Objections to Planning Application 16/0669/MOUT

Land at Two Bridges Road, Sidford

Cllr Marianne Rixson & Cllr Dawn Manley
5th June 2016

Contents

SUI	MMARY	2
1	FLOOD RISK	2
2	INADEQUATE ROAD NETWORK AND DIFFICULT ACCESS TO THE SITE	2
3	EXCESSIVE AND INAPPROPRIATE DEVELOPMENT	3
4 E	UNACCEPTABLE DAMAGE TO A VALUABLE AND SENSITIVE SITE IN THE EADEVON AREA OF NATURAL BEAUTY	
5		
REI	FERENCES	
F	FLOOD RISK	5
I	NADEQUATE ROAD NETWORK AND DIFFICULT ACCESS TO THE SITE	6
Γ	DAMAGE TO THE SITE	7
	MPACT ON NEIGHBOURING PROPERTIES	
API	PENDICES	9
Α	APPENDIX A - NPPF extracts	9
A	APPENDIX B – Environment Agency Flood Zone Map	10
A	APPENDIX C – Narrow Roads	11
A	APPENDIX D – Map of narrow roads, Sidford & Sidbury	12
A	APPENDIX E – Visual impact	13
	APPENDIX F – Review of the Ecological Impacts for the Land at Two Bridges Road, Sidford	
A	APPENDIX G – Agricultural Land	27
	APPENDIX H – Rainfall data – Flood Warnings and Alerts from the Environment Agency for didford	
A	APPENDIX I – Flood Survey	29
A	APPENDIX J - Photos of Flood Zone 2/3 & Downstream	41
A	APPENDIX K – Adapting to Climate Change	44
A	APPENDIX L – Photos of flooding at 2 Bridges Road, Sidford	45
	APPENDIX M – Pavements & Road Width	
Δ	APPENDIX N – Photos of congestion in School St. Two Bridges Road & Sidbury	47

SUMMARY

I object to this application because the scale and the type of development proposed is excessive and inappropriate on this site because of:

- an increasing risk of serious flooding which cannot be appropriately mitigated,
- an inadequate and un-improvable road access,
- unacceptable damage to a site in the AONB of high landscape value and rich in wildlife, and
- potential damage to the vitality of Sidmouth town centre

Moreover in a number of significant areas, this application fails to comply with policies of the East Devon Local Plan and the National Planning Policy Framework.

1 FLOOD RISK

The site is located on a flood plain which acts as a natural sump to the surrounding valley sides. It is subject to regular serious flooding and run-off from the site contributes to flooding in residential areas of Sidford, which has affected many residents. There is a strong possibility that the proposed construction of extensive areas of hard standing would inevitably exacerbate the run-off problem. This contravenes East Devon Local Plan **Policy EN22 (Surface Water Run-off Implications of New Development).**

The applicants' consultants' Environmental Statement (3.6.26) erroneously suggests that development is planned only in flood zone 1. In fact Phase 1 of the development would in fact be in flood zones 3 and 2, so the Sequential Test should be applied (NPPF, 100 and 102)¹ (see Appendix A). Note the Environment Agency map on page 56 of Jubb Consulting Engineers Ltd Flood Risk Assessment, dated August 2012, clearly shows that the proposed development site is in Flood Zones 3 and 2 (see Appendix B).

Mitigation measures as proposed by the applicant are inadequate as they fail to take account of the substantial increase in flood risk caused by climate change contained in the latest Environment Agency guidance. This contravenes East Devon Local Plan **Policy EN21 (River & Coastal Flooding). In** addition, **the mitigation** measures would cause unacceptable environmental damage to a sensitive site.

2 INADEQUATE ROAD NETWORK AND DIFFICULT ACCESS TO THE SITE

The site is located on the A375, effectively an unimproved rural 'B' road, which is dangerously narrow in places, and is incapable of coping with the inevitable rise in heavy vehicle movements that would result from the proposed development.

The Transport and Access Statement prepared by Jubb Consulting Engineers Ltd is misleading. It states that the "site is well served by highway access" (3.6.26) and that the A375 is "an interurban link forming an important part of the regional strategic highway network within East Devon" (2.1.6). However, a later comment (10.4.5) admits that the local road network because of "its organic growth and historic nature.....has grown from a series of lower order routes leaving typically confined highway geometry" (narrow roadways!).

¹ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/6077/2116950.pdf

Access to the site from the south is along School Street which narrows to 4.8 metres in width by 'Cobwebs' cottage. It is a notorious bottleneck where heavy goods vehicles and cars, let alone buses, cannot pass each other, and frequently resort to driving on the pavements. Any increase in such traffic would pose a serious safety risk for pedestrians using the narrow footway. (See photos, Appendix C)

Vehicles approaching the site from the south would need to negotiate the centre of historic Sidbury, where parked cars already cause serious congestion. The road through the village contains a series of dangerous 'pinch points', for example at 'Crossways' where cars are permanently parked close to a blind bend, there is no pavement and the carriageway is only 5.3 metres wide. At Sidford Mill, where there are no pavements, the road narrows again to 5.3 metres. (See map, Appendix D). Historic Cotford Bridge, located on a bend just outside the village, is difficult to negotiate by large vehicles and has been the scene of frequent accidents.

This application, because of the extra congestion it would create on an already inadequate highway, does not comply with East Devon Local Plan **Policy TC7** (**Highways, Access & Congestion**):

'Planning permission for new development will not be granted if the proposed access, or the traffic generated by the development, would be detrimental to the safe and satisfactory operation of the local, or wider, highway network'.

East Devon Local Plan **Policy TC2 (Accessibility of New Development)** seeks to minimize the need to travel by car. Unemployment in the Sid Valley is consistently low. Therefore, in order to fill the proposed new jobs, an influx of employees from other parts of East Devon, West Dorset and South Somerset will be essential, negating the Council's commitment to reduce commuting.

3 EXCESSIVE AND INAPPROPRIATE DEVELOPMENT

Sixty percent of the development proposed is in categories B2 or B8 (6,480 and 6,840 sq ft respectively) which does not comply with East Devon Local Plan **Strategy 26 (Development at Sidmouth)** which states that the "onus" of development should be category B1 (Business, Offices) which is clearly more appropriate close to residential areas. The application only proposes 40% of B1 (9,120 sq ft.)

B2 and B8 are totally inappropriate at Sidford (contrary to Strategy 26) because the site is adjacent to a residential area and is situated within the East Devon Area of Outstanding Natural Beauty (AONB). **General industrial and storage or distribution activities,** including open air storage' pose many potential nuisance risks, and would constitute unacceptable visual intrusion.

4 UNACCEPTABLE DAMAGE TO A VALUABLE AND SENSITIVE SITE IN THE EAST DEVON AREA OF NATURAL BEAUTY

The site enjoys strong protection as part of the AONB and the proposed development, therefore, contravenes Strategy 26 of the East Devon Local Plan. The site is visible from surrounding hills especially from Trow Hill on the A3052, which is an important tourist route. The applicant's consultants failed to examine the 'significant visual effect' which the proposed development would cause from this viewpoint especially if industrial activities, warehousing and open-air storage were allowed on the site. (See Appendix E, photos from Trow Hill).

The Peter Brett Associates Environmental Statements admit that the scale of development proposed would have "an adverse and direct long-term effect of severe significance on the site itself". Their surveys also suggest that the site contains a rich and varied wildlife including a variety of insects and mammals such as many species of bats (including horseshoe bats), dormice and otters.

To comply with NPPF paras 7 and 9 concerning the importance in sustainable development of protecting and enhancing our natural, environment and improving, biodiversity, extensive mitigation measures will be essential which could include strict limits on lighting, heights of buildings, and natural areas to be preserved.

Of particular concern are the applicants' proposals to straighten the brook and embark on massive earth moving required to construct attenuation ponds. There is a serious risk that the construction work envisaged and the industrial and warehousing activities suggested could have detrimental effects on the relatively healthy condition of the River Sid.

The proposal to remove three hedgerows, including the one flanking Laundry Lane (H7) to facilitate the construction of a cycle way would need Government permission as it is protected under the Hedgerow Regulations.² This permission is unlikely, as existing hedges ameliorate the flood risk at this site and are important wildlife habitats. (See report, *Review of the Ecological Impacts for the Land at Two Bridges, Road, Sidford, Devon*, Appendix F)

The applicants' <u>Non Technical Summary</u>, (Agricultural Land, 6.8.11) wrongly designates the site as Grade 3. Both the proposed development fields are Grade 2 (see Appendix G) which shows that these fields are the ONLY Grade 2 fields in the Sid Valley.

5 POTENTIAL DAMAGE TO THE VITALITY OF SIDMOUTH TOWN CENTRE

Policy E9 – Town Centre Viability and Shopping Areas- of the East Devon Local Plan seeks to protect the viability of town centres such as Sidmouth with its range of independent small shops. This could be threatened by the proposal to include retail at this site. No retail should be permitted unless it is clearly and demonstrably ancillary to the primary use of the unit. Further expansion of retail must be strictly controlled.

_

² https://www.gov.uk/guidance/countryside-hedgerows-regulation-and-management

REFERENCES

FLOOD RISK

- Serious flooding has recently taken place in Sidford in 2012, 2013 and 2014. Since 2012 there have been many EA flood alerts and flood warnings. (See rainfall data, Appendix H). A survey of residents previously affected or at risk of flooding was conducted in February/March 2016 in both Sidbury and Sidford. The results of this survey are attached in Appendix I.
- Two Bridges Road has been regularly flooded by run-off. Recent modifications to the drainage system may not be sufficient to cope with the type of deluge experienced FOUR times in 2012: on 7th July, 21st November, 24/25th November and 31st December respectively. Flood water currently flows across the road, under the gate and across Flood Zone 2/3 (see photos in Appendix J).
- **3** The Applicants' Flood Report data (1.6.1) are out of date as they predate the new Environment Agency (EA) report on *Adapting to Climate Change: Advice for Flood and Coastal Erosion Risk*Management Authorities, which was issued on 13th April 2016. Therefore, all flood calculations and maps submitted on behalf of Fords of Sidmouth have been superseded. (See Appendix K).

Martin Hutchings Flood Risk Manager at Devon County Council, in an email to me on 8th April 2016 summarised the EA's "betterment figures" (safety margins that have to be allowed in flood predictions for planning purposes as a result of continuing climate change):

'From a sustainable drainage perspective the recommendation is between 20% and 40% increase for climate change, depending on the flood risk, land use, etc. and we are already requesting 30%. The flow figures, which as you say are 85%, I assume will be used to update the Environment Agency's Flood Zone Maps for Planning and therefore likely to expand the flood risk areas where development will be discouraged.'

- The change to EA guidance is very significant for this site, which is adjacent to the Sid and is on a geomorphological feature known as a "sump" where land slopes gently from high ground and levels off into a flatter, poorly drained area which accumulates water and releases it slowly into the surrounding watercourses. Two Bridges Road floods regularly in heavy rain (see Appendix L). The 3ha field on which the development is proposed is the catchment which becomes waterlogged after heavy rainfall. Building on the site will create two problems:
- the "attenuation ponds" proposed by the developers are unlikely to compensate for the volume of water held by the site as a whole which means there will be increased risk of surface water flooding;
- (ii) a much more rapid release of water, through the attenuation ponds or directly through run-off, will put considerable extra strain on an already over-stretched drainage system both upstream and downstream, increasing the risk of flooding elsewhere as by 2080 there could be four times the volume of river flow and double the volume of surface water.

The importance of natural sumps as buffers against surface water flooding is now widely recognised and there are initiatives in other parts of Devon to preserve and enhance the sumps (e.g. areas of permanent grassland and moorland on Exmoor). It would be ironic if permission were given for this development as it stands, thus destroying one of the few natural features helping to protect against flood in the Sid Valley.

³ https://www.gov.uk/government/publications/adapting-to-climate-change-for-risk-management-authorities

After development on the flood plain at Sidbury, the storm on 7th July 2012 resulted in increased flooding as the flood water could no longer drain away on the field next to the Sidbury garage. One property sustained £53,000 of damage in July and was flooded a second time in November 2012. (See flood survey comments, Appendix I).

The Environment Agency has also highlighted an increase in sea levels by 2080 of 1.24m in the South West. This combined with the predicted increase in surface water and river flows could create considerable problems in the Sid Valley, particularly if rainfall coincides with an incoming tide as all rivers and tributaries (such as the brook) will be held back.

INADEQUATE ROAD NETWORK AND DIFFICULT ACCESS TO THE SITE

- The pavement on the west side of School Street (Appendix M) is very narrow and is privately owned. On the east side, it is narrow in parts, and does not meet national standards for mobility and visually impaired people. For example, 'a wheelchair user and an ambulant person side-by-side need 1500mm width'⁴.
- The A375 is totally unsuitable to accommodate any substantial increase in traffic flow, particularly HGVs, associated with such a large development site. (See photos, Appendix M).

Congestion is already experienced in Sidford both at peak times and during the tourism season (see photos in Appendix N).

The report prepared by Jubb Consulting Engineers Ltd in 2012 has traffic flow predictions based on one weekday manual count at peak periods at Sidford Cross on 15th March 2012, and a week-long automatic recording of movements in School Street from 9-16th May 2012. The period chosen excludes the tourism season when traffic movements are much higher.

3 Average two-way weekday peak flows (8-9am, 4.40-5.30pm) along Two Bridges Road was recorded at 435 and 448 per hour.

There will allegedly be 'no significant effects' caused by the increase in construction traffic and the predicted change in traffic flow by 2019 (11.5.19) (with development minus without development rates) will be as follows:

Two Bridges Road +6%
School Street +32%
High Street +8%
Trow Hill +8%
Sidford Road +7%

How can a 32% increase be accommodated in School Street? Why is there such a discrepancy between the figures for Two Bridges Road and School Street? Where are the figures for increased traffic movement through Sidbury?

The applicants' Transport Assessment, Appendix E1 p.3 states: 'The A375 is one of the primary routes to/from Sidford with good connections to the A30, A3052 and M5'. In fact the A375 is only an upgraded B road and so hardly fits the description of a primary route. This is borne out by two statements in a written

⁴ https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3695/inclusive-mobility.pdf

reply in Hansard on 30th October 2003 from the Parliamentary Under-Secretary, DOT, to a question from Geoffrey Robinson QC about Road Widths⁵ which states:

'The available information relates to urban major roads, i.e. those that are within urban areas with a population of 10 thousand or more. The latest estimate of mean road width for A roads in urban areas is 11.2 metres. Information on minor roads is less comprehensive. In 2001, estimates were made for minor roads with speed limits of 40mph or below. The mean road widths for such B, C and unclassified roads were 7.5 metres, 6.9 metres and 6.2 metres respectively.'

DAMAGE TO THE SITE

In April 2014, the Devon Wildlife Trust (DWT) undertook a survey of the River Sid, (<u>'</u>River Sid, Living Rivers Project 2013-14'.) They stated that the river had "good ecological status" but the Sidford Brook, one of the tributaries of the river is now under threat because of the applicants' proposal to widen, straighten and deepen the watercourse. DWT say this can result in a "<u>loss of vital habitats, with featureless stretches</u> of river offering little variety in depth, flow or vegetation.

The Report also pointed out the danger of run-off pollution from tributaries with the example of the polluted Woolbrook stream affecting the water quality of the Sid.

'The Woolbrook is a heavily modified and culverted watercourse with new housing developments at the upstream end...... Below the Woolbrook / Sid confluence the lower Sid too is impacted, the influence of water from the tributary probably being compounded by such factors as road run off and diffuse pollution from the central urban area of Sidmouth.'

Louise Woolley undertook a *Review of the Ecological Impacts for the Land at Two Bridges Road, Sidford, Devon* in June 2016. (See Appendix E). This clearly highlights the damage that removal of hedgerows and increased light levels will have on European protected species of bats. Dormice and Reptiles will also be affected if such linear features are removed, as these are used as commuting, foraging or resting habitat.

Therefore, permission for removal of hedgerows, such as H7 at Laundry Lane, which is described as 'Important' and a countryside hedgerow 'located on or next to land used for agriculture', should be refused as this is protected by hedgerow regulations.

IMPACT ON NEIGHBOURING PROPERTIES

1 The development has the potential to cause noise, light, traffic and air pollution. Conditions should be applied to ensure this does not affect the amenity of neighbours.

The proximity of this proposed development is of concern to neighbouring properties. The age profile of residents in Two Bridges Road and Sid Vale Close, whose properties will be nearest to the development, are almost without exception of retirement age. Therefore, these residents will potentially be affected 24/7 as they will not even be out at work all day. Should this site be approved, working hours must be restricted to allow residents to have some relief from noise intrusion.

Traffic flow reduces significantly at night after peak commuting hours from Sidford Cross to Honiton. Therefore, any new traffic to or from this site will have a large impact.

⁵ http://www.theyworkforyou.com/wrans/?id=2003-10-30.134833.h

Currently the site is very dark at night such that the night sky is an attractive feature of the valley. No overnight lighting should be permitted on the site.

APPENDICES

APPENDIX A - NPPF extracts

100

Inappropriate development in areas at risk of flooding should be avoided by directing development away from areas at highest risk, but where development is necessary, making it safe without increasing flood risk elsewhere.

Local Plans should be supported by Strategic Flood Risk Assessment and develop policies to manage flood risk from all sources, taking account of advice from the Environment Agency and other relevant flood risk management bodies, such as lead local flood authorities and internal drainage boards. Local Plans should apply a sequential, risk-based approach to the location of development to avoid where possible flood risk to people and property and manage any residual risk, taking account of the impacts of climate change, by:

- applying the Sequential Test;
- if necessary, applying the Exception Test;
- safeguarding land from development that is required for current and future flood management;
- using opportunities offered by new development to reduce the causes and impacts of flooding; and
- where climate change is expected to increase flood risk so that some existing development may not be sustainable in the long-term, seeking opportunities to facilitate the relocation of development, including housing, to more sustainable locations.

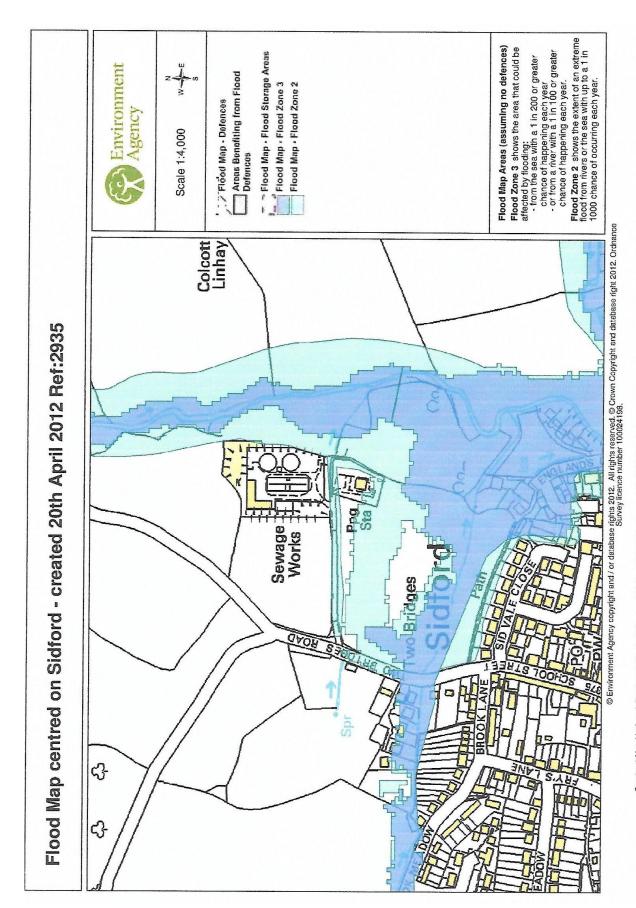
102

If, following application of the Sequential Test, it is not possible, consistent with wider sustainability objectives, for the development to be located in zones with a lower probability of flooding, the Exception Test can be applied if appropriate. For the Exception Test to be passed:

- it must be demonstrated that the development provides wider sustainability benefits to the community that outweigh flood risk, informed by a Strategic Flood Risk Assessment where one has been prepared; and
- a site-specific flood risk assessment must demonstrate that the development will be <u>safe for its</u>
 <u>lifetime taking account of the vulnerability of its users, without increasing flood risk elsewhere, and, where possible, will reduce flood risk overall.</u>

Both elements of the test will have to be passed for development to be allocated or permitted.

APPENDIX B - Environment Agency Flood Zone Map



Contact Us: National Customer Contact Centre, PO Box 544, Rotherham, S60 1BY. Tel: 03708 506 506 (Mon-Fri 8-6). Email: enquiries@environment-agency.gov.uk

APPENDIX C - Narrow Roads

SIDFORD



School St – HGV inc. mirrors are 3m wide, so not enough room for commercial vehicles to pass oncoming traffic

SIDBURY



Cotford Bridge

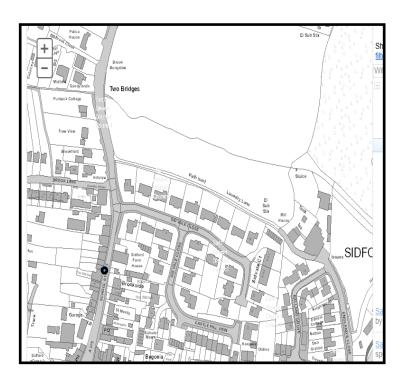


Sidbury Mill

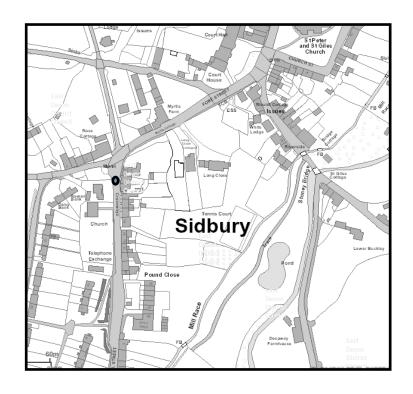
APPENDIX D - Map of narrow roads, Sidford & Sidbury

Bottlenecks on A375 at Sidford and Sidbury

Measured by Anthony Green on 2 June 2016



School Street Sidmouth: circle marks point where roadway is 4.77 metres wide



12

APPENDIX E – Visual impact

View from Trow Hill, Sidford

1) Before development



2) After development



APPENDIX F – Review of the Ecological Impacts for the Land at Two Bridges Road, Sidford, Devon



Louise Woolley BSc (Hons) ACIEEM 22 Arcot Park, Sidmouth, Devon, EX10 9HP louise@devonecologyandwildlife.co.uk www.devonecologyandwildlife.co.uk

Review of the Ecological Impacts for the Land at: Two Bridges Road, Sidford, Devon



Date: 02/06/16

Provided for: Marianne Rixson

By: Louise Woolley BSc (Hons) ACIEEM

1. Executive Summary

This review has provided the following outcomes:

- Recommendations in the form of mitigation and compensation for protected species particularly the hazel dormouse, *Muscardinus avellanarius* and 9 species of bat, *Chiroptera spp.*, may be outdated, due to surveys taking place in 2014, since which changes to the original plans may have occurred.
- The Arboricultural report (2016) says that hedgerows H3, H5, H7 are being completely removed; this does not appear to be reflected in the ecological report (2014).
- The site has high overall value for bats with key commuting flyways being removed in the form of hedgerows and key foraging areas for bats being lost through the construction of the built environment and surrounding infrastructure.
- EU Regs Annex II species, the horseshoe bats, *Rhinolophus* ferrumequinum and *Rhinolophus hipposideros*, were recorded on the site. The barbastelle bat, *Barbastella barbastellus* has been recorded within 4.2 km. These species should be given extra attention in respect to mitigation and compensation particularly as horseshoe bats are under recorded on detectors due to their highly directional calls which only travel a short distance.
- Compensation in the form of regeneration of hedgerows will not provide suitable replacement habitat for many years, which should be taken into consideration.
- It is essential that final lighting designs are created as stated; in conjunction with a suitably experienced ecologist.
- A slow worm *Anguis fragilis* was observed on 1st June 2016 by Louise Woolley in Laundry Lane. It is therefore necessary that the translocation site for reptiles includes Laundry Lane as works are highly likely to cause death to this and other reptile species.

1. Contents

1. Execu	tive Summary	1
2. Conte	nts	2
3. Introd	uction	3
4. Metho	od	4
5. Evalua	ation	4
i.	Hedgerows	4
ii.	Bats	7
iii.	Lighting	10
iv.	Reptiles	11
Conclusi	ion	12

2. Introduction

This review has been undertaken by Louise Woolley BSc (Hons) ACIEEM (Associate Member of the Chartered Institute of Ecological and Environmental Management) who holds a Natural England WML-A34 - Level 2 (Class Licence) - To survey bats using artificial light, endoscopes, hand and handheld static nets along with WML-A34, a Level 1 (Class Licence) - To undertake activities for the conservation of bats whilst on official duties under the NE Bat Advice Contract. Louise also holds a Class Survey Licence WML CL10A (Dormouse Level 1) Dormouse Survey Licence and has worked as a Sidmouth based freelance ecologist with experience of protected species and mitigation strategies since 2011.

This review was commissioned by Marianne Rixson in order to provide her with a clearer understanding of the relevant ecological issues especially in respect to bats, which have been presented through the Environmental Assessment provided by Peter Brett Associates, The Arboricultural Report and Lighting Strategy Report present on planning portal 16/0669/MOUT.

This report has been written in support of attaining appropriate mitigation outcomes for wildlife at the development site of Two Bridges, Sidford, Devon with contributions of local knowledge of the area.

The evaluation has been undertaken in a restricted period of time therefore it is a brief review of a vast and complex report. Information has been copied from the report in order to highlight important areas for consideration through the planning process.

Characteristics of the development

The proposed development comprises an infrastructure project that involves 5.8ha of land (3.76ha net) and would provide up to 22,800 sq m of employment space constructed in two phases. It is proposed to raise ground levels, provide flood alleviation and flood prevention works and additional landscaping.

Location of the development

The relationship between a proposed development and its location is a crucial consideration. For any given development proposal, the more environmentally sensitive the location, the more likely it is that the effects will be significant and will require an EIA.

In this instance the site is located within an open valley characterised as an unsettled farmed valley floor within the Area of Outstanding Natural Beauty, is located within/on a minor aquifer and affects the setting and integrity of the Historic Environment

Environmental Statement – Vol 1 Page 16

3. Method

A desk study of the sections of the Environmental Statement, Arboricultural Report, Lighting Strategy and Appendices which appear to have the most relevance to the ecological status of the site was undertaken. Local species information has also been identified using local knowledge and desk based information portals. A brief site visit to external boundaries was undertaken to establish apparent differences in the recorded information from different sources within the report.

4. Evaluation

5.i Hedgerows

There appears to be a difference of opinion as to how hedgerows are to be affected. The Ecological Assessment undertaken in 2014 appears to indicate that there were only to be sections of hedgerow to be removed to the west and southwest of the site. As stated below the loss of species rich hedgerow will have an adverse effect on wildlife.

- 8.5.2 Construction would result in the removal of the following approximate areas of habitat:
 - 185m length of species-rich hedgerow;
 - 54m length of species-poor hedgerow;
 - 5.2ha of arable;
 - 0.95ha of species-poor semi-improved grassland; and
 - 0.25ha of semi-improved neutral grassland.
- 8.5.3 Loss of sections of species-rich and species-poor hedgerow would reduce the length of this Devon BAP Habitat (species-rich only) and Priority Habitat resulting in an adverse, certain, medium-term effect significant at Parish level. The loss of semi-improved neutral grassland would be an adverse, certain, short-term effect significant at Parish level. Removal of the remaining habitats would be an adverse, certain, long-term effect at Sub-Parish level.

Environmental Statement – Vol 1 – Page 61

Whereas the Arboricultural Report in 2016 states that complete hedgerows are to be removed. The ecological impact will therefore be far greater and adequate mitigation and compensation

must be undertaken in order to ensure that protected species including dormice, birds, bats and reptiles are not disadvantaged.

On 25th April 2016 the Arboricultural Report states:

The Tree Constraints Plans show three full hedgerows (H3, H5 and H7) being completely removed, with new landscaping and hedgerows being provided in mitigation. A short section of hedgerow H4 and area A3 are also removed, but these do not affect any key landscape features. It is also noted that a section of area A2 will require removal to accommodate the proposed foul sewer; it is

Arboricultural Report – page 1

The above statement states that hedgerows H3, H5 and H7 are to be removed in full and that newly planted hedgerows are to be planted in replacement.

H3

- Heavily flailed native roadside hedgerow comprising Field Maple, Viburnum, Hawthorn and Elder with a maximum stem diameter of approximately 100mm;
- Field ploughed to east of hedgerow.
- Root protection area anticipated to extend no further than 1.0m to east of post and rail fence;
- Hedgerow shown for removal and replacement on proposed site layout.

H5

- Heavily flailed native roadside hedgerow comprising Field Maple, Blackthorn and Elder with a maximum stem diameter of approximately 150mm;
- Field ploughed to east of hedgerow.
- Root protection area anticipated to extend no further than 1.0m to east of post and rail fence;
- Hedgerow shown for removal and replacement on proposed site layout.

H7

- Heavily flailed incomplete young hedgerow comprising Elder, Hawthorn and Blackthorn with a maximum stem diameter of 100mm.
- Root protection area not calculated as hedgerow proposed for removal to accommodate widened public right of way immediately to south, and flood management scheme to the north;
- Hedgerow shown for removal and replacement on proposed site layout.

Arboricultural Report - Page 6

Hedgerow H7 is a Devon hedgebank and fence which appears to be highlighted for removal and reinstated further north in order to widen Laundry Lane. Maturity and exact replacement of habitat of hedgebanks are difficult to replicate due to the stone content of the bank which provides habitat for reptiles and invertebrates. Maturity of this bank will not be achieved for many years therefore having a detrimental effect on the species currently present. In respect to invertebrates and reptiles appropriate compensation should be implemented including the construction of hibernacula.

Arboricultural Map of the HedgerowsHedgerows to be affected and banks to be installed



5.ii Bats

The levels of bat activity across the site are substantial with 9 species of bat being recorded throughout the site. This is therefore a highly important foraging ground and provides essential commuting routes out along the valley for all species recorded and may be for those not identified. Levels of activity are stated as being high to the north of the site and moderate in other areas and although the compensation of tree planting in the north of the site is beneficial to some bat species in that area, it does not compensate for the loss of open foraging areas used by bats further south. The overall activity throughout the site is high and it is necessary for adequate mitigation and compensation measures to be put in place in order to maintain current species population numbers.

Static bat surveys

Position 1

The static detector placed approximately in the middle of the site recorded highest bat activity in May 2014 with an average of 535 bat passes per night (high levels of activity). Across all months, the mean bat activity recorded was 280 passes per night (moderate activity). At least nine species were recorded with common pipistrelles the most abundant species overall (95%), followed by soprano pipistrelle (2.7%). At least six other species were recorded which made up less than 1% each of the total. There was a definite increase in activity between July (124 passes per night) and August (365) which indicates increased activity during this period (refer to Table C5.4 and Figure C5.2).

Position 2

The southern boundary static detector recorded highest bat activity in July 2014 with an average of 50 bat passes per night (low levels of activity). Across all months, the mean bat activity recorded was 25 passes per night. Common pipistrelles were the most abundant species overall (87%), followed by soprano pipistrelle (8%) Nyctalus species (1.75%) and Myotis species (1.5). At least four other species were also recorded which made up less than 1% each of the total. Bat activity at Position 2 decreased from July to August.

Ecology Appendix - Page 177

The area around static detector position 1 (see map below) is key and should be brought to attention with reference to the final lighting design. Greater Horseshoe *Rhinolophus ferrumequinum* were recorded at this position and although only a small number of passes were recorded it is highly likely that the actual activity for these and the Lesser Horseshoe *Rhinolophus hipposideros* species, (both Annex II species of the European Habitats Directive) will be much higher. This is due to the horseshoe bats having very directional calls which only travel a short distance and are picked up by a detector often less than 25% of the time. The Long Eared bats may also have been under recorded due to their calls being very quiet and therefore not easily picked up by a detector, meaning there may be higher bat activity in the area than recorded.

At stopping points A, F, L, and M the highest activity was recorded. Stopping point F had the highest activity, where the habitat is going to be enhanced through tree planting and provides adequate compensation for the bats in this area.

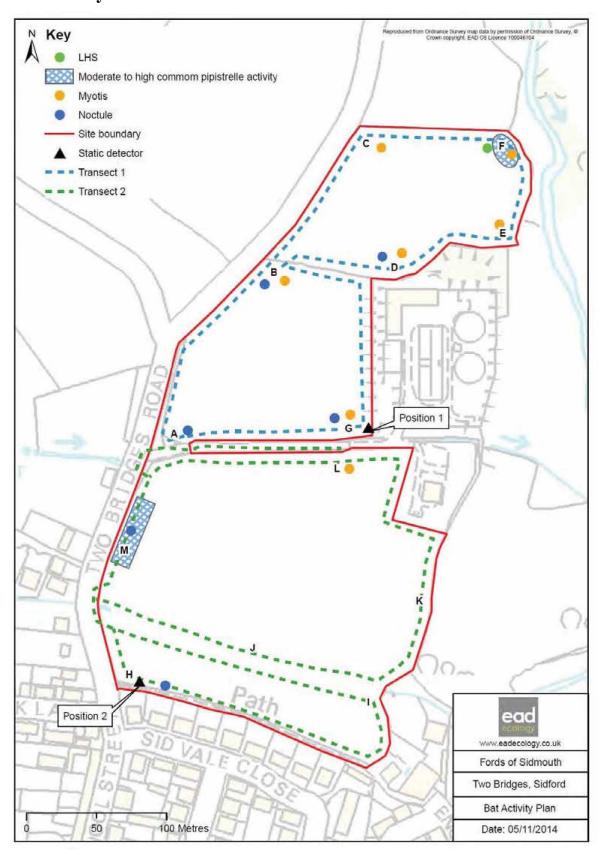
Areas surrounding stopping points A, L and M to the southwest of the site are going to undergo significant habitat loss which will be highly detrimental to bat species. The surrounding stopping points A and M will both be directly affected by the removal of hedgerows as these provide commuting routes. The Annex II Lesser horseshoe and Greater Horseshoe are dependent on hedgerows as they regularly fly only 1 metre or lower above the ground. They not only use the hedgerows as commuting guides but also use mature hedgerows as shelter from any prevailing winds whilst using the flyway.

Any removal of large sections or complete hedgerows especially H3, H5 and H7 (as named in the Arb Report) will have a detrimental effect on foraging and commuting routes for bats. Flyways through valleys provide connectivity, often from roosts present within buildings, and the wider environment. Any impacts on these vital flyways should be evaluated closely.

The cumulative effects of temporary loss of adequate hedgerows which bats use as commuting routes, the permanent loss of foraging grounds along with an increase in lighting will all have a detrimental effect on the resilience of bat populations. Bats are protected due to their slow rates of population growth and therefore any impact on their ability to feed can be catastrophic to individual colonies. Although mitigation and compensation is going to be put into place the woodland will not provide replacement habitat and the hedgerows will not mature for many years.

A Greater Horseshoe SAC (Special Area of Conservation) in East Devon, is currently in the research and development stage and may well cover this site in the future with the closest roosts being Southleigh and Branscombe. Part of this research is thought to be providing information that Greater Horseshoe may be travelling much further distances than the 10km already thought by Ransom (1991). The closest known Lesser Horseshoe maternity roosts in current use are 1.9km, 2.5km and 2.6km with the closest known Greater Horseshoe maternity roosts in current use being 5.7km and 8km. Barbastelle, *Barbastella barbastellus*, bats have also been recorded foraging 4.2 km away from the site and within the Sid Valley.

Bat Survey Transect and Static Detector Locations



5.ii Lighting

A lighting strategy has been identified as having an effect on the wildlife present within the site and it is essential that the recommendations in respect to ecology are adhered to. This is especially important with reference to the areas with particularly high bat activity.

The lighting that is currently present along the Two Bridges Road is being tolerated by bat species at the moment and currently switches of at 01:00. It is essential that this is not increased in respect to timings or an increase in lux output as this is highly likely to become intolerable and therefore have a detrimental effect on foraging and commuting to foraging grounds.

Ecological Design Objectives

Ecological design objectives to minimise the adverse effects of lighting on local wildlife using the hedgerows and watercourses for foraging and refuge and as migration corridors across the site are listed below and will be taken into consideration during preparation of the Lighting Design:

 All lighting will be designed and fitted to minimise light intrusion along hedgerows and watercourses by avoiding light intrusion on these areas. This will avoid the fragmentation of

the habitat used by protected species such as bats, badgers, otters, reptiles, birds and all other local wildlife that use these features at night-time for refuge. The Lighting Design should be reviewed by a suitably qualified Ecologist.

Lighting Strategy - page 22

Ecological Design Objectives

- 7.1.4 Specific ecological design objectives that will be implemented to ensure that adverse effects of lighting associated with construction of the proposed development are minimised through measures such as:
 - Dark corridors should be maintained during the evening, overnight or early morning (i.e. outside approximately one hour before dusk and one hour after dawn) along hedgerows, watercourses and any other habitat linear features by avoiding light intrusion on these areas. This will avoid the fragmentation of the habitat used by protected species such as bats, badgers, otters, reptiles, birds and all other local wildlife that use these features at night-time for refuge.
 - Louvres, shields and hoods should be used to avoid light spill if working near a sensitive habitat (e.g. hedgerows or other linear habitat features).

The lighting strategy states that it will take into account the following guidelines in respect to bats and these should be closely adhered to during the design process in conjunction with advice taken from a suitably experienced ecologist.

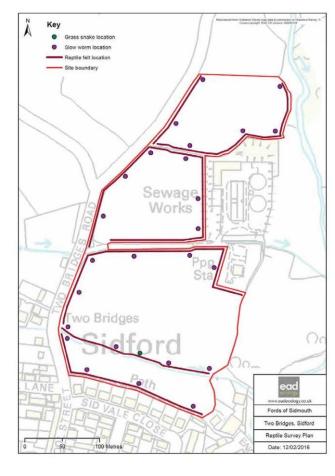
- 2.4.4 Bat Conservation Trust Bats and Lighting in the UK (2009). This document is designed to provide guidance on general principles of lighting to mitigate adverse effects on areas where bats are known to be present and / or commuting to feeding areas. The document sets out advice for bat workers and lighting designers to ensure that both parties work together to achieve the most effective solution in delivering an appropriate lighting solution whilst minimising the adverse effects on bats.
- 2.4.5 Bat Conservation Trust Statement on the Impact and Design of Artificial Light on Bats (2011). A supplement to the 2009 document cited above, this statement summarises the key issues associated with bats and artificial lighting, as well as summarising the main mitigation methods to reduce the adverse effects of lighting.
- 2.4.6 Bat Conversation Trust Landscape and Urban Design for Bats and Biodiversity (2012). This document provides recommended lux levels to minimise effects on bats resulting from artificial lighting.

Lighting Strategy - page 10

5.iv Reptiles

A slow worm *Anguis fragilis* was observed on 1st June 2016 by Louise Woolley on Laundry Lane. As works are going to cause disturbance to this lane it is therefore essential that this area is also included within the reptile translocation site to reduce the risk of death to reptile species. This should be put in place before any works affecting this lane commence.

Previously this area was not surveyed as it was outside of the site boundary, therefore it was not included in any mitigation strategy (see map).



Conclusion

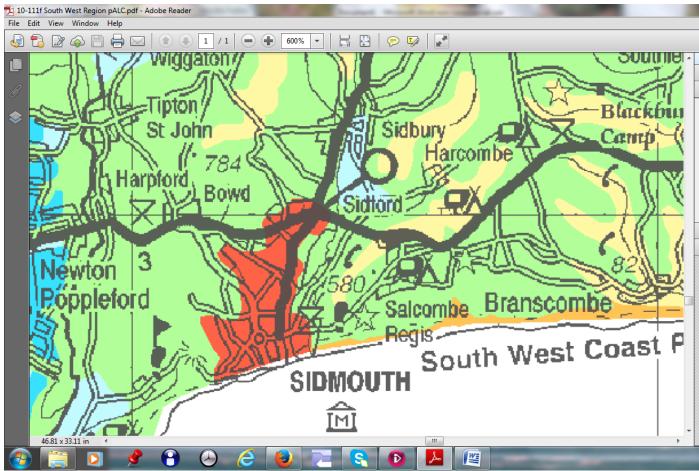
It is essential that all guidelines and licences issued with respect to protected species and hedgerows are adhered to. Adequate compensation measures and mitigation strategies should be put in place which will enable no net loss of species and support the favourable conservation status of all EU and British protected species as outlined in the legislation.

There appears to be uncertainty as to which boundaries are to be affected and to the extent of removal of hedgerows and hedgebanks which needs to be clarified. Any changes in plan design since the original ecological surveys in 2014 should be taken into account and an extension to the site boundary and areas to be affected reassessed, with further ecological surveys undertaken if required.

APPENDIX G - Agricultural Land

Two Bridges Road, Sidford

Both the 3ha and 2ha sites allocated for non-strategic development at Sidford are classified as Grade 2 agricultural land on the Natural England website (see link below).



Grade Description: 1 Excellent (Dark blue), 2 Very Good (Light blue) http://publications.naturalengland.org.uk/publication/144017

APPENDIX H - Rainfall data - Flood Warnings and Alerts from the Environment Agency for Sidford

Flood warnings and flood alerts from 21 st November 2012 – 3 rd March 2014		hours
	Duration	24

Type	Start	From	End date	То	Days since last flood alert/warning	Days	Hours	Total (hrs)	No. of alerts
Warning	21/11/2012	08:07	21/11/2012	16:44		0	8	8	1
Warning	24/11/2012	20:20	25/11/2012	08:29	3	0	12	12	2
Alert	13/12/2012	14:42	15/12/2012	12:02	19	1	21	45	3
Alert	18/12/2012	16:32	21/12/2012	10:13	5	2	17	65	4
Alert	21/12/2012	15:31	01/01/2013	11:31	3	10	19	259	5
Alert	12/01/2013	07:08	13/01/2013	10:27	22	1	3	27	6
Alert	22/01/2013	16:17	24/01/2013	10:11	10	1	17	41	7
Alert	25/01/2013	14:41	28/01/2013	10:13	3	2	19	67	8
Alert	28/01/2013	14:31	30/01/2013	06:49	3	1	16	40	9
Alert	10/02/2013	09:41	11/02/2013	08:36	13	0	23	23	10
Alert	21/03/2013	13:58	23/03/2013	11:30	39	1	22	46	11
									-
				AVERAGE	12			58	

						Dura	ation		_
Туре	Start	From	End date	То	Days since last flood alert/warning	Days	Hours	Total (hrs)	No. of alerts
Alert	21/10/2013	17:28	22/10/2013	11:12		0	18	18	1
Alert	24/10/2013	16:19	25/10/2013	10:29	3	0	18	18	2
Alert	27/10/2013	15:31	28/10/2013	17:16	3	1	1	25	3
Alert	18/12/2013	15:30	19/12/2013	08:12	52	0	17	17	4
Alert	22/12/2013	15:55	27/12/2013	11:18	4	4	20	116	5
Alert	29/12/2013	13:48	30/12/2013	15:41	7	1	2	26	6
Alert	31/12/2013	15:02	02/01/2014	11:47	2	1	22	46	7
Alert	03/01/2014	15:18	07/01/2014	10:15	3	3	19	91	8
Alert	16/01/2014	14:28	17/01/2014	09:19	13	0	19	19	9
Alert	18/01/2014	18:52	19/01/2014	10:35	2	0	16	16	10
Alert	21/01/2014	16:07	22/01/2014	09:44	3	0	17	17	11
Alert	04/02/2014	16:16	08/02/2014	10:47	14	3	18	90	12
Alert	10/02/2014	15:29	15/02/2014	11:46	6	4	21	117	13
Alert	17/02/2014	16:13	18/02/2014	11:08	7	0	19	19	14
Alert	02/03/2014	18:04	03/03/2014	16:46	13	0	21	21	15
				AVERAGE	9			44	_

In order to gain an understanding of the impact of flooding at Sidford and Sidbury, I issued a survey to properties at risk of flooding and asked the residents and business owners to complete the survey and return it to me by Friday, 4th March 2016. The survey questions are in Appendix A.

The total number of questionnaires issued was 70. 34 responses were received, which is a 49% response rate.

35 questionnaires were issued in Sidbury and 35 in Sidford. 11 respondents were from Sidbury 32%) and 23 from Sidford (68%). The responses received were as follows:

Q1 Are you a resident of Sidford or Sidbury?

Respondents were from the following streets in Sidbury and Sidford:

Q 1a & 1b	
Sidbury	11
Bridge Street	3
Church Street	2
Cotford Road	3
Other	3
Sidford	23
Brook Close	3
Church Street	2
Englands Close	4
Hamilton Close	4
Packhorse Close	7
Two Bridges Road	3

Q2 How long have you lived at this address?

The majority of residents have been living in Sidbury and Sidford for a considerable number of years. The average for Sidbury was 16 years and for Sidford 26 years, with one resident of Sidbury being a resident for 60 years.

There were four major floods in the Sid Valley in 2012. However, two residents have been in the valley for only two years, one for one year and another for only four months, so none of these residents will have been affected by the severe floods experienced that year.

Q3 In your experience, has the number of flood warnings and alerts increased or decreased in the last five years?

Q3 Increase / decrease in flood warnings & alerts			
Increased	22		
Increased hugely	2		
Decreased	2		
Don't know	7		
Never had	1		

24 respondents reported that they had increased or increased hugely, which represents 71% of responses received.

Q4 Have you been affected by flooding in the last five years?

Q4 Affected by flooding in last 5	yrs?
Yes	23
No	11

68% of respondents have been affected by flooding in the last five years.

Q5 If so, how many times and what effect did this have on your property?

Q5 No of times	Respondents
1	3
2	9
3	5
4	2
2 to 3	1
3 to 4	1
blanks	12
too many to enumerate	1

Twelve respondents did not reply to this question.

However, 22 respondents have experienced flooding and of these 19 respondents have been flooded more than once and one "too many to enumerate".

The effect on their properties was recorded as follows:

- Flood water in rear garden Once severe flood water on front driveway/garden (Nov 2012)
- Garden & summerhouse flooded from Burscombe Brook. House not affected. Minimal financial loss.
- Flooded back garden and front drive (deep water on main road by bridge!)
- Ruined the garden. Gates had to be opened to let water out.
- £5,000 damage claimed on insurance
- Road closure between Sidbury & Sidford

- Insurance claim which totalled £53K and personal loss of approx £30K not to mention the mental and physical effects of sorting it all out and living in horrendous conditions for 9 months
- No, did not claim, cleaned up and salvaged items. Could not afford to claim.
- Flooding around Packhorse Bridge flowed down the Close and found its way back to the river through our gardens. Alterations made to air bricks and a flood drain
- Water flooded into back garden and into front porch. Hall carpet wet by front door slightly. No insurance claim made as nothing damaged but only needed a clean.
- We cleaned up all the mess ourselves as it was the garden and patios under deep silt on 3 occasions, 2 yrs ago. Silt was often 1 ft deep. Water was inches from coming in house. It was very hard work and our shed was ruined and many belongings including washing machine and lawn mower.
- Financial loss (replacement floor coverings to ground floor) but didn't make an insurance claim. Have now installed flood boards / drain protection system (back-flow valves)
- I have made an insurance claim in the past when my bank was swept away. Last time it was so expensive I have left it and hope I die before more damage
- Insurance claim £35K. Closed business 7 weeks. Suffered anxiety and depression as a result of the stress
- In July 2012 the river rose 10ft and although we are up on a bank the water came up to the bungalow but not inside. People at nos 4 & 5 were more affected. Also the garage next door
- Claimed on our insurance on both occasions
- No (financial loss), came up to front gate
- Water in garage, no claims made
- *My old house flooded so on renting here I made sure the house had never flooded. I know
 the flood water diverts through the garden here so I am concerned any more development
 may change the watercourse and affect the house. I had no insurance previously but I do
 now and cannot afford higher premiums
- 1/3 of the garden was covered in mud and debris. No financial loss only because I'm capable. I spent 2 days shovelling and pressure washing
- The property was flooded (conservatory) twice in 2012 damage to carpet / floor / curtains but this was with previous owners
- No effect. We use flood boards
- I have never been flooded from the river (new drains now save me from the road) but as I am so close to it one never knows!
- Insurance claim
- July 2012 lower 1/3 of garden flooded partly from brook and also run off from fields which ran through all gardens. Lost 1/2 of bank and large hole would be costly to repair. Didn't claim because of effect on premium / difficulty of re-insuring
- We did not suffer any losses <u>BUT</u> the inconvenience of having to prevent water entering the house and encouraging the water away from the house is a constant problem - even in the summer months
- One insurance claim 2012

Two respondents reported the effect on themselves and their properties as follows:

 Insurance claim which totalled £53K and personal loss of approx £30K not to mention the mental and physical effects of sorting it all out and living in horrendous conditions for 9 months Insurance claim £35K. Closed business 7 weeks. Suffered anxiety and depression as a result of the stress

The comment from another respondent is very revealing, "I have made an insurance claim in the past when my bank was swept away. Last time it was so expensive I have left it and hope I die before more damage"

Q6 Have you tried to sell your property in the last five years?

Q6 Tried to sell in last 5 years?	
No	30
Yes	1
No but want to now	1
No dare not	1
n/a	1

The majority have not tried to sell (88%), one did try to sell, one respondent said "No but want to now" and another, "No, dare not"

Q7 If you were unable to sell, was this due to the impact of flooding or flood risk?

The respondent above who said "Yes" to Q6 was unable to sell "due to the impact of flooding or flood risk".

Q8 Over the last five years, have your home insurance premiums increased due to flooding or flood risk? By approximately:

Q8 Increase in insurance premiums		
Less than 25%	14	
26-50%	6	
51-100%	1	
Other	8	
Blanks	5	

14 respondents had an increase of less than 25%, six had increases of between 26-50% and one reported an increase of 51-100% in insurance premiums.

Eight respondents did not reply to this question. The remaining respondents replied as follows:

- changed insurers went down
- increased
- initially we were penalised because original 'storm damage' was re-worded as 'flooding' but as we are just over the 5yr limit, this year it decreased again
- no claim, no increase in premiums
- not insured
- Q9 Has your excess increased due to flooding or flood risk? If so, how much has it increased in the last five years? (From / to)

20 respondents did not reply to this question. Of the remainder, the replies were as follows:

- Sorry unable to answer this one
- £2000-£2,500
- £250-£1,000
- £200-£1000
- £0-£1000 per item
- Don't know
- increased
- No
- No
- £3000-£5000
- Not sure
- Don't know
- No
- No
- n/a

As you can see, there have been some significant increases in insurance premiums for five respondents.

Q10 Any other comments

Comments received in response to this open question were as follows:

- Developer will probably argue that owing to improved flood water management, risks may be reduced if the development goes ahead. They could be correct, depending on how much work is done and money expended. Need to look in detail at what is proposed!
- Large areas of paving on the proposed employment site will increase the flood risk
 downstream whatever mitigation measures are built into the development. Englands Close,
 Hamilton Close, The Salty Monk & Packhorse Close would be at increased risk. Any
 restrictions to the Burscombe Brook, either accidental, or as part of the employment site
 design would cause flooding on Two Bridges Road and properties there.
- My property is not in a position to flood. Approx. the road to bungalow level is about 8ft. I
 have never known this property to be flooded.
- Environment Agency dredging is essential to prevent excess flooding and blocking of road storm drains below the bridge.
- Sorry we can't be of much help, due to the fact we have only lived here one year
- I have been refused insurance because we are on a flood plain.
- My bungalow is built on a plot more than 3 feet above road level, so unlikely to suffer flooding
- £5,000 damage claimed on insurance

SIDFORD:



Development site (Two Bridges Rd, Sidford)



Access road (Two Bridges Road)



Two Bridges Road



1am, 25th November 2012 Hamilton Close & Englands Close flooded



Church St / England's Close



River Sid in full spate at Packhorse Bridge

SIDBURY:



Cotford Road, Sidbury



New development on flood plain at Cotford Rd, Sidbury

SIDMOUTH:

Link to video of July 2012 flood in Sidmouth @ https://www.youtube.com/watch?v=JXO4TF6z4O0

APPENDIX A

FLOOD SURVEY

As you may have seen in The Sidmouth Herald, the planning application for development of an employment site by Fords of Sidmouth at Two Bridges Road, Sidford, is expected in spring 2016. This could be as early as next month.

Before the application is lodged, I would like to gain an understanding of the impact of flooding at Sidford and Sidbury. For example, in 2012 alone, there were four flood warnings and numerous flood alerts.

I would be grateful if you would help me by completing the survey and returning it to me at my home address, as follows, by Friday, 4th March 2016.

Many thanks.

Cllr Marianne Rixson 22 Sid Vale Close Sidford EX10 9PH

Sidford EX10 9PH T No 01395 576727	
	Brook Close, Sidford Church Street, Sidford Englands Close, Sidford Hamilton Close, Sidford Packhorse Close, Sidford Two Bridges Road, Sidford or
	Bridge Street, Sidbury Cotford Road, Sidbury Other, Sidbury
(Pleas	e tick relevant box)
2	How long have you lived at this address?
	Number of years
3	In your experience, has the number of flood warnings and alerts increased or decreased in the last five years?
	Increased Decreased Don't now

4	Have you been affected by flooding in the last five years?	
	Yes (Go to Q5) No (Go to Q6)	
5	If so, how many times and what effect did this have on your property?	
	Number of times	
Effect	(for example, did you suffer a financial loss or did you make an insurance claim?	
6	Have you tried to sell your property in the last five years?	
	Yes (Go to Q7) No (Go to Q8)	
7	If you were unable to call was this due to the import of flooding on flood visto	
7	If you were unable to sell, was this due to the impact of flooding or flood risk?	
	Yes No	
8	Over the last five years, have your home insurance premiums increased due to flooding or flood risk? By approximately:	
	Less than 25% 26-50% increase	
	51-100% increase Double	
	More than double	
9	Has your excess increased due to flooding or flood risk? If so, how much has it increased in the last five years?	
From To	£	
10	Any other comments	
Thank you for participating in this survey. Your help is very much appreciated.		

Cllr Marianne Rixson

22 Sid Vale Close

Sidford, EX10 9PH

27th February 2016

Dear Councillor Rixson,

Thank you for including us in your survey of potential increased flood risk. This risk will we feel be much higher if the land on the west bank of the River Sid above Packhorse Bridge is built on. We are already at considerable risk of flooding. Simply building in this area would heighten this risk, building a Business Park with its increased coverage of concrete would condemn our property to regular flooding.

The flood risk as it stands exists because of the inability of the two arches of Packhorse Bridge to allow the increased volume of water to pass through them. Our property has never been at risk of the actual river level rising below Packhorse Bridge.

When the suggestion in the local plan was first made public, I phoned the Environmental Agency to voice my concerns. At that time I was told that any development on that site would include a mechanism to hold and control release of water into the Sid. When I asked how this could be done it was suggested that storage tanks would be included in the design. This suggestion to me seems highly suspect in engineering terms. More importantly I feel the developers would not want this extra cost.

Any building to the west and above Packhorse Bridge, will speed up flow of water into the river. This in turn will speed up the rate of flow of the river. The volume of water will increase causing this to reach the limit of flow through the two arches of the bridge. This will be followed by the river breaking its bank above the bridge with water flowing at great speed down England's Close, into Church Street and then down Packhorse Close.

Once the drains in Packhorse Close have been overwhelmed, water levels rise, and overflow into the properties on the East side of the Close. The natural flow of the flood water is to try and flow downhill to re-join the river below Packhorse Bridge. The natural floodplain of the river is on the East side.

The properties in Packhorse Close have never been threatened by the river rising naturally and inundating them.

History

Any flooding into Packhorse Close has been caused by the inability of the two arches of Packhorse Bridge over the Rivers Sid and Snod to cope with the volume of water passing through it.

In the past 4 years we have had to take action when flooding occurred. This included blocking air vents, sandbagging, and taking action to redirect water back to the river.

After the last threat in 2014, I had airbricks in the house raised and had a large storm drain installed in the back of the property.

Prevention

We brought a property by a river so there will always be a threat of flooding. The flood risk in its present form can be reduced considerably.

I have spoken to the Environmental Agency enquiring whether the two arches of the bridge can be enlarged. The bridge is apparently a listed structure. Therefore I am told enlargement is not an option.

The EA now come more regularly to remove stone build up from the river bed below the arches, thereby increasing the arch volume and allowing more water through the two spans. This is vital.

The drains in Packhorse Close are easily overwhelmed. Could the capacity of these be increased?

Can flood water directed from above the bridge, under the road on the east side to flow into natural flood below the bridge?

It should be possible to build at least two large storm drains that lead from Packhorse Close back to the river.

All these measures, some in place, most not, will reduce the risk of flooding in Packhorse Close as things stand now. I am certain that if significant development takes place above Packhorse Bridge, to the west of the River Sid, even the measures suggested above will be insufficient to prevent regular flooding to properties in Packhorse Close. Our property would be devalued considerably.

Since living here I have had regular contact with the EA regarding flood risk. I have sent them photos and videos of flooding events.

I feel very strongly about this. I also feel that even if the development does not take place, more flood prevention measures should be put in place now.

Please do contact me if you think I can be of further assistance.

I realise that it is not only Packhorse Close which is threatened by this potential development. However if you wish to come and talk to us regarding the threat to Packhorse Close and see things at first hand the we would be more than happy to see you here.

Yours sincerely



Twice now our road has flooded. On the night of 24 " November 2012 we came within a hairs breadth of water entering the house. It actually entered my neighbours house. Due to his age and ill health I fear he may not fill in your questionair, my other neighbour has since died.

with the extra water our off that 12 acres of non permeable land we will flood.

Shave written to the planning office in the past and gone personally to the Environmental Office. They chose to ignore our plight in an act of gross selfishness and irresponsibility because they do not care what happens to us, making a mockery of their plaque on the wall INVESTORS IN PEOPLE. Nobody will be accountable. Il wager the government inspector was not told of our flooding.

BEST OF LUCK



APPENDIX J - Photos of Flood Zone 2/3 & Downstream

7th July 2012



Access road, Two Bridges Road



Brook, Two Bridges Road



Car park (Nissan Garage), England's Close



England's Close



England's Close / Church Street



Packhorse Close



Packhorse Bridge



River Sid (downstream)

24th/25th November 2012



Two Bridges Road



Hamilton Close / England's Close



England's Close / Church Street



20th December 2012













31st December 2012



APPENDIX K - Adapting to Climate Change

A ENVIRONMENT AGENCY

Environment Agency report on Adapting to Climate Change: Advice for Flood and Coastal Erosion Risk Management Authorities, issued on 13^{th} April 2016

2 Transitional Arrangements

'This advice should be applied to all future appraisals that are started (new) from March 2016'

Table 2 <u>Peak river flood flow allowances</u> by river basin district use (1961-90 baseline) - see SW England: <u>85%</u> 2080s (2070-2115)

Table 3 <u>H++ river flood flow scenarios</u> for each river basin district - see SW England: <u>105%</u>, 2080s (2070-2115)

Table 4 <u>Change to extreme rainfall intensity</u> compared to a 1961-90 baseline - see upper estimate: <u>40%</u> 2080s (2070-2115

p.14

'The peak rainfall intensity ranges should be used for small catchments and urban/local drainage sites.'

B FORDS OF SIDMOUTH

Environmental Statement Volume 1: Main Report Revision date 16.02.16

- 9.4 Baseline Conditions
- In order to develop the site, the Environment Agency require the site to be defended to a 1-in-100 year return period standard (less than 1.0% annual probability of flooding) for the fluvial and surface water events at the site over the lifetime of the development. In considering the lifetime of the development a design life of 75 years has been adopted for climate change impacts. This equates to a 20% increase in fluvial flows and rainfall intensities based on EA guidance.

Flood Risk Assessment dated August 2012 Report No P9687/G201/B **Final date of issue – 26/02/2016**

p.22 peak rainfall intensity +20% (60 yrs) peak river flow +20% (60 yrs)

APPENDIX L - Photos of flooding at 2 Bridges Road, Sidford



Development site, Phase 1 (Two Bridges Rd)

Surface water currently flows down the hillside, across the road and through the gate into the field.

The field acts as a sponge until it can absorb no more water, then flows across like a river into the river Sid, down through Sidford and Sidmouth to the sea



Flood water from Fairport, Two Bridges Road



Flood water from Sandylands, Two Bridges Road



Depot: Two Bridges Road. Water flows down the hill, straight across the road and into the Flood Zone 2/3 field



If the water is not allowed to drain onto the flood plain, where will it go in future?

APPENDIX M - Pavements & Road Width



School St (west side)— private pavement (recycling box shows how narrow this is)



School St (east side) – HGV inc. mirrors are 3m wide, so not enough room for commercial vehicles to pass oncoming traffic

APPENDIX N - Photos of congestion in School St, Two Bridges Road & Sidbury

SIDFORD



August



August



September



September



October

SIDBURY

