i>General</i>	17
<i>Protest management – principles</i>	18
<i>Protest Management Scheme</i>	19
4.7 Environmental emergency management strategy.....	19
<i>Preparation for environmental incidents/emergencies</i>	20
<i>Emergency/incident recording</i>	21
4.8 Fire prevention and control	22
4.9 Construction worker conduct	22
5 Traffic and transport management strategy.....	23
5.1 General	23
5.2 Logistics Centre	23
5.3 Park and Ride and associated shuttle buses	24
<i>Parking Phasing Scheme</i>	25

5.4	Abnormal Indivisible Loads (AIL)	25
	<i>Abnormal Indivisible Loads Management Scheme</i>	26
	<i>HGV and AIL routes</i>	26
5.5	Temporary Traffic Management procedures	26
5.6	Information packs and training inductions	27
5.7	Car-sharing	27
5.8	Freight movement	28
	<i>Delivery Management System</i>	30
	<i>Exceptional circumstances</i>	30
5.9	Traffic incident management	31
	<i>Traffic Incident Management Scheme</i>	31
5.10	Monitoring measures	32
	<i>Worker travel</i>	32
5.11	Construction Traffic	36
5.12	Enforcement	36
6	Public access management strategy	38
6.1	General	38
6.2	Works on a Public Right of Way	38
6.3	Public Right of Way reinstatement	39
6.4	Maintenance of access arrangements	39
7	Air quality management strategy	41
7.1	General	41
7.2	Vehicle and plant emissions	41
7.3	Dust and air quality control measures	42
7.4	Dust and air quality monitoring	44
7.5	Dust and air quality thresholds	45
8	Noise and vibration management strategy	46
8.1	General	46
8.2	Section 61 applications	49
	<i>General procedure for Section 61 applications</i>	49
8.3	Local Noise Mitigation Strategy	50
	<i>Interpretation</i>	51
	<i>Applicability</i>	52
	<i>Eligibility (noise due to construction activities within the WNDA)</i>	52
	<i>Eligibility (noise relating to traffic)</i>	53
	<i>Sensitive receptors</i>	57
	<i>Implementation and operation of the LNMS</i>	57
8.4	Noise and vibration monitoring	59
9	Waste and materials management strategy, including soils and land contamination	60
9.1	General	60
9.2	Materials management	61
9.3	Site waste management	62
	<i>Waste controls on all sites</i>	63
	<i>Waste duty of care</i>	64
9.4	Land contamination management	64

9.5	Soils	65
10	Water management strategy	67
10.1	General	67
10.2	Protection of watercourses	67
10.3	Site drainage	68
10.4	Control of pollution	69
	<i>Surface water</i>	69
	<i>Groundwater</i>	70
10.5	Flooding	70
10.6	Monitoring	71
11	Ecology and landscape management strategy	72
11.1	General	72
11.2	Receptor-specific requirements	73
	<i>Bats</i>	74
	<i>Otters</i>	74
	<i>Water vole</i>	75
	<i>Red squirrel</i>	75
	<i>Notable mammals</i>	75
	<i>Hedgehog</i>	76
	<i>Marine mammals</i>	76
	<i>Breeding birds</i>	76
	<i>Schedule 1 bird species</i>	76
	<i>Reptiles and amphibians</i>	77
	<i>Fish</i>	78
	<i>Invertebrates</i>	78
	<i>Invasive non-native plant species</i>	78
	<i>Protection of existing trees, scrub and hedgerows</i>	80
	<i>Protection of other retained landscape features</i>	80
11.3	Landscaping requirements	80
11.4	Landscape reinstatement	81
11.5	Record keeping	81
12	Cultural heritage management strategy	82
12.1	General	82
12.2	Archaeological remains	82
12.3	Historic buildings	82
12.4	The historic landscape	83
13	References	84

List of Tables

Table 5-1 HGV delivery windows	24
Table 7-1 Non-real-time triggers for dust control based on monthly dust deposition rates (human receptors)	45
Table 8-1 Required contents of Section 61 applications.....	49
Table 8-2 Definitions.....	51
Table 8-3 Construction noise eligibility criteria, dB L _{Aeq,T} facade incident	53
Table 14-1 Schedule of references	84

List of Figures

Figure 2-1 Approach to environmental management on the Wylfa Newydd DCO Project	5
Figure 8-1 LNMS Construction Boundary Plan	55
Figure 8-2 LNMS Construction Boundary Plan	56
Figure 8-3 Operation of the LNMS – schematic flowchart	58
Figure 9-1 Horizon’s Waste Hierarchy	60

Executive Summary

The Wylfa Newydd Code of Construction Practice (CoCP), together with location-specific sub-CoCPs, sets out how construction activities will be managed and controlled in order to deliver the mitigation commitments arising from the Wylfa Newydd DCO Project. Sub-CoCPs are provided for the Main Power Station Site, Marine Works, Off-Site Power Station Facilities, the Logistics Centre, the Park and Ride and the A5025 Off-line Highway Improvements. These sub-CoCPs set out specific controls relevant to those locations which are not adequately covered under the Wylfa Newydd CoCP.

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1 Introduction

1.1 General

- 1.1.1 This Wylfa Newydd CoCP, together with the associated location-specific sub-CoCPs, sets out general and topic-specific environmental requirements, standards and measures described in the Environmental Statement¹ as well as requirements identified through the other assessment processes undertaken for the Wylfa Newydd DCO Project, such as the Welsh Language Impact Assessment [APP-432] and [APP-433]; Health Impact Assessment Report [APP-429]; Shadow Habitats Regulations Assessment Report [APP-050 and APP-051]; Water Framework Directive Compliance Assessment [APP-444]; and Equality Impact Assessment [APP-434]. The series of controls within this Wylfa Newydd CoCP and the sub-CoCPs serve to demonstrate the effective planning, management and control of all construction activities (and, in the case of temporary Associated Development, the decommissioning) associated with the Wylfa Newydd DCO Project.
- 1.1.2 This Wylfa Newydd CoCP and accompanying sub-CoCPs form part of the application for a Development Consent Order (DCO) for the Wylfa Newydd DCO Project. These documents are secured through the DCO Requirements in the Wylfa Newydd (Nuclear Generating Station) Order ("Order").
- 1.1.3 This Wylfa Newydd CoCP and the sub-CoCPs support the planning and delivery of the Wylfa Newydd DCO Project in as sustainable, efficient and cost-effective a manner as possible.
- 1.1.4 Horizon Nuclear Power Wylfa Ltd, places safety, health and security as top priorities and central to the Wylfa Newydd DCO Project. The construction of the Wylfa Newydd DCO Project is planned to maintain those priorities across the safety and well-being of all employees, the natural and historical environment, stakeholders and the public in general.
- 1.1.5 For the purposes of this Wylfa Newydd CoCP and the sub-CoCPs, the term 'Horizon' refers to Horizon Nuclear Power Wylfa Ltd (or any other undertaker to whom the benefit of the Order is transferred to under Article 9 of the Order), its appointed representatives and the appointed construction contractors.
- 1.1.6 Where this Wylfa Newydd CoCP and the sub-CoCPs refer to Horizon application documents, the Examination Library reference has been provided. External documentation available in the public domain is referenced in the References section at the back of this Wylfa Newydd CoCP or sub-CoCPs. Those documents that are 'certified documents' pursuant to Article 76 of the Order and listed in Schedule 18 of the Order are not provided a reference for the purposes of this Wylfa Newydd CoCP and the sub-CoCPs.

¹ Any reference to the Environmental Statement in this Wylfa Newydd CoCP and sub-CoCPs, includes reference to the Environmental Statement Addendum (both certified documents listed in Schedule 18 of the Order).

1.2 Responsibilities

- 1.2.1 Horizon is the company responsible for the delivery of the Wylfa Newydd DCO Project, in whom the powers of the Order would be vested. It is responsible for all of the works, which include overseeing and assuring the activities carried out by their contractors, and the co-ordination between contractors. Horizon will appoint representatives that will procure and project-manage the supply chain of the Wylfa Newydd DCO Project. Those appointed representatives are suitably skilled and resourced to perform those duties on behalf of Horizon.
- 1.2.2 The appointed construction contractors will be contractually required to deliver the construction works in accordance with the terms of all the DCO Requirements, including this Wylfa Newydd CoCP and relevant sub-CoCPs. Any contractor will be responsible for demonstrating compliance through appropriate monitoring and audit controls recorded as part of their Construction Environmental Management Plan (CEMP) to meet Horizon's oversight and assurance requirements. All Wylfa Newydd DCO Project contractors and sub-contractors will be required to adhere to these requirements. Refer to section 2.4 for further detail.

1.3 CoCP structure

- 1.3.1 The Wylfa Newydd DCO Project covers a number of discrete locations, however, this overarching Wylfa Newydd CoCP sets out the project-wide controls applicable to the following aspects of the Wylfa Newydd DCO Project at all sites in the Order Limits:
- communications and community and stakeholder liaison;
 - general site management;
 - traffic and transport;
 - public access;
 - air quality;
 - noise and vibration;
 - waste and materials management (including soils and land contamination);
 - water;
 - ecology and landscape; and
 - cultural heritage.
- 1.3.2 Sub-CoCPs are provided for each location and provide additional controls relevant specifically to that location. The sub-CoCPs that underpin this Wylfa Newydd CoCP are the:
- Main Power Station Site sub-CoCP;
 - Marine Works sub-CoCP;
 - Off-Site Power Station Facilities sub-CoCP;
 - Park and Ride sub-CoCP;
 - Logistics Centre sub-CoCP; and

- A5025 Off-line Highway Improvements sub-CoCP.
- 1.3.3 The requirements for the decommissioning of temporary Associated Development (the Logistics Centre, the Park and Ride and the Site Campus on the Wylfa Newydd Development Area (WNDA)) are covered in the relevant sub-CoCPs.
- 1.3.4 The construction of the Wylfa Newydd DCO Project will be carried out in accordance with this Wylfa Newydd CoCP and the relevant sub-CoCPs. In the event of a conflict between the Wylfa Newydd CoCP and a sub-CoCP, the controls set out in the sub-CoCP will prevail.

2 Approach to environmental management

2.1 Introduction

- 2.1.1 Figure 2-1 outlines the overall approach to environmental management across the Wylfa Newydd DCO Project. The following sections provide further detail to the various elements of the approach.

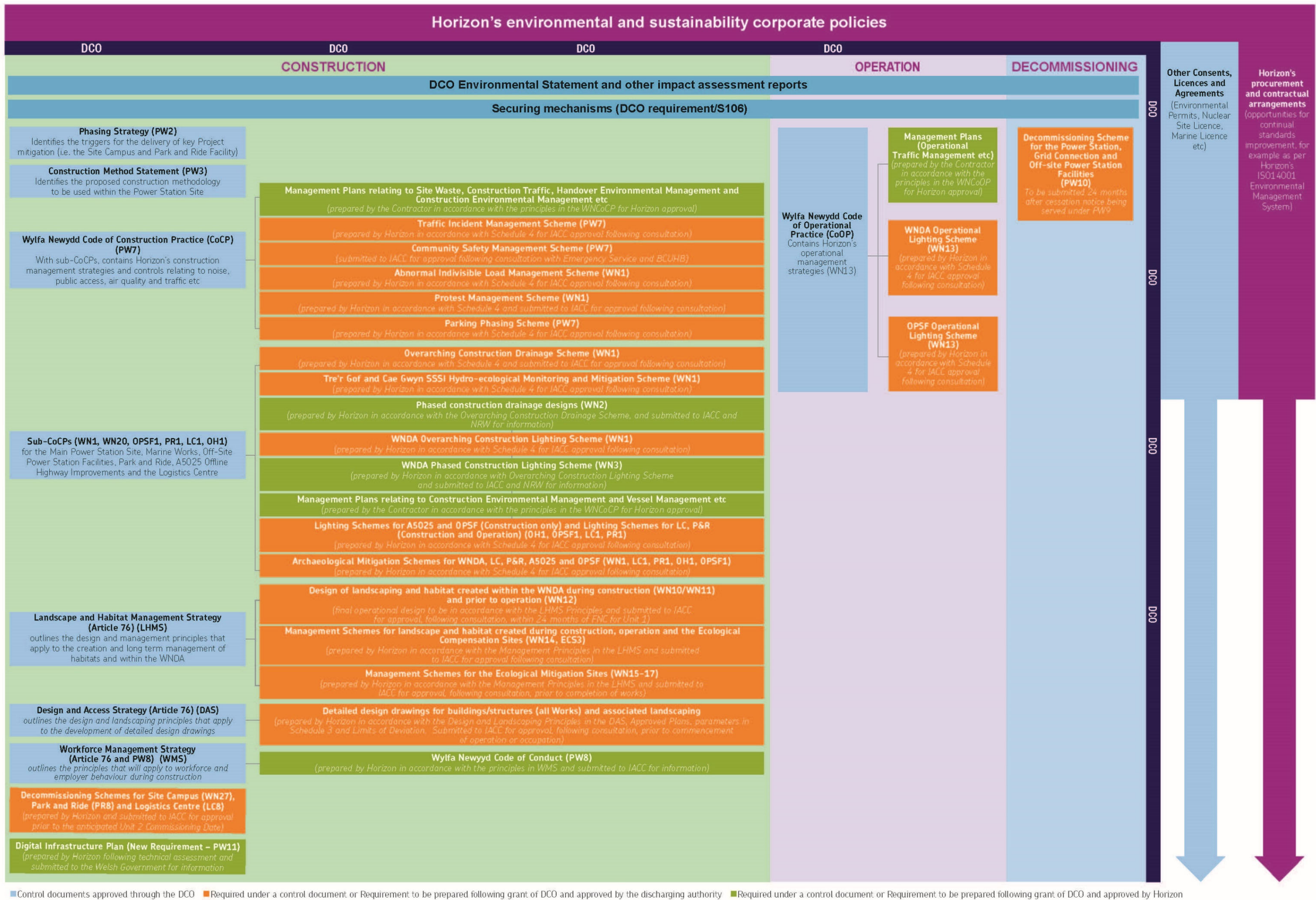
2.2 Environmental Impact Assessment

- 2.2.1 This Wylfa Newydd CoCP has been informed by the Environmental Impact Assessment (EIA) undertaken for the Wylfa Newydd DCO Project and the Environmental Statement prepared in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009 (as amended) and the Marine Works (Environmental Impact Assessment) Regulations 2007, as well as the other 'stand-alone' assessments (such as Welsh Language Impact Assessment [APP-432] and [APP-433], Health Impact Assessment Report [APP-429], Shadow Habitats Regulations Assessment [APP-050] and [APP-051], Water Framework Directive Compliance Assessment [APP-444] (as updated) and Equality Impact Assessment [APP-434] carried out as part of the planning of the Wylfa Newydd DCO Project.

Mitigation

- 2.2.2 The term 'mitigation' describes committed measures used to prevent or reduce adverse environmental effects.
- 2.2.3 Three types of mitigation were considered in the EIA undertaken for the Wylfa Newydd DCO Project as follows:
- 'Embedded mitigation' includes all those measures to avoid or reduce environmental effects that are directly incorporated into the design of the development.
 - 'Good practice mitigation' contains measures that would occur with or without input from EIA feeding into the design process (for example, mitigation that represents established industry practice or would be undertaken to meet existing legal compliance).
 - 'Additional mitigation' measures are measures that have been identified through the EIA or other assessment processes to further reduce environmental effects.

Figure 2-1 Approach to environmental management on the Wylfa Newydd DCO Project



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- 2.2.4 The approach in paragraph 2.2.3 accords with the Institute of Environmental Management and Assessment guidance [RD1], which describes ‘primary’ (embedded) mitigation, ‘secondary’ (additional) mitigation and ‘tertiary’ (good practice) mitigation.
- 2.2.5 Embedded mitigation integral to the Wylfa Newydd DCO Project is secured within the project design information contained within certified ‘control’ documents, such as the Design and Access Statement, Phasing Strategy, and the Landscape and Habitat Management Strategy, as displayed on figure 2-1.
- 2.2.6 Good practice and additional mitigation relevant to construction activities that make up the management strategies contained within this overarching Wylfa Newydd CoCP (if project-wide), or the relevant sub-CoCP (in relation to specific locations), shown alongside the project design information in figure 2-1.
- 2.2.7 Some mitigation measures for the Wylfa Newydd DCO Project have been derived from good practice guidance and industry standards, or will be secured through separate UK legislation.
- 2.2.8 Horizon’s commitment to follow such guidance has been secured throughout this Wylfa Newydd CoCP and the sub-CoCPs, for example by citing a British Standard (see paragraph 8.1.6). Referencing best practice guidance and industry standards keeps this Wylfa Newydd CoCP and the sub-CoCPs concise, avoids wholesale duplication of publicly available information, and avoids the commitments that might otherwise be made in this Wylfa Newydd CoCP and the sub-CoCPs from becoming out of date as guidance is updated.
- 2.2.9 Similarly, where separate UK legislation and consents, permits and licences under such legislation will govern specific controls and mitigation measures, those measures have not been duplicated within this Wylfa Newydd CoCP and the sub-CoCPs, for example a European Protected Species Mitigation Licence (EPSML) as set out in paragraphs 11.1.7 and 11.1.8.

2.3 Code of Construction Practice

- 2.3.1 This Wylfa Newydd CoCP and the sub-CoCPs describe Horizon’s commitment to mitigating construction-related environmental effects, demonstrating that Horizon will control the potential impacts of the Wylfa Newydd DCO Project on people, businesses and the natural and historical environment.
- 2.3.2 The content of this Wylfa Newydd CoCP and the sub-CoCPs has been prepared with cognisance of Pre-Application Consultation with stakeholders and the local community, as well as ongoing focus groups with key stakeholders such as the Isle of Anglesey County Council (IACC) and Natural Resources Wales (NRW) during the development of the Wylfa Newydd DCO Project and the associated assessment processes including the EIA.
- 2.3.3 The ‘management strategies’ in this Wylfa Newydd CoCP and the sub-CoCPs secure the necessary mitigation described in the Environmental Statement and other impact assessments. Where the specific details of the proposed mitigation is yet to be determined, Horizon has committed to ‘schemes’, secured under a Requirement in the Order to be approved by an appropriate authority (for example the IACC), and where relevant in consultation with other stakeholders. ‘Schemes’ will be developed in accordance with the

Requirements in Schedule 3 and Schedule 4 of the Order and relevant principles set out in certified documents. Where 'schemes' relate to principles set out in this Wylfa Newydd CoCP or relevant sub-CoCPs, reference is made to the name of the scheme and the Order.

- 2.3.4 This Wylfa Newydd CoCP and sub-CoCPs are secured as certified control documents as described in section 2.6.
- 2.3.5 Subsequent proposed revisions to this Wylfa Newydd CoCP or sub-CoCPs would be submitted to and approved by the relevant discharging authority. Upon approval of a revision by the relevant discharging authority, the construction of the authorised development must be carried out in accordance with the revised Wylfa Newydd CoCP or revised sub-CoCPs.

2.4 Construction Environmental Management Plans

- 2.4.1 This Wylfa Newydd CoCP and the sub-CoCPs set standards and measures that will manage and control the adverse environmental effects of construction.
- 2.4.2 The CEMP is a delivery document that details how the practical execution of the construction works will be planned, managed and controlled to meet the requirements of this Wylfa Newydd CoCP and relevant sub-CoCPs, other necessary consents, legislation and common good practices.
- 2.4.3 The appointed construction contractors will be contractually required to prepare a CEMP to cover their works in accordance with this Wylfa Newydd CoCP and relevant sub-CoCPs. The contractual requirement set out by Horizon Nuclear Power Wylfa Ltd is therefore one of the mechanisms that will secure the mitigation requirements set out in the Environmental Statement and other related impact assessments where the works are to be undertaken by a third party.
- 2.4.4 CEMPs will be reviewed and accepted by Horizon Nuclear Power Wylfa Ltd before the commencement of activities relevant to the construction works the CEMP covers.
- 2.4.5 CEMPs will be updated as and when required, but as a minimum, CEMPs will be reviewed every six months to ensure the mitigation measures used reflect the changing needs of the works during construction and, for example, any relevant updates to industry guidance or legislation.

2.5 Environmental management system

- 2.5.1 Horizon has developed and will construct the Wylfa Newydd DCO Project under environmental management systems accredited to British Standard (BS) EN ISO 14001 [RD2].
- 2.5.2 Horizon will be compliant with, and maintain, ISO 14001 accreditation throughout the construction phase of the Wylfa Newydd DCO Project. Accreditation will be periodically audited by accredited external bodies in line with ISO 14001 procedures.

2.6 Enforcement

- 2.6.1 This Wylfa Newydd CoCP is a certified document and is approved under article 76 of the Order.
- 2.6.2 The Requirements in Schedule 3 of the Order state that the construction of the Wylfa Newydd DCO Project, as described in Schedule 1 of the Order, must be carried out in accordance with this Wylfa Newydd CoCP and the relevant sub-CoCP applying to a specific site, unless otherwise agreed by the IACC as the relevant planning authority. The inclusion of *unless otherwise agreed by the IACC* enables Horizon scope to propose revisions to these documents, provided the IACC is satisfied that the proposed revision is unlikely to give rise to any materially new or materially different environmental effects from those assessed in the Environmental Statement. Where a revision is approved, construction of the Wylfa Newydd DCO Project must then be carried out in accordance with the revised Wylfa Newydd CoCP or relevant sub-CoCP.
- 2.6.3 In the event of conflict between the Wylfa Newydd CoCP and any sub-CoCP, the DCO Requirements are clear that the relevant sub-CoCP will prevail. This is reiterated in each of the site-specific requirements relating to sub-CoCPs in Schedule 3 of the Order.
- 2.6.4 As Work No.s 3 (Site Campus), 6 (Park and Ride) and 7 (Logistics Centre), described in Schedule 1 of the Order, will be operational during construction of the Power Station, the controls and measures relating to the operation of these facilities are included within the Wylfa Newydd CoCP and relevant location-specific sub-CoCPs, which must be complied with during the operation of those facilities.

3 Communications and community/stakeholder liaison management strategy

3.1 General

- 3.1.1 Horizon's communications and community/stakeholder liaison management is based on the requirements set out in this Wylfa Newydd CoCP, relevant sub-CoCPs and the DCO s.106 agreement.
- 3.1.2 Any site-specific mitigation requirements to be implemented for communications and community/stakeholder liaison are described in section 3 of the relevant sub-CoCPs.

3.2 Wylfa Newydd engagement framework

Engagement Groups

- 3.2.1 The purpose, role and membership of the Engagement Groups is set out in the relevant Schedules in the DCO s.106 agreement.
- 3.2.2 Horizon will, via its role on the Engagement Groups, provide relevant information to the Community Liaison Group (CLG).

Community Liaison Group

- 3.2.3 Horizon will co-ordinate a series of regular communication meetings with key stakeholders and local communities.
- 3.2.4 A CLG will consist of a group of local residents from the immediate local communities, businesses and representatives of local groups. The purpose of the CLG is to exchange information and enable dialogue between Horizon and the local community during construction.
- 3.2.5 Horizon's expectation is that CLG meetings will be held locally on a monthly basis until at least First Nuclear Concrete is achieved in the construction programme. However, after the first six months, and every six months thereafter, the CLG meeting frequency will be reviewed as required. Each CLG will be chaired by an independent facilitator. A Horizon representative will be present. Representatives of the IACC will be invited where appropriate, dependent on the issues arising and agenda items to be addressed. CLG meetings will be bilingual in Welsh and English.
- 3.2.6 The criteria for CLG membership will include:
- the ability to demonstrate strong links with the local community;
 - willingness and ability to represent a range of interests and Wylfa Newydd DCO Project issues;
 - availability to attend quarterly evening meetings; and
 - support for a collaborative and partnership approach to issues resolution.

- 3.2.7 The CLG will focus on issues specifically associated with construction effects and progress of the Wylfa Newydd DCO Project. The objectives of the CLG, to be developed with the group, will be set around:
- establishing relationships between Horizon and key stakeholders and the wider community;
 - providing a conduit for the dissemination of information to, and input from, community members and other key stakeholders;
 - identifying and commenting on concerns raised by the community during construction, with suggested action that could be undertaken to alleviate these concerns; and
 - discussion of construction issues and suggestions for mitigating the local construction effects.
- 3.2.8 Horizon will provide information packs to nearby residents which will include information on (where appropriate):
- the potential for short-term peaks in air pollution concentrations;
 - the potential for dust concentrations;
 - anticipated noise and construction activities;
 - any mitigation that will be put in place to manage these peaks and concentrations (if practical); and
 - details of the Community Involvement Officers and avenues to register any complaints.

Other communication matters

- 3.2.9 Horizon will notify occupiers of nearby properties in advance of works taking place that will potentially affect them. Information will include a description of the works to be carried out, expected duration and level of disruption, an explanation of the measures being implemented to mitigate adverse effects of the works and information regarding Horizon's complaints procedure and contact details (see section 3.3). Community information sheets will be bilingual and circulated (as well as posted online) regularly, including at least two weeks before construction activities that may affect nearby properties start.
- 3.2.10 Horizon will display the name and contact details of the person(s) accountable for construction works on the site boundary. This may be the environment manager/engineer or the site manager. Horizon will also display the head or regional office contact information on the site boundary.
- 3.2.11 All notifications will be bilingual in Welsh and English, and accompanied with a contact name, telephone number and address to which enquiries should be directed (see section 3.3). Stakeholders will be kept informed of progress throughout the construction phase of the Wylfa Newydd DCO Project. Updates will also be provided on the Wylfa Newydd DCO Project website. The Wylfa Newydd DCO Project website will also contain more information about the Wylfa Newydd engagement framework including details of membership each Engagement Group, which will be updated regularly.

- 3.2.12 All matters related to construction activities will follow a standardised communications protocol across the Wylfa Newydd DCO Project. In accordance with Schedule 13 of the DCO s.106 agreement, Community Involvement Officers will be appointed by agreement between Horizon and the IACC.
- 3.2.13 Horizon will identify and further consult with groups who represent people with characteristics protected under the Equality Act 2010 in order to determine whether there are any additional issues which may require reasonable adjustments to be made.
- 3.2.14 Horizon's extensive commitments to Welsh Language are secured in the DCO s.106 agreement.

3.3 Enquiries and complaints

- 3.3.1 Horizon will establish a dedicated and free telephone hotline to be available for anyone with concerns about the construction programme or Wylfa Newydd DCO Project. It will deal with enquiries or complaints from the public, the IACC or other key stakeholders and ensure appropriate action is taken in response to concerns or questions arising from construction arrangements or consented plans.
- 3.3.2 The system will be staffed by bilingual personnel. The system will be widely advertised by appropriate means, particularly on construction site boundaries across the Wylfa Newydd DCO Project. The system will be held to set response times and key performance indicators to enable the efficiency or effectiveness of the helpline to be monitored or measured.
- 3.3.3 The system will ensure that appropriate action is taken in response to any non-compliance with approved plans or construction arrangements, or in the event of physical damage, in accordance with an enforcement protocol.
- 3.3.4 A complaints register will be maintained by Horizon. All calls will be logged and mapped, together with a record of the responses and action taken. Mapping will be used to record where key concerns are raised by individuals, local communities or other stakeholders. The complaints register will be made available to the IACC upon request.
- 3.3.5 Horizon will deal with minor construction-related, residential, business or agricultural claims up to a pre-determined value on a case-by-case basis. The administration of the claims procedure will be standard across the Wylfa Newydd DCO Project.

3.4 Community safety management

- 3.4.1 This section sets out Horizon's approach to the management and communication of matters relating to community safety management, and to ensure that members of the public are properly informed and prepared in advance about what to do in the event of an incident or emergency.

Community Safety Management Scheme

- 3.4.2 Prior to the commencement of the authorised development, except for Work No.12, Horizon will prepare and submit for approval a Community Safety

Management Scheme (CSMS) in accordance with the Requirements in Schedule 3 and Schedule 4 of the Order. The CSMS will be prepared in accordance with the principles set out in section 3.4 of this Wylfa Newydd CoCP. The approved CSMS (or any approved variations) will be implemented for the duration of the construction period.

- 3.4.3 Horizon, as set out in the DCO s.106 agreement, will continue to collaborate with Emergency Services Engagement Group for the duration of the construction period.
- 3.4.4 The CSMS will set out how Horizon will monitor and manage the effects of the Wylfa Newydd DCO Project on community safety management (including aspects of safeguarding) and the resulting effect on emergency services, including in relation to resourcing. The CSMS will establish a framework for developing measures and communication routes in collaboration and consultation with relevant bodies and organisations.
- 3.4.5 The CSMS will address the following issues:
- geographical scope;
 - ways of working;
 - contingency response arrangements;
 - service planning;
 - resourcing; and
 - safeguarding.
- 3.4.6 The CSMS will set out how Horizon will work with the Emergency Services Engagement Group to monitor potential effects arising from the Wylfa Newydd DCO Project as it relates to community safety. This will include monitoring against community safety indicators, including data on anti-social behaviour and crime.
- 3.4.7 The Emergency Services Engagement Group will work closely with representatives of the emergency services to ensure that effective communications are maintained and that appropriate resources are available on a day-to-day basis throughout the construction period. The Emergency Services Engagement Group will identify preparation measures in the event of an emergency situation at the Power Station. The group will also advise on the establishment of procedures to ensure that requisite training is provided to construction personnel and that a Code of Conduct (refer to section 4.9) is adhered to in consultation with relevant bodies.

Safeguarding

- 3.4.8 Horizon will take reasonable steps to safeguard the welfare of its employees and those acting on behalf of the company. Where it is appropriate, Horizon will take reasonable steps to safeguard the welfare of the general public, such as the steps described in this paragraph. Prior to and throughout the construction of the Wylfa Newydd DCO Project, appropriate dialogue will be maintained between Horizon, the supply chain and local safeguarding agencies, including North Wales Police. Discussions will include any individual or coordinated measures appropriate to avoiding risks to vulnerable groups, for example in relation to human trafficking and direct or indirect sex work.

Safeguarding protocols will be prepared by Horizon in consultation with North Wales Police and the IACC, and reviewed annually. An appropriate number of Horizon and supply chain staff will be trained in safeguarding issues so that, for example, security staff who conduct site and/or vehicle inspections will be aware of signs of illegal activity such as human trafficking.

4 General site management strategy

4.1 General

- 4.1.1 Horizon's site management strategy is based on the requirements set out in this Wylfa Newydd CoCP and relevant sub-CoCPs.
- 4.1.2 Any site-specific mitigation requirements to be implemented for site management are described in section 4 of the relevant sub-CoCPs.
- 4.1.3 Horizon's Environmental Management Team will be employed appropriate to the site activities of the Wylfa Newydd DCO Project. During construction, the Environmental Management Team will ensure that the procedures and controls in this CoCP and sub-CoCPs are followed. The Environmental Management Team will be made up of a range of technical specialists (which will include the Ecological Clerk of Works (ECoW) and equivalent suitably qualified and experienced persons) appropriate to the ongoing work activities. The Environmental Management Team will report any environmental issues to the Site Director. The Site Director will have the power to halt relevant works activities or intervene where there is a reasonable likelihood of a breach of Requirements or legislation. Where there is a high and imminent risk of a breach, halting of relevant works activities (or intervention as appropriate) will occur immediately after such works have been made safe. Such events will be communicated in a timely manner to the IACC's Environmental Officer (as appointed pursuant to the DCO s.106 agreement).
- 4.1.4 Horizon will require its construction workers to register with, and prioritise the use of the on-site medical and healthcare services rather than using the community National Health Service services.
- 4.1.5 Horizon will comply with all relevant legislation to protect health and to eliminate work-related ill-health. It will promote measures for the protection of health and the maintenance of a healthy workforce, and where appropriate, will align with health promotion initiatives run by Welsh Government, Betsi Cadwaladr University Health Board, Public Health Wales or the voluntary sector.

4.2 Working hours

- 4.2.1 Activities at the worksites across the Wylfa Newydd DCO Project will be varied. Required working hours and shift patterns for the various parts of the Wylfa Newydd DCO Project are set out in the relevant sub-CoCPs.

4.3 Site layout

- 4.3.1 Horizon has ensured (and will continue to ensure) that site layouts and appearance are designed according to the following requirements.
 - Noise-generating activities will be sited away from noise-sensitive receptors where practicable, or screened so as not to exceed agreed levels within the Section 61 consent (see section 8).

- Storage sites, temporary offices, fixed plant and machinery will be positioned to reduce as far as practicable the environmental impacts, having due regard to the constraints of each site.
- Internal vehicle routes will be arranged to reduce the risk of carrying mud out of the site.
- Information boards will be displayed at appropriate locations on the boundaries of the sites warning of the hazards on site as well as containing contact names, telephone numbers, addresses and a helpline number (see section 3).
- Horizon will promote and enforce 'good housekeeping' arrangements on all construction sites to ensure the sites remain clean, tidy and safe.
- Measures will be implemented to provide effective preventative pest and vermin control and prompt treatment of any pest and vermin infestation. Horizon will ensure that the risk of infestation by pests and vermin is managed to be as low as reasonably possible. Adequate arrangements will be made for disposing of food waste or other material attractive to vermin. If infestation occurs, Horizon will take action to eliminate the infestation and prevent further occurrence.
- Welfare facilities will be provided for the construction staff, appropriate to the type of site.
- Horizon will encourage sustainable water and energy consumption initiatives where practicable across all working methods.

4.4 Site lighting

- 4.4.1 The lighting designs will be developed to: reduce light spill onto sensitive receptors (including ecological receptors) to below thresholds where significant effects are predicted, where practicable; maintain a uniform lighting solution to reduce dark and light spots; and limit visibility of new lighting at distant receptors. Technologies used will enable variable lighting levels, dimming and switching off in different zones.
- 4.4.2 Site lighting management will be overseen by Horizon for each construction site according to the following controls and high level requirements.
- Site lighting will primarily be provided to ensure safe working conditions and to maintain security on all construction sites, while having regard to sensitive ecological receptors or occupied residential properties.
 - Lighting will be positioned and directed so as not to spill unnecessarily from construction sites.
 - Lighting will be switched off when not required to ensure safe working conditions and site security.
 - Construction site lighting will, as far as practicable, be designed to ensure that any artificial light emitted from a site does not prejudice health or create a nuisance, as required by the Environmental Protection Act 1990.

- To avoid sky glow, lighting will be kept at zero degrees tilt to keep the upward light ratio at 0%, where practicable.
 - Cows will be used if the tilt required on floodlights is greater than five degrees, where practicable.
 - Construction vehicle headlights will be dipped when approaching the site perimeter to limit light spill and glare beyond the site boundary.
- 4.4.3 Appropriate good practice lighting control measures will be identified, giving consideration to BS EN 12464-2:2014 [RD3] and *Guidance Notes for the Reduction of Obtrusive Light* GN01:2011[RD4].
- 4.4.4 Horizon will provide solar and blackout blinds or alternative mitigation in unforeseen cases of sleep disturbance in accordance with section 8.3 of this Wylfa Newydd CoCP.
- 4.4.5 As set out in the relevant sub-CoCPs, Horizon will prepare and submit for approval site-specific Construction Lighting Schemes in accordance with the Requirements in Schedule 3 and Schedule 4 of the Order.

4.5 On-site communications

- 4.5.1 A process of on-site communications, such as daily shift and activity briefings, will be used to advise the site workforce of health, safety, environmental and community matters. This will include information obtained from CLG meetings (see section 3.2), such as noise generation and access issues, together with constraints detailed in the contracts (e.g. working hours) and other documents, such as the Order, this Wylfa Newydd CoCP and the sub-CoCPs, regulating the Wylfa Newydd DCO Project.
- 4.5.2 Appropriate information will be addressed to all members of the workforce by way of an induction, including sub-contractors, before any person commences work.
- 4.5.3 Toolbox talks or other appropriate means will be employed to disseminate information to the workforce on a routine basis.

4.6 Security

General

- 4.6.1 Horizon will ensure that all construction sites are secure at all times, setting out security requirements including the following as a minimum.
- Perimeter fencing will be used as necessary for site security and public safety, located so that Public Rights of Way (PRoWs) are maintained or appropriately diverted.
 - Complete a site-specific security risk assessment and implementation of appropriate control measures to deter, detect and respond to security incidents including criminal acts and civil issues such as trespass.
 - Pedestrian and vehicle access points will be lit to the luminosity necessary to perform security tasks in accordance with Centre for the Protection of National Infrastructure guidelines for UK Critical National Infrastructure.

- Closed-circuit television (CCTV) incorporating infra-red lighting and alarm systems will be used where required, some of which may be mobile CCTV towers.
 - Vehicular and foot security patrols will be conducted at all sites 24 hours a day, seven days a week, 365 days a year.
 - Consult with crime prevention design advisors on Associated Development site security proposals.
 - Plant will be immobilised, and materials including equipment fuel storage containers securely stored.
 - Access to sites will be limited to specified entry points and all personnel entrances/exits will be recorded and monitored for security, health and safety purposes.
 - Horizon has a statutory duty to prevent unauthorised access to sites and will complete site-specific assessments of the security and trespass risk at each site and implement appropriate control measures.
 - The site boundary will be secured and constructed such that it limits opportunities for unauthorised entry.
 - Horizon will conduct regular security patrols of the site boundary on a 24-hour basis and should the site boundary suffer any damage, it will be immediately rectified.
- 4.6.2 Horizon will cooperate with relevant authorities with regard to site security matters, including the Office for Nuclear Regulation and the Civil Nuclear Constabulary.
- 4.6.3 Access to and from the WNDAs will be security monitored/controlled. Restrictions on private/personal transportation will be put in place and workers will be encouraged to utilise Wylfa Newydd DCO Project-sponsored transportation arrangements (i.e. Park and Ride and shuttle buses to Holyhead ferry port and local railway stations).

Protest management – principles

- 4.6.4 Horizon has clear principles regarding protests that might be associated with the authorised development.
- Horizon recognises the legal right of peaceful protest.
 - Horizon recognises that safety is paramount.
 - Horizon will endeavour to ensure that any peaceful protest conducted in the vicinity of its land and operations is conducted in a safe manner for both the protestors' and Horizon workforce's perspectives alike. This may include allocating an area of land on which the protest can take place.
 - Horizon will comply with any reasonable request from local authorities or North Wales Police to ensure the safety of the protestors and workforce.
 - If given advance notice of the peaceful protest Horizon may choose to require non-essential staff to work from home, suspend operations or may employ additional security guards for the duration.

- If a protest takes place in an unauthorised area and is causing delays/blocking access/not safe to essential ongoing work Horizon may choose to employ a specialist company approved in methods of protestor removal.
- Horizon will maintain clear procedures for dealing with trespassers.
- Horizon will inform North Wales Police and the IACC if Horizon becomes aware of, or had received intelligence in relation to, any proposed protest activities.

Protest Management Scheme

- 4.6.5 Prior to the commencement of the authorised development, except for Work No.12, Horizon will prepare and submit for approval a Protest Management Scheme in accordance with the Requirements in Schedule 3 and Schedule 4 of the Order. The Protest Management Scheme will be prepared in accordance with the principles set out in this section 4.6 of this Wylfa Newydd CoCP. The Protest Management Scheme approved pursuant to the DCO Requirements (or any approved variations) will be implemented for the duration of the construction period.

4.7 Environmental emergency management strategy

- 4.7.1 Horizon will conduct environmental emergency management in line with the measures detailed in this Wylfa Newydd CoCP and the relevant sub-CoCPs, as well as relevant health, safety and environmental legislation.
- 4.7.2 Horizon will manage emergency pollution control measures in keeping with Pollution Prevention Guidelines (PPGs) previously issued by the Environment Agency² (until replaced by corresponding guidance for pollution prevention) and NRW's *How to comply with your environmental permit* [RD5] including, at a minimum, the following measures.
- The amount of potentially polluting substances stored will be limited as much as practicable, stored in suitable and secure storage facilities (including the adequate bund capacity), and in line with relevant legislation (such as the Environmental Permitting (England and Wales) Regulations 2016 and the Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016).
 - Plant and equipment containing potentially polluting substances will be stored in areas with impermeable ground or hardstanding (in order of preference) and at least 15m away from a watercourse, drainage feature, ditch or other pathway.
 - All fuel storage will be within engineered containment facilities including suitably bunded tanks.

² Although the Environment Agency withdrew their collection of PPGs in 2015, they remain a source of information on good industry practice, and Horizon considers them relevant to the control of construction activities on the Wylfa Newydd DCO Project until they are replaced by Guidance for Pollution Prevention (GPPs).

- Chemicals will be stored and transferred in appropriate chemical storage facilities with the correct segregation of chemicals according to the requirements of the Control of Substances Hazardous to Health Regulations 2002.
 - All plant and equipment will be maintained in line with manufacturer's instructions and checked before use to ensure it is in good working order with no obvious defects.
 - If any defects are identified, the item of plant/equipment will not be used until the defect has been rectified.
 - Records of plant, equipment and storage checks will be made and kept for inspection.
 - Appropriate measures will be employed to prevent incidents as far as practicable from small plant and containers containing potentially polluting substances.
 - Appropriate management arrangements will be put in place for refuelling plant and equipment proportionate to the risk, for example in designated areas on impermeable ground or hardstanding and at least 15m away from pathways or sensitive receptors, never leaving refuelling activities unattended, and ensuring any nearby surface water drains are covered and receiving oil interceptors are functional before refuelling commences.
- 4.7.3 Horizon will provide construction staff emergency phone numbers and a means of notifying local authorities, statutory authorities and local community representatives as part of the site induction programme. Contact numbers for the employer and contractor's key staff will also be included.

Preparation for environmental incidents/emergencies

- 4.7.4 Horizon will ensure that all personnel with a responsibility under emergency management arrangements, or working with or near pollution hazards, receive appropriate training.
- 4.7.5 Where appropriate, site inductions will include pollution prevention and response information. Horizon will ensure site work teams receive regular and appropriate ongoing information on the potential environmental impacts of their work and how to prevent and respond to potential pollution incidents.
- 4.7.6 Horizon will provide and maintain environmental emergency response materials/equipment appropriate to the risk of its activities. Such materials will be stored at strategic locations on site and on vehicles, be suitably sized according to the risk, and easily identified.
- 4.7.7 All staff that work with or near pollution hazards must receive training on:
- how to recognise a pollution event and the scale of response required to manage it;
 - the most appropriate materials to use in order to manage the pollution;
 - initial actions following the identification of pollution;
 - what the reporting procedure is; and

- the appropriate method of disposal of materials used during pollution response.
- 4.7.8 All workers that work with chemicals will receive training from approved training providers.
- 4.7.9 Horizon will plan to hold appropriate environmental emergency response tests to ensure its environmental emergency management procedures are effective.
- 4.7.10 Horizon will produce, and display in an accessible and visible place, a Site Environmental Drawing in every site compound, showing all sources, pathways and receptors related to the area. Where relevant, content will consist of:
- access routes and rendezvous points for emergency services;
 - buildings (permanent and temporary) labelled to show what they are;
 - water treatment facilities used during the works;
 - oil and chemical storage used during the works;
 - waste storage relevant to the works including segregated hazardous waste;
 - impermeable and permeable areas;
 - location of static environmental emergency response materials (and type, e.g. chemical or oil spill kit) and equipment;
 - water abstraction and discharge points;
 - location of any sewage facilities;
 - direction of flow of all drainage (including foul and surface water);
 - any natural or man-made water feature;
 - drainage inspection points;
 - oil separators/interceptors;
 - ecologically sensitive areas; and
 - pollution control features (e.g. shut-off valves/penstocks fitted on drainage systems).
- 4.7.11 The Site Environmental Drawing will be explained using a toolbox talk to key site personnel, including those that manage the storage of potentially polluting materials/equipment and those with any responsibility under environmental management arrangements.

Emergency/incident recording

- 4.7.12 Incident reports will be prepared in accordance with the arrangements set out in Horizon's Environmental Management System. The following details will be recorded as a minimum:
- names of people involved in the incident and response;
 - location (as specific as possible);
 - date and time;
 - description of the incident (with timeline);

- immediate actions taken;
- what further actions need to be taken;
- actions to prevent reoccurrence of the incident; and
- relevant photographs.

4.7.13 In accordance with The Reporting of Injuries, Diseases and Dangerous Occurrences Regulations 2013, and Horizon's Health and Safety Policy, appropriate records will be maintained and relevant bodies notified depending on the nature of the emergency or incident.

4.8 Fire prevention and control

4.8.1 Horizon will have in place appropriate management controls to prevent fires on all its construction sites and associated accommodation and welfare facilities.

4.8.2 Horizon's response procedures will ensure swift action is taken to protect the public, workers, environment and plant whilst maintaining construction site security.

4.8.3 Horizon will not allow open fires or the burning of waste materials.

4.9 Construction worker conduct

4.9.1 Expected standards to be placed on construction workers in relation to their conduct and behaviour whilst employed on the Wylfa Newydd DCO Project are committed to in the Workforce Management Strategy. Its purpose is to set out:

- Horizon's commitments to ensure appropriate management of the workforce;
- supply chain contractual obligations; and
- workforce behaviour principles which will govern workforce behaviour and which will be secured through their terms of employment and the Code of Conduct.

4.9.2 The Workforce Management Strategy covers expected standards of behaviour in the local community, housekeeping and behaving in an environmentally and socially responsible manner.

5 Traffic and transport management strategy

5.1 General

- 5.1.1 Horizon's traffic and transport management is based on the requirements set out in this Wylfa Newydd CoCP and relevant sub-CoCPs.
- 5.1.2 Any site-specific mitigation requirements to be implemented for traffic and transport are described in section 5 of the relevant sub-CoCPs.
- 5.1.3 Access routes for heavy goods vehicles (HGV), buses and Abnormal Indivisible Loads (AILs) to the individual sites which comprise the Wylfa Newydd DCO Project have been identified. The prioritised routing to be used is along the A55 from the mainland via Britannia Bridge to Valley and then the A5025 north.
- 5.1.4 There will be some exceptions to this, for example, the north and east of Anglesey shuttle buses which will be routed via the A5025 on the eastern side of Anglesey to pick up construction workers living in settlements in eastern Anglesey and transport them to the WNDA and other Wylfa Newydd DCO Project sites.
- 5.1.5 All members of staff will be required to pre-register any vehicle parking on site and no unauthorised vehicles will be allowed to park on all sites.
- 5.1.6 Prior to HGV deliveries commencing, Horizon will appoint a Travel and Logistics Manager with specific responsibility for controlling and coordinating logistics and travel across the Wylfa Newydd DCO Project. The Travel and Logistics Manager will be in place throughout the construction phase of the Wylfa Newydd DCO Project. The Travel and Logistics Manager will lead a Travel and Logistics Team which will help discharge responsibilities as demand increases. The Travel and Logistics Team will include wider travel management responsibilities including that of a travel plan coordinator.

5.2 Logistics Centre

- 5.2.1 The Wylfa Newydd DCO Project incorporates a Logistics Centre at Parc Cybi. The role of the Logistics Centre will be to control the flow of HGVs along the A5025 during the construction phase of the Power Station.
- 5.2.2 The Logistics Centre will manage the frequency and volume of traffic movements along the A5025 by road-based freight by:
 - requiring HGVs to pass through the Logistics Centre;
 - managing deliveries at the Power Station; and
 - maintaining a delivery booking system to manage deliveries according to the capacity of the loading facilities.
- 5.2.3 In order to mitigate the impacts of HGV traffic on existing flows and recreational cyclists, a delivery window on the A5025 for the construction materials has been identified. The delivery window is described in table 5-1 and needs to be read in conjunction with HGV movements in section 5.8.

Table 5-1 HGV delivery windows

Time period	Delivery window
Weekday delivery periods	Monday to Friday, between 07:00 and 23:00
Weekend delivery period	Saturday between 08:00 and 13:00

- 5.2.4 The HGV delivery window will include restrictions during school start times (between 08:00 and 09:00) and end times (between 15:00 and 16:00) in advance of the A5025 Off-line Highway Improvements being operational. It is anticipated that deliveries may occasionally be undertaken outside of these times, but they will be limited, whenever practicable.
- 5.2.5 Specific controls relating to the Logistics Centre are set out in the Logistics Centre sub-CoCP.
- 5.2.6 In the event that HGV monitoring data provided by Horizon and traffic count and journey time data recorded by this Welsh Government demonstrates using a VISSIM model (or equivalent model) that effects on eastbound queuing times on Britannia Bridge between 07:00 to 08:30 are, as result of HGV movements associated with the Wylfa Newydd DCO Project, causing (or are predicted to cause) a significant adverse effect in the reasonable opinion of the Transport Engagement Group, then Horizon will agree actions with the Transport Engagement Group to avoid or mitigate such effects which may include restrictions or limits on Wylfa Newydd HGV movements over Britannia Bridge at identified peak times.

5.3 Park and Ride and associated shuttle buses

- 5.3.1 The Wylfa Newydd DCO Project incorporates a Park and Ride located immediately adjacent to the A55 but close to the A5025 at Valley. The site is at Dalar Hir at A55 Junction 4.
- 5.3.2 The purpose of the Park and Ride is to serve construction workers, providing for the transfer of construction workers to shuttle buses, reducing the number of private vehicle movements to and from the WNDA.
- 5.3.3 Specific controls relating to the Park and Ride are set out in the Park and Ride sub-CoCP.
- 5.3.4 Free shuttle bus services for construction workers parked at the Park and Ride to the WNDA will reduce potential effects from emissions due to road traffic.
- 5.3.5 Horizon will provide a dedicated free shuttle bus service for construction workers living in areas such as Holyhead, Bangor, Caernarfon, Amlwch, Cemaes and Benllech as needed, to reduce the number of private vehicle movements to the Park and Ride or the WNDA. Use of bus stops and locations will be agreed in advance with the IACC and Gwynedd County Council.
- 5.3.6 All buses procured for the Wylfa Newydd DCO Project will meet a minimum standard for emissions (Euro IV diesel engines or equivalent), and the environmental element of the quality assessment undertaken as part of the procurement assessment will give greater weight to suppliers who can better this emission standard.

5.3.7 Horizon will incorporate the use of the proposed park and share facilities (including as stops on the shuttle bus network) at Four Crosses, Gaerwen, Bangor and Caernarfon, as a complementary component of the traffic and transport management strategy set out in this section 5 for the Wylfa Newydd DCO Project provided that:

- these park and share facilities will be delivered by others, and will not be funded by Horizon;
- the demand to use the Park and Share facilities will be reviewed by Horizon every quarter; and
- where Horizon confirms to the Transport Engagement Group (prescribed in the DCO s.106 agreement) that there is no viable demand for use of one or more of the sites (as evidenced by both the compliance with modal splits data monitored pursuant to section 5.10 and table 5-1 of this Wylfa Newydd CoCP and the locational data from the Worker Accommodation Management Service demonstrating where the workforce is living) they need not be used.

Parking Phasing Scheme

5.3.8 Prior to the commencement of the authorised development, except for Work No.12, Horizon will prepare and submit for approval a Parking Phasing Scheme in accordance with the Requirements in Schedule 3 and Schedule 4 of the Order. The approved Parking Phasing Scheme (or any approved variations) will be implemented for the duration of the construction period.

5.3.9 Horizon will review the Parking Phasing Scheme on a quarterly basis, throughout the duration of the construction period.

5.4 Abnormal Indivisible Loads (AIL)

5.4.1 An AIL is defined in the Road Vehicles (Authorisation of Special Types) (General) Order 2003 (STGO) as a load that cannot, without undue expense or risk of damage, be divided into two or more loads for the purpose of being carried on a road, and that, owing to its dimensions or its weight, cannot be carried on a motor vehicle that complies in all respects with the Road Vehicles (Construction and Use) Regulations 1986 (C&U Regulations) or the Road Vehicles (Authorised Weight) Regulations 1998 (AW Regulations).

5.4.2 An AIL can be carried on special types of vehicle that do not meet the C&U and AW Regulations provided this is in accordance with the requirements of the STGO.

5.4.3 Typical construction AILs will include earth-moving equipment, large cranes and equipment for concrete batching plants, i.e. large loads that are routinely transported by a low-loader. Typical AILs are defined as those that exceed 4.3m wide, as this is the width limit below which the load can be carried on an ordinary heavy-duty vehicle. The height of the AILs will be restricted by bridge clearance along the A55.

- 5.4.4 The STGO requires the haulier to give in excess of two days' notice to North Wales Police, highway and bridge authorities before moving the load. This process will be managed by Horizon's Travel and Logistics Team.
- 5.4.5 AILs will be used subject to the correct implementation of procedures for their use on the road network between their origin and the WNDA and Associated Development sites.

Abnormal Indivisible Loads Management Scheme

- 5.4.6 Prior to commencement of Power Station Works (as defined in the Order), except for Work No.12, Horizon will prepare and submit for approval an Abnormal Indivisible Loads Management Scheme in accordance with the Requirements in Schedule 3 and Schedule 4 of the Order. The Abnormal Indivisible Loads Management Scheme will be prepared in accordance with the principles set out in section 5.4 of this Wylfa Newydd CoCP. The approved Abnormal Indivisible Loads Management Scheme (or any approved variations) will be implemented for the duration of the construction period.

HGV and AIL routes.

- 5.4.7 Access routes for both HGVs and AILs to the individual sites which comprise the Wylfa Newydd DCO Project have been identified. The primary routing to be used is the A55 to Valley and then the A5025 north. The route will be communicated to all parties involved in the transport of material for the purpose of constructing the Wylfa Newydd DCO Project. HGV delivery requirements will be included in all contracts where deliveries will be required. The requirements will include key information on the following aspects:
- HGV restrictions;
 - HGV route;
 - Delivery Management System; and
 - mechanisms for dealing with non-compliance.
- 5.4.8 Regular meetings will be held with the Travel and Logistic Team and the suppliers to discuss the management of freight and any issues that arise and how they can be addressed.
- 5.4.9 When the HGVs are en route, communication between the Travel and Logistics Team and the suppliers will be via telephone/email. Communication between the suppliers and their drivers will be via the means they normally use, e.g. pagers, radio (subject to prioritising the health and safety of drivers).
- 5.4.10 Bilingual temporary signing of HGV, bus and AIL routes will be erected along the A55/A5025 access routes to the proposed developments. The wording content and proposed locations of temporary signage will be agreed with the relevant highway authority in plain format. The purpose of the signs will be to ensure effective route management.

5.5 Temporary Traffic Management procedures

- 5.5.1 Temporary Traffic Management procedures will be used, where required, at each of the proposed sites that would affect the public highway, for example temporary traffic signals or manned stop-and-go boards. Horizon will work

with the appropriate authorities to agree the appropriate traffic management arrangements.

- 5.5.2 If Temporary Traffic Management procedures affect bus stops, Horizon will liaise with the relevant bus companies about any necessary repositioning of bus stops. Horizon will work to ensure that disruption from moving any bus stops will be reduced, as far as practicable.

5.6 Information packs and training inductions

- 5.6.1 Information packs containing the Construction Traffic Management Strategy will be provided to all construction workers at their induction. The information packs will contain, but not be limited to, the following:

- HGV routes and route restrictions (if appropriate);
- safety and operational requirements;
- construction vehicle routes (if appropriate), including construction workers sticking to 'A' class roads (and where possible prioritising the use of A55, rather than the A5), and subsequently avoiding 'B' class roads, 'C' class roads and unclassified roads, wherever practicable (to avoid causing unnecessary nuisance and disturbance to local communities);
- non-compliance guidance;
- complaints procedure; and
- available transport options, including bus routes and Park and Share sites (if available).

- 5.6.2 Workers will be bound to comply with the principles set out in the Workforce Management Strategy.

- 5.6.3 Included in the information packs will be likely enforcement actions for breaches of the travel commitments made in this Wylfa Newydd CoCP, with examples such as:

- improvement to communications protocol and channels;
- appropriate warnings;
- temporary or permanent removal of approval to park on site; and
- temporary suspension or permanent removal of suppliers/driver/workers who continually fail to adhere to the commitments set out in this Wylfa Newydd CoCP.

5.7 Car-sharing

- 5.7.1 During the majority of the construction programme, most of the construction workers wishing to drive to the WNDA or Park and Ride will be required to car share. Horizon will target an average car share ratio of 2.0 people per vehicle across the Wylfa Newydd DCO Project in the peak construction year.

- 5.7.2 Horizon will implement a car-sharing database which will likely utilise internet and mobile phone based applications to match workers who wish to drive to the WNDA or Park and Ride. The Workforce Accommodation Portal could be used as a basis to form the database

- 5.7.3 The level of car sharing required will vary depending on the number of construction workers, the availability of parking spaces and the number of construction workers travelling to site by non-car modes such as shuttle buses, amongst other factors. Vehicle occupancy requirements, and changes to them, will be advertised clearly to all construction workers well in advance.
- 5.7.4 The existence of such a database and matching system will be communicated to all employees, including that non-adherence to the car-share policy could result in refusal of entry to the WNDA or Park and Ride car parks.

5.8 Freight movement

- 5.8.1 The construction and use of a Marine Off-Loading Facility (MOLF) to deliver the bulk of materials to the WNDA will significantly reduce the number of HGV movements on the road network. This will lead to lower NO₂, PM₁₀ and PM_{2.5} concentrations, particularly at those human receptor locations close or adjacent to the A5025. This will also lead to lower NO_x concentrations and deposition rates of nitrogen and acid at sensitive ecological receptors in close proximity to the A5025 and A55 and the wider road network.
- 5.8.2 In accordance with the Order, at least 60% of all materials required for the construction of the Power Station Works (as defined in the Order) will be delivered via the MOLF, (although Horizon will seek to increase this amount up to 80% where possible). This will limit the amount of material required to be transported by road.
- 5.8.3 Horizon commits to limit the number of HGV movements by road on the A5025, so as not to exceed :
- 40 HGV deliveries (80 movements) per hour between the hours of 07:00 and 19:00 Mondays to Fridays;
 - 20 HGV deliveries (40 movements) between 19:00 and 23:00 Mondays to Fridays;
 - 50 HGV deliveries (100 movements) between 08:00 and 13:00 Saturdays;
 - 160 HGV deliveries (320 movements) per day; and
 - 3,500 HGV deliveries (7,000 movements) per month.
- 5.8.4 However, before the opening of the A5025 Off-line Highway Improvement Works, Horizon commits to limit the number of HGV movements by road on the A5025 at Valley so as not to exceed:
- 22 HGV deliveries (44 movements) per hour between the hours of 07:00 and 19:00 Mondays to Fridays;
 - 20 HGV deliveries (40 movements) between 19:00 and 23:00 Mondays to Fridays;
 - 50 HGV deliveries (100 movements) between 08:00 and 13:00 Saturdays;
 - 113 HGV deliveries (226 movements) per day; and
 - 2,500 HGV deliveries (5,000 movements) per month.
- 5.8.5 For the purpose of the measures in 5.8.3 and 5.8.4, one HGV delivery consists of two movements, one each way.

5.8.6 An integrated Distribution Management Asset Tracking System (DMATS) will be used to monitor, manage and control HGV deliveries to site and will likely comprise three elements:

- a delivery booking system;
- a vehicle tracking system; and
- an asset tracking system.

- 5.8.7 A DMATS is a collection of applications contained within a single electronic system designed to monitor, manage and control an entire distribution network efficiently and reliably. The delivery booking system will allow Horizon's contractors and other users requiring delivery of items to site to pre-book entry, typically 24 hours in advance.
- 5.8.8 The asset tracking system will enable the tracking of all delivery items (maximising delivery items per HGV), the ability to pinpoint individual items quickly, efficiently and holistically from source to site, and provide accurate information to all contractors as well as clear accountability for material and goods ownership.
- 5.8.9 The DMATS will include appropriate use of technology such as barcoding, Global Positioning System tracking and just-in-time delivery systems and will allow capacity optimisation for HGVs and maximise the efficacy of the overall system.
- 5.8.10 Horizon will monitor freight vehicle movement including HGV numbers and deliveries via the MOLF using the delivery booking system to ensure compliance with the above. There may be exceptional circumstances, for example adverse weather that disrupts the normal operation of the MOLF, which makes compliance with this difficult. Horizon will prepare contingency arrangements in agreement with the IACC and the Welsh Government to manage such events.

Delivery Management System

- 5.8.11 HGV deliveries to the Wylfa Newydd DCO Project will be controlled by a Delivery Management System. The Delivery Management System will be used to achieve the following objectives:
- regulate the arrival of HGVs directly to site or via the Logistic Centre by providing a set number of delivery slots; and
 - ensure HGV deliveries do not exceed the agreed limits set out in 5.8.3 and 5.8.4 (other than in exceptional circumstances as set out below).
- 5.8.12 The Travel and Logistics Team will manage the Delivery Management System and will plan future deliveries based on the project schedule and the HGV limits set in 5.8.3 and 5.8.4. All bookings will be approved or rejected by the Travel and Logistics Team before the delivery schedule for each day is finalised.
- 5.8.13 For suppliers making regular or frequent deliveries, appropriate slots will be booked or blocked out on the delivery booking system.

Exceptional circumstances

- 5.8.14 There are a range of exceptional circumstances in which it may be necessary to apply a temporary cessation of the HGV limits and route restrictions. Such circumstances could include an emergency response requiring an HGV movement after 23:00 or before 07:00 or a major traffic incident preventing use of the proposed HGV routes to the site. Examples of exceptional circumstances are:

- a traffic or other similar incident on the highway network that delays a HGV such that it misses its allocated slot or falls outside the permitted delivery hours;
- a breakdown of a vehicle en route to the site;
- inclement weather (e.g. high winds, flooding, snow or ice) that significantly disrupts the normal operation of the highway network;
- circumstances associated with demonstrations or protests; and
- vehicles that require specific arrangements to be made with traffic police, etc., where they may dictate timings of deliveries (e.g. AILs)

5.8.15 Other routes will be considered for critical deliveries in these exceptional circumstances.

5.8.16 Horizon will notify the IACC and North Wales Police in advance of any HGV movements outside of the permitted hours due to exceptional circumstances.

5.9 Traffic incident management

5.9.1 Although Horizon has no statutory authority in the event of a traffic incident on the road network, it is committed to assisting emergency services in undertaking their statutory duties.

Traffic Incident Management Scheme

5.9.2 Prior to the commencement of the authorised development, except for Work No. 12, Horizon will prepare and submit for approval a Traffic Incident Management Scheme in accordance with the Requirements in Schedule 3 and Schedule 4 of the Order. The Traffic Incident Management Scheme will be prepared in accordance with the principles set out in section 5.9 of this Wylfa Newydd CoCP. The approved Traffic Incident Management Scheme (or any approved variations) will be implemented for the duration of the construction period.

5.9.3 The Traffic Incident Management Scheme will include the following measures.

- Maintaining a site-based delivery management team as a contact point for contractors, emergency services and the highway authorities. This team will help manage and coordinate Horizon and its supply chain's response to an incident.
- Controlling the number and frequency of HGVs on the designated HGV routes.
- Establishing an appropriate communications protocol for workers, bus drivers transporting construction workers and HGV drivers.
- Communicating incident management information to all workers, contractors making a delivery, and bus operators transporting workers.
- Holding HGVs and buses at appropriate locations, including the Logistics Centre, during an incident.

5.10 Monitoring measures

Worker travel

- 5.10.1 Horizon commits to the provisional mode share targets for construction worker travel associated with the Wylfa Newydd DCO Project, as set out in table 5-2.
- 5.10.2 Table 5-2 provides values for each quarter of Year 1 of Main Construction to reflect the changes expected as working arrangements and travel patterns become established. From Year 2, targets are annual because working arrangements and travel patterns will become embedded.
- 5.10.3 The provisional mode share targets will be monitored, reviewed and amended by Horizon as required in agreement with the IACC throughout the construction period. This enables Horizon to take into consideration uncertainties such as the exact home locations of construction workers, the proportion of construction workers that may arrive in contractor minibuses, or the use of park and share sites.

Table 5-2 Provisional Mode Share Targets – Daily Travel to WNDA – Construction Workers

Year	Year 1 Q1	Year 1 Q2	Year 1 Q3	Year 1 Q4	2	3	4	5	6	7	8	9
Shuttle Bus	20%	25%	30%	35%	35%	35%	35%	35%	35%	35%	35%	35%
Park and Ride	0%	0%	0%	0%	0%	25%	25%	25%	25%	25%	25%	25%
Maximum private vehicle (e.g. car / minivan)	80%	75%	70%	65%	65%	40%	40%	40%	40%	40%	40%	40%
Total	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %	100 %

- 5.10.4 The provisional mode share targets shall also apply to construction workers on the night shift from the start of Year 3 which is when the main night shift activities will commence.
- 5.10.5 Weekend construction worker travel is dependent on a wide range of factors including the distance to the permanent home of a worker, shift patterns and ease of travel. The provisional mode share target for these construction workers is that 20% of weekend travel to a worker's permanent home will use non-car modes.
- 5.10.6 Bus routes will be operational from the start of the construction programme. See figure 5-1 below for the indicative Year 1 shuttle bus routes. This is initially based on assumptions used to inform the Order, as to where construction workers are expected to live, and is subject to change depending on where construction workers live when the construction programme commences.
- 5.10.7 As part of the delivery of these targets, Horizon will, in accordance with the Parking Phasing Scheme (see section 5.3.8), provide car parking spaces to

reflect the number of workers on the Wylfa Newydd DCO Project, balancing an over-provision of car parking (which could encourage car travel) with an under-provision of car parking (which could encourage fly parking).

5.10.8 Horizon will monitor the effectiveness of its traffic and transport management strategy through a suite of indicators consistent with appropriate good practice and guidance. The following monitoring methods will be adopted.

- Daily monitoring and analysis of HGV movements at the Logistics Centre and WNDA including using the integrated DMATS described in this section.
- Monitoring and analysis of daily shuttle bus movements including routes, frequencies and construction worker demand and regular analysis of boarding point.
- Monitoring and analysis of daily Park and Ride bus movements including frequencies and construction worker demand.
- Monitoring and analysis of daily car park usage at WNDA and Park and Ride.
- Monitoring and analysis of number of construction workers at each work site each day.
- Monitoring and analysis of weekend travel by construction workers.
- Monitoring and analysis of cycle usage and usage of electric vehicle charging points on a monthly basis;
- Monitoring and analysis of number of Site Campus residents on a weekly basis.
- Monitoring and analysis of worker home locations on a monthly basis.
- The monitoring measures outlined above will enable the vehicle share ratio to be calculated. Regular validation checks will be undertaken (at least monthly) to verify the data regarding vehicle sharing.
- Monitoring and analysis of servicing and light goods vehicle trips on a monthly basis.
- Monitoring of issues reported by the public or stakeholders as described in section 3 of this Wylfa Newydd CoCP.

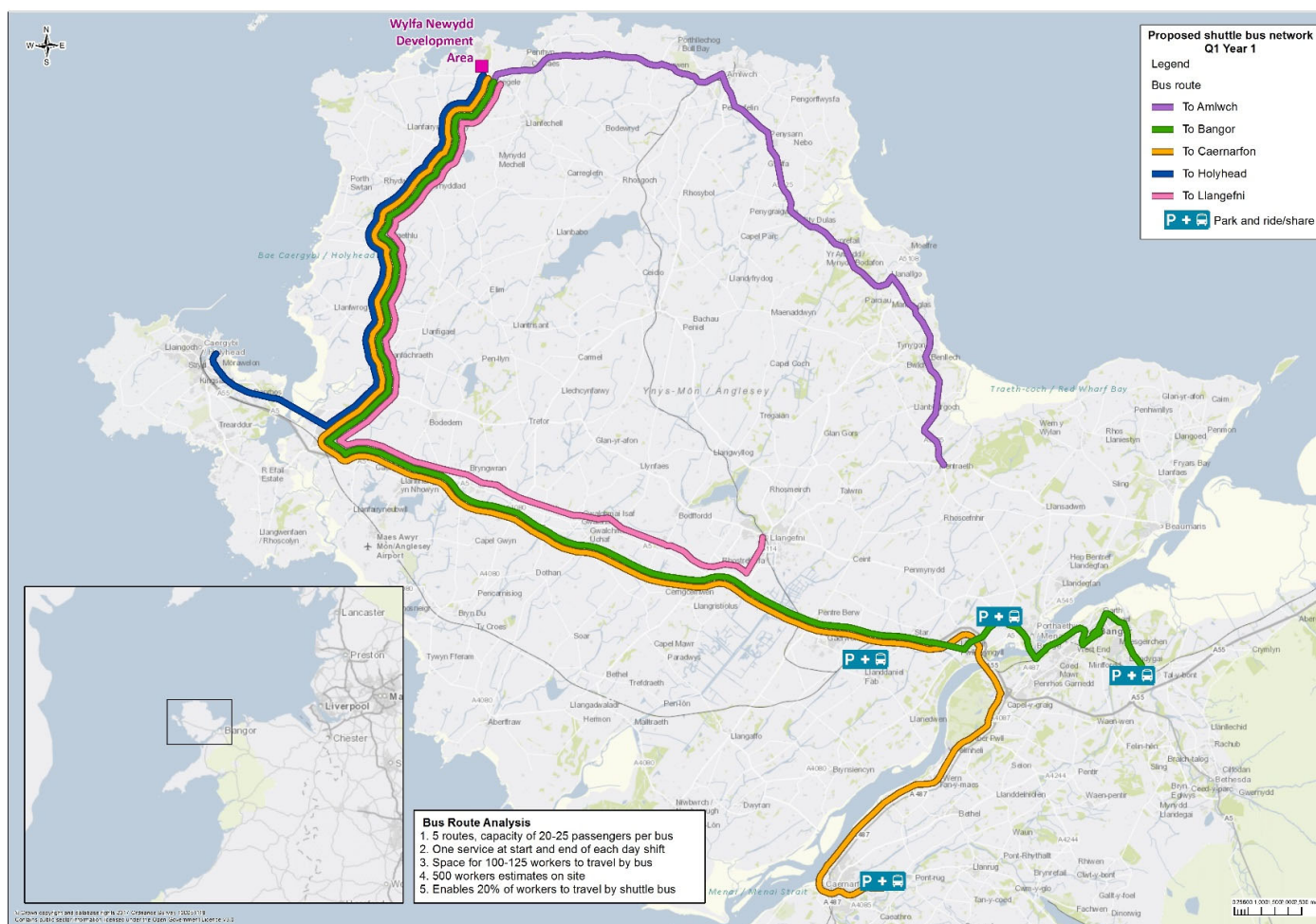
5.10.9 A quarterly summary of all monitoring and an analysis of this monitoring data against mode share targets and HGV requirements will be provided to the IACC, Emergency Services Engagement Group and the Transport Engagement Group. If mode share targets or HGV requirements are not being achieved, Horizon will discuss with the IACC, Emergency Services Engagement Group, and the Transport Engagement Group, and a plan will be prepared by Horizon with the aim of improving performance to meet agreed mode share targets. Actions will include one or more of the following:

- further promotion by Horizon of shuttle bus services and the Park and Ride;
- further incentives and measures implemented by Horizon to encourage workers to use the shuttle bus service (e.g. require all workers who live

within a certain distance of a shuttle bus stop to use the shuttle bus service), Park and Ride, and park and share sites (if available);

- Horizon to work with shuttle bus operators to amend routes, frequency and vehicle size of shuttle bus network so more construction workers can use the service;
- Horizon to implement enhanced enforcement measures;
- Horizon and the IACC to agree revised mode share targets to reflect changes to underlying assumptions (for example, if more construction workers live in Holyhead than forecasted, then more construction workers may travel by shuttle bus rather than using the Park and Ride and mode share targets would need to be adjusted accordingly); and
- Horizon to review HGV management arrangements and implement changes to ensure that HGV requirements in terms of HGV delivery caps and routings are achieved.

Figure 5-1 Indicative Year 1 Quarter 1 shuttle bus routes



5.11 Construction Traffic

5.11.1 The following monitoring data will be collected in relation to construction traffic:

- the Delivery Management System will allow the collection of data which can be used for monitoring compliance with the HGV movement limits at paragraphs 5.8.3 and 5.8.4;
- compliance with the HGV route;
- ALLs deliveries by road; and
- instances that are classified as exceptional circumstances.

5.11.2 The Delivery Management System will be continually monitored. Planned deliveries will be checked against the actual HGV arrivals/departures. If there is a breach of HGV movement limits or routes, this will be recorded. By undertaking this monitoring on a regular basis, it will help to ensure that any issues are identified at an early stage and dealt with promptly.

5.11.3 A quarterly Construction Traffic Management Report will be made available for review by the Transport Engagement Group and Emergency Services Engagement Group. The report will include:

- record of Delivery Management System bookings;
- comparison of Delivery Management System bookings against estimated HGV deliveries;
- comparison of actual HGV deliveries against HGV movement limits set in 5.8.3 and 5.8.4;
- summary of any investigations on alleged breaches of HGV limits, time restrictions or reported breaches of routing; and
- any relevant complaints (including reported issues associated with the traffic impact of HGV deliveries on the operation of Britannia Bridge) and a summary of Horizon's proposals for responding to the issues raised.

5.11.4 Horizon will hold regular internal meetings to review, discuss and implement any improvements to construction traffic and logistics.

5.12 Enforcement

5.12.1 Horizon will instigate management practices with its suppliers to ensure compliance with the HGV movement limits set in 5.8.3 and 5.8.4. As set out in paragraph 1.2.2 of this Wylfa Newydd CoCP, contractual conditions will be implemented to ensure compliance with the Wylfa Newydd CoCP.

5.12.2 Following an investigation, suppliers not complying will be notified and appropriate action in accordance with their contracts will be taken to ensure compliance. The action could be in the form of warnings and corrective actions up to and including banning of drivers and termination of the supplier for breach of contract.

5.12.3 A complaints procedure will be implemented, as described in section 3.3.

- 5.12.4 Investigation of all suspected incidents related to fly-parking and rat-running will be commenced within 48 hours of the initial complaint being submitted to Horizon, and a final report completed within five working days.

6 Public access management strategy

6.1 General

- 6.1.1 Horizon's public access management is based on the controls set out in this Wylfa Newydd CoCP and relevant sub-CoCPs.
- 6.1.2 Any site-specific mitigation requirements to be implemented for public access are described in section 6 of the relevant sub-CoCPs.
- 6.1.3 Horizon will put in place mitigation to reduce as far as practicable adverse effects of permanently closing, temporarily closing or diverting PRowS in particular on the surrounding PRow network as well as the environment and local communities.

6.2 Works on a Public Right of Way

- 6.2.1 PRowS will be kept open or temporarily diverted wherever practicable throughout construction. However, where closures are unavoidable, they will be authorised through DCO Requirement, or in cases where closures are required outside of the Order Limits, by using the appropriate means, such as Temporary Traffic Regulation Orders (TTROs) under the Road Traffic Regulations Act 1984. When TTROs are used to temporarily close a PRow, they will be for the shortest duration practicable for the works required.
- 6.2.2 When temporary PRow closures are required, Horizon will submit the TTRO application to the IACC in sufficient time for approval, but no less than six weeks in advance of a required closure of up to six months, no less than two weeks for a closure of up to two weeks.
- 6.2.3 Horizon will provide temporary footpaths where practicable and appropriate to ensure that pedestrians are able to maintain necessary access without coming into conflict with construction activities or other obstacles.
- 6.2.4 Horizon will delineate the diverted footpaths clearly and adequately and will provide all signage (indicating diversions and closures) clearly in both Welsh and English.
- 6.2.5 Horizon will undertake all works necessary to make the ground on diverted paths suitable for pedestrians, including reasonable adjustments to maintain or achieve inclusive access, where reasonably practicable.
- 6.2.6 Horizon will monitor all PRow closures and diversions, to ensure damage from construction activities is appropriately repaired and signs are maintained in working order.
- 6.2.7 Horizon will ensure that diversions are fully accessible and comply with the requirements of the Equality Act 2010, as far as practicable and in the context of the route to be closed temporarily (e.g. in the context of footways within communities).
- 6.2.8 Where a need is identified through community liaison, Horizon will review access and pedestrian routes. The review will determine whether additional measures or reasonable adjustments may be required for the purposes of ensuring accessibility by mobility-impaired people.

- 6.2.9 Horizon will maintain any required fencing around actual and diverted PRow corridors.
- 6.2.10 Horizon will ensure safe pedestrian access is provided to Tregele to access the proposed new alignment of the Wales Coast Path and onward PRow to Cemaes.
- 6.2.11 Horizon will support and enhance active travel access for people using the Copper Trail which currently links to the A5025 in Tregele. At this point, Horizon will provide a dedicated cycle way/footpath to Nanner Road, which will be two metres wide and appropriately surfaced.
- 6.2.12 Horizon will ensure vehicles interact with the public highway and PRowS in a safe manner using measures such as:
- use of appropriate traffic management (such as stop-go boards) at relevant locations giving priority to non-construction vehicles;
 - the method for crossing PRowS in a manner which gives priority to walkers; and
 - temporary closures and or diversions where appropriate.
- 6.2.13 Where there are to be temporary PRow closures within the Order Limits, Horizon will provide the IACC the following information no less than 28 days prior to the closure:
- time period for closure;
 - where a diversion is required, the temporary route proposed;
 - the types and location for any temporary signage; and
 - conditions of reinstatement.

6.3 Public Right of Way reinstatement

- 6.3.1 If temporary alterations to a PRow occur as a result of the Wylfa Newydd DCO Project, Horizon will ensure that reinstatement is carried out to at least the original condition.
- 6.3.2 Horizon will conduct and record appropriate surveys to establish the condition of the PRow network around construction areas, within and immediately adjacent to the Order Limits, and any PRow to be physically affected by the construction activities, prior to commencement and after completion of all relevant construction works in that area. The results of the surveys conducted to establish the condition of the PRowS will be shared with the IACC. Ongoing maintenance of any new PRowS created as part of the Wylfa Newydd DCO Project within the WNDA is set out in the Wylfa Newydd Code of Operational Practice.

6.4 Maintenance of access arrangements

- 6.4.1 Existing access for residential properties and local businesses will be maintained where possible, including replacement points of access, where necessary, to agricultural landholdings from A5025 bypasses and bend improvements.

- 6.4.2 Horizon will provide replacement means of access for residential properties, businesses and community services where necessary (in cases where existing access cannot be maintained) through the modification of roads and junctions, and the re-use of existing sections of carriageway.

7 Air quality management strategy

7.1 General

- 7.1.1 Horizon's air quality management is based on the controls set out in this Wylfa Newydd CoCP and relevant sub-CoCPs.
- 7.1.2 Any site-specific mitigation controls to be implemented for air quality are described in the relevant sub-CoCPs.
- 7.1.3 Horizon will comply with the Wylfa Newydd CoCP with regard to dust, noise, congestion and nuisance controls.
- 7.1.4 Horizon has developed mitigation to reduce as far as practicable, adverse effects relating to dust and air quality on the surrounding environment.
- 7.1.5 Dust and air quality monitoring procedures will include equipment specification, monitoring locations, duration, setting of alert thresholds, and reporting requirements.
- 7.1.6 Arrangements will be put in place to manage contingencies, for example due to adverse weather conditions (e.g. forecasting of future dry and windy periods in order to increase the dust suppression capability and frequency of application) and a rapid response to the breakdown of dust suppression equipment (e.g. arrangements in place to repair or replace dust suppression equipment at short notice). Construction workers will be trained as appropriate to increase their awareness of community issues in environmental concerns including dust management and on-site management techniques relating to these issues. This training will be conducted via, but not limited to, site inductions, on-the-job training and toolbox talks.

7.2 Vehicle and plant emissions

- 7.2.1 Construction of the Logistics Centre will allow traffic flows along the A5025 to be managed to reduce peak time deliveries to the Power Station, reducing the potential for congestion which will lead to higher emissions of NO₂, PM₁₀ and PM_{2.5}.
- 7.2.2 The A5025 Off-line Highway Improvements will lead to lower NO₂, PM₁₀ and PM_{2.5} concentrations at human receptor locations close to the existing A5025 alignment and reduce the number of properties and other human receptor locations which would experience an increase in pollutant concentrations.
- 7.2.3 Construction and use of the Park and Ride will significantly reduce the number of car movements on the A5025. This will lead to lower NO₂, PM₁₀ and PM_{2.5} concentrations at human receptor locations and lower NO_x concentrations and deposition rates of nitrogen and acid at sensitive ecological receptors close, or adjacent to, the A5025.
- 7.2.4 Horizon will ensure that the adverse effects of vehicle and plant emissions are controlled wherever safe and practicable. Measures for limiting emissions will include the following as a minimum:
 - ensuring that the engines of all vehicles and plant on site are not left running unnecessarily;

- compliance with the EU Stage IIIB emission standards for non-road mobile machinery (EC Directive 97/68/EC) introduced in January 2011 for the larger engine sizes relevant to the works;
- maintaining construction plant and machinery in accordance with the manufacturer's instructions to reduce the risk of elevated emissions due to poor engine efficiency, maintain abatement performance and ensure that any malfunctions are swiftly repaired;
- avoiding the use of diesel or petrol-powered generators and use mains electricity or battery-powered equipment where practicable; and
- managing and reducing where practicable the movement of construction traffic around the site in both site layouts and routine operations.

7.3 Dust and air quality control measures

- 7.3.1 The key method for controlling dust emissions is through good process, site design and good housekeeping.
- 7.3.2 The dust control measures implemented will be based on the following hierarchy:
- adopt activities that do not give rise to dust releases;
 - good process design to reduce dust emissions (such as reducing drop heights, where possible covering stockpiles, reduction of vehicle speed);
 - abatement systems or control measures in place (water bowsers); and
 - daily vigilance and mitigation.
- 7.3.3 Good practice measures to control dust during construction are derived from the Institute of Air Quality Management [RD6].
- 7.3.4 The requirements for all sites across the Wylfa Newydd DCO Project are set out here in this Wylfa Newydd CoCP.
- Conduct community engagement before work commences on site (refer to section 3.2 of this Wylfa Newydd CoCP).
 - Display the name and contact details of person(s) accountable for air quality and dust issues on the site boundary (refer to section 3.2 of this Wylfa Newydd CoCP).
 - Display the head or regional office contact information (refer to section 3.2 of this Wylfa Newydd CoCP).
 - Record all dust and air quality complaints, identify cause(s), take appropriate measures to reduce emissions in a timely manner and record the measures taken (refer to section 3.3 of this Wylfa Newydd CoCP).
 - Make the complaints log available to the IACC when asked (refer to section 3.3 of this Wylfa Newydd CoCP).
 - Record any exceptional incidents that cause dust and/or air emissions, either on site or off site, and the action taken to resolve the situation.

- Hold regular liaison meetings with other potentially high-risk construction sites within 500m of Horizon's construction sites, and ensure plans are co-ordinated with any works. It is important to understand the interactions of the off-site transport/deliveries which might be using the same strategic road network routes.
- Plan site layouts so that machinery and dust-causing activities are located away from receptors, as far as is practicable.
- Control site runoff of water or mud.
- Keep the security fencing around the construction site, barriers and scaffolding clean, where practicable and safe to do so.
- Ensure that all construction activities, including materials stored on site that have a potential to produce airborne dust are subject to appropriate site management controls necessary to prevent/mitigate the identified risk.
- All vehicle engines are to be switched off when stationary, wherever practicable and safe to do so.
- Avoid the use of diesel or petrol-powered generators and use mains electricity or battery powered equipment where practicable.
- Use lower power settings where practicable.
- Where there is a risk of dust nuisance, use cutting, grinding or sawing equipment fitted or in conjunction with suitable dust suppression techniques.
- Ensure an adequate water supply on site for effective dust/particulate matter suppression/mitigation.
- Where there is a risk of dust nuisance, use enclosed chutes and conveyors and covered skips, where practicable.
- Where there is a risk of dust nuisance, control drop heights from conveyors, loading shovels, hoppers and other loading or handling equipment and use fine water sprays on such equipment wherever appropriate.
- Ensure equipment is readily available on site to clean any dry spillages, clean up spillages as soon as reasonably practicable, and use wet cleaning methods where appropriate.
- Ensure there will be no bonfires and burning of waste materials (refer to section 4.8 of this Wylfa Newydd CoCP).
- Ensure effective water suppression is used during demolition operations, for example hand-held sprays and high-volume water suppression systems.
- Produce specific method statement and risk assessment if the need to remove biological materials is identified through demolition activities.
- Avoid scabbling (roughening of concrete surfaces) if possible.

- Ensure sand and other aggregates brought on to site are stored so as not to be allowed to dry out unless this is required for a particular process, in which case ensure that appropriate additional control measures are in place.
- Use water-assisted dust sweeper(s) on the access and local roads to remove, as necessary, any material tracked out of the site.
- Ensure vehicles entering and leaving sites are covered to prevent escape of materials during transport.
- Implement a wheel-washing system (with rumble grids to dislodge accumulated dust and mud prior to leaving the site).

7.3.5 Individual sub-CoCPs contain further specific additional measures to control dust where warranted in that location due to the construction activities planned to take place there or with respect to nearby receptors.

7.4 Dust and air quality monitoring

7.4.1 Where required, the appropriate monitoring methodologies, metrics and equipment types/specification for monitoring air pollutants, are set out in the relevant sub-CoCPs.

7.4.2 Dust and air quality monitoring equipment will be installed prior to the commencement of construction works and continue until construction works are complete at each relevant site.

7.4.3 Horizon will undertake dust deposition monitoring using passive Frisbee-type dust deposition gauges at all sites. Monitoring and processing of dust samples will be in accordance with the protocol for using the dry Frisbee dust deposit gauge [RD7], or equivalent approach. The dust deposition samples will be exposed for a period of approximately one month.

7.4.4 At the end of each monthly sampling period, the samples will be sent to an accredited laboratory for analysis and to determine the average rate of deposition for the month-long sample (in milligrams of dust deposited per square metre per day ($\text{mg}/\text{m}^2/\text{day}$)).

7.4.5 Horizon will undertake regular on-site and off-site inspection, where receptors (including roads) are nearby, to monitor dust and record inspection results, and make the log available to the IACC when asked (this includes regular dust soiling checks of surfaces, such as street furniture, cars and window sills, in the vicinity (and within 100m) of the site, with cleaning to be provided if necessary).

7.4.6 Horizon will provide a weather station at an appropriate location, measuring wind speed, wind direction, temperature and rainfall. Where feasible, construction activities will be managed appropriately during times of drought and winds that could raise the potential for increased dust deposition at local receptors.

7.4.7 The frequency of site inspections by the person accountable for air quality and dust issues on site will be increased when activities with a high potential to produce dust are being carried out and during prolonged dry or windy conditions.

- 7.4.8 Horizon will keep records of the visual inspections conducted, including inspections of haul routes.
- 7.4.9 Horizon will ensure that dust suppression and monitoring equipment is always available when required, that it functions as intended, and it is maintained in accordance with manufacturer's instructions.
- 7.4.10 Horizon will provide details of how monitoring data will be interpreted and presented. Any particular controls relevant to specific locations are detailed in the relevant sub-CoCPs.
- 7.4.11 Horizon will ensure competent persons are employed to install and service the monitoring systems, and to undertake the monitoring and observations.

7.5 Dust and air quality thresholds

- 7.5.1 The dust deposition triggers that would be used to initiate action by Horizon are based on the 90th and 95th percentile of the UK dataset for open country as set out in relevant guidance [RD8]. These are set out in table 7-1.

Table 7-1 Non-real-time triggers for dust control based on monthly dust deposition rates (human receptors)

Averaging period	Dust deposition rate non-real-time trigger (mg/m ² /day)			Notes
	Amber	Red	Black	
Approximately one month	100	140	N/A	There is no statutory limit for dust deposition.

- 7.5.2 All exceedances of the dust deposition trigger levels, responses and outcomes will be recorded.
- 7.5.3 The amber and red trigger levels for dust deposition or other measured pollutants detailed in this document or relevant sub-CoCPs may be adjusted during the construction works in agreement with the IACC and NRW following review of the effectiveness of the thresholds to indicate the potential for adverse effects at off-site locations.

8 Noise and vibration management strategy

8.1 General

- 8.1.1 Horizon's noise and vibration management is based on the controls set out in this Wylfa Newydd CoCP and relevant sub-CoCPs.
- 8.1.2 Any site-specific mitigation controls to be implemented for noise and vibration are described in section 8 of the relevant sub-CoCPs.
- 8.1.3 Horizon's noise and vibration management will be mobilised prior to construction activities commencing. Horizon will put in place mitigation to reduce as far as practicable noise and vibration effects on the surrounding environment.
- 8.1.4 Horizon will ensure that noise and vibration effects are reduced as far as is practicable.
- 8.1.5 Horizon will:
- employ specific and appropriate noise and vibration control methods;
 - make applications for prior consent for noisy works under Section 61 of the Control of Pollution Act 1974 in accordance with the procedures outlined in this Wylfa Newydd CoCP;
 - monitor noise and vibration levels according to requirements set out in the relevant sub-CoCPs; and
 - undertake relevant actions if thresholds are exceeded.
- 8.1.6 All construction work will be undertaken in accordance with generic measures consistent with the guidance in BS 5228-1:2009+A1:2014 [RD9] and BS 5228-2:2009+A1:2014 [RD10].
- Prior to the commencement of construction activities, the preferred construction methodology and equipment will be reviewed by Horizon to identify any reasonable opportunities to reduce construction noise and vibration and potential impacts on sensitive receptors. Where reasonable opportunities are identified, Horizon will adopt these as part of its construction methodology. Preference will be given to the selection of electrically powered equipment rather than diesel or petrol powered.
 - Heavy plant and equipment will comply with the noise limits outlined in the relevant European Commission Directive 2000/14/EC which is enacted in the Noise Emission in the Environment by Equipment for use Outdoors Regulations 2001. All plant and equipment will be maintained on a regular basis to ensure good working order and compliance with these limits.
 - All heavy plant and equipment fitted with noise abatement covers will not be operated with noise abatement covers open or removed, to ensure that the acoustic insulation they are fitted with remains effective. The effectiveness of acoustic insulation and silencers fitted to plant will be monitored and assessed on a monthly basis. Any plant or equipment

identified to have defective or underperforming insulation or silencers would be immediately investigated and repaired.

- Heavy plant, equipment and vehicles in intermittent use will be shut down or throttled down to a minimum during waiting periods as far as is practicable.
- Preference will be given to fabrication off-site or within purpose-built buildings on site, rather than in the open at the work area.
- Consideration will be given to site layout in order to eliminate or reduce emissions received at sensitive locations.
- Noisy plant and equipment producing high levels of vibration will be kept as far away as possible from sensitive areas.
- Vehicles and mechanical plant employed for any activity associated with the construction works will be fitted with effective exhaust silencers/suppression equipment.
- Plant employed for any activity associated with the construction works will be operated in a manner such that noise and vibration emissions will be controlled and limited as far as reasonably practicable.
- Vehicles will not wait or queue on the public highway with engines running (unless the engine was required to power the operation of the vehicle, e.g. concrete wagon).
- All materials will be handled in a manner that reduces noise.
- Noise from reversing alarms will be limited by designing circulation routes to avoid the need for vehicles to reverse, as far as practicable, using banksmen where appropriate. To reduce noise, reversing alarms fitted to all vehicles will incorporate one or more of the following features:
 - highly directional sounders;
 - broadband or warbling signals;
 - self-adjusting output sounders (also known as ‘smart sounders’); and
 - flashing lights.
- The location of static equipment (such as generators, compressors and pumps) will be positioned to reduce noise at sensitive receptors as far as practicable.
- Localised noise screens or enclosures will be placed around small scale and comparatively immobile equipment, where practicable.
- Vibratory rollers will not be started, stopped, or the direction of travel reversed close to sensitive receptors unless no alternative option is available.
- Considerate working practices and behaviours will be communicated to the workforce, through at least (but not restricted to) site inductions, shift briefings and toolbox talks.

- Horizon will ensure all site personnel with responsibility for operating plant and machinery, in particular the working methods required by relevant Section 61 consents, are suitably trained and qualified.
- Horizon will ensure vehicle fleets undergo regular checking and maintenance.

8.1.7 Other measures that will be considered include:

- Start up of plant and vehicles sequentially rather than all together.
- The surfaces on to which metal materials are moved will be covered by resilient material, where practicable.
- Site buildings such as offices and stores will be grouped together, where practicable, to form a barrier separating site operations and nearby noise-sensitive locations.
- Where practicable, impact noise when piling is being driven will be reduced where practicable by:
 - introducing a non-metallic dolly between the hammer and the driving helmet;
 - enclosing the driving system in an acoustic shroud; or
 - by enclosing the hammer and the complete length of pile being driven, within an acoustic enclosure.
- The short period $L_{Aeq, T}$ or the one percentile exceedance level $L_{A01, T}$ over one driving cycle or the L_{Amax} will be monitored where appropriate for pile driving activities. Where $L_{A01, T}$ or L_{Amax} is specified, the F time weighting will be used.
- Appropriate care will be taken in the siting of the following:
 - access points;
 - limit of excavation;
 - baffle mounds;
 - acoustic fences;
 - overburden mounds;
 - internal haul roads;
 - plant yards and maintenance facilities;
 - pumps, generators and static plant;
 - stocking areas and loading facilities; and
 - site amenities and car parking.
- Where practicable, roads will have easy gradients and gradual turns to reduce noise emission from vehicles and mobile plant.
- Where practicable, noisy static site elements will be located to take advantage of the screening effects of overburden and soil mounds.
- Where practicable, Horizon will choose appropriate drilling rigs, such as down-the-hole hammers or hydraulic drifters as opposed to compressed air drifters, to reduce the impact of noise emissions from this activity.

- Horizon will not use detonating fuse on the surface unless no other means are technically feasible.

8.2 Section 61 applications

General procedure for Section 61 applications

- 8.2.1 Horizon will submit Section 61 applications to cover appropriate periods of works, and any associated variations and dispensations.
- 8.2.2 For each Section 61 application, Horizon will ensure that the IACC is provided with sufficient time to review each application.
- 8.2.3 Horizon will maintain regular communication with the IACC to discuss the progress of Section 61 consent applications.
- 8.2.4 Section 61 applications will be made using the template in appendix A and containing the information set out in table 8-1.

Table 8-1 Required contents of Section 61 applications

Section of Section 61 application	Required information
Scheme of work	Horizon will provide a description of the works to be carried out, working methods, type and quantity of plant to be used, and the duration of the works.
Programme	Horizon will detail the location (on site layout drawings) and duration of each activity with a potential to cause a noise or vibration impact at local receptors.
Working hours	Horizon will provide a definition of the working hours required.
Plant noise data	Horizon will provide sound power levels or sound pressure levels at 10m for each proposed item of plant.
Best Practicable Means (BPM) measures	Horizon will describe steps to reduce noise and vibration as far as practicable during the works.
Predicted noise and vibration levels	Horizon will undertake predictions of noise and vibration levels in accordance with BS 5228 Parts 1 and 2 [RD9, RD10].
Proposed noise/vibration limits	Horizon will provide proposed noise/vibration limits applicable to normal operations described in the Section 61 application.
Proposed short-term higher noise/vibration limits	Where required, Horizon will propose limits for predicted short-term higher noise/vibration effects and associated durations, for consideration by the IACC.
BPM justification for short-term higher	Horizon will provide a detailed justification that the method and plant proposed represents BPM in terms

Section of Section 61 application	Required information
noise/vibration operations	of noise and vibration control. The duration of effect will be described.
Details of monitoring programme for noise and/or vibration	Horizon will provide details (including proposed monitoring locations, equipment, standards and personnel) of the proposed monitoring regime.

- 8.2.5 In the event that works for which Section 61 consent has been applied for, need to be rescheduled or modified (for example, using different plant, working methods or working hours), Horizon will apply for a dispensation or variation from the IACC before commencing those works.
- 8.2.6 The person(s) responsible for preparing applications for Section 61 consent or variation on behalf of Horizon and for the associated noise and vibration calculations must be suitably qualified and experienced.
- 8.2.7 Horizon will undertake a vibration risk assessment as part of the Section 61 application for any construction activity involving vibratory or impact equipment to be used.
- 8.2.8 If any significant effects from vibration are predicted at specific receptors by the Section 61 process, then Horizon will notify all affected properties about the effects that may be experienced at their property.

8.3 Local Noise Mitigation Strategy

- 8.3.1 Noise resulting from the construction and operation of the Wylfa Newydd DCO Project will be mitigated through a combination of embedded, good practice and additional mitigation measures. There will however remain some residual noise effects with the potential to adversely affect certain properties within the vicinity of the WNDA and along road transport access routes.
- 8.3.2 Horizon is committed to a voluntary Local Noise Mitigation Strategy (LNMS) which offers a noise insulation package of measures to properties within LNMS boundary areas for the WNDA and along certain road transport routes, including part of the A5025. The noise insulation package contains measures to improve noise insulation in eligible rooms of eligible buildings. The aim is to improve noise insulation for qualifying windows and doors whilst ensuring adequate ventilation. Enhanced measures may be offered on a case-by-case basis, where there is a need and scope to provide additional noise insulation for conservatories and/or gardens.
- 8.3.3 Horizon is also committed to ongoing assessment of noise effects and considering potential additional eligibility of affected properties during construction as part of the Section 61 process in due course.
- 8.3.4 Horizon will report on the implementation of the LNMS to the IACC on a quarterly basis by way of the relevant Engagement Groups (see section 3 and the DCO s.106 agreement). This reporting will provide a regular update of the number of applications received and accepted, the number of surveys undertaken, general options undertaken after survey including installation of

solar and blackout blinds, any complaints raised and the amount of properties with LNMS measures installed at the property.

Interpretation

8.3.5 The following terms are defined as set out in table 8-2 within the LNMS.

Table 8-2 Definitions

Term or abbreviation	Definition
acoustic fencing	Means timber fencing of sufficient surface density, and without gaps, so that it acts as a noise barrier.
application pack	Means the pack of information sent out to owners or occupiers of potentially eligible buildings. It contains further information about the LNMS, details of how to apply and an application form.
bedroom	Means a room originally intended for sleeping.
LNMS applicant	Means an owner or occupier (on behalf of an owner) who is in the process of applying for LNMS.
eligible building	Means a building accepted by Horizon into the LNMS during the LNMS process, by meeting all of the relevant eligibility criteria set out in the LNMS.
eligible room	Means a room within an eligible building which would benefit from LNMS measures delivered through the noise insulation package (i.e. a bedroom or living room).
enhanced measures	Means LNMS measures which may be applicable in certain situations to reduce noise in gardens and conservatories.
living room	Means sitting rooms, dining rooms, and kitchens with integrated living or dining areas.
LNMS WDA Construction Boundary Plan Area	Means the boundary drawn around the WDA within which buildings would be eligible for noise insulation under the LNMS provided that the criteria related to ownership, lease length and use set out in the LNMS are satisfied. The LNMS WDA Construction Boundary Plan appears as figure 8-1.
LNMS measures	Means the measures available under the LNMS, relating to noise insulation. These are divided into two categories: (1) a noise insulation package (for eligible rooms); and (2) enhanced measures (relating to gardens and conservatories).
noise insulation package	Means the package of LNMS measures available for qualifying doors and qualifying windows in eligible rooms.

Term or abbreviation	Definition
potentially eligible building	Means a building which meets the acoustic and building type eligibility criteria of the LNMS. Owners or occupiers of potentially eligible buildings will be notified and provided with information to allow them to apply under the LNMS if they wish to do so.
qualifying door	Means an external door to an eligible room.
qualifying highway	The section of the A5025 between Valley and Treglele, and the section of the A5 between the junctions with the A5025 and the A55 North Wales Expressway, as shown in figure 8-2.
qualifying window	Means an external window in an eligible room.
qualifying works	Means works which are predicted to exceed the noise thresholds for the LNMS at a particular location (such that the acoustic criteria is then met).

Applicability

8.3.6 The Environmental Statement finds that noise insulation measures set out in the LNMS could be of particular benefit to certain properties affected by noise due to:

- construction activities within the WNDA; and
- noise relating to traffic.

8.3.7 These two aspects form the focus for the LNMS. In all cases, the LNMS noise insulation measures will be applicable to bedrooms and living rooms where there is a greater sensitivity to noise. Other rooms, outhouses, sheds and other outbuildings are excluded. Some conservatories and gardens (acoustic fencing) will be considered on a case-by-case basis.

8.3.8 The effect of noise due to the construction of the Off-Site Power Station Facilities and the Associated Development will be of shorter duration than the construction within the WNDA and will be adequately addressed through effective planning, management and control of the various construction processes, including embedded and good practice and other additional mitigation. This LNMS will therefore not apply to the construction of these facilities.

Eligibility (noise due to construction activities within the WNDA)

8.3.9 In order to qualify for the additional mitigation under the LNMS, a property will need to be:

- situated within the LNMS Construction Boundary Plan area shown on figure 8.1, and
- a residential property, guest house, bed and breakfast or hotel where:
 - the applicant is the property owner or the holder of a long lease (with at least three years remaining); and

- the property is lawfully occupied as a permanent dwelling at the date the Order is granted.

8.3.10 The LNMS Construction Boundary Plan will be reviewed to take account of more accurate and detailed information associated with the Section 61 application process, prior to and throughout the construction period. Horizon will notify owners of any additional properties identified through this review that they may apply for the LNMS noise insulation measures subject to meeting the other eligibility criteria described in paragraph 8.3.9.

8.3.11 Properties outside of the published LNMS Construction Boundary Plan area will qualify if they meet the ‘residential property’ criteria set out in paragraph 8.3.9, and in addition:

- meet the acoustic qualification criteria set out in table 8-3; and
- the noise effect is likely to exist for a period of 10 or more days of working in any 15 consecutive days or for a total number of days exceeding 40 in any six consecutive months.

Table 8-3 Construction noise eligibility criteria, dB L_{Aeq,T} facade incident

Monday to Friday			Saturday			Sunday	
07:00– 19:00 (T=12hrs)	19:00– 22:00 (T=3hrs)	22:00– 07:00 (T=9hrs)	07:00– 13:00 (T=6hrs)	13:00– 22:00 (T=9hrs)	22:00– 07:00 (T=9hrs)	07:00– 22:00 (T=15hrs)	22:00– 07:00 (T=9hrs)
65	60	55	65	60	55	60	55

Eligibility (noise relating to traffic)

8.3.12 The LNMS also supports those affected by road traffic noise associated with the Wylfa Newydd DCO Project, due to increases in traffic on existing road alignments as well as the A5025 Off-line Highway Improvements. The output of the Environmental Statement modelling work has been used to identify qualifying highways (figure 8-2), adopting the following criteria:

8.3.13 Daytime acoustic qualification criteria:

- traffic noise levels during the construction or operation of the Wylfa Newydd DCO Project are predicted to exceed 63dB L_{A10 18 hr};
- the Wylfa Newydd DCO Project is predicted to experience an increase in traffic noise levels by at least 1dB(A), when compared to the baseline (i.e. without the Wylfa Newydd DCO Project) in the year 2020 when the A5025 Off-line Highway Improvements are to be finished; and
- the property is within 300m of any highway which will carry traffic generated by the Wylfa Newydd DCO Project.

8.3.14 Night-time acoustic qualification criteria:

- traffic noise levels during the construction or operation of the Wylfa Newydd DCO Project are predicted to exceed 60dB L_{AF max};
- the Wylfa Newydd DCO Project is predicted to increase traffic noise levels by at least 1dB(A), when compared to the baseline (i.e. without the Wylfa

Newydd DCO Project) in the year 2020 when the A5025 Off-line Highway Improvements are to be finished;

- traffic noise levels during the construction or operation of the Wylfa Newydd DCO Project are predicted to exceed 55dB(A) L_{night} ; and
- the property is within 300m of any highway which will carry traffic generated by the Wylfa Newydd DCO Project.

8.3.15 In order to qualify for the additional mitigation under the LNMS, a property will be:

- situated within 300m of a qualifying highway shown on figure 8-2;
- notified by Horizon that modelling indicates that noise levels at the property would exceed the acoustic qualification criteria set out in paragraphs 8.3.13 or 8.3.14; and
- a residential property, guest house, bed and breakfast or hotel where:
 - the applicant is the property owner or the holder of a long lease (with at least three years remaining); and
 - the property is lawfully occupied as a permanent dwelling at the date the Order is granted.

Figure 8-1 LNMS Construction Boundary Plan

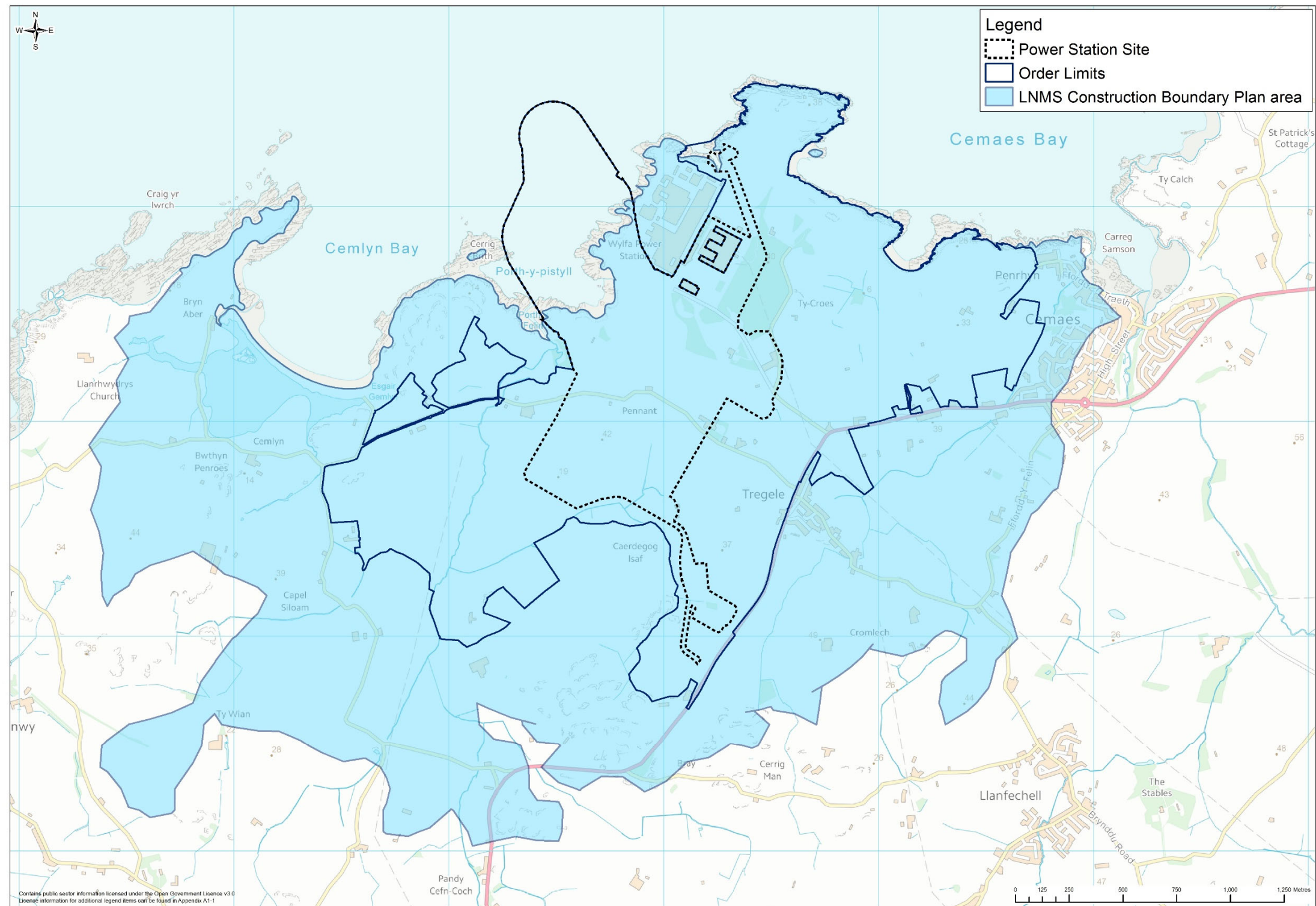
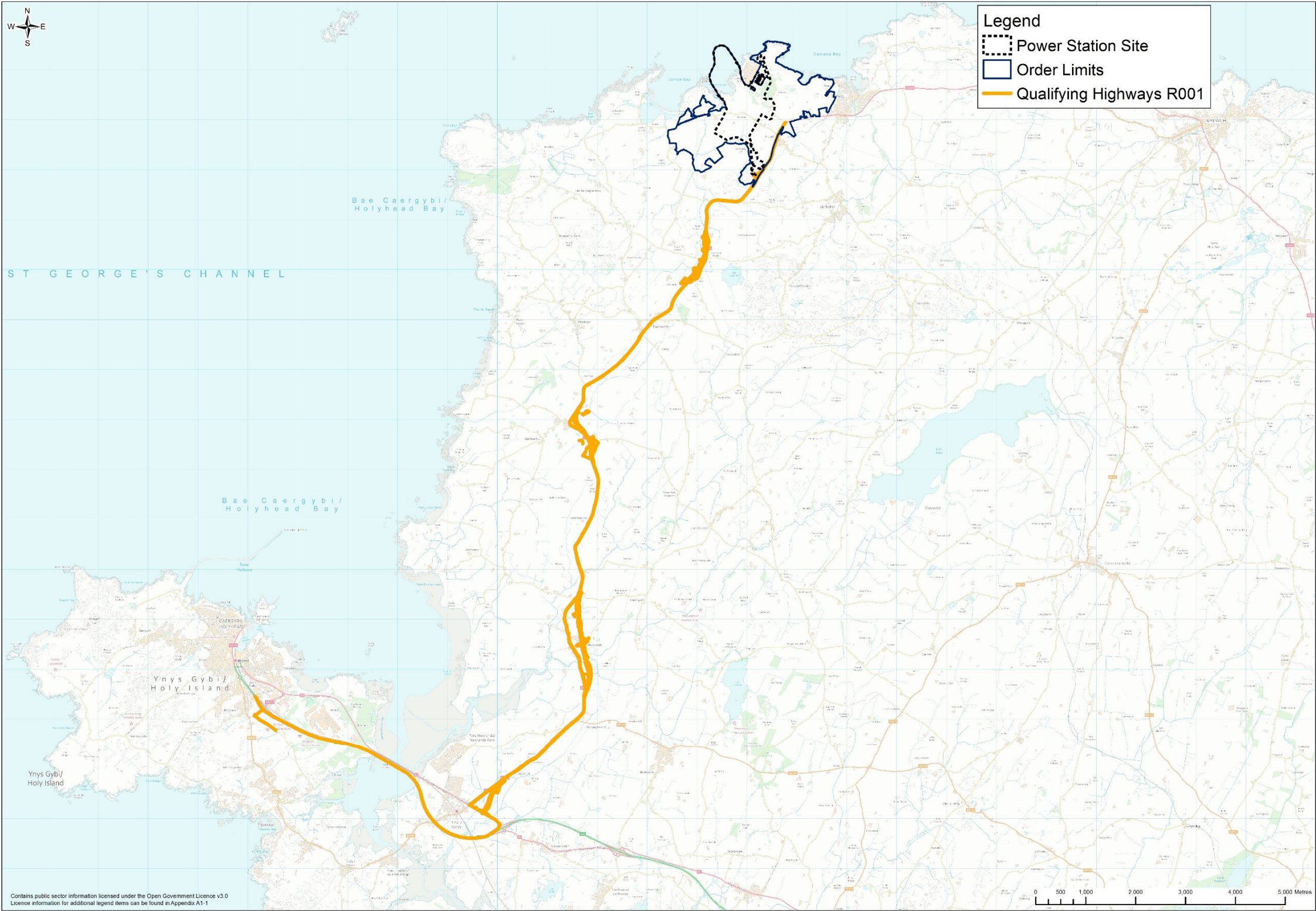


Figure 8-2 LNMS Construction Boundary Plan



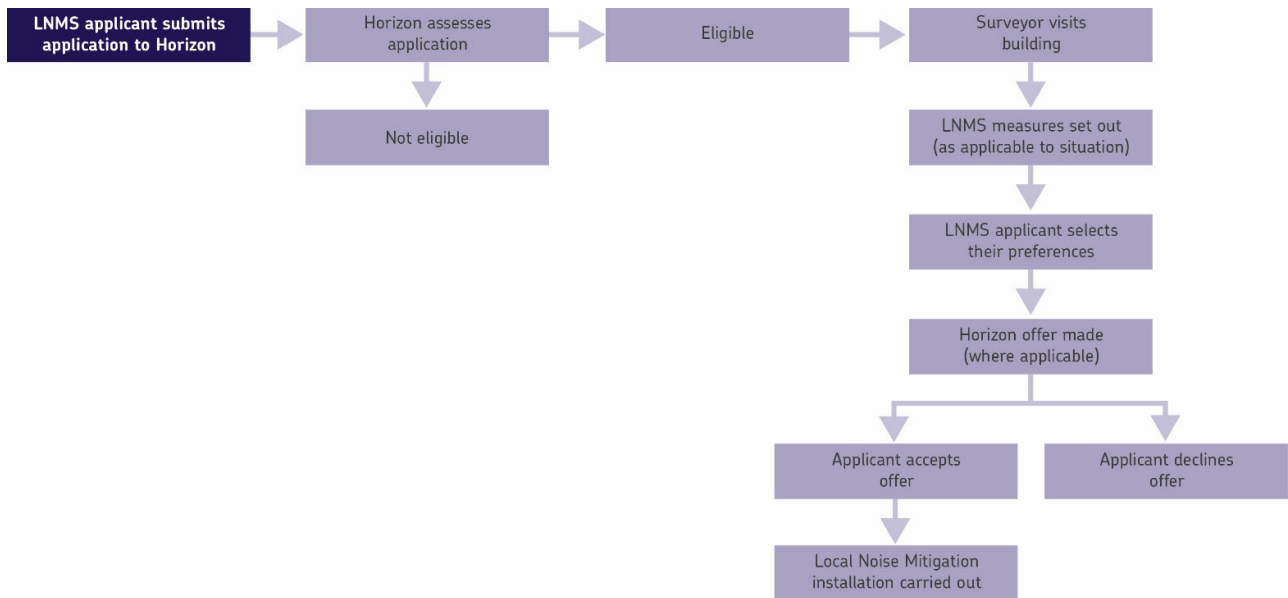
Sensitive receptors

- 8.3.16 The Environmental Statement identified a number of potentially sensitive receptors that could be adversely affected by noise and where LNMS noise insulation measures may provide benefit. The DCO s.106 agreement provides funding for Cemaes Primary School and Eglwys Sant Padrig Church. Horizon will approach other such receptors on a case-by-case basis..
- 8.3.17 Night workers, those needing a particularly quiet home environment to work in, or those that have a medical condition which will be seriously aggravated by construction noise, will also be considered on a case-by-case basis.

Implementation and operation of the LNMS

- 8.3.18 Prior to the commencement of construction works authorised by the Order, all potentially eligible buildings will be notified that they may be eligible to receive LNMS measures and will be provided with an application pack to enable them to apply. Notification will also be given to any additional properties that may become potentially eligible buildings resulting from any subsequent expansion of the LNMS Construction Boundary Plan area or qualifying highways.
- 8.3.19 Applications received will be checked against the eligibility criteria set out above. Eligible buildings will then be taken forward and Horizon will arrange for surveys to be undertaken to recommend LNMS measures that would benefit the occupants. At all eligible buildings consideration will be given to a noise insulation package comprising:
- secondary or double glazing for qualifying windows;
 - additional (noise insulated) ventilation in eligible rooms so that windows may be kept closed;
 - acoustic treatment for qualifying doors; and
 - internal solar blinds (or blackout blinds if preferred).
- 8.3.20 In some situations, enhanced measures (acoustic fencing or noise insulation for conservatories) will also be considered.
- 8.3.21 If an offer of improvements is subsequently made, and the LNMS applicant opts to take up the offer, Horizon will then arrange for installation. The LNMS applicant is at liberty to choose whether or not to take up the offer, but no cash alternative will be available in lieu of undertaking the improvements.
- 8.3.22 Horizon is committed to providing a suitably qualified and experienced independent third party to help to resolve cases relating to the LNMS should Horizon not come to an agreement with the LNMS applicant.
- 8.3.23 Figure 8-3 shows in schematic form key principles for how the LNMS will operate.

Figure 8-3 Operation of the LNMS – schematic flowchart



8.4 Noise and vibration monitoring

- 8.4.1 The aims of monitoring noise and vibration levels will be to:
- satisfy the requirements of consent obtained under Section 61 of the Control of Pollution Act 1974;
 - provide confidence in the calculations undertaken to inform the Section 61 process;
 - monitor compliance with the noise/vibration limits agreed during the Section 61 process; and
 - inform response to complaints about noise and vibration.
- 8.4.2 Noise measurements are to be undertaken at regular intervals by suitably qualified and experienced personnel.
- 8.4.3 Where monitored noise or vibration levels are found to be above the limits set out in the relevant Section 61 consent covering the works at the time, the following actions will be undertaken immediately upon any breach being discovered:
- review works in the area likely to be causing the breach and consider any necessary mitigation actions (including, if necessary, temporary suspension of works);
 - confirm that monitored levels are not being impacted by other noise or vibration sources;
 - determine whether the exceedance is due to a particular activity or item of equipment, and if so, identify if the equipment can be substituted for an alternative piece of equipment;
 - implement other feasible and reasonable measures (which may include modifying time of works, using an alternative construction methodology, or a combination of these); and
 - continue monitoring (including additional monitoring, if required) to verify that the control measures have reduced the noise levels to acceptable levels at the relevant receptors.
- 8.4.4 Horizon will be responsible for preparing summary reports of noise monitoring and vibration monitoring for the IACC. These will be prepared by a suitably qualified and experienced person.

9 Waste and materials management strategy, including soils and land contamination

9.1 General

- 9.1.1 Horizon's waste and materials management is based on the controls set out in this Wylfa Newydd CoCP and relevant sub-CoCPs.
- 9.1.2 Any site-specific mitigation controls to be implemented for waste and materials are described in section 9 of the relevant sub-CoCPs.
- 9.1.3 Horizon will manage all materials and waste for the Wylfa Newydd DCO Project during construction in an integrated approach according to this waste and materials management strategy. The strategy will:
- apply a waste hierarchy (as set out in figure 9-1) which encourages proactive management of materials to reduce the amount that is discarded and seeks to recover the maximum value from the wastes that are produced with disposal as a final option;
 - establish safety controls;
 - account for waste; and
 - protect human health and the environment, now and in the future.

Figure 9-1 Horizon's Waste Hierarchy



- 9.1.4 Modular buildings can be disassembled and relocated/refurbished with greater ease and efficiency, potentially reducing decommissioning waste.

9.2 Materials management

- 9.2.1 Horizon will conduct its materials management at each site following the process set out in *The Definition of Waste: Development Industry Code of Practice* [RD11]. Horizon materials management will provide that material is not a waste by giving sufficient consideration to the following four factors:
- protection of human health and the environment;
 - suitability for use, without further treatment;
 - certainty of use; and
 - quantity of material.
- 9.2.2 Horizon will ensure a Contaminated Land: Applications in Real Environments (CL:AIRE) qualified person is employed within its management systems to review, approve and verify site materials management. The CL:AIRE qualified person will not play an active part in the elements of the Wylfa Newydd DCO Project associated with materials management as they must be independent.
- 9.2.3 In accordance with the CL:AIRE code of practice, Horizon will:
- collate information on how excavated materials are to be reused at each site, or within the Wylfa Newydd DCO Project;
 - prepare plans and/or schematics showing the proposed materials management, including excavations, stockpiles and any areas where material will be treated;
 - apply 'suitable for use' criteria, that can be used to decide if a material is suitable or if it is a waste;
 - gather evidence to demonstrate that the materials are certain to be used, for example site layout plans or design drawings showing where material is needed to develop the site;
 - prepare a breakdown of the quantity of excavated material being used on each site, including quantities of different types of material;
 - gather details of how much material will be placed at each site or sub area of each site;
 - use a tracking system that will be used to monitor materials movements so that accurate records are available of what was placed where; and
 - review all waste management licences, environmental permits or exemptions of services Horizon procure, to ensure all waste carriers, brokers and holders are licensed and permitted to handle the specific types of wastes in transit, from transfer from sites or offices to the final point of disposal.
- 9.2.4 When construction works are complete, Horizon will produce a document that sets out in detail how materials were actually managed on each site.

9.3 Site waste management

- 9.3.1 All waste arising from the Wylfa Newydd DCO Project will be managed in a responsible manner with the clear intention of applying Horizon's waste hierarchy and in line with all relevant waste legislation and regulation during the construction of the Wylfa Newydd DCO Project.
- 9.3.2 Horizon will produce a project-wide Site Waste Management Plan (SWMP) prior to construction commencing. The SWMP will be supported throughout construction with reports for each construction site detailing the waste management processes for the site, waste types produced, and waste management facilities used.
- 9.3.3 Site-specific SWMPs will be prepared in alignment with the project-wide SWMP.
- 9.3.4 Horizon will consult with the IACC on the project-wide SWMP and the site-specific SWMPs.
- 9.3.5 Horizon will identify sufficient provision of essential waste infrastructure on-site or to service its sites. Horizon will consider local waste management opportunities where these are suitably prepared, compliant and auditable. Horizon will liaise with local waste management contractors to ensure adequate capacity is maintained for the demands of local businesses. This information will be captured in the project-wide and site-specific SWMPs and reported during construction activities. If monitoring identifies issues arising with regard to local capacity, Horizon will revise the relevant SWMP(s) and share the update with the IACC.
- 9.3.6 Horizon will implement each site-specific SWMP before construction works begin on that site. Throughout construction Horizon will prepare a report for each construction site detailing the waste management processes that were followed including:
- project details;
 - named persons and their roles and responsibilities;
 - waste minimisation actions and owners;
 - forecast of waste types and volumes including European Waste Catalogue codes;
 - names and duty of care information for waste carriers expected to be used;
 - names, locations and duty of care information for waste management facilities expected to be used on the Wylfa Newydd DCO Project; and
 - list of sub-contractors engaged with the Wylfa Newydd DCO Project.
- 9.3.7 The report will also:
- complete and finalise its waste reporting requirements;
 - conduct a comparison of the forecast and actual reported quantities for each waste type;

- describe lessons learnt from any differences between the concept phase and how Horizon actually performed during execution and implementation; and
 - generate an estimate of any cost savings achieved.
- 9.3.8 Throughout the construction period, and at regular intervals, Horizon will update:
- actual waste types and volumes including European Waste Catalogue codes;
 - names and duty of care information for waste carriers and waste management facilities that were used;
 - progress on waste minimisation actions; and
 - the list of sub-contractors working on the Wylfa Newydd DCO Project.
- 9.3.9 Within three months of the completion of construction works at that site, Horizon will complete and finalise its waste reporting requirements including preparing a final report which:
- includes a comparison of the forecast and actual reported quantities for each waste type;
 - describes lessons learnt from any differences between the concept phase and how Horizon actually performed during execution and implementation; and
 - generates an estimate of any cost savings achieved.

Waste controls on all sites

- 9.3.10 Horizon will procure waste management services for the Wylfa Newydd DCO Project. Horizon will implement waste controls to manage waste including the following.
- Optimising opportunities for reuse, recycling and recovery of wastes.
 - Storing non-hazardous materials in labelled bins or skips in designated areas. If the designated areas are external, they will be enclosed to prevent rainwater accumulating and material degradation.
 - Storing inert waste generated by Horizon's activities in inert skips or in designated storage area(s).
 - Appropriately identifying, managing and storing hazardous waste in designated area(s) in appropriately labelled, enclosed skips or receptacles in accordance with legislative requirements.
 - In the event that waste is suspected of being radioactive, it must be left *in situ* and advice sought immediately from the Corporate Radioactive Waste Adviser Body on its management and disposal, and the Corporate Radiation Protection Adviser Body on the associated radiological safety aspects, e.g. dose and exposure.

Waste duty of care

- 9.3.11 Horizon will categorise waste according to the European Waste Catalogue, and classify materials as hazardous, non-hazardous or inert according to their physical, chemical and biological properties.
- 9.3.12 Horizon will comply with, and ensure that others under Horizon's control comply with, their statutory obligations with respect to waste including the 'duty of care' requirements which will apply under Section 34 of the Environmental Protection Act 1990, and the requirement to arrange legal and compliant waste management services, including review of the transfer note (non-hazardous) or consignment note (hazardous) as part of Horizon's compliance with its statutory obligations.

9.4 Land contamination management

- 9.4.1 Horizon will assess and manage land contamination in accordance with guidance within the *Model Procedures for the Management of Land Contamination* [RD12]. This will include undertaking appropriate ground investigation, assessment and where necessary, remediation, to deal with any risks from land contamination that are identified within the WNDA and any of the associated development sites.
- 9.4.2 Horizon will prepare a Land Contamination Remediation Management Plan (which will cover for the WNDA and the Off-Site Power Station Facilities), in consultation with the IACC, detailing the methodology for the design, preparation, implementation, verification and monitoring and maintenance of land affected by contamination. Following remediation, Horizon will prepare verification reports in consultation with the IACC.
- 9.4.3 In order to address any areas of unexpected contamination encountered on all sites, Horizon will prepare, in consultation with the IACC, an Unexpected Contamination Management Plan for all sites prior to the commencement of any activities that involve ground disturbance. The Unexpected Contamination Management Plan will include processes and procedures that clearly set out the method for dealing with any material affected by contamination encountered during construction works.
- 9.4.4 As a minimum, the processes and procedures will include specific methodologies that provide a means of safely managing the unexpected contamination and minimising potential environmental impacts, and will cover the following:
- stopping work and notifying the Environmental Supervisor or Environmental Clerk of Works (or similar) when unexpected contamination is encountered;
 - isolating the affected area or segregating the affected material (if already excavated), with specific guidance to be provided on the management of any potential asbestos-containing materials;
 - undertaking sampling and assessment of the affected area/material;
 - mitigation of effects arising from the unexpected contamination;

- recording of assessment findings and subsequent management of the material within the verification report; and
- liaison with regulators, if necessary.

9.5 Soils

- 9.5.1 Horizon will ensure that suitably qualified and experienced personnel are employed to supervise the management of soil resources during soil stripping, handling, storage and reinstatement so that soil quality is retained, as far as practicable. These personnel will have the qualifications and meet the applicable minimum competencies set out within “Document 4 – Soil Science in soil handling and restoration” of *Working with Soil – The IPSS Professional Competency Scheme* [RD13].
- 9.5.2 Horizon will follow guidance within the *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites* [RD14] and *Good Practice Guide for Handling Soils* [RD15] with regards to soil management.
- 9.5.3 In addition, Horizon will give consideration to the following:
- BS 3882:2015 *Specification for topsoil* [RD16];
 - BS 8601:2013 *Specification for subsoil and requirements for use* [RD17];
 - *The Definition of Waste: Development Industry Code of Practice* [RD11];
 - The Waste (England and Wales) Regulations 2011; and
 - The Environmental Permitting (England and Wales) Regulations 2016.
- 9.5.4 Soil resource surveys will be undertaken prior to earthworks commencing at each location. The scope of the soil resource surveys will be determined by the suitably qualified and experienced personnel, in consultation with the IACC and NRW, taking into account the existing Agricultural Land Classification surveys, but will be in accordance with the guidance presented in the *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites* [RD14]. The information generated will be used to better understand the nature of soils on site so that they can be managed appropriately. The results of the surveys including the soil maps will be shared with the IACC for information.
- 9.5.5 In accordance with the *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites* [RD14], maps will be produced prior to construction showing existing topsoil and subsoil types, and the areas to be stripped and left *in situ*, the location of stockpiles and their anticipated contents, the location of haul routes, and the expected reuse for all stripped soils. The methods for stripping, stockpiling, resspreading and decompacting will also be set out prior to construction. These plans and methods will take into account the results of the Agricultural Land Classification and soil resource surveys.
- 9.5.6 General controls to be employed by Horizon when managing soil resources include, but are not limited to the following.
- Soil handling works will cease when soil moisture exceeds limits determined by the suitable qualified and experienced personnel working

to the *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites* [RD14].

- Topsoil and subsoil (where necessary), will be stripped as per good practice construction techniques from all areas where development is taking place, with the exception of environmental buffer areas. This will be undertaken towards the start of the construction works.
- Topsoils and subsoils, as well as soils of distinctly different qualities, types or composition will be stripped separately and segregated during storage and reinstatement as far as practicable, informed by properties such as (but not limited to) texture, stoniness, pH and nutrient levels.
- Soils will be stockpiled using methods appropriate to the soil moisture conditions and stored in secure designated areas.
- Soil storage mounds will have slopes of 1 in 2 (approximately 25°) or less where practicable.
- Where soils will be stored for longer than 60 days, stockpiles will be seeded with an appropriate low-maintenance seed mix.
- The topsoil (and subsoil, where necessary), would then be reused sustainably within the Wylfa Newydd DCO Project or at a suitable third-party receptor site (e.g. via the CL:AIRE register of materials).
- Topsoils will be reinstated to depths recommended by guidance, i.e. 150–300mm for grassland and 150–400mm for woodland, and subsoil will be placed beneath topsoil.
- Appropriate decompaction measures will be undertaken during reinstatement for topsoils, subsoils and their receiving substrates, including loosening with ripping equipment.
- Made ground materials and potentially contaminated materials will be stockpiled separately from natural materials to prevent cross contamination.
- Stockpiles considered to be contaminated will be stored on an impermeable base and have suitable containment and drainage to prevent potentially contaminated waters and sediments escaping.
- Chemical testing of stockpiles of made ground will be undertaken where required with testing results compared to relevant target values prior to reuse.
- If it is envisaged that soil will need to be stored for in excess of one year, a storage time limit will be agreed with NRW.

10 Water management strategy

10.1 General

- 10.1.1 Horizon's strategy to protect water resources is based on the controls set out in this Wylfa Newydd CoCP and relevant sub-CoCPs.
- 10.1.2 Any site-specific mitigation controls to be implemented for water management are described in section 10 of the relevant sub-CoCPs.
- 10.1.3 These documents will underpin the framework of controls for matters related to water resources that are set out within the Environmental Permit and deemed Marine Licence.
- 10.1.4 Horizon will comply with relevant legislation (including, but not limited to, the Water Resources Act 1991, the Environmental Permitting Regulations 2016 and the Land Drainage Act 1991 (as amended)).
- 10.1.5 Horizon will implement working methods to protect surface water and groundwater from pollution and other adverse impacts, including changes to flow, flood storage volume, water levels and water quality.
- 10.1.6 Construction Industry Research and Information Association (CIRIA) Guidance will be adopted as appropriate from the following publications:
- *Environmental Handbook for Building and Civil Engineering Projects* (three parts, C512, C528, C529) [RD18, RD19, RD20];
 - *Control of water pollution from construction sites. Guidance for consultants and contractors* (C532) [RD21];
 - *Environmental good practice on site guide* (fourth edition) (C741) [RD22];
 - *Land use management effects on flood flows and sediment – guidance on prediction* (C719D) [RD23];
 - *The SuDS Manual* (C753) [RD24];
 - *Development and flood risk – guidance for the construction industry* (C624) [RD25]; and
 - *Culvert Design and Operating Guide* (C689) [RD26].

10.2 Protection of watercourses

- 10.2.1 Horizon will ensure suitable procedures are in place to provide protection for watercourses (refer to section 4.7), such as appropriate control measures and resources to manage the risk of spills and accidents.
- 10.2.2 In line with CIRIA Guidance C741, *Environmental good practice on site guide* [RD21], buffer zones will be established adjacent to watercourses. Requirements for specific surface water receptors are set out in the sub-CoCPs.
- 10.2.3 Horizon will carry out a risk assessment for all works within surface water buffer zones, including but not limited to, vegetation management adjacent to watercourses, and construction of bridges and drainage outfalls. Furthermore, a risk assessment will be undertaken for use of any cementitious materials

within 50m of any active watercourse. Appropriate controls, proportionate to the level of risk identified, will be applied to the works.

- 10.2.4 Adequate drainage systems will be installed prior to construction works with appropriate treatment prior to discharge. This will include sediment treatment and the inclusion of oil separators where necessary.
- 10.2.5 The drainage system will be appropriately maintained throughout the works such that it remains efficient. Sediment would go to sediment lagoons.
- 10.2.6 Measures will be taken to prevent the deposition of silt or other material arising from work operations in existing watercourses or catchment areas. The measures will accord with the principles set out in industry guidelines, including *Guidance for Pollution Prevention: Works and maintenance in or near or water: GPP 5* [RD27]. Measures include use and maintenance of temporary lagoons, tanks, bunds, silt fences or silt screens, as well as consideration of the type of plant used and the time of year for working in watercourses.
- 10.2.7 In addition, relevant guidance including the following PPGs and GPPs will be followed, including:
- *PPG1: Understanding Your Environmental Responsibilities – Good Environmental Practices* [RD28];
 - *GPP 2: Above ground oil storage tanks* [RD29]
 - *PPG 6: Working at construction and demolition sites* [RD30];
 - *GPP 13: Vehicle washing and cleaning* [RD31];
 - *GPP 20: Dewatering underground ducts and chambers* [RD32];
 - *GPP 21: Pollution Incident Response Plans* [RD33];
 - *GPP 22: Dealing with spills* [RD34]; and
 - *PPG 26: Safe storage – Drums and intermediate bulk containers* [RD35].
- 10.2.8 Horizon's management of construction activities will be updated by the Environment Agency's GPPs, as they are made available.
- 10.2.9 Measures will be taken with regard to any works within a watercourse to restrict the release of suspended sediment and solids into the water column, as far as practicable.

10.3 Site drainage

- 10.3.1 Where practicable, sustainable methods will be utilised for discharges including site drainage, surface runoff and dewatering discharges.
- 10.3.2 Horizon will ensure runoff is managed appropriately, according to the controls within this Wylfa Newydd CoCP and relevant sub-CoCPs as well as any permits or other relevant approvals being obtained. This will include use of sediment settlement ponds and other appropriate treatment to manage flows and meet water quality thresholds as per the findings of the Water Framework Directive Compliance Assessment [APP-444] (as updated).
- 10.3.3 Horizon will ensure sufficient drainage is installed prior to topsoil strip or major works occurring in a particular area (including construction of site compounds)

to comply with the controls in this Wylfa Newydd CoCP and relevant sub-CoCPs.

- 10.3.4 Horizon will ensure all relevant construction activities are managed within the limits of an obtained Environmental Permit, for example keeping within limits on the concentrations of substances to be discharged, as far as possible, to protect receiving surface waters.
- 10.3.5 All temporary hardstanding (on non-foreshore sites), as far as is reasonably practicable, will incorporate permeable surfacing unless there is a risk of surface water or groundwater pollution from contaminants.
- 10.3.6 Wherever practicable, permeable surfacing will be used for minor tracks, haul roads, compounds and laydown areas in order to avoid any increase in flood risk. Permanent tracks, haul roads, and larger compounds that will house heavy equipment will be designed to avoid increases in flood risk. Discharge from any areas storing fuels and oils will be via an oil interceptor.
- 10.3.7 Oil interceptors will be provided to areas of hardstanding where there is a potential risk from oil/fuel contamination (e.g. at car parking areas).

10.4 Control of pollution

Surface water

- 10.4.1 Horizon will ensure that protection measures to control the risk of pollution to surface water are adopted, including the following.
 - All deemed requirements of the Environmental Permitting (England and Wales) Regulations 2016.
 - Any containers of contaminating substances on site will be leak-proof and kept in a safe and secure building or compound from which they cannot leak, spill or be open to vandalism. The containers will be protected by temporary impermeable bunds (or drip trays for small containers) with a capacity of 110% of the maximum stored volume. Areas for transfer of contaminating substances (including refuelling areas) will be similarly protected and have appropriate spill kits.
 - In addition, any permanent oil storage tanks and temporary storage of over 200 litres of oil in drums and mobile bowers, as well as ancillary pipe work, valves, filters, sight gauges and equipment will be stored within secondary containment, e.g. bunding or drip trays (Water Resources (Control of Pollution) (Oil Storage) (Wales) Regulations 2016) with a capacity of at least 110% of the maximum contents of an oil tank, mobile bower or intermediate bulk container.
 - No fuel, oil or chemical substances will be stored within 15m of a watercourse.
 - Above-ground pipework will be properly supported and underground pipework will be protected from physical damage and subject to adequate leakage detection. Mechanical joints on oil pipes will be inspectable. Oil

and hydrocarbon underground pipes will not extend into the groundwater saturated zone.

- All refuelling, oiling and greasing will take place above drip trays or on impermeable surfaces (e.g. plant nappy) with sealed drainage and an oil interceptor, which provides protection to underground strata and watercourses, and away from drains as far as is reasonably practicable. Vehicles and plant will not be left unattended during refuelling. Appropriate spill kits will be easily accessible during these activities.
- All construction equipment and vehicles will be maintained in line with manufacturer's instructions to ensure it is in good working order. Should any oil or fuel leaks occur, corrective action will be taken.
- Drip trays will be placed below static mechanical plant.
- All washing-down of vehicles (including wheel washing) and equipment will take place in designated areas and wash water will be prevented from passing untreated into watercourses and groundwater in accordance with the Environment Agency's GPP 13 [RD31] and subject to Environmental Permit requirements if discharged to controlled waters.
- The Environment Agency's GPP 5 [RD27] will be followed when carrying out maintenance of structures over water. Where practicable, only biodegradable hydraulic oils will be used in equipment working in or over watercourses.
- Appropriate measures will be taken to protect erodible earthwork surfaces, such as the use of sheeting.

Groundwater

- 10.4.2 Horizon will employ protective measures to control the risk of pollution to groundwater, which will, in particular, be consistent with the Environmental Permitting (England and Wales) Regulations 2016.
- 10.4.3 Horizon will address the handling of material from excavations being a potential source of contamination. Horizon will ensure measures will be put in place to prevent contaminated runoff reaching open ground.
- 10.4.4 In addition, Horizon will avoid using materials that could result in direct or indirect discharge of hazardous substances or non-hazardous pollutants to groundwater.

10.5 Flooding

- 10.5.1 Horizon will ensure that flood risk is managed safely throughout the construction period and that all designs comply with the flood consequence assessment in appendix D8-4 (Flood Consequence Assessment) [APP-150 to APP-157].
- 10.5.2 A documented flood mitigation action plan will be developed to ensure that in the event of flooding occurring on site, appropriate plans are in place to manage the risks and ensure that there is no increased risk to human health and that risks to property are managed appropriately. The plan would, as a

minimum, include details of the requirements for monitoring regulatory flood warning alerts, identification of safe meeting areas, access and egress routes, activities required to secure plant and equipment in the event of a flood being forecast, checking of drainage systems, roles and responsibilities and checking procedures.

- 10.5.3 Horizon's flood risk compliance will be based upon a risk-based precautionary approach, using the source-pathway-receptor concept, drawing information from NRW's online flood warning advice [RD36], or other such reputable service as appropriate.

10.6 Monitoring

- 10.6.1 Where required, the monitoring of aspects such as water quality, groundwater, and fluvial geomorphology will be carried out by Horizon.
- 10.6.2 Refer to relevant sub-CoCPs for details on required monitoring arrangements.

11 Ecology and landscape management strategy

11.1 General

- 11.1.1 Horizon's ecology and landscape management is based on the controls set out in this Wylfa Newydd CoCP and relevant sub-CoCPs.
- 11.1.2 Any site-specific mitigation controls to be implemented for ecology and landscape are described in section 11 of the relevant sub-CoCPs.
- 11.1.3 The Landscape and Habitat Management Strategy, a certified document, secures the creation and management of a range of key landscape elements and wildlife habitats across the WNDA and Ecological Compensation Sites. During the construction stage and operation stage of the Power Station, the Landscape and Habitat Management Strategy applies to a range of habitats including but not restricted to:
- Tre'r Gof Site of Special Scientific Interest, including botanical monitoring to identify any hydrological and air quality effects;
 - Notable Wildlife Enhancement Site;
 - the Reptile Receptor Site;
 - the Ancient Woodland Receptor Site;
 - maintenance of artificial red squirrel nest boxes in the Dame Sylvia Crowe wooded mounds; and
 - habitat management for chough at Wylfa Head.
- 11.1.4 Horizon will ensure that procedures are in place to prevent disturbance and damage to European Designated Sites; prevent offences under protected and controlled species legislation; and control and reduce, as far as is practicable, disturbance and damage to retained habitats and notable species, in accordance with the control measures set out within this Wylfa Newydd CoCP and sub-CoCPs and relevant legislation and nature conservation policy and guidance.
- 11.1.5 There are requirements for pre-construction ecology surveys set out, where relevant, in the sub-CoCPs. These pre-construction surveys will be carried out to provide up-to-date information on the potential presence of protected species. Results from the pre-construction surveys will inform the need for/the detail of protected species licences and/or inform construction decisions such as the micro-siting of ditch crossings. Pre-construction surveys identified as required at a site will be carried out by suitably qualified and experienced ecologists not more than 12 months in advance of construction commencing there.
- 11.1.6 Horizon's construction work will be planned with cognisance to the results and findings of the pre-construction surveys. Specific controls identified as a consequence of the pre-construction survey work will be carried out by Horizon through the planning and undertaking of the construction activities where appropriate.
- 11.1.7 Where a European Protected Species is shown to be present, construction of that part of the development will not commence until, after consultation with

NRW and the IACC, Horizon has obtained the necessary European Protected Species licence if required.

- 11.1.8 The specific details of mitigation measures and working methods would be detailed within each licence application, which would be legally binding documents. As set out in paragraph 2.2.9, the content of protected species licence applications is not forerun in the sub-CoCPs to keep these documents concise, and to avoid unnecessary repetition.

11.2 Receptor-specific requirements

- 11.2.1 As part of its Environmental Management Team set out in paragraph 4.1.3, Horizon will employ suitably qualified and experienced ecologists (referred to in this document and sub-CoCPs as Ecological Clerk of Works (ECoW)) to carry out site supervision works during activities that affect sensitive habitats and species to ensure that the procedures and controls in this Wylfa Newydd CoCP and sub-CoCPs are followed. The ECoW team will be in place to identify any new ecological constraints on site arising during construction. These will be dealt with following appropriate best practice guidance and, where required due to legal protection and licensing requirements, liaison with NRW.
- 11.2.2 The ECoW team will comprise professional ecological support associated with construction (or other works) site supervision, be it vegetation clearance or ensuring the adherence to specific working methodologies during other activities. Where necessary, specialist ECoWs may be required for specialist activities (e.g. NRW licensed bat workers or electrofishing specialists). The ECoW will report any ecological issues to the Site Director who will have the power to halt relevant works activities or intervene where there is a reasonable likelihood of a breach of Requirements or legislation. Where there is a high and imminent risk of a breach, halting of relevant works activities (or intervention as appropriate) will occur immediately after such works have been made safe. Such events will be communicated in a timely manner to the IACC's Environmental Officer, as appointed pursuant to the DCO s.106 agreement. The duties of the ECoW team will include:
- providing toolbox talks;
 - raising ecological awareness; and
 - inspecting wildlife exclusion/habitat protection fencing.
- 11.2.3 Works will be timed where possible to avoid particularly sensitive periods for ecological receptors. This may require habitat clearance to be undertaken in advance of the programme period for a particular construction activity.
- 11.2.4 Where species are protected by specific legislation requiring a derogation licence to avoid committing an offence under that legislation, approved guidance will be followed and sufficient time allowed to obtain the required licences or consents.
- 11.2.5 Horizon will implement a programme of monitoring to review the status of ecological issues during construction, including the monitoring and maintenance of any measures implemented as part of advanced mitigation works.

- 11.2.6 Horizon will ensure the construction workforce is provided with sufficient training to comply with the controls of this Wylfa Newydd CoCP and the sub-CoCPs relevant to a particular site. As a minimum, this will take the form of appropriate toolbox talks delivered by the ECoW prior to the commencement of works to ensure that all site personnel are aware of ecological constraints and the measures to avoid undue damage to habitats within or outside of the construction site.
- 11.2.7 Horizon will have particular regard to the controls of this Wylfa Newydd CoCP and sub-CoCPs with respect to general site operations, dust and air quality, noise and vibration and surface water and groundwater, respectively, to protect ecologically important habitats and species in the vicinity of construction sites.
- 11.2.8 Horizon will report and keep record of any unforeseen incidents that lead to breaches of this Wylfa Newydd CoCP and sub-CoCPs and actions taken to immediately remedy the non-compliance.
- 11.2.9 Horizon will be responsible for protecting habitats including terrestrial, foreshore and watercourse habitats, by appropriate means. This will include the creation of buffer exclusion zones to be demarcated and protected with site fencing/hoarding to prevent works encroaching into sensitive habitat areas. The relevant sub-CoCPs will identify whether buffer zones are required for specific locations and what the buffer zone will be.
- 11.2.10 Enabling works (such as vegetation clearance and dry stone wall removal), will be carried out in a directional manner as far as reasonably practicable, to encourage movement of mobile ecological receptors from construction areas towards retained habitat either on or off-site..

Bats

- 11.2.11 All species of bat in the UK are protected by law under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010 (both as amended). It is an offence to intentionally (or recklessly) kill, injure, capture or disturb bats or to damage, destroy or prevent access to roost sites (even when bats are not present).
- 11.2.12 Where works have the potential to disturb bats (by means of their commuting, foraging or roosting), appropriate mitigation will be dictated by means of an EPSML specific to bats if presence is established during pre-construction surveys detailed in relevant sub-CoCPs. Construction works with the potential to disturb bats will be supervised by an ECoW in line with the methodology set out in the EPSML. The ECoW appointed to oversee works potentially affecting bats will be an NRW bat licence holder.

Otters

- 11.2.13 Otters are protected by law under the Wildlife and Countryside Act 1981 and the Conservation of Habitats and Species Regulations 2010 (both as amended). It is an offence to intentionally (or recklessly) kill, injure, capture or disturb otters, or to damage, destroy or prevent access to resting or sheltering places (even when otters are not present).

- 11.2.14 Where works have the potential to disturb otters, appropriate mitigation will be dictated by means of an EPSML specific to otters if presence is established during pre-construction surveys detailed in relevant sub-CoCPs. Construction works with the potential to disturb otters will be supervised by an ECoW appointed to oversee works, in line with the methodology set out in the EPSML.

Water vole

- 11.2.15 Water vole are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally (or recklessly) kill, injure, capture or disturb water vole, or to damage, destroy or prevent access to resting or sheltering places (even when water vole are not present).
- 11.2.16 Where works have the potential to disturb water vole, appropriate mitigation will be dictated by means of a Conservation Licence (to derogate effects that might otherwise be illegal under the Wildlife and Countryside Act 1981) specific to water vole if presence is established during pre-construction surveys detailed in relevant sub-CoCPs. Construction works with the potential to contravene the legislation relating to water vole will be supervised by an ECoW appointed to oversee works, in line with the methodology set out in the Conservation Licence.

Red squirrel

- 11.2.17 Red squirrel are protected by law under the Wildlife and Countryside Act 1981 (as amended). It is an offence to intentionally (or recklessly) kill, injure, capture or disturb red squirrel, or to damage, destroy or prevent access to resting or sheltering places (even when red squirrel are not present).
- 11.2.18 Where works have the potential to disturb red squirrel, appropriate mitigation will be dictated by means of a Conservation Licence (to derogate effects that might otherwise be illegal under the Wildlife and Countryside Act 1981) specific to red squirrel if presence is established during pre-construction surveys detailed in relevant sub-CoCPs. Construction works with the potential to contravene the legislation relating to red squirrel will be supervised by an ECoW appointed to oversee works, in line with the methodology set out in the Conservation Licence.

Notable mammals

- 11.2.19 Section 7 of the Environment (Wales) Act 2016 places a duty on Welsh Ministers to produce a list of habitats and species that are of principal importance for the purpose of maintaining and enhancing the biodiversity of Wales. To reduce the risk of killing, injuring or isolating animals from suitable habitat, vegetation clearance works will take place in a directional manner, encouraging animals to move into retained and enhanced habitats.
- 11.2.20 All mammals in the UK are protected by the Wild Mammals (Protection) Act 1996. It is an offence to be found to show intent to inflict unnecessary suffering on any UK mammal. Horizon will ensure that toolbox talks are given to clearance teams by an ECoW to make them aware of the presence of these species on site and the habitats which support them. The toolbox talk will be appropriate to the areas to be cleared, informing the clearance teams about

the process of directional clearing and appropriate actions to be taken relevant to species encountered.

Hedgehog

- 11.2.21 Habitat with the potential to support hibernating hedgehog will not be removed between November and March without supervision by the ECoW.

Marine mammals

- 11.2.22 Refer to the Marine Works sub-CoCP for controls pertaining to marine mammals.

Breeding birds

- 11.2.23 All species of wild bird, their nests and their eggs are protected by law. It is an offence by the Wildlife and Countryside Act 1981 (as amended) to intentionally (recklessly) take, damage or destroy the nests or eggs of any wild bird while the nest is in use or being built.
- 11.2.24 Where possible, habitat with the potential to support bird nests will be removed outside the breeding bird season (typically March to August inclusive). This will ensure that no birds are nesting on site at the start of construction within or near to the identified habitat. If it is not possible to avoid the breeding bird season, then clearance works will be supervised by the implementation of the following measures.
- An ECoW will complete a pre-construction survey prior to removing any habitat with the potential to support nesting birds, including ground nesting species. The pre-construction survey will identify the presence of any active nests, and in the event they are identified, establish appropriate methodologies to reduce any potential impacts on these nests during clearance works.
 - The ECoW will supervise the clearance of habitats once it has been established that there are no nests present.
 - Should active nests be found, either during the pre-construction survey or during supervision, then the ECoW will set up a work exclusion zone of an appropriate distance and any other necessary mitigation works to prevent disturbance. The exclusion zone distance will be set based on the judgement of the ECoW and the species concerned, but will typically range between 5m to 10m.
 - Work exclusion zones will be maintained until chicks have fledged or the nest has become inactive, as determined through monitoring visits by the ECoW.

Schedule 1 bird species

- 11.2.25 Certain uncommon species of bird are afforded additional protection from disturbance; it is an offence to intentionally or recklessly disturb any such bird while it is building a nest, any such bird at a nest containing eggs or young or the dependent young of such a bird. These species are listed on Schedule 1

of the Wildlife and Countryside Act 1981 (as amended). The ECoW will propose protection measures specific to any Schedule 1 species present.

11.2.26 In order to mitigate the risk of disturbing any Schedule 1 bird species nest, the following approach will be taken in accordance with the Conservation of Habitats and Species Regulations 2010.

- Habitats with the potential for use by Schedule 1 bird species will be identified and surveyed by the ECoW prior to site clearance.
- In the event that a Schedule 1 bird species is found during the nesting season, NRW will be consulted in order to identify and agree appropriate measures to be undertaken in respect of that species.
- Should a Schedule 1 species be discovered within an area to be disturbed, Horizon will implement the general measures set out above for birds (see paragraph 11.2.24) with the added requirement that any Schedule 1 species or its dependent young must not be disturbed while at or building a nest. Therefore, additional exclusion/protective measures may be required.

11.2.27 It is noted that there is no legal provision under the Wildlife and Countryside Act 1981 (as amended) to obtain a licence to facilitate development which would disturb a Schedule 1 species.

Reptiles and amphibians

11.2.28 The great crested newt is a fully protected species under all elements of Section 9 of the Wildlife and Countryside Act 1981 (as amended), and under Parts 1 and 2 of Regulation 39 of the Conservation of Habitats and Species Regulations 2010.

11.2.29 Any required translocation of great crested newt will be completed under an EPSML obtained by Horizon. This will include all areas within 250m of ponds and follow best practice guidance from English Nature [RD37].

11.2.30 Horizon will be responsible for maintaining appropriate fencing that would prevent these animals from returning to the construction site for the duration of construction activities in that vicinity.

11.2.31 The ECoW appointed to oversee works potentially affecting great crested newt will be an NRW Great Crested Newt Licence holder or accredited agent.

11.2.32 All reptiles receive protection under the Wildlife and Countryside Act 1981 (as amended) making it illegal to intentionally injure or kill these animals.

11.2.33 Habitat with the potential to support hibernating reptiles or hibernating toads will not be removed between November and March without supervision by the ECoW. As hibernation is dependent, in part, on ambient temperature, the ECoW will provide advice on when clearance of habitat with the potential to support hibernating reptiles could occur, as well as advising on which habitats are likely to support hibernating reptiles.

11.2.34 Translocation of reptiles will take place in accordance with the Herpetofauna Groups of Britain and Ireland guidance [RD38], using artificial refuges.

- 11.2.35 Horizon will be responsible for maintaining appropriate fencing similar to that used to prevent amphibians from returning to the construction area, to also prevent reptiles from moving back into the area, until construction is complete. Where required, a single fence can be used for reptiles and amphibian purposes.
- 11.2.36 Habitat manipulation will be utilised where practicable to displace reptiles from an area subject to clearance into an adjacent undisturbed area in order to protect animals from injury and mortality. This is achieved by cutting and clearance of vegetation in stages towards the direction of retained habitats such as hedgerows, woodland edge, tussocky grassland and scrub.
- 11.2.37 Where possible, pond destruction will be timed to avoid amphibian breeding season. If not possible, the pond will be drained down and cleared under the supervision of an ECoW. Common toads collected would be translocated in accordance with English Nature guidance [RD37] using artificial refuges to the nearest retained pond.

Fish

- 11.2.38 Fish receive protection under the Salmon and Freshwater Fisheries Act 1975 and a number of species are listed under the Environment (Wales) Act 2016. Horizon will take all reasonable measures to ensure fish (and riparian mammal) passage is maintained along watercourses during construction works.
- 11.2.39 Horizon will conduct any necessary rescue and translocation of fish due to works within a watercourse, the rescue and translocation of fish, including the acquisition of appropriate licences from NRW. Watercourse works will avoid fish spawning and migratory periods, i.e. October to December.
- 11.2.40 Fish rescue will be undertaken by accredited and suitably qualified fisheries scientists.

Invertebrates

- 11.2.41 Sub-CoCPs contain site-specific controls established for notable invertebrate species found to be present.

Invasive non-native plant species

- 11.2.42 The Wylfa Newydd DCO Project has the potential to result in the spread of Invasive Non-Native Species (INNS) in the terrestrial or marine environment. This could have detrimental effects on native biodiversity and could be contrary to the Wildlife and Countryside Act 1981 (as amended) which lists INNS, making it illegal to introduce or cause them to spread or grow in the wild. It could also be contrary to other regulations and international conventions. The works have the potential to both spread INNS that are already established on the site and elsewhere in the UK and result in import of INNS from outside the UK.
- 11.2.43 In order to manage these risks, Horizon will prepare one (or more) Biosecurity Risk Assessment(s) and Method Statement(s) to cover all activities. Each Biosecurity Risk Assessment will consider in general:

- measures that will be undertaken to control and eradicate INNS within the area of works; and
- measures or actions that aim to prevent INNS being introduced to the site for the duration of the construction phase of the Project.

11.2.44 In the management of existing known presence of INNS, Biosecurity Risk Assessments and Method Statements will detail:

- how areas with the presence of INNS will be demarcated;
- how any contaminated materials will be appropriately managed throughout the works, including where appropriate, eradication from the site;
- appropriate disposal; and
- how any transfer or spread will be prevented.

11.2.45 In terms of prevention of new introduction to the site through terrestrial and marine pathways, Biosecurity Risk Assessments and Method Statements will detail:

- risk pathways and risk activities for the transfer and spread of non-native species;
- risk assessment for the transfer and spread of individual non-native species of known concern;
- methods to manage risk of transfer including any actions to be undertaken prior to reaching site; and
- contingency planning and corrective actions.

11.2.46 Prior to any construction workers going out on site, a toolbox talk from a suitably qualified ecologist who is experienced in identifying INNS will be provided and will include photographs of the INNS known to be present within the development site.

11.2.47 A suite of mitigation measures regarding the movement and management of the construction workforce and construction vehicles required for the Wylfa Newydd DCO Project, outlined in this Wylfa Newydd CoCP, and where appropriate the sub-CoCPs] and Workforce Management Strategy, will be complied with throughout the duration of the Wylfa Newydd DCO Project. All site personnel (and vehicles) will keep to defined access and egress routes at all times.

11.2.48 To prevent the transfer of INNS on imported/removed/disposed materials from contaminated areas, materials will be disposed of appropriately. This includes ensuring that the details of its appropriate level of disposal are known to those parties involved with its handling, and how the transfer of viable propagules of INNS by people or vehicles will be prevented.

11.2.49 During construction, the areas where INNS have been recorded and that will not be affected by the Wylfa Newydd DCO Project, will be demarcated (in accordance with industry guidance, where available) under the supervision of a suitably qualified ecologist. For instance, the demarcation of area(s) of Japanese knotweed and any subsequent works in or around these area(s) will be undertaken in accordance with the guidelines set out in the *Knotweed Code*

of Practice [RD39] and The Control of Japanese Knotweed in Construction and Landscape Contracts [RD40].

- 11.2.50 Any INNS that are suspected to be present in areas outside of those already known will be reported as soon as is practicable so that the appropriate actions can be applied from the Biosecurity Risk Assessment.
- 11.2.51 The implementation of a monitoring programme for INNS will include observational surveys of the working areas by a suitably qualified ECoW. Surveys will record the presence and abundance of non-native species and will be reported in a format to be agreed with NRW. An initial pre-construction survey will be undertaken, and regular surveys will begin once construction commences. Monitoring survey requirements for specific sites are set out in the sub-CoCPs where relevant. Where new presence of INNS is discovered, Biosecurity Risk Assessments and Method Statements will be reviewed and amended where necessary. Early detection increases the likelihood of successful containment and the potential for full eradication.
- 11.2.52 The frequency and extent of monitoring will reduce over time, particularly once significant construction activities are underway and/or near completion. The ongoing requirement for monitoring will be regularly reviewed and agreed with NRW.

Protection of existing trees, scrub and hedgerows

- 11.2.53 Horizon will identify, map, categorise and quantify existing trees, scrub and hedgerows to be retained and protection of those features will be in accordance with the recommendations in BS 5837:2012 [RD41].
- 11.2.54 Works within tree root protection areas will be avoided wherever practicable. If works within the root protection area of trees to be retained are deemed essential, works will be carried out using the techniques provided in BS 5837:2012 and the duration of those works will be restricted as far as possible.

Protection of other retained landscape features

- 11.2.55 Horizon will identify other landscape features (such as stone walls, cloddiau, watercourses) to be retained during the construction phase of the Wylfa Newydd DCO Project.
- 11.2.56 Appropriate protection measures (for example, erecting signage, fencing) would be put in place and maintained throughout the construction phase to demarcate all buffers around all retained trees, scrub and hedgerows within each site. Fencing demarcation will be established prior to any works commencing likely to encroach upon the area to be protected.

11.3 Landscaping requirements

- 11.3.1 The relevant Design and Access Statement, Volume 1, Volume 2 and Volume 3 Parts 1 and 2, and for the WNDA the Landscape and Habitat Management Strategy, set out the design principles that will provide guidance on landscaping measures to be implemented, for reasons such as mitigating adverse visual impacts, effects on habitats and species and/or effects on landscape character.

11.4 Landscape reinstatement

- 11.4.1 Horizon will undertake reinstatement of land used temporarily for construction to a condition similar to that which existed prior to construction.

11.5 Record keeping

- 11.5.1 Horizon will maintain proper record-keeping procedures in relation to all ecological constraints and respective licences.
- 11.5.2 Horizon will provide all species data collected to Cofnod (North Wales Environmental Information Service).
- 11.5.3 Recorded data will be kept securely and backed up as necessary for the purposes of audit.

12 Cultural heritage management strategy

12.1 General

- 12.1.1 Horizon's cultural heritage management is based on the controls set out in this Wylfa Newydd CoCP and relevant sub-CoCPs.
- 12.1.2 Site-specific mitigation controls to be implemented for cultural heritage are described in section 12 of the relevant sub-CoCPs.
- 12.1.3 Mitigation for effects on cultural heritage is presented below under the sub-topics of archaeological remains, historic buildings, and the historic landscape.
- 12.1.4 As part of the general measures in 4.3.1, Horizon will ensure that the internal layout of the temporary Construction Compounds is designed to reduce noise intrusion into the setting of heritage assets and will include consideration of fencing materials, stockpiles and the positioning of construction portable buildings.

12.2 Archaeological remains

- 12.2.1 If unknown archaeological remains are discovered and it is determined by Horizon's archaeological consultant, in liaison with the IACC, that the planned construction works may affect those remains, Horizon will cease works in that area. The potential remains will then be assessed and appropriate mitigation measures developed in consultation between Horizon and the IACC. Appropriate mitigation may comprise measures such as:
 - palaeoenvironmental assessment followed by palaeoenvironmental analysis if required;
 - archaeological excavations;
 - strip, map and sample; and
 - targeted watching briefs.
- 12.2.2 Archaeological recording will be undertaken in accordance with relevant guidance provided by the Chartered Institute for Archaeologists and Written Schemes of Investigation agreed with the IACC. All archaeological recording will include a programme of assessment, reporting, analysis, publication and dissemination commensurate with the value of the terrestrial archaeological remains removed, submission of reports to the Historic Environment Record and National Monument Record of Wales, and the preparation of an ordered archive which will be submitted to an appropriate repository. Works will continue in the vicinity of the remains upon implementation of the approved mitigation.

12.3 Historic buildings

- 12.3.1 In order to mitigate effects on historic buildings within the Order Limits, one or both of the following will be undertaken, to be determined on a case-by-case basis:
 - photographic surveys to provide a permanent visual record of the current conditions of historic buildings and/or their settings; and

- historic building recording (at a suitable level) to provide a permanent documentary (written, drawn and photographic) record of historic buildings in their current form and setting.

12.3.2 Photographic survey and historic building survey will be undertaken in accordance with relevant good practice guidance and Written Schemes of Investigation agreed with the IACC. The level of archaeological building recording and reporting will be commensurate with the value of the historic buildings affected, and will include submission of reports to the Historic Environment Record and National Monument Record of Wales, and the preparation of an ordered archive which will be submitted to an appropriate repository.

12.4 The historic landscape

12.4.1 Measures will be undertaken to mitigate effects on the historic landscape within the Order Limits. Such measures will include one or all of the following:

- historic landscape surveys (at a suitable level) will be undertaken to mitigate the effects on historic landscape through creating a permanent documentary (written, drawn and photographic) record of their current form and setting;
- topographic and landscape survey and recording, at a suitable level; and
- photographic surveys (at a suitable level) to provide a permanent visual record of the landscape.

12.4.2 The surveys will be undertaken in accordance with relevant good practice guidance and Written Schemes of Investigation agreed with the IACC. The level of reporting will be commensurate with the value of the historic landscape affected, and will include submission of reports to the Historic Environment Record and National Monument Record of Wales, and the preparation of an ordered archive which will be submitted to an appropriate repository.

13 References

Table 14-1 Schedule of references

ID	Reference
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ID	Reference
RD15	Ministry of Agriculture, Fisheries and Food. 2000. <i>Good Practice Guide for Handling Soils</i> (version 04/00). Cambridge: Farming and Rural Conservation Agency.
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RD17	British Standards Institution. 2013. <i>BS 8601:2013 Specification for subsoil and requirements for use</i> . London: British Standards Institution.
RD18	Venables, R.K. 2000. PUB C512 <i>Environmental handbook for building and civil engineering projects. Part 1: Design and specification</i> . London: CIRIA.
RD19	Venables, R.K. 2000. PUB C528 <i>Environmental handbook for building and civil engineering projects. Part 2: Construction</i> . London: CIRIA.
RD20	Venables, R.K. 2000. PUB C529 <i>Environmental handbook for building and civil engineering projects. Part 3: Demolition and site clearance</i> . London: CIRIA.
RD21	Masters-Williams, H. Heap, A., Kitts, H., Greenshaw, L., Davis, S., Fisher, P., Hendrie, M., Owens, D. 2001. <i>CIRIA C532 Control of water pollution from construction sites. Guidance for consultants and contractors</i> . London: CIRIA.
RD22	Charles, P. and Edwards, P. 2015. <i>Environmental good practice on site guide (fourth edition)</i> (C741). London: CIRIA.
RD23	McIntyre, N. and Thorne, C. 2013. <i>Land use management effects on flood flows and sediment – guidance on prediction</i> (C719D). London: CIRIA.
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RD26	Balkham, M., Fosbeary, C., Kitchen, A. and Rickard, C. 2010. <i>Culvert Design and Operating Guide</i> (C689). London: CIRIA.
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RD30	Environment Agency, Scottish Environment Protection Agency and Northern Ireland Environment Agency. 2012. <i>Working at construction and demolition sites: PPG 6</i> . 2 nd Edition. Bristol: Environment Agency.
RD31	Northern Ireland Environment Agency, Scottish Environment Protection Agency and Natural Resources Wales. 2017. <i>GPP 13: Vehicle washing and cleaning</i> . Cardiff: Natural Resources Wales.
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RD33	Northern Ireland Environment Agency, Scottish Environment Protection Agency and Natural Resources Wales. 2017. <i>GPP 21: Pollution Incident Response Plans</i> . Cardiff: Natural Resources Wales.
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RD40	Welsh Government. 2011. <i>The Control of Japanese Knotweed (Fallopia japonica) in Construction and Landscape Contracts</i> . [Online]. [Accessed: February 2019]. Available from: http://www.nonnativespecies.org/downloadDocument.cfm?id=1064
RD41	British Standards Institution. 2012. BS 5837:2012 <i>Trees in relation to design, demolition and construction. Recommendations</i> . London: British Standards Institution.

Appendix A Template application form for Section 61 consent

CONTROL OF POLLUTION ACT 1974

EXAMPLE APPLICATION FORM FOR SECTION 61 CONSENT

To be developed further (with explanatory notes) in consultation with the relevant authorities.

Name and address of contractor	
Telephone number: Fax number:	
Address/location of proposed works:	
Particulars of works to be carried out:	
Site plan	
Methods to be used in each stage of development:	
Hours of work:	
Number, type and make of plant and machinery (including heavy vehicles) stating sound power levels	
Proposed steps to manage noise and vibration	
Predicted noise levels	
Approximate duration of works	
Other information	
List of plans and documents attached	

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