Design Review
Report
Wylfa Associated Development, Anglesey
**DCFW Ref: N60**
Meeting of 29th June 2016
Declarations of Interest

Panel members, observers and other relevant parties are required to declare *in advance* any interests they may have in relation to the Design Review Agenda items. Any such declarations are recorded here and in DCFW’s central records.

**Review Status**

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<td>Meeting date</td>
<td>29&lt;sup&gt;th&lt;/sup&gt; June 2016</td>
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<td>Issue date</td>
<td>14&lt;sup&gt;th&lt;/sup&gt; July 2016</td>
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<td>Scheme location</td>
<td>Wylfa, Anglesey</td>
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<td>Scheme description</td>
<td>Associated development to proposed Nuclear Facility</td>
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**Declarations of Interest**

None declared.

**Consultations to Date**

The Design Commission for Wales has been engaged in consultation on the development associated with the new nuclear facility for over two years during which time three review meetings have taken place prior to this one. At the previous meeting it was suggested that the next session take place in Anglesey to include site visits. This review took place following a morning of visits to the sites in question with DCFW and Horizon being joined by representatives of the Local Planning Authority.

**The Proposals**

This review focused on associated development including on-site temporary worker accommodation, simulator and training building, AECC, park and ride, and off-site temporary worker accommodation at Rhosgoch.

**Main Points**

This review session did not address the appropriateness of the location of proposed development. Further discussion with the LPA is necessary on this aspect. Whilst location issues have been discussed in previous reviews, in order to advance the conversation in the limited time available, this review focused on the design of the emerging proposals on the basis that they may take place in the currently proposed locations.
General considerations

Each development was addressed individually and the key points relating to these are outlined below. There were also a number of general points that were raised following the site visits which are summarised here. These comments should be considered alongside those made in previous reports.

The more comprehensive package of information including an overall plan of where each element of development is to be located was welcomed.

The importance of a sound approach to landscape design was emphasised given the context within which these developments will be placed. For many of the sites, particularly the temporary developments, the landscape is the most important element and the design of the building is secondary.

It is clear from the tour around Anglesey that there are no strong local precedents for the scale of buildings proposed. Therefore each of the buildings must respond to the local conditions of the site and, typically, be addressed in design terms as new ‘alien’ buildings within the landscape. As such care should be taken as to their quality as they will set new precedent. Precedents from further afield may be useful in the design process. The nature of the ‘temporary’ worker accommodation presents an interesting design challenge and one that should be addressed with creativity and ingenuity. Given the 8-10 year lifespan of some of the worker accommodation, the significance of the visual impact of the developments should be considered differently to something permanent.

It was noted that the period of peak worker accommodation could be between two to four years which also poses a design challenge in the type or construction of the buildings. Consideration should be given to accommodation that could be re-used or readily recycled, as well as responding to the landscape.

Each of the sites visited are separate and have little visual or functional connection and, therefore, should each be considered on their own merits and within their own context rather than necessarily being related to one another as a family of buildings.

The starting point for DCFW is that the design should be focused on creating something that is attractive to experience and encounter visually and physically, rather than reliance upon screening and mitigation. Poor buildings or structures should not be accepted because it may be possible to ‘hide’ them. Some ‘mitigation’ may be appropriate but this should not be a starting point. This represents the critical design challenge of how to build large buildings in a landscape.

The nature of the landscape is one of collage with a series of layers including:

- the topography of the drumlins and the indented coast;
- the industrial legacy which has resulted in a series of man-made objects in the landscape;
- agricultural patterns of a post-enclosure nature that may change in the future; and
- the architecture of settlements and dispersed structures.
Each of these elements need to be understood and presented as part of the analysis process. Some elements may provide inspiration for form, materials and landscape response.

For each of the proposed developments it is necessary to be able to demonstrate why they are as proposed. What has been the driving force behind the design, and how have analyses of what is there now, a vision for the development, and an overall strategy, influenced the proposals.

Further analysis is needed of the nature of the AONB to identify what is important about it, what is to be prioritised and how the proposals respond to it. Key viewpoints should be identified and agreed on for each of the developments, and these should be used as a tool to inform the design.

The sketch drawings that were presented at the review are helpful at this design stage and should continue to be used to explore options. Reviewing the existing situation against the proposed in this way can be particularly helpful and can be used to show how the design approach has progressed.

Whist not explored in detail at this review, the need for the designs to relate to a social sustainability plan which manages impacts on the existing community was discussed. The studies being undertaken now should form part of the design briefs and influence decisions about the location and nature of developments, particularly the worker accommodation.

Accommodation that becomes permanent housing after the construction phase is the most positive approach if it is in the right location. This form of development should be treated like any other application for residential development.

Consideration should be given to a hierarchy of importance across all of the buildings to identify where investment should be focused. Those to be prioritised are likely to be the buildings that will be there for the longest time rather than the temporary buildings.

**On-site temporary worker accommodation – Wylfa Head**

The reduction in the amount of parking on site since the last review is positive as it will help to reduce the visual impact and provide more land to accommodate the required accommodation within a landscape setting.

A starting point for the design of this site should be what it will be like after the site is restored. Designing the landscape for 15 years hence could help to identify elements that can be incorporated into the proposed development at an early stage to reduce later changes and provide opportunities for planting to mature. For example if certain vegetation or landform lines are to be restored or heathland created this could be built into the landscape approach and the buildings worked around it.

The exact nature of the proposed restored state needs to be fully understood. An option for it to become part of the nature reserve was mentioned and could be a positive step. Whatever the end state is, it is unlikely that it would have straight lines of trees so it would be inappropriate to introduce trees in this pattern for the course of the temporary accommodation.
The natural pattern of the landscape as seen in the surrounding area from the coastline inwards will provide good clues as to the nature and form of the landscape for this site. Alongside the need to provide good accommodation, it is the landscape that will be there for the long term and this is considered to be of most importance on this site.

A number of constraints were outlined including the required number of units and emergency access around the whole site. Whilst these requirements need to be accommodated, an overall design vision should be driving the proposals.

Currently the proposed form and scale of the buildings for this site are unconvincing. Other options were not presented and a clear rationale is lacking. Whilst we understand the idea of the curved form is one which responds to the contours, we are not convinced by the analysis of the site in demonstrating that such a shape is an appropriate response. The modular requirements of development of this nature would suggest that a rectangular form could be more efficient and economical. The approach of having fewer large buildings on the site seems to be creating problems and an exploration of alternatives should be undertaken. Smaller buildings may be more effective, for example, in visually breaking up the elevations than the current proposals of varying the building face, which again would result in a more expensive building.

The fenestration of the proposed buildings will be important particularly for long views when it is dark and light will be shining through the windows. Short and distant views should be considered in this context.

For a temporary development of this nature consideration should be given to the embodied energy as well as operational energy requirements. Options for reuse or recycling of materials and components at the end of the lifespan of the buildings should be a key design driver.

**Simulator and training building**

There is no local precedent for a building of this scale and nature so it needs to be a beautiful object in the landscape and needs to be very well executed.

The proposed earth mounding will screen some of the building but it will be visible from the highway and certain key view points. The design of the permanent landform needs to run in parallel to the design of the building so that the two design elements can be considered together.

Careful consideration is therefore needed as to what will be seen. Currently the parking to the front of the building will be prominent and unsightly. The possibility of moving the building forward and relocating the parking to a position out of the view from the road should be explored. This would make the building more visible but could offer a more positive and better controlled view from the highway.

A physical model would help the design team to understand the relationship between the building and the proposed landform and the glimpses of the building that will be caught from different locations.

The external form of the proposed building does not reflect the internal plan which is more interesting than currently expressed. Expressing the four large internal spaces in a simple form with more attention given to the more active elements could be an option to
explore. The more active elements may also be better located to the south side of the building which is more visible. Consideration should also be given to how the entrance is expressed so that it is clear and legible.

Simplification of some of the edges of the building and organisation of the supporting plant elements would help to improve the appearance.

The proposed colour and materials palette is appropriate with grey providing a striking contrast with the surrounding landscape. Care should be taken to ensure that dark grey is not over used particularly as the assessment shows a range of warmer tones which would respond to the existing stone and landscape. Security fencing and boundary requirements need to be fully considered in the overall plan for the site.

Further analysis of the impact of the building on key viewpoints including from Tregele needs to be fully worked through.

AECC

The modern purity of the building seems to be heading in the right direction but there are a number of aspects that require further consideration in order to build on the design intent for the building including the following:

- Whether the plant could go into the roof void to help tidy up the space around the building.
- Whether the roof could be continued over what is currently shown as a cut away into one of the corners. This would help to simplify the building and its roof form.
- Similarly, whether the low level condenser units could be collected and recessed or relocated.

An energy strategy for the building should address how to reduce energy requirements for the minimal use of the building. Two strategies may be required to accommodate the different elements of the building. Rapid switching from out of use to in use is likely to be a key design driver.

Material choice is important visually but also to reduce maintenance requirements and withstand the conditions of the site. A simple, restrained palette but with budget allocated to higher quality materials may be most appropriate.

The proposals for the external space are currently dominated by the requirements for a turning circle for a bin lorry. This should be played down much more so that the space becomes more understated, simple and flexible, and with the use of less ‘formal’ materials. The different uses within the space do not necessarily have to be physically defined and there may be more sophisticated ways to accommodate essential requirements that should be identified and tested.

There are opportunities to incorporate some of the small scale features of the surrounding landscape into the external space such as the small exposed rock faces and scrub vegetation.

The landscape design for the site should be properly considered and presented alongside the landscape proposals for the road as the two will need to work together.

Park and Ride
A clear decision needs to be made as to what happens to the site after the construction phase and appropriate agreements put in place so that concerns about the long term use of the site can be dealt with.

Further thought needs to be given to the layout of the site from a pedestrian perspective. Pedestrian movement from where a car is parked, particularly if it is on the far side of the site, to the point of getting on the bus should be safe, comfortable and as direct as possible. Currently the focus of the plan is directed too much towards vehicle movement rather than pedestrians.

Paving selection should consider permeability and respond to the differing requirements of long (1-2 weeks) and short (1 day) stay parking.

Early consideration of hedgerow management should enable hedges to be in place and maturing at an early stage. A plan showing the landscape phasing over the course of the lifetime of the park and ride and beyond should be prepared. Planting rather than fencing is preferable for boundary treatments. As noted above for the on-site temporary worker accommodation at Wylfa Head, a starting point for the design should be the restored landscape. Again, starting with the desired outcome of the fully restored landscape 15 years after the start of construction would be a useful approach.

Future use of the building or its material components should be considered in the design process. A standard prefabricated system building, with a surrounding screen wall, may be suitable for the site if it can then be used somewhere else. Options for incorporating the sub-station and generator within the building form should be explored.

A lighting strategy should respond to the different use requirements of different sections of the site with areas not lit when not in use.

Topsoil management and restoration need to be planned and should respond to the phasing.

**Rhosgoch off-site temporary worker accommodation**

Initial consultation with NRW has suggested an advisory limitation on works within a 250m zone of the ponds which would render a large portion of the brownfield site unusable. This section of the site would appear to be the most logical for development and therefore the exact limitations need to be fully understood. The ecological impact of the greenfield option should also be included in the evaluation of which part of the site is best for development.

A thorough analysis of this unique landscape is required to understand and prioritise what should be retained and how it might be adapted. Retaining some of the key elements that reflect the history of the site such as the mounds and steps will help to give the development identity. This analysis should provide cues for the form and character of any future development on the site.

A creative approach could be applied to the form of development for this site given its temporary nature. More options need to be explored that test different distributions of floor space which respond to the geometry of the site, the former tank locations and areas of existing planting. A more literal expression of the geometry of the site could produce some very interesting proposals.
The location appears to be relatively isolated but long distance views and the impact of projecting above the ridgeline need to be explored and understood. The need for six storey development in this location is questionable given the amount of space available. A clear rationale and understanding of the impact of development of this scale would be needed and the significance of the architecture increases as the scale does.

A movement strategy for the site would help to set out what areas will be available for workers for amenity use and what would be open to the general public for walking etc.

A landscape strategy that recognises the rural and wild nature of the site as well as the need to help create shelter should be developed alongside the proposals for built form. Each space created within the development should be tested to assess what it will be used for, whether it will be a comfortable space in terms of wind and sun, how people will access it, and whether there are desire lines through it.

The brownfield and currently derelict nature of the former industrial part of this site presents a compelling argument for the proposed temporary use and could be presented as part of a narrative of the site. If the former tank bases are used, this development has the potential to be an exemplar of temporary development in a post-industrial landscape if the short, medium and long term proposals are well considered and well designed.

Every effort should be made to ensure this very significant intervention responds to the equally significant design and quality opportunities presented by the site and the nature of the locations.

Amlwch temporary worker accommodation and MEEG

Time did not allow for review of these developments and we would welcome the opportunity to address them at the next session.
## Attendees

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<th>Horizon:</th>
<th>Trystan Mabbitt</th>
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