

Wylfa Newydd Project Update January 2016



Foreword

from Alan Raymant

The Wylfa Newydd Project is our commitment to the Isle of Anglesey, bringing significant investment to the Island and helping to secure its long-term economic future.

In this endeavour, we recognise our responsibility to protect and enhance the unique characteristics of this beautiful part of Wales, which include its language and landscape.

We completed our first stage of pre-application consultation in 2014 and the feedback you provided has helped to shape our proposals. Of course, our Project has developed significantly since this time and we are now ready to share our latest plans with you. We'll do this in two ways in the coming months, firstly through a number of open exhibitions and then through more focused workshop sessions, which we plan to run across Anglesey.

This document contains an update on each part of the Project and we ask a number of questions where your feedback really can help us shape development of the Project. Please do get involved and let us know what you think – your views count!

As the shape and scale of the Project becomes more clearly defined and we understand more fully the impacts and benefits of different aspects, we will come back to the community later this year with our refined Project proposals as part of our second stage of pre-application consultation.

Our website: www.horizonnuclearpower.com/consultation has all the details of the events that we will be running in the coming months. We look forward to meeting you and receiving your feedback.



Alan Raymant



Chief Operating Officer
Horizon Nuclear Power



OUR VISION

We believe there is a compelling requirement for new nuclear power in the UK to help tackle the vital and complex challenge of delivering a sustainable energy future. Horizon will deliver secure, affordable, low carbon energy for present and future generations.





Documents available as part of this Project Update

This document provides an update of our current Project proposals and builds on the information that was available during our first stage of pre-application consultation in 2014. It will explain how our Project has moved on during 2015, providing you with the latest available information and asking for your feedback where we think it might be particularly helpful to further develop our proposals.

The information available includes:

- This document, the Wylfa Newydd Project Update (available in both Welsh and English)
- Fact Sheets to summarise our strategic approaches and information on topics that we know people are especially interested in (available in both Welsh and English)
- The Summary of Pre-Application Consultation Stage One Feedback

This information can also be downloaded from our website at: www.horizonnuclearpower.com/consultation



MORE INFORMATION

PLEASE LOOK OUT FOR THESE ICONS THROUGHOUT THIS DOCUMENT



QUESTION

We have included questions about elements of the Project where your input could be particularly helpful. The question mark indicates when to refer to the feedback form, enclosed within this document.



MORE INFORMATION

This provides more detailed information about the Project.



'DID YOU KNOW?'

This highlights particular aspects of our Project that you might find interesting.

A step-by-step guide to this document

1

Find the information you're interested in

There's a lot of information available about our Project, but we know there are some areas that you are especially interested in. This handy guide will help you find the information you need quickly and easily.



WORKER'S ACCOMMODATION

Have a look at page 29 for more information about our proposals for housing workers during the construction phase.



ROAD IMPROVEMENTS

Have a look at page 41 for our road improvements proposals.



WELSH LANGUAGE AND CULTURE

Have a look at page 47 for more information about what we're doing to protect and enhance the Welsh language and culture.



COMMUNITY BENEFITS

Have a look at page 57 for our planned delivery of community benefits.



THE ENVIRONMENT

Have a look at page 43 for information about the environment and our current thinking on mitigation.



JOB'S AND SKILLS

Have a look at page 51 for more detailed information on the types of jobs that will be available and our proposed training and skills programme to maximise local employment opportunities.

2

Getting involved...

The best way to get involved is to talk to us in person and complete our feedback form. There will be lots of opportunities to meet us during early 2016 and members of our team will be available to answer your questions and discuss any comments or concerns that you have.



EVENTS

We're holding events across Anglesey where you'll be able to view information about the Wylfa Newydd Project and meet the experts from our team. Welsh speakers will be available at all events.



WORKSHOPS

In early spring we'll be holding a series of workshops across the Island to speak with you in more detail about the topics of most interest to you and your community. Look out for more information about this at the events.

Don't forget, if you don't have time to come to one of our events, you can phone us for free on **0800 954 9516** or email us at **wylfaenquiries@horizonnuclearpower.com** at any time.

3

Tell us what you think

The most important thing is to tell us what you think about our proposals. Your views count! You can send us your feedback in several different ways and in either Welsh or English. Please make sure your feedback reaches us by 24 March 2016.

FILL OUT OUR
FEEDBACK FORM ONLINE

Go to our website and complete our online form:
www.horizonnuclearpower.com/consultation

FILL OUT OUR
PAPER FEEDBACK FORM

Fill out a paper feedback form and give it to us at one of our events or post it to us free of charge.



WRITE TO US

Send us your thoughts in an email to **wylfaenquiries@horizonnuclearpower.com** or a letter to **FREEPOST Horizon Nuclear Power Consultation**

Project overview

The UK faces significant energy challenges in the coming years and needs investment in low carbon electricity generation.

To support this, we are planning to construct and operate a new nuclear power station on Anglesey, to the west of Cemaes and south-west of the existing Magnox power station. The Wylfa Newydd Power Station would generate 2,700 megawatts of electricity, providing enough secure, low carbon power for around five million homes for decades to come. It will also create significant long-term employment opportunities and economic benefits for Anglesey and north Wales.

This document includes an update to the Project as a whole, including our proposals for the Power Station, Off-Site Power Station Facilities and Associated Development.

THE POWER STATION

The Power Station is the proposed new nuclear power station including two UK Advanced Boiling Water Reactors (UK ABWRs) to be supplied by Hitachi-GE Nuclear Energy, Ltd. (Hitachi-GE), associated plant and ancillary structures and features to be constructed and operated on Anglesey.

Construction works will be needed on the land around the Power Station and in the water near Porth-y-pistyll. This will include creation of a permanent landscaped setting for the Power Station as well as construction of our cooling water system, associated breakwaters and Marine Off-Loading Facility.

OFF-SITE POWER STATION FACILITIES

We also have to develop some facilities that are geographically separate from but local to and part of the Power Station, comprising an alternate emergency control facility and environmental survey laboratory for the Power Station and a garage to store specialist vehicles. More information on the Off-Site Power Station Facilities can be found from page 21 of this document.

ASSOCIATED DEVELOPMENT

Associated Development supports the delivery and operation of the Power Station and will include such works as highway improvements along the A5025, temporary accommodation for construction workers, a park and ride facility, a logistics centre, and a visitor centre. More information on the Associated Development can be found from page 24 of this document.



QUESTION – GENERAL

Do you have any general comments about the Wylfa Newydd Project?



Proposed timeline and phasing of the Wylfa Newydd Project

Consultation and project update

We are committed to undertaking effective consultation with the community who may be affected by our Project.

STAGE ONE PRE-APPLICATION CONSULTATION

The first stage of our pre-application consultation lasted for ten weeks, beginning in September 2014 and ending in December 2014.

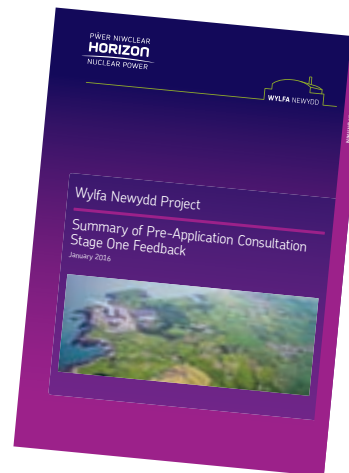
To maximise the number of people involved in the consultation process, we posted newsletters; placed adverts across the Island; held exhibitions, drop-in sessions, information stands and open surgeries; made presentations as part of the regular Project Liaison Group meetings; met with 'hard-to-reach' groups; and regularly updated our social media accounts and consultation website.

In total, we received 424 responses to the first stage of pre-application consultation, 38 of which were from technical consultees.



CONSULTATION FEEDBACK REPORT

We have worked hard to analyse the feedback we received and have prepared a Summary of Pre-Application Consultation Feedback from our first stage of consultation. This report outlines the responses received, describes the common themes that we noted within the feedback and sets out the process we used to review and consider feedback in the development of our Project proposals.



DID YOU KNOW?

A technical consultee is someone with a specific or expert interest in the Project such as statutory consultees or community organisations.



MORE INFORMATION

We published a Statement of Community Consultation (SOCC) in September 2014, outlining our Project proposals on Anglesey, as well as the way in which we planned to consult with stakeholders and the community. As we have revised the timing of our consultations, we have updated our SOCC and republished it in January 2016. The updated SOCC can be found at our website: www.horizonnuclearpower.com/consultation

UPDATES ON PROGRESS OF OUR PROJECT

We have met with a number of our technical consultees including the Isle of Anglesey County Council, Gwynedd Council, Conwy County Borough Council, Welsh Government, Natural Resources Wales, the Environment Agency, and the Office for Nuclear Regulation.

These discussions and our analysis of the first stage of pre-application consultation feedback have contributed to changes to our Project during 2015 including:

- development of our options for accommodation of our construction workers
- significant progress on our socio-economic assessment and environmental monitoring
- development of a number of strategies to support the work we are undertaking – these are summarised in a series of Fact Sheets which will be available at our events
- changes to our site masterplanning, including the reduction in volumes of excavated materials, achieved through the creation of a terraced site

Our strategic approach

We recognise that some aspects of our Project are likely to need special attention so that we do not create additional impacts on the communities across Anglesey.

We have developed a number of strategies on these important aspects of the Project. We know that many of these are of particular interest to the community and we'd like to hear your views on them as we develop them. We believe that the most appropriate way to address these particular aspects is to allow you to influence our direction of travel at an early stage.

To help you provide feedback on our strategies we have prepared Fact Sheets to summarise our proposals. We have also prepared Fact Sheets for topics that we know local people are especially interested in, including the Welsh language and culture and radioactive waste.

The Fact Sheets that we are seeking feedback on are:

- Welsh language and culture
- Architectural Strategy
- Construction Worker Accommodation Strategy
- Education Engagement Strategy
- Jobs and Skills Strategy
- Integrated Traffic and Transport Strategy
- Public Access and Recreation Strategy
- Community Benefits Strategy
- Landscape and Environmental Master Plan
- Radioactive waste

Fact Sheets are available as part of this consultation and on our website: www.horizonnuclearpower.com/consultation



QUESTION – STRATEGIC APPROACHES TO MITIGATION AND ENHANCEMENT

Please consider the strategic approaches and topics that we introduce in our Fact Sheets:

- Architectural Strategy
- Construction Worker Accommodation Strategy
- Education Engagement Strategy
- Jobs and Skills Strategy
- Integrated Traffic and Transport Strategy
- Public Access and Recreation Strategy
- Community Benefits Strategy
- Landscape and Environmental Masterplan
- Welsh language and culture
- Radioactive waste

Please could you describe any positive or negative effects you think our proposed strategies may have on your local area and any ideas that you would like us to consider in developing them further? Please specify in your response which strategy you are referring to.

If you have suggestions about other areas of the Project that could benefit from a similar approach we would like to hear from you.

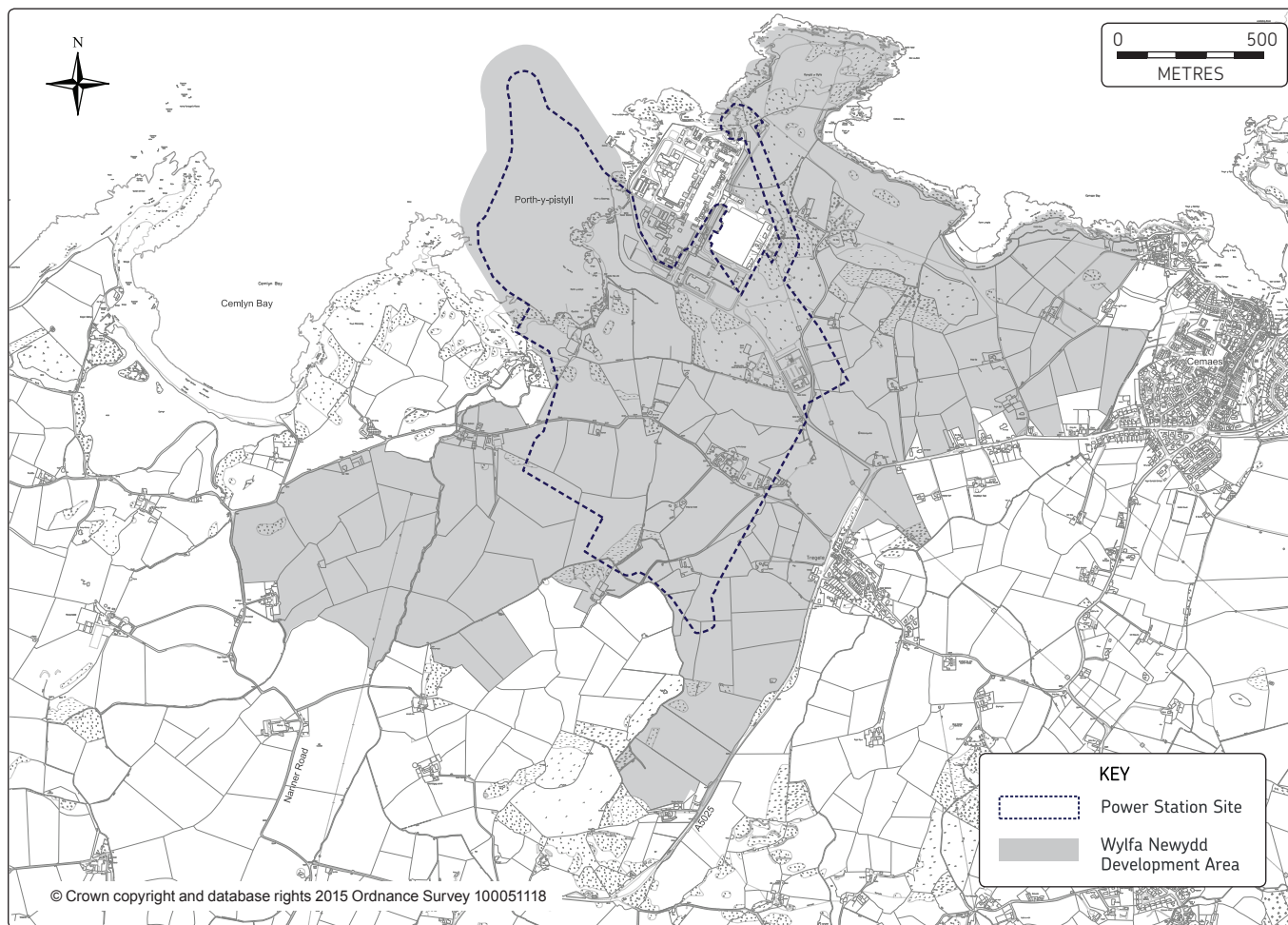
Wylfa Newydd Project proposals

PROJECT LOCATION AND AREA

The main buildings for operation of the Power Station are located within the Wylfa Newydd Development Area. The primary exceptions to this are three safety-related facilities which are required to be located off-site (Off-Site Power Station Facilities). The Power Station will also be supported by Associated Development, which will generally be located off-site.

We use different terms to refer to where parts of our Project will be built:

- **Power Station Site:** the indicative area of land and sea within which the majority of the permanent Power Station buildings, plant and structures would be situated. This includes the two nuclear reactors, steam turbines, the cooling water system intake and pumphouse, outfall structures, breakwaters and the Marine Off-Loading Facility
- **Wylfa Newydd Development Area:** the indicative areas of land and sea including the Power Station Site, and the surrounding areas that would be used for construction and operation of the Power Station. This area is representative of the maximum area that would be physically affected by construction activities related to the Power Station and used to form the setting and landscaping features of the operational Power Station
- **Off-Site:** the areas of land needed for the Project that fall outside the Wylfa Newydd Development Area. Components that would be off-site include most of the Associated Development needed for both construction and operation of the Power Station, as well as what we call the Off-Site Power Station Facilities



Geographic areas of project

Wylfa Newydd Project proposals

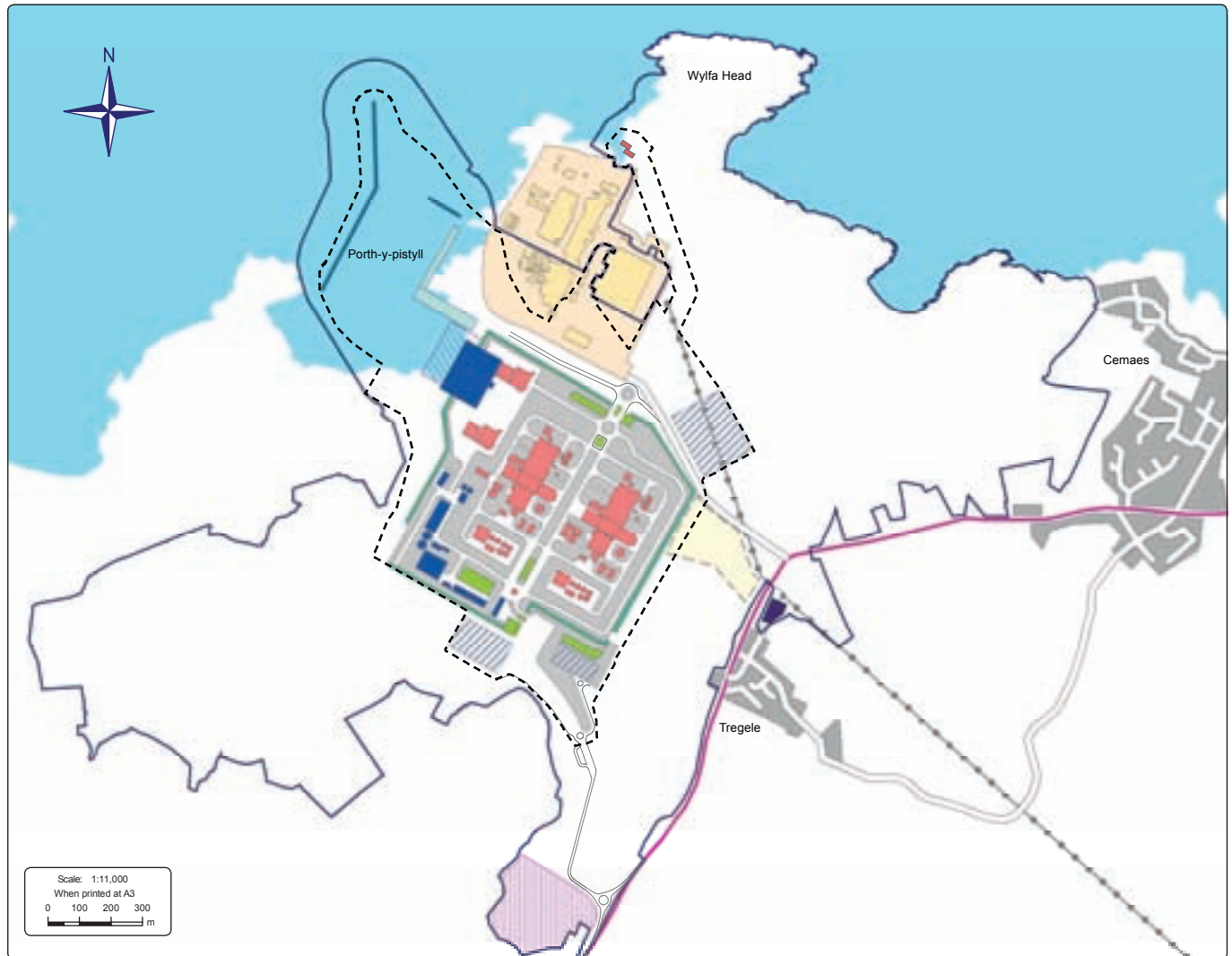
PROJECT CHARACTERISTICS

Permanent development at the Power Station Site includes the main operational plant and structures, including:

- **main plant:** those parts of the Power Station that enable nuclear generation. This includes the two UK ABWRs and buildings that are directly associated with each UK ABWR
- **common plant:** those parts of the Power Station that service the generation of power but are shared between the two UK ABWRs
- **supporting facilities, buildings, structures and features:** those parts of the Power Station that are necessary to support the operation and maintenance of the Power Station, including offices, stores and security facilities. These will also include the Marine Off-Loading Facility

KEY

	Power Station site		Existing Magnox power station
	Wylfa Newydd Development Area		Proposed visitor centre
Power Station			
	Main plant		Car parking
	Common plant		Local roads
	Supporting facilities, buildings, structures and features		A5025
	Power Station internal road layout		Indicative location for Training and Simulator building
	Main perimeter fence		Existing Overhead Power Lines
	Proposed replacement alternative emergency control centre and district survey laboratory for existing Magnox power station		Marine Off-Loading Facility
			Settlements



Power Station layout

OFF-SITE POWER STATION FACILITIES

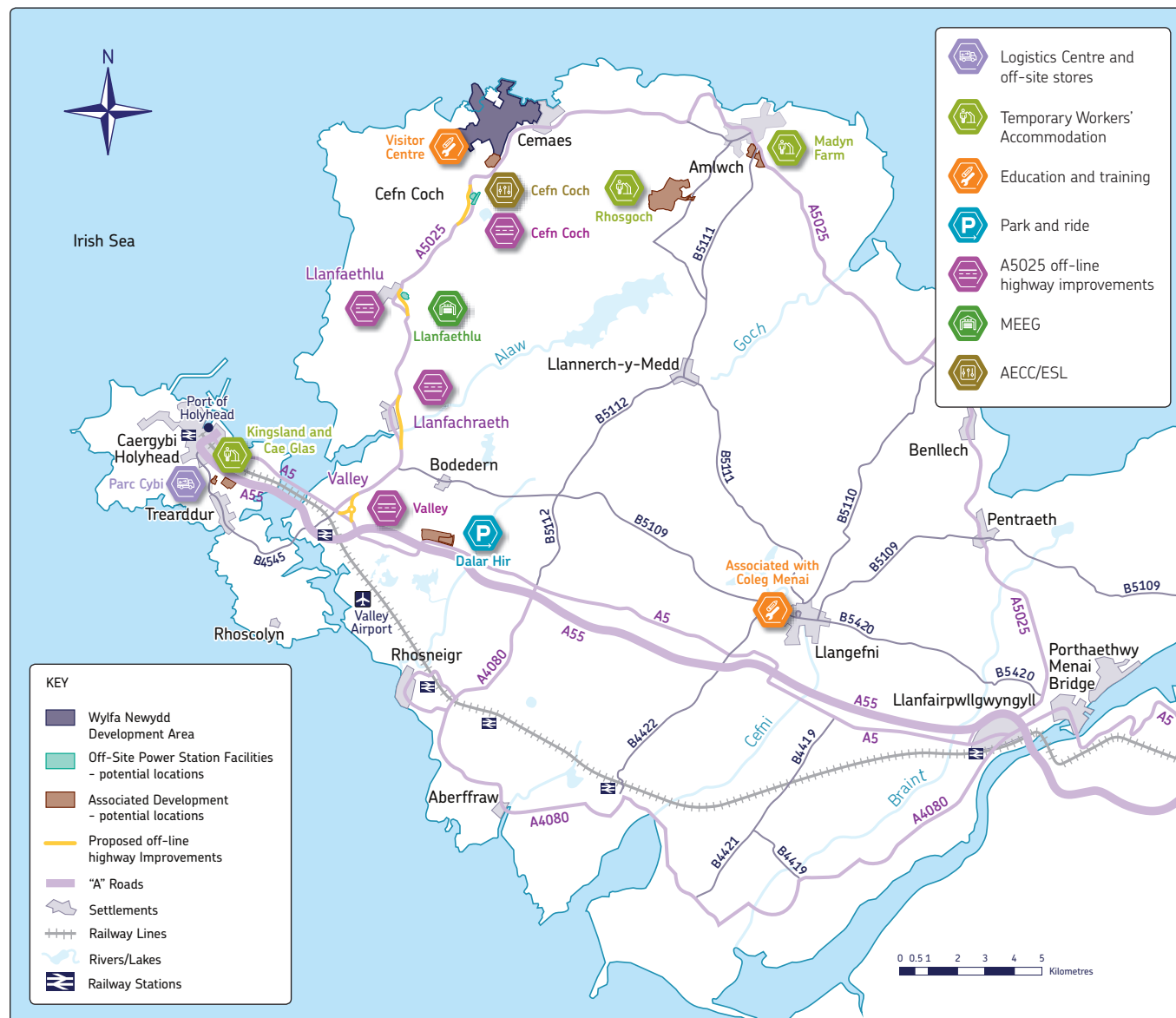
The Off-Site Power Station Facilities will be physically separate from, but local to, the Power Station Site and are an integral part of our emergency arrangements. These include:

- **Alternative Emergency Control Centre (AECC):** to provide back-up command and communication facilities
- **Environmental Survey Laboratory (ESL):** to provide facilities to manage radiological survey in the local area, including radiation monitoring equipment controls
- **Mobile Emergency Equipment Garage (MEEG):** to house a number of specialist vehicles

ASSOCIATED DEVELOPMENT

Associated Development supports delivery of the Power Station and includes:

- **highway improvements:** highway upgrades along sections of the A5025 to improve access and safety
- **park and ride facility:** a hub to the transfer of construction workers from private vehicles onto shared transport to reduce Project traffic on local roads
- **logistics centre:** a temporary secure facility where we can manage lorry movements to the Power Station Site to reduce effects on communities
- **off-site specially provided Temporary Workers' Accommodation:** a temporary type of accommodation and key services for construction workers. This would be large scale campus style housing for a minimum of 500 workers in each location
- **visitor centre, including media reception centre:** similar to the Magnox visitor centre, this facility will provide information about the Power Station and support education, tourism and community engagement
- **off-site stores:** an off-site facility where we can receive deliveries and house stocks of spare parts and goods during operation



Indicative distribution of Off-Site components

Constructing the Wylfa Newydd Power Station

ENABLING WORKS

Enabling Works is a term we use to describe the activities that are needed to prepare the Wylfa Newydd Development Area for construction of the Power Station. To ensure generation of first power in the first half of the 2020s, many of these activities will begin before the grant of a development consent order, and some are already underway.

SITE PREPARATION AND CLEARANCE

The Power Station Site and immediate area need to be cleared of existing features like trees, hedgerows, walls and existing buildings, roads and footpaths, and topsoil before work to build the Power Station can start. We also need to make sure that any protected species have been carefully moved out of the construction areas, which would be fenced off. Works to prepare for levelling off parts of the Power Station Site by removing topsoil and installing drainage for the site will need to be undertaken.

Haul roads and compounds would be established so that we are ready to bring in construction equipment. We are preparing a planning application for this package of Site Preparation and Clearance for submittal later in 2016.



Some of the work that we plan to undertake as part of Site Preparation and Clearance includes:

- clearance of all vegetation and translocation of protected species, in accordance with appropriate European Protected Species Licences
- demolition of existing buildings and structures
- surface stripping, watercourse diversion and preparation of areas of the Wylfa Newydd Development Area for receipt of bulk excavation material
- removal and storage of topsoil, as shown in the figure on the opposite page
- installation of perimeter construction fences
- stopping-up of Cemlyn Road
- restriction of public access along the existing Magnox power station access road
- closure and diversion of footpaths
- utility works
- creation of smaller construction compounds, containing offices, welfare and security facilities as well as car parking

Beginning with the Site Preparation and Clearance phase of work, the Power Station Site and surrounding land would be fenced off and start looking like a major construction site, with clusters of temporary buildings, large construction equipment and a change to open views.



MAIN CONSTRUCTION

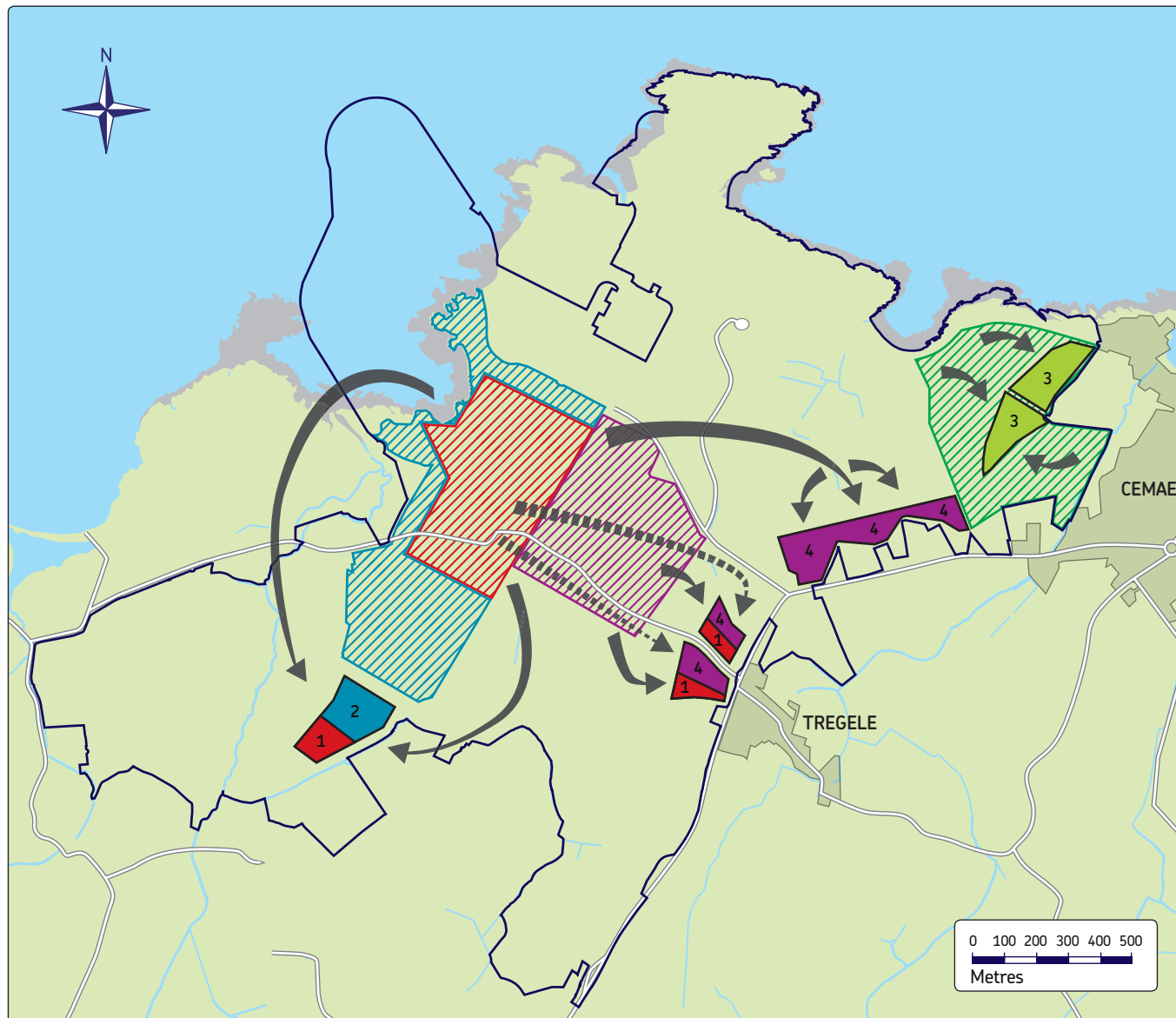
The Main Construction stage would start once we have been granted permission to build the Power Station, overlapping with the timeline of completion of Enabling Works, and is anticipated to last for around nine years in total.

Activities that will take place during Main Construction include:

- bulk earthworks including site levelling and grading, leading to the creation of building platforms and construction laydown areas
- construction of the new Power Station access road
- establishment of large temporary construction compounds to allow for storage of materials and temporary construction buildings
- construction of haul roads and bridges
- construction of a concrete batching plant
- marine construction including the breakwaters, cooling water intake and outfall and a Marine Off-Loading Facility
- construction and utilisation of Temporary Workers' Accommodation on the Wylfa Newydd Development Area
- deep excavations and tunnelling for construction of the foundations of the main plant
- general construction of all Power Station buildings, facilities and structures, and installation of all major equipment

COMMISSIONING OF THE POWER STATION

Commissioning is a period of testing to ensure all systems in all parts of the Power Station operate as intended. We expect commissioning to take around two and a half years for each UK ABWR.



KEY

- Wylfa Newydd Development Area
- Indicative area for topsoil strip phase 1
- Indicative area for topsoil strip phase 2
- Indicative area for topsoil strip phase 3
- Indicative area for topsoil strip phase 4
- Indicative location for temporary storage of topsoil from phase 1
- Indicative location for temporary storage of topsoil from phase 2
- Indicative location for temporary storage of topsoil from phase 3
- Indicative location for temporary storage of topsoil from phase 4
- Proposed movement of topsoil for temporary storage

Proposed movement of topsoil during Site Preparation and Clearance

Operating and Decommissioning the Wylfa Newydd Power Station

OPERATIONS

We are proposing to operate two UK ABWRs, each with an expected operational life of 60 years. We expect to employ around 850 people at the Power Station during operation, with recruitment beginning early in the construction phase to ensure we have a highly-skilled workforce in place in time for operation of the Power Station.

In accordance with requirements set out by regulators, we are developing plans for operational and emergency preparedness. It will be a requirement of our Nuclear Site Licence that we have adequate emergency preparedness plans in place, and our operational emergency plan will need to be in place prior to us bringing nuclear fuel to the Power Station Site. This plan will include a phased approach to emergency response identifying actions to be taken at the Power Station Site, in the local communities, across the region and then across the UK.

Emergency arrangements include three facilities located off-site from the Power Station Site including an Alternative Emergency Control Centre and Environmental Survey Laboratory (AECC/ESL), Mobile Emergency Equipment Garage (MEEG) and media reception centre. The requirements for locating these facilities is discussed in more detail in the Off-Site Power Station Facilities and Associated Development sections of this document.

RADIOACTIVE WASTE

Once operational, the Power Station will create radioactive wastes. Radioactive wastes with very low and low levels of radioactivity, such as contaminated gloves and overalls, are expected to be disposed of in licensed facilities away from the Power Station Site. Materials with larger amounts of radioactivity as well as spent fuel, need to be treated in different ways at the Power Station Site before they are ready to be removed.

One of our main plant buildings is the radioactive waste building. This contains facilities to receive wet radioactive wastes, which are then transferred to the processing facilities for appropriate treatment and short-term storage. These facilities would be constructed in time for use at the start of operation of the Power Station.



Indicative image of one ABWR reactor building

Government policy requires that we have facilities for 'interim' longer-term storage of spent fuel, intermediate level and dry high level radioactive wastes at the Power Station Site, which we would need approximately five to ten years after generation of electricity begins at the Power Station. These provide a holding point where our various waste streams would be stored in specially designed protective casks. These casks would stay at the Power Station Site until they could be repackaged for transfer to a national radioactive waste disposal facility being planned by the UK government. We conservatively estimate that these radioactive wastes would remain within the Wylfa Newydd Development Area for up to 140 years *after the end of electricity generation*, although further study is already underway to look at how this time might be reduced.

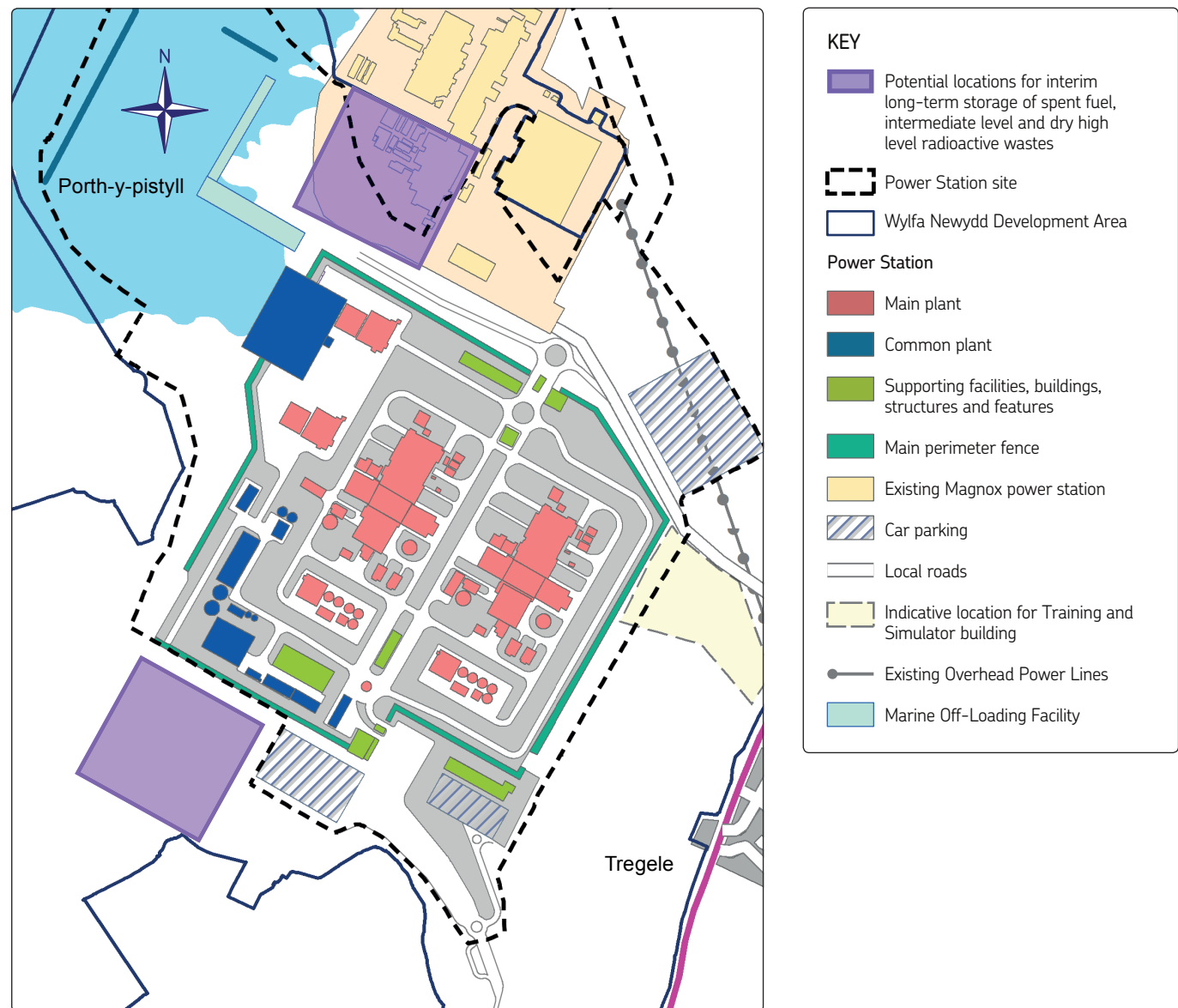
We are still considering two areas for the location of these radioactive waste storage buildings. One is located immediately to the south-west of the Power Station Site while the other is located to the north of the Power Station Site on land currently occupied by the existing Magnox power station and owned by the NDA.

Our ultimate decision on the location will need to consider a number of issues including appropriate access for transport of the radioactive wastes, technical and regulatory considerations and further study of environmental effects.



MORE INFORMATION

We have prepared a Radioactive Waste Strategy that outlines how we will deal with radioactive wastes that we generate when the Power Station is operational. More information can be found in our Fact Sheet regarding Radioactive Waste, available in hard copy at our events and on our website: www.horizonnuclearpower.com/consultation



Indicative locations for spent fuel, ILW and HLW storage

Operating and Decommissioning the Wylfa Newydd Power Station

DECOMMISSIONING THE POWER STATION

At the end of the 60 year operating stage, the Power Station will be decommissioned and we will remove buildings from the site while responsibly managing all spent fuel and radioactive wastes. The end state of the site would be agreed with regulators and uses other than nuclear could be approved for the site. While we will have a decommissioning programme available at the early stage of the Project, decommissioning activities would be planned in detail closer to actually decommissioning the Power Station. We will need to apply for additional permissions at that time, and prepare an assessment of the potential effects on the environment.



MORE INFORMATION

We are already planning how decommissioning might be done so that our Project design makes the decommissioning process more efficient in the future. We are expecting decommissioning to take around 20 years once the Power Station is closed but radioactive wastes and spent fuel storage buildings are expected to stay for longer, until it is possible to transfer them to the UK Government's planned geological disposal facility. We believe, conservatively, that this will be approximately 140 years after the end of electricity generation at the Power Station Site, but more detailed work is underway to explore ways in which this timescale could be reduced.



Creating the landscape setting for our Power Station

We recognise that the scale of the Power Station buildings and infrastructure will change the local landscape.

Our proposal is to create a setting for the Power Station that is in keeping with the existing hilly landscape, dominated by small hills known as drumlins. To help us achieve this, we have prepared a Landscape and Environmental Masterplan (LEMP) which sets out our proposals for the creation of the permanent landscape setting for our Power Station and how this will change over time.

The LEMP also takes account of our preliminary environmental assessment work and incorporates proposals covering such topics as drainage, ecology, recreation and agricultural use, integrated with the progression of the earthworks within the Wylfa Newydd Development Area. The LEMP provides for mitigation and enhancement measures that will allow for restoration of the landscape around the Power Station.



KEY CONSIDERATIONS FOR THE LANDSCAPE AND RECREATION PROPOSALS

There are several public footpaths, including the Wales Coast Path, within the Wylfa Newydd Development Area. These would need to be diverted or closed for security and safety purposes and we recognise this could change recreational amenities in the area.

We also recognise that there are a number of special characteristics and particular issues that we need to incorporate in the development of our design and have given specific consideration to the following:

- areas of special designation including: SSSIs, Anglesey AONB, North Anglesey Heritage Coast, Anglesey SLA (shown on page 43 of this document)
- Wylfa Head
- watercourses subject to Water Framework Directive protection
- our nearest neighbours, especially those at Tregele and Cemaes
- public rights of way and users
- existing landscape and seascape character
- the need to divert the Wales Coast Path to the perimeter of the construction site
- Cemlyn Road
- construction of the new Power Station access road early in the programme to provide access from the A5025 via a new roundabout to the south of Tregele

Upon completion of construction works, the construction perimeter fence will be removed and the boundary of the Power Station will be defined by a permanent security fence.

CREATING A LANDSCAPE SETTING

Central to our proposed approach to landscaping is the formation of mounds across the Wylfa Newydd Development Area, using materials excavated during construction.

The new mounds, which we intend to create at an early stage in construction, will be landscaped with hedgerows, trees and shrubs typical of Anglesey to create features similar in form and height to the existing landscape. We are also looking at a number of locations where we would look to specifically enhance the local biodiversity value, building on our previous initiatives such as installation of bat boxes and a wildlife tower.

The mounding will be formed to provide visual and noise screening for the villages of Tregele and Cemaes. The areas where we are proposing new mounds generally lie to the south, east and west of the Power Station Site.

Public rights of way would be diverted to allow access into the Wylfa Newydd Development Area once the land is no longer required for construction activities. We will also look to return some areas to agricultural use in the longer term.

To enhance the experience for recreational users, we are proposing to build a new car park and to install picnic tables, benches, information boards and a shelter at Wylfa Head. We are also proposing to construct a new visitor centre which would not only serve as a tourist attraction, but also as an education facility.



DID YOU KNOW?

Our current landscape proposal is based on the re-use of excavated materials as far as possible. This will significantly reduce the number of vehicle movements across the Island.

Creating the landscape setting for our Power Station

The LEMP comprises four main phases, as shown in the following illustrations. The main activities or visual changes that local residents can expect are identified for each phase.

In order to prepare the area for main construction, we need to undertake a number of key activities at the start including:

- site preparation and clearance works (see Site Preparation and Clearance information on page 11)
- topsoil stripping (see illustration on page 12)
- installation of our security fence
- temporary closure of some public rights of way
- footpath and cycle ways diverted



DID YOU KNOW?

We are currently exploring options for the final route of the Wales Coast Path but we have shown our current thinking on the landscape figures.

KEY

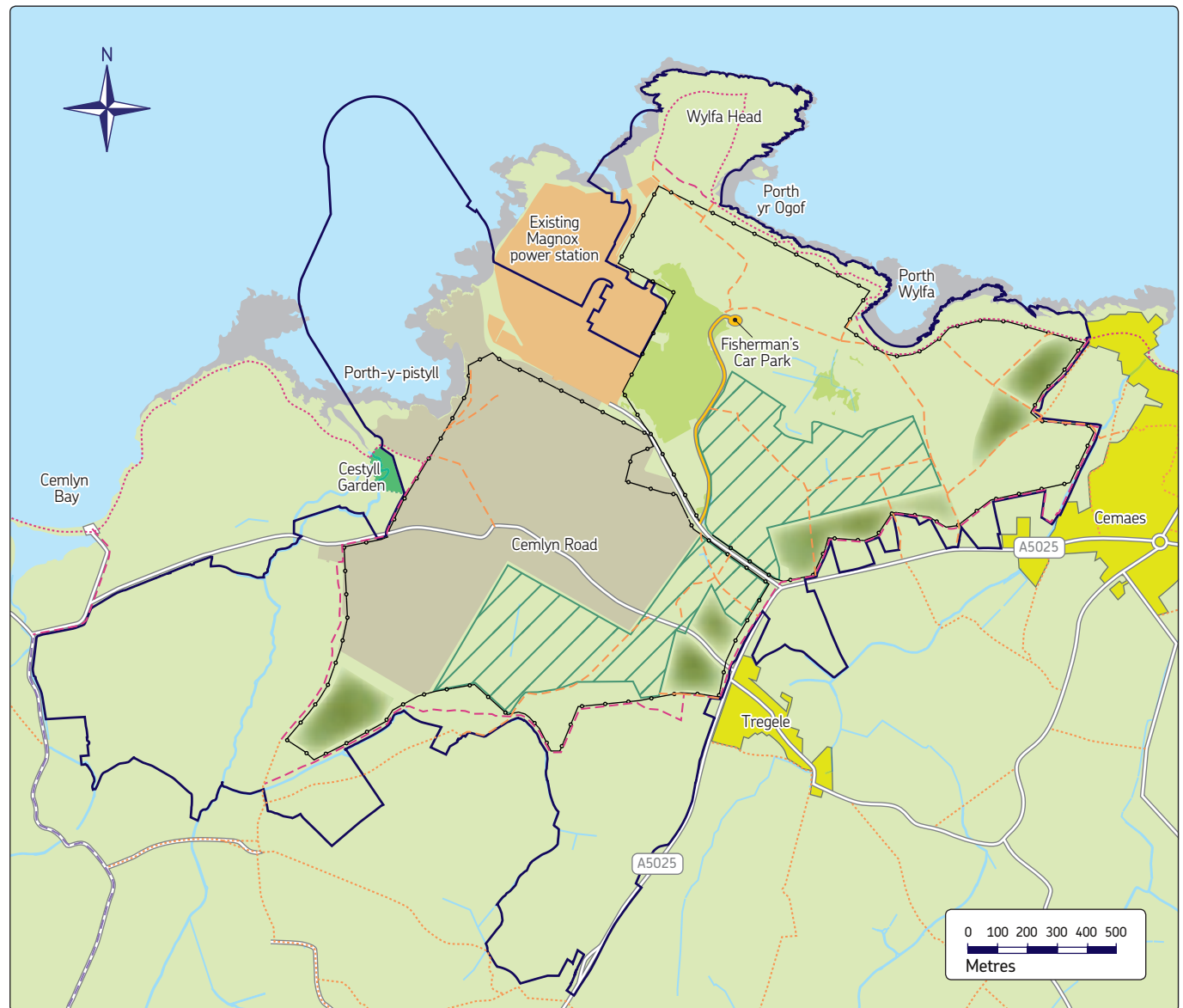
Wylfa Newydd Development Area

Proposed works

- Areas of stripped topsoil
- Temporary topsoil storage mounds
- Vegetation/field boundary and above ground clearance
- Temporary construction fencing
- Public rights of way to be temporarily closed
- Copper Trail diversion
- Wales Coast Path diversion (options under consideration)

Existing features

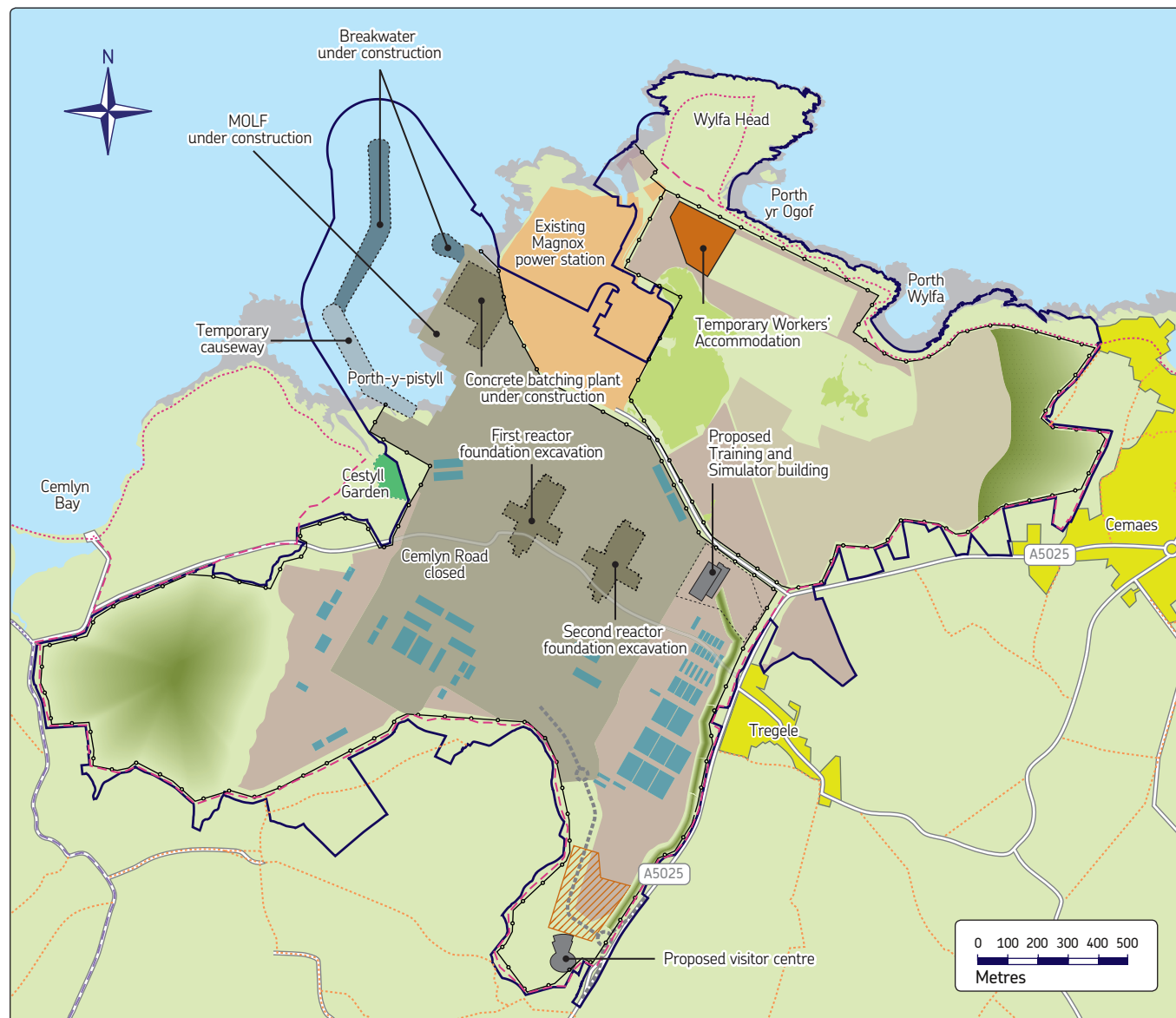
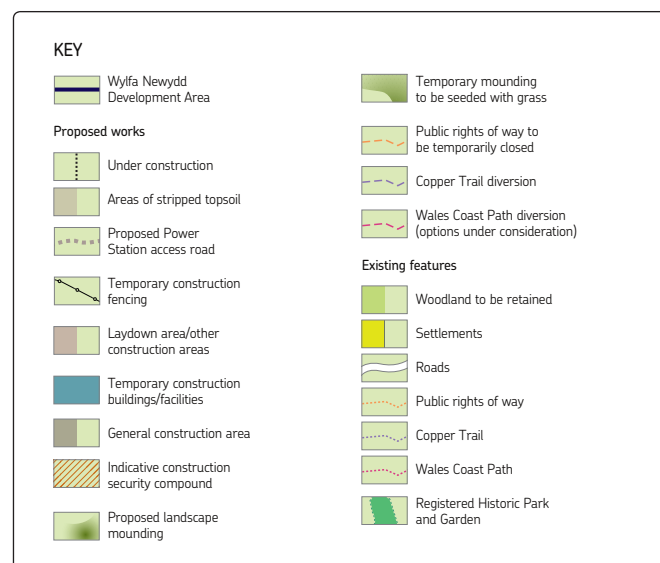
- Woodland to be retained
- Settlements
- Roads
- Public rights of way
- Copper Trail
- Wales Coast Path
- Registered Historic Park and Garden



LEMP: Site ready for main construction

Once we begin main construction activities you can expect to see:

- building platforms for the nuclear reactors created
- temporary buildings for construction
- Power Station access road constructed
- Cemlyn Road closed
- On-site worker accommodation constructed



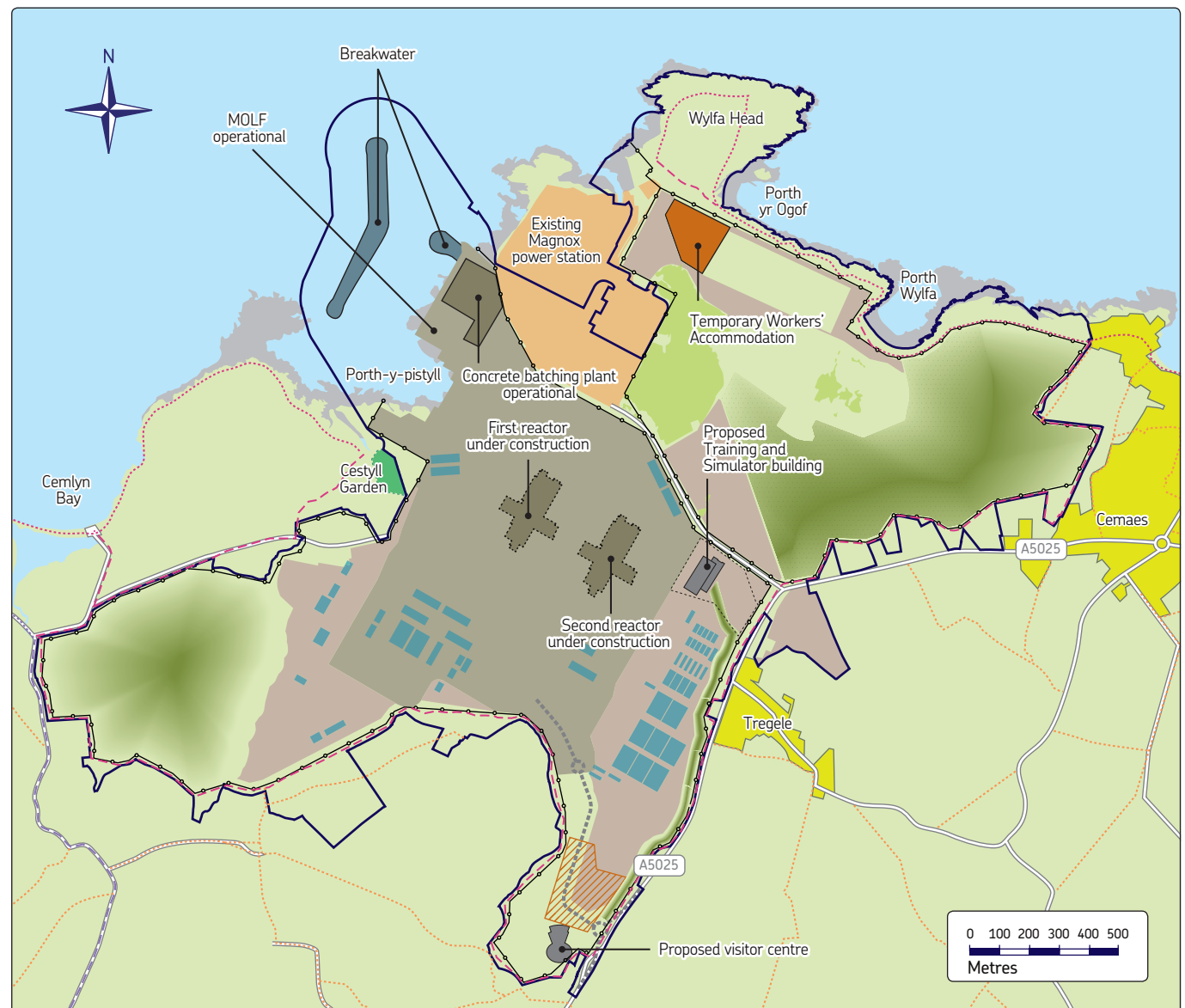
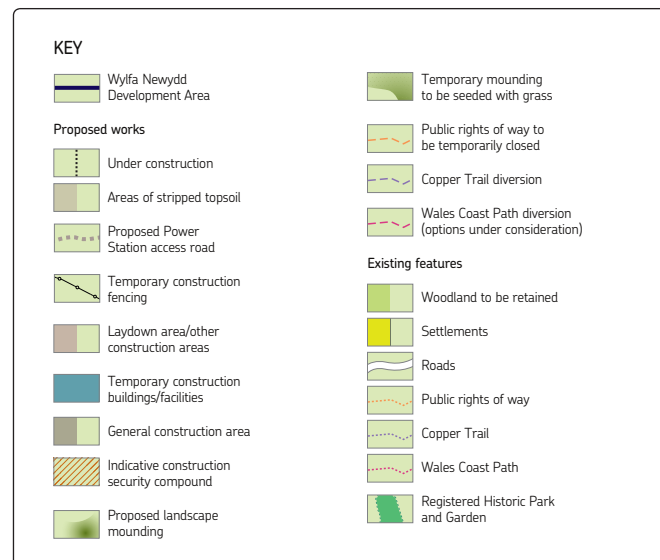
LEMP: Main construction activities

Creating the landscape setting for our Power Station

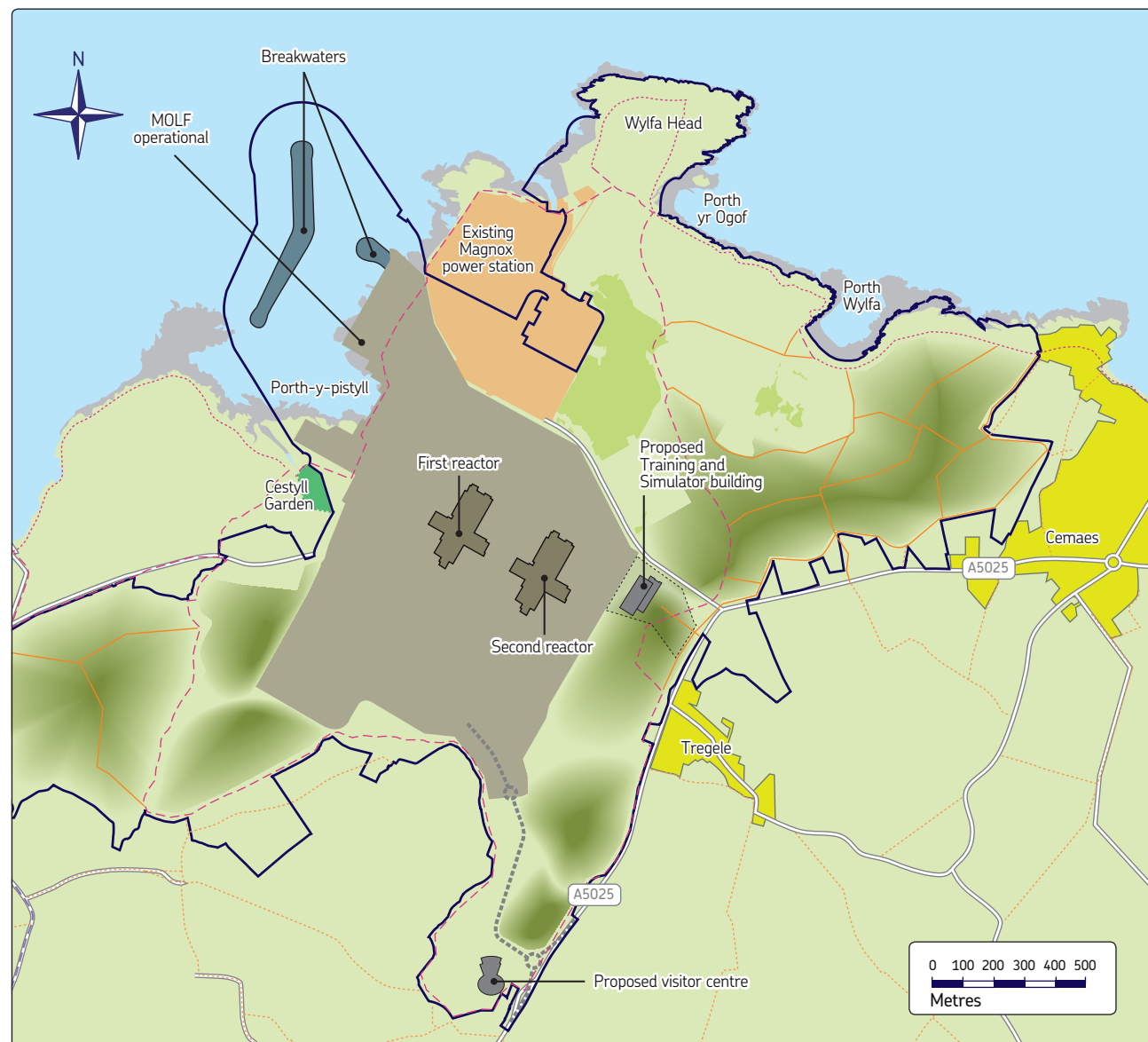
Through the main construction period there will be a range of activities ongoing including:

- Marine Off-Loading Facility receiving regular deliveries
- concrete batching plant operational
- permanent landscaping complete, temporary mounding added as necessary
- occupation of on-site Temporary Workers' Accommodation
- completion of landscape mounds
- continued construction of Power Station buildings

As we move towards operation of the Power Station we will remove the construction perimeter fence and reinstate public access to footpaths that were closed during construction.



LEMP: Completion of main earthworks



LEMP: Permanent landscape setting created



QUESTION – LANDSCAPE AND ENVIRONMENTAL MASTERPLAN (LEMP)

The finer details of our Project proposals will be developed in the context of our Landscape and Environmental Masterplan and will be used to develop the final landscaping and environmental mitigation for the Project. We welcome your thoughts on this, especially in the following areas:

- planting, including preferred types of trees or patterns of hedgerows
- the way the footpath network links together, including whether routes go up or around the proposed mounding
- the gradient of the mounding, meaning that the footprint could be smaller but the hill more steep, or the footprint larger but the hill less steep. Different approaches to the shape of the mounding might suit different uses such as farming or recreation
- whether cycle routes should be included and if so, what places they should try to link together

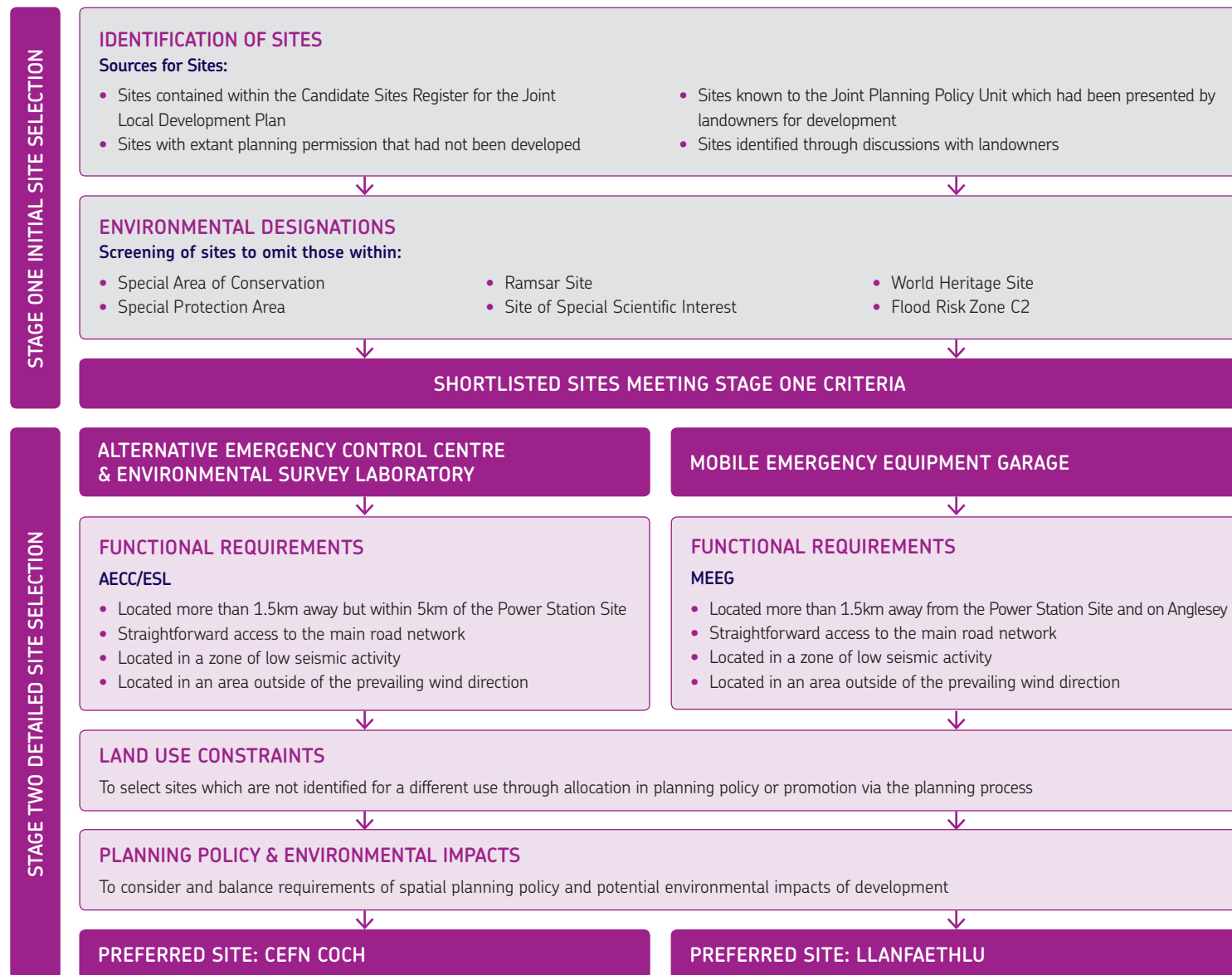
Please give your views and suggestions on the aspects of the LEMP design that are important to you.

KEY

	Wylfa Newydd Development Area		Copper Trail diversion
Proposed works			Wales Coast Path diversion (options under consideration)
	Areas of stripped topsoil	Existing features	
	Proposed Power Station access road		Woodland to be retained
	Laydown area/other construction areas		Settlements
	General construction area		Roads
	Proposed landscape mounding		Public rights of way
	Temporary mounding to be seeded with grass		Copper Trail
	Public rights of way to be temporarily closed		Wales Coast Path
			Registered Historic Park and Garden

Off-Site Power Station Facilities

As part of our emergency planning arrangements, there are a number of buildings that would need to be geographically separate from, but local to, the Power Station Site. The requirements for these buildings are established by the Office for Nuclear Regulation. Since our first stage of formal pre-application consultation, we have been working closely with regulators and have made progress in understanding our needs for these Off-Site Power Station Facility requirements.



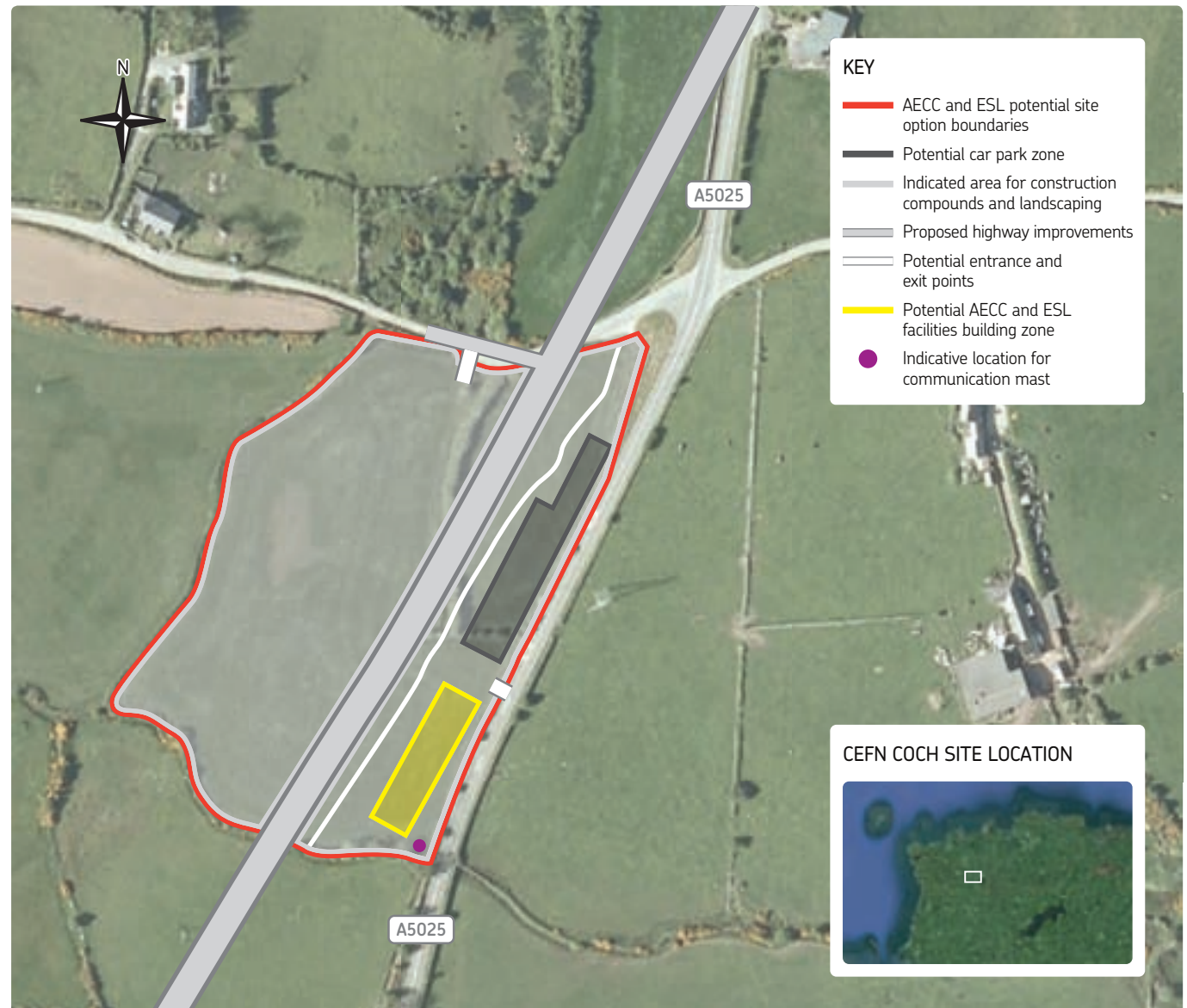
ALTERNATIVE EMERGENCY CONTROL CENTRE (AECC) & ENVIRONMENTAL SURVEY LABORATORY (ESL)

Similar to the facility at the existing Magnox power station, the Project would need an AECC and ESL. In the extremely unlikely event that facilities at the Power Station Site were made unavailable in an emergency, the AECC would provide alternative command and communication facilities. This would allow any emergency controllers to liaise with the Local Authority and Emergency Services at the Strategic Coordination Centre.

The ESL would provide facilities for monitoring any possible radiation levels in the local area, during both normal operation and emergency situations. A small number of vehicles would be based at this facility, with communication connections to the Power Station Site.

Whilst it is possible to separate the AECC and ESL buildings on different sites, our preference is to locate these facilities together given their operational requirements and their relationship during an emergency situation.

AECC & ESL

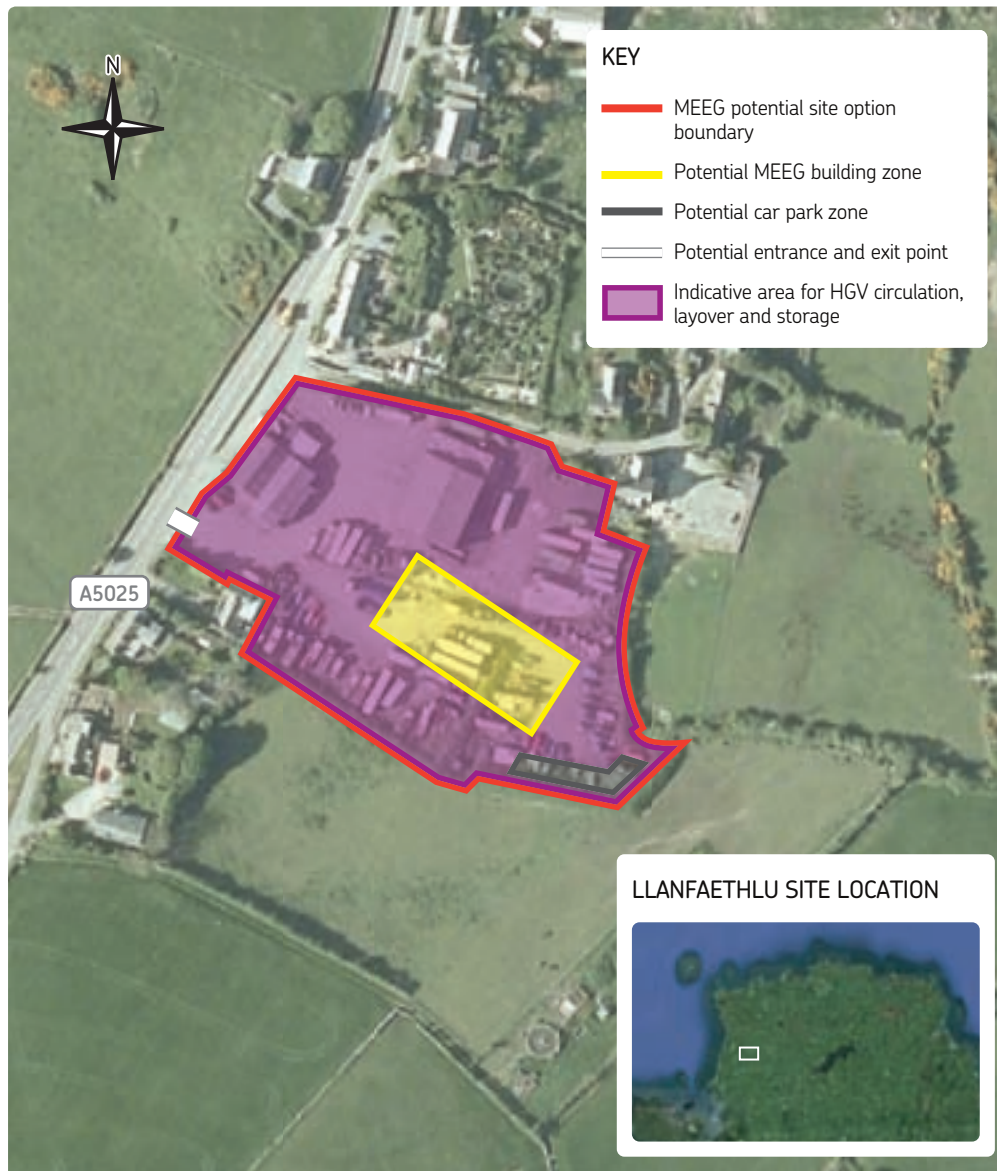


Illustrative layouts only. The preferred layouts will be developed within the site boundary to take account of environmental and other site constraints

Off-Site Power Station Facilities

MOBILE EMERGENCY EQUIPMENT GARAGE (MEEG)

The MEEG is a facility for the storage of specialist vehicles, located close to but separate from the Power Station Site. This would allow for the specialist vehicles to rapidly support an unlikely emergency event at the Power Station Site. The MEEG may also be used as a marshalling point for support arriving on Anglesey before onward dispatch to the Power Station Site.

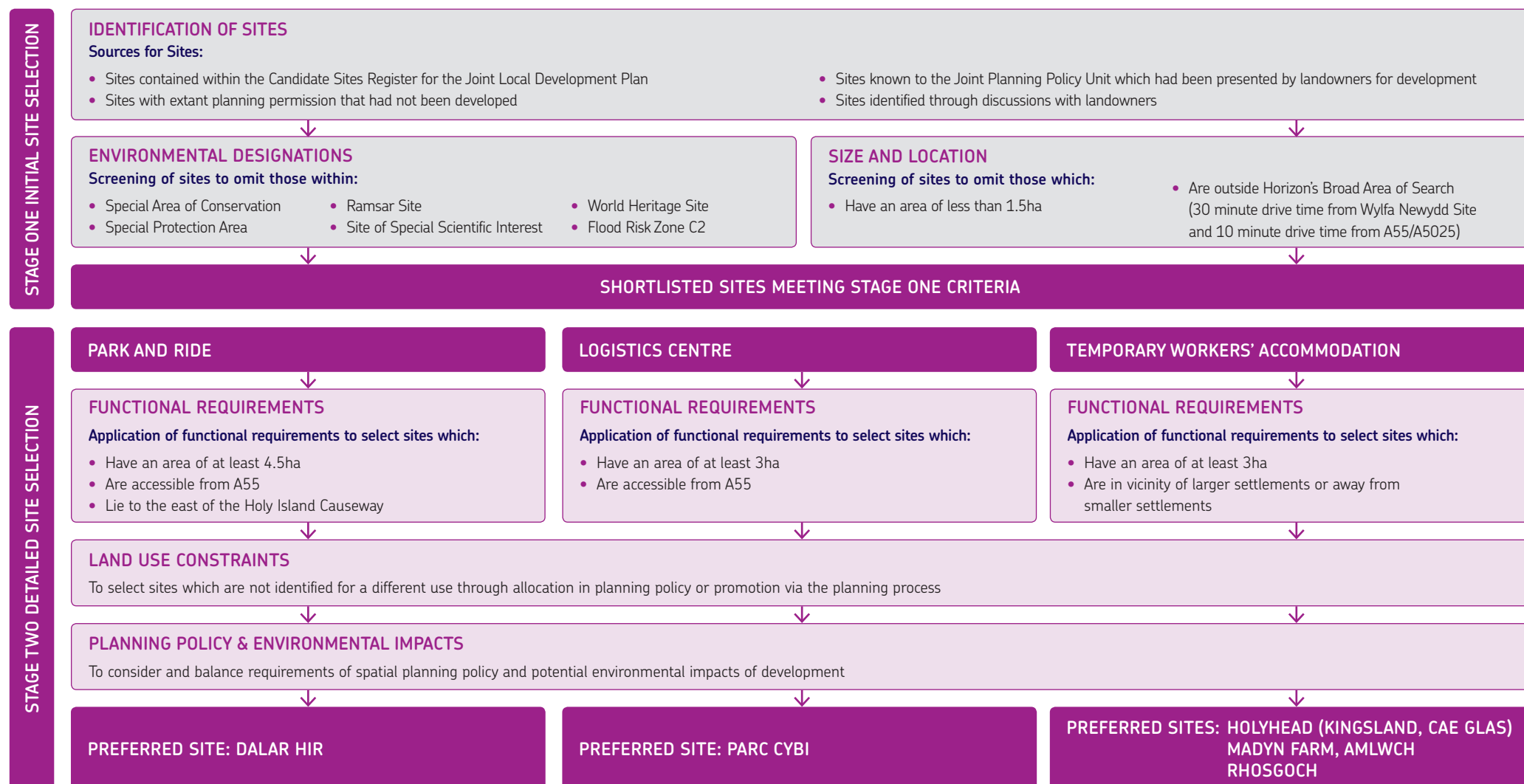


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Associated Development

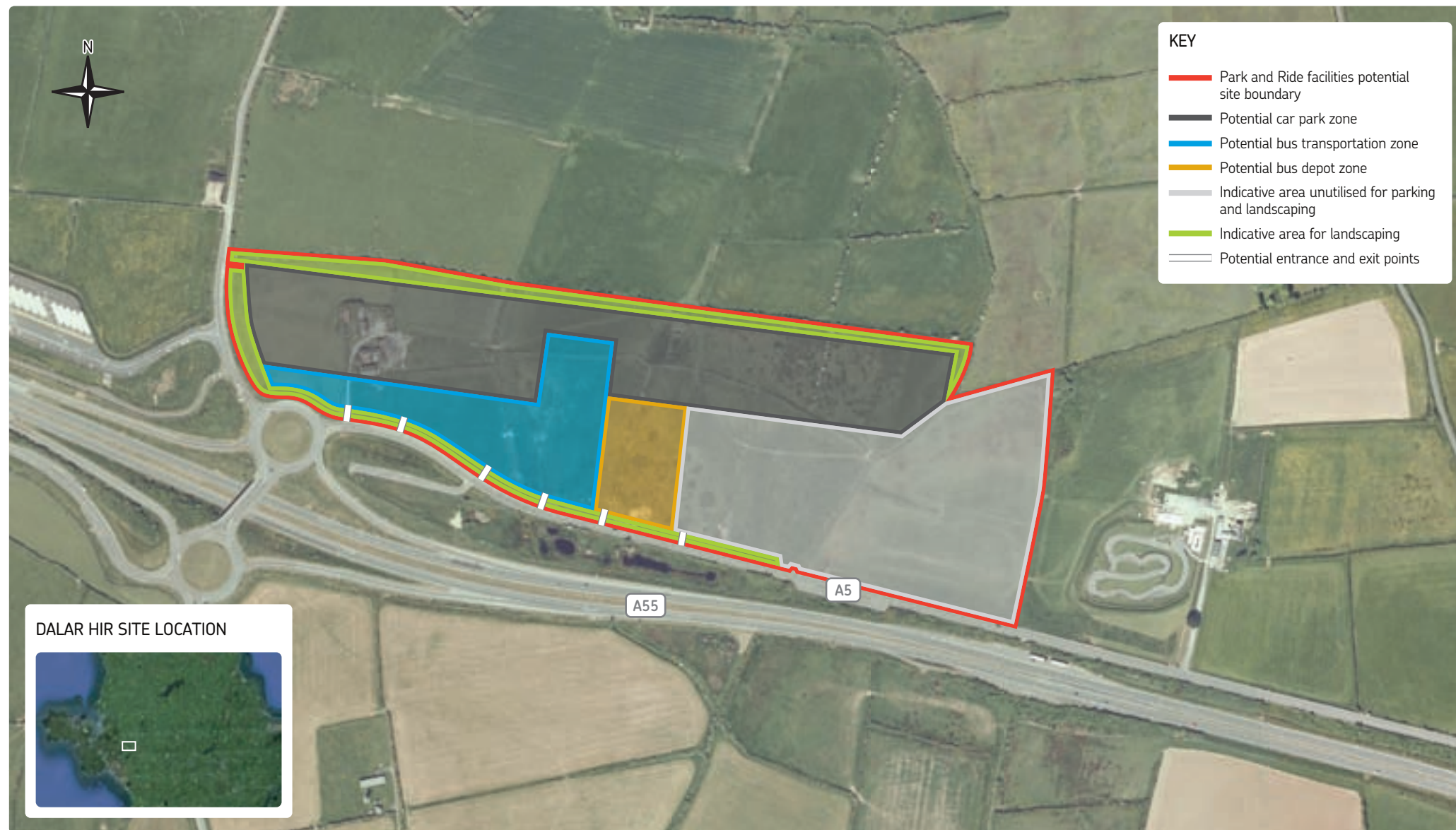
Since the first stage of formal pre-application consultation, we have undertaken a lot of work to identify appropriate sites for our Associated Development which includes at least one park & ride, a logistics centre and at least three off-site temporary

worker accommodation locations. We have also undertaken studies to identify sites for our visitor centre and media reception centre, as well as the off-site stores.



Associated Development

PARK AND RIDE FACILITY



Illustrative layouts only. The preferred layouts will be developed within the site boundary to take account of environmental and other site constraints

LOGISTICS CENTRE



Illustrative layouts only. The preferred layouts will be developed within the site boundary to take account of environmental and other site constraints



DID YOU KNOW?

We considered the following when finding a suitable location for the visitor centre and media reception centre (see next page for more information)

Visitor centre

- provision of a tourist attraction and focus on the history and culture of the local area
- safety for visitors during both construction and operation
- timing of site availability
- access by foot, cycle, public transport and car
- visibility of the Power Station
- local and engineering constraints

Media reception centre

- visibility/line of sight of the Power Station
- safe distance away from Power Station Site
- parking and welfare facilities
- function spaces for press briefings

While the visitor centre and media reception centre could be two buildings, due to the similar siting and function requirements, our preference is to locate these facilities together.

Associated Development

VISITOR CENTRE AND MEDIA RECEPTION CENTRE

The proposed visitor centre would serve two key functions:

- provision of education facilities and a tourist attraction focussed on the history of the local area and electricity generation, building on connections established by the existing Magnox power station visitor centre, and
- a facility where media could be gathered and briefed in the extremely unlikely event of an emergency at the Power Station Site

As outlined at the first stage of our pre-application consultation, we previously proposed a location for the visitor centre at the Wylfa Gateway Complex. After continued consultation with the Isle of Anglesey County Council and the Office for Nuclear Regulation, we have given additional consideration to:

- a location close to the new Power Station access road, off the A5025
- a location off the existing Magnox power station access road
- Wylfa Head



Illustrative layouts only. The preferred layouts will be developed within the site boundary to take account of environmental and other site constraints

OFF-SITE STORES

Since our first stage of pre-application consultation, we have identified the need for an off-site stores to support operation and maintenance of the Power Station. The issues we need to consider in terms of siting are very similar to that proposed for the logistics centre but to support the operational phase. A site near to the A55 on Anglesey would be required and preferably close to Holyhead where deliveries may be made via the port.

Our preferred location is Parc Cybi as it would provide an opportunity for a legacy benefit after use of the logistics centre. Our next steps are to determine whether a transition from use of the construction logistics centre building to off-site stores (for the operational phase) can be managed without disruption to the function of the logistics centre. In the event that this cannot be managed, the preferred location would still be Parc Cybi but the off-site stores would be constructed adjacent to the logistics centre.



QUESTION – OFF-SITE POWER STATION FACILITIES AND ASSOCIATED DEVELOPMENT

We have outlined the siting criteria relating to our preferred sites for our Off-Site Power Station Facilities and Associated Development.

Taking into consideration these requirements for site selection, please tell us what you think about our preferred sites. Your feedback, both positive and negative, on the sites we've identified, together with your reasons for this, will be very helpful in guiding our understanding of how use of these sites may affect your community.



Illustrative layouts only. The preferred layouts will be developed within the site boundary to take account of environmental and other site constraints

Worker Accommodation

We have been working hard to understand our construction workforce needs and have prepared a Construction Worker Accommodation Strategy, with a focus on housing workers who will be working on the Wylfa Newydd Project away from their home base.

This Strategy allows us to identify opportunities for landlords and homeowners to accommodate members of the construction workforce where they want to do so, without overwhelming the tourist and rental accommodation units available.

We expect the construction workforce for the Wylfa Newydd Project to grow to between 8,000 and 10,000 at peak periods, exceeding 6,000 for around three to four years of the total construction period. For the purposes of our environmental assessment and planning for the Wylfa Newydd Project, we have done our calculations based on a peak construction workforce of 9,200.



MORE INFORMATION

We have defined the 'travel to work' area as the maximum area within which workers might reasonably be willing to commute to and from their homes on a daily basis, typically considered to be a 90 minute drive for our Project.



DID YOU KNOW?

We think that roughly 2,300 people (25%) would commute from their existing homes either on Anglesey or within the travel to work area, to be part of our construction workforce. It is assumed that we would not have to make arrangements to house these workers. We have designed our Construction Worker Accommodation Strategy to address housing the remaining 6,900 construction workers, with a preference for them to be close to the Power Station Site.

Horizon recognises that the arrival of construction workers to deliver the construction phase of the Wylfa Newydd Project is of great concern for local communities. It is important that we create a solution for housing our workers that minimises impacts (both positive and negative) that this will have on local communities, the Welsh language and culture, health impacts, and social cohesion.

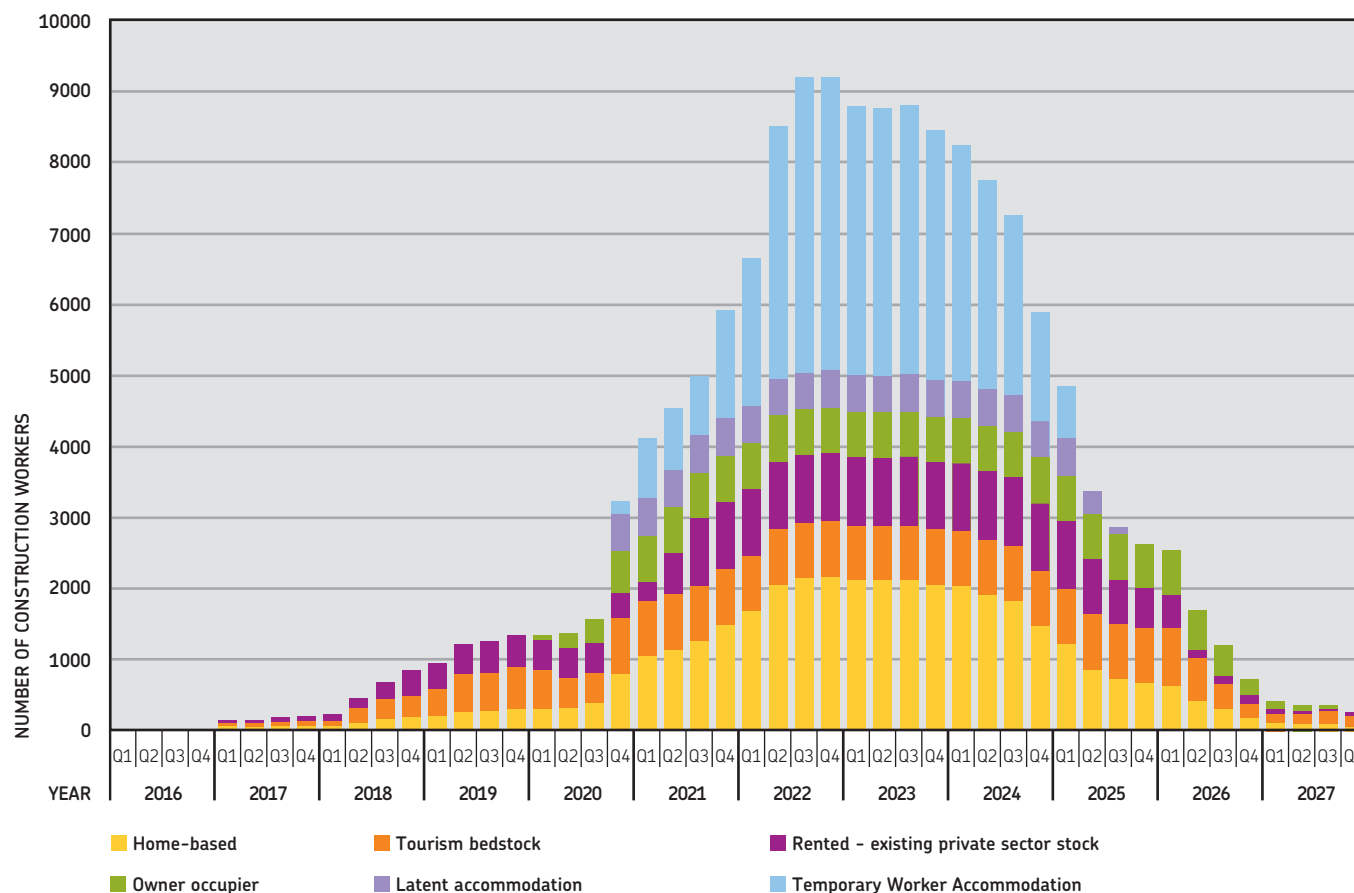


Travel to work area

WAYS TO HOUSE WORKERS

We have reviewed the various forms of existing accommodation which may be used by our temporary workers. These fall into four main categories:

- **Occupation of existing tourist accommodation:** We recognise that Anglesey has a substantial stock of tourist accommodation comprising caravan parks, bed and breakfasts, hotels and self-catering short-term lets, the occupancy of which varies by season. We expect that around 820 beds within the existing tourist accommodation stock will be available for use by construction workers during the peak period of construction, between 2021 and 2024, without creating negative effects on tourism across the Island
- **Occupation of private rental accommodation:** Private rental accommodation is included as part of the existing housing stock on Anglesey and we are working to ensure that accommodation that is currently empty is utilised
- **Purchase of existing properties:** we expect that a proportion of our workers (around 670) would purchase their own property within commuting distance of the Power Station Site
- **Re-use of empty homes:** Working together with Isle of Anglesey County Council, we have identified a potential benefit from bringing empty properties back into use. However, care will be needed not to overwhelm small communities where there are high densities of Welsh speakers. We think that at least 250 workers could be accommodated by re-using existing properties located within a 30 minute drive of the Power Station Site



Likely distribution of construction workforce across accommodation types



DID YOU KNOW?

To ensure that workers are using our appointed housing stock, we will establish a Construction Worker Accommodation Management Portal through which they must secure their housing while employed on the Project.

Our Construction Worker Accommodation Management Portal will be designed based on the principles of the Isle of Anglesey County Council's Housing Hub. This will also offer an efficient way for residents to make known any available accommodation.

More information can be found in our Fact Sheet regarding our Construction Worker Accommodation Strategy which is available in hard copy at our events and on our website at: www.horizonnuclearpower.com/consultation.

Worker Accommodation

TYPES OF NEW ACCOMMODATION

This leaves a balance of just under 4,000 workers which cannot be accommodated within existing forms of accommodation and, as a result, new stock will be required, including some specially provided Temporary Workers' Accommodation. We introduced this at the first stage of our pre-application consultation but have developed our thinking further.

- **New houses:** We know that there is a need for new housing on Anglesey. We believe that there is an opportunity for new housing to be built and used initially by some of our workers, creating a positive legacy once construction has finished
- **Temporary Workers' Accommodation:** This term describes a campus style development of at least 500 modular single bedroom units, using shared facilities such as kitchens and dining facilities. Between 250 and 500 units would be provided within the Wylfa Newydd Development Area to house critical construction workers. At other sites where we provide temporary workers' accommodation, catering, healthcare, laundry and some leisure facilities will be provided and we will transport workers from these sites to the Power Station Site on shuttle buses. This will help to reduce the impacts on local transport and services

We have identified likely sites for construction worker accommodation and new houses and the likely routes that would be taken by our shuttle buses transporting workers to and from these locations (see information on page 38).



QUESTION – FACILITIES FOR CONSTRUCTION WORKERS

Construction workers who do not already live on Anglesey or the neighbouring mainland communities will have a choice of places to live with some accommodation likely to be in villages and towns, for example existing rental options or bringing empty homes back into use. The balance of our construction workers will live in specially provided Temporary Workers' Accommodation.

Wherever they choose to live, our construction workers will need to be able to use a range of facilities and services and we recognise that the introduction of these workers could increase demand for local services and facilities. In some cases this could lead to added pressure on local communities by, for example, increasing waiting times for a GP appointment while in others, this could bring new users to underused facilities such as leisure centres.

There are a number of ways in which we could provide facilities and services to accommodate our construction workers and we recognise that there may be both benefits and challenges associated with provision of such services.

With respect to the suggestions for facilities and services, we'd like you to use the feedback form to tell us which options you'd prefer us to take and why?



MORE INFORMATION

We have identified that space for around 200 workers may be available during the initial period of construction in private homes or rentals, rising through 2020 to potentially around 1,000 by the middle of 2021. There may be additional spaces made available in the future as owners bring forward empty rooms within their homes – this is known as 'latent accommodation'.



DID YOU KNOW?

Critical construction workers would include those involved in security, continuous concrete pours and cooling water system construction.

LOCATION OF CONSTRUCTION WORKER ACCOMMODATION

We have identified a number of sites where we may develop new housing and Temporary Workers' Accommodation.

WYLFA NEWYDD DEVELOPMENT AREA

We propose that between 250 and 500 critical construction workers would be housed within the Wylfa Newydd Development Area. This temporary accommodation would be removed after use.

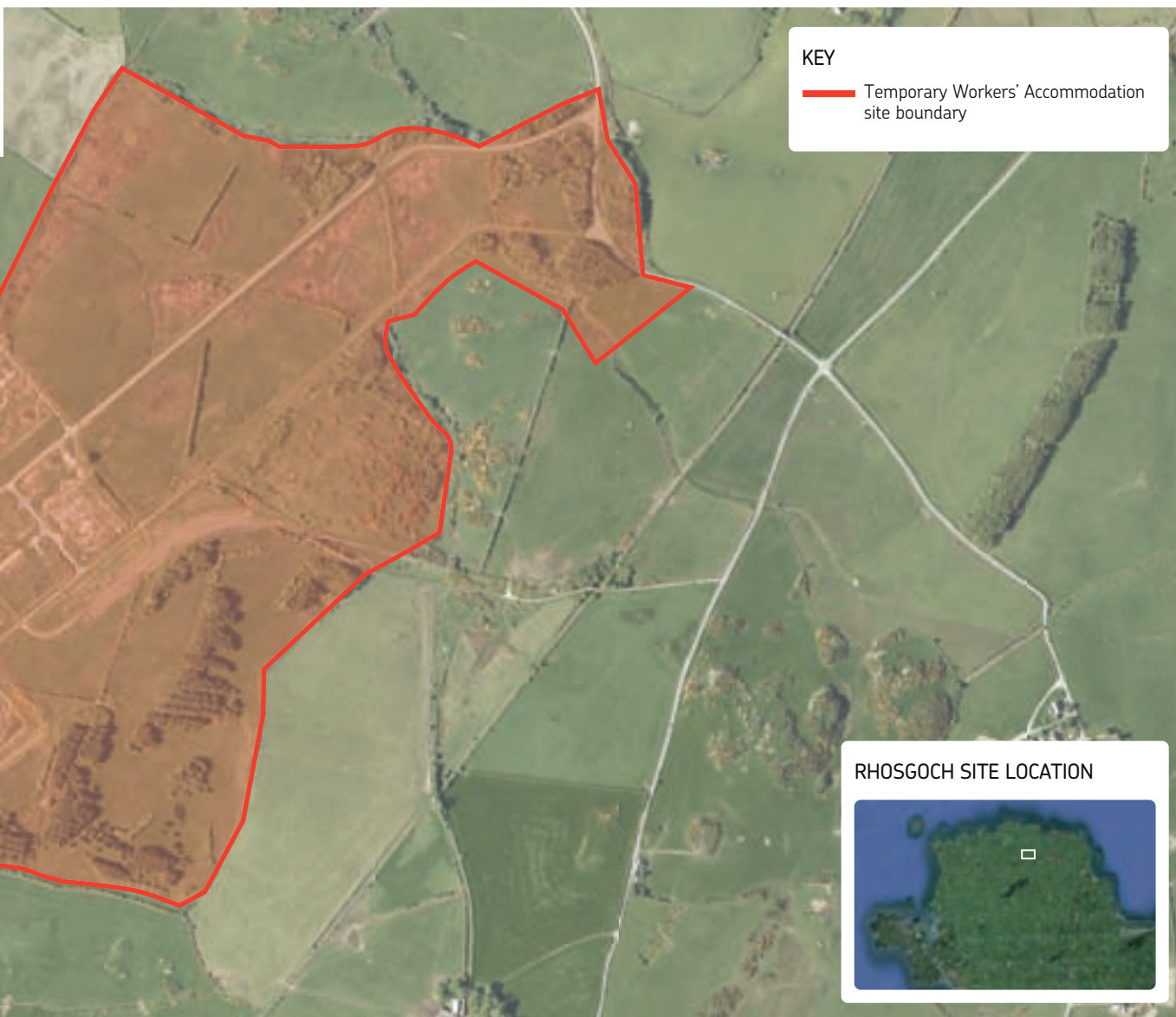


Illustrative layouts only. The preferred layouts will be developed within the site boundary to take account of environmental and other site constraints

Worker Accommodation

RHOSGOCH

Up to 4,000 workers could be accommodated at the former oil depot site in Rhosgoch. The temporary accommodation would be removed after use and the site would be returned to community use with services in place, enabling possible future redevelopment.

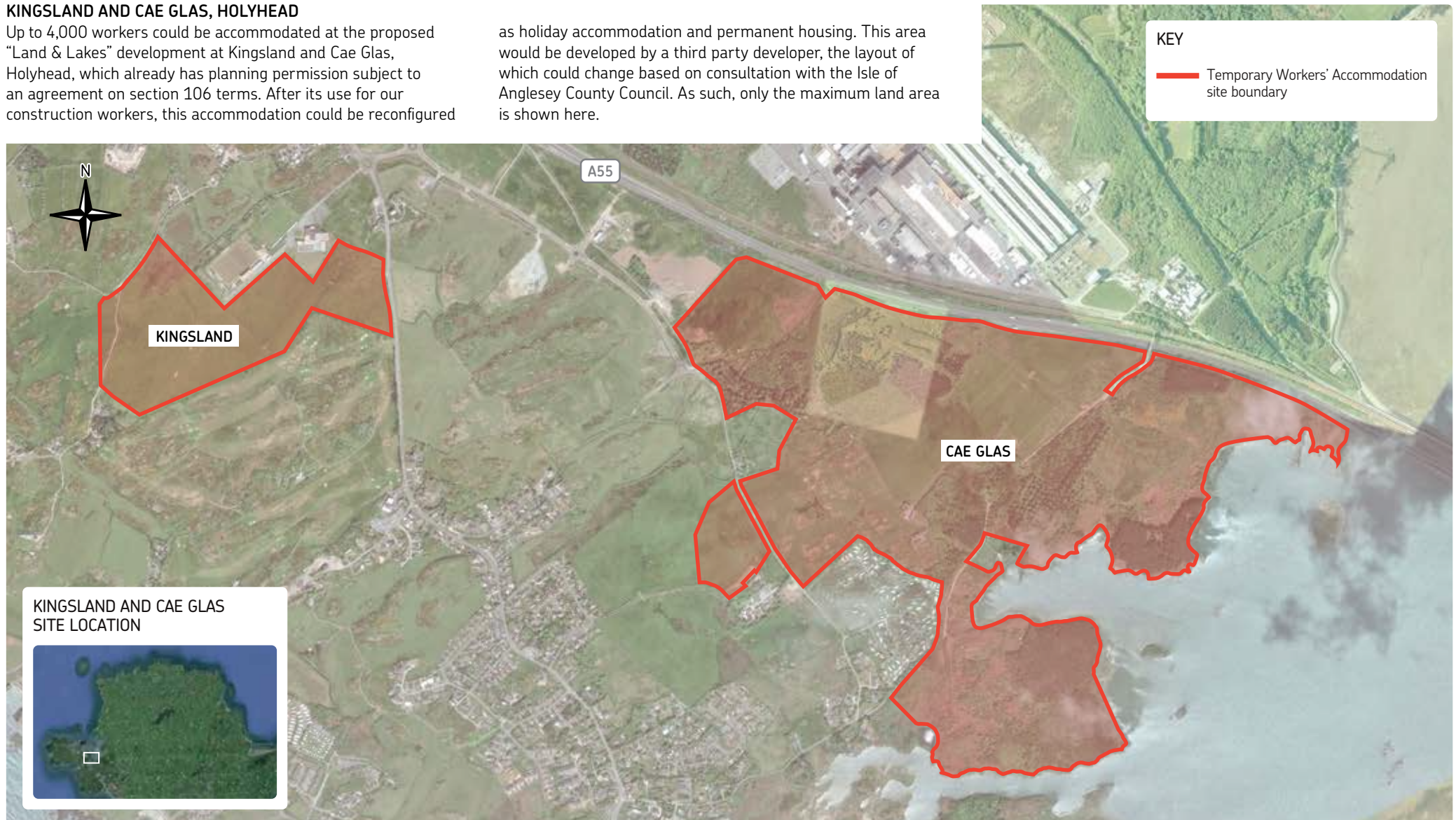


Illustrative layouts only. The preferred layouts will be developed within the site boundary to take account of environmental and other site constraints

KINGSLAND AND CAE GLAS, HOLYHEAD

Up to 4,000 workers could be accommodated at the proposed “Land & Lakes” development at Kingsland and Cae Glas, Holyhead, which already has planning permission subject to an agreement on section 106 terms. After its use for our construction workers, this accommodation could be reconfigured

as holiday accommodation and permanent housing. This area would be developed by a third party developer, the layout of which could change based on consultation with the Isle of Anglesey County Council. As such, only the maximum land area is shown here.

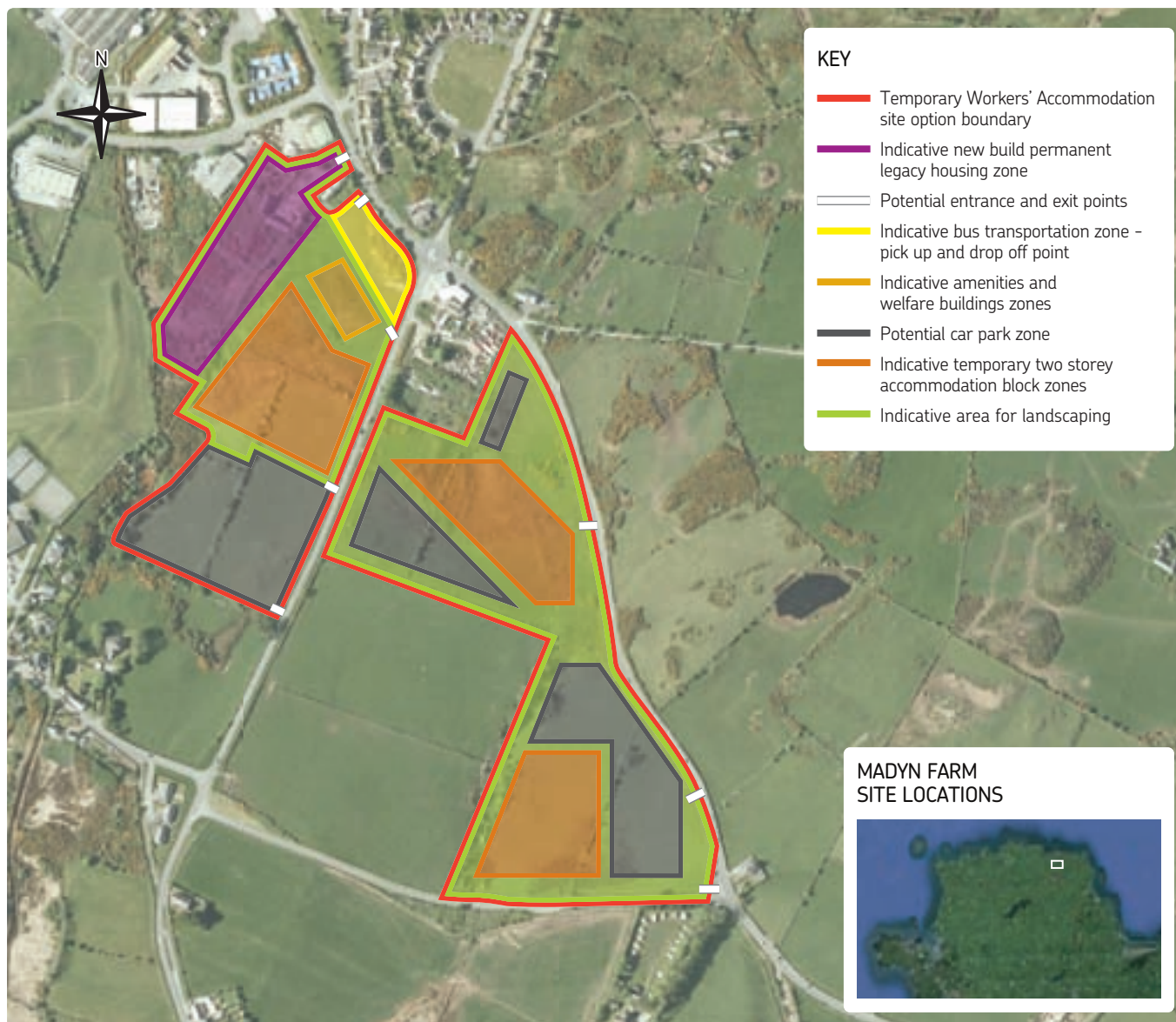


Illustrative layouts only. The preferred layouts will be developed within the site boundary to take account of environmental and other site constraints

Worker Accommodation

MADYN FARM, AMLWCH

We are proposing to build around 50 permanent houses on a site called Madyn Farm in Amlwch. These houses would accommodate around 150-200 temporary construction workers for around four years before reverting to general housing stock. In addition, up to 800 workers could be temporarily accommodated on land adjacent to Madyn Farm and on the opposite side of the B5111. This temporary accommodation would be removed after use and the site would be returned to community use with services in place, enabling possible future redevelopment.



Illustrative layouts only. The preferred layouts will be developed within the site boundary to take account of environmental and other site constraints

PERMANENT HOUSING IN HOLYHEAD

We are also considering opportunities for the development of permanent houses in Holyhead, although we have not identified specific sites at this time. These houses could accommodate temporary construction workers for around four years before reverting to general housing stock.



MORE INFORMATION

At the July 2015 information events we considered the construction of Temporary Workers' Accommodation at Dalar Hir, co-located with the Park & Ride facility, however we are not currently considering it.

As we refine our proposals we may revisit use of Dalar Hir for workers' accommodation and, in this event, we will come back to you and share any revised proposals.

The ultimate solution for housing our construction workers will depend on a number of factors, including the potential impact on the Welsh language in host communities. But we have identified solutions that we think will minimise impacts on communities while benefiting the health and welfare of our workers.

Currently, we are showing the maximum or likely range of units that could be allocated to each location but our final proposals will include a mix of options. We will consult on our final proposals at our second stage of pre-application consultation.

POTENTIAL BREAKDOWN FOR HOUSING OUR CONSTRUCTION WORKERS

Type	Location	Accommodation Units
Re-use of empty homes	Prioritised within 30 mins travel time	250
New build permanent housing	Amlwch	150 to 200 (circa 50 legacy homes at Madyn Farm)
	Holyhead	potential legacy benefit from Kingsland development
Temporary Workers' Accommodation	Wylfa Newydd Development Area	between 250-500
	Amlwch area	up to 4,000 at Rhosgoch
	Holyhead area	up to 4,000 at Kingsland and Cae Glas



QUESTION – TEMPORARY WORKERS' ACCOMMODATION SITE OPTIONS

Our Construction Worker Accommodation Strategy recognises that our workers will need to make use of a range of different types of accommodation. This includes accommodation that is already available for short or long-term rental (such as tourist or private rental beds), the option to buy a home, as well as the use of new accommodation for rent by bringing empty homes back into use. The balance of our construction workers would live in specially provided Temporary Workers' Accommodation.

It is likely that at least one of the larger sites (Rhosgoch or Kingsland/Cae Glas) will house a substantial number of construction workers, and we may use some or all of the other preferred sites. We will present our final proposals for housing our construction workforce at our second stage of pre-application consultation.

We've outlined our proposals for development of new housing and Temporary Workers' Accommodation facilities and we are keen to receive feedback that can inform our detailed development of the proposed facilities on these sites. In particular, we are interested in understanding more about the specific impacts our developments might have locally and/or the opportunities which might arise as a result of our development of these sites.

Taking into account the information we've provided in the Project Update and also the Fact Sheets regarding our Construction Worker Accommodation and Integrated Traffic and Transport Strategies, what do you believe are the key impacts and/or opportunities associated with our proposals for new housing and Temporary Workers' Accommodation facilities, making reference to specific site(s)?

Additionally, do you have views about the specific sites we have identified to use for accommodation, particularly at the larger sites such as Rhosgoch or Cae Glas/Kingsland?

Worker Accommodation

CONSTRUCTION SHIFT WORKING

We are continuing work on our construction programming which includes consideration of working hours and shift patterns. We will need to use different approaches at various stages of the construction but we will need to introduce 24-hour working at key points.

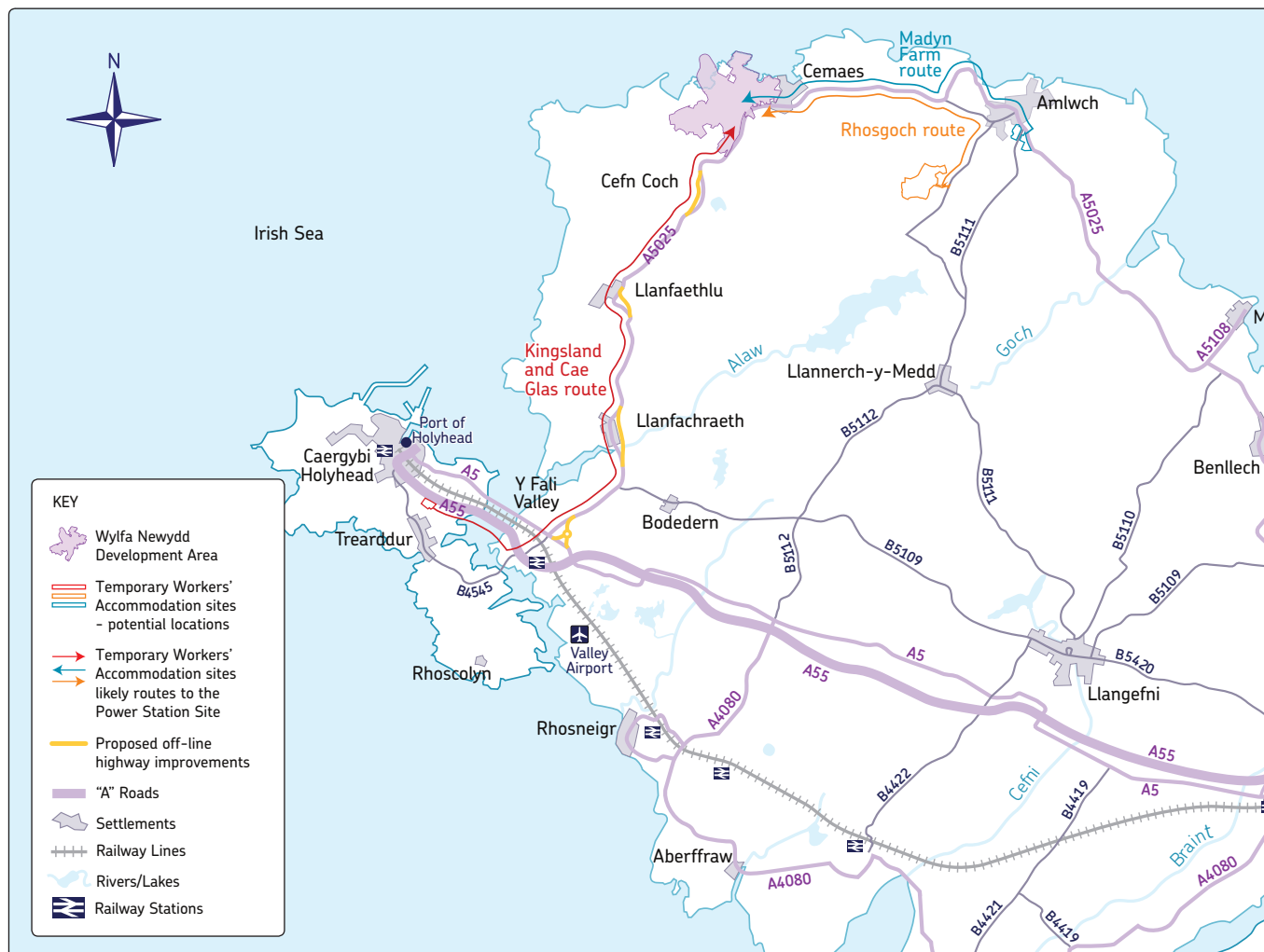
Activity	Indicative working hours and shift pattern
Marine construction	Dredging will occur 24 hours per day, 7 days per week. Other activities would generally occur during daylight hours, with the exception of particularly complex activities which may require occasional 24-hour working.
Bulk earthworks, including site grading and deep excavation	Generally up to 12 hours per day (largely daylight hours), 7 days per week.
General building and construction	Critical path activities will require 24-hour working, 7 days per week. Concrete pouring will generally occur during day shifts, with the exception of large continuous concrete pours which will require 24-hour working.
Commissioning	Commissioning will be undertaken 24 hours per day, 7 days per week.

For periods of 24-hour working (expected at the same time as our peak workforce), we expect the most likely core shift pattern to include two shifts, each lasting 10.5 hours (including a half hour lunch break). Our current proposal is to have a shift pattern with the following characteristics:

- day shift with staggered start times of 0700, 0730 and 0800
- night shift with staggered start times of 1630, 1700 and 1730
- eleven days on and three days off on a rolling fourteen day cycle that would be staggered to ensure that work would continue each weekend

It is important to note that the night shift would likely end between 0300 and 0400 with night shift workers needing to travel back to their accommodation. This would mean that shuttle buses would likely be running along the identified routes between 0230 and 0430.





Likely routes of shuttle buses to and from the Power Station Site



QUESTION – CONSTRUCTION SHIFT WORKING

We have developed a proposal for construction worker shift patterns. However, based on the final proposal for the housing of our construction workers, our shift patterns could result in differing impacts on local communities.

For example, if we located 4,000 construction workers at the Rhosgoch site, we would need to make return shuttle bus trips along that portion of the A5025 at times such as 0230, 0800 and 1500.

While the scope to change the bus routes and travel times is limited because of the road network and construction requirements for a large project, we recognise that the shuttle buses could be passing sensitive locations such as residential properties and roadway junctions at peak times and creating adverse effects on local communities.

We will work with the Isle of Anglesey County Council to minimise these effects. For example, we could consider using larger buses to carry more workers per trip to reduce bus movements on local roads. We would be interested in hearing from you about other factors and considerations important to you that we may have overlooked.

Meeting the transport requirements of the Project

INTEGRATED TRAFFIC AND TRANSPORT STRATEGY (ITTS)

We have now prepared an Integrated Traffic and Transport Strategy (ITTS) to present a co-ordinated package of measures to transport our construction workers and materials, as well as looking for legacy opportunities beyond operation. This includes the range of transport modes available across Anglesey such as road, rail, air and sea.

We have focused the objectives of the ITTS on minimising the adverse effects of the Project on communities and the environment, especially during construction, while leaving positive contributions to the transport system such as the construction of new sections of road, highway improvements along the existing network, and additional footpaths and cycleways.

To achieve this, we have concentrated on the movement of people, freight and logistics.



MORE INFORMATION

More information about the ITTS and our Public Access and Recreation Strategy can be found in our Fact Sheets, available in hard copy at our events and on our website at: www.horizonnuclearpower.com/consultation

PEOPLE MOVEMENT AND TRAVEL PLANNING MEASURES

We intend to work with the construction and operational workforces to ensure that they can make informed decisions about their transport options, encouraging a reduction in the use of the private car. We will be preparing an overarching Travel Plan to achieve this and some key measures that we are considering currently include:

- assignment of a Travel Plan Coordinator who will be based at the Power Station Site
- assignment of Travel Plan Representatives who will be based at each of the Temporary Workers' Accommodation sites during construction
- creation of an internet-based accommodation booking portal and worker 'car share scheme'
- provision of a Travel Information Pack to all workers prior to beginning work during construction or operation. This would include details of both Anglesey-wide and Horizon specific sustainable travel options, pedestrian and cycle routes to local facilities, and the Construction Worker Accommodation Management Portal
- commitment to restrict parking at the Power Station Site, via a car parking permit allocation system
- incentive programmes to introduce cycling to work
- staggered shift patterns to avoid peak travel times

We are currently focused on the following:

- **shuttle buses:** in order to make alternative modes of transportation as attractive as the use of the private car, our proposals include a number of shuttle bus services and routes:
 - set routes with fixed, signed pickup points, likely to be along the A5025, to accommodate the northern and eastern sides of Anglesey
 - shuttle bus service for construction workers from the proposed Temporary Workers' Accommodation locations at Amlwch, Rhosgoch and Holyhead to the Power Station Site
 - shuttle bus service from key transport interchanges at Holyhead and Anglesey Airport to accommodate workers coming by train, ferry or air



- **rail use:** as part of our assessment, we have identified that rail is likely to be attractive only for those workers travelling from Bangor and beyond. To encourage this, we plan to provide a shuttle bus from Valley or Holyhead railway stations, depending on future demand
- **park and ride facilities:** we are proposing a park and ride facility at Dalar Hir, immediately to the north east of Junction 4 on the A55. The current design includes between 2,000 and 3,000 parking spaces that would allow us to consolidate car-based construction workers onto shuttle buses for the journey along the A5025 to the Power Station Site
- **management of parking arrangements:** we plan initially to provide up to 1,000 parking spaces on the Power Station Site for construction workers so that the Project does not contribute to unauthorised parking in the surrounding areas. This will be reduced once our park and ride facilities are operational. During operation, we plan to operate a parking permit system for those workers that cannot access the Power Station by more sustainable modes of transport
- **cycling:** to encourage the use of cycling as part of the Project, covered and secure bicycle parking will be provided at any park and ride facilities, Temporary Workers' Accommodation sites and at the Power Station Site



FREIGHT AND LOGISTICS MOVEMENT

LOGISTICS CENTRE

Our intention is to maximise the delivery of construction materials and equipment direct to the Power Station Site by sea. We will also continue to look at the use of rail, but recognise that this requires the forward transport by road.

To manage the movement of construction materials, we plan to construct a logistics centre at our preferred location of Parc Cybi, on the southern edge of Holyhead. The logistics centre would be able to accommodate up to 100 heavy goods vehicles at any one time, with a peak of around 40 heavy goods vehicles per hour and an average of around 150 heavy goods vehicles per day travelling between the logistics centre and the Wylfa Newydd Development Area.

Whenever possible, we will combine smaller deliveries, transferring them to larger vehicles to minimise the number of vehicle movements along the A5025. These would typically include deliveries of post and parcels, food, equipment spares and other consumables.



MARINE OFF-LOADING FACILITY

To reduce the number of construction freight vehicles on the roads and to address safety concerns along the route from Holyhead to the Power Station Site, we are proposing a Marine Off-Loading Facility at Porth-y-pistyll. This will allow for the majority of freight to be delivered directly to the Power Station Site by sea during both construction and operation.

To maximise the use of the Marine Off-Loading Facility, we are proposing to construct it as soon as possible after the development consent order is granted. This is anticipated to begin in 2018 and be completed in 2020, in time for the first delivery of bulk materials for construction of the Power Station.

We expect that the Marine Off-Loading Facility will accommodate around 90% of the bulk materials and the majority of large pieces of equipment needed during construction.



DID YOU KNOW?

Considering just the bulk materials, using the Marine Off-Loading Facility would replace over 180,000 lorries during the Main Construction period.



MORE INFORMATION

We estimate that the consolidation of smaller loads would reduce the number of vehicles used to deliver consumables travelling along the A5025 by around 80%.

Meeting the transport requirements of the Project

HIGHWAY IMPROVEMENTS AND ENHANCEMENT MEASURES

The main route to the Wylfa Newydd Development Area from the mainland and the port of Holyhead is along the A55, the A5 and the A5025. We recognise that a variety of highway improvement works will be needed to address existing safety and environmental concerns.

In collaboration with Isle of Anglesey County Council, we have identified the following proposals for highway improvements to ease the flow of traffic and to reduce effects of the Project on congestion and road safety.

A5025 PROPOSALS

On-line improvements

Our proposals for on-line improvements of the A5025 generally include upgrading existing locations where we have identified constraints, particularly where two HGVs could not pass safely. We expect these improvements to include:

- widening to a standard width, where possible
- additional widening of the highway width on bends where existing conditions are particularly tight
- reconstruction of sections of the A5025 that will be used for construction traffic to ensure that the condition of the road is maintained
- resurfacing of sections of the A5025 where the highway will be bypassed by our proposed off-line improvements
- resurfacing the entire length of the A5025 between Valley and the Power Station Site, as well as the portions of the A5025 that we will bypass with our proposals
- where the National Cycle Network intersects the A5025, new crossing points and surfaced cycleways will be provided



MORE INFORMATION

On-line highway improvements are considered to be those made to the existing road, generally within the existing highway corridor.

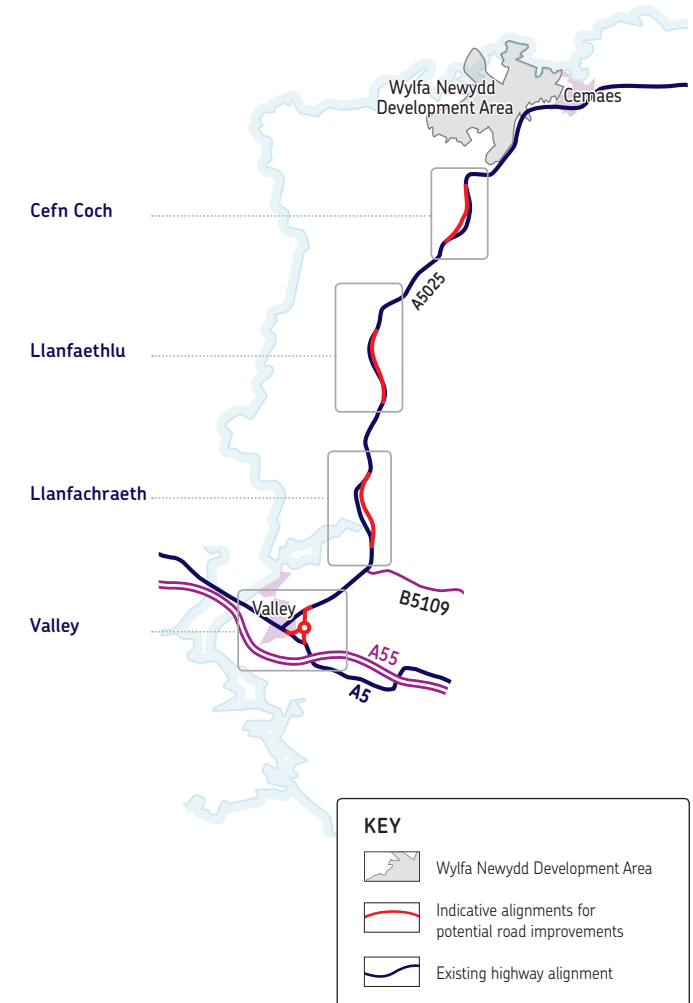
We consider off-line highway improvements to be those that involve the construction of new sections of road such as a bypass.

Off-line improvements

We are proposing off-line highway improvements at four locations between Valley and the Power Station Site, including:

- A5/A5025 Valley junction improvements
- Llanfachraeth bypass
- Llanfaethlu road straightening
- Llanrhyddlad to Cefn Coch improvements

We were able to bring a more detailed design of these improvements to the community in July 2015. Based on feedback from those events, the focus of our road projects in 2016 will be to progress the detailed design and to continue our environmental survey work, resulting in the submittal of applications for consent of both the on-line and off-line highway improvements. This will allow us to ensure that the improvements are constructed prior to the peak of the construction phase. We anticipate that the on-line works would commence immediately following planning consent while the off-line works would commence upon grant of the development consent order for the Project.



Overview of locations for potential road improvements

NANNER ROAD IMPROVEMENTS

Development of the Power Station will require the closure (stopping up) of a section of Cemlyn Road that runs from Tregle to Cemlyn Bay, to the west of the Power Station Site (as shown on page 18). We recognise that this will put additional pressure on Nanner Road and we have assessed a variety of improvement options.

Working with the Isle of Anglesey County Council, we have committed to constructing passing bays at various locations along Nanner Road which we will have in place prior to the stopping up of Cemlyn Road.

In places where the highway improvements require that we remove dry stone walling, we have committed to replacing the wall to maintain the character of the road and therefore the area.

A series of utility diversions are currently underway along Nanner Road. We anticipate the works to improve Nanner Road will occur in late 2016 to create minimal disruption to the nearby agricultural and tourist operations.



A5025 POWER STATION TO AMLWCH

We have committed to providing shuttle buses to transport construction workers to the Power Station Site and recognise that private and tourist rental options could be in areas of the north and east of Anglesey. In addition, our Construction Worker Accommodation Strategy has now identified the potential to house some of our construction workers in the Amlwch area, and could include a large Temporary Workers' Accommodation development at Rhosgoch.

We recognise that our Project will increase journeys along the A5025 between the Power Station Site and Amlwch, however, until we finalise our approach to housing our construction workers, we cannot be sure how significant this increase will be.

In advance of this decision being made, we are studying the existing road conditions between Cemaes and Amlwch, focusing on areas where the road width is currently constrained or areas where we know there are existing safety risks such as Llanbadrig, near Burwen, and in Amlwch.



QUESTION – TRAVEL PLANNING

We have developed a package of transport measures that form our overall Integrated Traffic and Transport Strategy, with the aim of minimising the adverse effects of the Project (especially during construction), including a number of facilities and proposals that we have already consulted on including highways improvements on the A5025, park and ride facilities, a Marine Off-Loading Facility and logistics centre.

Taking into consideration the range of measures we are proposing, is there anything additional that we should consider in finalising our traffic and transport proposals for the Project?

BRITANNIA BRIDGE

We are currently undertaking studies to investigate what impacts, if any, the Project could have on the Britannia Bridge and are working closely with Welsh Government and Isle of Anglesey County Council to consider the issue. Our next step in this process includes further traffic modelling to identify the potential delays caused by an increase in vehicle traffic on the bridge. Once we have a better understanding of any effects, we will investigate ways to minimise these during peak hours. Potential mitigation measures might include changes to the merge layout for some junctions of the A55 and green travel planning for journeys to the park and ride facility.

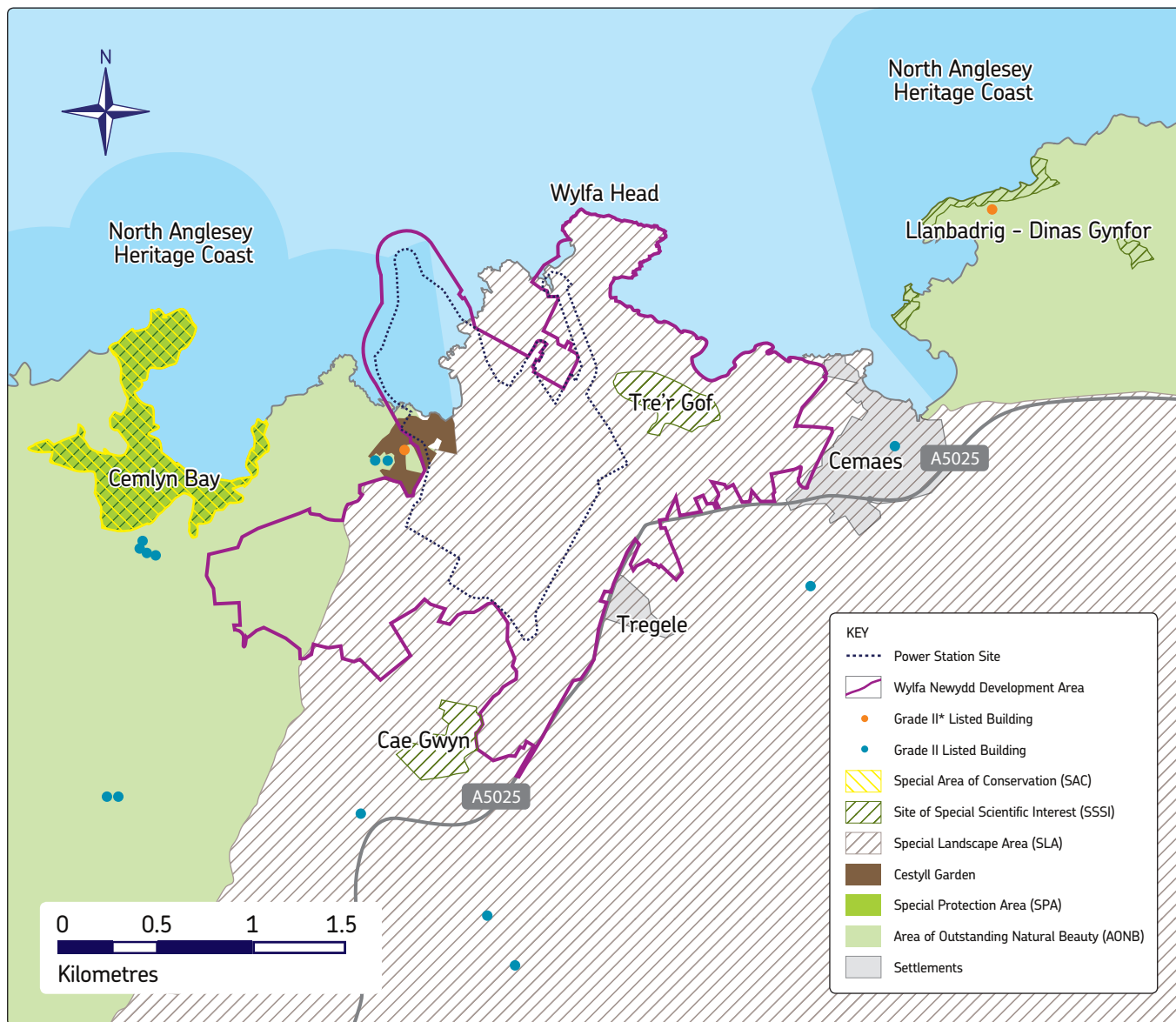


Environmental and socio-economic context

Building on the work we prepared for our first stage of pre-application consultation, we have continued extensive study of the environment within the Wylfa Newydd Development Area and the surrounding area. We have also undertaken initial studies of the areas of land that we think we'll need for our Off-Site Power Station Facilities and Associated Development. These studies help us to identify where there are receptors such as people, animals and plants that may be particularly sensitive to development and ensure that our Project takes this into account.

We have also completed a number of more detailed studies to allow us to better understand the socio-economics across Anglesey and North Wales with a focus on people who live on and visit Anglesey; and the distinctive characteristics of villages, towns and communities likely to be affected by our Project. The Welsh language forms part of the social fabric of local communities across Anglesey and North Gwynedd. The impact of the Project on the Welsh language is considered across all disciplines, in particular the socio-economic context.

This work is important in helping us to develop strategies for education, jobs and skills, and engaging local and regional suppliers for our Project, as well as understanding the impact of our Project on the Welsh language and the health and wellbeing of Anglesey residents.



Local environment – key designations

LOCAL ENVIRONMENT

There are various special sites and buildings in and around the Wylfa Newydd Development Area that we need to consider in the development of the Project.

A number of public rights of way, including the Wales Coast Path and the Copper Trail (national cycle route) also cross the Wylfa Newydd Development Area and we're looking at how best to accommodate these in our Project. The existing Magnox power station is a significant element in the landscape and forms an important part of the visual context for the Wylfa Newydd Project and proposed landscaping.

STATUS OF ENVIRONMENTAL IMPACT ASSESSMENT

The construction and operation of the Power Station will result in a range of environmental and socio-economic effects. Based on the information currently available, we have identified potential environmental effects (both beneficial and adverse) that we believe could arise from our Project. We have also identified, where possible at this stage, mitigation and enhancements to address anticipated significant effects. The environmental impact assessment process is ongoing and will continue to develop through to the submission of our application for the development consent order.

SOCIO-ECONOMIC

HOUSING

To construct the Power Station, a large temporary workforce would be required that will need to be housed near to the Wylfa Newydd Development Area. We recognise that a large number of people living and working in the area could affect the availability and cost of accommodation, as well as the demand on community facilities and public services.

To offset these effects, we are proposing ways to manage accommodation for our construction workers which would reduce the potential effect on private rental housing, and increase the local benefits to the Anglesey economy. We are also in the process of deciding the best way to provide healthcare services, and leisure facilities for construction workers and to create legacy benefits for Anglesey.

EDUCATION AND TRAINING

A large number of jobs would be created in the area both directly and indirectly across a range of sectors, which would increase the skill levels of the local community. Education, jobs and skills plans will be implemented to maximise opportunities for the local workforce.

TOURISM

There is the potential that a large construction project like ours could impact tourism on Anglesey. While work is currently ongoing to understand the specific effects on the tourism industry, there is potential for change in visitor patterns in terms of numbers and their pattern of expenditure. We are also assessing the impact on the demand and availability of tourism accommodation. However the provision of Temporary Workers' Accommodation will help reduce the potential effects on tourism accommodation.

With the introduction of a new visitor centre to Anglesey as part of the Project we anticipate that there will be a positive result to tourism by increasing the number of visitors and spend in the area.



Environmental and socio-economic context

TRAFFIC AND TRANSPORT

We appreciate that the introduction of plant and machinery as well as the transport of materials, goods and construction workers could result in an increase in traffic which may affect local communities, including through changes to air quality and noise and vibration levels. We are looking at a number of ways to manage construction traffic, including use of a logistics centre which will regulate the flow of heavy goods vehicles on the road network. We are also proposing at least one park and ride facility which will make use of a dedicated bus service to the Power Station Site, reducing the number of private vehicles using local roads.

We are also planning to construct and operate a Marine Off-Loading Facility, which will allow for the majority of construction materials to be brought directly by sea to the Power Station Site. Proposed works to the A5025 will improve the standard of the road between Valley and the Power Station, with bypasses and junction upgrades removing traffic from the communities of Valley, Llanfachraeth, Llanfaethlu and Cefn Coch. We will also implement a traffic management plan to manage the movement of construction vehicles across Anglesey.

PUBLIC ACCESS AND RECREATION

Ahead of construction beginning at the Power Station, a number of public rights of way, including the Wales Coast Path and the Copper Trail cycle route will have to be temporarily diverted or stopped up. Over time, we will also have to stop up the Cemlyn Road and the road to fisherman's car park, and to close the car park itself. We are still identifying the best ways to reduce the potential effects on public access and recreation, but we are committed to maintaining access to footpaths and public rights of way wherever possible and reinstating them upon completion of construction activities.

NOISE AND AIR QUALITY

Construction of the Power Station will inevitably result in an increase in noise and vibration levels due to the use of heavy machinery, earth moving activities and an increase in the traffic on nearby roads. Operation of plant and equipment, earth moving activities and increased traffic could also have an effect on air quality.

We are developing a Landscape and Environmental Masterplan (LEMP) which includes details on how we are planning to develop mounds around the construction area, helping to reduce noise effects on the surrounding villages. Good construction management practice will be applied to minimise noise and vibration such as restricting particularly noisy activities to appropriate times of day. We are proposing to use the Marine Off-Loading Facility for delivery of as much of the construction materials as is feasible, which will minimise the potential effect on air quality from additional traffic movements.



MARINE ECOLOGY

Construction of the breakwaters, Marine Off-Loading Facility and cooling water system will involve a significant amount of activity within the marine and coastal environment. Changes to a number of features on the seabed, and coastline could occur, affecting coastal processes e.g. currents and waves. Construction activities could affect water quality, and increase lighting, noise and vibration levels, causing habitats and marine animals to be potentially injured, lost or disturbed.

During operation there is also the potential for currents to change and marine life to be affected by the operation of the cooling water system.

To offset these potential impacts, we are looking at control measures and design features which could include the provision of new habitats on the breakwater structures, fish recovery and return systems, maintaining migratory fish passage and implementing marine mammal exclusion zones.

TERRESTRIAL ECOLOGY

Anglesey has a broad range of animals, plants and habitats, and some of these are given special protection. During construction, these species and supporting habitats could be disturbed, injured or lost. Significant effects could also arise during operation, from changes in air quality linked to plant and vehicle emissions, and disturbance from noise, vibration and lighting at the Power Station. To minimise these effects, where appropriate protected species would be relocated, suitable habitats created (e.g. bat barns), and good construction practice and environmental management plans would be implemented.

We are currently undertaking the necessary Habitats Regulations Assessments to identify the potential effects of the Project on nearby European designated sites (e.g. Cemlyn Bay Special Area of Conservation) and sites for the replacement of ecological resources will be considered.

THE LANDSCAPE

DRAINAGE

During the early stages of construction, a significant amount of soil and rock needs to be moved around the Wylfa Newydd Development Area to level the Power Station Site in preparation for main construction. The change in landform will alter the landscape and affect the groundwater and surface water. Water courses will be diverted, groundwater and surface water levels, flow patterns and water quality could change. Water dependent habitats, such as Tre'r Gof SSSI could be affected. We are currently developing a drainage plan that will maintain the existing flow and quality of water across the Wylfa Newydd Development Area, where possible, and include planting as early as possible in the construction phase to reduce surface water runoff.

SOILS AND GEOLOGY

During construction, the excavation of rock and soils and earth moving activities has the potential to result in the loss of agricultural topsoil or a reduction in its quality; the disturbance of existing contamination due to the movement of soil; the damage or loss of access to Regionally Important Geological Sites; and accidental spillage or leaks which could result in new contamination. An environmental management plan will be prepared which will help to protect geological and soil resources.

LANDSCAPE AND VISUAL

Over the construction stage, the change to the landscape will affect the landscape character, including the setting of the Area of Outstanding Natural Beauty, historic landscape, Cestyll Garden and conservation areas, and views and visual amenity (including night-time lighting). Landscape and heritage effects will be reduced or avoided, where possible, through our approach to the LEMP which proposes mounds to help integrate the Power Station into the landscape and screening to soften views (see pages 17 to 20).

CULTURAL AND ARCHAEOLOGICAL

The construction of the Power Station could impact on the setting of archaeological assets. Additionally the excavation of ground during construction has the potential to impact buried archaeological remains. We propose to reduce the adverse effects on heritage assets through: recording of assets, and where feasible, preserving them in their current setting; excavating archaeological remains and landscaping to screen construction and operation activities. We currently have a team of archaeologists on site undertaking one of the largest archaeological evaluation projects in the UK that will help us identify potential areas of undiscovered archaeology and confirm the types of effect likely to arise from the Project.

CUMULATIVE EFFECTS

Cumulative effects can be described as effects on the environment which are caused by the combined results of past, current and future activities. The term is used to describe how our Project would interact with other projects that are expected in the nearby area. We have been undertaking work to identify those projects where there is a potential to overlap with ours and to understand the potential for cumulative environmental effects. As our work progresses, we will work with developers of the identified projects to understand effects and any necessary mitigation.



Welsh language and culture

In Wales, developers of major projects such as ours must complete an assessment to understand how the proposals may affect the Welsh language and culture – this is called a Welsh Language Impact Assessment.

We have established an independently chaired Welsh Language Steering Group who have worked with us to develop a systematic methodology for the assessment. The Steering Group meets regularly to give us advice on how we do our assessment work and to discuss our findings as they emerge.



DID YOU KNOW?

Our Welsh Language Steering Group includes representatives from the following, with the Welsh Language Commissioner and Welsh Government's Welsh Language Division acting as observers to the assessment work:

- Anglesey and Gwynedd Joint Planning Policy Unit
- Gwynedd Council's Language Unit and Democratic Services
- IACC's Economic Development, Education, Corporate Policy and Welsh Language Officer
- Menter Môn
- Wylfa Project Liaison Group
- Horizon

METHODOLOGY

Our assessment methodology has a series of steps:

STEP 1 – ESTABLISHING A BASELINE

This step looks at information about the existing characteristics of the communities across Anglesey. It uses information about population, people reading and speaking in Welsh, employment, schooling, housing, the types of community and social groups, access to public services, health and wellbeing and tourism to build up a picture of how Welsh language features in day-to-day life.

STEP 2 – ASSESSMENT OF THE EFFECTS OF OUR PROJECT ON THE BASELINE

This step involves detailed review of the information collected at Step 1, to better understand what differences exist between areas of Anglesey and how sensitive a particular community might be to a change in patterns of Welsh language use. The possible impacts of the Project on these different communities and characteristics are identified as part of Step 2.



STEP 3 – ASSESSMENT BASED ON CHECKLIST QUESTIONS

Our methodology involves answering a checklist of 18 questions that are based on Planning and The Welsh Language: the Way Ahead. These questions are about the impacts and possible effects of the Project on the following five aspects of community life:

- population characteristics
- quality of life
- economic factors
- social and cultural aspects
- infrastructure supply

The answers to the questions are used to group effects on the Welsh language as positive, negative or neutral. Each question is then ranked in terms of importance, based on discussions we have had with the former Welsh Language Board. By matching up the type of effect with the ranking of the question, the assessment process gives a score for each question which then allows us to understand where our Project is most likely to have negative effects that would need to be overcome, or positive effects that we could look to enhance.

STEP 4 – MONITORING THE IMPACT OF THE PROJECT

This step will be ongoing through the lifetime of our Project. It involves monitoring data to check on how effective our mitigation measures and proposals for enhancement are in terms of ensuring that Welsh language is treated no less favourably than English.

INITIAL FINDINGS

As part of our Welsh Language Impact Assessment, we have been working to identify the potential impacts of our Project. Our initial findings have identified some likely impacts and these are the areas where we expect to do further work with our Steering Group and technical consultees to generate ideas for possible mitigation and enhancement measures. These include:

- potential negative impacts on the Welsh language due to the scale of our construction workforce, particularly temporary workers who will not be home-based
- potential for changes in the housing market as a result of demand. This may benefit some sectors such as tourism, but could introduce competition with local people, particularly for private rental accommodation
- potential for the use of the Welsh language to be diluted in schools and amongst friendship groups, depending on how many construction workers also bring families to the area
- potential positive impacts on out-migration rates as a result of the large number of job opportunities and encouragement for some local people to return to the area
- potential positive impacts from increased revenue to a wide range of local businesses, including those supporting construction activities and tourism
- changes in the characteristics of Anglesey communities, which could have a range of impacts. These may include tensions between different social groups and increased fear of crime

NEXT STEPS

As our proposals are developed in greater detail, we will be able to review the Step 3 process to better understand the significance of effects. This will then allow us, together with the Steering Group, to develop our thinking about the types of mitigation and enhancement measures that will be most effective for the Welsh language and culture, as well as plans for monitoring our proposals. An interim report will be issued at the second stage of our pre-application consultation presenting the preliminary findings of our assessment process. A final Welsh Language Impact Assessment report will be submitted with our application for development consent order.



QUESTION – WELSH LANGUAGE AND CULTURE

Horizon is keen to hear your views on the ways in which the Welsh community identity and culture can be protected and enhanced. This could include preferences for improving local focal points, such as Cemaes beach, or measures to encourage use of local customs or Welsh language.

With reference to Welsh language and culture, please describe any important issues for your local community that you think Horizon should consider and share any suggestions that you would like us to explore further.

Health Impact Assessment

We are using a process called Health Impact Assessment to consider the potential effects of the Project on health and wellbeing. The first step of the assessment focuses on understanding the existing characteristics of health and wellbeing across Anglesey, North Wales and the UK. We will then take this information to look at how our Project may impact on different aspects of health and wellbeing. The findings of our environmental impact assessment work are closely linked to the health impact assessment.



DID YOU KNOW?

Our Health Impact Assessment methodology uses these three guidelines:

- the Wales Health Impact Assessment Unit Health Impact Assessment practical guide. Funded by Welsh Government, this is used widely across Wales and is considered best practice internationally
- Mental wellbeing impact assessment – a toolkit for wellbeing. This looks at how mental health can be linked to social and environmental issues
- the Isle of Anglesey Health Impact Assessment tool, which adds a local context to our work

METHODOLOGY

Our assessment methodology has a series of steps:

STEP 1 – ESTABLISHING A BASELINE

This step looks at information about the existing characteristics of the communities across Anglesey and North Wales, particularly those communities closest to the Wylfa Newydd Development Area. It uses information about the population, schooling, use of the Welsh language, community life, GP practices, the proportion of diseases and other risk factors to build up a picture of the health and wellbeing of these communities. This picture indicates how sensitive local communities might be to potential impacts from the Project.

STEP 2 – ASSESSMENT OF THE EFFECTS OF OUR PROJECT ON THE BASELINE

This step is informed by the information collected in Step 1 and additional scientific evidence. The assessment considers both the sensitivity of affected communities, as well as the magnitude of the change due to construction and operation of the Project. The assessment of magnitude is informed by changes in social or environmental conditions due to the Project, in line with the detailed environmental and socio-economic assessments we have been undertaking. Professional judgement is used to determine whether an effect will be adverse or beneficial and how significant potential effects may be. The results of the assessment will inform the mitigation measures that we might need to address any negative effects, and how we can look to enhance any positive effects.

STEP 3 – MONITORING AND MANAGEMENT

This step will be ongoing throughout the lifetime of our Project. It involves monitoring information to track how effective our mitigation measures and proposals for enhancement are in terms of the health and wellbeing of local communities.



INITIAL FINDINGS

We have started our assessment work by looking at the communities closest to the Wylfa Newydd Development Area because we expect the greatest changes in environmental effects to be felt there. These include Treglele and Cemaes.

Our initial findings have suggested a number of ways in which the Project may have impacts on health and wellbeing:

- the Project will boost the local economy and provide employment opportunities, which is beneficial for general health and mental wellbeing, with positive impacts on families
- the Project will improve accessibility to education and training needed to engage in job opportunities, particularly for local people, benefiting both Anglesey and North Wales
- the security of power supplies is very important to public health and wellbeing and the Project will make a positive contribution to this aspect of day-to-day life
- improvements to transport routes such as the A5025 and a new network for walkers and cyclists around the Power Station will result in positive health and wellbeing effects
- during construction, the Project may increase dust, noise, and vibration levels and some night-time activities which can combine to interfere with daily routines and sleep patterns
- a large construction workforce may change established community life, including perceived and actual changes in anti-social behaviour, smoking and alcohol use, as well as concerns around crime levels and social tensions
- the Project will change the landscape around the Power Station Site which could affect community identity, social networks or culture
- changes in the accessibility to existing recreational routes, particularly during construction, may deter people from going for walks or cycling



DID YOU KNOW?

We have established a Steering Group so that local stakeholders can be part of our Health Impact Assessment work.

The Steering Group is chaired by Betsi Cadwaladr University Health Board and includes:

- Public Health Wales
- Welsh Government
- Wales Health Impact Assessment Support Unit
- Isle of Anglesey County Council
- Wylfa Project Liaison Group
- Horizon

We also invite Natural Resources Wales, Public Health England and the Office for Nuclear Regulation to observe the Steering Group.

NEXT STEPS

As our proposals become more detailed, we will be able to predict the effects on health and wellbeing that people may experience due to our Project.

Once this more detailed information is available, we will develop ideas for mitigation measures that could avoid or reduce any negative effects, and make plans for enhancing positive effects.

We will continue to share our findings with the Steering Group and invite their help to identify appropriate mitigation measures. An interim report will be issued at the second stage of our pre-application consultation presenting the preliminary findings of our assessment work. A final Health Impact Assessment report will be submitted with our application for development consent order.



QUESTION – HEALTH AND WELL BEING

Horizon is keen to hear your views on the ways in which services to meet the health and wellbeing needs of our construction workers could be met. For example, these services could be delivered through enhancing existing local health services that would be shared with the construction workforce or by the provision of separate services for use specifically by the workers.

With reference to health and wellbeing, please could you describe any important issues for your local community that you think Horizon should consider and share any suggestions that you would like us to explore further?

Jobs, skills and business development opportunities

We anticipate that the Wylfa Newydd Project will generate significant employment and supply chain opportunities throughout the construction and operation of the Power Station. To maximise opportunities for the local workforce, we have prepared a Jobs and Skills Strategy.

WYLF A NEWYDD PROJECT WORKFORCE

CONSTRUCTION

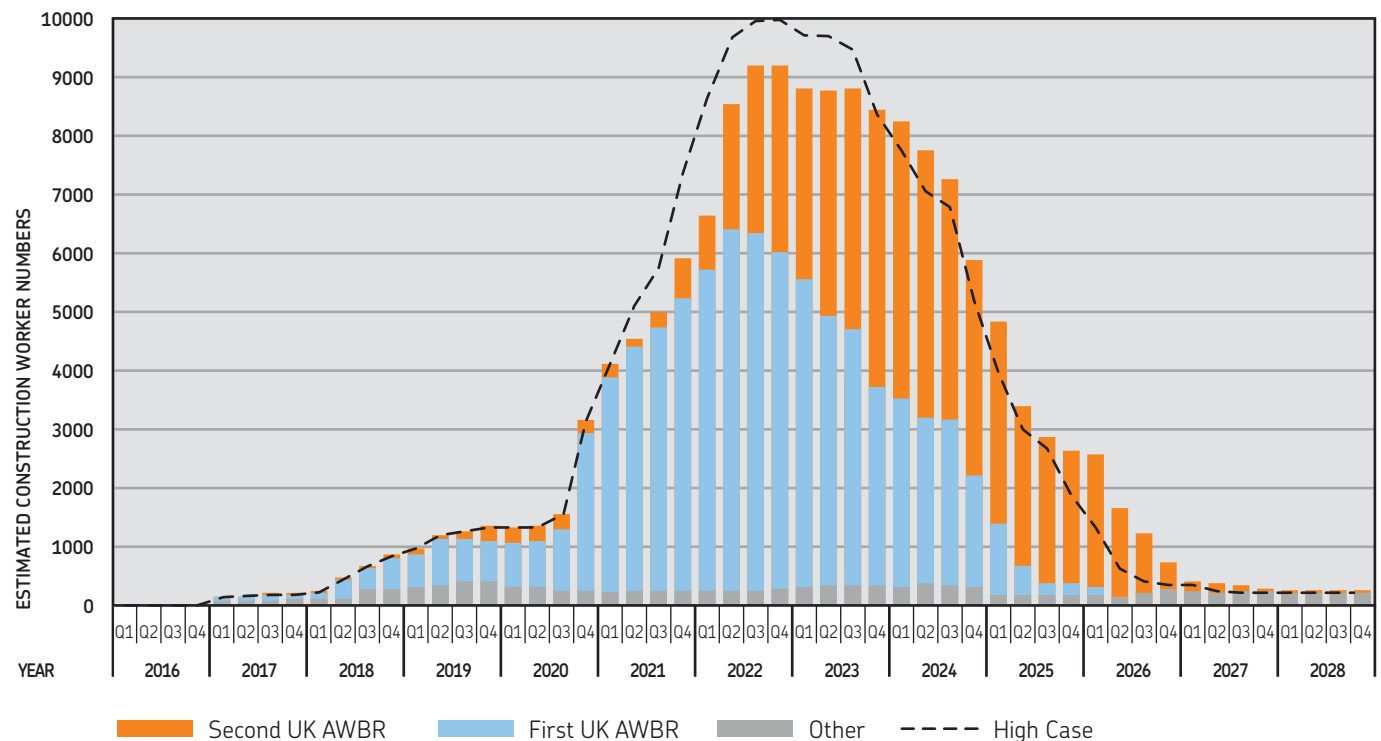
Our current thinking is that we will need between 8,000 and 10,000 construction workers during peak periods. This accounts for construction workers at the Power Station Site, Off-Site Power Station Facilities and Associated Development.

An additional facilities management workforce would be required to run the Temporary Workers' Accommodation sites and our associated ITTS proposals. We expect that this would total around 250 people during the peak construction period.

Due to the varied nature of construction activities throughout the construction stages, a range of job roles will be available such as:

- planners, surveyors, and engineers
- marine and environmental experts
- project managers and safety experts
- security
- heavy plant technicians and operatives
- specialist trades such as steel fixing, form-makers, welders, scaffolders
- support services

At a high-level we anticipate the following need for workers over the construction period:



As construction moves towards the end of the programme, we anticipate the need to train workers for operation of the Power Station. We think these early trainees would divide their time between the Power Station Site and other operational power stations as part of their training.

The training of these workers would overlap between the construction and operational phases of the Project to ensure that the necessary skills are available when needed. During this overlap, we expect the number of our operational workers to increase while the number of construction workers decreases.

OPERATION

Once fully operational, we expect up to 850 permanent jobs at the Power Station across a wide range of roles. We are committed to working with existing training and service providers, including Grŵp Llandrillo Menai and Bangor University, to maximise opportunities for residents across north Wales to get suitable qualifications to apply for the jobs we will create.

We anticipate the following roles will be needed to operate the Power Station:

- operators and controllers for the reactors
- maintenance
- project and operational management
- engineering and technical support such as chemists, radiation protection specialists and nuclear engineers
- business and administrative support
- facilities and support services such as catering, cleaning, groundskeeping, painting, lagging and scaffolding
- security
- trainers for the operational workforce

OUTAGE AND MAINTENANCE

Each nuclear reactor has to be shut down for periodic maintenance and re-fuelling; this is called an outage. We expect that this will take place once every 18 months for each UK ABWR, on a staggered schedule so that at least one reactor is generating power at all times.

We expect that up to an additional 1,000 temporary workers would be employed during planned periods of plant outage which would last for a period of around 25-30 days. The range of roles we anticipate during outage could include:

- engineers and maintenance technicians
- specialist maintenance crews
- trained ABWR refuellers
- fitters
- extra ladders, scaffolders, and fitters
- extra administrative, catering, cleaning and groundskeeping staff
- extra drivers

After the 60 years of operation of the Power Station, additional employment opportunities will be available during decommissioning activities. This will likely involve maintenance and engineering personnel for several decades, but at lower numbers than during operation.



MORE INFORMATION

In order to train our operational and specialist workforce, we are proposing a Training and Simulator building that would contain two full scope simulators of the UK ABWRs, together with a range of classrooms and training spaces. This building would need to be available by the middle of 2020 to allow sufficient time for the first set of operational staff to be trained prior to commissioning activities. The location of the Training and Simulator building can be found on our LEMP drawings on pages 18 and 20.



MORE INFORMATION

We estimate around 2,300 members of the construction workforce may be drawn from Anglesey and neighbouring mainland communities, equating to approximately a quarter of the peak construction workforce. Our Jobs and Skills Strategy aims to maximise opportunities for these local people to get the right training, which we hope could further increase the number of local employment opportunities.



DID YOU KNOW?

The Power Station will generate power continuously throughout operation so operators and controllers will work on a shift schedule to ensure coverage 24 hours, seven days a week.

Jobs, skills and business development opportunities

JOBS AND SKILLS STRATEGY

We have developed a Jobs and Skills Strategy to outline our approach for recruitment and training so that we can deliver the necessary workforce, both in size and in skill, to meet our programme for construction and operation of the Power Station.

We want to maximise the opportunity for local people to gain the skills that we will need and the principles of the Jobs and Skills Strategy reflect this.

As we refine the Jobs and Skills Strategy, we will also take into account the findings of the Welsh Language Impact Assessment.



ENGAGEMENT AND RECRUITMENT

Our recruitment policy is based on the principles of equal opportunities and individual merit, seeking to attract the best candidate for a given position.

CONSTRUCTION

As a reflection of our commitment to Anglesey and the wider region, our Jobs and Skills and Education Engagement Strategies focus on training and educating at the local and regional levels to ensure that local people can be ready to take advantage of the employment opportunities of the Wylfa Newydd Project, in the timescales that we will need employees.

Our primary objectives revolve around engagement with schools and higher education institutions as well as with careers and employment agencies in North Wales.



DID YOU KNOW?

We have agreed Memoranda of Understanding with Grŵp Llandrillo Menai and Bangor University which means that we can develop our programmes to enhance student and graduate employability and promote science, technology, engineering and maths subjects, sponsorships and sponsored research.

OPERATION

As part of the Jobs and Skills Strategy, we have focussed on the accessibility of permanent job opportunities to local residents. This includes skills transfer from the existing Magnox power station, graduate programmes to encourage young people to stay in their communities, sponsorships and specialist training and apprenticeship programmes.

We will also be launching an apprenticeship scheme and are proposing to establish an employment brokerage that will connect people in north-west Wales to jobs on the Wylfa Newydd Project. This effort could be led by Job Centre Plus, with Careers Wales invited to provide a supporting role.



SPECIAL TRAINING FACILITIES

In addition to the Training and Simulator facility that we are building to train our workforce, we are continuing to work with key partners including the Welsh Government and others to explore making use of existing facilities in North Wales.

An example is the possible future use of parts of the existing Energy Skills Centre at Coleg Menai's Llangefni site to provide a base and training venue for Horizon engineering apprentices. We are also keen to explore new facilities at Coleg Menai; the potential use or development of facilities at Bangor University; and the proposed North West Wales Science Park development.



MORE INFORMATION

Details of our apprenticeship and graduate programmes, as well as our proposed sponsorship opportunities are outlined in the Fact Sheet regarding the Jobs and Skills Strategy available in hard copy at our events and on our website at: www.horizonnuclearpower.com/consultation



QUESTION – JOBS AND SKILLS

We are aiming to ensure that our jobs and skills activities will result in at least a quarter of our construction workers being drawn from people who already live on Anglesey or in the neighbouring mainland communities.

We are already working with schools across Anglesey and beyond, with a particular focus on activities designed to get children interested in science, technology, engineering and maths from primary age upwards, as well as providing older children with advice on subject choices that could lead to careers with Horizon.

Our school activities flow into the plans we have to develop our work with Coleg Menai, Bangor University and other regional training providers to ensure that they run the right sort of training courses to give students the skills needed to work on our Project.

With this information and that provided in the Fact Sheet on our Jobs and Skills Strategy in mind, could you please:

- provide your views about our proposals for education, jobs and skills development?*
- share any ideas we could consider for maximising the uptake of opportunities by local people?*

Jobs, skills and business development opportunities

BUSINESS DEVELOPMENT



Since the first stage of our pre-application consultation, we have undertaken a range of activities to raise awareness of the business development opportunities linked to our Project. This includes:

- continuing to engage with businesses at our monthly open surgeries hosted in Cemaes and with those that want to become suppliers for the Project
- support for conferences and other business networking platforms including engagement activities arranged by the Anglesey Energy Island Programme and Welsh Government
- completion of a pilot programme for business readiness to engage local and regional businesses early
- hosting a national supply chain event in Llandudno in July 2015



MORE INFORMATION

If you are interested in becoming part of the Wylfa Newydd Project supply chain, please register at www.horizonnuclearpower.com/supplier-registration

Category	Specialised safety-critical components	Major components, systems and products	Significant goods and materials
Likely approach to procurement	Existing proven suppliers <ul style="list-style-type: none"> • Main nuclear plant equipment and components such as key reactor components and safety systems • Turbine and generator equipment • Control systems 	Seeking capable and competitive suppliers, including in the UK and Wales  <ul style="list-style-type: none"> • Major components such as emergency diesel generators • General building equipment such as lifts and heating ventilation and air conditioning • Systems and equipment such as standard pipework and valves, heat exchangers and air compressors 	Likely to procure in UK and Wales  <ul style="list-style-type: none"> • Civil and building materials such as aggregate, cement and rebar • Construction equipment such as scaffolding, cranes and mobile plant • Installations such as fire detection / protection, general electrical equipment and communications systems • General construction goods and materials (steelwork, doors, ladders, paint etc.)
	Working with UK suppliers to enhance capabilities for the future		

Example procurement opportunities

SUPPLY CHAIN CHARTER

We published our Supply Chain Charter in July 2015, which set out the working principles and behaviours we will develop in the supply chain. In preparing the charter, we considered feedback received from the first stage of our pre-application consultation, UK and Welsh Government supply chain policy, and Horizon objectives relating to construction and operation of the Wylfa Newydd Project.



SUPPLY CHAIN OPPORTUNITIES AND PROCUREMENT

We previously asked for feedback on our emerging proposals, which included a suggestion that local business should be given preferential treatment for small contracts (aggregate less than £100,000). We listened to your feedback on our proposals and have changed our policy to strengthen support for local business. All tenderers will be required to identify the local resources engaged.

Due to the scale of the Project, an extensive range of goods and services will need to be procured.



QUESTION – SUPPLY CHAIN

In order to build and operate our Power Station, we will need to employ services and facilities across a vast range of sectors. Some will be specialist services directly related to nuclear power, but many opportunities will be linked to general construction, facilities management, administration, transport and meeting the day-to-day needs of our construction and operational workforces.

We have a supply chain charter that sets out commitments to open and transparent communication with our supply chain and the required performance of our suppliers. The charter looks to support opportunities for businesses involved in our Project to develop and realise their potential for ongoing sustained growth, including expanding into other markets. We also plan to continue our work with the North Wales Economic Ambition Board to share information about Project opportunities, understand the skills and services that are available locally and regionally and help businesses to best prepare themselves to bid for work with us.

Please could you tell us your views about:

- a) our supply chain charter? This can be found on our website: www.horizonnuclearpower.com/suppliers*
- b) the way we plan to support business development opportunities?*
- c) our proposals for buying services for our Project?*

Community Benefits

The Project will bring significant economic investment to Anglesey and North Wales. In addition, we are focused on delivering positive benefits to the communities of Anglesey before and during the life of the Power Station. Since our first stage of pre-application consultation we have worked hard with the Isle of Anglesey County Council to identify a way in which we can create and deliver these benefits.

There are three ways that community benefits will be delivered:

- **Inherent benefits:** These are the benefits that are delivered because the Project is happening and include things like the upskilling of the local workforce, creation of job opportunities and growth of the local supply chain
- **Planning benefits:** These are the benefits directly linked to the planning permission and development consent order processes. These are delivered through a legal process under the Town and Country Planning Act 1990 and can be used to reduce impacts on local communities. They must be directly linked to grant of planning permission. Such benefits may include transport improvements or contributions to support local health or emergency services. The level of planning benefits will be informed by the findings of our environmental, Welsh language and health impact assessment work which will continue through to our application for development consent order
- **Voluntary benefits:** These are voluntary actions and contributions which we may make. This includes things like the contribution of funds by us in support of Anglesey communities or the commitment of time and resources to training and educational programmes. The Isle of Anglesey County Council has in place a strategy related to the provision of these type of benefits for large scale development on Anglesey. Additionally, we already have in place a Charitable Donations and Community Support Scheme that provides grants to local projects. As the Project progresses, we will continue to review our voluntary community benefit commitments



We consider the following to have the potential to deliver a positive legacy for Anglesey:

- **Employment:** The Project will provide a significant number of jobs across Anglesey at both the Power Station and in support areas such as catering, facilities management and logistics. These opportunities will help to reduce the need for young people to leave the island to find quality employment and will attract previous local residents, who may have left the area, to return
- **Supply Chain:** We have spent around £5 million with suppliers headquartered in Wales and will continue to engage with potential suppliers as the Project develops
- **Apprenticeship scheme:** We will be launching our apprenticeship scheme in September 2016, in partnership with Coleg Menai which will be associated with meeting our future operational needs. We anticipate that at least 250 new apprenticeships will be created as a result of the Project. We are still developing our thinking in relation to construction, working with our prospective supply chain
- **Sponsorship in education:** We plan to develop a sponsorship programme for young people and students who want to study disciplines that are related to the Project



DID YOU KNOW?

We have already invested £450,000 in the Cwmni Prentis Menai scheme.

Voluntary community investments that we have already made include:

- Cemaes Heritage Centre – providing equipment for the newly renovated building
- Ysgol Parc Y Bont – development of a wildlife garden as an outdoor teaching resource
- Môn FM – purchase of new equipment for the community radio station
- Cylch Meithrin Amlwch – funding equipment in the Welsh language nursery



DID YOU KNOW?

We launched our policy for charitable donations and sponsorship in 2014 and invested more than £75,000 during the year. The scheme focuses on charities, schools and community organisations who wish to apply for small grants. For details of the scheme, our criteria and an application form please visit the website: www.horizonnuclearpower.com/community-support



MORE INFORMATION

We plan to construct a new visitor centre adjacent to the new Power Station access road. This will offer views towards the Power Station and connections to the footpaths which will support its use as a tourist destination. We also plan to use the visitor centre as an educational hub for school children.

Appearance of Buildings

ARCHITECTURAL STRATEGY

Since our first stage of pre-application consultation, we have continued developing our Architectural Strategy which is designed to set a framework of materials that designers of any of the Wylfa Newydd Project buildings can use.

These materials can be used across all individual buildings and will help to create a coordinated visual appearance across the Project. This will also ensure that the materials used on our buildings reflect materials found in and around the Anglesey community.

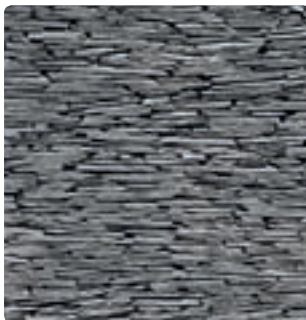
An example of the material palettes that we've created are shown in the following:



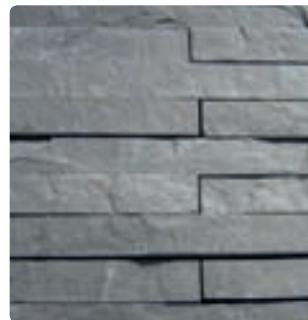
Glass curtain walling



Patinated copper



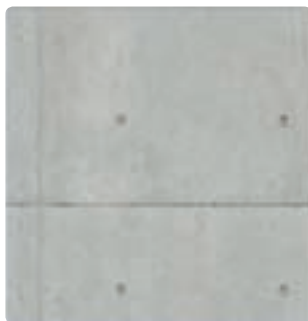
Stacked slate



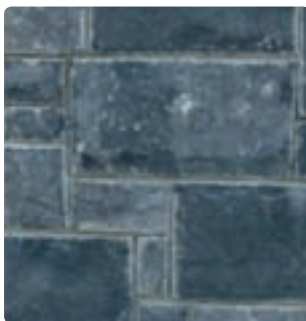
Welsh slate



Composite cladding



Exposed concrete



Welsh stone



Blue engineering brick



QUESTION – ARCHITECTURAL MASTERPLANNING

We have provided indicative images of architectural treatment for three of our buildings that will be used frequently by the public or seen by users of local roads or public rights of way. In each case, we have represented a 'bold' and 'blend' materials choice.

Using these illustrative examples, please could you tick the boxes to show whether you prefer a bold or blend materials choice and then explain why?

- | | | |
|---|------|-------|
| a) Administration building | BOLD | BLEND |
| b) Visitor Centre | BOLD | BLEND |
| c) On-site temporary workers' accommodation | BOLD | BLEND |

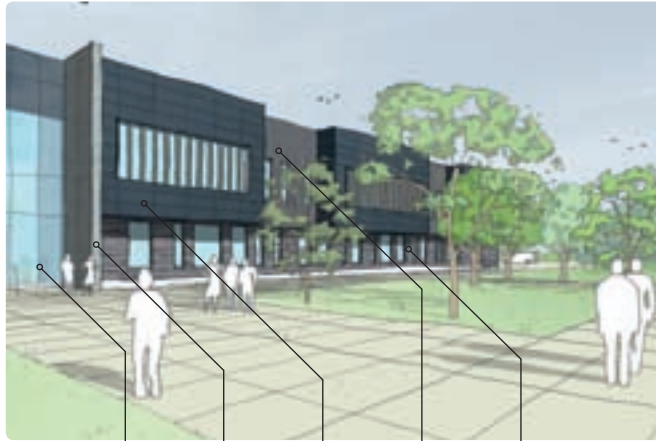
Please also give your reasons for your preferences.



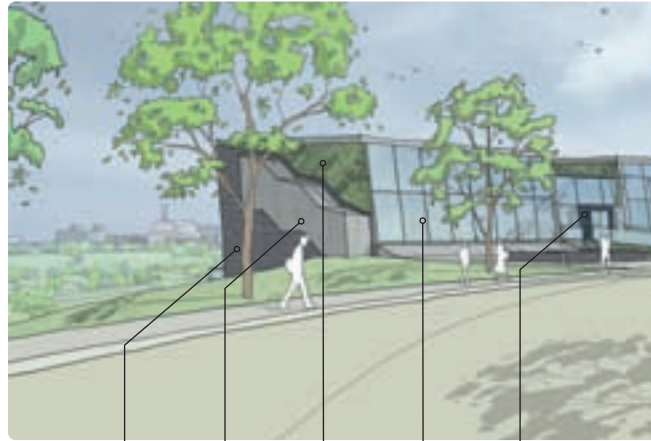
MORE INFORMATION

In response to feedback received during our first stage of pre-application consultation, we have prepared visual examples of what the use of our materials palette could create for specific buildings. However, it is important to understand that the design of these buildings will likely change based on your feedback as well as feedback from further consultation with such organisations as Isle of Anglesey County Council and Design Commission for Wales.

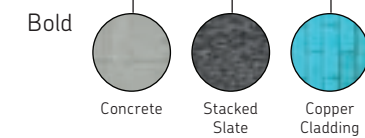
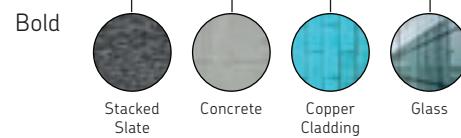
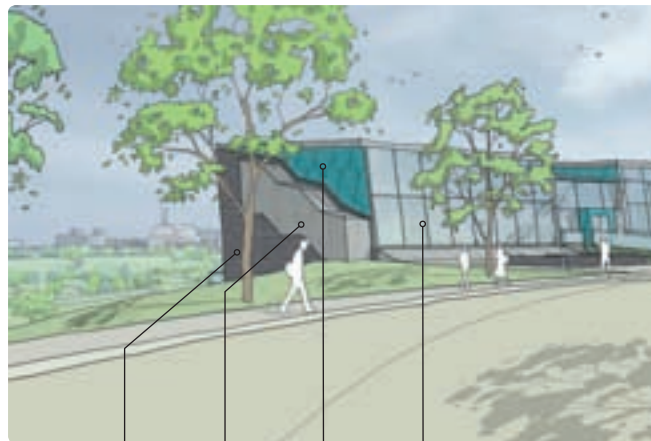
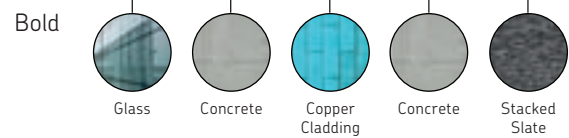
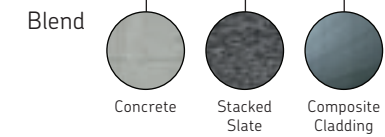
ADMINISTRATION BUILDING



VISITOR CENTRE



ON-SITE TEMPORARY WORKERS' ACCOMMODATION



Providing your feedback

HOW TO SUBMIT YOUR FEEDBACK

Your response is a very important part of our overall consultation process and can be submitted in either Welsh and English. We look forward to receiving your thoughts in person or in writing by 24 March 2016.

There are a number of ways in which you can respond:

- **Via feedback form** available at our information events and online at: www.horizonnuclearpower.com/consultation. These are available in both Welsh and English
- **In writing** to our Freepost address **FREEPOST Horizon Nuclear Power Consultation**
- **Via email** at ymholiadauwylfa@horizonnuclearpower.com or wylfaenquiries@horizonnuclearpower.com

We also operate a Freephone number in Welsh and English to answer your questions and queries at any time. You can contact us on: **0800 954 9516**.

Please ensure that your feedback reaches us by 24 March 2016.

EVENTS

Please join us at any one of the events that we're holding whether it be a public exhibition, a workshop or our regular monthly surgery, all of which will be conducted bilingually. While timings and venues are subject to change, a current listing of event details is available on our website at www.horizonnuclearpower.com/consultation

We have tried to arrange a number of different formats, venues and timings to ensure that you are able to chat with our team, gather information and provide feedback. If you are in need of a home visit, please contact us on **0800 954 9516** or wylfaenquiries@horizonnuclearpower.com and we will endeavour to arrange a home visit.



DOCUMENTS AVAILABLE AS PART OF THIS PROJECT UPDATE

The following documents (available in both Welsh and English) are available for your review:

- This document, the Wylfa Newydd Project Update
- Fact Sheets to summarise our strategic approaches and information on topics that are commonly asked about
- The Summary of Pre-Application Stage One Feedback.

All documents are available on our website at: www.horizonnuclearpower.com/consultation

CONTACT US:

If you have any questions or feedback regarding the Wylfa Newydd Project you can contact us on our dedicated Wylfa Newydd freephone hotline and email address, by calling on **0800 954 9516** or emailing **wylfaenquiries@horizonnuclearpower.com**

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