

## 10 Meeting Transport and Construction Workforce Requirements

- 10.1 This Chapter provides an overview of the issues and options for modes of transport that Horizon has considered in determining how to move materials and the workforce associated with the Wylfa Newydd Project and the way in which the construction workforce may be accommodated. The Wylfa Newydd Project would require delivery of substantial quantities of freight throughout the Enabling Works and Main Construction stages. This would include some extremely large plant and equipment termed 'Abnormal Indivisible Loads' (AILs)<sup>56</sup> that could cause disruption when they are being transferred to the Wylfa Newydd Development Area, depending on the mode of transport used. The Wylfa Newydd Development Area would also need to be accessible to the construction workforce, which could reach 8,500 during peak periods.
- 10.2 This Chapter provides an overview of Horizon's draft principles for an Integrated Traffic and Transport Strategy (ITTS) for the Wylfa Newydd Project and the different transport modes that Horizon has considered for the Project, taking these principles into account. The Chapter is then divided into the following sub-sections:
- MOLF Proposals;
  - Road Transport Proposals;
  - Worker Accommodation Strategy; and
  - Sites Identification – Park and Ride facilities, Logistics Centres and Temporary Worker Accommodation.
- 10.3 The components listed above (Paragraph 10.2) form part of the overall mitigation for likely socio-economic, traffic and transport, and related environmental effects (described in more detail in Chapters 7 and 9 of the PEI Report, respectively). The components also have the potential to give rise to a range of environmental impacts during construction and operation. Chapter 7 includes an overview of the likely environmental effects associated with typical activities. Consultees should refer to this information and review relevant sections of the PEI Report to assist in forming consultation responses.

<sup>56</sup> Horizon has adopted the following as a definition for AILs: Length exceeds 18.75 metres, excluding the transporting vehicle; Width exceeds 3.0 metres; Height exceeds 4.5 metres; and/or Weight exceeds 80 tonnes, including the transporting vehicle.

## Transport Modes

### Context

- 10.4 Horizon is keen to ensure that the traffic associated with constructing the various components of the Wylfa Newydd Project is managed in a manner that seeks, as far as is practicable, to avoid significant adverse effects on the existing communities of Anglesey and the surrounding areas. In addition, Horizon is keen to ensure that the efficiency with which people and goods are moved is maximised, whilst also managing environmental impacts, ensuring user and community safety and presenting solutions that offer some legacy benefits for the communities of Anglesey.
- 10.5 Horizon will develop proposals in order to produce an ITTS that addresses all of these matters in a co-ordinated manner. The ITTS would be prepared following this Stage One pre-application consultation to include a package of transport measures covering a range of different transport modes available for construction and operation of the Power Station, including green travel planning initiatives designed to encourage travel by sustainable modes. An overview of the emerging draft principles that would govern the preparation of the ITTS is provided in this section.

Horizon is keen to hear consultee views on Horizon's preferred modes for meeting the transport needs of the Wylfa Newydd Project and the draft ITTS principles presented. Consultees are also invited to comment on the transport issues outlined in this section.

### Transport Requirements of the Project

- 10.6 The freight that would be associated with constructing the Wylfa Newydd Project can be split into three categories:
- Construction materials such as sand, cement, aggregates and steel;
  - AILs such as parts of the reinforced concrete containment vessel and transformers; and
  - General items, which would include everything not within the two categories above (e.g. control panels, valves, food, office equipment and stationery).
- 10.7 The numbers and types of freight deliveries that would be needed will vary over time as the Wylfa Newydd Project progresses from the Enabling Works stage to the Main Construction stage and through to the Full Operation stage.

## Key Issues for Consideration

- 10.8 Horizon has determined that if HGVs were to be the only mode of transport used for the delivery of construction materials, there would be a requirement for tens of thousands of HGV movements over the Main Construction stage. Consequently, Horizon has considered alternative modes of transport for bringing construction materials to the Power Station Site.
- 10.9 In addition to construction materials, the Wylfa Newydd Project is anticipated to require approximately 800 AILs (depending on construction methods used) over the duration of the Main Construction stage. Transporting AILs along single carriageway roads such as the A5025 would require specialist transportation and bespoke arrangements, which would likely require a rolling road closure. Given the substantial number of AILs anticipated, Horizon has concluded that there is a need to identify an alternative to relying upon the use of public roads for delivery of AILs.
- 10.10 There would also be the requirement to transport the workforce to and from the Power Station Site. The workforce numbers would change as the Wylfa Newydd Project moves from the Enabling Works stage to the Main Construction stage and through to the Full Operation stage. In particular, there is anticipated to be a considerable amount of fluctuation in workforce numbers during the Main Construction stage (see Figure 9.1 in Chapter 9). In planning the transport of the workforce, it is also necessary to understand the proportion of workers that may already reside, or plan to reside locally, compared to those that may require Temporary Worker Accommodation. This has a substantial bearing on the types of transport options that would offer the most efficient solutions.

## Draft ITTS Principles

10.11 Draft ITTS principles have been developed by Horizon taking into account the baseline conditions (refer to Chapter 3 of this Document and Chapter 9 of the PEI Report), the aims of the North Wales Regional Transport Plan<sup>57</sup> and matters discussed during meetings with IACC.<sup>58</sup> These draft principles seek to:

- Ensure the safety of roads for all types of users, including pedestrians and cyclists;
- Promote the use of non-road modes for the movement of freight and promote the use of sustainable transport modes for the movement of the workforce;
- Reduce the need to travel, including through demand restraint to limit traffic growth;
- Reduce the number of trips by all modes through transport efficiency;
- Offer efficient, flexible, reliable and sustainable modes of transport to the workforce;
- Control private vehicle and freight movements along the A5025 corridor;
- Manage disruption to existing communities from additional road traffic and develop measures to enable control of traffic to avoid exacerbating peak hour congestion on the existing highway network;
- Avoid where possible and mitigate against predicted significant adverse environmental effects arising from the transport requirements of the Wylfa Newydd Project;
- Reduce land take requirements in delivering necessary transport infrastructure; and
- Provide, where possible, a legacy benefit for Anglesey.

10.12 As part of the EIA process, analysis of alternative modes of transport, including cycling and other non-motorised modes, will be considered.

**Horizon is keen to hear the views of consultees on the draft ITTS principles presented.**

<sup>57</sup> Taith (Anglesey, Conwy, Denbighshire, Flintshire, Gwynedd and Wrexham Councils working in Partnership) – North Wales Regional Transport Plan, 30th September 2009.

<sup>58</sup> IACC draft position statement for the proposed Power Station, Grontmij, August 2011. It identifies problems and opportunities for transport planning and presents IACC's view regarding the types of transport proposals that should be linked to Horizon's proposals. The Wylfa SPG has also been considered.

## Description and Current Status

10.13 In the context of the position of the Power Station Site on Anglesey, there are four main transport modes available to move freight and the workforce: air, rail, sea and road. These transport modes have been reviewed by Horizon.

10.14 An overview of the key findings of the review of transport modes is provided below. The review has resulted in Horizon drawing some high level conclusions and excluding modes for certain types of Project transport requirements where they are less preferable than other options, taking account of the draft ITTS principles and considering Horizon's operational needs.

### Air

10.15 The nearest airport to the Power Station Site is Anglesey Airport at RAF Valley, some 20km to the south. The airport has a daily passenger service to Cardiff from which the journey to the Power Station Site would need to be made by road, approximately 25km along the A55 and A5025.

10.16 Air based transport from RAF Valley has been discounted for construction materials, ALLs and some plant and equipment on the grounds of practicality and sustainability. Air freight arriving to Valley would also require transfer for onward road transport. It is possible to avoid this through the use of other modes of transport, primarily sea-based transport directly to the Power Station Site.

10.17 There may be some scope to consider air transport for limited workforce movements, which could involve a shuttle bus service to the Power Station Site; this is still under consideration, although it is clear to Horizon that large scale use of air transport for workers would not be practical.

**Horizon invites feedback on the conclusions drawn in relation to the limited use of air travel to support the construction and operation of the Power Station.**

## Rail

10.18 The closest existing passenger railway station to the Power Station Site is some 18km away at Valley, connected to the Power Station Site via the A5 and A5025. In addition, there are several redundant railway facilities that have been considered for reinstatement or development as part of the options review process:

- **Rhosgoch** – this is a vacant, previously developed site in open countryside. Rhosgoch could be made accessible by rail; however, this would require the Gaerwen to Amlwch branch line to be brought back into use. A 2010 Welsh Assembly report into the feasibility of re-opening the branch line concluded that it would be possible to restore the section as far as Llangefni. Re-opening the rail line to Rhosgoch for temporary use during construction activities would only be viable if there was a continuing requirement for bulk freight movement once the Power Station becomes operational;
- **Holyhead** – this is rail-connected and, as a former container terminal, is of sufficient size and length to convert into a bulk materials terminal;
- **Anglesey Aluminium** – this is rail connected with sidings that are in good condition and of sufficient length to accommodate freight, with access to open handling areas and associated hardstanding; and
- **Gaerwen** – this is a former station goods yard that is no longer rail connected. The Gaerwen site is cleared and secure; but there is no remaining infrastructure.

10.19 Specialist freight management facilities would be required to accommodate the delivery of material to Anglesey by rail and to allow the unloading of material from railway wagons for transfer to the Power Station Site, which would usually be by road. The configuration of railway lines and the availability of land for sidings, unloading equipment and HGV loading and layover are therefore important in determining the suitability of potential rail facilities for use in association with the Wylfa Newydd Project.

10.20 Trains can carry significantly greater quantities of freight than HGVs in a single movement and a larger number of people than a single bus or car movement. In this respect, this is a mode that offers greater efficiency than road-based modes. All but two of the options – Holyhead and Anglesey Aluminium – would require specially constructed facilities and/or reinstatement of the Gaerwen to Amlwch branch line in order to handle the construction material requirements of the Wylfa Newydd Project. Both Holyhead and Anglesey Aluminium would require the transfer of materials by road along the A5025, the former being in a town centre location, which is especially undesirable. The potential benefits of rail over road would be negated by the use of sea-based modes delivering directly to the Power Station Site. The Rhosgoch site offers the potential to develop a conveyor belt system

connection to the Power Station Site, which would lessen the need to use the A5025 but the financial, environmental and logistical issues associated with constructing the conveyor belt system and reinstatement of the branch line are currently considered by Horizon as likely to be prohibitive.

- 10.21 The tight tolerances on the rail network, such as tunnels, bridges, railway stations and passing trains, are generally prohibitive for the transportation of ALLs, resulting in the need for alternative modes to be considered.
- 10.22 In conclusion, rail is a mode that has been discounted from further consideration by Horizon for the movement of significant volumes of freight, including ALLs, on the basis that sea-based transport directly to the Power Station Site offers a greater number of advantages in the context of the draft ITTS principles.
- 10.23 Rail remains a potential option for use by the workforce during construction and operation. It is envisaged that this would primarily be as part of longer journeys, for example, between Off-Site Temporary Worker Accommodation and permanent homes elsewhere in the UK, but also in conjunction with shuttle bus service(s) to the Power Station Site.

Horizon invites feedback on the conclusions drawn in relation to the limited use of rail to support the construction and operation of the Power Station.

## Sea

### A/ILs

- 10.24 Department for Transport policies indicate that the Government's preferred mode for AIL transport is by sea. In addition, the North and Mid Wales Trunk Road Agency (and the Highways Agency if AILs originate in England) will only authorise road transport of AILs if the use of water-based transport has been explored and discounted due to practicality, excessive cost and/or environmental reasons. On this basis, Horizon has reviewed the roads along which AILs would need to be transported between the closest existing ports and the Power Station Site.
- 10.25 The types of AILs that would be associated with the Wylfa Newydd Project are anticipated to be within the size and weight thresholds<sup>59</sup> for movement along Highway Agency high and heavy load advisory routes, which include the A5/A5025 route from Holyhead.<sup>60</sup> The low bridges on the A55/A5025 route from the mainland, whilst not necessarily prohibitive for the movement of HGVs for other types of freight needed for the Wylfa Newydd Project, are likely to make it unsuitable for the majority of AILs anticipated to be required. These constraints mean that movement of AILs by road from the mainland is not considered preferable and has not been explored further in detail by Horizon to date.
- 10.26 Movement of AILs by road along the A5/A5025 corridor would allow for the transfer of goods from Holyhead Port to the Power Station Site. There is a set procedure that Horizon would need to follow in order to gain permission to move AILs along this route.
- 10.27 Horizon's analysis suggests that the nature and characteristics of the A5/A5025 route, which would need to be used to transport AILs from Holyhead to the Power Station Site, mean that there would be significant disruption and likely social and environmental impacts associated with transporting AILs from this part of Anglesey (refer to Chapter 9 of the PEI Report). On this basis, coupled with the anticipated number of AILs likely to be required for the Wylfa Newydd Project, offloading AILs at Holyhead for onward road transport is not considered to be the optimum fit with the draft ITTS principles. In addition, the notice period needed for AIL transfer by road is lengthy and would not support flexibility within the construction programme for the delivery of AILs to the Power Station Site. The implication of the need for flexibility in the timing of AIL deliveries would be that further substantial storage space may be needed within the construction compounds on the Wylfa Newydd Development Area.

<sup>59</sup> Horizon has adopted the following as a definition for AILs: Length exceeds 18.75 metres, excluding the transporting vehicle; Width exceeds 3.0 metres; Height exceeds 4.5 metres; and/or Weight exceeds 80 tonnes, including the transporting vehicle.

<sup>60</sup> [http://assets.highways.gov.uk/specialist-information/abnormal-loads-grids-and-preferred-routes/High\\_and\\_Heavy\\_Load\\_Grids\\_Map\\_for\\_Abnormal\\_Loads.pdf](http://assets.highways.gov.uk/specialist-information/abnormal-loads-grids-and-preferred-routes/High_and_Heavy_Load_Grids_Map_for_Abnormal_Loads.pdf) [Accessed:11.09.2014]



### *MOLF*

- 10.28 Because of the constraints associated with the delivery of AILs from existing ports by road, Horizon has considered alternative sea-based transport options that could bring AILs directly to the Power Station Site.
- 10.29 Horizon has decided to create a bespoke MOLF at the Power Station Site and this aspect of the Wylfa Newydd Project is largely settled. A general arrangement has been developed, which would include two quays to allow vessels to berth for the unloading of bulk materials and AILs close to construction activities, for onward transport without using public roads. Consideration is also being given to the establishment of a temporary landing facility on the foreshore at Porth-y-pistyll to enable the delivery of some materials directly to the Power Station Site by sea for the Enabling Works and start of Main Construction activities, in advance of the MOLF becoming operational.
- 10.30 Of the transport modes available, the delivery of freight by sea is considered to be the best fit with the draft ITTS principles, as it offers scope to substantially reduce the amount of HGV movements that would otherwise be required on Anglesey. More detail is provided on the MOLF later in this Chapter.

### *Holyhead Port*

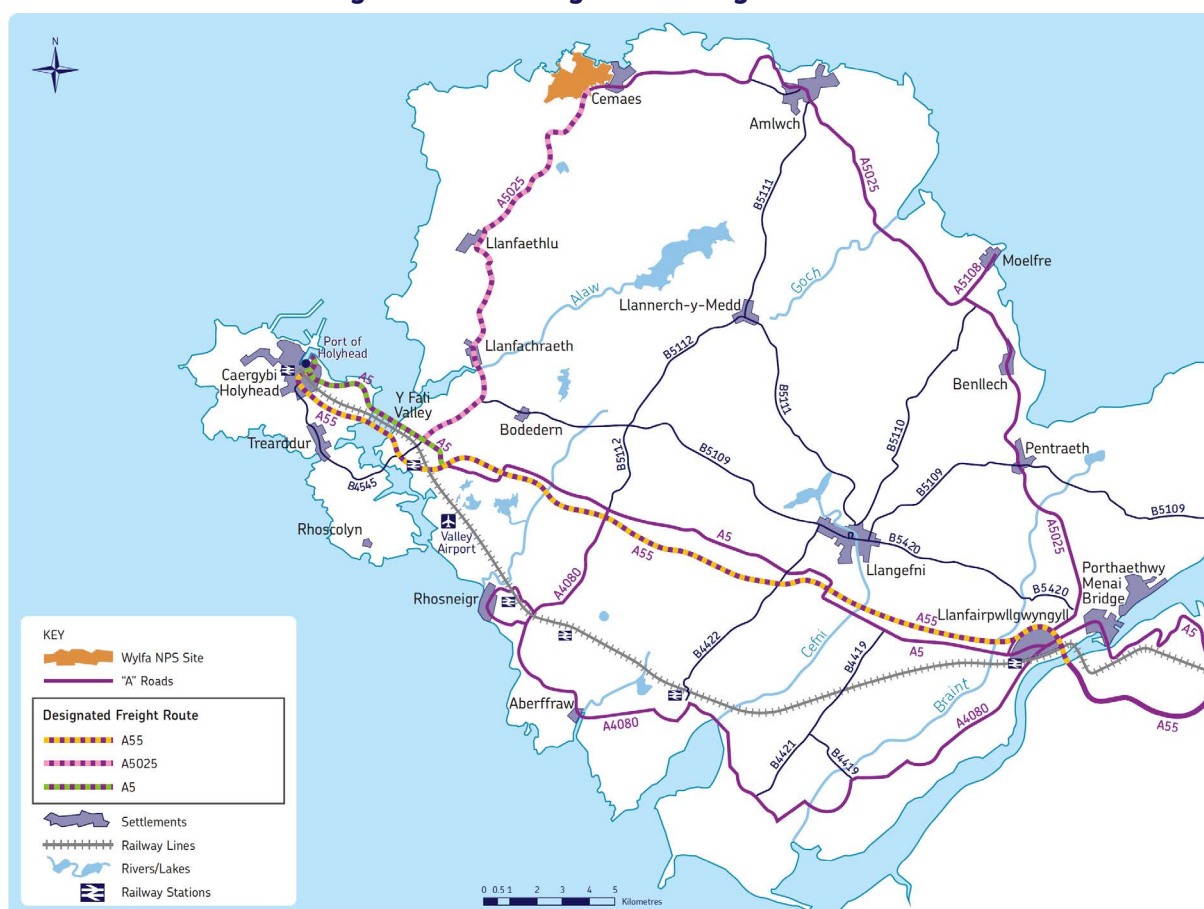
- 10.31 There may be a residual use for local ports such as Holyhead as they could provide areas for vessels to shelter while waiting to deliver directly to the MOLF. Holyhead could also provide a location for vessels that are unable to use the MOLF, for example due to size constraints, to be berthed to allow transfer of cargo to vessels that are then able to complete delivery by accessing the MOLF.
- 10.32 Holyhead Port remains a potential option for use by the workforce, primarily for travel between Temporary Worker Accommodation and permanent homes in Ireland and elsewhere in the UK, but also in conjunction with shuttle bus service(s) to the Power Station Site that could have a role during construction and/or operation.

Horizon is keen to receive feedback from consultees on the intention to develop a temporary landing facility and subsequent bespoke MOLF to handle AILs and manage bulk materials deliveries directly to the Power Station Site.

## Road

- 10.33 Principal road access to the Power Station Site from the mainland is expected to be via three main roads, the A55 dual carriageway, the A5 and the A5025 from Valley. Horizon intends to define this, together with a route from Holyhead Port to the A5025, as the Designated Freight Route for the movement on Anglesey of freight associated with the Wylfa Newydd Project, as shown in Figure 10.1. Horizon also intends to adopt appropriate freight management measures and signage to enforce its use, thus avoiding potential impacts arising from freight traffic using less suitable parts of the Anglesey road network.
- 10.34 Any AILs travelling between Holyhead and the Power Station Site, as opposed to using the MOLF, would use the A5 then the A5025 as this is designated by the Welsh Government as a 'high load route' suitable for use by AILs. Should any other types of road transport be required from the Holyhead region of Anglesey (for example, from Holyhead Port or Railway Station), this would follow the A55, A5 and then join the A5025.

**Figure 10.1 Designated Freight Route**



### *Construction Materials and General Items*

- 10.35 Horizon recognises that there will be a role for road-based movement of construction materials and general items to the Power Station Site. Certain sizes of HGVs could use the A55, A5 and A5025 to approach the Power Station Site, recognising the height restrictions along parts of the A55 corridor and the likely need for highway improvements along the A5025 to accommodate additional HGV flows arising as part of the Wylfa Newydd Project (refer to the Road Transport Proposals section for further information).
- 10.36 The identification of likely environmental impacts (refer to Chapter 9 of the PEI Report) coupled with the draft principles of the ITTS have prompted Horizon to consider ways in which HGV movement could be controlled in order to reduce potential disruption and environmental effects. Horizon is therefore exploring the potential for creating at least one Logistics Centre at an appropriate location close to the Designated Freight Route to manage freight movements associated with the Wylfa Newydd Project. A Logistics Centre would allow the provision of vehicle reception, registration and layover facilities, which in turn would enable the times that freight would be able to travel onward along the Designated Freight Route from the Logistics Centre to the Power Station Site to be controlled. The Logistics Centre could also be used to combine smaller loads onto larger vehicles, which would be a means of reducing the number of onward freight trips made to the Power Station Site by road. On this basis, there would be merit in siting such a centre in proximity to the A55 to ensure that movements along the A5025 between Valley and Wylfa would be controlled.

### Workforce

- 10.37 It is anticipated that the workforce for the Wylfa Newydd Project would originate from a range of locations. The starting point for journeys would affect the way that members of the workforce choose to travel. Horizon anticipates that use of the road network will be the most efficient option for the majority of the workforce although, as stated previously, considers that there may be a limited role for passenger rail, air and ferry services.
- 10.38 The draft principles of the ITTS seek to encourage measures to ensure that sustainable modes such as bus services and walking and cycling routes would be available to the workforce and that these would be supported by controls on the demand and potential for using private cars (e.g. limiting the availability of car parking at the Power Station Site). Such measures would combine to encourage more sustainable patterns of worker transport and may form one of a number of green travel planning initiatives for inclusion in the ITTS, which will be developed following this Stage One pre-application consultation.
- 10.39 It is considered that Park and Ride facilities could also provide a means of supporting the draft ITTS principles in reducing the amount of miles travelled by private vehicle, particularly effective for construction shift-workers with fixed working hours. Options for such facilities are being explored and are described in the Sites Identification section later in this Chapter.

### Conclusion

- 10.40 The preferred modes of transport are principally a combination of sea- and road-based movements directly to the Power Station Site. This aspect of the Wylfa Newydd Project is largely settled.
- 10.41 The ITTS is likely to include:
- Development of a temporary landing facility at Porth-y-pistyll, to be followed by the development of a MOLF;
  - A range of mass-transit solutions, primarily bus-based, for transporting workers between the Power Station Site and areas within the Travel to Work Area<sup>61</sup>;
  - Park and Ride facilities for construction workers;
  - Potential to limit car parking provision at the Power Station to discourage single occupant car journeys;

<sup>61</sup> The Travel to Work Area is a boundary for assuming reasonable daily commuting behaviour to the Power Station Site. This is defined by the two travel to work areas of Holyhead; and Bangor, Caernarfon and Llangefni, as set out in Chapter 7 (socio-economic) of the PEI Report. This area is deemed to be suitable for daily commuting during the construction and operation of the Power Station.

- Road freight management measures such as a Logistics Centre, to work in conjunction with measures to enforce use of the Designated Freight Route for the Wylfa Newydd Project; and
- Enhancements to the existing transport network, particularly the A5025 between Valley and Wylfa.

10.42 The ITTS would be developed to encompass options with potential for more occasional use such as passenger rail, air and ferry travel for the workforce. In addition, the ITTS would incorporate measures, where practicable, to develop sustainable transport opportunities for short journeys associated with the Wylfa Newydd Project.

Horizon is keen to receive feedback from consultees on the proposed use of sea and road modes for inclusion within the ITTS and would welcome suggestions for further matters that Horizon should consider in developing the ITTS.

## Question 9

**Do you have any comments on Horizon's draft Integrated Traffic and Transport Strategy (ITTS) principles?**

## MOLF Proposals

### Context

- 10.43 Horizon's assessment of transport modes for meeting the anticipated transport demand from the construction activities at the Wylfa Newydd Development Area has concluded that freight should principally be delivered by a combination of sea- and road-based modes. Sea transport would be directly to the Power Station Site through the use of a MOLF. This aspect of the Wylfa Newydd Project is largely settled.
- 10.44 This section identifies Horizon's key criteria, proposed location and indicative layout of the MOLF.

Horizon would be particularly interested to receive feedback on the way in which a MOLF could be configured at Porth-y-pistyll, including factors that may be considered important in developing the design further.

### Approach

- 10.45 Horizon has explored potential options for a MOLF, drawing on the indicative layout of the Power Station and potential locations for positioning of construction compounds for the Power Station. Taking these factors into account, Horizon envisages that a MOLF structure and location should meet the following criteria:
- Be easily accessible to vessels in terms of navigation and water depth (draught clearance), and offer a space adequate to manoeuvre vessels safely;
  - Be available in time to support the Main Construction activities;
  - Offer protection to ensure that vessels can reach the MOLF for off-loading of freight. This is referred to as the 'availability' to accept vessels for off-loading;
  - Be positioned to bring freight ashore as close to the construction compounds for the Power Station as possible;
  - Be capable of handling AILs and bulk materials deliveries required for the Wylfa Newydd Project;
  - Seek to avoid or mitigate potential adverse impacts on international, national and locally sensitive environmental receptors, particularly within the marine environment (refer to Chapters 17 and 18 of the PEI Report for further information on Horizon's current understanding of the baseline conditions and potential impacts); and

- Be available for the operational lifetime of the Power Station, allowing for the occasional delivery of ALLs and replacement parts in operation, if required.

Horizon welcomes feedback on the criteria that have been used to shape the layout for the MOLF, including suggestions for additional or amended criteria.

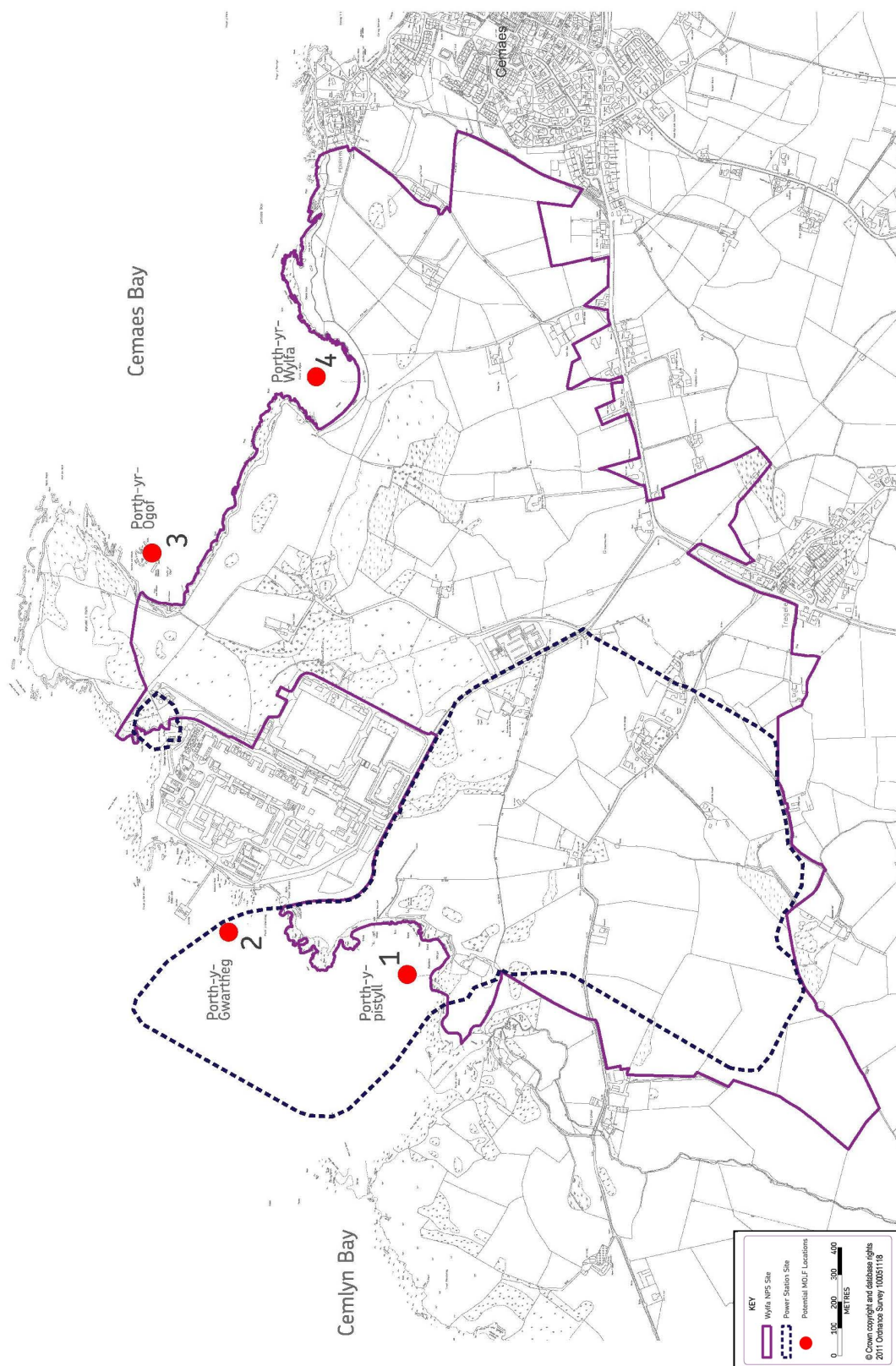
10.46 Horizon initially identified four potential locations for a MOLF in the vicinity of Wylfa and has considered these against the MOLF criteria. (Further information relating to the consideration of alternatives in the development of the Wylfa Newydd Project is provided in Chapter 5 of the PEI Report). These include:

- Site 1: at Porth-y-pistyll, within the western part of the Power Station Site;
- Site 2: located just north of Site 1 at Porth-y-Gwartheg, to the west of the Existing Power Station;
- Site 3: Porth-yr-Ogof to the east of Wylfa Head; and
- Site 4: Porth-y-Wylfa, approximately 500m to the east of Porth-yr-Ogof.

10.47 These locations are shown in Figure 10.2.



**Figure 10.2 Potential MOLF Locations**





10.48 Sites 1 and 3 were identified as preferred sites initially. However, following further design work Horizon considers co-location of the MOLF with the breakwater and structures required for the CW intake (refer to Cooling Water System and Breakwater in Chapter 6 for details) to be an important opportunity to deliver efficiency within the Wylfa Newydd Project. Consequently, Site 1 at Porth-y-pistyll is Horizon's preferred location for the MOLF and a largely settled aspect of the Wylfa Newydd Project, offering the following benefits:

- Porth-y-pistyll is a short distance from the potential locations for the construction compounds for the Power Station and would allow the creation of a haul route between these and the MOLF that would not affect the existing 400 kilovolt lines, nor require use of public roads;
- Construction of the MOLF in the same location as the CW intake and breakwaters would consolidate the impacts of construction for these two components of the Wylfa Newydd Project to one location. In addition, concentrating development to the south-west of the Existing Power Station would minimise the footprint of the Wylfa Newydd Project and offer significant health and safety benefits for construction vehicles having to cross the Existing Power Station access road during its decommissioning works. The single consolidated site would also reduce land use for the Wylfa Newydd Project and should contribute to ensuring Power Station Site security;
- Within Porth-y-pistyll, the breakwaters and MOLF would be at least partially screened from views looking west from land to the east by the natural topography and there would only be a short section of the Wales Coast Path from which they would be visible. From seaward, the MOLF and breakwaters would be set against the backdrop of both the Power Station and the Existing Power Station, thus reducing their visual impact; and
- It is intended that the MOLF would be retained for potential future use during the 60 year operational lifetime of the Power Station for transport of large items of plant and equipment that may require replacement. In Porth-y-pistyll, maintaining the MOLF would be easier than it would be in an alternative location, due to the proximity to the Power Station.

## Indicative MOLF layout at Porth-y-pistyll

- 10.49 Horizon's detailed proposals for the MOLF layout are under development. The general arrangement is largely settled and is likely to include two quay structures, one approximately 100m long and 50m wide and one 155m long and 20m wide (refer to Figure 6.8).
- 10.50 The shorter of the two quays would be for ALLs and the longer would accept deliveries of bulk materials. There would be additional land-side infrastructure necessary, likely to include cranes and conveyors for unloading, haul routes providing connection to the construction compounds for the Power Station, as well as some buildings. Some of this infrastructure would be removed upon completion of the Main Construction stage, such as bulk materials unloading equipment.
- 10.51 Initial studies suggest that within the body of water protected by the breakwaters at Porth-y-pistyll, access/egress for the MOLF berths would potentially need to be dredged to a depth of approximately -10m Above Ordnance Datum<sup>62</sup> and this may necessitate some blasting activity. The MOLF infrastructure would also include the installation of navigation markers and lighting, highlighting the safe approach channel for vessels.

## Question 10

### Do you have any comments on Horizon's sea transport proposals?

- 10.52 Horizon is particularly keen to hear consultee views on:
- The criteria used to shape the design and location of the indicative proposals for the MOLF;
  - The proposed co-locating of the MOLF with the CWS at Porth-y-pistyll; and
  - The proposed indicative layout for the MOLF.

<sup>62</sup> Above the mean sea level at Newlyn in Cornwall calculated between 1915 and 1921, taken as a reference point for the height data or Ordnance Survey maps. A negative value means that the point is below sea level.

## Road Transport Proposals

### Context

- 10.53 The review of transport modes for meeting the anticipated transport demand from the Wylfa Newydd Project concluded that there will be a need to use the road network. This aspect of the Wylfa Newydd Project is settled.
- 10.54 This section sets out the potential road transport measures that Horizon has developed in line with the draft principles of the ITTS. Options are presented in order to address the identified constraints on the existing highway network and consultees are invited to select their preferences. Potential measures to assist with the management of vehicles using the road network are also described.

Consultees are welcome to comment on the proposed use of the highway network and Horizon is particularly interested to receive feedback on the measures outlined in this section, specifically where options and potential alignments for highway improvements are presented.

### Approach

- 10.55 Horizon has presented a series of draft principles for creating an ITTS (included within the Transport Modes component description earlier in this Chapter) and envisages that in order to meet the principles, the overall strategy would include the following road transport elements:
- A range of mass-transit solutions, primarily bus-based, for transporting workers between the Power Station Site and specific points within the Travel to Work Area (such as main settlements and railway stations);
  - Park and Ride facilities for construction workers;
  - Potential to limit car parking provision at the Power Station Site to discourage single occupant car journeys;
  - Road freight management measures such as a Logistics Centre, to work in conjunction with measures to enforce use of the Designated Freight Route (refer to Figure 10.1); and
  - Enhancements to parts of the existing transport network likely to experience increased use as a result of the Wylfa Newydd Project, particularly the A5025 between Valley and Wylfa.

## Existing Constraints and Deficiencies along the A5025 Corridor (Valley to Wylfa)

- 10.56 The Designated Freight Route for the Project includes the A5025 between Valley and Wylfa. Horizon is undertaking a Stage 1 scheme assessment along this section of the road network in line with the guidance given in the Department for Transport's Design Manual for Roads and Bridges Technical Directive TD 37/93 – Scheme Assessment Reporting. The purpose of the assessment is to identify the existing constraints and deficiencies along the A5025 from Valley to Wylfa, which may require improvements in order to accommodate additional freight traffic associated with the Wylfa Newydd Project.
- 10.57 To date, the assessment has been largely desk-based and maps have been used to identify features of the highway network that fall below current highway design standards,<sup>63</sup> such as tight bends, poor visibility and narrow carriageway cross-sections. This assessment will be progressed in further detail upon completion of the relevant survey work, which includes ecological surveys.

### *Location Specific Constraints*

- 10.58 In discussion with stakeholders, Horizon has identified a number of specific locations where the existing A5025 corridor may be constrained.
- **Valley Junction (A5/A5025):** Anecdotal evidence suggests that this junction may be 'over capacity' in the future even in the absence of the Wylfa Newydd Project. Horizon is in the process of undertaking traffic counts to check whether the anecdotal evidence is accurate and to quantify any capacity issues. If the traffic counts indicate that the existing junction would be over-capacity, then predicted flows,<sup>64</sup> combined with the tight layout of the junction, suggest that an alternative junction type may be more suited to cope with the predicted increase in HGV traffic and provide suitable space for larger vehicles to turn.
  - **Llanfachraeth:** The A5025 passes through the centre of the village of Llanfachraeth. Many properties in Llanfachraeth face directly onto the A5025 and the increased construction traffic generation predicted as a result of the Wylfa Newydd Project would be likely to expose residents to increased noise, vibration and emissions, particularly from HGVs. These impacts could affect the environmental quality of the area (further information is provided in Chapter 21 of the PEI Report).

<sup>63</sup> Design Manual for Roads and Bridges (DMRB) Technical Directive TD 9/93 (section 3.11).

<sup>64</sup> Traffic flow predictions for the Project would be prepared following this Stage One pre-application consultation to take proposed transport measures into consideration (e.g. MOLF, Park and Ride facilities and Logistics Centres).

Llanfachraeth has a high density of properties close to the main road, where driveways and commercial activity may be a safety concern. The position of these buildings also means that there is insufficient space to widen the A5025 through Llanfachraeth.

- **Llanfaethlu:** Llanfaethlu has several properties close to the A5025, with driveways and local highways accessed from it. The horizontal and vertical alignment of the A5025 in the vicinity of Llanfaethlu includes tight bends and climbs that impede visibility near junctions and the free flow of traffic, particularly for larger vehicles. Any increase in traffic, particularly in HGV movements, may impact on Llanfaethlu and affect the environmental quality of the area, as well as the safety of users, particularly at junctions (further information is provided in Chapter 21 of the PEI Report).
- **Llanrhyddlad to Cefn Coch:** This section of the A5025 to the south of Cefn Coch is of a sub-optimal alignment with both horizontal and vertical alignment constraints and sub-standard cross-section and bend widths.

### Description of Potential Solutions to Constraints and Deficiencies along A5025 (Valley to Wylfa)

10.59 A series of options have been developed by Horizon, including some indicative potential re-alignments to address the location-specific constraints and deficiencies outlined. Figure 10.3 provides an overview of the main locations where improvements to the A5025 (Valley to Wylfa) are likely to be required, based on the assessment work undertaken to date.

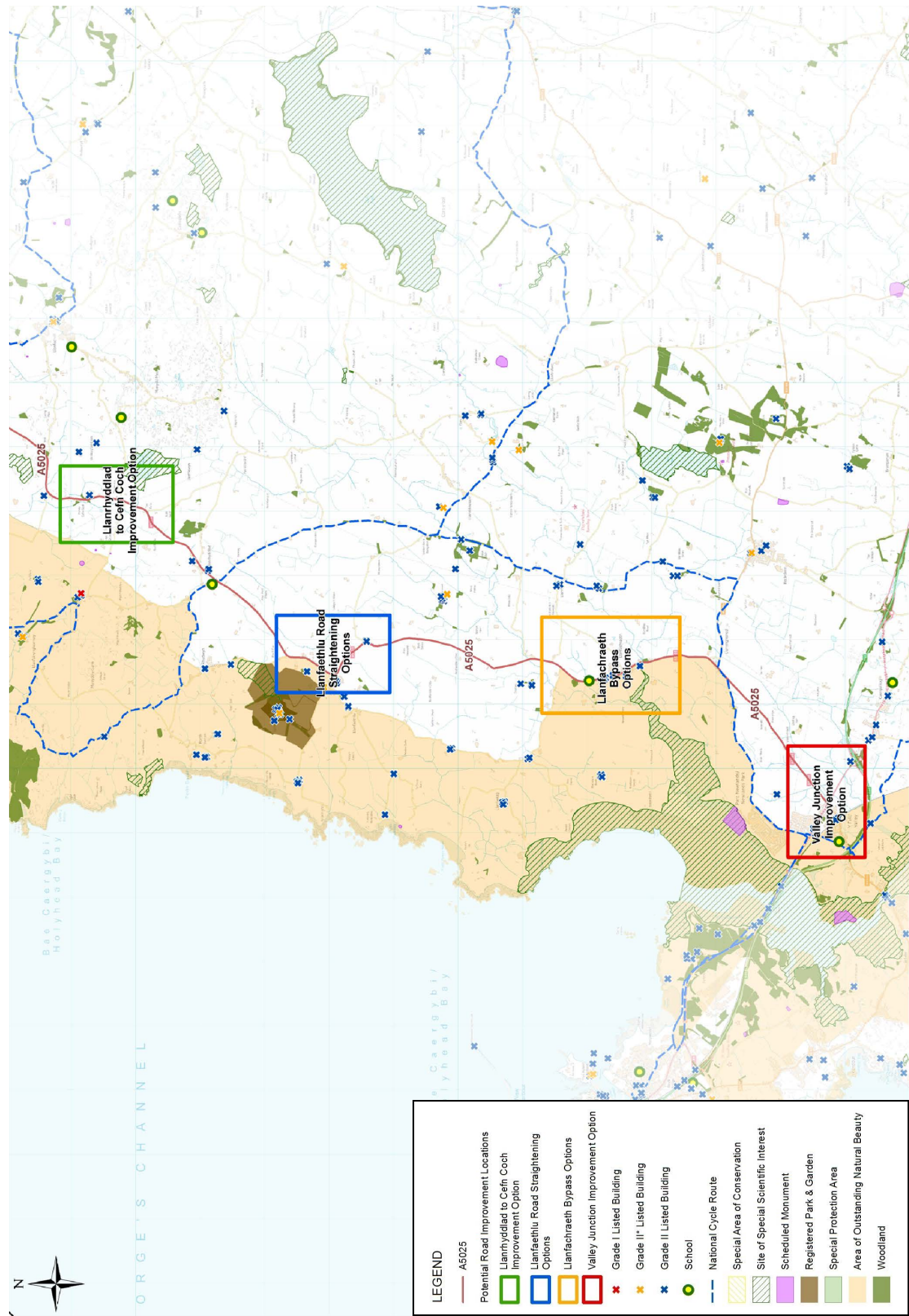
10.60 The options fall into two categories:

- **On-line highway improvements:** This is a term used to describe improvements that are made to the existing road, generally within the existing highway corridor. Such improvements could include:
  - Implementation of localised treatments such as surface colouration, enhanced carriageway marking and signing;
  - Localised widening, where necessary, to achieve minimum road widths to cater for passing HGVs (appropriate widths would be agreed with IACC); or
  - Re-alignment of the carriageway to achieve a more suitable alignment.
- **Off-line highway improvements:** This term is for improvements that involve the construction of new sections of road.

Consultees are invited to comment on the initial options for improvements and suggestions for alternative solutions are welcome.



Figure 10.3 Overview of Locations for Potential Road Improvements

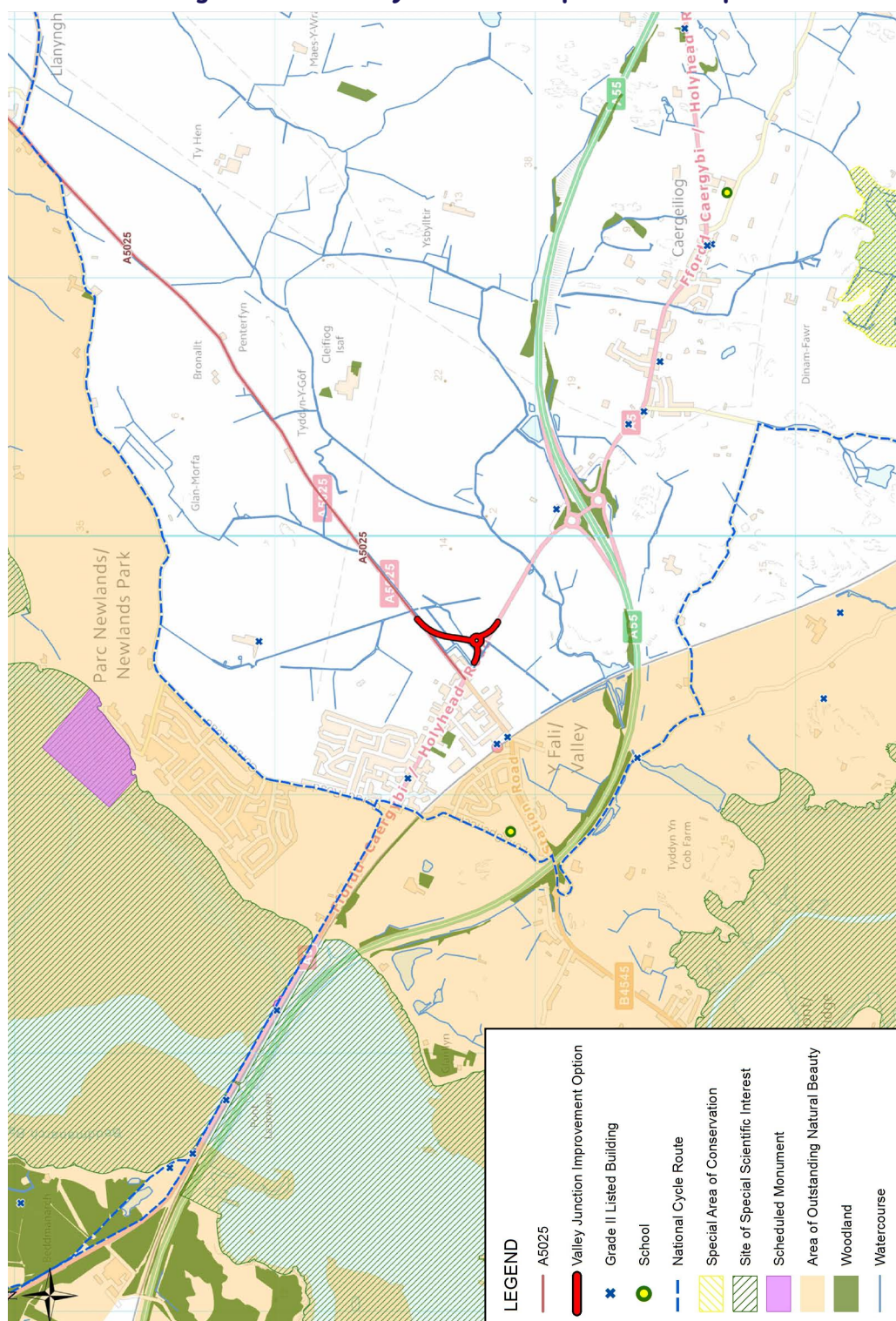


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### *Valley Junction Improvement Option*

- 10.61 Horizon is undertaking traffic counts to allow the capacity of this junction to be modelled. Horizon has proposed an indicative alignment for an Off-line highway improvement, the need for which would in large part depend on the outcome of the traffic modelling and EIA work.
- 10.62 Initially, Horizon considered the provision of a direct link between the A5025 and junction 3 of the A55. However, following discussions with stakeholders, it has been concluded that there would be insufficient space on the A55 roundabout to provide the tie-in and this has therefore not been developed further.
- 10.63 If a new junction is required, Horizon has a preference for a new alignment including a roundabout, which would bypass the existing crossroads, similar to the option shown in red on Figure 10.4. The new junction would allow traffic using the Designated Freight Route to bypass the centre of Valley. Chapter 21 of the PEI Report provides information about the existing environmental conditions in the vicinity of the Valley Junction and notes that the new alignment would pass through an area acknowledged to be at risk of flooding from nearby rivers, which would need to be addressed through detailed design.

**Figure 10.4 Valley Junction Improvement Option**



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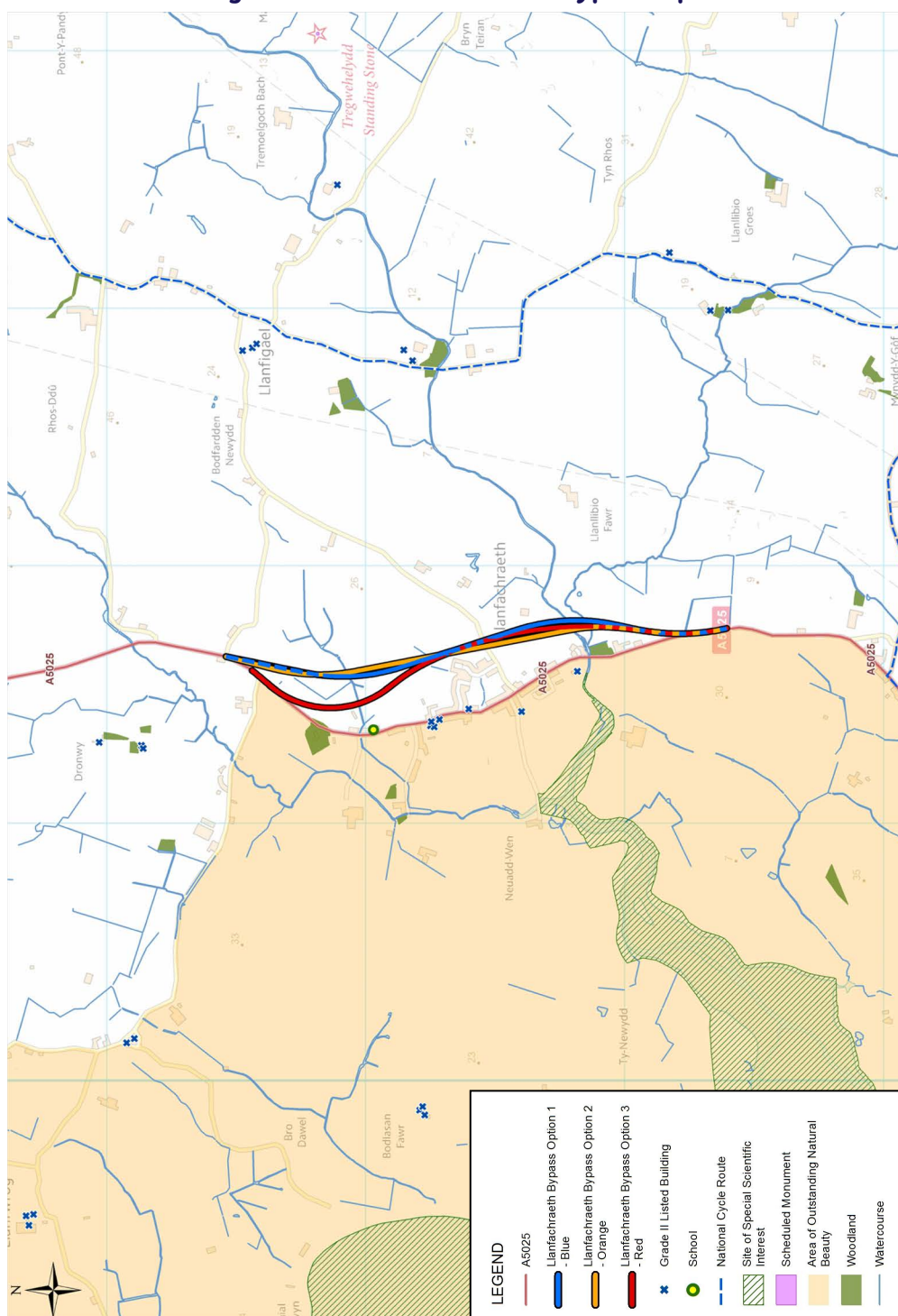
Horizon invites consultees to comment on the option presented for improving the A5025 junction at Valley.



### *Llanfachraeth Bypass Options*

- 10.64 In this location, a bypass to the west of Llanfachraeth was initially considered. However, a road positioned to the west of the village would pass through a SSSI and the Anglesey AONB. These designations mean that the environment is more sensitive to change in terms of biodiversity and landscape to the west of the village than it is to the east. On this basis and taking into account views of stakeholders, further consideration of alternatives to the west of Llanfachraeth was discounted, with work on potential alignments focusing on a corridor to the east.
- 10.65 Within the eastern corridor, Horizon has developed three alignment options that would each bypass Llanfachraeth village, which are shown in Figure 10.5. Chapter 21 of the PEI Report provides information about the existing environmental conditions in Llanfachraeth, which contains a small number of Listed Buildings and a school.
- 10.66 All three of the options would pass through farmland to the east of the settlement and cross main rivers acknowledged to be in an area of flooding. The main differences between them are:
- Llanfachraeth Alignment 1 (indicated blue) allows for traffic to be routed away from the most sensitive receptors in the centre of the settlement;
  - Llanfachraeth Alignment 2 (indicated orange) creates an alignment that is slightly closer to the settlement than Option 1, but would increase overtaking opportunities as the alignment is straighter and would offer clearer visibility for drivers; and
  - Llanfachraeth Alignment 3 (indicated red) is the longest of the three options and is the one that most closely follows the existing settlement boundary, bringing it closer to Llanfachraeth. Of the three options, this alignment is also closest to the AONB that extends over land to the west of Llanfachraeth.

### Figure 10.5 Llanfachraeth Bypass Options



Horizon invites consultees to comment on the options presented for addressing issues in Llanfachraeth, including Horizon's proposal to focus any Off-line highway improvements to the east of the settlement.

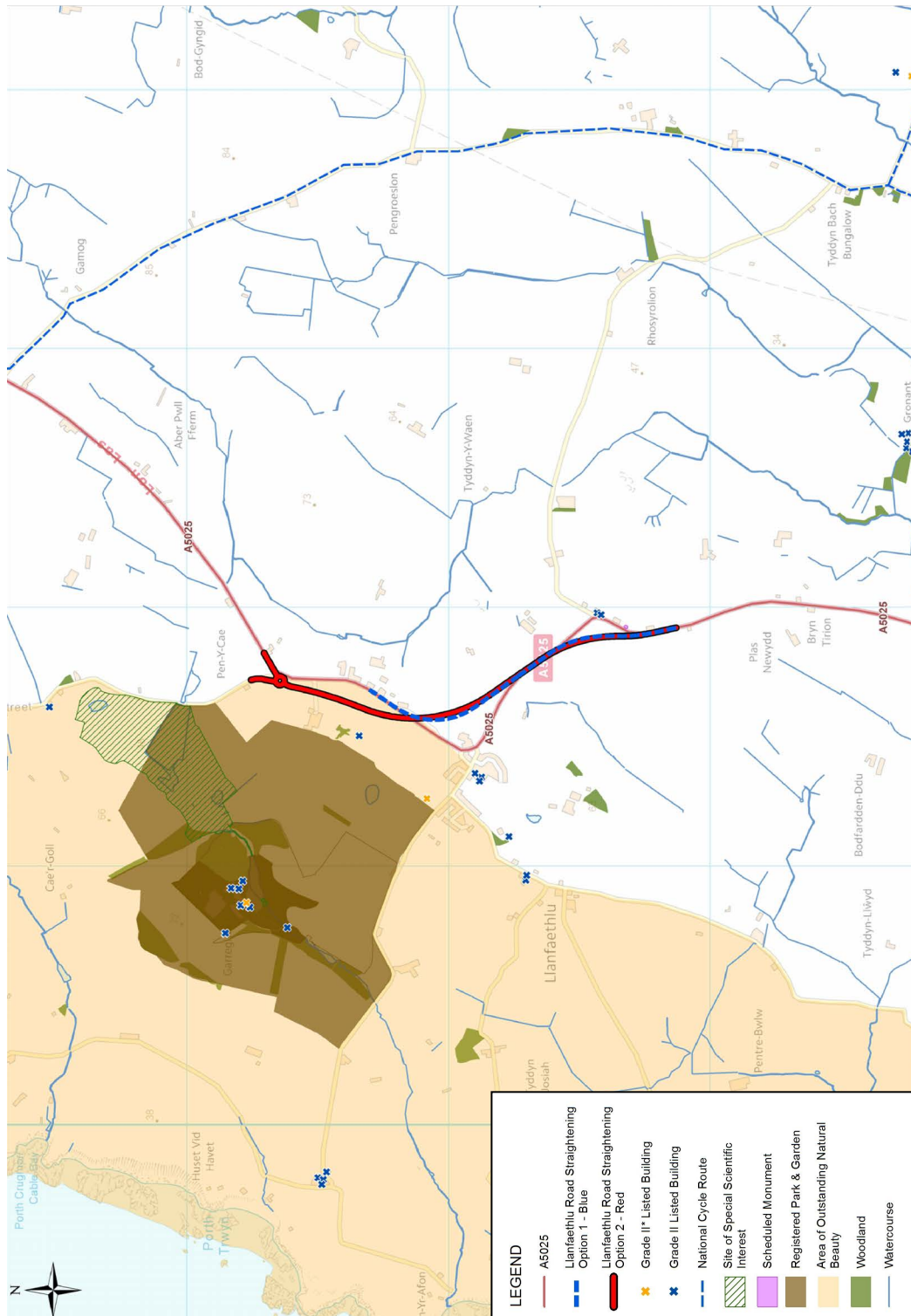
### *Llanfaethlu Road Straightening Options*

10.67 Horizon has discussed the potential for a bypass to the east of Llanfaethlu with stakeholders but this was not deemed to be a credible route due to the length of road and the potential environmental impacts that may arise from the construction and operation of the road. As an alternative solution with an anticipated lower environmental impact than a bypass, two example alignments are under consideration to straighten the two existing bends along this section of the A5025, as shown in Figure 10.6. Chapter 21 of the PEI Report provides information about the existing environmental conditions in and around Llanfaethlu, which include a number of designated heritage assets and the Anglesey AONB.

10.68 The main differences between the two options are:

- Llanfaethlu Alignment 1 – road straightening (indicated blue) to deliver a more suitable alignment for HGVs. This is the shorter of the two options and would avoid construction within the Anglesey AONB; and
- Llanfaethlu Alignment 2 – road straightening (indicated red) that would also realign the carriageway through Llanfaethlu, moving the road further from residential properties that line the existing A5025 to the north of the settlement and introducing a roundabout junction to the north. This alignment would need to pass partly through the edge of the Anglesey AONB.

**Figure 10.6 Llanfaethlu Road Straightening Options**



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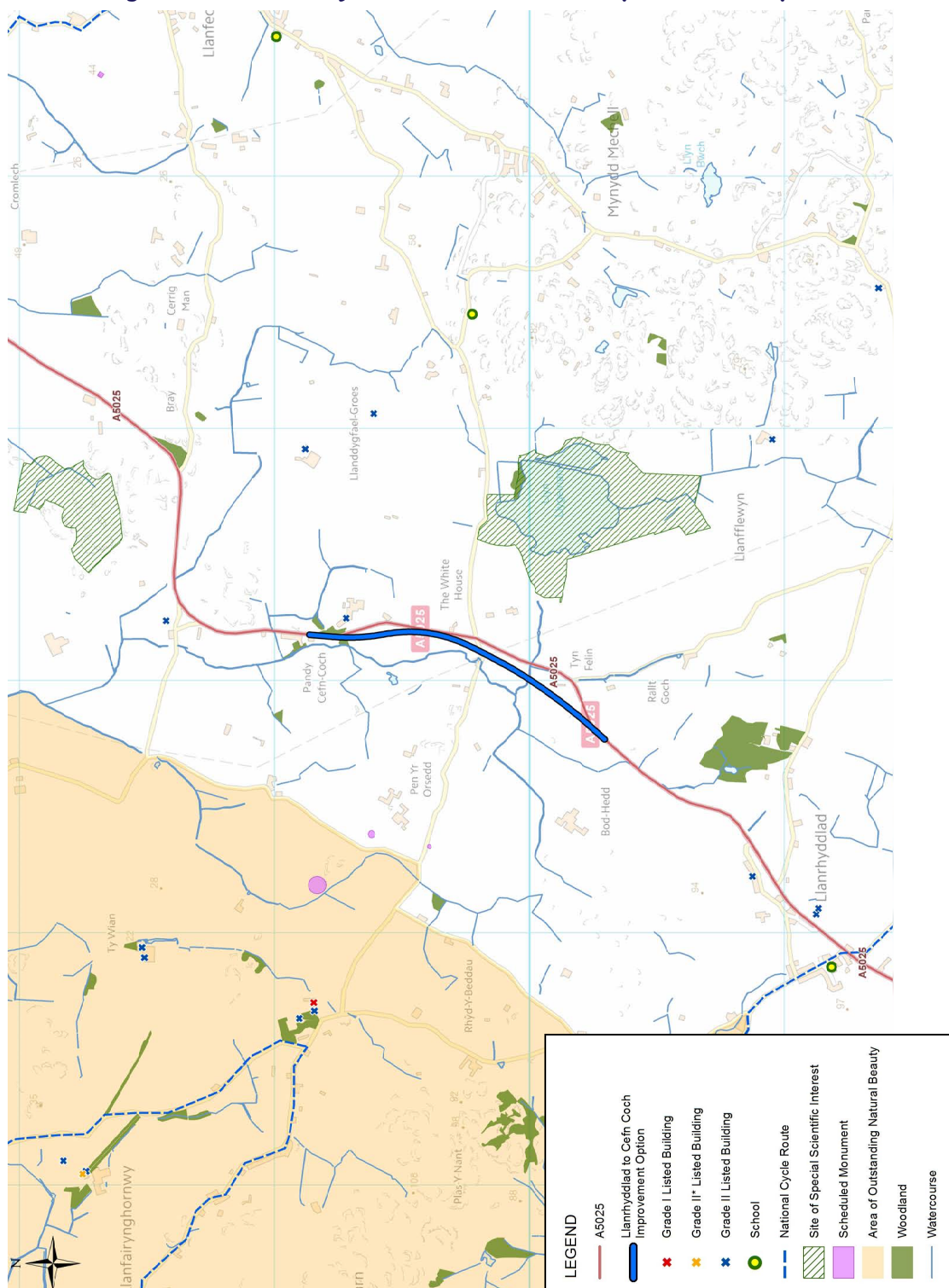
Horizon invites consultees to comment on the bend relaxation options presented for addressing issues in Llanfaethlu.

### *Llanrhyddlad to Cefn Coch Improvement Option*

- 10.69 The section of the A5025 to the south of Cefn Coch does not meet the required standards in terms of alignment for the safe and easy passage of HGVs. To address the constraints in this area, a bypass is being considered. A potential alignment within a broader corridor is shown in Figure 10.7.
- 10.70 Chapter 21 of the PEI Report provides information about the existing environmental conditions in and around this section of the A5025. The alignment option would provide a straighter and more direct section of road that would be further from the Llyn Llygeirian SSSI than the existing route. It would cross farmland within the locally designated Special Landscape Area, and also cross a number of minor ditches and, potentially, an existing footpath.



**Figure 10.7 Llanrhyddlad to Cefn Coch Improvement Option**



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Horizon invites consultees to comment on the example alignment for addressing issues along the A5025 between Llanrhyddlad and Cefn Coch.

## Additional Road Transport Measures

### *Park and Ride Facilities*

- 10.71 Horizon intends to establish Park and Ride facilities for construction workers, which could be particularly efficient in transporting those who may be working a fixed shift pattern. Details of the proposed approach for identifying and evaluating potential sites for Park and Ride facilities are provided in the Sites Identification section in this Chapter.
- 10.72 It is currently anticipated that Park and Ride facilities would only be available to transport the construction workforce. Horizon intends to work with IACC to consider the potential for legacy benefits for the wider community that could be realised through conversion of development sites, potentially including Park and Ride facilities, once they are no longer required to support the Wylfa Newydd Project. This is discussed in brief in Chapter 11.

### *Bus Services for Construction Workforce*

- 10.73 Horizon intends to consider the role of bus services to and from the Wylfa Newydd Development Area. These could follow a set route picking workers up at settlements and transport nodes (such as railway stations) on Anglesey, dependent upon the demand and distribution of members of the workforce. This could form one of a number of sustainable transport initiatives within the ITTS and would be in addition to bus services that would be provided from Off-Site Temporary Worker Accommodation.

### *Logistics Centre*

- 10.74 Horizon is considering establishing at least one Logistics Centre to manage road freight travelling to the Wylfa Newydd Development Area. Horizon envisages that a Logistics Centre would be a secure facility, capable of receiving vehicles up to 24 hours per day at periods of greatest demand. The principal role of the Logistics Centre would be to manage the onward flow of construction traffic to the Wylfa Newydd Development Area, particularly to allow traffic during peak hours to be controlled, and enable consolidation of loads into a fewer number of deliveries, as necessary. Details of the proposed approach for identifying and evaluating potential sites for this type of facility are provided in the Sites Identification section in this Chapter.
- 10.75 Consultees are encouraged to consider opportunities for legacy benefits in commenting on the proposals for at least one Logistics Centre, with reference to Chapter 11.

**Horizon is interested to hear consultee views on the idea of creating at least one Logistics Centre and Park and Ride facilities and invites nominations for potential sites for developing this type of facility.**

### Summary of Road Transport Activities

10.76 Table 10.1 outlines the main activities associated with road transport during each of the Wylfa Newydd Project development stages. This includes roads affected during the Enabling Works stage, described in Chapter 7.

**Table 10.1 Road Transport Proposals – Summary of Component**

	Enabling Works Stage	Main Construction Stage	Full Operation Stage
Power Station Site	Stopping up of Cemlyn Road (refer to Chapter 7 for further information)	-	-
Wylfa Newydd Development Area (excluding Power Station Site)	Construction of Power Station Access Road	-	-
Off-Site	<ul style="list-style-type: none"> <li>On-line and Off-line highway improvements (as required)</li> <li>Construction of Park and Ride facilities</li> <li>Construction of Logistics Centres</li> <li>Bus services to transport construction workforce</li> </ul>	<ul style="list-style-type: none"> <li>On-line and Off-line highway improvements (as required)</li> <li>Operation of Park and Ride facilities</li> <li>Operation of Logistics Centres</li> <li>Bus services to transport construction workforce</li> <li>Conversion of transport facilities to legacy use in accordance with the strategy</li> </ul>	Transfer of transport facilities to legacy use in accordance with the strategy
Community Aspects	The implementation of highway improvements would have implications for users of the affected road network and residents and businesses within the communities closest to the works. Other transport measures may offer the potential for legacy benefits, discussed further in Chapter 11.		

## Question 11

**Do you have any comments on Horizon's road transport proposals?**



10.77 Horizon is particularly keen to hear consultee views on:

- The initial option for Off-line highway improvements at A5025 Valley;
- Initial options for Off-line highway improvements, to provide a bypass to the east of Llanfachraeth;
- Initial options for Off-line highway improvements to provide bend relaxation at Llanfaethlu;
- The initial option for Off-line highway improvements between Llanrhyddlad and Cefn Coch;
- Suggestions for highway improvements along Nanner Road;
- Emerging proposals for the provision of Park and Ride facilities (also with reference to the Sites Identification section of this Chapter);
- Potential to introduce bus services to transport the construction workforce; and
- The potential to build at least one Logistics Centre (also with reference to the Sites Identification section of this Chapter).

## Worker Accommodation Strategy

### Context

- 10.78 The construction of the Power Station is anticipated to require a workforce that could reach 8,500 during peak periods, as illustrated in Figure 9.1. In addition, there would be a requirement for a smaller number of workers for the construction of Associated Development, which would commence in the Enabling Works stage of the Project. Horizon is developing measures to seek to draw a proportion of the construction workforce required for the Wylfa Newydd Project from the local resident population; however, it is anticipated that there would also be a need for construction labour to be sourced beyond the local area.
- 10.79 This section includes the draft principles for Horizon's Worker Accommodation Strategy, which will seek to ensure that members of the construction workforce who are not local residents can be accommodated in a manner that balances likely demand with managing impacts on the existing communities and environment on Anglesey. The section provides an overview of the different types of accommodation that might be suitable for this proportion of the workforce.

### Approach

- 10.80 Horizon has considered issues surrounding the identification of accommodation for construction workers who do not already live locally. Work undertaken to date has focused on the following:
- Defining Horizon's draft principles for a Worker Accommodation Strategy;
  - Exploring and defining the likely requirements for accommodating Power Station construction workers throughout the Main Construction stage and when these requirements would be expected;
  - Developing a detailed understanding of the existing environmental baseline conditions on Anglesey using a geographic information system that catalogues and maps key pieces of information such as environmental designations and settlement boundaries, covering datasets that are linked to the draft principles for the Worker Accommodation Strategy;
  - Using this knowledge to inform the identification of potential locations, in broad terms, for the provision of Temporary Worker Accommodation and other types of Associated Development; and

- Developing a staged approach to screen and evaluate potential sites for Temporary Worker Accommodation, which can inform the identification of preferred options. This process aims to identify sites that would represent the best strategic fit with Horizon's requirements, taking account of the potential benefits of co-locating Temporary Worker Accommodation with Park and Ride facilities, as well as considering the evolving planning policy context.

10.81 Work is yet to be undertaken to understand the size of the construction workforce that may be needed for Associated Development, principally during the Enabling Works stage of the Project, although this is anticipated to be substantially less than the numbers projected for the construction of the Power Station. Additional information relating to this proportion of the construction workforce will be included in the Stage Two pre-application consultation.

### Size of Construction Workforce and Demand for Accommodation

10.82 Horizon's indicative projection of the size of the construction workforce that would be needed for constructing the Power Station and how it may vary over the Enabling Works and Main Construction stages is provided in Figure 9.1.

10.83 Horizon has assumed, for the purposes of developing the draft principles for the Worker Accommodation Strategy, that construction workers living within the Travel to Work Area<sup>65</sup> reside sufficiently close to the Power Station Site that they would be unlikely to require separate accommodation. For construction workers who live beyond the Travel to Work Area, Horizon needs to understand to what extent workers may be able to use existing bedspaces closer to the Power Station Site and use this knowledge to ascertain how much additional accommodation would be needed for use by workers.

<sup>65</sup> The Travel and Work Area is defined by the two travel to work areas of Holyhead; and Bangor, Caernarfon and Llangefni, as set out in Chapter 7 (socio-economic) of the PEI Report. This area is deemed to be suitable for daily commuting during the construction and operational phases of the Power Station.

10.84 IACC encourages a strategic approach to planning for construction worker accommodation within the Wylfa SPG. For the purposes of meeting construction worker accommodation requirements, IACC proposes the assumption that one third of workers will occupy private rented accommodation, one third will use tourist accommodation and one third will occupy purpose-built accommodation, unless any future evidence can demonstrate that a different mix would be more suitable.<sup>66</sup> The Wylfa SPG also makes reference to identifying opportunities to use existing redundant buildings such as schools for conversion into construction worker accommodation.<sup>67</sup> Horizon intends to consider the proposed distribution of workers further as the Wylfa Newydd Project evolves and once there is greater certainty about the capacity of the private rental and tourism sectors.

10.85 Once operational, the Power Station is anticipated to employ up to 1,000 workers. Horizon does not currently anticipate that the Worker Accommodation Strategy would need to specifically address this aspect of demand, on the basis that people accepting operational posts would either already reside in the vicinity of the Power Station or intend to source accommodation suited to their individual circumstances.

10.86 In addition to the operational workers, during planned periods of Power Station outage for maintenance it is estimated that approximately 1,000 additional workers may need to be accommodated within easy reach of the Power Station Site on a temporary basis. These periods of outage are anticipated approximately every 18 months for a period of around 25 days each. This is based on the anticipated fuel cycle of the nuclear technology and outages would be staggered between the two units such that one unit would be working during maintenance on the other. At present, Horizon is working on the assumption that there will be sufficient capacity within the rental and tourist accommodation sector to meet this demand and this is not therefore addressed in the Worker Accommodation Strategy.

### Draft Principles for Worker Accommodation Strategy

10.87 Horizon has produced draft principles for the Worker Accommodation Strategy, which will be developed following this Stage One pre-application consultation. The draft principles take into account issues raised within the Wylfa SPG, the Wylfa Nuclear New Build Construction Workers Accommodation Position Statement (March 2011), housing need and assessment work published by IACC and key health, Welsh language and cultural factors. The draft principles recognise that different types of accommodation are likely to be required and they are to seek, where practicable, to:

<sup>66</sup> Wylfa SPG, July 2014, GP10, page 65

<sup>67</sup> Wylfa SPG, July 2014, GP10, page 65

- Identify and optimise the potential to use existing available bedspaces to accommodate members of the construction workforce prior to considering options for increasing supply;
- Facilitate a range of options to offer the workforce appropriate choices and flexibility in accommodation types and sizes and develop measures to match supply to demand, responding to expected workforce needs;
- Identify a Broad Area of Search and apply evaluation criteria for sites within this area that are potentially suitable for the construction of Temporary Worker Accommodation, taking the following accessibility, socio-economic and cultural factors into consideration:
  - Access to public and/or mass-transit opportunities for travel to the Wylfa Newydd Development Area;
  - Opportunities to meet sport, leisure and recreation demands within potential sites;
  - Availability of personal healthcare services (e.g. doctors, dentists and opticians) to the construction workforce;
  - Access to urban and local service centres, as defined in the draft JLDP, to meet additional demand from the construction workforce (e.g. public houses, restaurants);
  - Avoiding long-term reliance on tourist accommodation to ensure any adverse effects on the tourist market, particularly during the peak season, are reduced;
  - Avoiding significant adverse effects on sensitive environmental receptors; and
  - Avoiding the development of land at the highest category of risk of or from flooding (zone C2), as defined in Welsh Government Technical Advice Note 15 – Development and Flood Risk.
- Consider the potential for the Temporary Worker Accommodation sites and other construction workforce initiatives to deliver legacy benefits once they are no longer needed to support the construction of the Wylfa Newydd Project.

Horizon welcomes feedback on the draft principles for the Worker Accommodation Strategy presented here.

## Potential Accommodation Types

10.88 Horizon recognises that construction workers will have different accommodation needs, preferences and expectations. Options identification also recognises that the composition of the workforce would change as the Wylfa Newydd Project moves from the Enabling Works stage to the Main Construction stage. A number of options exist for accommodating workers and Horizon currently anticipates that the Worker Accommodation Strategy would comprise a combination of using capacity in existing accommodation/housing stock and the creation of additional Temporary Worker Accommodation. In brief, the options are considered to be the following:

- **Tourist Accommodation** – Anglesey has a substantial stock of tourist bedspaces appealing to a range of people and budgets, including caravan parks; bed and breakfasts; hotels and self-catering short-term lets. In exploring the potential offered by this sector, consideration needs to be given to seasonality and Horizon's draft Worker Accommodation Strategy principles seek to avoid constraining the existing tourist market;
- **Private Rented Sector** – this would be suited to construction workers seeking a more permanent base in the long-term and may be sought by some as a stepping stone to purchase;
- **Purchase of Existing Housing Stock** – this would be best suited to long-term use, catering for those looking to relocate to the area; and
- **Temporary Worker Accommodation** – this would be large scale and bespoke, most likely to be a campus-style with a minimum of 500 bed spaces on any one site, located to accord with the draft principles of the Worker Accommodation Strategy and the site evaluation methodology (see Site Identification section later in this Chapter). It would be designed for short-term occupation but could be a stepping stone to other options. This sort of accommodation type would support sufficient numbers of people to warrant the provision of site-specific sport, leisure and recreational facilities and key services, thus avoiding placing undue pressure on existing community infrastructure.

10.89 Horizon anticipates that the Worker Accommodation Strategy would focus on two aspects of meeting demand:

- Implementing measures for optimising the use of existing tourist bedspaces and housing stock by the workforce; and
- Meeting the requirement for Temporary Worker Accommodation and amenities.

### *Optimising Use of Housing Stock*

- 10.90 Horizon would encourage use of the existing housing stock to maximise potential for accommodating workers who are not resident within the Travel to Work Area. Horizon is therefore considering a range of initiatives to assist with the management of existing housing stock and encouraging existing property owners to enhance the quality and suitability of housing to meet anticipated demand from workers.

Horizon is keen to receive suggestions from consultees for potential initiatives that may be welcomed for enhancing housing stock or encouraging occupation of vacant properties by members of the construction workforce.

### *Temporary Worker Accommodation*

- 10.91 Horizon envisages that there would be a need to develop at least one Off-Site Temporary Worker Accommodation site to provide sufficient capacity to meet likely shortfall in capacity within existing bedspaces.<sup>68</sup>
- 10.92 As the operational requirements of the Main Construction stage become clearer, it is likely that Horizon would explore the opportunities for accommodating bed spaces in the Wylfa Newydd Development Area which would be for key staff members that need to be based close to the Main Construction activities. In considering such opportunities, Horizon would also ensure that implications and interaction with other aspects of the Wylfa Newydd Project, such as the phasing of the Landscape and Biodiversity Masterplan, are addressed.

<sup>68</sup> This shortfall has not yet been quantified. Horizon has engaged with IACC and other stakeholders to explore the capacity of existing accommodation and will be developing this area of work following the Stage One pre-application consultation process.

## Sites Identification – Park and Ride Facilities, Logistics Centre and Off-Site Temporary Worker Accommodation

### Context

- 10.93 This section sets out Horizon's proposed approach to the identification of specific sites for Park and Ride facilities, at least one Logistics Centre and Off-Site Temporary Worker Accommodation as Associated Development for the Power Station.
- 10.94 An area of search termed the Broad Area of Search has been defined for potential sites, underpinned by selection criteria. This section outlines the factors Horizon plans to consider to evaluate the suitability of sites that may be identified within the Broad Area of Search with reference to meeting Horizon's functional requirements for such facilities. In considering potential sites, Horizon is exploring the potential for creating mixed-use developments through co-location of Associated Development uses. Horizon plans to use a site evaluation methodology to consider the suitability of sites within the Broad Area of Search, including sites that may become known to Horizon following this Stage One pre-application consultation.

Horizon wishes to gather suggestions for potential sites for Park and Ride facilities, at least one Logistics Centres and Off-Site Temporary Worker Accommodation. Suggestions for possible longer term uses of sites once the Power Station is operational would be welcomed. Consultees are also invited to propose land to be considered through the sites evaluation process.

### Approach

#### Off-Site Temporary Worker Accommodation

- 10.95 The draft principles for the Worker Accommodation Strategy for the Wylfa Newydd Project assume a likely need for a proportion of the construction workforce to occupy purpose-built Temporary Worker Accommodation. This sort of accommodation type would support a minimum of 500 people on any one site, which is considered by Horizon to be a sufficient number of people to warrant the provision of sport, leisure and recreational facilities and key services alongside Temporary Worker Accommodation. The approximate size for a 500 bed temporary worker accommodation site is estimated to be between two and three hectares. Proximity of the Temporary Worker Accommodation sites to the Power Station Site is also a key consideration for the efficient management of construction activities. The factors that would be considered in evaluating sites reflect these requirements.



## Logistics Centre

- 10.96 The construction of at least one Logistics Centre is proposed to form part of the ITTS for the Wylfa Newydd Project, as outlined in the Transport Modes and Road Transport Proposals sections of this Chapter. Such a centre would need to be appropriately sited and sized to support delivery and storage of freight and some queuing and/or layover of HGVs, estimated to be between two and four hectares. Goods and materials would be consolidated into onward deliveries to the Wylfa Newydd Development Area, as appropriate, to efficiently meet the requirements of the construction programme. Proximity to the Designated Freight Route for the Project is a key consideration and it is recognised that the optimum location is likely to be a short distance from the A55 dual carriageway, on the basis that this would allow consolidation of loads and management of HGV trips prior to freight traffic using the single-lane A5025 between Valley and Wylfa.

## Park and Ride Facilities

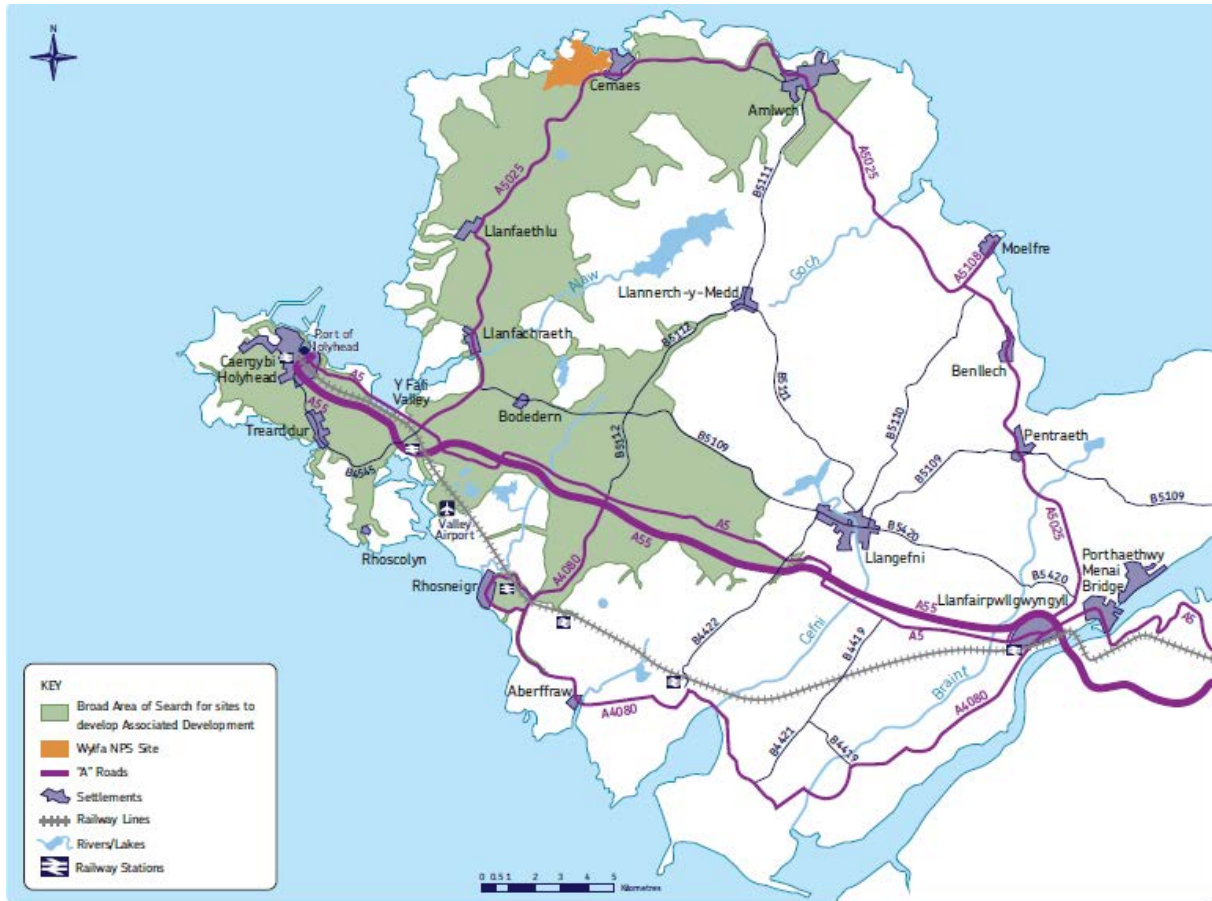
- 10.97 Park and Ride facilities for construction workers are proposed to form part of the ITTS for the Wylfa Newydd Project. These facilities would act as hubs for the transfer of construction workers from private vehicles to other shared modes of transport, currently anticipated to be buses. The approximate size for a 500 space facility is estimated to be between 1.5 and 2 hectares. Park and Ride facilities would allow Horizon to manage the amount of private vehicle trips made between the facilities and the Wylfa Newydd Development Area. Horizon has developed criteria for the selection of sites that focus on the more accessible parts of Anglesey to appeal to a broad potential user catchment.
- 10.98 It is anticipated that further transport work would explore the potential benefits of establishing Park and Ride facilities on the mainland. This would be best suited to those living within the mainland part of the Travel to Work Area or beyond and could be particularly effective in limiting the number of vehicles travelling between the mainland and Anglesey. Further information will be provided at Stage Two pre-application consultation.

## Broad Area of Search

- 10.99 Horizon has identified a Broad Area of Search for sites required for Associated Development needed to support the construction of the Power Station. This Broad Area of Search represents preferred areas for evaluating potential development sites, and has been defined to include areas that satisfy the following criteria:
- Land is within 30 minutes drive time of the centre of the Power Station Site; and
  - Land is within 10 minutes drive time of a junction on the A55 and the A5025 between Valley and Amlwch; and
  - Land is not within the following designations (refer to Figure 3.3):
    - SAC;
    - SPA;
    - Ramsar sites;
    - SSSI;
    - World Heritage Site<sup>69</sup>; and
    - Flood Risk Zone C2, as defined by Welsh Government Technical Advice Note 15 – Development and Flood Risk
- 10.100 The area of search criteria have been mapped using a geographic information system. The three criteria have been overlain and the Broad Area of Search comprises the land that satisfies all of the requirements. The resultant boundary is illustrated in Figure 10.8.

<sup>69</sup> A historic site, area or feature of cultural or natural heritage recognised in the Convention concerning the Protection of the World Cultural and Natural Heritage, adopted by United Nations Educational, Scientific and Cultural Organization (UNESCO) in 1972.

**Figure 10.8 Broad Area of Search for Park and Ride Facilities, Logistics Centres and Off-Site Temporary Worker Accommodation**



Consultees are invited to comment on the Broad Area of Search.

## Identification of Sites

10.101 Horizon intends to use the Broad Area of Search as an initial screening process, meaning that in order to be considered further, potential sites must fall within the Broad Area of Search boundary. In addition, to be considered for the potential siting of Logistics Centres and Park and Ride facilities, land would need to be in proximity to the A55 corridor (as opposed to the A5025 corridor) in order to offer the opportunity to control and reduce traffic movements along the A5025.

10.102 The suitability of sites within the Broad Area of Search would then be reviewed and evaluated in relation to the following relevant functional, environmental and planning policy considerations, in sequence:

- Exceedence of a minimum size threshold of 1.5 hectares;
- Satisfaction of Horizon's functional requirements for different configurations and combinations of use types (i.e. single use, a combination of two uses, or all three uses on one site);
- Avoidance of land identified in the emerging JLDP as green land or green wedges;
- Proximity of potential sites to sensitive land use types, including residential development, hospitals, schools, SACs, SPAs, Ramsar sites, SSSIs and the Anglesey AONB;
- Proximity of potential sites to Urban and Local Service Centres defined in the draft JLDP; and
- Review of known environmental constraints to development (refer to Chapter 21 of the PEI Report), strategic fit with existing and emerging planning policy and guidance, viability and potential legacy opportunities.

10.103 To date, Horizon has identified potential sites within the Broad Area of Search from the following sources:

- Sites contained with the Candidate Sites Register for the JLDP, which is held by the Joint Planning Policy Unit (JPPU);<sup>70</sup>
- Sites with extant planning permission that have not yet been developed (using data provided by the JPPU);
- Sites known to the JPPU that have been presented by landowners as potentially suitable for development, subsequent to the closing date for inclusion within the Candidate Sites Register; and
- Sites identified on behalf of Horizon through discussion with local land agents in early 2014.

**Horizon is keen to receive nominations from landowners with land holdings that fall within the Broad Area of Search, should they wish to have their land considered for Associated Development.**

<sup>70</sup> The merger of the Gwynedd Council Planning Policy Unit and the Isle of Anglesey County Council Planning Policy Unit.

10.104 Horizon will also review any potential additional sites within the Broad Area of Search nominated by consultees and landowners in response to this Stage One pre-application consultation. Further information, including Horizon's preferred sites, will be included in the Stage Two pre-application consultation.

## Question 12

**Do you have any comments on the Broad Area of Search or suggestion for sites Horizon could develop for Park and Ride facilities, Logistics Centres and Temporary Worker Accommodation?**

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## 11 Legacy Benefits and Community Facilities

- 11.1 It is important for Horizon to consider how certain aspects of its proposals may affect local communities and ensure that appropriate measures to realise potential benefits and reduce the likelihood of potential adverse effects are considered sufficiently early to allow their effective integration into the Wylfa Newydd Project. The management of these aspects is important to develop a sustainable Wylfa Newydd Project and to ensure a positive legacy for the communities across Anglesey, North-West Wales and beyond.
- 11.2 Benefits flowing from the Wylfa Newydd Project could be realised in three main areas:
- Job creation and contracts flowing from the multibillion pound construction works and subsequent operation of the Power Station, particularly for local residents and businesses (refer to Chapter 9 of this Document and Chapter 7 of the PEI Report);
  - The lasting ‘legacy benefit’ opportunities from necessary supporting infrastructure and Associated Development or other activities to mitigate potential environmental impacts and likely environmental effects predicted to arise from the Wylfa Newydd Project (refer to Chapters 9 and 11 of this Document and Chapter 21 of the PEI Report); and
  - Substantial community benefit payments from the UK and Welsh Governments, in accordance with the UK Government announcement made on 17 July 2013.<sup>71</sup>
- 11.3 This Chapter sets out Horizon’s Project proposals to realise benefits in relation to the Wylfa Newydd Project legacy and community facilities.

### Legacy Benefits

- 11.4 This section sets out the way in which Horizon intends to realise the potential future benefits of the Associated Development and infrastructure needed for the Wylfa Newydd Project. It outlines activities undertaken to date as part of mitigating the biodiversity and ecological impacts of the Wylfa Newydd Project, which are already delivering benefits. It also provides an overview of the potential areas where the legacy use of Project components is under consideration and consultees are encouraged to suggest further options.
- 11.5 Horizon is engaged with IACC, Anglesey Energy Island Programme and key local stakeholders to understand opportunities to realise the considerable potential for legacy benefit for Anglesey from the Wylfa Newydd Project.

<sup>71</sup> <https://www.gov.uk/government/news/communities-to-benefit-from-hosting-nuclear-power-stations>  
[Accessed: 10.09.2014]

## Potential for Legacy Benefits

- 11.6 Horizon recognises that investment in relevant infrastructure and mitigation measures identified through the EIA process will be required to manage the impacts of the Wylfa Newydd Project on Anglesey's communities and environment. Horizon also intends to deliver a number of community facilities as part of the Wylfa Newydd Project, details of which are provided in the next section of this Chapter. This investment has the potential to deliver a positive legacy for Anglesey.
- 11.7 In addition to the measures outlined elsewhere in this Chapter, Horizon considers the following developments to offer potential for legacy benefits:
- **Highway Improvements** – where possible, highway improvements would be designed as permanent enhancements as opposed to temporary provision. Horizon intends to work with communities to understand local issues and consider appropriate enhancements, particularly where bypasses are presented as potential options (refer to Road Transport Proposals in Chapter 10 for further details);
  - **Health Service Provision** – Horizon intends to ensure that healthcare service provision would meet the anticipated increased demand from the Wylfa Newydd Project workforce. Horizon is exploring the most appropriate means of delivering this provision with stakeholders and whether any proposed solutions could be incorporated into the community following the Main Construction stage, as a legacy benefit;
  - **Re-development of Temporary Worker Accommodation** – the overall Worker Accommodation Strategy will be developed following this Stage One pre-application consultation and Horizon is mindful of the potential for a legacy benefit. Leisure and recreation service provision for the workforce and the legacy benefits of this will be considered during the production of the Worker Accommodation Strategy;
  - **Enhancement of Existing Housing Stock** – Horizon is considering a range of initiatives to assist with the management of existing housing stock and encourage property owners to enhance the quality and suitability of housing to meet anticipated demand, particularly from construction workers. Careful and targeted investment could help to ensure that Horizon contributes to the creation of accommodation that has longer term potential for adaptation or transfer to tourism;
  - **Sustainable Transport Options** – Horizon intends to consider how public transport services could deliver a legacy benefit from increased connectivity and levels of sustainable transport provision available for residents and visitors to Anglesey. The Public Access and Recreation Strategy would also

include proposals for enhancing walking and cycling connectivity, which would offer potential legacy benefits;

- **Re-development of Park and Ride facilities and Logistics Centres** – Horizon will consider whether there is a role for Park and Ride facilities and Logistics Centres sites, once identified, to continue to support the operation of the proposed Power Station. In addition, there could be potential for these sites to serve as logistics hubs for future construction projects and major destinations such as Holyhead Port and/or business development; and
- **Biodiversity and ecological activity** – the Landscape and Biodiversity Masterplan, would include detail on habitat enhancement and creation, as well as targeted biodiversity mitigation measures. Horizon has already completed a number of measures to mitigate potential impacts of the Project on protected species. These include the construction of specially designed bat barns, erection of a wildlife tower to support a range of species and habitat enhancements including developing a small wildlife pond and introducing locally sourced native trees. Horizon is also partnering with North Wales Wildlife Trust to develop a tree nursery on Anglesey, which would provide some of the plants that would be needed by the Project in years to come.

11.8 Consultation responses will allow Horizon to take into account the views of communities and other stakeholders and help Horizon to develop the Wylfa Newydd Project with beneficial legacies that contribute to sustainable development.

Horizon is keen to hear consultee views on the potential legacy opportunities outlined here. In addition, suggestions for additional or alternative legacy opportunities would be welcome.

## Community Facilities

11.9 There are some existing community facilities that would be affected by the construction and operation of the Power Station, including the Wylfa Sports and Social Club and public access and recreation in the Wylfa Newydd Development Area. This section outlines the way in which Horizon intends to reduce the potential impacts of the Project on these existing community facilities by ensuring that, as far as is practicable, the quality and range of community facilities would be maintained or improved. Horizon has begun to consider how alternatives to existing community facilities could be provided and initial options are outlined in this section.

## Wylfa Sports and Social Club

- 11.10 The existing Wylfa Sports and Social Club, which is supported by Magnox Limited, would need to be relocated from its existing premises during the Enabling Works stage (early 2016 onwards). In order to ensure continuity, Horizon is planning to provide new premises to facilitate relocation of the Wylfa Sports and Social Club. It is Horizon's preference for the facilities to be located at the Wylfa Gateway Complex site (refer to Figure 6.1). This aspect of the Wylfa Newydd Project is largely settled.
- 11.11 The Wylfa Gateway Complex would be near to the existing Wylfa Sports and Social Club, which would make this location convenient for current users of the facility. In addition, the Wylfa Gateway Complex would contain alternative premises for other facilities that would need to be relocated during the Enabling Works stage and is also Horizon's preferred location for the new visitor centre.
- 11.12 Horizon is also considering options for long-term leisure facilities, including the following:
- Developing new sports and leisure facilities in nearby communities for shared use by the construction workforce and members of the community;
  - Investing in upgrading existing sports and leisure facilities in nearby communities; or
  - Developing, as far as practicable, a long-term facility on the Wylfa Gateway Complex, offering a broader range of leisure activities than the initial temporary provision at this location.

Horizon is keen to hear consultee views on what long-term sports and social facilities they consider would be of most value to the community and where these should be located.

## The Wylfa Visitor Centre

- 11.13 The Existing Power Station has a visitor centre comprising a reception and display area, video room, classroom, café and meeting room. The display area offers information on the nuclear energy story, including managing environmental impacts and ensuring safe operation.
- 11.14 The existing visitor centre is currently used by schools from the local area as a base for formal and informal education activities (linked to the national curriculum). These visits are led by visitor centre staff. In addition, the visitor centre is located adjacent to the Wales Coast Path and just south of the publicly accessible Wylfa Nature Trail, on which visitor centre staff run guided walks.
- 11.15 The existing visitor centre would need to be closed at some point during the Enabling Works stage. Horizon intends to develop a new facility to replace it and this aspect of the Wylfa Newydd Project is settled. Horizon views development of a new visitor centre as an important means to integrate the Power Station into the community and wider region, particularly in terms of supporting education and learning and contributing to tourism.
- 11.16 Horizon has a preference to locate the new visitor centre on the Wylfa Gateway Complex. This aspect of the Wylfa Newydd Project is largely settled.
- 11.17 Horizon is keen that the new visitor centre should provide a balance of facilities alongside other resources available in the community already. Horizon is therefore considering the inclusion of the following amenities within the new visitor centre.
- Exhibition area;
  - Restaurant/café and associated facilities;
  - Meeting/training room;
  - Formal education classroom; and
  - Associated ecological/biodiversity 'nature trail' facilities, connected to and promoted within the new visitor centre.

Horizon would welcome comment on the timing of construction and amenities that could be included in the new visitor centre.

11.18 Horizon has identified several potential options for the type of information that could be included in the new visitor centre. Some examples being reviewed include:

- **Sustainability** – the new visitor centre could inform and educate visitors about the role nuclear energy plays in a sustainable energy future. This could include the focus on sustainable energy within the island through the Anglesey Energy Island Programme. The building design could also take into account sustainable technologies as well as the relationship of the Power Station with the surrounding environment;
- **The story of Wylfa and Wylfa Newydd** – the new visitor centre could tell the story of the Existing Power Station and Wylfa Newydd and the relationship of the power stations with the environment, local heritage and culture; and
- **The Power Station and nuclear power** – the new visitor centre could explain the lifecycle of nuclear power stations, covering the construction, operation and ultimate decommissioning processes.

11.19 Horizon intends to refine the role of the new visitor centre in the light of consultation comments and in an awareness of the views of stakeholders.

Consultees are encouraged to share their views on what the new visitor centre could offer in terms of information provision. This could include comment on the options presented, as well as alternative suggestions.

## Public Access and Recreation

11.20 Chapter 8 provides information about the existing public rights of way and Figure 3.4 shows the existing network of public rights of way in and around the Wylfa Newydd Development Area. Chapter 8 also contains options for the type of alternative routes for the Wales Coast Path that could be created along the two sections that will be affected by the Wylfa Newydd Project to the south of the Power Station Site and around the CW outfall at Wylfa Head.

11.21 Horizon intends to develop a Public Access and Recreation Strategy, relevant parts of which would be incorporated into the Landscape and Biodiversity Masterplan. As part of the preparation of the Public Access and Recreation Strategy, Horizon has undertaken an audit of the existing public rights of way network. The audit identified the following key resources that would be considered in the Public Access and Recreation Strategy:

- **The Wales Coast Path** – the Public Access and Recreation Strategy should acknowledge the significant recreational value of this route and seek to establish a design solution that contributes to long-term recreational enhancement;



- **The Copper Trail** – this is a designated National Cycle Route that currently uses the part of Cemlyn Road that would be stopped up by the Wylfa Newydd Project. The Public Access and Recreation Strategy should consider alternatives for the Copper Trail and seek to present a design solution for cycling that balances the need to promote utility trips,<sup>72</sup> connects with high quality environments and incorporates traffic-free sections;
- **Cestyll Garden** – the Public Access and Recreation Strategy should explore the potential to enhance the recreational value of Cestyll Garden, whilst recognising its sensitivity;
- **Cemlyn Bay** – the Public Access and Recreation Strategy should explore opportunities to promote the location sensitively to encourage year-round wildlife watching, taking the conservation objectives of the existing environmental designations into account; and
- **Anglesey AONB** – proposals should seek to minimise adverse effects on the special qualities associated with this designation and, wherever possible, deliver enhancement.

Horizon is keen to hear consultee views on the key resources that Horizon intends to consider in the measures that would be included in the Public Access and Recreation Strategy.

11.22 Following on from the audit, a strategic review of the public rights of way network would be used to identify specific measures for inclusion in the Public Access and Recreation Strategy. Initial opportunities identified by Horizon for further consideration in this planned review work include:

- **Improving the quality of the public rights of way network** – measures such as realignment, widening, reinstatement of missing sections, improved connectivity and installation of seating/benching;
- **The identification and promotion of circular walking routes** – these would ideally link to existing settlements and/or car parks;
- **The promotion of cycling** – there is the potential to promote cycling through the establishment of local cycle route links to The Copper Trail and a traffic-free walking/cycling route between Cemlyn Bay and Tregele as an enhancement to the existing provision, which is on the main highway network;

<sup>72</sup> The trips made by any non-motorised transport mode that are made for specific non-recreational purposes.

- **Community recreation areas** – potential enhancements to community recreational areas within and adjacent to the Wylfa Newydd Development Area, including at Wylfa Head, Cemlyn Bay, Cemaes, Tregele and Cestyll Garden;
- **Directional signage improvements** – the strategy could define minimum signage requirements and consistent quality standards for signage at route junctions to ensure that users can easily orientate themselves;
- **Enhance interpretation** – opportunities to introduce information boards to enhance the user experience along various routes, for example at Wylfa Head, St Patricks Church and Cestyll Garden; and
- **Enhanced accessibility** – opportunities may exist to improve the accessibility of the public rights of way network to people who are mobility impaired. The potential for introducing bridleways could also be explored, reflecting the IACC Bridleway Strategy (2004).

Horizon welcomes feedback on the initial opportunities presented in respect of the Public Access and Recreation Strategy.

11.23 The potential community benefits already discussed in this section would form part of the mitigation of likely environmental effects of the Wylfa Newydd Project on local communities (refer to Chapter 7 of the PEI Report for further information). Many of these measures would provide a lasting legacy to the local community.

### Question 13

Do you have any comments or suggestions for long term legacy benefits or community facilities?

11.24 Horizon is particularly keen to hear consultee views on:

- The list of potential legacy opportunities identified;
- Suggestions for additional or alternative legacy opportunities that Horizon could consider as part of the Wylfa Newydd Project;
- Options for delivering long-term sports and leisure facilities;
- Options for a new visitor centre, including what it could be used for, when it should be constructed, and the focus of the information that could be conveyed to visitors; and

- The initial opportunities identified for consideration in respect of the Public Access and Recreation Strategy and the key resources identified.

11.25 Horizon is keen to understand what additional community benefits might be delivered, potentially as an additional voluntary donation as part of Horizon's commitment to the local community.

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## 12 Next Steps

- 12.1 Horizon's general approach to consultation is set out in its Statement of Community Consultation published in September 2014. This section sets out the ways in which consultees can provide feedback on Horizon's Stage One pre-application consultation materials.
- 12.2 This section concludes with an overview of the next steps in the Project evolution. This includes information about the way in which consultation responses will be used and how Horizon will inform consultees about the way in which consultation may influence the Wylfa Newydd Project.

### How to Respond to this Consultation

- 12.3 Horizon's Stage One pre-application consultation is taking place for a period of ten weeks, commencing on 29 September 2014. Responses to this Stage One pre-application consultation will be accepted prior to 8 December 2014 in Welsh or English.
- 12.4 There are a number of ways in which to respond to this Stage One pre-application consultation:
- Via feedback forms, which are available at pre-application consultation events and can be downloaded from [www.horizonnuclearpower.com/consultation](http://www.horizonnuclearpower.com/consultation);
  - Via the Stage One pre-application consultation webpages at [www.horizonnuclearpower.com/consultation](http://www.horizonnuclearpower.com/consultation), where consultees can register and complete a feedback form online;
  - In writing to the freepost address FREEPOST HORIZON NUCLEAR POWER CONSULTATION; and
  - Via email at [wylfaenquiries@horizonnuclearpower.com](mailto:wylfaenquiries@horizonnuclearpower.com) and [ymholiadauwylfa@horizonnuclearpower.com](mailto:ymholiadauwylfa@horizonnuclearpower.com).
- 12.5 Horizon also operates a freephone number in Welsh and English at 0800 954 9516 to help with enquiries during and after this Stage One pre-application consultation.

12.6 Horizon will host a series of events in support of this Stage One pre-application consultation. These events will generally follow three formats and will provide an opportunity for consultees to collect hard copies of materials or to ask questions face to face with a member of Horizon:

- **Public exhibitions**, which will be staffed by Horizon personnel;
- **Staffed 'drop-in' sessions**, which will be held periodically at popular locations, including places of work; and
- **Information Points**, which will be displayed in a number of different libraries and information centres, for about a week at a time during the consultation period. These will be unstaffed.

## Question 14

**Do you have any additional comments on Horizon's Project proposals?**

## Consultation – Next Steps

### Project evolution

12.7 Figure 1.1 indicates the way in which consultation and engagement has informed and will continue to inform Project evolution. In addition to considering formal feedback from the Stage One pre-application consultation, Horizon will progress the iterative process of design evolution and review through established fora such as working groups and regular stakeholder meetings.

12.8 The following specific elements of work are scheduled as next steps, leading towards the further development and refinement of the Wylfa Newydd Project, and will be described in further detail in the Stage Two pre-application consultation:

- Optimisation of the plant layout within the Power Station Site, which would be informed by further discussions with regulators and relevant statutory bodies and consideration of implications for construction processes. This work would include proposals for the development of the CWS in relation to land-based and marine structures at Porth-y-pistyll and Wylfa Head;



- Confirmation of the specific requirements for Off-Site Power Station facilities, to include discussion with local stakeholders and the North Wales Resilience Forum.<sup>73</sup> Once specific requirements are more fully understood, siting options would also be identified and reviewed;
- Completion of demand quantification for the overall water supply and sewerage requirements of the Wylfa Newydd Project, taking account of construction and operational needs of the Power Station, as well as the preferred sites for Associated Development. This would inform the completion of feasibility assessment work relating to options for supplying potable water, process water and firewater from the existing DCWW network, allowing the potential need for capacity enhancement and temporary provision to be better understood and addressed;
- Refinement of Horizon's strategic approach for managing radioactive waste and Spent Fuel, informed by discussions with the relevant regulators;
- Optimisation of the Wylfa Newydd Project programme, allowing more detailed definition of the timing and sequence of Enabling Works and Main Construction stage activities and the construction requirements, including the workforce;
- Development of the Landscape and Biodiversity Masterplan, the phasing of which would be driven by the requirements of the construction processes, with the proposals incorporating environmental design and mitigation measures leading towards a final setting for the operational Power Station. This work would inform the refinement of the Wylfa Newydd Development Area boundary;
- Production of the architectural masterplan for the Wylfa Newydd Project, which would be influenced by consultation feedback, stakeholder views and further review and development in conjunction with the landscaping proposals. Overarching design principles and concepts would start to be applied to built components of the Wylfa Newydd Project, for which draft proposals would be produced;
- Continuation of work with stakeholders and education providers to inform the production and implementation of the Jobs and Skills Strategy, also taking relevant consultation feedback into account;
- Clarification of Horizon's understanding of the nature and extent of skills, services, goods and materials available within the local, regional, national and

<sup>73</sup> The North Wales Resilience Forum (NWRF) is a multi-agency group of organisations within North Wales that together "ensure effective delivery of the duties of the Civil Contingencies Act [2004] and requires the partner organisations to coordinate resources so they can respond effectively when incidents occur, to make sure North Wales remains a safe place. The NWRF also exists to warn, inform, advise and educate the public about developments in the area of Civil Protection."

UK supply chains. This would be informed by further jobs and skills and supplier engagement events in 2015, to assist in advising the business community and potential workforce about the best ways to engage with the Wylfa Newydd Project. Contract opportunities would also be made available to the supply chain as they arise;

- Verification of traffic modelling using anticipated trip generation data, which would be derived from the refined Project programme. This would be combined with the views of consultees and stakeholders in order to inform the selection and detailed development of proposals for On-line and Off-line highway improvements, particularly along the A5025 between Valley and Wylfa;
- Further development of potential initiatives to optimise the availability of existing housing stock to meet the needs of a proportion of the construction workforce, coupled with analysis to more fully understand the availability of tourist bedspaces to accommodate a proportion of construction workers. This work will enable a more robust quantification of the likely demand for Temporary Worker Accommodation, which would inform the development of the Worker Accommodation Strategy;
- Application of the methodology proposed for the evaluation of sites for Associated Development. This work would be combined with the traffic modelling information to develop and test site options, leading to the identification of preferred sites for Park and Ride facilities, Logistics Centres and Temporary Worker Accommodation;
- Development of outline proposals for legacy benefits, including the identification of options for the adaptation, conversion or re-development of Associated Development; and
- Refinement of proposals for community facilities. This would include development of the Public Access and Recreation Strategy, including potential implications and possible opportunities for off-shore recreation, taking account of proposed changes to Porth-y-pistyll and Wylfa Head, particularly associated with the CWS.

12.9 As the Wylfa Newydd Project develops, Horizon would identify additional land required and seek to secure it by mutual agreement with landowners to provide certainty for development. However, if negotiations have not succeeded at the point where Horizon needs to prepare its application for a development consent order or planning applications it may, as a last resort, apply for compulsory acquisition powers. In deciding whether to grant compulsory purchase powers to Horizon, the decision-maker would need to be satisfied that Horizon has demonstrated a compelling case in the public interest for the land to be acquired.

## Environmental Impact Assessment Work

- 12.10 The EIA process is a key element of Project evolution. Continuation of environmental survey work and monitoring will ensure that Horizon's understanding of baseline conditions is accurate and current.
- 12.11 Ongoing review of emerging aspects of the Wylfa Newydd Project by environmental specialists will allow likely environmental effects to be understood with a greater level of certainty. This will lead to proposals for measures and design refinements to avoid or mitigate predicted significant adverse environmental effects and enhance potential positive environmental effects.

## Supporting Assessment Work

- 12.12 In addition to the EIA that will be undertaken to inform the development of the Wylfa Newydd Project, Horizon is committed to a number of additional assessment processes, all of which are designed to identify opportunities to enhance the potential for the Wylfa Newydd Project to deliver beneficial effects.
- 12.13 The importance of the Welsh language and culture is recognised by Horizon. Therefore a language impact assessment (LIA) will be carried out, the proposed scope of which is set out in Horizon's LIA Scoping Report. Horizon is also committed to reviewing the potential impact of the Wylfa Newydd Project on health and wellbeing via a health impact assessment (HIA), the scope of which is set out in Horizon's HIA Scoping Report.
- 12.14 The methodologies for the LIA and HIA will be refined in light of feedback on the respective scoping reports, which is being sought through discussions with IACC and key stakeholders (refer to Chapter 1). It is anticipated that the application of the LIA and HIA processes will give rise to recommendations for initiatives and measures that could be integrated into the Wylfa Newydd Project to reduce likely negative effects and assist in realising potential opportunities to increase likely positive effects. The influence of the LIA and HIA on the Project evolution will be outlined within the Stage Two pre-application consultation materials.
- 12.15 Horizon recognises the considerable commitments of the UK and Welsh Government to the realisation of sustainable development, noting that Planning Policy Wales places a commitment on developers to *"provide sufficient information to enable the decision maker to make an informed judgement on whether the proposed development is sustainable"*.<sup>74</sup> Consequently, Horizon is keen to ensure that the Wylfa Newydd Project strives to meet the sustainability aims established in UK, Welsh and local policy.

<sup>74</sup> Planning Policy Wales, paragraph. 4.2.6.

12.16 Horizon intends to undertake periodic review of the Wylfa Newydd Project to consider the extent to which sustainability is being incorporated into the design evolution. In order to facilitate this review process, Horizon has developed a set of draft sustainability objectives that are considered to reflect prevailing planning policy. These draft objectives are relevant to aspects of the Wylfa Newydd Project that Horizon has scope to refine as the Project evolves and are set out in a Sustainability Assessment Scoping Report. Feedback from discussions with the IACC and key stakeholders on this scoping report will be used to refine the sustainability objectives and Horizon will provide information relating to the sustainability of the Wylfa Newydd Project as part of the Stage Two pre-application consultation.

## Responding to Feedback

- 12.17 Horizon intends, where possible, to provide an acknowledgement of receipt of consultation responses to Stage One pre-application consultation.
- 12.18 Horizon is committed to considering responses received during the Stage One pre-application consultation and explaining how they have been taken into account in the ongoing development and refinement of the Wylfa Newydd Project. Similarly, for feedback that is considered but not incorporated into the Wylfa Newydd Project, Horizon intends to explain why.
- 12.19 Following the Stage One pre-application consultation, Horizon intends to prepare a feedback document, which will collate the responses and identify the main issues raised in the consultation that Horizon will need to further examine. A similar approach will be taken for any additional smaller rounds of consultation.
- 12.20 Horizon will draw the feedback together into an interim consultation report that would be published as part of the Stage Two pre-application consultation. It is anticipated that this report would contain an overview of the principal issues raised through consultation feedback, and information relating to the way in which these issues have been considered in the Wylfa Newydd Project evolution, including matters that have been shaped by consultee feedback.
- 12.21 Upon completion of all stages of pre-application consultation, Horizon will produce a Consultation Report pursuant to section 37 of the Planning Act 2008 that will be submitted at the same time as the application for a development consent order.

## Appendix A How a Nuclear Power Station Works

- A.1 Nuclear energy is based on a highly controlled process of nuclear fission, occurring when an atomic nucleus splits and releases a large amount of energy. Heat produced through the fission process is then harnessed and used to create electricity.
- A.2 There are a number of different nuclear reactor designs used around the world to generate electricity. The following description applies to a power station using the United Kingdom Advanced Boiling Water Reactor (UK ABWR) design, which is the reactor type that it is intended to use at the Power Station Site.
- A.3 The fuel used in a UK ABWR is based on the naturally occurring element uranium. There are a number of different isotopes of uranium, but for fission in a UK ABWR, uranium 235 (U-235) is the isotope of interest. Around seven atoms in every 1,000 of naturally occurring uranium are fissionable U-235, and so the uranium dioxide fuel used in the BWR reactor is enriched with U-235.
- A.4 The nucleus of the U-235 atom splits when bombarded by neutrons and this reaction generates further neutrons that can go on to split further nuclei, resulting in a sustained chain reaction. The splitting of the atomic nucleus results in significant amounts of heat being produced.
- A.5 For the chain reaction to continue and be self-sustaining, the atomic nuclei need to be split by 'slow' moving neutrons, known as 'thermal' neutrons. In order to achieve this, the fuel assemblies are surrounded by a substance called a moderator, which slows the neutrons, giving them the opportunity to interact with further U-235 nuclei.
- A.6 In a UK ABWR, water is used as the moderator. It is also used as the reactor coolant and carries the heat away from the reactor core. This heat is used to generate high pressure steam as part of the 'water/steam cycle'. This steam is used to turn the steam turbine, which drives a generator, to generate electricity.
- A.7 Reactor heat output can be controlled via two methods:
1. Controlling the flow of water through the reactor: water flow through the reactor core can be increased or decreased to control neutron moderation; or
  2. Using neutron absorbing rods: these 'control rods' can be inserted into or withdrawn from the reactor core if more or less neutron absorption is needed to control reactor heat output.

- A.8 A nuclear power station generates electricity in a similar way to many other large thermal power stations in that water is heated and turns into steam, which rotates a steam turbine that drives an electrical generator. In a nuclear power station, the energy needed to heat the water comes from the nuclear reaction as opposed to the combustion of fossil fuels such as coal, gas or oil. In all types of water/steam cycle power stations, the steam generated passes through a steam turbine and is subsequently converted back into water in a condenser. The condensate is then pumped back to the reactor to produce more steam.
- A.9 A simple schematic diagram of a UK ABWR nuclear power station of the type proposed at the Power Station Site is shown below in Figure A.1.
- A.10 The following description offers some detail of the main components of the Nuclear Island, Conventional Island and Balance of Plant and how they inter-relate.
- A.11 The reactor pressure vessel is a very strong, high-integrity steel vessel that contains the reactor core, fuel, control rods, reactor internal pumps and other equipment. Inside the reactor pressure vessel are around 870 fuel assemblies, each one about 4.5m high. Each fuel assembly consists of 92 fuel rods. Each fuel rod is made of a tube of zirconium alloy metal, which contains hundreds of fuel pellets. The fuel pellets are made of enriched uranium dioxide and each one is about 1cm long and about as thick as an ordinary pen.
- A.12 The fuel assemblies are inserted into the reactor pressure vessel along with control rods and instrumentation. Water passes around the fuel elements taking away the heat generated within the fuel by the fission reaction, turning to steam as a result.
- A.13 Primary containment is provided by the reinforced concrete containment vessel (RCCV) and forms a major structural element of the reactor building. The RCCV contains the suppression chamber and vents and reactor primary systems. The RCCV is constructed from thick-walled reinforced concrete and lined with leak-tight steel plates, such that in the extremely unlikely event of a leak of reactor coolant, there is no uncontrolled release of radioactivity to the environment.
- A.14 Many of the other systems that are required for safe and efficient operation are located within the secondary containment, which is provided by the reactor building. The primary and secondary containments have isolation valves that allow them to be closed off in the event of an incident, to prevent release of any radioactivity to the environment.



The diagram illustrates the complex piping and components of a Pressurized Water Reactor (PWR) system. Key components labeled include:

- Reactor vessel**: The central heat source.
- Moisture separator heater**: Separates steam from water in the primary loop.
- High pressure turbine** and **Condensers**: Part of the primary loop's power generation stage.
- High pressure feed water heaters**: Preheat feed water using steam from the primary condenser.
- Low pressure turbine** and **Condensers**: Part of the secondary loop's power generation stage.
- Low pressure feed water heaters**: Preheat feed water using steam from the secondary condenser.
- Condensate purification system** and **HPCPs** (High Pressure Control Pumps): Maintain water level and purity in the secondary loop.
- Steam jet air ejectors** and **Off gas system**: Handle steam and gas from the secondary loop.
- Feed water pumps**: Circulate water in the secondary loop.
- Suppression pool**: A reservoir of water used to maintain system pressure and prevent boiling.

Arrows indicate the flow direction of water and steam throughout the system.

- A.15 Associated with each reactor is a multi-stage turbine, which drives an electrical generator. Each steam turbine comprises many rows of blades, alternate rows being fixed to a stationary casing and to a rotating shaft. Steam at high temperature and pressure is passed over the turbine blades, causing the turbine shaft to rotate, which also turns the generator. The steam contains a large amount of heat energy, which is converted to mechanical energy in rotating the turbine, and into electrical energy via the generator. The steam ultimately passes into the condenser, where it is converted back into water.
- A.16 To extract as much energy from the steam as possible for generation of electricity, the steam pressure is reduced to below atmospheric pressure in a condenser. The condenser consists of a vessel beneath the steam turbine, into which the steam passes. Thousands of tubes run through the condenser, through which cold seawater is pumped. As the steam touches the tubes, it condenses back to water; which is then pumped back to the reactor to again raise steam.
- A.17 The Power Station will utilise once-through water cooling to cool the condenser, using seawater abstracted from the Irish Sea through the CWS intake/pumphouse structures. This intake structure includes coarse and fine screening to exclude debris, such as seaweed, and a number of pumps and large pipes. The seawater may be dosed with biocide to discourage growth of marine organisms within the CWS. The temperature of the seawater is raised as it passes through the condenser. After exiting the condenser, the water passes through to the outlet tunnels, where it starts to cool, and is returned to the sea through the CW outfall structure.
- A.18 Electricity is produced in an electrical generator, which consists of a rotor that creates a magnetic field, rotating inside a number of copper coils. This in turn induces a voltage, resulting in an electric current. The Power Station will have one steam turbine and electrical generator per reactor. Together, these generators would generate at least 2,700MW.
- A.19 The electrical energy created in the generator needs to be transferred to the National Grid high voltage electricity transmission network. The electricity produced needs to be stepped-up to the transmission network voltage of 400 kilovolts for connection at the existing National Grid sub-station adjacent to the Power Station. Each generating unit would therefore have a 'step-up' transformer, located near to the electrical generator. The power would be conducted, through buried cables or overhead lines, over the relatively short distance from the generator (step-up) transformer to the National Grid sub-station.

## Appendix B National Grid – North Wales Connection Project

- B.1 National Grid owns, operates and maintains the high voltage electricity transmission network in England and Wales and operates the electricity transmission system across Great Britain. The electrical transmission system connects large power stations to the local networks, where the power is distributed to business, homes and industrial users through a combination of overhead transmission lines and buried cables, where the power is distributed to industrial users and local networks.
- B.2 National Grid is regulated by the Office of Gas and Electricity Markets and is required by its electricity transmission licence to offer contractual terms for any request for connection to the transmission system and to undertake works in England and Wales required by any ensuing connection contracts. Such works may include the construction of new or modified infrastructure local to the connection and may also include new or modified infrastructure at locations further away.
- B.3 National Grid has entered into an agreement with Horizon to carry out the works required to connect the Power Station to the transmission system.
- B.4 The works for the Power Station can be considered in two parts:
- Works local to the Power Station Site
    - This is the physical connection between the Power Station and the transmission system. It is expected to comprise sub-station works at Wylfa and modifications to existing connections from the existing sub-station.
  - Remote works on the transmission network
    - National Grid must ensure that the transmission system can cater for the electrical output from the Power Station.

- B.5 National Grid consulted local communities and stakeholders in 2012 about their strategic connection options to the existing Wylfa substation. National Grid's preliminary preference in 2012 was for a new overhead power line between the existing Wylfa substation and the existing substation on the mainland at Pentir.
- B.6 National Grid is currently reviewing the feedback that it received in response to the 2012 consultation. This will inform National Grid's decision on how best to reinforce the transmission system to accommodate the Wylfa Newydd Project generation output. In finalising its proposals, National Grid will give careful consideration to reducing any potential adverse effects from the proposed works, and measures that may be used could include:
- careful routing and siting;
  - planting and screening to reduce visual impact;
  - habitat creation;
  - the management of waste;
  - the control of traffic;
  - reducing noise; and
  - putting sections of overhead connection underground.
- B.7 Figure B.1 shows the proposed route corridor options for the Wylfa to Pentir overhead electricity transmission line, as shown in National Grid's Route Corridor Identification Report October 2012. Regardless of which option is chosen by National Grid, part of the route will go through the Wylfa Newydd Development Area.

## Further Information

- B.8 National Grid intends to provide further information about the transmission network between Wylfa and Pentir. Any future stages of public consultation that National Grid plans to undertake would be publicised within local communities. Contact details for National Grid are as follows:

<http://www2.nationalgrid.com/UK/In-your-area/Projects/North-Wales/>  
 freephone number: 0800 990 3567  
 email: [nationalgrid@northwalesconnection.com](mailto:nationalgrid@northwalesconnection.com) or  
 freepost address: FREEPOST NATIONAL GRID NW CONNECTION



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## Appendix C Glossary

C.1 The table below sets out explanations for specific acronyms and terms used in this Document. References to legislation are to that legislation as amended and in force at the date of this Document.

Full Title	Abbreviation / Acronym	Description
Abnormal Indivisible Loads	AILs	A load that cannot be divided for the purpose of being carried on a road without undue expense or risk of damage.
Ancillary Structures	-	Buildings and other structures that are necessary to support the construction, operation and management of the Power Station.
Anglesey Energy Island Programme	-	An initiative led by IACC involving several stakeholders within the public and private sector working in partnership to catalyse employment, growth and development opportunities in the energy sector.
Area of Outstanding Natural Beauty	AONB	Areas designated under the Countryside and Rights of Way Act 2000 for the purpose of conserving and enhancing the natural beauty of the designated area.
Associated Development	-	Development to support delivery of the Power Station, for example highway improvements along the A5025, Park and Ride facilities for construction workers, at least one Logistics Centre and Off-Site Temporary Worker Accommodation.
Balance of Plant	-	Plant, systems and associated structures that serve both generating units, including the CWS, and which form part of the Power Station.
Best Available Techniques	BAT	The legislative requirements whereby operators must demonstrate that certain operations are conducted in the optimum manner, to prevent or minimise releases and limit the impact on the environment, taking a number of factors into account including technological advances, economic feasibility and time.

Full Title	Abbreviation / Acronym	Description
Birds Directive	-	The European Union's Directive on the conservation of wild birds (79/409/EEC of 30 November 2009).
Broad Area of Search	-	The area of land within which Horizon will consider sites for the construction of certain types of Associated Development, comprising Park and Ride facilities, Logistics Centre and Off-Site Temporary Worker Accommodation. The criteria that apply to this land are contained in paragraph 10.99.
Conventional Island	-	The steam turbine, electrical generator and associated structures, which form part of the Power Station.
Cooling Water System	CWS	The once-through water cooling system that removes the proportion of heat energy produced by the nuclear reactors, which cannot be converted to electricity, and for this Project includes the intakes, pumphouses, breakwaters, seal pits and outfall structures as well as connecting pipelines and tunnels, for each generating unit.
Copper Trail	-	The northern section of national route 566, forming part of the sustrans national cycle network.
Decommissioning	-	This is explained in paragraphs 5.43 – 5.45 in Chapter 5 and 7.61 – 7.62 in Chapter 7.
Department of Energy and Climate Change	DECC	The UK Government department with responsibility for (among other things) energy and climate change issues, including the security of the UK's energy supplies.
Designated Freight Route	-	The A55 (on Anglesey), the A5 and the A5025 from Valley to the Wylfa Newydd Development Area, as shown in Figure 10.1.
Development consent order	-	The consent for a Nationally Significant Infrastructure Project required under the Planning

Full Title	Abbreviation / Acronym	Description
		Act 2008.
Dŵr Cymru: Welsh Water	DCWW	The company responsible for sewers, rising mains, potable water, water, temporary surface drainage and redundant water mains in Anglesey.
EN-1 - Overarching National Policy Statement for Energy	NPS EN-1	The National Policy Statement designated by the Secretary of State for Energy and Climate Change in July 2011, which sets out national policy for major energy infrastructure projects.
EN-6 - National Policy Statement for Nuclear Power Generation	NPS EN-6	The National Policy Statement designated by the Secretary of State for Energy and Climate Change in July 2011, which sets out national policy on new nuclear power stations and against which an application for a development consent order for a nuclear power station is assessed.
Enabling Works	-	This is explained in paragraphs 7.4 to 7.14, inclusive, in Chapter 7.
Environment Agency	-	The executive non-departmental public body with responsibility for environmental regulation in England. The Environment Agency gives advice to Natural Resources Wales in relation to the radioactive substances regulation under the Environmental Permitting (England and Wales) Regulations 2010 and to the Welsh Government in respect of Generic Design Assessment for the UK ABRW.
Environmental Impact Assessment	EIA	The process in which the likely significant effects of a development on the environment are identified and assessed.
Environmental Management Plan	-	A document that sets out the key environmental and planning/consenting considerations that must be taken into account for any works taking place. There will be more than one plan and the development of these plans is an iterative process.

Full Title	Abbreviation / Acronym	Description
Environmental Statement	-	The document in which the results of an Environmental Impact Assessment are presented.
European Designated Sites	-	<p>The following sites that are designated and therefore given special protection under the Habitats Directive and the Birds Directive:</p> <ul style="list-style-type: none"> <li>• Special Areas of Conservation (SACs).</li> <li>• Special Protection Areas (SPAs).</li> <li>• Sites of Community Importance (which is the second step in being formally designated as a SAC).</li> <li>• candidate SACs (which is the first step in formal designation as a SAC).</li> <li>• potential SPAs (which are approved by the Government but are not yet classified as SPAs).</li> </ul> <p>Collectively, the above European Designated Sites are known as Natura 2000.</p> <p>There are also internationally important and designated wetland sites which often overlap with the European designated sites listed. These wetlands are known as Ramsar sites (identified under the Ramsar Convention, 1971).</p>
Existing Power Station	-	The existing Magnox nuclear power station at Wylfa.
Full Operation	-	This is explained in paragraphs 7.50 to 7.60, inclusive, in Chapter 7.
Generic Design Assessment	-	The process being used by the Office for Nuclear Regulation and the Environment Agency to assess the safety, security and environmental implications of new nuclear reactor designs for the UK, separately from applications to build them at specific sites.
Geological Disposal Facility	GDF	A purpose built facility for deep burial of higher

Full Title	Abbreviation / Acronym	Description
		activity radioactive wastes.
Habitats Directive	-	The EU Directive on the conservation of wildlife, plants and habitats (Council Directive 92/43/EEC of 21 May 1992).
Habitat Regulations Assessment	HRA	The process by which plans and projects are assessed for their likely significant effects on European Designated Sites, pursuant to the Habitats Directive and the Conservation of Habitats and Species Regulations 2010.
Integrated Traffic and Transport Strategy	ITTS	The strategy to be developed by Horizon to manage traffic associated with the Project, including to ensure efficiency, manage environmental impacts, ensure safety and present transport solutions.
Intermediate Level Waste	ILW	Waste that has a radioactive content exceeding the LLW limit and that does not have a significant heat output.
Intermediate Level Waste Interim Storage Building or ILW Interim Storage Building	-	Building for the on-site storage of packaged ILW prior to disposal in the GDF.
Isle of Anglesey County Council	IACC	The local authority governing the area within which the Power Station is intended to be constructed. IACC has a number of functions, including the granting of planning permission as local planning authority.
Landscape and Biodiversity Masterplan	-	A fully coordinated environmental landscape design covering the Wylfa Newydd Development Area, including the formation of mounds, habitat and woodland creation, targeted biodiversity mitigation and enhancement measures, temporary and permanent public footpath diversions, management of watercourses and surface water drainage and other relevant environmental considerations.

Full Title	Abbreviation / Acronym	Description
Listed Building	-	A building that, due to special architectural features or historic interest, is designated as a listed building pursuant to the Planning (Listed Buildings and Conservation Areas) Act 1990.
Logistics Centre	-	An Off-Site facility at which deliveries can be consolidated into fewer loads and the timing of traffic movements to the Wylfa Newydd Development Area can be controlled during both the Enabling Works and Main Construction stages.
Low Level Waste	LLW	Waste that has a radioactive content not exceeding 4 GBq (gigabecquerels) per tonne of alpha, or 12 GBq per tonne of beta/gamma activity.
Main Construction	-	This is explained in paragraphs 7.18 to 7.38, inclusive, in Chapter 7.
Marine Off-Loading Facility	MOLF	A facility comprising two purpose built quays to allow delivery of freight such as AILs and construction materials by sea.
National Grid	-	National Grid Electricity Transmission Plc.
National Policy Statements	NPS	Statements prepared and designated by the Secretary of State under the Planning Act 2008, which establish national policy for nationally significant infrastructure projects, including energy, transport and water, waste water and waste and against which applications for development consent orders are assessed.
Nationally Significant Infrastructure Project	NSIP	A type of project listed in the Planning Act 2008, and which must be consented by a development consent order. The construction of a generating station is an NSIP.
Natural Resources Wales	-	The public body whose stated purpose is to ensure that the natural resources of Wales are sustainably maintained, enhanced and used, now and in the

Full Title	Abbreviation / Acronym	Description
		future. It absorbed the regulatory and advisory duties of the Environment Agency, Countryside Council for Wales and the Forestry Commission in Wales. It is the regulatory authority in Wales for a wide range of environmental legislation including environmental permitting (under the Environmental Permitting (England and Wales) Regulations 2010) and is a statutory consultee for development consent orders.
New Nuclear Build at Wylfa: Supplementary Planning Guidance	Wylfa SPG	IACC's supplementary planning guidance, in respect of new nuclear development at Wylfa, published in July 2014.
Nuclear Decommissioning Authority	NDA	The non-departmental public body created through the Energy Act 2004 responsible for decommissioning and cleaning up civil nuclear facilities on 17 sites and providing for the disposal of all the resulting wastes.
Nuclear Island	-	Each nuclear reactor and its associated plant and structures, which form part of the Power Station.
Nuclear Licensed Site	-	A site in respect of which a Nuclear Site Licence has been granted.
Nuclear Site Licence	-	The licence required under the Nuclear Installations Act 1965 for the installation and operation of a nuclear reactor granted by the Office for Nuclear Regulation.
Office for Nuclear Regulation	-	The public corporation, which is responsible for (among other things) the regulation of nuclear safety, nuclear security and safeguards at nuclear licensed sites in the UK.
Off-line highway improvements	-	Highway improvements that involve the construction of new sections of road.
Off-Site	-	Areas of land needed for the Project, which are yet to be identified, but would be outside the Wylfa Newydd



Full Title	Abbreviation / Acronym	Description
		Development Area.
Off-Site Power Station Facilities	-	The emergency and other facilities explained in paragraph 6.46, including an alternate emergency control centre, survey laboratory and specialist vehicle storage.
On-line highway improvements	-	Highway improvements that are made to the existing road, generally within the existing highway corridor.
Park and Ride facilities	-	An Off-Site facility from which construction workers will park and travel via a dedicated bus service to the Wylfa Newydd Development Area.
Planning Inspectorate	-	The body that accepts and examines applications for development consent orders and makes recommendations to the Secretary of State in support of determining whether to grant consent.
Power Station	-	The proposed new nuclear power station, including two UK ABWRs, associated plant and ancillary structures and features, to be constructed and operated at Wylfa on Anglesey.
Power Station Access Road	-	The proposed access road from the A5025 south of Tregele, to the Power Station Site, which will also provide access to the Wylfa Newydd Development Area during the Enabling Works and Main Construction stages (illustrated in Figure 7.2).
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 (illustrated in Figure 2.1).
Preliminary Environmental Information	-	Preliminary information about the environmental context and potential environmental effects of the Project, which is compiled from the early stages of the environmental studies being conducted to inform development of the Project, and is provided during

Full Title	Abbreviation / Acronym	Description
		consultation in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2009.
Preliminary Environmental Information Report	PEI Report	The report, prepared for this Stage One pre-application consultation, in which the Preliminary Environmental Information available at this stage of the Project is presented.
Project or Wylfa Newydd Project	-	The Power Station and Associated Development.
Ramsar Sites	-	Wetlands of international importance, designated under the Ramsar Convention 1971.
Radioactive Waste Building	-	Building to collect and treat radioactively contaminated water from the reactor building and turbine building.
Scheduled Monument	-	Scheduled Monuments are protected by law under the Ancient Monuments and Archaeological Areas 1979 and are, by definition, of national importance
Secretary of State (for Energy and Climate Change)	-	The cabinet minister in charge of DECC and who (among other things) ultimately determines applications for development consent orders.
Sites of Special Scientific Interest	SSSI	Sites designated for their flora, fauna or geological or physiographical features under the Wildlife and Countryside Act 1981.
Special Area of Conservation	SAC	Areas that have been identified as being important for a range of vulnerable habitats, plant and animal species within the European Union and are designated under the Habitats Directive.
Special Landscape Area	-	A non-statutory designation applied by the local planning authority to define areas of high landscape importance within their administrative boundary.

Full Title	Abbreviation / Acronym	Description
		Areas of high landscape importance may be designated for their intrinsic physical, environmental, visual, cultural and historical value in the contemporary landscape. Landscapes designated as a Special Landscape Area may be unique, exceptional or distinctive to the local authority area.
Special Protection Areas	SPA	Sites designated under the Birds Directive due to their international importance for the breeding, feeding, wintering, or the migration of, rare and vulnerable species of birds.
Spent Fuel	-	Fuel that has been used in a nuclear reactor.
Spent Fuel Interim Storage Building	-	Building for the on-site storage of Spent Fuel prior to disposal in the Geological Disposal Facility.
Statement of Community Consultation	-	A statement in which a developer sets out how it intends to consult the local community in respect of its proposed NSIP pursuant to section 47 of the Planning Act 2008.
Statutory Working Group	-	The forum established by Horizon for formal communication, engagement and sharing of information amongst key statutory bodies in relation to consents and permissions pertinent to the Project.
Strategic Siting Assessment	-	The process which was used during the preparation of NPS EN-6 to identify and assess sites which are considered strategically suitable for the deployment of new nuclear power stations by the end of 2025.
Temporary Worker Accommodation	-	The specially provided temporary worker accommodation of at least 500 bedspaces, designed for short term use by the construction workforce and which may include site-specific leisure and recreational facilities and key services.
Travel to Work Area	-	The boundary for assuming reasonable daily commuting behaviour to the Power Station Site. This

Full Title	Abbreviation / Acronym	Description
		is defined by the two travel to work areas of Holyhead; and Bangor, Caernarfon and Llangefni, as defined by the Office for National Statistics and set out in Chapter 7 (socio-economics) of the PEI Report. This area is deemed to be suitable for daily commuting during the construction and operation of the Power Station.
UK Advanced Boiling Water Reactor	UK ABWR	The UK advanced boiling water reactor to be supplied by Hitachi-GE Nuclear Energy, Ltd., as part of the Power Station. See Appendix A1 for a more detailed description of how this type of nuclear reactor works.
Very Low Level Waste (High Volume)	VLLW	Waste that has a radioactive content not exceeding 4MBq (megabecquerels) per tonne of total activity. This waste type typically includes lightly contaminated concrete and steel.
Wales Coast Path	-	An 870 mile network of public footpaths and other routes around the coastline of Wales, which incorporates the Isle of Anglesey Coastal Footpath.
Welsh Government	-	The devolved Government for Wales.
Worker Accommodation Strategy	-	The strategy that will seek to ensure the construction workforce for the Project can be accommodated in a manner that balances likely demand with potential impacts on the existing communities and environment on Anglesey.
Wylfa Gateway Complex	-	The parcel of land indicated on Figure 2.2 that would contain alternative premises for a number of facilities that need to be relocated from their existing locations on the Wylfa Newydd Development Area, including the Wylfa Sports and Social Club. It is also the preferred location for Horizon's proposed new visitor centre.
Wylfa Newydd Development Area	-	The indicative area of land including the Power Station Site and the surrounding areas that would be used for the construction and operation of the Power

Full Title	Abbreviation / Acronym	Description
		Station (illustrated on Figure 2.1).
Wylfa Newydd Project	-	See the Project.
Wylfa NPS Site	-	The Wylfa site designated by NPS EN-6 as potentially suitable for the deployment of a new nuclear power station.
Wylfa SPG	-	See New Nuclear Build at Wylfa: Supplementary Planning Guidance.



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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