HAYLE HARBOUR REDEVELOPMENT

Rationale for selection of habitat creation sites to mitigate for loss of 3.3 hectares of dune grassland resulting from the Hayle Harbour development proposals

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A. Introduction

The Draft Heads of the Section 106 Agreement for the proposed Hayle Harbour development includes the following provisions:

Before commencement of works to implement construction of the Hilltop Car Park, including any groundworks, the Developer shall submit feasibility studies with detailed proposals, including a programme for implementation, for the restoration of the dune habitat on the area shown on the attached plan [the existing car park at Hayle/Harveys Towans] for approval by the Local Planning Authority and upon approval the Developer will implement the scheme in accordance with the approved programme and detailed proposals. The details to be submitted shall also include proposals for monitoring and management of the restored area.

Before commencement of works to implement construction of the Hilltop residential development, including any groundworks, the Developer shall submit feasibility studies with detailed proposals, including a programme for implementation, for the creation/restoration of dune grassland habitat on the area shown on the attached plan [the two northernmost fields at Riviere Farm comprising 2.5 to 3 hectares] for approval by the Local Planning Authority and upon approval shall implement the scheme in accordance with the approved programme. The details to be submitted will also include proposals for monitoring and management of the new/restored area and the Developer will be responsible for undertaking monitoring and management of that area for a period of [] years following completion of the creation/restoration works.

These habitat creation provisions are put forward in order to mitigate for the loss of 3.3 hectares of dune grassland and associated scrub habitat which will occur at North Quay as a result of proposals within the Hayle Harbour development scheme.

B. Rationale for mitigation site selection

In identifying suitable sites on which to undertake dune habitat creation, the following rationale was adopted by ecological consultants to ING:

Key principles

- 1. The proposed site(s) would provide appropriate ecological benefits (and minimal disturbance) to the wider terrestrial landscape ecology, in particular
 - benefit to the nearby dune SSSI habitats
 - benefit to the existing semi-natural habitats and species within the landscape
- 2. Opportunity to restore degraded habitat would be sought where sustainable
- 3. The proposed site(s) should offer landscape benefits within this partly suburban setting
- 4. The proposed site(s) should be within the ownership of ING, for the following reasons:
 - to allow direct management of the mitigation/compensation project as part of the development proposals
 - to ensure the proposal could be timetabled alongside the phasing of the main project (an important aspect with regard to funding)
- 5. The proposed mitigation project should be sustainable in terms of materials and future management.

Potential sites available according to the selection principles above

Areas of non-urban terrestrial habitat within the ING ownership boundary at Hayle (see Figure 1, attached) were therefore investigated for suitability as dune habitat creation sites. The areas considered are described below, according to the principal land use type in each case.

1. Industrial and post-industrial areas

These have, largely, been earmarked for development within the present regeneration plans with the exception of the Triangular Spit. The Triangular Spit was rejected due to the following factors:

- The Triangular Spit has an existing high nature conservation importance due to the presence of an inter/nationally important colony of petalwort (*Petallophilum raflsii*), which presents constraints on the possibilities.
- Consideration was given to enhancing the small sand dune system on the Spit's west side, but it is a highly dynamic interface within Lelant Water and is too limited in geographic extent for the required mitigation.

2. Existing sand dune habitat (including degraded areas)

The sand dune habitat that exists within the ING ownership shows widespread, though only locally severe, degradation owing to effects that include recreational disturbance, spread of invasive non-native plant species, and historic loss/fragmentation of habitat to scattered buildings and car parking. Within this extent the following options were considered:

- 2.1 Removal of existing housing; this was not considered viable in the context of the development proposals.
- 2.2 Restoration of sand dune habitat on the informal car park on Harvey's (Hayle) Towans. This option appeared particularly viable since it has potential to restore the locally pressured semi-fixed dune habitat whilst management of the access routes to the beach is being undertaken as part of the development proposals. The restoration of dune would also restore landscape quality to a conspicuous area of higher ground above Hayle Beach.

2.3 Management of the non-native sea buckthorn growth within the ING ownership. This would represent a significant improvement in the quality of the dune habitat on Harvey's Towans.

3. Agricultural land

Within the ING ownership there are several agricultural fields within the Riviere Farm landholding that were identified as potential sites for habitat compensation. Within this extent the following options were considered:

- 3.1 An area of fields near Mexico Towans which have the benefit of:
 - being adjacent to the dune SSSI such that new dune habitat here could provide ecological benefits by reducing indirect impacts of arable land use on SSSI habitats
 - being close to marine influence
 - being of low to negligible nature conservation interest.
- 3.2 The south-western fields (above Copperhouse Pool); however, these were unavailable for habitat creation purposes since they are earmarked for development within the Hayle Harbour proposals.

C. Dune mitigation sites selected

As a result of the above appraisal, the following two sites were selected as the most suitable areas on which dune habitat creation could be carried out:

- Harvey's (Hayle) Towans car park (see para 2.2 above)
- Two fields in the north-eastern region of the Riviere Farm landholding (see para 3.1 above)

It is therefore proposed that the loss of 3.3 hectares of dune grassland at North Quay is addressed through:

- Restoration of 0.5 hectares of semi-fixed dune habitat at Harvey's Towans (to be achieved by deposition of 2-3m of clean sand over the area and subsequent stabilisation of the substrate through planting and landscaping, followed by appropriate habitat management and monitoring)
- Conversion of 2.75 hectares of arable land at Riviere Farm to dune grassland (to be achieved by deposition of clean sand to 1m depth over 100% of the total area available, and subsequent landscaping, seeding, planting and appropriate management and monitoring).

The location and boundaries of the two dune mitigation sites are shown on Figures 2 and 3, attached.

D. Policy review relevant to dune creation on agricultural land at Riviere Farm

Buro Happold has prepared a report (see Appendix 1) which reviews the proposed loss of 2.75 hectares of Grade 2/3a agricultural land at Riviere Farm against relevant national, regional and local planning policies applying to use of agricultural land in the context of development proposals. The report also assesses the social and economic impacts of the conversion of the land to nature conservation use.

The Penwith Local Plan and Cornwall Structure Plan policies concerning the development-related use of agricultural land largely reflect national policy guidance in this area, which sets out a presumption in favour of the protection of the 'best and most versatile' land (ie. Agricultural

Land Classification Grades 1, 2 and 3a), except where the land area involved is not 'significant' or there are other overriding sustainability considerations. The key relevant policies in this case are:

Penwith Local Plan: Policy E-5:

DEVELOPMENT WHICH WOULD RESULT IN THE IRREVERSIBLE LOSS OF AGRICULTURAL LAND GRADED 1, 2 AND 3A IN THE DEPARTMENT FOR ENVIRONMENT, FOOD AND RURAL AFFAIRS CLASSIFICATION WILL NOT BE PERMITTED UNLESS THERE IS NO PRACTICABLE ALTERNATIVE AND THE IMPORTANCE OF THE DEVELOPMENT OUTWEIGHS THE NEED TO PROTECT THE BEST AND MOST VERSATILE LAND. IF AGRICULTURAL LAND NEEDS TO BE DEVELOPED, AND THERE IS A CHOICE BETWEEN SITES IN DIFFERENT GRADES (AGRICULTURAL LAND CLASSIFICATION GRADES 1-5), LAND OF THE LOWEST GRADE AVAILABLE SHOULD BE USED UNLESS OTHER SUSTAINABLE CONSIDERATIONS OUTWEIGH THE AGRICULTURAL LAND QUALITY CONSIDERATIONS.

Cornwall Structure Plan: Policy 3

Development must be compatible with the prudent use of natural and built resources and energy conservation. Development should:

- give priority to the re-use of previously developed land and buildings to meet development needs including, where appropriate, derelict land reclamation;
- protect the best and most versatile agricultural land;
- avoid land at risk from flooding, following a sequential approach to site selection ensuring priority is always given to low risk areas;
- utilise sustainable drainage techniques dealing with surface water run-off as close to source as possible;
- avoid, directly or indirectly, risk of significant levels of pollution or contamination to air, land, soil or water, including noise and light pollution;
- facilitate energy conservation and the utilisation of renewable energy sources reducing energy consumption and CO2 emissions;
- follow sustainable construction principles including consideration of the use of resources, energy efficiency and local materials.

In judging how far the proposed loss of agricultural land at Riviere Farm represents a significant departure from these policies, the following aspects need to be considered:

- i. the significance of the social and economic impacts of the loss of productive land
- ii. the nature conservation benefits arising from the proposed dune habitat creation scheme

Addressing point i), the Buro Happold report predicts that the loss of 2.75ha of agricultural land at Riviere Farm will have the following impacts:

- Minor to insignificant impact on the area of 'best and most versatile' land available for horticultural use
- Minor direct impact on the income of the existing farming operation
- Minor to insignificant indirect district-level economic impact
- Minor direct employment and social impacts
- Minor to insignificant indirect district-level employment and social impacts
- Minor to insignificant impact on local food production
- Insignificant impact on transport

Thus, the social and economic impacts are minor / insignificant at district and local levels, and the farm level impacts are also assessed as minor, since they would not threaten the viability of the farming operation.

Addressing point ii) above, the nature conservation benefits of the proposed dune habitat creation scheme at Riviere Farm can be summarised as follows:

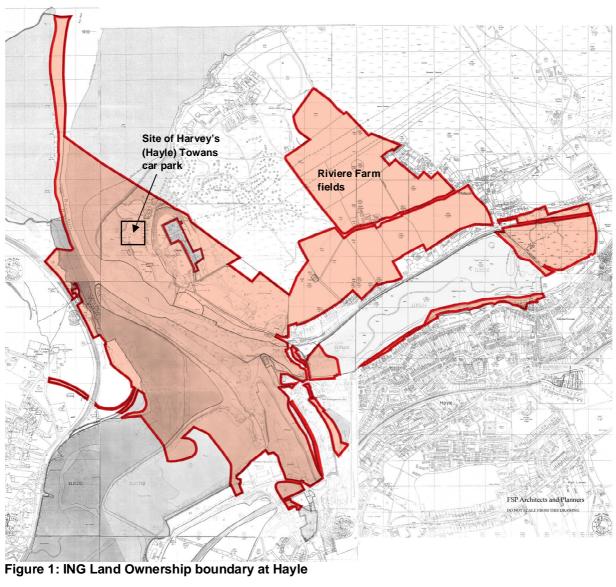
- Sand dunes are of high conservation importance, and are a European priority habitat, listed in Annex I of the EC Habitats Directive (coastal dune systems and their component habitats are threatened and declining in Europe). The UK Biodiversity Steering Group has produced a national Habitat Action Plan for this BAP Priority habitat, and there is also a Habitat Action Plan for county sand dune systems contained in the Cornwall BAP, Volume 3 (2004).
- The dune area which would be lost to the Hayle Harbour development (above North Quay) is moderate in size, isolated from the wider Towans dune system (by an adjacent cricket pitch and the Riviere Chalet camp to the north), and experiences localized recreational pressures which compromises the habitat quality (eg. through trampling of vegetation, littering). Such detrimental effects should be avoidable at the proposed dune habitat mitigation area at Riviere Farm, which is within the ownership of the applicant, thus providing likely assurance of appropriate habitat management and access control so that in the long-term the biodiversity value of the created habitat should exceed that of the dune area lost to development.
- The Riviere Farm fields that have been selected for dune habitat creation are immediately adjacent to the western boundary of the Gwithian to Mexico Towans Site of Special Scientific Interest (SSSI), which is an area of nationally important calcareous fixed dune grassland. The creation of a semi-natural habitat on the periphery of the SSSI is a valuable proposal since it could buffer the SSSI from the continuing agricultural use of the Riviere Farm fields and, potentially, absorb part of the continuing visitor pressure on that section of the dunes. This in turn could benefit species such as Skylark, a Priority Biodiversity Action Plan species, and reptiles, both of which require undisturbed grasslands, and offering nature conservation gain for the SSSI sand dune system.

Thus, while the permanent loss of Grade 2/3a land is not consistent with basic planning policy objectives for the use of agricultural land, the specific circumstances at Riviere Farm mean that counter-balancing arguments can be made in favour of dune habitat creation on 2.75 ha of land here, ie.

- the scale of agricultural and loss is relatively small
- the social and economic impacts of the proposal would be minor to insignificant at the district, local and farm level
- significant nature conservation benefits are likely to arise from creation of the proposed dune
 habitat area (particularly that the site location favours probable enhancement of conditions in
 the adjacent SSSI).

The last bullet above can be viewed as a 'sustainability consideration', as referenced in Penwith Local Plan policy E-5.

Spalding Associates / Environmental Academy 17th December 2008



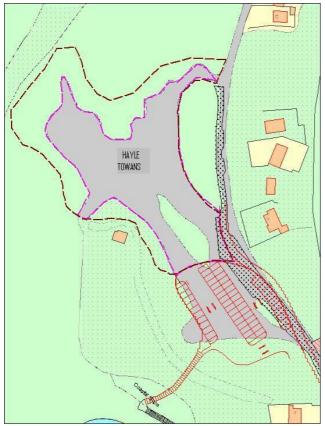
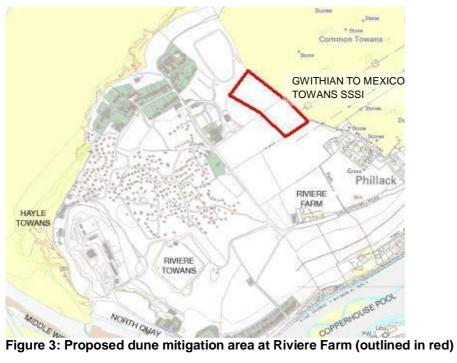
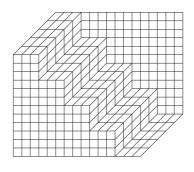


Figure 2: Proposed dune mitigation area at Hayle Towans (hashed line)



Appendix 1:

Hayle Harbour OPA, Agricultural Land Study (Buro Happold, December 2008)



022961 Hayle Harbour OPA

Agricultural land study

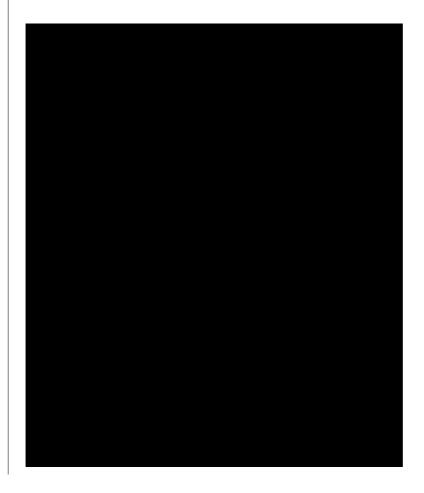
December 2008

Revision 01

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1 Purpose and background

1.1 Purpose

The purpose of this report is to assess the economic and social impacts of the proposed conversion to nature conservation of 2.75 ha of agricultural land at Riviere Farm, Hayle, in terms of:

- a) The farm enterprise which uses the land
- b) Local food production
- c) The local economy and community.

1.2 Background information

Riviere Farm (67.5 acres, or 27.3 ha, in 12 fields) is owned by ING Real Estate Development UK (Hayle Harbour) Ltd, and leased to R Whear & Son. This lease does not extend to the farmhouse and outbuildings, which are leased to other parties.

The fields concerned (2.75 ha, or about 10% of the farm) are understood to be either Grade 3a or Grade 2 agricultural land, under agricultural land classification (ALC) system developed by MAFF and now administered by Defra (MAFF, 1988 - Table 1—1). Penwith District Council advises that the fields are thought to be Grade 3a, but the broad scale maps of ALC on the MAGIC website (www.magic.gov.uk) appear to show the area as Grade 2, although the maps are only a general guide and are not a substitute for field verification. The farm tenant also considers the land to be Grade 2, and the results of the soil survey at the site support this view. It has been assumed for the purpose of this report that the land is Grade 2.

The fields have been used to grow broccoli in recent years, as has the remainder of Riviere Farm, with the exception of one field which is used for preparation, loading and unloading vehicles etc. In previous years (more than a decade ago) the land was used for grazing.

The land is subject to a Farm Business Tenancy regulated under the Agricultural Act 1995. The land lease is on an annual rolling basis. The tenancy agreement requires ING RED UK Ltd, the owner, to give the tenant 12 months notice on or before the annual/interim review dates. The tenant also operates other farms in the area.

The broccoli crop is sold into local markets and supermarket chains. It has been assumed that about 2/3 is sold to local markets and 1/3 to national markets in a typical year. The local packhouse and distribution centre is about four miles from the farm.

The labour force on the farm is mainly the farmer and his family, and it is also assumed that casual labour is employed during harvest.

Grade 2 - very good quality agricultural land

Land with minor limitations which affect crop yield, cultivations or harvesting. A wide range of agricultural and horticultural crops can usually be grown but on some land in the grade there may be reduced flexibility due to difficulties with the production of the more demanding crops such as winter harvested vegetables and arable root crops. The level of yield is generally high but may be lower or more variable than Grade 1.

Grade 3 - good to moderate quality agricultural land

Land with moderate limitations which affect the choice of crops, timing and type of cultivation, harvesting or the level of yield. Where more demanding crops are grown yields are generally lower or more variable than on land in Grades 1 and 2.

Subgrade 3a - good quality agricultural land

Land capable of consistently producing moderate to high yields of a narrow range of arable crops, especially cereals, or moderate yields of a wide range of crops including cereals, grass, oilseed rape, potatoes, sugar beet and the less demanding horticultural crops

Subgrade 3b - moderate quality agricultural land

Land capable of producing moderate yields of a narrow range of crops, principally cereals and grass or lower yields of a wider range of crops or high yields of grass which can be grazed or harvested over most of the year.

Table 1-1 MAFF (1988) definitions of agricultural land Grades 2 and 3

2 Review of relevant policy

Legislation and policy of relevance is reproduced below.

2.1 Planning Policy Statement 7: Sustainable Development in Rural Areas

28. The presence of best and most versatile agricultural land (defined as land in grades 1, 2 and 3a of the Agricultural Land Classification), should be taken into account alongside other sustainability considerations (e.g. biodiversity; the quality and character of the landscape; its amenity value or heritage interest; accessibility to infrastructure, workforce and markets; maintaining viable communities; and the protection of natural resources, including soil quality) when determining planning applications. Where significant development of agricultural land is unavoidable, local planning authorities should seek to use areas of poorer quality land (grades 3b, 4 and 5) in preference to that of a higher quality, except where this would be inconsistent with other sustainability considerations.

PPS7 makes clear the presumption in favour of protection of grade 1, 2 and 3a agricultural land. However it should be balanced against other sustainability considerations. Poorer quality land should be preferred for 'significant' non-agricultural development, and it may be argued that 2.75 ha is not a significant development, although this depends partly on the local context as discussed further in section 4 below.

2.2 Town & Country Planning Act 1990

Section 55. Meaning of "development" and "new development"

- (1) Subject to the following provisions of this section, in this Act, except where the context otherwise requires, "development," means the carrying out of building, engineering, mining or other operations in, on, over or under land, or the making of any material change in the use of any buildings or other land.
- (3) For the avoidance of doubt it is hereby declared that for the purposes of this section—
- (a) the use as two or more separate dwellinghouses of any building previously used as a single dwellinghouse involves a material change in the use of the building and of each part of it which is so used;
- (b) the deposit of refuse or waste materials on land involves a material change in its use, notwithstanding that the land is comprised in a site already used for that purpose, if—
- (i) the superficial area of the deposit is extended, or
- (ii) the height of the deposit is extended and exceeds the level of the land adjoining the site

Based on the definitions in section 55, reversion of agricultural land to nature conservation is not in itself 'development' in terms of the Town & Country Planning Act 1990. However, deposit of clean sand to assist with dune plant revegetation is likely to be considered a material change of use. Deposit of sand won from dredging may also be considered 'deposit of waste' and therefore subject to the Local Plan's provisions on this subject, and the provisions of waste management legislation, although an exemption from the latter can be applied for. It is understood that in this case the sand will be classed as waste by the Environment Agency

2.3 Penwith Local Plan

The Penwith LDF is at an early stage of preparation, therefore policy and explanatory text from the Penwith Local Plan (of relevance to agricultural land protection) are reproduced below, with emphasis added.

6.3.3 POLICY CC-1:

Development will not be permitted where it would significantly harm the landscape character, amenity, nature conservation, archaeological, historic or geological values of the coast and countryside of Penwith.

6.3.7 Although special emphasis is rightly given to formal landscape designations it is important not to undervalue the contribution made to the identity of Penwith by all parts of the countryside. Almost any landscape is valued by somebody, for whatever reason, and the importance of safeguarding those parts of the countryside not within a designated landscape area is fully recognised. This accords with the government's view, as expressed in PPG 7, of the need to protect the countryside in general for the sake of its beauty and diversity of landscape as well as its ecological, **agricultural** and recreational value, a view carried through into PPS 7...

6.3.23 The character of much of the rural landscape has largely been shaped and maintained by farming practices. The prehistoric pattern of small scale fields enclosed by stone walls, for example, still survives in west Penwith, producing a unique historic landscape. Over recent years changes in agricultural practices and priorities have created new pressures and demands. Increasingly areas of land are being taken out of agricultural production with farmers looking at alternatives for the economic use of their land, including projects relating to tourism and recreation. Whilst the government supports diversification there remains a strong presumption to maintain and enhance the landscape, as well as **protecting the best and most versatile agricultural land...**

Policy CC-11 and other policies promote the creation and management of landscape features and habitats.

2.4 Summary

There is a national policy presumption on favour of protection of grade 1, 2 and 3a land, which is qualified by consideration of whether a proposed development is 'significant' (i.e. covering a large area), and whether there are other overriding sustainability considerations. The Local Plan repeats this presumption and also contains policies which promote the enhancement of nature conservation values, especially in relation to SSSIs and other designated sites, but does not provide guidance on how agricultural use value may be weighted against nature conservation value.

3 Assessment of impacts

3.1 Agricultural land class distribution

The following Agricultural Land Classification (ALC) Statistics were sourced from the Defra website http://www.defra.gov.uk/rds/lgmt/ALC.htm.

These ALC statistics derive from the digital 1:250,000 scale Provisional ALC map, originally published as a regional series of paper maps in 1977, and Ordnance Survey Boundary Line 2003. It should be noted that the Provisional ALC map was designed to provide general strategic guidance on land quality and not for identifying the agricultural quality of individual parcels of land. It is based on reconnaissance surveys, rather than detailed field surveys, and has a minimum mapping unit of approximately 80 hectares. The maps were created prior to the sub-division of Grade 3 into Sub-grades 3a and 3b.

Penwith has a slightly higher proportion of Grade 1 and 2 agricultural land than Cornwall (8.8% vs. 8.1%), and considerably more than England as a whole (6.9%) (Table 3—1).

Agricultural land grade	Penwith	Cornwall	England
	Area (%)	Area (%)	%
1	326 (1.1)	326 (0.1)	2.7
2	2261 (7.5)	28317 (8.0)	4.2
3	19147 (63.5)	216517 (61.2)	48.2
4	2642 (8.8)	67,599 (19.1)	14.1
5	2733 (9.1)	23367 (6.6)	8.4
Non-agricultural	1820 (6.0)	11299 (3.2)	5.0
Urban	1225 (4.1)	6250 (1.8)	7.3

Table 3-1 Area and percentage of main agricultural land grades

3.2 Horticultural land use

The statistics in Table 3—2 were obtained from the June 2007 Agricultural Survey, again from the Defra website.

Measure	Penwith	Cornwall &	Note
Farmed area (ha)	23,393	283,491	Total farmed area in the county / district
Number of holdings	689	8021	Total holdings in the county / district (includes part time)
Horticulture area (ha)	2002	5543	Total area in horticultural use
Horticulture (No. of holdings)	80	525	Number of holdings classified as primarily horticultural enterprises
Horticulture (area as % of total farmed)	8.6%	2.0%	Percentage of farmland used for horticulture
Horticulture (No. of holdings as % of all holdings)	11.6%	6.5%	Percentage of all holdings classed as primarily horticultural
Vegetables and salad grown in open (ha)	996	3093	Area of all field vegetable crops
Vegetables and salad (No. of holdings)	71	316	Number of farms which grew at least some field vegetables

Table 3-2 Horticultural land use in Penwith and in Cornwall & Isles of Scilly

Penwith has about 80 horticultural holdings (economic units), and horticultural land accounts for 2002 ha or 8.6% of all farmland (Table 3—2). These figures correspond closely with, but are somewhat lower than, the Grade 1 and 2 ALC figures in Table 3—1. Not all Grade 1 and 2 land is used for horticulture, as it may be used for arable crops or grazing, and not all horticulture is located on Grade 1 and 2 land, as Grade 3a (which is in good supply) is also suitable for some horticultural and field vegetable crops.

About half of all horticulture in Penwith in 2007, by area, was field vegetables (996 ha). The 2.75 ha under consideration for habitat creation at Riviere Farm would be about 0.3% of Penwith's field vegetable area and about 0.1% of Cornwall's. At a district and county scale this loss of production is considered to be minor to

insignificant. If the demand and market value for field vegetables increased in the future it is likely that there is additional Grade 2 and 3a land in the county which could be used for field vegetable production if required (e.g. land currently used for grazing).

3.3 Farm level and district economic impacts

3.3.1 Farm level

In considering farm level impacts on the current tenant, the following facts are relevant:

- The 2.75 ha in question is about 10% of the farm
- The tenant also has farming operations on other properties
- Production and market prices for fresh vegetables are highly variable depending on factors such as the season, and supplies available from other sources.
- The published gross margin for broccoli (income after deduction of variable costs but without allowing for fixed costs) varies between authors and years. An average figure of £2177 / ha is provided by the Agricultural Budgeting and Costing Book (Nov 2008), although the Farm Management Pocketbook (2009) gives a figure of £690 / ha.

Based on the higher figure, the lost income to the farmer would be $2.75 \times £2177 = £5987$ per year. A further £308 would be lost through reduced Single Payment Scheme payments, which are currently received by the tenant farmer at the standard lowland rate of £112.17 / ha (in 2008). In addition, the fixed costs for the farm such as management costs and machinery leasing would in all likelihood remain the same, and would therefore need to be supported by a smaller farm unit.

The tenant farmer was asked to comment on the magnitude of these impacts in relation to his overall farm enterprise, based on the following scale:

- Minor noticeable, but would not affect the overall operation and viability of the enterprise
- Moderate would require changes to the farming operation e.g. cutting costs in other areas, reducing
 machinery fleet, changing the crop mix or production methods, reducing full time staff
- Major would undermine economic viability of the farm, may require you to restructure, downsize your overall operation, take on more debt etc

He assessed the overall impact as minor, noting that his farming operation includes other properties and the lost acreage could be replaced from within the overall area he farms.

In conclusion, the farm level impacts are assessed as minor, and they will not threaten the viability of the farming operation.

3.3.2 District level

The impact of losing income from the local economy is assessed by using the ECONi South West Regional Accounts which are produced by the South West Regional Development Agency. ECONi includes an impact assessment tool which calculates the value of the direct and indirect impacts (multiplier effects) of change within the economy, such as the loss of income from a particular sector. ECONi uses regional data and does not reflect specific localised market and labour conditions, but provides the most appropriate method to estimate impacts in this case.

The use of 2.75ha of land for other purposes is estimated above to result in the loss of direct income in the local economy of £5,987. The ECONi tool shows that a loss of £5,987 in the agricultural sector will result in the direct loss of 0.1 full time equivalent (FTE) jobs and a loss of a further 0.1 FTE jobs in the wider economy. The total combined loss of 0.2 FTE is too small a number to generate any figures for the decrease in the added monetary value of agriculture to the local economy (GVA). For comparison the ECONi tool shows that a loss of 1 FTE job in agriculture would generate a total loss of £0.03m GVA to the local economy.

The loss of 2.75 ha and the income of £5,987 it generates will, therefore, have a minor to insignificant effect on the local and regional economy.

3.4 Social and employment impacts

3.4.1 Farm level

The direct employment impacts would be mainly felt as reduced hours for casual labour employed to plant and pick the crop. Assuming that the farm remained viable, there is unlikely to be the loss of any permanent positions. Overall the impact is likely to be minor.

3.4.2 District level

As demonstrated in paragraph 3.3, the loss in income would result in the loss of 0.1 FTE jobs in the wider economy. Therefore, the downstream social and employment impact is likely to be minor to insignificant.

3.5 Other impacts

Impacts on local food production are considered to be minor to insignificant. As noted about the fields represent only 0.3% of the field vegetable production area in the District.

Transport related impacts are difficult to predict. Given that some of the farm's production is already sent to national markets, it may be that this export volume reduces. Alternatively, national sales may be maintained if prices or contracts dictate this, with local sales reducing. Overall the impacts on transport will not be significant.

4 Summary

The loss of 2.75 ha of land from Riviere Farm is expected to have minor or insignificant adverse impacts.

The impacts can be summarised as:

- Minor to insignificant impact on the area of Grade 1, 2 and 3a land available for horticultural use
- Minor direct impact on income of the existing farming operation
- Minor to insignificant indirect District level economic impact
- Minor direct employment and social impacts
- Minor to insignificant indirect District level employment and social impacts
- Minor to insignificant impact on local food production
- Insignificant impact on transport

References

Agro Business Consultants (2008) Agricultural Budgeting and Costing Book.

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B Warmington Buro Happold Limited Camden Mill Lower Bristol Road Bath BA2 3DQ UK

Telephone: +44 (0)1225 320600 Facsimile: +44 (0)870 787 4148

Email: bernie.warmington@burohappold.com