

**Application Ref: NP/20/0026/FUL**

<b>Case Officer</b>	Kate Attrill		
<b>Applicant Agent</b>	Mr J Hamilton		
<b>Proposal</b>	One Planet Development for a single dwelling, the reconstruction and extension of one existing barn, alterations to another existing building and a temporary caravan in the form of a shepherds hut.		
<b>Site Location</b>	Land at Jason Road, Freshwater East		
<b>Grid Ref</b>	SS03569879		
<b>Date Valid</b>	21-Jan-2020	<b>Target Date</b>	21-Apr-2021

This application is being brought to Committee as the site area is over a hectare and the application is a 'Major' with concerns expressed from the Community Council.

**Consultee Response**

**Lamphey Community Council:** Concern – and raised the following comments:-

*The applicant consulted Lamphey Community Council at pre-application stage and attended one of our meetings to explain his proposal and answer any questions.*

*Now that we have evaluated the proposal, we have the following concerns:*

- Although the top part of the field is dry, the lower part of the field is on boggy clay land. It is not good quality fertile well drained land. Taking this into account we have significant reservations that a person could live self-sufficiently on this site*
- We also fear that this may be a back door method to gain residential permission on this site. For example, if the applicant should sell the land onto someone else in the future who is less committed to One Planet or if the applicant changes his mind about running it on a self-sufficient basis. If planning permission is granted we would ask that sufficient conditions are put in place to prevent this from happening.*
- We were puzzled to read on the application form that all immediate neighbours had been consulted at pre-application stage. Neither of the 2 immediate neighbours have been consulted.*

**Dwr Cymru Welsh Water:** No objection

**Natural Resources Wales:** No objection

**PCC - Transportation & Environment:** Conditional Consent

**PCNPA Planning Ecologist:** No adverse comments

**Public Response**

The Town and Country Planning (Development Management Procedure) (Wales) Order 2012 requires that proposed developments are advertised by way of either neighbour letters or a site notice. In this case, a site notice was displayed from the 6th March 2020.

As the site is classed as 'major' due to the size being over a hectare, the applicant has undertaken a public consultation (PACS) and produced a report of that process and a summary of responses as part of this application.

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A number of letters of support were received, whilst one objection detailed concerns over a number of issues, such as traffic and safety, it being a 'pretence' for a residential development in the open countryside, and the risk that it may attract 'hippies'.

The majority of reasons for objection would be controlled through both a legal agreement and conditions of planning to ensure that if the OPD development proposals were unsuccessful, the dwelling would be removed from the site whilst the existing agricultural use could continue.

A further supporting statement was submitted by the applicant to address the concerns on the 26th April which fully addressed the concerns above, and explained the measures which had been taken to contact adjoining landowners.

### **Policies considered**

Please note that these policies can be viewed on the Policies page Pembrokeshire Coast National Park website -

<http://www.pembrokeshirecoast.org.uk/default.asp?PID=549>

LDP2 Policy 01 - National Park Purposes and Duty

LDP2 Policy 07 - Countryside

LDP2 Policy 08 - Special Qualities

LDP2 Policy 09 - Light Pollution

LDP2 Policy 11 - Nationally Protected Sites and Species

LDP2 Policy 13 - Welsh Language

LDP2 Policy 15 - Open Space

LDP2 Policy 29 - Sustainable Design

LDP2 Policy 30 - Amenity

LDP2 Policy 31 - Minimising Waste

LDP2 Policy 47 - Housing Allocations orl and with Planning Permission

LDP2 Policy 52 - Housing Mix

LDP2 Policy 53 - Gypsy Traveller & Showpeople Sites

PPW10

SPG02 - Low Impact Development making a positive contribution

SPG04 - Planning Obligations

SPG05 - Sustainable Design

SPG06 - Landscape

TAN 06 - Planning for Sustainable Rural Communities

TAN 12 - Design

### **Constraints**

LDP Mineral Safeguard

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Historic Landscape  
Potential for surface water flooding  
Recreation Character Areas  
Affordable Housing Submarkets

### **Officer's Appraisal**

#### **Site and Context**

The site for this proposed OPD lies adjacent to the area known as Holly Lake, to the north of Jason Road, which runs between the Jameston to Hodgaston stretch of the A4139 and the village of Freshwater East, near to Manorbier and roughly equidistant between the towns of Tenby and Pembroke in South Pembrokeshire. The site is approximately half a mile from the coast and within the bounds of the Pembrokeshire Coast National Park.

The total area of the site is in the region of 5.1 acres, it is roughly rectangular with its longer axis running very approximately north east to south west and is made up of two larger fields of in the region of two acres each, divided by a smaller enclosure of approximately one acre. Just inside the northern boundary of the site, and extending approximately half way up the western boundary of the northern field is a strip of semimature woodland made up primarily of alder, ash, sycamore, poplar and some spruce, the boundary itself follows closely the line of a small watercourse running east to west.

#### **Relevant Planning History**

NP/99/0419 Agricultural building for sheep, implements & pony

PA/19/0061 Pre-application advice sought as to principle for OPD

#### **Description of Proposal**

There are three pre-existing buildings on the site: a 20metre long poly-tunnel, a barn (also described as a cider shed, bike shed and store) measuring 10.5m x 7m, and a tool shed measuring 10m x 4m. There is also an existing pump house which is also proposed to be replaced as part of this application.

The tool shed, is in the process of being moved and rebuilt under a separate earlier planning permission.

The polytunnel is proposed to be removed and replaced with two smaller 10x2 polytunnels in approximately the same location.

A single one-bedroom dwelling is proposed with a pitched roof which measures 18 metres long by 7.5 metres wide to a ridge height of 7 metres with a band of solar panels on the southern roof slope. A proposal for a wind turbine has been removed from the application.

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Amended scaled site plans, block plans and elevations plans were received on the 26th April 2020, whilst an updated Management Plan was received on the 14th May 2020.

### **Key Issues**

The application raises the following planning matters:

- Policy and Principle of Development
- Siting, Design and Impact upon the Special Qualities of the National Park
- Access and Parking
- Biodiversity
- One Planet Development Practice Guidance

### **National Policy:**

PPW (edition 11, February 2021) defines One Planet Development (OPD) as that which through its low impact either enhances or does not significantly diminish environmental quality. OPD may take a number of forms and can either be single homes, co-operative communities or larger settlements. They may be located within or adjacent to existing settlements or be situated in the open countryside. PPW requires that OPD located in the open countryside should provide for the minimum needs of the inhabitants in terms of income, food, energy and waste assimilation over a period of no more than five years from the commencement of work.

The essential characteristics of OPD from PPW are that development must have a light touch on the environment, be land-based, have a low ecological footprint, have very low carbon buildings, evidenced by carbon analysis, and shall be the sole residence for the proposed occupants. This is to be evidenced by a clearly understood Management Plan produced by a competent person(s), setting out the objectives of the proposal, the timetable for the development of the site and the timescale for review.

### **Local Policy:**

The site lies within the open countryside away from any development boundaries defined by the Local Development Plan. The strategic policy for this development is Policy 7.

Policy 7 (f) references One Planet Development proposals, and the supporting text below at 4.45 highlights that national planning guidance refers to buildings needing 'to be of a form, bulk and general design which are in keeping with their surroundings'..

One key policy consideration to take into account is that the policies of the National Park do still apply to One Planet Development Proposals.

The Local Development Policies need to be balanced against the One Planet Development guidance, which requires that developments are zero-carbon in

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construction and operation (with the exception of buildings which do not require Building Control).

Technical Advice Note 6 (2010) contains the first reference to One Planet Development, and this is expanded on in the Practice Guidance which was issued in 2012.

### Siting, Design and Impact upon the Special Qualities of the National Park

Policy 8 of the Pembrokeshire Coast National Park Local Development Plan (LDP) is a strategy policy which refers to the special qualities of the National Park and lists priorities to ensure that these qualities will be protected and enhanced.

Policy 15 of the LDP seeks the conservation of the Pembrokeshire Coast National Park with criteria (a) and (b) resisting development that would cause significant visual intrusion and/or, that would be insensitively and unsympathetically sited within the landscape. Criteria (d) and (e) resists development that would fail to harmonise with or enhance the landform and landscape character of the National Park and/or fails to incorporate important traditional features.

Policy 29 of the LDP requires all development proposals to be well designed in terms of place and local distinctiveness (criterion (a)).

In terms of the OPD guidance, paragraph 1.22 states that:  
Sites of high ecological or landscape sensitivity may not be suitable as OPD activities could have unacceptable negative impacts unless these sensitivities are carefully conserved and enhanced.

Paragraph 3.7 refers to the need to carefully assess how the site will be viewed from public vantage points.

3.37 One Planet Developments in the open countryside should have the objective of conserving, managing and, wherever possible, enhancing environmental quality. The starting point will be what is already present on the site (paras 3.3 – 3.8). One Planet Developments should conserve and enhance the site's biodiversity, cultural heritage and landscape, also potentially bringing benefits to the wider landscape. It will be particularly important to conserve designated sites and features and, in the case of biodiversity, habitats and features identified in the Local Biodiversity Action Plan.

3.42 In considering the addition of new features it will be important to take account of views to and from the site, helping blend the site into its surroundings and using a natural vernacular characteristic of its surroundings. This will help strengthen local landscape character rather than take away from it.

3.43 Choosing the right site for buildings (including polytunnels) and tracks and other access arrangements) will be an important aspect in assisting landscape 'fit'. Locations for buildings and access should be chosen where they will not be obtrusive in views from outside the site. Suitable locations will be those that are part screened by the lie of the land and /or existing tree and hedgerow cover or new

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planting. There will also be benefit in providing additional tree and hedgerow planting that further help filter views into the site, especially of built structures and areas of horticulture. These can often combine with shelter belts that can improve the micro-climate around dwellings and offer shelter to cropped areas.

3.47 Landscape: One Planet Development in the open countryside should have a positive impact on the surrounding landscape. This, to a significant extent, should be 'built into' One Planet Development, as traditional land use activities and habitat management were what created historic landscapes in the first place. Thus, OPD can either reinforce or recreate valued traditional landscape features such as hedges, orchards, woodlands, copses and meadows. One Planet Development is generally small scale, and so should not have a major landscape impact.

Nevertheless, it is important to ensure that:

- (a) features created (such as hedgerows, hedgebanks and walls) reflect the traditional characteristics of the local landscape.
- (b) dwellings and other structures including access tracks are located where they can be recessed into the landscape as part of the wider design for the site, such that they do not stand out in views from public vantage points; and
- (c) new features created under (a) above, provide additional screening (using native species) where this will help the overall development blend into the wider landscape.

3.51 Buildings and other structures and access tracks are located where they can be recessed into the landscape and do not stand out in views from public vantage points.

The One Planet Practice Guidance states at 3.4:

Landscape: One Planet Development in the open countryside should have a positive impact on the surrounding landscape. This, to a significant extent, should be 'built into' One Planet Development, as traditional land use activities and habitat management were what created historic landscapes in the first place. Thus, OPD can either reinforce or recreate valued traditional landscape features such as hedges, orchards, woodlands, copses and meadows. One Planet Development is generally small scale, and so should not have a major landscape impact.

Nevertheless it is important to ensure that: (a) features created (such as hedgerows, hedgebanks and walls) reflect the traditional characteristics of the local landscape; (b) dwellings and other structures including access tracks are located where they can be recessed into the landscape as part of the wider design for the site, such that they do not stand out in views from public vantage points; and (c) new features created under (a) above, provide additional screening (using native species) where this will help the overall development blend into the wider landscape.

Following a 'virtual' site visit undertaken during the first lockdown, a subsequent physical site visit, and the submission of a Landscape and Visual Impact Assessment document the concerns as to the potential for the proposals landscape impact are considered to have been adequately addressed.

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The site of the dwelling is well screened in regard to the wider landscape, whilst the pre-existing agricultural buildings already form part of the established setting. The Special Qualities of the National Park are not considered to be harmed as a result of this proposal.

### **Access and Parking:**

The Highways Department of PCC has been consulted in respect to any potential impact from a highways point of view. Their comments read as follows:

Although the proposal is on a road where there are advisory signs stating that it is “Not suitable for Motors”, there is no restriction on accessing the fields or property along the road for normal permitted uses. The site will be at the eastern end of this 1.7 kilometre length of the Unclassified Road (U6340), after it leaves the built-up part of Freshwater East, with access within 500 metres of the junction with the A4319 (half way between Hodgeston and Jameston). This is important, but the proposed One Planet Development will also be a low traffic generator.

It appears that minor improvements have resulted due to the already increased use of the field access. These include the maintenance of overgrowth on the face of the hedgebank just to the west of the access to give improved visibility. The PACS report/response states that this maintenance will continue. The low speed of passing traffic, and the extremely low traffic use, does not lead to a requirement for more to be done, but I am including a condition about setting the gate back. The parking/turning area is taken to be at the “Tool Shed” at the top of the track close to the proposed dwelling.

Subject to the imposition of conditions relating to the access gates and parking and turning, the Highways Authority have no objection to the proposal.

### **Biodiversity:**

Policy 11 of the Local Development Plan (1) requires that any development which may disturb, or harm protected species will only be allowed where the effects will be acceptable minimised or mitigated through careful design, work scheduling or other measures.

To comply with Planning Policy Wales (2018), section 6, Technical Advice Note (TAN) 5 and Technical Advice Note (TAN) 10, Planning authorities should protect trees, hedgerows, groups of trees and areas of woodland where they have ecological value, contribute to the character or amenity of a particular locality, or perform a beneficial and identified green infrastructure function.

The County Ecologist has in her consultation response: ‘I have reviewed the following documents submitted in support of this application:

- Wildlife tower
- Site Plan
- Preliminary Ecological Appraisal by Matt Sutton dated 14th June 2019
- Management Plan

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I am satisfied with the level of assessment made and the recommendations contained in the aforementioned documents. The management of the site in line with the recommendations made within the report by Matt Sutton will result in overall biodiversity gain and enhancement.

Therefore, provided works are undertaken in accordance with these documents, I have no adverse comments to make.

### **One Planet Development**

Paragraph 4.16 of TAN states that: all applications must be supported by robust evidence. The content of management plans is specified: to include a business and improvement plan to identify whether there is a need to live on the site and establish the level of the inhabitants' requirements in terms of income, food, energy and waste assimilation that can be obtained directly from the site. An ecological footprint analysis, zero carbon analysis, a biodiversity and landscape assessment, community impact assessment and a transport assessment and travel plan must also be provided.

The Pembrokeshire Coast National Park Authority (PCNPA) has commissioned an independent assessment of the extent to which the revised Management Plan and Ecological Footprint Analysis submitted in support of Planning Application NP/20/0026 for One Planet Development (OPD) on land at Jason Road, Freshwater East, Pembrokeshire Coast National Park meet the tests (other than biodiversity and landscape) set out in Welsh Government policy and guidance relating to One Planet Development.

This advice is copied in an appendix to this report. The sections independently assessed include:

- The Management Plan
- Scope and Content
- Business and Improvement Plan
- Land Based Activity
- Land Management
- Energy and Water
- Waste
- Zero Carbon Buildings
- Community Impact Assessment
- Transport Assessment and Travel Plan
- Ecological Footprint Analysis
- Phasing Monitoring and Exit Strategy
- Essential Characteristics

The adviser's conclusions are as follows: 'on the basis of my assessment of the revised submission, my advice is that, in respect of those elements that I have been commissioned to assess, the proposal meets the qualifying criteria. However, the Authority will need to add its own assessment of the Land Management element of



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the revised Management Plan and then come to its own view, as the local planning authority, on the proposal as a whole.

In broad terms, the OPD Guidance advises that if a proposal satisfies the requirements of policy and clearly meets the qualifying criteria set out in the Guidance it should be allowed. However, the Guidance also points out that OPD in the open countryside is a relatively complex form of development and determination will frequently be a matter of some debate. The Guidance also points out that in order to make their decision the local planning authority will take into account national policy (set out in Planning Policy Wales and TAN 6), local policy (set out in the local [planning] authority development plan), the OPD Guidance, consultation responses and the specific nature of the proposals'.

### **Conclusion**

The applicant has evidenced that sufficient produce can be generated from the land to meet the requirements of OPD development, whilst the siting and design of the proposed dwelling are not considered to harm the special qualities of the National Park.

The Land Management proposals, and the biodiversity enhancements are considered sufficient to support the proposal.

The applicant has also produced a draft S106 agreement, but it has not been submitted in a final form, or subject to legal evaluation.

Should Committee be minded to support this application, delegated powers subject to the receipt of the final legal agreement within a 3 month period would be requested.

### **Recommendation**

Delegate approval to the Head of park Direction subject to negotiation and receipt of a suitably worded section 106 agreements and to the following conditions:

1. The development shall be carried out in accordance with the following approved plans and documents:

Management Plan received 17/03/2021

Proposed Site Plan received 22/02/2021

Outdoor toilet elevations received 22/02/2020

Polytunnel Proposed received 26/04/2020

Pumphouse elevations received 26/04/2020

Shepherds Hut elevations 27/05/2020

Temporary Accommodation 26/04/2020

Barn elevations received 26/04/2020

Dwelling Elevations received 26/04/2020

Dwelling floorplans received 26/04/2020

**Reason:** In order to be clear on the approved scheme of development in the interests of protecting visual amenity and the special qualities of the National Park. Policy: Local Development Plan – Policies 1 (National Park Purposes and Duty), 8 (Special Qualities), 15 (Conservation of the Pembrokeshire Coast National Park) and 29 (Sustainable Design).

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2. The occupation of the dwelling hereby approved in connection with the One Planet Development shall be limited to resident(s) solely working on the land in accordance with the provisions of the Management Plan and any resident dependents. The dwelling shall be occupied as the sole residence of the resident(s).

**Reason:** To ensure that the occupation of the dwelling conforms to the principle of One Planet Development and the agreed Management Plan as part of the One Planet Development. Policy: TAN 6 - Planning for a Sustainable Rural Community and Local Development Plan Policy 47 - Low Impact Development.

3. The use of the site shall be carried out in accordance with the management objectives set out in the Management Plan received 17/03/2021.

**Reason:** To ensure that only the agreed scheme is implemented and complied with as part of the One Planet Development. Policy: Local Development Plan - Policy 47 (Low Impact Development Making a Positive Contribution).

4. No later than on the 2nd January each year, commencing in the first year after development has been approved, the occupiers of the site shall submit to the local planning authority a written report giving details of the activities carried out during the previous twelve months, setting out performance against the management objectives included within the Management Plan and as set out in the Phasing, Monitoring and Exit Strategy and as required by the Welsh Government Practice Guidance One Planet Development (October 2012).

Details specifically relating to the energy drawn or fed into the grid shall also be submitted as part of the monitoring. In the event that the report identifies that any objective has not been met, a supplementary report setting out corrective or mitigating measures together with a timetable for achieving the objective or target shall be submitted to the local planning authority no later than the 21st April of that year. Those measures shall be implemented in accordance with the supplementary report.

In the event that any revised objective or target is not achieved within the agreed timeframe within the supplementary report, or if the One Planet Development otherwise fails to meet the requirements of the conditions of this planning permission, the Exit Strategy set out in the Management Plan shall be invoked, the residential use of the land shall cease and the dwellinghouse and other domestic structures removed from the land.

**Reason:** To ensure that the site is being managed in accordance with the approved plan. Policy: Local Development Plan - Policy 47 (Low Impact Development Making a Positive Contribution).

5. Prior to the erection of any external lighting, a light mitigation strategy, including measures to reduce light spillage onto foraging habitats for protected species, shall be submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the approved details.

**Reason:** To ensure that animal and plant species and habitats listed under the Conservation of Habitats and Species Regulations 2010 are adequately protected, and to protect and enhance the character and appearance of the site and its setting within the Pembrokeshire Coast National Park. Policy: Local Development Plan – Policies 1 (National Park Purposes and Duty), 8 (Special Qualities), 9 (Light

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Pollution), 11 (Protection of Biodiversity) and 15 (Conservation of the Pembrokeshire Coast National Park).

6. Notwithstanding the provisions of Article 3 of The Town and Country Planning (General Permitted Development) Order 1995, (relating to extensions to, and changes to the external appearance of, the cabin and to development or the siting of a caravan within the curtilage of the cabin), no development of Parts I, 6, 40 and 43 of Schedule 2 to that Order (or any Order revoking or re-enacting that Order) shall be carried out without specific planning permission being obtained.

**Reason:** To preserve the character of the area. Local Development Plan - Policy 1 - National Park Purposes and Duty, 8 - Special Qualities, 15 - Conservation of the Pembrokeshire Coast National Park and 30 - Amenity.

7. All produce to be sold or bartered as part of the approved One Planet Development is to be sourced from the land subject of this application, and from no other source.

**Reason:** To ensure that only the agreed scheme is implemented and complied with as part of the One Planet Development. Policy: Local Development Plan - Policy 47 (Low Impact Development Making a Positive Contribution).

8. The development must proceed in strict accordance with the ecological recommendations contained within section 5.2 of the submitted reptile report dated August 2019.

**Reason:** To comply with the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017 and the Environment (Wales) Act 2016.

9. The temporary static caravan and shepherds hut shall be removed from the site within 3 months of the occupation of the dwelling shown on the site plan (dated 22/02/2021) and elevations (received 26/04/2020).

**Reason:** In accordance with the principles of One Planet Development and Policies 1, 8, 14 & 29 of the Pembrokeshire Coast National Park Local Development Plan to protect the special qualities of the National Park.

**Annex to NP//20/0026/FUL - Advice from the National Park Authority's specialist advisor.**

**Assessment of Planning Application NP/20/0026 for the Pembrokeshire Coast National Park Authority in respect of proposed One Planet Development on land at Jason Road, Freshwater East, Pembrokeshire Coast National Park**

1.1. Current Welsh Government policy relating to One Planet Development (OPD) is set out in paragraphs 4.2.38 and 4.2.39 of PPW 11 dated February 2021. OPD is defined as “development that through its low impact either enhances or does not significantly diminish environmental quality”.

1.2. This application is for OPD in the open countryside and PPW 11 specifies that, in such cases, OPD located in the open countryside should provide for the minimum needs of the inhabitants in terms of income, food, energy and waste assimilation over a period of no more than five years from the commencement of work on the site. This should be evidenced by a Management Plan produced by a competent person(s). I comment on these points of policy later in this assessment of the Management Plan

1.3. Where this cannot be demonstrated, proposals should be considered against policies which seek to control development in the open countryside. This is outside the scope of this assessment and would be a matter for the local planning authority to determine where these circumstances arise.

1.4. Finally, PPW 11 states that planning authorities should follow the guidance in TAN 6 with regard to the requirements of OPD and associated Management Plans.

**TAN 6**

1.5. Current Welsh Government Technical Advice relating to OPD is set out in paragraphs 4.15.1 – 4.23.2 of TAN 6. Together, the provisions of PPW 11 and TAN 6 set out national planning policy for OPD.

1.6. TAN 6 specifies that OPD should initially achieve an ecological footprint of 2.4 global hectares per person or less in terms of consumption and demonstrate clear potential to move towards 1.88 global hectare target over time [N.B. 1.88 global hectares per person was the global average availability of resources in 2003 and an objective of the Sustainable Development Scheme “One Wales: One Planet” was that Wales’ ecological footprint be reduced to this level within the lifetime of a generation]. I comment on this further when considering the submitted Ecological Footprint Analysis (EFA).

1.7. TAN 6 also states that where OPD involves members of more than one family the proposal should be managed and controlled by a trust, co-operative or other similar mechanism in which the occupiers have an interest. As this proposal is for a single person household this requirement does not apply.

1.8. TAN 6 also repeats policy already set out above in PPW 11 relating to minimum needs and development in the open countryside.

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1.9. TAN 6 also sets out more detail in respect of Management Plans and their content and I include these provisions in the respective sections of my advice in sections 4 – 6 of this assessment.

### **TAN 6 OPD Practice Guidance (October 2012) and TAN 6 Practice Guidance Using the OPD Ecological Footprint Calculator**

1.10. The Technical Advice Note TAN 6 was supplemented by two Practice Guidance Notes published in October 2012. The OPD Practice Guidance Note addresses OPD in rural locations outside existing settlements so is of direct relevance to this application. It covers all the requirements for a planning application for OPD and provides practical support for applicants putting together proposals for OPD and for planning authorities assessing them. I comment on the relevant parts of these Guidance Notes in the following assessment.

## **2. CONTENT OF ADVICE**

This advice covers the requirements of PPW 11, TAN 6 and the Practice Guidance Notes relating to OPD with the exception of assessment of the Land Management component which it is agreed will be undertaken by the PCNPA using their specialist expertise and resources available to them.

The advice is structured as follows:

- The Management Plan
  - Scope and Content
  - Business and Improvement Plan
  - Land Based Activity
  - Land Management
  - Energy and Water
  - Waste
  - Zero Carbon Buildings
  - Community Impact Assessment
  - Transport Assessment and Travel Plan
- Ecological Footprint Analysis
- Phasing Monitoring and Exit Strategy
- Essential Characteristics
- Conclusions
- Appendix: Legal Agreement and Planning Conditions
- 

## **3. ADVICE:**

### **3.1. The Management Plan**

4.1.1 TAN 6 states that planning applications for land based OPD in the open countryside need to be supported by robust evidence. I comment on the adequacy and robustness of evidence in the examination of each element of the Management Plan and the Ecological Footprint Analysis (EFA) (sections 4.2 – 4.10, section 5 and section 6 following).

4.1.2 TAN 6 also states that the planning application must be accompanied by a Management Plan produced by a competent person(s). In this case, the

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Management Plan has been prepared by the applicant, who was born and educated locally, has a first degree in Physics (including some work on solar power generation) and further post graduate qualifications in classics and contemporary history. The applicant worked for a number of years researching and writing on environmental history and developed an interest in traditional patterns of land management, distribution, agriculture, relationships of different groups and individuals to plants and animals and to the natural and semi-natural environment more broadly.

4.1.3 The applicant explains that this work led to learning about OPD and to him considering moving back to the area to experiment in practice with a kind of small-scale, low-impact, agricultural conservation project which could contribute to the resurrection of an agricultural ideology in which land, nature and the environment are nurtured, improved, preserved and safeguarded.

4.1.4 The applicant's work experience included a year working for a natural and organic wine importer, including learning about organic production and traditional fermentation techniques. Since returning to the area in 2018, the applicant has planted an orchard of 64 heritage variety cider apple trees on the site. The applicant also began a test vegetable box project in 2018, using produce from market gardening on the site, and has operated and expanded this to the present. He has also assisted a school friend found a locally-based subscription wholefood nutrition bar service.

4.1.5 It seems to me then that the applicant has provided evidence of some relevant knowledge and experience in some of the type of activities proposed at the site, e.g. organic market gardening and supply, apple orcharding and fermentation and production techniques, as well as having developing knowledge of the low-impact, integrated OPD lifestyle.

### 4.2 Scope and Content

4.2.1 The structure of the Management Plan contains sections on each of the topics required by TAN 6 para 4.16.1. It begins with an introductory section, containing a Summary, Baseline and Design/Strategy as advised in the OPD Guidance.

4.2.2 In this case, the Summary provides a succinct and clear overview of what is proposed to be achieved by this OPD proposal.

4.2.3 Briefly, this is a sustainable, organic, mixed agricultural smallholding, self-sufficient in power, water and waste disposal and largely self-sufficient in food with a strong conservationist ethic. The main products are intended to be organic fruit and vegetables, cut flowers, honey and cider, sales of which are intended to meet the economic requirements of an OPD. The site is intended to be developed and maintained with the interests of local wildlife to the forefront and include a dedicated conservation area. Building siting and design, together with screen planting, are intended to soften the impact on the area.

4.2.4 The OPD Guidance indicates that all OPD proposals need to be set within a Baseline setting out the context of the site's location and current conditions. This is

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to provide a benchmark against which to judge whether the development benefits and enhances the land and biodiversity over time.

4.2.5 In this case, I consider the Baseline contains sufficient detail of the characteristics and use of the land, its boundaries, adjacent land uses, services and site access arrangements as required by the Guidance.

4.2.6 The Baseline also, in my view, provides sufficient further details of physical, biodiversity, cultural heritage, landscape, buildings and land use, Statutory Designations and transport as required by the OPD Guidance. The Baseline also draws on relevant data from official sources of information, including Landmap, Local Biodiversity Action Plan and CADW archaeology records, and is supplemented by Appendices which set out the Landmap data for the area including the proposed site, an ecological survey carried out by an ecological consultancy and a tree survey.

4.2.7 Finally, the introductory section of the Management Plan sets out the Design/Strategy showing how the proposed OPD is intended to operate, how the uses and activities on the site link and inter-relate, how the occupants (the applicant alone in this case) contribute to the development and management of the site and (in outline) how the site will be developed over time. N.B. as there is only one (single person) household the mechanism by which multiple occupying households work together is not applicable.

4.2.8 The guiding principle set out in this Management Plan is the maximization of benefit to wildlife and biodiversity while satisfying the requirements of OPD policy. The mixed agriculture, including market gardening, bee keeping and organic orcharding, will be developed in parallel to support the applicant's basic needs in terms of both subsistence and income, beginning almost entirely with market gardening with the balance shifting progressively towards cider and drink production over time as the orchard matures.

4.2.9 There is a clear emphasis on managing the land and designing and carrying out activities on the site to benefit the environment and biodiversity and to reduce the impacts on the land and the environment, e.g. through sustainable building design, construction techniques and material selection, power minimization, low impact operational methods and composting.

4.2.10 This section also explains that the applicant plans to develop and work the site alone with the help of some family expertise (building/joinery and horticulture) in the initial 5-year set up period of the project.

4.2.11 The Guidance advises that the Design/Strategy section of the Management Plan should include the outline programme for the development of the site. However, this has not been included here, although there is a very detailed description of the phasing of development and a phasing plan set out in a later section of the Management Plan (see paras 6.1.1 and 6.1.2). Consequently, I do not, therefore, regard the absence of an outline programme in this section as a deficiency and I am therefore satisfied that the Design/Strategy section sufficiently complies with the Guidance.

### 4.3 **Business and Improvement Plan:**

4.3.1 The Business and Improvement Plan is essentially the core of the overall Management Plan and comprises four elements as set out in the following four sections.

4.3.2 It sets out the integrated system by which people and the land will combine to make a reduction in environmental impact possible. It therefore provides the fundamental justification for the development.

4.3.3 It should describe how people living on the site are able to reduce their environmental impact by meeting their everyday needs from the site while at the same time enhancing the environmental capital of the site by their activities.

4.3.4 Thus, the Guidance states, there has to be a proven relationship between the two within a broader system for the management of the site as a whole.

### 4.4 **Land Based Activity**

4.4.1 TAN 6 requires firstly that land use activities on the site should be able to provide directly for the minimum needs of its occupants in no more than five years in terms of income and food and that the MP should quantify how these minimum needs can be met directly from the site. Secondly, that the need to live on site is justified and the number of occupants has a clear relationship to (a) the site's ability to sustain them, (b) the smooth running of the venture, and (c) the return that is gained. Finally, TAN 6 requires that the site should be the sole residence of the occupants.

4.4.2 The objectives for this component in the Guidance enlarge on these requirements, including the basis of the need to live on site, why the site should be the sole residence of the occupants and why the no of occupants should be directly related to the ability of the site to meet their minimum income and food needs.

4.4.3 The land-based activities, which can be in the form of produce grown and/or reared on the site (including processing) should generate a modest income that meets the minimum food and income needs. In this assessment, income cannot be included where it is derived from the site or elsewhere unrelated to land based activities and cannot include unearned income. Produce grown and reared must be the results of the labours of the occupants and not that of hired hands.

4.4.4 The essential criteria are that:

- i. Minimum food needs are met from produce grown and/or reared on the site or purchased with income derived from other products grown or reared on the site;
- ii. Basic domestic needs are met from income derived from produce grown and reared on the site (inc. processing and adding value) and other income streams derived from the productive and regenerative capacity of the site (such as from training and education courses or consultancy directly linked to land based activities on the site. These



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latter activities should be clearly subsidiary to the primary activity of growing and rearing produce;

- iii. The no of occupants is directly related to the ability of the site to support their minimum food and income needs and the no of people needed to run the site effectively;

### 4.4.5 Contributory criteria are that:

- i. The land-based enterprise provides food and other products to local markets, reducing local footprints;
- ii. Facilities for processing products are made available to other local producers;
- iii. Training/courses/consultancy are offered as components of the land-based enterprise to share best practice;

4.4.6 As far as meeting food needs is concerned, a detailed food plan is provided in an Appendix and a produce calendar is included detailing the wide range of vegetables, herbs, fruit and nuts intended to be produced on site over the course of the year and proposals are set out for extending the growing season (e.g by using a poly-tunnel or cold frames) and maintaining a basic diet through the leanest period of production by, for example, judicious crop selection, use of traditionally dried produce, root vegetables and tubers, a program of preservation (e.g pickling). Additional food supplies are to be provided from the site by honey from a small no of beehives, apples from the orchard and eggs from a small no of hens.

4.4.7 An existing orchard containing a variety of trees, predominantly fruit, has been supplemented, during 2018, by a larger orchard containing 64 standard cider apple trees on the land and improvements made to external beds and beds within the poly-tunnel. Some details are given of the food produced in 2018, 2019 and 2020 from the site and from this experience the applicant considers that, for personal consumption, with the addition of a moderate amount of shop bought produce, as indicated in the food plan, an adapted diet will be sufficient in terms of choice and nutritional value during the period of low fresh production.

4.4.8 The food plan in Appendix 10 supported by the information in this section of the Management Plan provide a sufficiently detailed quantification of the respective amounts of food needs to be met from produce grown and/or reared on the site or purchased with income derived from other products grown or reared on the site and to support the estimate that by Year 5 the produce grown on the site can meet around 80% of the applicant's food needs. The OPD target of 65% year-round self-sufficiency would therefore be satisfied.

4.4.9 Turning to the criterion relating to basic needs and income, the income-producing proposals are based on three main income streams - market gardening (fruit, vegetables and cut flowers), honey and cider production. The applicant does not intend to expand the market gardening, honey and cider businesses to their maximum potential but to reach a stable and steady point of equilibrium at which his modest needs for food and income are met.

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4.4.10 In the early years it is expected that the primary income will be from organic market gardening. This is proposed to be achieved by a combination of sales of 'vegetable boxes', preferentially to local customers, and produce sales at local markets and a local farm shop. The viability of the 'vegetable boxes' has been tested by small trial projects run and improved each year from 2018 and the estimated production area and season and the variety of produce and potential income generation and costs appear to me to be reasonably evidenced based on the experience and learning from the trials.

4.4.11 As far as honey is concerned, there are currently stated to be 2 beehives on the site and the intention is to build this up to 5 or 6 over time naturally, by catching swarms (as with the second of the existing hives). Estimated annual yields are based on a modest production level and income is based on an example of the retail price for a local honey. While no details are given in this section of how the applicant expects to sell his honey, the TATP later indicates that produce will be available for sale by arrangement, through the local market and farm shop or at the farm gate.

4.4.12 Expansion of produce to include a broad range of flowering plants to produce cut flowers for supply to local events and venues was started in 2020 and, although this business stream was interrupted by the Coronavirus pandemic, flower production and income has been demonstrated to be practicable. On the basis of this albeit limited experience, some level of confidence in the income and cost estimates is reasonable.

4.4.13 The final proposed income stream is the production of a traditional style of sparkling cider using the apples from the orchards on site, with further diversification in the longer term. The applicant expects that by Year 5 the cider apple orchard will have matured sufficiently to be producing on a significant scale and realizing around 900 litres of cider. As the orchard continues to mature in the longer term it is estimated that yields will continue to increase.

4.4.14 The income levels are based on the applicant's personal experience of the wholesale and retail trade for this type of product and a conservative estimate of profit margins. While, as with honey, no details are given in this section of how the applicant expects to sell his cider, the TATP later indicates that produce will be available for sale by arrangement, through the local market and farm shop or at the farm gate or at farm events.

4.4.15 The Management Plan states that the intention is not to expand the market gardening, honey and cider businesses to their maximum potential but to reach a stable and steady point of equilibrium at which the applicant's own modest needs in terms of food and income are met. It is expected that this will mean a steady expansion of the market gardening and honey businesses in years 1 to 4, followed by either stabilization or moderate contraction as the higher profit cider and other drinks business expands in line with the increased levels of production from the maturing orchard.

4.4.16 Other proposed activities are described which could potentially yield income but these have not been included in the income figures set out in Table 2. These activities are:

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- Fowl: It is proposed to keep a small number of chickens and other fowl to provide eggs for food, with any excess sold to local families or through the local Market or local Farm Shop;
- Shared Processing Facilities: It is proposed to run a community juicing project using the cider press and shed enabling local people to bring their own fruit to be pressed and bottled. This could yield some income but is hard to judge at this stage;
- Consultancy/Courses: Free consultancy and advice is proposed to be offered on OPD and day courses are proposed on organic orcharding and traditional cider production. While acknowledging that these could produce income, the applicant states that he does not intend courses to take a central place in the economy of the development and their primary purpose will be in aiding others to move towards more sustainable livelihoods through knowledge and skills sharing.

4.4.17 With respect therefore to the second of the essential criterion, I have based the following comments on my understanding of the data provided in tables on pages 29 and 30 of the revised Management Plan and I have suggested that clarification of table numbers and terms should be obtained from the applicant. My understanding is that the applicant provides, in Table 4 (p29), an estimate of the annual costs for those items of expenditure set out in the OPD Guidance, plus animal feed, amounting in total to £3,163. Potential annual income (i.e. profit from the produce grown, reared and processed on site) is set out in Table 2 (p29) of the Management Plan and is estimated to potentially be able to grow from an initial level of £2,114 in Year 1 to £10,794 in Year 5.

4.4.18 However, in line with intentions set out in para 4.4.15 above, the applicant provides an indication of how production and revenue streams could be managed to ensure that essential costs and commercial resilience are met whilst also achieving advantages for the habitat, environmental and wildlife resources of the site, customers and ecological footprints. While the exact details are uncertain at this point, a second Table 4 (p30) indicates, as I understand it, how income streams might actually be balanced in accordance with these principles.

4.4.19 Most confidence can be attached to activities where trials of supply have been carried out (fruit and vegetables and cut flowers) and these are demonstrated to be capable, on their own, of meeting the applicant's basic domestic needs as required by the second essential criterion. Consequently, I consider the second essential criteria is demonstrated to be met.

4.4.20 The final essential criterion relates to the number of occupants and the ability of the site to support their minimum income and food needs and the need to run the site effectively.

4.4.21 In this case, the proposal is for a single person (the applicant) to live on and work the site. In the Design/Strategy section, as mentioned earlier, he states that for the most part he plans to develop and work the site alone with the help of some family expertise (building/joinery and horticulture) in the set-up of the project. The Business and Improvement Plan states that the plans have been devised to create an on-site economy which can be worked by a single person.

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4.4.22 Based on previous years' experience and other sources, the Management Plan sets out a comprehensive assessment of the labour requirements across all the business and conservation land management elements of the development. Based on an upper limit of a quarter of an acre of cultivated bed, the horticultural project, including delivery/markets, is estimated to require 20-30 hours in the summer months and perhaps half this out of season. Additional estimates are produced for management and harvesting of beehives, orchard maintenance, harvesting, pressing and bottling of apples. In total, 30-35 hours is the estimated maximum (summer) weekly workload associated with the income generating elements of the proposal. Maintenance and management of the designated conservation areas is low level in line with the recommendations of the ecology survey and together with other maintenance tasks suggest a total working week of approx. 35-38 hours at the busiest periods. Maintenance of buildings and equipment are expected to be able to be fitted in around other requirements.

4.4.23 There are no proposals to employ additional labour and it is confirmed that additional family help is proposed during the set-up period only. Consequently, I am satisfied that the site is capable of supporting the minimum food and income needs of the single resident as proposed and that a single person is sufficient to run the site effectively;

4.4.24 The proposals also include elements which go towards meeting the contributory criteria, including:

- Distributing food and other products to local markets;
- Making processing facilities available to other parties;
- Offering training courses and OPD consultancy.

4.4.25 In conclusion, therefore, the revised Management Plan provides sufficient evidence in my view to demonstrate that the essential criteria for the Land Management element are met.

4.4.26 Finally, the detailed monitoring proposals conform to the requirements set out in the Guidance (paragraphs 3.33-3.36) for data and reporting to support the annual reporting of indicators for the essential and contributory criteria and for the Ecological Footprint Analysis and Other Footprints.

### 4.5 Land Management:

4.5.1 TAN 6 requires the preparation of a baseline assessment of biodiversity and landscape character with clear management proposals to enhance features of importance.

4.5.2 The OPD Guidance, in summary, states that OPD in the open countryside should have the objective of conserving, managing and, wherever possible, enhancing environmental quality, not only on the site but also potentially bringing benefits to the wider landscape.

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4.5.3 Objectives for biodiversity, cultural heritage and landscape should be integral to the management of the whole site forming part of a sustainable land management system that provides food and other products while also benefitting other aspects of the environment.

4.5.4 Components are expected to include conservation of existing features of biodiversity, cultural and landscape importance (which should have been recorded in the baseline) and extension where this fits in with the overall plan. In considering the addition of new features it will be important to take into account views to and from the site, helping blend the site with its surroundings and using a natural local vernacular style thus strengthening local landscape character.

4.5.5 The Guidelines also set out the key considerations for biodiversity, cultural heritage and landscape in paras 3.45-3.47 and the essential and contributory criteria in paras 3.51 and 3.52. These should be used by PCNPA in their assessment of the Land Management element of the MP. I also consider that the PCNPA should satisfy itself that the MP and supporting plans and documents provide satisfactory details to enable future monitoring as set out on pages 27 and 29 of the Guidance.

4.5.6 As this proposal is in a National Park, the PCNPA should also be aware of para 1.22 of the Guidance which points out that sites of high ecological sensitivity may not be suitable as OPD activities could have unacceptable negative impacts unless these sensitivities are carefully conserved and enhanced.

### 4.6 Energy and Water

4.6.1 TAN 6 requires quantification of how the inhabitants' requirements for energy can be obtained directly from the site and also indicates that there is the potential to have wider community benefits through the export of any surplus electricity to the grid.

4.6.2 The Guidance also points out that while TAN 6 only deals with energy, water is a natural resource that also requires careful management.

4.6.3 The objective is that the use of both energy and water is minimized and that these resources are re-used wherever possible. The energy needs of the inhabitants should come from the site. This should also be the case for water, unless it can be demonstrated that there is a more environmentally sustainable alternative.

4.6.4 The Guidance advises that because energy and water are consumed by both domestic and other activities, they should be accounted for separately. The first priority is minimization of energy and water use by reducing demand and then to re-use resources for other purposes on site.

4.6.5 The Guidance also advises that OPD sites should provide for the needs of their inhabitants through the use of renewable resources. For energy, the main suitable sources are solar, wind, water and biomass while, for water, the primary source should be rainwater harvested and stored on site with the balance from other

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water bodies, such as ponds, lakes, watercourses, wells and boreholes, provided that abstraction is sustainable.

4.6.6 Although sites should be broadly self-sufficient, the Guidance states that if a grid connection is available this allows surplus energy to be exported to the grid. Conversely, this provides a back-up in an emergency although energy should not be routinely drawn from the grid and any energy used will be added to the Ecological Footprint.

4.6.7 The Guidance also states that the use of small amounts of non-renewable fuels is acceptable where it is justified by need and suitability, e.g. bottled gas for cooking where the normal renewable energy source is not available or fuel for specific land management machinery. Generation of electricity from non-renewable fuels is not acceptable. Use of fuels is added to the Ecological Footprint.

4.6.8 The essential criteria are:

- i. The energy needs of the site will be minimized through suitable design and use of technology, including that which enables re-use;
- ii. All of the energy needs of all activities shall be met from sources of renewable energy on site, with the exception of small amounts of non-renewable fuel for particular uses for which they are best suited and justifiable;
- iii. The water needs of the site will be minimized through suitable design and use of technology, including that which enables re-use;
- iv. Rainwater harvesting from buildings and structures must be maximised;
- v. All of the water needs of all activities should be met from water available on site, unless there is a more environmentally suitable alternative;
- vi. Abstraction from water bodies (including groundwater sources) must be at levels that do not cause environmental harm. Harm would result from lowering of surface and ground water levels;

### Energy

4.6.9 In this case, the proposals have been developed to minimize energy requirements in the first place. This includes adopting operating methods which use labour rather than powered machinery, by simplifying lifestyle and utilising low-powered electronics and essential appliances only.

4.6.10 The revised MP indicates that it is not expected that any of the cultivation of crops or their processing will require any power input beyond physical labour. Possibilities, as technology develops, for use of electric versions of power tools which can be run from on-site renewable resources may be considered, where these would save labour, but the intention remains to avoid the need for machines.

4.6.11 The use of low-power electronics and technology for lighting and cooking and the design of the dwelling focusing on maximising natural light, passive solar heating systems, high insulation/high thermal mass building materials and techniques are

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part of the range of measures proposed to minimize energy demand. Additionally, non-essential appliances, such as TV, microwave, dishwasher, tumble dryer, will not be used and through a predominantly vegetarian/ovo diet, eating what is freshly available seasonally supplemented by preservation and storage of root vegetables the need for a large fridge/freezer is also avoided.

4.6.12 Consequently, I consider that there is sufficient evidence to satisfy the first of the essential criteria.

4.6.13 Turning to the second essential criterion, relating to renewable energy, it is proposed that the development's energy requirements will be met entirely by solar-powered micro-generation and the submission includes an Appendix which sets out in detail the projected energy requirements from all electrical devices proposed. The maximum daily demand is expected to occur in wintertime and this is calculated to be just below 6.34kWh/day and a maximum instantaneous load of 3760W, including heating from a ground source heat pump.

4.6.14 A PV solar panel array of 24 2m x 1m 335W PV panels with a total output of 8kW is proposed with a small battery bank sufficient to provide overnight power. The submission includes calculations of generation in wintertime taking account of the shorter length of daylight and cloudy conditions. It is submitted that the 8kW array should be sufficient to meet all the energy needs of the project even on the cloudiest day in mid-winter. Should capacity be found to be insufficient, the submission states that adding extra panels would be simple enough with plentiful south-facing roof space on other outbuildings.

4.6.15 The submission also mentions that because the system is designed for worst case wintertime demand and production, it is likely that there would be surplus capacity at other seasons and that, therefore, a grid connection to export surplus power is proposed. This is allowable by the Guidance, which also advises that while this provides a back-up in an emergency, energy should not be routinely drawn from the grid and any energy used will be added to the Ecological Footprint. However, the monitoring section refers to "non-renewable sources if these are used" and "records of electricity exported to and imported from the grid".

4.6.16 Consequently, while I am satisfied that the use of solar-powered micro-generation as proposed satisfies the requirement for use of renewable energy, I have advised that you may wish to seek clarification from the applicant concerning the control and management of the grid connection and verification from an appropriate expert in respect of the power demand calculations and, then, on the calculations supporting the size of the proposed PV array and battery to be assured that all of the energy needs of all activities at the site can be covered by the generation proposals. Additionally, I would advise that the grid connection should be subject to strict control to ensure that it is only normally used to export surplus power and imported only in a real emergency.

### Water:

4.6.17 The Management Plan states that systems will be put in place to minimise water use and to maximise re-use, e.g. selective water from domestic uses will be

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passed through reed beds and then used for irrigation. Additionally, water used for washing produce and processing equipment will also be collected, saved and, where appropriate used for irrigation.

4.6.18 Rainwater from the roofs of buildings is to be collected and stored and used, preferentially, for irrigation with drinking water and any additional requirements for irrigation will be sourced from the existing borehole on site. This borehole appears to have existed for some time (the shed covering the borehole is said to have been placed there some 18 years ago) and the water has been used predominantly for irrigation as well as for drinking water.

4.6.19 Water available from the existing borehole has been passed as fit for human consumption. Water is currently extracted by electric pump and the intention, as explained earlier, is to replace this with a syphon system or, if that is not feasible, link the pump to the proposed solar powered system.

4.6.20 In respect of the first essential criterion relating to water, the proposals refer to measures to reduce water use and to enable re-use of water for irrigation. Consequently, I consider that this criterion is satisfied.

4.6.21 In respect of the second criterion relating to water, rainwater harvesting from the roofs of all buildings is proposed for use, as a source of first resort, in irrigation and it is stated that with sufficient water tank space to be able to supply most irrigation water. Calculations of demand for water for irrigation and of the storage capacity needed to cover two weeks without rainfall. In longer drought conditions the borehole provides a backup, although the submission also indicates that storage could be increased if this became a significant drain on the borehole. Consequently, I consider this criterion can be considered to be satisfied.

4.6.22 Finally, in respect of extraction from the borehole, this must be at levels which do not cause environmental harm to satisfy the third water criterion. Usage to date is stated to have not led to any reduction of water levels, although checks were made occasionally rather than regularly. The revised submission includes calculation of water usage for domestic and produce cleaning purposes and indicates levels within the estimates of previous usage. On this basis it is considered reasonable to expect that this level of usage will not have any effect on water levels leaving plenty of capacity for irrigation if needed. Records of usage and monthly checks of borehole water levels are proposed which will enable the situation to be adequately monitored.

4.6.23 Contributory criteria are:

- i. The embodied energy of renewable energy equipment should not outweigh its benefits from energy generation;
- ii. Human and animal labour should replace the use of non-renewable energy whenever possible and practical;
- iii. Any water pumping should be renewably powered;
- iv. Any ponds/lakes created should maximise habitat creation and should not destroy important existing habitat;



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4.6.24 The revised submission provides details of embodied energy in the PV solar panels and the battery bank and calculates net positive impact on other footprints.

4.6.25 In the case of the second contributory criterion, the submission contains satisfactory proposals prioritizing human labour over the use of equipment in the growing, harvesting and processing of land-based produce;

4.6.26 In the case of the third contributory criterion, the power requirements for the water pumping are included in the energy demand calculations although the first preference is to replace it with a gravity-based syphoning system within the first two years and only link it to the solar-powered system if this proves impractical. Either alternative would satisfy the criterion.

4.6.27 Finally, while environmental proposals for an existing pond are set out in the land management section of the Management Plan as recommended in the ecological report there are no plans to build or extend existing ponds as part of water management.

4.6.28 In conclusion, therefore, the revised Management Plan provides sufficient evidence, in my view, to demonstrate that the essential criteria for the Energy and Water element are met.

4.6.29 Finally, the monitoring proposals described in the revised submission should provide, subject to approval of details of the operation and monitoring of the grid connection, the information required for monitoring the indicators as set out for Energy and Water in paras 3.64-3.67 of the Guidance.

### 4.7 Waste

4.7.1 TAN 6 requires quantification of how the inhabitants' requirements for waste assimilation can be obtained directly from the site.

4.7.2 The objective is that all waste produced (other than very small amounts of unavoidable non-biodegradable or hazardous waste) should be assimilated on site in environmentally sustainable ways.

4.7.3 The Guidance explains that this component is concerned with waste produced by domestic and other activities on site and that wastes produced by other types of activities should be accounted for separately from domestic waste. Guidance on waste minimization, to reduce waste in the first place, and on waste recycling and re-use is provided.

4.7.4 The essential criteria are:

- i. All biodegradable waste produced on site is assimilated on site in environmentally sustainable ways;
- ii. The only exception to this is occasional off-site disposal of small non-biodegradable amounts of waste which cannot be assimilated on site which arise from things used on site wearing out or breaking irreparably;

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- iii. All waste handling and assimilation on site must comply with Environment Agency (now Natural Resources Wales) guidelines;

4.7.5 The single contributory criterion is:

- i. The re-use of organic waste on site should increase overall site fertility and productivity so long as this is not at the expense of important semi-natural habitats dependent on low soil fertility;

4.7.6 In this case, increasing self-sufficiency in food and a largely vegan diet avoids buying many processed food stuffs which thereby reduces packaging waste significantly. Use of local organic and suppliers where products are supplied on a refill basis and purchases of secondhand goods, e.g. clothes, will further reduce packaging waste.

4.7.7 By reducing waste in the first place and by careful and considered purchasing, e.g. purchasing items which are robust and less technically complex, using items which are recyclable, waste which requires off-site disposal is proposed to be minimised and limited to such items as degraded batteries, unrepairable items, clothing, shoes, technology.

4.7.8 All human waste as well as food and gardening waste will be composted on site. A dry composting toilet will be used for solid human waste which, once rotted sufficiently, can be used for composting in appropriate circumstances (but not for food crop areas). Urine, as mentioned in the Guidance, is to be collected and used in the composting process. Waste from chickens and fowl will be used either directly as natural fertilizer or added to compost heaps. The revised submission takes account of NRW requirements and records are to be kept and presented with annual reports.

4.7.9 Grey water from the dwelling will be managed and re-used across the gardens on non-food crops using a reed bed filtering system (diagram of this system provided). The revised submission takes account of NRW requirements and of building regulations and BRE guidelines. Use of natural cleaning products, etc., is intended to reduce the workload of the filtering system.

4.7.10 With respect to the first essential criterion, the revised submission provides sufficient confidence that biodegradable waste produced on site is able to be assimilated on site in environmentally sustainable ways.

4.7.11 With respect to the second criterion, the proposal addresses the minimisation of waste items requiring disposal off-site which is allowable under this criterion.

4.7.12 With regard to the final essential criterion, the revised submission confirms that waste handling on site is to be carried out so as to comply with NRW requirements.

4.7.13 With respect to the contributory criterion, it is proposed to re-use organic waste to increase site fertility. The Ecological Report contains recommendations for management of areas of the land for conservation and increasing biodiversity,

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including areas where fertilisers should not be used, and the Land Management section proposes that the maintenance strategy in the Ecological Report will be followed exactly. Consequently, I consider this contributory criterion is met.

4.7.14 In conclusion, therefore, the Management Plan in its current, amended form, provides sufficient evidence to demonstrate that the essential criteria for the Waste element will be met.

4.7.16. Finally, the monitoring proposals are cross-reference to paras 3.77 and 3.78 and the records proposed should provide the information required for annual monitoring reports together with details of assimilation and of off-site disposal of waste and an annual statement of compliance with NRW guidelines.

### 4.8 Zero Carbon Buildings

4.8.1 TAN 6 requires that OPDs should be exemplars of Welsh Government's zero carbon aspiration and achieve zero carbon status in terms of construction and use, that planning applications should be accompanied by supporting information confirming that the development will be zero carbon in construction and use and that plans should be monitored as part of the annual monitoring report.

4.8.2 The Guidance sets out details of 'zero carbon' as may be applied to OPD buildings both in their construction and materials and in their use. It also requires that, as set out in an Exit Strategy', the buildings to be removed in the event that the site fails or otherwise ceases should be capable of being removed with low environmental impacts.

4.8.3 The essential criteria are that:

- Domestic and ancillary buildings will be 'zero carbon' in construction and use as explained in the Guidance and using the up to date Welsh definition of 'zero carbon';
- Proposals will identify which structures will require Building Regs approval and that this approval will be obtained either before or during construction;
- All structures for removal in the Exit Strategy are capable of removal with low environmental impact;

4.8.4 Contributory criteria are:

- The construction of buildings should make as much use of recycled materials as possible so long as this does not affect their ability to satisfy the essential criteria;
- Existing buildings are re-used where this would have lower environmental impact than new buildings, or where they are of particular value in landscape or heritage terms but provided they are not unsightly or have a negative impact on the surrounding landscape;

4.8.5 In this case, it is proposed that all of the buildings added to the site as part of the OPD proposal will be 'zero carbon' in construction and use. They are proposed to be constructed using a mixture of locally sourced sustainable materials

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(responsibly/sustainably sourced timber, straw bales, clay, lime) and re-used/reclaimed materials (windows, steel cladding). High levels of insulation will contribute to minimizing energy demand as well as the measures relating to lighting, cooking, appliances (as assessed earlier in relation to the Energy element).

4.8.6 Construction techniques will reduce environmental impact by focusing on human effort rather than machine power and to use traditional techniques and materials, as described in the Management Plan and submitted plans.

4.8.7 The applicant states that the dwelling will be his only place of residence and is proposed to be a modest, single-storey, wood frame, straw bale construction modelled on local examples of chalet-style or beach houses. Primary features of these are painted corrugated steel cladding on roofs, painted or unpainted weatherboard cladding, or steel cladding as described, painted wood-framed windows, pitched roofs and lean-to sections.

4.8.8 With regard to other buildings, the poly-tunnel is to be retained but may be replaced by a glass greenhouse in the longer term to reduce plastic waste. The multi-purpose barn is proposed to be an open-fronted wood-framed barn with a double-width closed in section at the eastern end. Materials to be used are intended to be locally sourced larch, part bare earth, part gravel, floor, and walls with reclaimed painted corrugated iron sheeting and wood framed windows. The composting toilet will be housed in a wood-framed, larch clad building with painted re-used corrugated steel roof. The borehole pump house and the tool and produce handling shed are also proposed to be constructed with wood framed, steel clad buildings with wood-framed windows.

4.8.9 This section of the Management Plan also includes other details of the buildings, e.g. siting, design, colour schemes, features to encourage nesting birds, bats and other wildlife, which are relevant to the impact of the development on landscape and biodiversity and which should be assessed as part of the Land Management element. They are not considered here.

4.8.10 This element of the OPD Guidance is concerned with the minimising of carbon from buildings in construction and use, energy efficiency design and performance and the ability for buildings to be removed with low environmental impact.

4.8.11 The OPD Guidance recognises that OPD homes are not well suited to assessment under the Code for Sustainable Homes (CSH), as they often take low tech approaches to construction and display differences to conventional development. Consequently, OPD in the open countryside is only required to meet the standards of CSH in respect of category 3 – Materials. In this case, the applicant has submitted an independent assessment of the environmental impact of the materials to be used in construction carried out by a Stroma-certified assessor (although this is not referred to in the Management Plan and may have resulted from the pre-application advice).

4.8.12 This considers firstly the materials used in the roof, external walls, internal walls, ground floor (no higher levels proposed) and windows. Where the proposed

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materials do not have a recognised published rating (e.g. because they are unconventional or unusual) the assessor has identified a comparable type of material with similar attributes which is rated, which is an approach compatible, in my view, with the OPD Guidance. The assessment demonstrates that the rating requirements of the Guidance are satisfied.

4.8.13 Secondly, the assessments of the responsible sourcing of basic building materials and finishing materials produces results for some elements which are less than the 80% CSH requirements. However, an Appendix explains why credits are not available for some materials, e.g. those sourced from site, and provides the rationale for considering that these materials can be demonstrated to be responsibly and legally sourced. Guidelines to meet these requirements and selecting local suppliers on the basis of their good practice and sustainable approach to sourcing are set out, including timber harvested in accordance with FSC principles from certified suppliers to ensure that 100% of timber is legally and responsibly sourced

4.8.14 The revised submission indicates that the dwelling is the only building which will require Building Regulation approval. Currently, the required level of energy performance of buildings is covered by Part L of the Building Regulations. This is in the process of review to achieve higher energy efficiency standards as part of the Welsh Government's plans to meet its carbon reduction targets. The revised submission confirms that the applicable regulations will be followed and satisfied and Building Regulations approval will be obtained during the building process.

4.8.15 With respect to the first criterion, the proposals are demonstrated to satisfy the CSH Category 3 standards required by the Guidance and I consider the proposals for construction operations are designed to minimize environmental impact. Consequently, I am satisfied that this criterion is met

4.8.16 The application of Building Regulations to the dwelling is identified and the revised submission include a commitment to follow and satisfy the regulations during construction. Consequently, I am satisfied that this criterion is met.

4.8.17 In addition to the energy efficiency criteria relating to buildings, the final criteria requires that all structures identified for removal in the Exit Strategy are capable of removal with low environmental impact. Details are set out later on pages 58-59 of the revised MP. These details explain that the buildings can be easily dismantled, the usable materials and equipment sold for re-use and clay/cob render broken up for re-use on site. Consequently, I consider that as these details demonstrate that the buildings can be removed with low environmental impact, the third criterion is satisfied.

4.8.18 The details of the materials to be used includes good use of re-use of materials and components which are demonstrated not to affect their ability to meet the essential criteria. I consider the first of the contributory criteria to be satisfied.

4.8.19 With respect to the second contributory criteria, the existing buildings to be re-used are the poly-tunnel (which may eventually be replaced by a greenhouse), the bore-hole pumphouse (to be renovated and extended) and the tool shed (proposed to be moved under an existing planning permission). I consider that judgements as

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to the environmental impact, the value of these buildings and whether or not they are unsightly or have a negative impact on the landscape are matters which should be considered by the Authority in their assessment of the Land Management element of the Management Plan and which will then allow a judgement to be made as to whether or not this second contributory criteria is satisfied.

4.8.20 In conclusion, therefore, this element of the revised Management Plan, in my view, meets the essential criteria for the Zero Carbon Buildings element and also demonstrates some positive benefits in respect of the contributory criteria.

4.8.21 With respect to monitoring, it is proposed that monitoring of suppliers and keeping of records will ensure that the requirements set out in paras 3.107 to 3.108 of the OPD Guidance will be followed and that appropriate records will be kept.

### 4.9 Community Impact Assessment

4.9.1 TAN 6 requires the identification of potential impacts on the host community (both positive and negative) and the identification and implementation of any mitigation measures that may be necessary.

4.9.2 The objectives are that OPD in the open countryside should not impact negatively on neighbouring communities, positive impacts should be encouraged and negative impacts mitigated. All likely impacts of OPD proposals should be assessed and the Guidance gives advice on social and economic components.

4.9.3 The essential criteria are that:

- i. There is a thorough assessment of all impacts of the proposal on the neighbouring communities and OPD in the open countryside should not impact negatively on these communities;
- ii. Any negative impacts are mitigated;

4.9.4 Contributory criteria are:

- i. OPD children attend local schools and residents support local groups, clubs and events;
- ii. There are open days, permissive paths and other access, as well as the hosting of on-site events;
- iii. Residents shop locally and use other local businesses;
- iv. Residents sell food and other produce locally;

4.9.5 In this case, in respect of the first essential criteria, the proposals set out a range of expected benefits covering primarily social and economic impacts. These include habitat improvements, reducing the visual impact of the development, reducing food miles by local distribution of produce and supply through local outlets, increasing pollinating insects, supplying fresh, local, organic produce, reducing other purchasers travel footprints by replacing shopping trips by direct supply of veg boxes delivered by cargo bike, supporting local outlets and suppliers by providing local produce, making the apple press available for use by local individuals and families, increasing awareness and promoting OPD practices by holding open days and

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holding open community events celebrating and promoting orcharding and apple growing. A seasonal calendar of events is set out in an Appendix. Finally, the connection of the PV solar array to the grid allows surplus power to be contributed to public power supply.

4.9.6 It seems to me that the applicant has given this aspect of OPD requirements reasonable thought and has identified a broad package of potential benefits for the local area relating to OPD generally as well as the specific elements of his uses proposed on the land. Consequently, as far as positive benefits are concerned, I think this criterion can be accepted as being satisfied.

4.9.7 In respect of negative impacts, data on food miles, annual polling of neighbours, customers and the local community plus feedback from visitors and attendees at events are proposed to identify problems, conflicts of interest and other negative interest and to identify opportunities to mitigate impacts. Proposals to mitigate negative impacts are also incorporated in other elements of the Management Plan, e.g. visual impact, waste, other footprints. Consequently, I consider the second Community Impact criterion can be considered to be met.

4.9.8 In respect of the contributory criteria, the following are proposed:

- It is proposed to support local markets and Christmas events at Pembroke and Manorbier Castles;
- It is proposed to hold open days on site to increase awareness of OPD and events centred around orchard and cider making, e.g. Wassail;
- It is stated that food items and other goods requiring to be purchased would be sourced and bought from local suppliers;
- It is proposed to sell produce locally, e.g. by distribution to areas local and accessible by cargo bike, sales through local markets and outlets, sales of cut flowers to local venues;

4.9.9 I consider that the proposals show positive contributions over all four supplementary criteria.

4.9.10 With regard to monitoring, it is proposed that data will be collected on the matters laid out in paras 3.115 and 3.116 of the OPD Guidance, including the quantity and value of food sold locally, the quantities of apples pressed or quantity of juice produced for others, the consultancy offered to prospective OPD applicants and their feedback and numbers attending community orchard events. It is also proposed to poll neighbours, customers and other members of the local community annually to obtain feedback on changes and to allow identification and responses to any problems and conflicts. I consider the monitoring proposals to be satisfactory.

### 4.10 Transport Assessment and Travel Plan

4.10.1 TAN 6 requires that planning applications should be accompanied by an assessment of the traffic generated from the site by its residents and visitors and that a travel plan should clearly identify a preference for low or zero carbon modes of transport including walking, cycling and car sharing.

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4.10.2 The objective is that OPDs should significantly reduce the environmental impacts of transport both by reducing the need to travel and favouring low carbon modes of transport.

4.10.3 The essential criteria are that:

- i. The management plan must be accompanied by a Transport Assessment and Travel Plan (which may be combined);
- ii. Overall, the development should achieve a significant reduction in transport impacts from all activities on site (residents, enterprises and visitors) in comparison to what would be the 'norm' for such activities;
- iii. There should be detailed monitoring of all trips to and from the site in terms of purposes, distances, modes and any transport sharing;

4.10.4 The contributory criteria are:

- i. The use of low and zero carbon modes of transport should be maximised;
- ii. Criterion for OPD where more than one household (not applicable to this case);
- iii. Connections between the site and local suppliers and customers for goods and services requiring travel should be maximized as opposed to those at greater distance;
- iv. Visitor travel should be the subject of proactive management to reduce transport impacts;

4.10.5 In this case, the applicant has submitted the Transport Assessment and Travel Plan (TATP) as part of the revised Management Plan together with an Appendix setting out an analysis of predicted travel by purpose, frequency, mode, trips and mileage. This meets the requirements of the first criteria.

4.10.6 The TATP analyses the accessibility of the site to local shops and services and those reasonable easily accessible by walking and cycling. The local bus service at Freshwater East and the railway station at Manorbier are also reasonable accessed by walking and cycling affording public transport access to larger settlements in the locality.

4.10.7 Traffic reductions are proposed to be achieved, firstly and primarily, by aiming to be 80% self-sufficient in food on the site, reducing the need to travel for purchases of other goods., and by eliminating travel to work. The vast majority of social and recreational trips are intended to be made, as now, on foot, by bike or public transport. Transporting produce to customers and local outlets is expected to involve a combination of the use of a cargo bike and a car/van (with the possibility later by an electric vehicle), although the Community Impact section also mentions sales at the farm gate.

4.10.8 Over the 5-year development programme of the OPD, estimated car mileage drops progressively while mileage by bike and public transport increases. A significant milestone occurs in Year 3 when the market gardening project is planned



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to meet OPD self-sufficiency targets, meaning a significant drop in travel for food shopping, and the other significant drop results from stopping working off-site.

4.10.9 Overall, the TATP provides sufficient evidence, in my view, that the OPD proposals should achieve a significant reduction in transport impacts compared with the 'norm' and I consider the second essential criteria is satisfied.

4.10.10 Proposals are set out to record all trips to and from the site by purpose, distance and mode of transport (including sharing) as required to fulfil the third criterion and to inform the annual assessment of travel for the annual monitoring reporting.

4.10.11 Data to be collected will also allow assessment of the contributory criteria relating to low and zero-carbon modes of transport, use of local suppliers, delivery of produce and visitor travel. Local options are to be prioritized wherever possible and visitor travel will be managed, reduced and actively curtailed where this causes potential negative impacts. Records will be also kept to provide the data requirements for the EFA and other EFs, e.g fuel purchases, mileage, visitor travel.

4.10.12 In conclusion, therefore, the Management Plan in its revised form, provides sufficient evidence to demonstrate that the third essential criteria for the Transport Assessment and Travel Plan element is met.

4.10.13 Similarly, with respect to the contributory criteria, I consider that the revised submission includes positive measures on each of the four criteria through proposals for use of low and zero carbon modes of transport wherever possible, to limit on site vehicle numbers, to use local suppliers wherever possible, to design the business elements to serve local customers and to implement proactive management of visitor travel.

4.10.14 The Guidance points out that over the long term monitoring is essential to inform whether the measure are working and, in my view, the proposals for monitoring in the revised submission meet the Guideline Monitoring requirements.

## 5 ECOLOGICAL FOOTPRINT ANALYSIS

5.1 Ecological Footprint Analysis (EFA) provides a simple measure of the impacts of a person's activities measured as the 'global hectares' needed to support them based on an assessment of household consumption. TAN 6 requires that the initial domestic footprint of residents of OPD in the open countryside is set at 2.4 global hectares per person with clear potential to move towards 1.88 global hectares over time.

5.2 The OPD Guidance requires that (a) the application proposals demonstrate that the applicants will have an Ecological Footprint (EF) working towards 2.4 gha per capita at the time of first habitation of the site and with a clear ability to achieve 2.4 gha per capita by year 5 after habitation, (b) that 2.4 gha is achieved by year 5 and (c) that thereafter the development is achieving a footprint below 2.4gha.

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5.3 It should be noted that point (c) of the Guidance is not consistent with TAN 6, which requires proposals to show clear potential to move towards 1.88 gha over time. A footnote to the Guidance states that the 1.88 gha target was at that moment (Oct 2012) very hard for OPD to achieve without major changes in Welsh society and the Welsh economy and that the ability to move below 2.4gha over time was, for now, a more realistic target.

5.4 A bespoke EFA tool has been developed for and is made available by the Welsh Government for use in calculating the domestic EF of OPD development proposals and to facilitate assessment of planning applications. This calculator uses data, predominantly expenditure but sometimes quantitative, representing total household domestic consumption of energy, materials, food and other services and consumables. Combined with other national data representing public services and capital investment categories, the EFA tool calculates the EF in gha per person. A separate Practice Guidance note has been issued by the Welsh Government on the use of the EF calculator.

5.5 The EF should reflect all the domestic/personal outgoings of the occupants and the EFA includes a verification box which allow the data for the year to be verified by comparing household income against household outgoings and savings. This should balance to within 5%. It should be noted that the Guidance does not preclude inhabitants earning other income but the household expenditure associated with the use of that income should be included in the EFA data and whether this has any unsustainable impact on the inhabitants whole lifestyle should be picked up through the EFA results. Furthermore, the OPD Guidance also requires the number of occupants to be directly related to the ability of the site to support them and the number of people needed to run the site effectively. Consequently, in cases where residents also work off-site, their main work has to be on the site to make sure that the site is managed correctly.

5.6 In this case, the applicant has used the Welsh Government's EFA calculator and has supplied a completed EFA for the existing footprints and the estimated first year of habitation and 5 years after first habitation footprints as the Guidance requires.

5.7 As a result of previous personal correspondence with Welsh Government Planning Division about potential calculation errors, the Welsh Government Planning Division have confirmed to me that the calculator contains a number of fields which are affected by calculation faults and provided advice on corrections which should be applied. I indicate below the corrections which should be applied to the EFA results in this case.

### **Domestic Environmental Footprint**

5.8 The calculated existing domestic footprint of 8.06 gha is based on last year's actual figures. There are no adjustments required to the existing footprint. While the provision of an existing footprint is not compulsory it is recommended and provides insight into the changes contributing to the future years' estimates.

5.9 The footprint on first habitation is calculated to be 4.87 gha and the Year 5 estimate is calculated to be 2.28 gha. The applicant has provided explanations of

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the Year 5 energy usage, size of plot and animal feed assumptions all of which I think are reasonable. A small adjustment is needed to the first habitation figure, due to a fault in the formula within the model which calculates the first habitation footprint on line 43 specifically, which gives an adjusted first habitation EF of 4.88 gha. No adjustments are required to the Year 5 figure.

5.10 The first habitation figure corresponds to the activity indicated in the Year 1 Phasing Plan, which involves the applicant moving on to the site in temporary accommodation, the introduction of a small, scalable, solar generation system and focusing on the non-domestic building projects and other work listed in the Phasing Plan. The EF calculations show a reduction of 3.19 gha from existing to first habitation. This is primarily due to the following factors:

- The Capital Investments and Public Services elements of the model (over which households have no direct influence) are reduced automatically within the model by 0.54 (the explanation for this is set out in Box 14 of the OPD Guidance),
- The Transport element is reduced by 0.31 due mainly to elimination of air travel and reductions in vehicle purchase costs, private car travel and fuel usage,
- The Consumable Goods element is reduced by 0.21 due to reductions in many items, and
- The shop-purchased Food element is reduced by 1.68 due mainly to reductions in fruit and vegetable purchases and to lower consumption of various other products.

5.11 Other smaller reductions occur in other elements and an additional footprint for home grown food of 0.12 occurs on first habitation. First habitation represents the first steps towards reducing the household Environmental Footprint and the analysis of the figures illustrates the significance of reducing travel and also, in this particular case, the influence of the applicant's vegan/ovo diet, which shows a marked reduction in the EF arising from the reduction in shop-bought fruit and vegetables enabled by the start of use of fruit and vegetables grown on site.

5.12 The Guidance indicates that for the first year of habitation an initial reduction of some 25% of the national average (i.e to 3.6 gha) should be expected. In this case, this is not achieved but the estimated EF of 4.88 gha is nevertheless a significant reduction from the existing estimated EF of 8.06 gha, indicating a significant shift towards a low-impact lifestyle based on the site.

5.13 The crucial EF for the purposes of judging OPD proposals is the Year 5 estimate, which in this case is 2.28 and is below the 2.4 target. Building on the reductions estimated for first habitation, the further reductions are primarily due to the additional reductions in the shop-bought fruit and vegetables EF component (from a level of 2.8267 gha on first habitation to 0.9335 gha by Year 5), indicating a high level of reliance on the development of on-site production by Year 5. This underlines the importance to the reduction of the EF of the success of on-site fruit and vegetable production and the measures proposed to extend the availability of fruit and vegetables for domestic consumption through storage and processing. The Energy EF component reduces to zero due to full implementation of the renewable

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solar energy system and, at a smaller scale, further reductions in other elements, particularly Travel and Transport and Consumables are indicated. An increase in the EF of the Domestic Food production on site is indicated but this is not significant.

5.14 In conclusion, the 5 Year Ecological Footprint calculation meets the OPD policy target of achieving a footprint of 2.4 gha per person in Year 5. It is particularly dependent on the implementation of the proposals in the Management Plan for food production at the site, for reducing transport impacts and for the switch away from use of on-grid electricity to the production power to meet all of the energy needs for this OPD through a solar PV system. It is also dependent more generally on the adoption of a low consumption lifestyle and the applicant's vegan/ovo diet.

5.15 While the Guidance comments on the difficulties with achieving the longer term TAN 6 target of 1.88gha per person it suggests that instead the ability to move below 2.4gha l time was more realistic. In this case, the 5 Year EFA calculation is below the 2.4 gha per person level OPD Guidance target and the submission suggests a number of ways in which the footprint could be further reduced in future.

### **Income and Expenditure:**

5.16 The EF input sheet shows that the applicant currently has an income of £17,700 per year and the TATP indicates that he intends to stop other work in Year 2. In respect of developing site-based business operations, the applicant, in the Business and Improvement Plan, indicates that he does not intend to expand the market gardening, honey and cider businesses to their maximum potential but to reach a steady point of equilibrium at which his own modest needs in terms of food and income are met. The Land-Based Activity section includes (page 30) a table showing, as I understand it, projections of actual income from the various land-based enterprises over the 5 Year period and beyond. This shows actual income is estimated to rise progressively from £2,114 in Year 1 to £8,494 in Year 4 and then steadying at £6,864 in Year 5 and £6,764 in Years 6 and 7 thereafter.

5.17 The EF calculator does not require, at application stage, details of total household income to be provided for future years. It only needs to be provided for Years 3 and 5 (and those subsequent intervals) at the point of annual monitoring reports when the actual household income is to be entered.

5.18 The submitted EF input data for expenditure on domestic/personal goods and services shows that for the existing EF the expenditure is £16,726 (including £1,705 on fuels – line 76). Comparisons with First Habitation and Year 5 input expenditure data is only possible for expenditure excluding fuels. The comparative figures (excluding fuels) are £15,021 existing, £7,661 at first habitation and £5,532 in Year 5. Significant expenditure reductions arise from:

- a. the Housing element of expenditure, where existing expenditure includes £7,700 rent or mortgage and water expenditure, while first habitation and Year 5 Housing expenditure is £2,400 and £2,300 for capital costs, maintenance and water. Nevertheless, comparisons of other elements and components show a lowering of consumption generally.

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- b. the Shop-bought Food element where existing expenditure of £3,521 drops to £2,521 on first habitation and £692 in Year 5 due to significant reductions in purchases of some items, particularly fruit and vegetables.
- c. Consumables, with existing expenditure falling from £1,700 existing to £880 on first habitation and to £780 in Year 5.

5.19 In this context it should be noted that the EF guidance advises that the total capital costs of home construction should be spread over 30 years (£1,500 per annum equating to a total capital cost of £45,000) and the capital costs of renewable energy equipment should be spread over 15 years (£500 per annum equating to a total capital cost of £7,500).

### **Other Environmental Footprints:**

5.20 OPD developments can affect the footprints of other people in positive and negative ways and is one of the critical elements in determination as set out in the Guidance. The Guidance mentions that potential positive impacts could include supply of low input foods to local communities and export of renewable energy to the grid while potential negative impacts could include those of on-site enterprises and visitors, e.g. travel impacts. These other footprints cannot be assessed in the same way as resident's domestic footprints but, as they can be significant, they need to be taken into account as a material consideration in the determination of planning applications.

5.21 In this case, the Management Plan, in other sections, indicates the potential for positive impacts on other footprints, including maximizing use of renewable energy for operations on site, reducing other people's travel footprints through the supply of food locally, including delivery by cargo bike, and exporting surplus electricity via a grid connection. On the other hand, the attraction of visitor and customer traffic to the site may have negative impacts.

5.22 The Ecological Footprint Analysis section proposes that data on the quantity and value of food sold locally will be collected to indicate the positive impact of the project on decreased food miles for customers and that polling of customers will be carried out to identify opportunities to reduce other footprints.

5.23 The collection and monitoring of data relating to other footprints will be important to the effective management of the impacts of other footprints and in my view the monitoring proposals throughout this revised Management Plan adequately address this issue.

## **6 PHASING, MONITORING AND EXIT STRATEGY**

6.1 With respect to Phasing, the OPD Guidance states that an essential part of the MP is a programme that sets out the phasing of the identified proposals over the first five years of the site's development. In this case, the MP includes details of phasing and a quarterly programme of expected work over each of the 5 years of development.

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6.2 The Guidance sets out the critical aspects that should be covered in the phasing programme and the submission covers these aspects sufficiently, i.e. management of the site, when the applicant will start to live on the site (in temporary accommodation in the first few months of commencement), details of the temporary accommodation (a static caravan, to be removed in Year 5), the development programme for land-based enterprises, including the crucial fruit and vegetable production, the building programme for the OPD dwelling (commence early in Year 4 and occupy by that year end) and the ancillary buildings (Year1). The dates by which it is proposed to achieve each of the essential criteria for OPD are not specified individually but the programme indicates that all the OPD requirements will be met in Year 5.

6.3 With respect to monitoring, the OPD Guidance states that an integral part of the MP will be a statement of monitoring and review and that the first MP should contain an undertaking that the requirements for monitoring (set out in paragraphs 5.3 and 5.4 of the OPD Guidance) will be produced and complied with. In addition the Guidance sets out (in paras 5.7 and 5.8, including the table of targets and indicators) what the Annual Monitoring Report should contain. Paragraph 2.21 of the Guidance states that “If the Management Plan does not adequately address monitoring and control then it is deficient and the requirements of One Planet Development are not met”.

6.4 The section on monitoring and responding to emerging problems on pages 57 and 58 of the revised Management Plan commits to the monitoring requirements set out across each element of the Management Plan and to the production of annual monitoring reports as set out in the OPD Guidance. The Year 3 and Year 5 annual monitoring reports would also include a full Ecological Footprint Assessment and in Year 5 there would also be a revised and updated Management Plan as set out in the OPD Guidance.

6.5 In respect of responding to emerging problems the OPD Guidance (paras 5.9 and 5.10) sets out how problems identified in the monitoring process are to be categorized, distinguishing between critical and non-critical problems, and how quickly they need to be dealt with. The MP should identify what would be considered to be critical failures and how quickly they should be dealt with. In this case, the submission commits to this approach and provides appropriate examples of critical and non-critical problems which will assist monitoring and determining appropriate responses.

6.6 The OPD Guidance states that the MP will need to identify what would constitute a failure of the site as a whole and set out an exit strategy in this eventuality. The exit strategy should set out how the development and land use changes would be removed such that the site is restored to its previous use (or other agreed use) and the site is left in the same or better condition than before the development took place. The operations required should be capable of being done relatively quickly and without incurring significant expense (if not, then the implication is that the development is not OPD).

6.7 In this case, the Exit Strategy follows the definition of failure contained in the OPD Guidance, i.e. the failure to achieve one or more of the essential characteristics

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of OPD in the open countryside over a period of 2 years without instituting clear and effective measures to address the identified problems. To this I would add that the qualifying criteria set out in the OPD Guidance clarify whether these essential characteristics are being met and provide the framework for monitoring and these should also, I think, be applied through a condition. The annual monitoring and reporting regime should provide enable early identification of emerging problems and also enable prompt responses.

6.8 The Exit Strategy proposals identify which buildings which need to be removed from the site and what could be retained to allow small-scale vegetable growing and the cider orchard to continue. The proposals for dismantling the dwelling and the barn, unless permission for retention of the barn were sought and granted, and removing materials from site are, in my view, capable of being done relatively quickly and without incurring significant expense. Screen planting would remain in place and I think the proposals would not leave the site in any worse condition than before the development took place. Potentially, there would be some improvement.

6.9 I consider that the, subject to appropriate conditions being included in any permission, the provisions for phasing, monitoring and exit strategy satisfactorily meet the requirements of the OPD Guidance.

### **7 ESSENTIAL CHARACTERISTICS**

7.1 TAN 6 lays out a set of essential characteristics which all OPD proposals in the open countryside must have. These are set out below with my advice as to whether or not they are satisfied in this case.

7.2 Firstly, OPD proposals must have a light touch on the environment, positively enhancing the environment wherever possible through activities on the site. The assessment of the impact on the environment in this case will, as agreed, be a matter for the NPA to carry out and I do not therefore comment on this particular aspect.

7.3 Secondly, OPD proposals must be land-based, providing for the minimum needs of the residents in terms of food, income, energy and waste assimilation in no more than 5 years. I consider that, subject to suitable controls, the proposals and provisions of the revised Management Plan satisfy this essential requirement.

7.4 Thirdly, OPD proposals must have a low ecological footprint (EF), i.e. must have an initial EF of 2.4 gha per person with a clear potential to move to 1.88gha over time. I consider that the applicants proposals enable the EFA to meet this essential requirement.

7.5 Fourthly, OPD proposals must have very low carbon buildings – these are stringent requirements requiring that buildings are low in carbon in both construction and use. I consider the applicant's proposals meet this essential requirement

7.6 Fifthly, OPD proposals need to be defined by a binding Management Plan which is reviewed and updated every 5 years. The revised Management Plan includes the commitments set out in OPD Guidance, including the review and updating of the

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Management Plan every 5 years, and I consider this essential requirement is satisfied.

7.7 Finally, OPD proposals must be bound by a clear statement that the development will be the sole residence for the proposed occupants. The submission includes this statement.

7.8 The OPD Guidance refers in para 2.19 to the critical elements which are critical to determination of OPD applications and evidence that essential characteristics are met. These are:

- The overall character of the development, taking account of the current nature of the site and the proposer's objectives for the site. In this case, I consider that the Summary and the Design/Strategy for this proposal indicates a clear intention to develop the site and thereafter manage the land in accordance with OPD principles.
- Whether all essential characteristics for OPD have been met and what additional OPD credentials are shown under the contributory criteria. In this case, my assessment is that the revised Management Plan demonstrates that all essential criteria are met. There are also many positives shown under the contributory criteria.
- Whether the proposals pass the EFA test –the revised submission passes the EFA test and details provide a sufficient level of assurance.
- The effect the proposals are having on other footprints – The Ecological Footprint Analysis section and other elements of the revised Management Plan identify proposals for assessment of or managing the effects on other footprints.
- An itemised programme for the delivery of the Management Plan over the coming 5 years. This is included in a satisfactory level of detail.
- A clearly identified programme of monitoring. The revised Management Plan contains satisfactory proposals to meet this criterion.

## 8 CONCLUSIONS

8.1 On the basis of my assessment of the revised submission, my advice is that, in respect of those elements that I have been commissioned to assess, the proposal meets the qualifying criteria.

8.2 However, the Authority will need to add its own assessment of the Land Management element of the revised Management Plan and then come to its own view, as the local planning authority, on the proposal as a whole.

8.3 In broad terms, the OPD Guidance advises that if a proposal satisfies the requirements of policy and clearly meets the qualifying criteria set out in the Guidance it should be allowed. However, the Guidance also points out that OPD in the open countryside is a relatively complex form of development and determination will frequently be a matter of some debate. The Guidance also points out that in order to make their decision the local planning authority will take into account national policy (set out in Planning Policy Wales and TAN 6), local policy (set out in



## Item 5 - Report on Planning Applications

the local [planning] authority development plan), the OPD Guidance, consultation responses and the specific nature of the proposals.

8.4 As this proposal is in a National Park, the PCNPA should also be aware of para 1.22 of the Guidance which points out that sites of high ecological sensitivity may not be suitable as OPD activities could have unacceptable negative impacts unless these sensitivities are carefully conserved and enhanced.

### APPENDIX: Legal Agreement

#### 1) Legal Agreement:

Welsh Government policy and guidance strongly suggest that the planning authority should, if they are to grant permission for an OPD, make the permission subject to a s106 agreement to secure requirements of OPD development which cannot be covered by planning conditions.

The requirements suggested in TAN 6 and the OPD Guidance, which I strongly recommend should be included in a s106 agreement are:

- a) That the site and the dwelling are to be occupied as a single entity for OPD purposes only and the dwelling is not to be separated from the remainder of the land.
- b) That the occupation of the dwelling is conditional on the management of the land in accordance with the Management Plan and the terms of the planning permission.
- c) Where the land changes ownership a new Management Plan should be submitted for approval. [I take this to mean new occupiers – which could be change of ownership but could presumably also include other arrangements, e.g. a leasehold arrangement or tenancy].

The OPD Guidance also states that the OPDs must be bound by a clear statement that the development will be the sole residence for the proposed occupants.

In this case, a draft s106 obligation has been submitted (Appendix 11). The revised Management Plan includes a section on Clarification of Tenure which explains that the site is owned by the applicant's father and that in the event of planning permission being granted the applicant would 'loan' the site at zero rent. I would advise that legal advice should be sought to clarify whether, in the event that planning permission is granted subject to agreement of a s106 obligation, the terms of the agreement would be binding on the applicant, as the intended occupier, under the proposed arrangement for occupying the land.

I also note that the requirements of the draft s106 obligation, in Clause 3, do not seem to me to be entirely clear and that they do not cover all the matters I set out in a) to c) above. Additionally, you may also wish to take advice on whether the 'sole residence' statement in the Management Plan is sufficient to bind the occupant in a legally enforceable way or whether this also needs to be incorporated into the s106 obligation.

**Conditions/Reasons**

1. The development shall begin not later than five years from the date of this decision.  
**Reason:** Required to be imposed pursuant to Section 91 (1) of the Town and Country Planning Act 1990 (as amended).
  
2. The development shall be carried out in accordance with the following approved plans and documents:  
Management Plan received 14/5/2020  
Site Plan received 27/05/2020  
**Reason:** In order to be clear on the approved scheme of development in the interests of protecting visual amenity and the special qualities of the National Park. Policy: Local Development Plan – Policies 1 (National Park Purposes and Duty), 8 (Special Qualities), 15 (Conservation of the Pembrokeshire Coast National Park) and 29 (Sustainable Design).
  
3. The occupation of the dwelling hereby approved in connection with the One Planet Development shall be limited to resident(s) solely working on the land in accordance with the provisions of the Management Plan and any resident dependents. The dwelling shall be occupied as the sole residence of the resident(s).  
**Reason:** To ensure that the occupation of the dwelling conforms to the principle of One Planet Development and the agreed Management Plan as part of the One Planet Development. Policy: TAN 6 - Planning for a Sustainable Rural Community and Local Development Plan Policy 47 - Low Impact Development.
  
4. The use of the site shall be carried out in accordance with the management objectives set out in the Management Plan received..  
**Reason:** To ensure that only the agreed scheme is implemented and complied with as part of the One Planet Development. Policy: Local Development Plan - Policy 47 (Low Impact Development Making a Positive Contribution).
  
5. No later than on the 2nd January each year, commencing in the first year after development has been approved, the occupiers of the site shall submit to the local planning authority a written report giving details of the activities carried out during the previous twelve months, setting out performance against the management objectives included within the Management Plan and as set out in Sections 14, 15 & 16 - Phasing, Monitoring and Exit Strategy and as required by the Welsh Government Practice Guidance One Planet Development (October 2012). In the event that the report identifies that any objective has not been met, a supplementary report setting out corrective or mitigating measures together with a timetable for achieving the objective or target shall be submitted to the local planning authority no later than the 23rd April of that year. Those measures shall be implemented in accordance with the supplementary report.  
In the event that any revised objective or target is not achieved within the

## Item 5 - Report on Planning Applications

agreed timeframe within the supplementary report, or if the One Planet Development otherwise fails to meet the requirements of the conditions of this planning permission, the Exit Strategy set out in the Management Plan shall be invoked, the residential use of the land shall cease and the dwellinghouse and other domestic structures removed from the land.

**Reason:** To ensure that the site is being managed in accordance with the approved plan. Policy: Local Development Plan - Policy 47 (Low Impact Development Making a Positive Contribution).

6. Prior to the erection of any external lighting, a light mitigation strategy, including measures to reduce light spillage onto foraging habitats for protected species, shall be submitted to and approved in writing by the local planning authority. The development shall be carried out in accordance with the approved details.

**Reason:** To ensure that animal and plant species and habitats listed under the Conservation of Habitats and Species Regulations 2010 are adequately protected, and to protect and enhance the character and appearance of the site and its setting within the Pembrokeshire Coast National Park. Policy: Local Development Plan – Policies 1 (National Park Purposes and Duty), 8 (Special Qualities), 9 (Light Pollution), 11 (Protection of Biodiversity) and 15 (Conservation of the Pembrokeshire Coast National Park).

7. Notwithstanding the provisions of Article 3 of The Town and Country Planning (General Permitted Development) Order 1995, (relating to extensions to, and changes to the external appearance of, the cabin and to development or the siting of a caravan within the curtilage of the cabin), no development of Parts 1, 6, 40 and 43 of Schedule 2 to that Order (or any Order revoking or re-enacting that Order) shall be carried out without specific planning permission being obtained.

**Reason:** To preserve the character of the area. Local Development Plan - Policy 1 - National Park Purposes and Duty, 8 - Special Qualities, 15 - Conservation of the Pembrokeshire Coast National Park and 30 - Amenity.

8. All produce to be sold or bartered as part of the approved One Planet Development is to be sourced from the land subject of this application, and from no other source.

**Reason:** To ensure that only the agreed scheme is implemented and complied with as part of the One Planet Development. Policy: Local Development Plan - Policy 47 (Low Impact Development Making a Positive Contribution).

9. Works must be carried out in strict accordance with section

**Reason:** To comply with the Wildlife & Countryside Act 1981 (as amended), the Conservation of Habitats and Species Regulations 2017 and the Environment (Wales) Act 2016.

10. The development must proceed in strict accordance with the ecological recommendations contained within section 5.2 of the submitted reptile report dated August 2019.

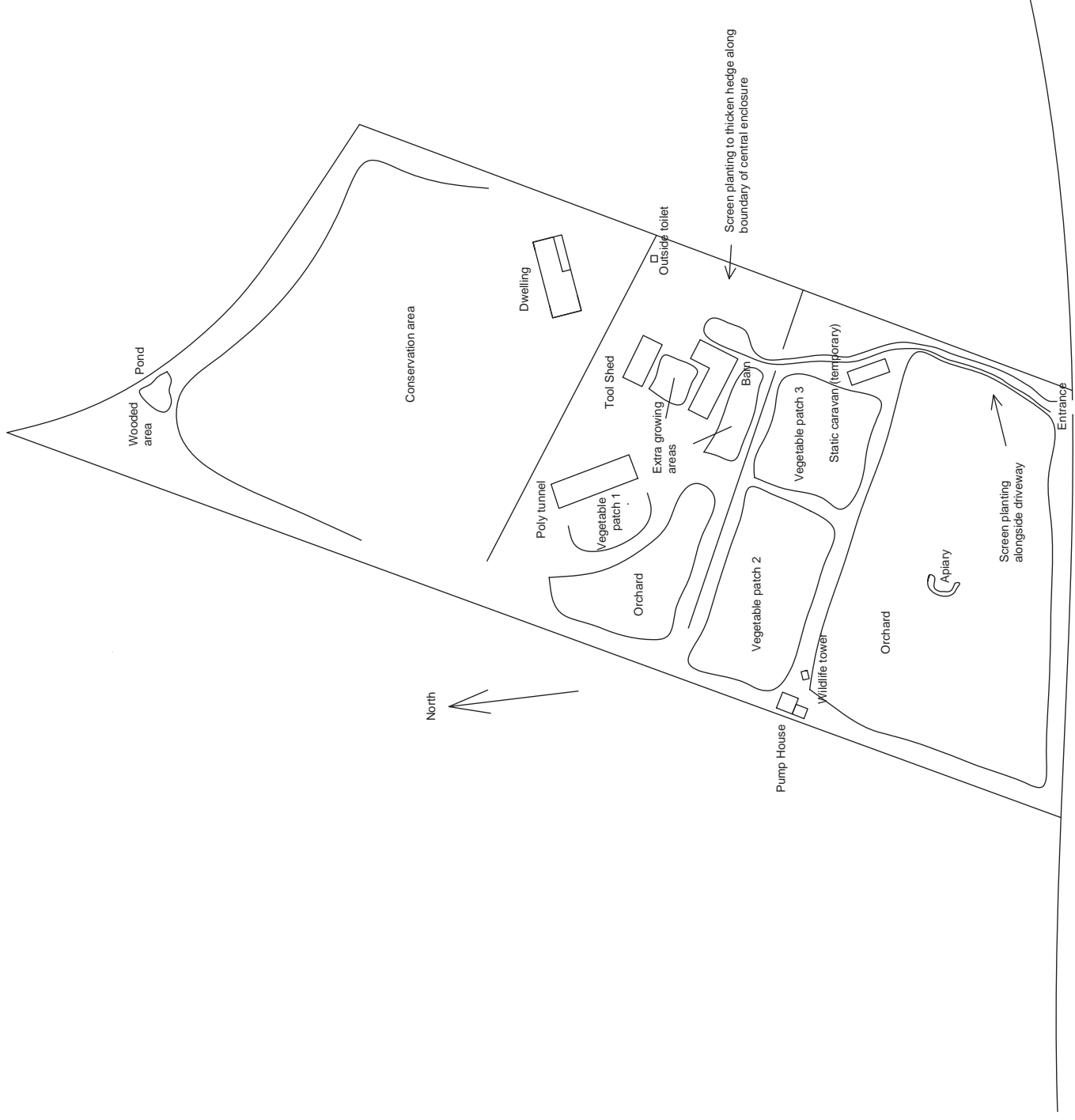
**Reason:** To comply with the Wildlife & Countryside Act 1981 (as amended),

## Item 5 - Report on Planning Applications

the Conservation of Habitats and Species Regulations 2017 and the Environment (Wales) Act 2016.

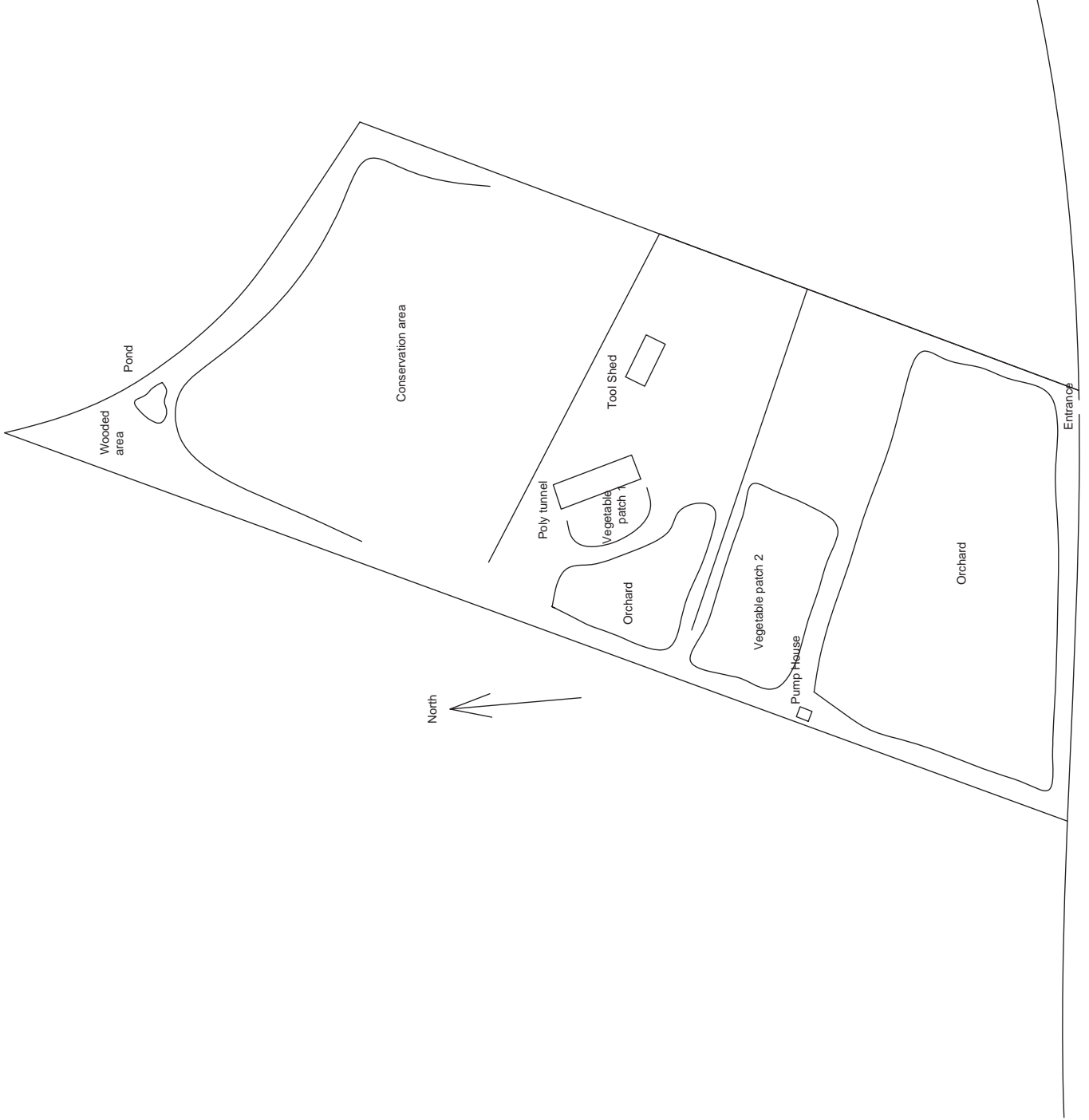


# Jason Road OPD, Freshwater East, Site Plan, Proposed



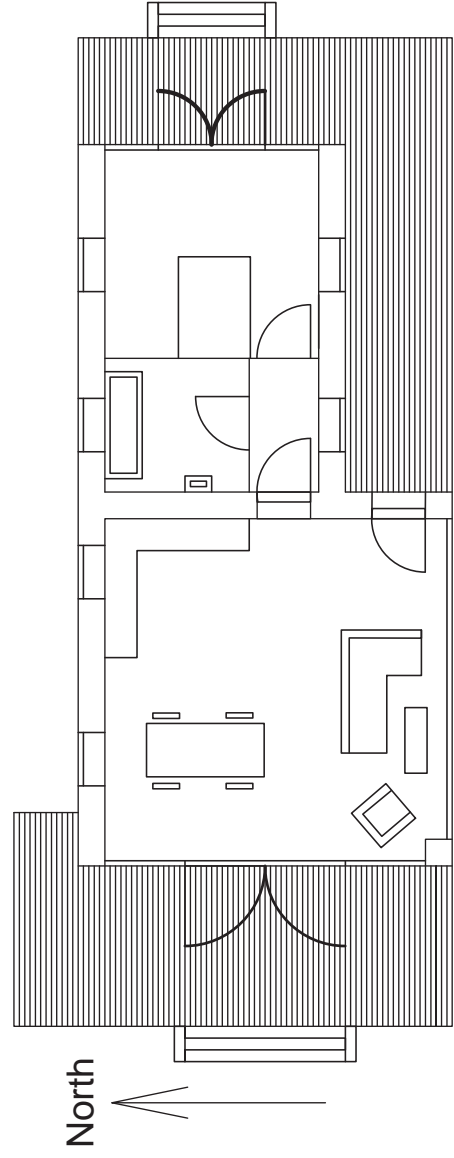
<b>Jason Road OPD, Freshwater East</b>	
Site plan, proposed	Drawing Number SP2
	1:1000 at A3 17/4/20
Contact: James Hamilton, James@humantfood.bio 07932452589	
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# Jason Road OPD, Freshwater East, Site Plan, Existing



<b>Jason Road OPD, Freshwater East</b>	
Site plan, existing	Drawing Number SP1 1:1000 at A3 17/4/20
Contact: James Hamilton, James@humanfood.bio 07932452589	

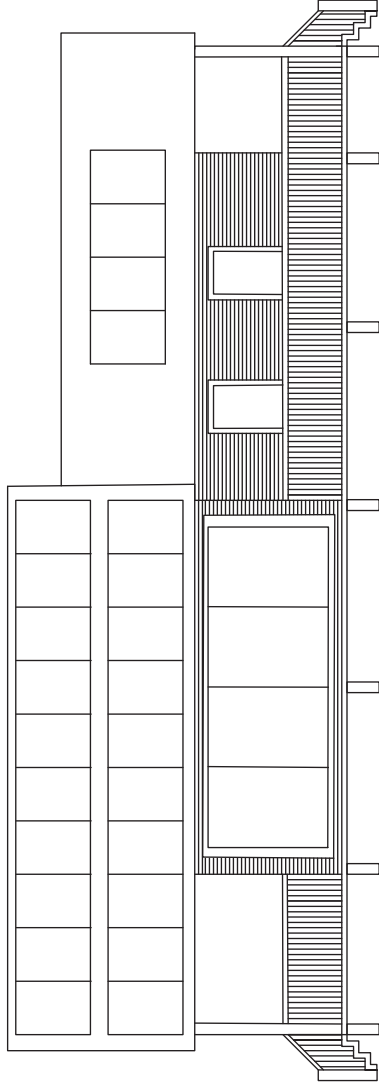
Jason Road OPD, Freshwater East, Proposed Plan, Dwelling.



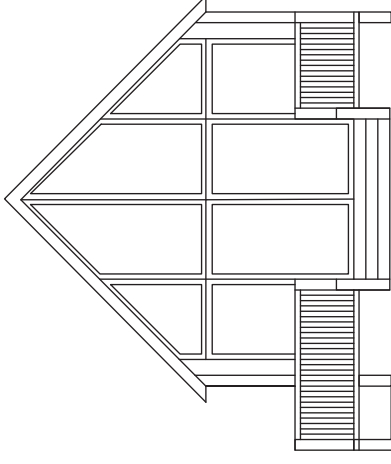


# Jason Road OPD, Freshwater East. Proposed Elevations, Dwelling

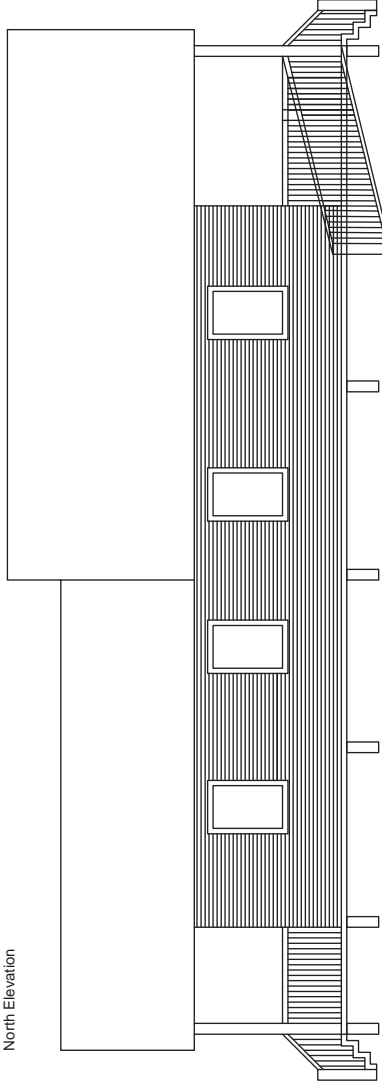
South Elevation



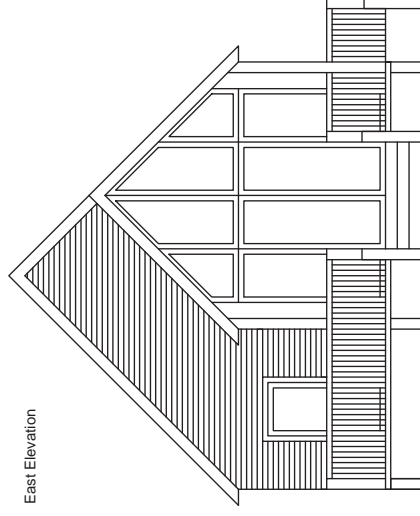
West Elevation



North Elevation



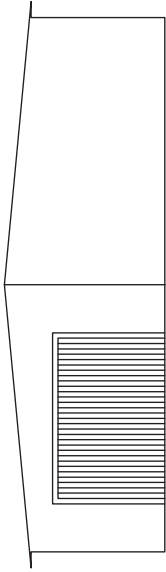
East Elevation



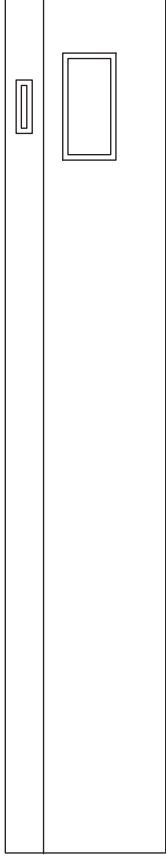
## Material Finishes

- Walls; Painted weatherboarding, black.
- Windows/ Sills; Double glazed, wood-framed, painted.
- Roof; Corrugated steel sheet, painted, black.
- Doors; Double glazed, wood-framed.
- Deck; Larch, unpainted.
- Fascias; Larch, painted.
- Guttering; Recycled aluminium.

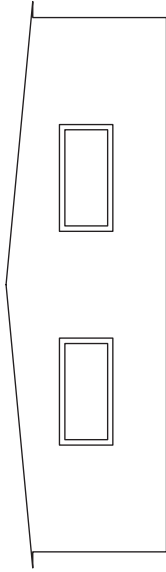
# Jason Road OPD, Freshwater East, Proposed Elevations and Plan, Barn.



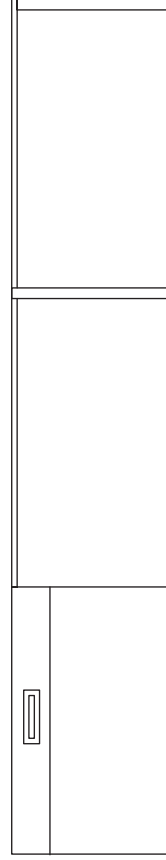
End elevation



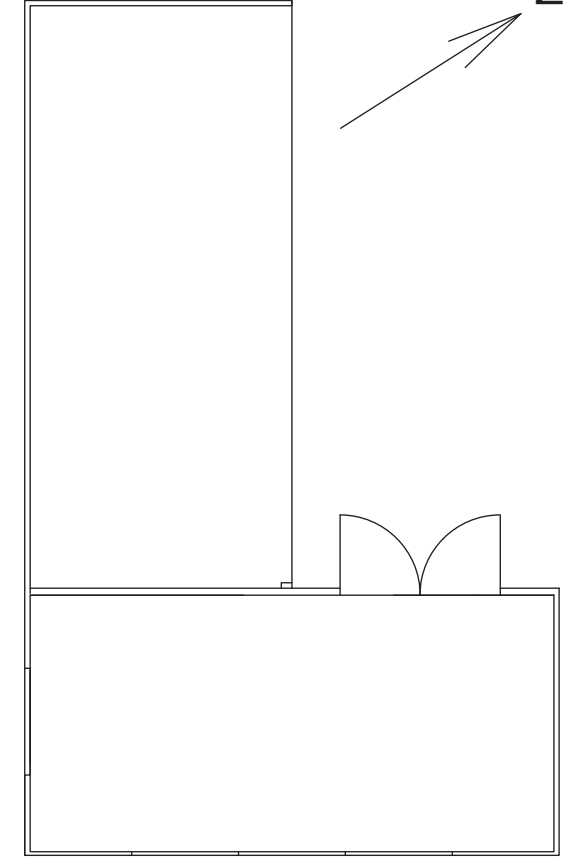
Rear elevation



End elevation



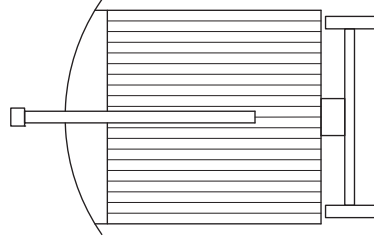
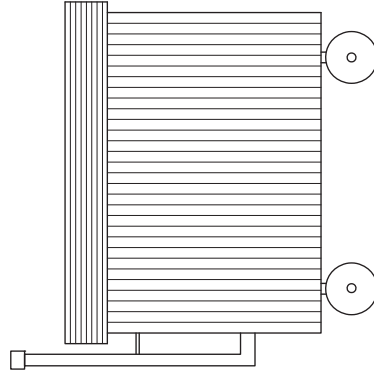
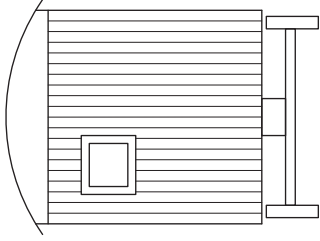
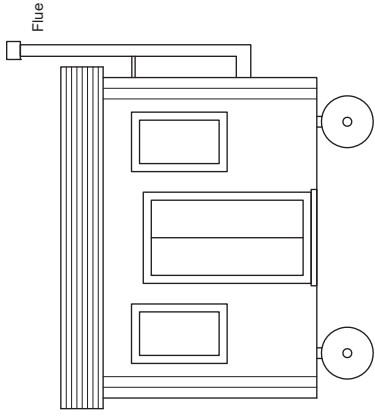
Front elevation



## Material Finishes

- Walls; Corrugated steel sheet, painted
- Roof; Corrugated steel sheet, painted
- Windows; Wood framed
- Doors; Wood, painted
- Sills; Wood, painted
- Fascias; Corrugated steel sheet, painted
- Guttering; Recycled aluminium

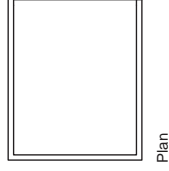
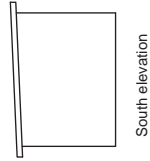
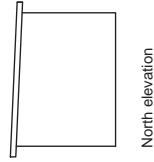
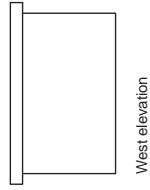
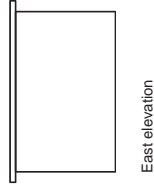
# Jason Road OPD, Freshwater East, Shepherds Hut, Elevations



- Roof: Painted corrugated steel
- Walls: Painted corrugated steel
- Windows: Painted timber frames, double glazed
- Door: Painted timber frames, double glazed
- Wheels: Cast iron

# Jason Road OPD, Freshwater East. Elevations and Plans, Existing and Proposed. Pump House.

## Existing

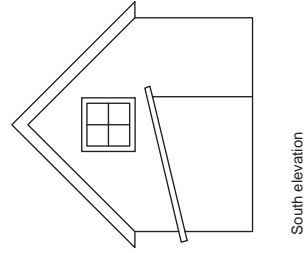
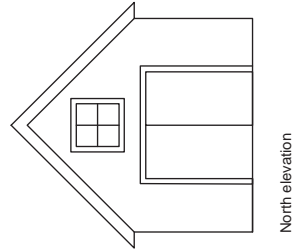
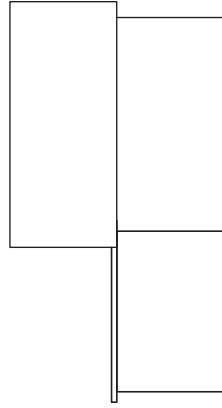
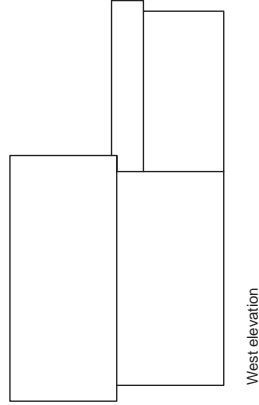


North

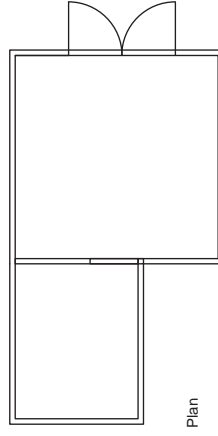
## Existing Material Finishes

Walls; Cement board  
Roof; Cement board

## Proposed



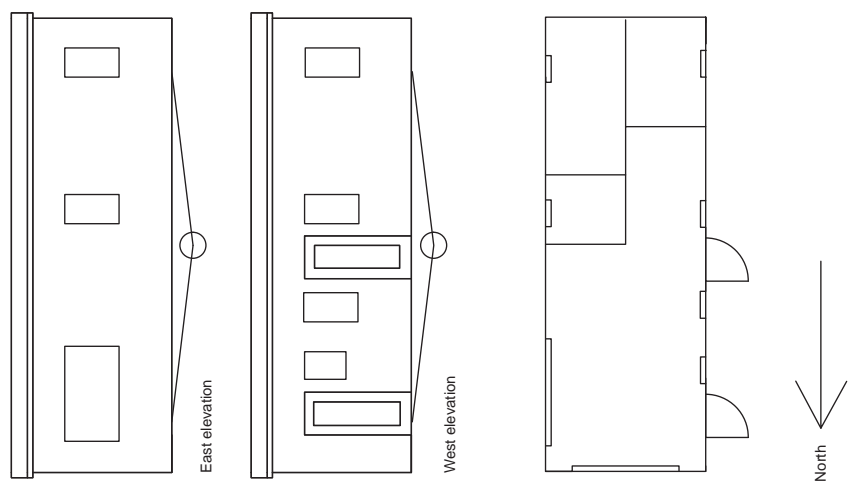
North



## Proposed Material Finishes

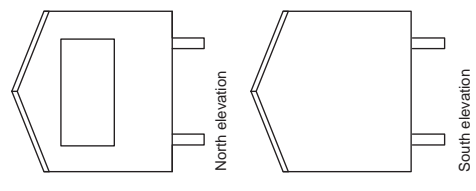
Walls; Corrugated steel sheet, painted  
Roof; Corrugated steel sheet, painted  
Windows; Wood framed  
Doors; Wood  
Fascias; Corrugated steel sheet, painted  
Guttering; Recycled aluminium.

# Jason Road OPD, Proposed Elevations and Plan, Temporary Accommodation (Static Caravan)



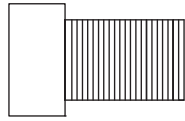
## Material Finishes

Static Caravan; painted aluminium.

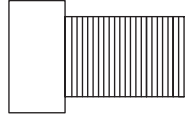


<b>Jason Road OPD, Freshwater East</b>	
Proposed elevations, temporary accommodation	Drawing Number TA1 1:100 at A3, 17/4/20
Contact: James Hamilton, James@humanfood.bio 07932462589	

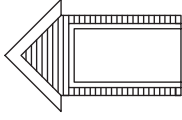
# Jason Road OPD, Freshwater East. Proposed Elevations and plans; Outdoor Toilet



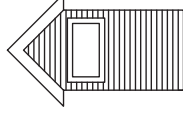
Side elevation



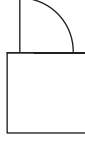
Side elevation



Front elevation



Rear elevation



North



## Material Finishes

- Walls; Weatherboard, painted, black
- Roof; Corrugated steel, painted
- Door; Wooden, painted
- Window; Wood frame, painted
- Fascias; Larch, painted.
- Guttering; Recycled aluminium.