

SP4 Atomic Weapons Establishment (AWE) Aldermaston and Atomic Weapons Establishment (AWE) Burghfield

This response to proposed policy SP4 is on behalf of Charlesgate Homes Limited who are promoting land in Sulhamstead for housing allocation for self and Custom build housing (SUL1)

This proposed policy appears to suggest that the starting position for all planning applications is a no, which is clearly in conflict with the NPPF goals which is that there should be a presumption in favour for all new developments. It is understandable that there will need to control on development in this area so as to not cause a detrimental impact on a facility that aids national security.

It is advised that throughout this proposed local plan review that currently any land within the AWE DPEZ zone in the Burghfield and Aldermaston will not be considered for ANY additional housing due to the WBC emergency planners advising that NO additional dwellings can be accommodated within the WBC emergency plan.

There does not appear to have been any site assessment done on any of the sites that are being promoted in the emerging local plan, and looking at the updated HELLA document, any site within the out of date DPEZ zone has been immediately omitted without any further site by site assessment, and would suggest that WBC are seeking a moratorium on any additional houses or businesses within this DPEZ

Charlesgate Homes Limited has instructed Mr Keith Pearce from Katmal limited to not only undertake a site assessment on SUL1 (land at Benhams Farm, Hollybush lane) but has also undertaken a risk assessment on the AWE burghfield site and its activities as well undertaking an assessment of the current DPEZ and policy SP4.

This site assessment and assessment of the Burghfield AWE and the current DPEZ have been attached in appendix 1 which is entitled “ **AWE Burghfield emergency planning implications for a proposed development at Benham’s Farm, Hollybush Lane, Burghfield Common, Reading RG7 3JS.**” Which is site SUL1 in the WBC HELLA report on promoted sites for residential housing

This report is extremely detailed, but Mr Pearce has provided a summary to his findings in support of SUL1 as a site for residential development which is currently within the DPEZ;

1. *The proposed development site is outside the UPAZ where prompt protective actions (in this case shelter) are estimated to be able to provide a nett benefit if the postulated accident occurred on the AWE Burghfield site while the wind was blowing towards the proposed development site*

under relatively unlikely weather conditions. Therefore, no detailed emergency plan is required to enable urgent protective actions at this site.

2. *The potential radiation dose to people living on the proposed development are so low and the probability of any such event affecting the site so low that we can assert with confidence that the AWE Burghfield site does not pose a significant risk to those who might live in the development.*
3. *The dose rates at the proposed development site during and after the postulated event would be sufficiently low as to allow life as normal, including home visits by emergency services and in-home service providers.*
4. *There are a number of sensible options to redefine the DEPZ such that the development site would be outside it. This would remove all the REPPiR-19 emergency planning requirements except those associated with severe accidents and outline planning.*
5. *The AWE Burghfield site will not be affected by external hazards resulting from a residential development this far away.*
6. *The development will not affect the ability of the emergency services or others to gain access to, or egress from the site and so will have no impact on the ability to respond any event on the AWE Burghfield site.*
7. *This proposal does not raise serious safety concerns nor does it lead to a breach the ONR demographic criteria.*
8. *It is concluded that the proposal would not present a barrier to the ability of emergency services to safely carry out their duties, and nor would it affect the Council's ability to execute and manage its obligations under the REPPiR plan.*
9. *Given the above, the local authority can provide the ONR with "adequate assurance that the proposed development can be accommodated within their existing off-site emergency planning arrangements (or an amended version)" allowing the ONR to approve the development.*

The SP4 policy appears to not take a "each site considered on its own merits" and hugely constraints all additional net housing in this location and is therefore at odds with the NPPF which supports the delivery of sustainable development, especially being that Burghfield Common is a Rural service centre and a good location for much needed residential housing.



AWE Burghfield emergency planning implications for a proposed development at Benham's Farm, Hollybush Lane, Burghfield Common, Reading RG7 3JS.

Executive Summary

The proposed development site is within the Detailed Emergency Planning Zone of AWE Burghfield. While there is no blanket ban on new people being accommodated in this area the local authorities have been citing it as a barrier to obtaining planning permission.

This document sets out to show that because of the distance between the development site and the AWE site the risks posed by the AWE site to residents of any new development would be very low compared to normal day to day risks and that the development itself poses no risk to the AWE site nor to the operation of the local authority's off-site plan.

The first argument is that the probability of an accident leading to a significant release of radioactive material to the atmosphere is low. It is argued that this is below 1 in 10,000 years, probably much lower.

The consequences of this accident, as deduced from the AWE's Consequence Report, at the distance of the development site would be classed as "minor" using the REPPIR risk framework.

As the site is beyond the range recommended for prompt protective actions by AWE. No protective actions would be needed at the development site even if the wind blew towards the site and the weather conditions were such as to minimise dispersion.

The estimates risk of death at the development site due to an accident on the AWE site is estimated to be far lower than the risk of a fatal lightning strike.

As it is beyond the AWE range for protective actions, the development site need not be in the DEPZ. Some options for the route of the DEPZ boundary are discussed.

As the off-site plan is to inform the residents of the area using an automatic phone system and then set up an information gathering and decision-making process in the Strategic Coordination Centre, the added number of people in the DEPZ do not impose any load on the off-site plan.

As the site is beyond the urgent protective action zone the emergency services and home support services should be allowed to operate as normal within the area of the development site even during the short release phase as an accident at the AWA site.

The risks at the site are compared to the ONR criteria for recommending against a development and it is concluded that the ONR should be comfortable not objecting to this development.

Introduction

1. This document reviews the emergency planning aspects of a proposed development site at Benham's Farm, Burghfield Common in order to provide reassurance that the AWE Burghfield site poses no great risk to the occupants of the proposed development, that the proposed development is neither a threat to the AWE site nor likely to be a strain on the local authority's off-site emergency plan and that the ONR should be able to "not advise against" the application.
2. The proposed development site is about 4,100 m from the AWE Burghfield DEPZ Centre Point Bearing 260 degrees. This is outside the Urgent Protective Action Zone (UPAZ)¹ of 3,160 m determined by AWE (AWE [2019])² but within the DEPZ as specified by the local authority (Richardson and Anstey [2020])³ (See Figure 1).
3. *The fact that the site is within the DEPZ is seen as a barrier to development.*
4. The council have stated that *"The site falls within the Detailed Emergency Planning Zone (DEPZ) of Burghfield Atomic Weapons Establishment (AWE). Proposals for residential development are likely to add pressure to 'blue light services' and the emergency off site plan. A revised emergency off site plan is expected in January⁴, and this will consider whether there may be potential for some residential development"* (WBC [2020])⁵. This statement is somewhat dated and the revised plan issued.
5. But the DEPZ is not necessarily permanently fixed.
6. The DEPZ is subject to periodic review. The "West Berkshire Local Plan Review 2022-2039 Proposed Submission January 2023" (WBC [2023]) states that *"The Detailed Emergency Planning Zone (DEPZ) required under legislation for Aldermaston and Burghfield is reviewed every three years and is a major factor in the assessment of sites in this location"*⁶.
7. The DEPZ is not subject to a total ban on development.
8. A council officer has confirmed that *"there is no outright ban on additional people in the area (the DEPZ) instead each application is considered on its own merits and the impact it may have on the AWE Off-Site Plan"*.⁷

¹ This report will use the term "Urgent Protective Action Zone" (UPAZ) to describe the area (circle) recommended as the minimum DEPZ by AWE.

² Part 2 Section 1a Page 2. https://www.westberks.gov.uk/media/48825/AWE-Burghfield-Consequences-Report/pdf/REPPIR_B-Site_ConsequencesReport_web_version1.pdf?m=637256670105370000

³ Appendix A, Page 12. <https://decisionmaking.westberks.gov.uk/documents/s82953/564466%20-%20DEPZ%20Determination%20-%20Decision%20Report%20-%20final.pdf>

⁴ The paper quoted is dated December 2020 this is probably referring to January 2021.

⁵ Appendix 4d, Emerging Draft West Berkshire Local Plan Review to 2037, Site Selection Background Paper (December 2020) https://westberks.gov.uk/media/49843/Appendix-4d-Burghfield-Common-Site-Assessments/pdf/Appendix_4d_Burghfield_Common_Site_Assessments.pdf?m=637910505179270000

⁶ Paragraph 4.14, https://www.westberks.gov.uk/media/53945/Proposed-Submission-Regulation-19-West-Berkshire-Local-Plan-Review-to-2039-Clean-Version/pdf/LPR_2022-2039_Proposed_Submission_for_consultation_20_Jan_2023_for_web.pdf?m=638096652954630000

⁷ [REDACTED], Email to Joe Atkinson, 28 May 2021. (email trail one)

<Name of Council officer redacted>

9. Planning Policy SP4 (WBC [2023]) is relevant. This refers to the implications of Atomic Weapons Establishment (AWE) Aldermaston and Atomic Weapons Establishment (AWE) Burghfield.
10. Policy SP4 states that *"In the interests of public safety, and to ensure that any proposed developments do not pose an external hazard to the AWE sites, any new development of a type more particularly described [a table] located in the Detailed Emergency Planning Zone (DEPZ) of AWE Aldermaston and AWE Burghfield is likely to be refused planning permission by the Council, especially when the Office for Nuclear Regulation (ONR) and/or Ministry of Defence (MoD) have advised against that development and/or object"*⁸.
11. The table mentioned lists the following criteria for within the DEPZ as "likely to be refused":
 - *Any new development, re-use or re-classification of an existing development that could lead to an increase in residential or non-residential populations thus impacting on the off-site emergency plan.*
 - *Any new development, re-use or re-classification of an existing development that could pose an external hazard to the site.*
12. A footnote to the table explains that these criteria are based on the then-current ONR guidance and that the council would follow any changes in ONR guidance.
13. SP4 does not explain what criteria the MoD might use to raise an objection to a proposed development although it does refer to the National Planning Policy Framework paragraph 95⁹ that requires *"planning policies and decisions should promote public safety and take into account wider security and defence requirements byb) recognising and supporting development required for operational defence and security purposes, and ensuring that operational sites are not affected adversely by the impact of other development proposed in the area"*¹⁰.
14. The council make a commitment to *"monitor housing completions and commitments as part of the Annual Monitoring Report and send this information directly to the Emergency Planning Services in each council and the ONR for them to make informed judgements when assessing future development proposals."*¹¹
15. It is explained¹² that *"The ONR provides advice to the local planning authorities on planning applications for developments around the AWE nuclear licensed sites. This advice seeks to limit the radiological public health consequences to members of the public in the event of a radiation emergency and to ensure that the developments do not pose an external hazard to the sites"*.

⁸ Page 23

⁹ This is paragraph 97 in the 2021 document at https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1005759/NPPF_July_2021.pdf

¹⁰ Paragraph 4.40 on page 24

¹¹ Paragraph 4.53 on page 17

¹² Paragraph 4.52 on page 17

16. Referring to the ONR's description of its own decision-making process it is stated that *"The ONR will normally advise against a particular development should they not receive adequate assurance from the owner of the Off-Site Emergency Plan that the development can be accommodated within that Plan"*¹³.
17. The plan owner is identified as West Berkshire District Council Emergency Planning Service who consult with the AWE Off-Site Planning Group (a group of responding local, regional and national agencies).
18. It should be noted that ONR claim to have no vires (powers granted) with regard to planning decisions by planning authorities. However, ONR seeks to be consulted in regard to proposed developments within specified consultation zones (ONR [2022])^{14,15}. Their advice is not binding.
19. Section 4.3 of the ONR guidance document discusses the options open to ONR should a local authority approve a development against ONR advice:
20. *"Should a planning authority be minded to grant a development consent order, planning permission or adopt a planning policy within their Local Plan in circumstances where ONR has advised against the proposal, ONR would consider whether the decision presented a serious safety concern. If such a concern was identified, ONR would consider seeking to refer the matter for determination by the relevant Minister, by the appropriate route"*.
21. *"Where potential development around a nuclear power station site is identified by ONR as having the potential to lead to a breach of the demographic siting criteria, ONR will provide advice to the relevant local authorities and government departments regarding the likelihood and safety significance of any such breach"*.
22. The AWE Off-Site Planning Group group will advise against a proposed development if they believe that *"the AWE Off-Site Emergency Plan (the Plan) would be adversely affected with no viable and sustainable mitigation options available"*¹⁶.
23. It should be noted that the suggestion that proposed developments within the DEPZ are likely to be refused planning permission as stated in Policy SP4 (see paragraph 10 above) is not ONR general policy which takes each case on its own merits and is influenced by the local emergency planners. ONR is looking for "serious safety concerns" or breaches of demographic criteria as grounds for objection.
24. However, ONR have stated that they are currently advising against developments within the AWE DEPZs because WBC are *"presently unable to provide the ONR, and by extension those communities living, working and studying within the DEPZ, with the adequate assurance that*

¹³ Paragraph 4.54 on page 17

¹⁴ Section 4.3 on Page 11

¹⁵ Schedule 4 of The Town and Country Planning (Development Management Procedure) (England) Order 2015 does identify ONR as a consultee.

¹⁶ Paragraph 4.54 on page 17

proposed developments resulting in an increase in population can be accommodated within West Berkshire Council's off-site emergency planning arrangements" (ONR [2021]).

25. This document will attempt to refute council concerns by showing that:
- The site does not pose a great risk to people living in the proposed development – the public safety issue (It is outside the Urgent Protective Action Zone and accidents are infrequent and of low consequence at this distance);
 - The AWE Off-Site Emergency Plan would not be adversely affected with no viable and sustainable mitigation options available. (It entails a small increment in population and the emergency plan is to warn and inform residents by phone and broadcast media and not a great deal else);
 - The development will not threaten access and egress from site for emergency vehicles (it is not on main roads, small increment in vehicle use);
 - The ONR should not be minded to object given their current criteria.

Part A: The risk posed to people living in the proposed development by operations at the AWE Burghfield site is small.

26. The risk of an accident at AWE Burghfield with off-site consequences is extremely low. In fact, an ONR report [ONR 2018]¹⁷ states that a Burghfield Report of Assessment (a REPIR-01 requirement) was written claiming that there were no reasonably foreseeable faults that could lead to a radiation emergency at Burghfield. If accepted, this would have removed the need for a DEPZ around Burghfield and removed the need for an off-site emergency plan. When challenged to look harder for a potential reference accident, AWE proposed a chain of events involving earthquakes and inadvertent detonations of conventional explosives but then introduced operational restrictions such that the sequence is no longer reasonably foreseeable. They then agreed the detonation in a hot cell as the Reference Accident with ONR.
27. The reason the above paragraph is relevant is that it provides strong circumstantial evidence that the accidents used in the REPIR-01 submission and carried over to the current Consequence Report are at the lower end of the probabilities considered for detailed planning in REPIR-01 (HSE [2001]) which used the test "reasonably foreseeable" (usually taken to be about 1×10^{-5} – 1×10^{-6} per year or 1 in 100,000 to 1 in 1,000,000 years).
28. It can therefore reasonably be assumed that the relevant Consequences Report has been prepared on the basis that a reference accident is no more likely than 1 in 10,000 years (possibly significantly less). Further, taking into account that the probability of the wind blowing any contaminated plume towards the site is no more (and probably a bit less than) 10% (see Figure 2 which shows a windrose diagram for nearby Benson), and that the adverse weather conditions which are the basis of the increased DEPZ occur about 12% of the time, the worst case dose contour which has informed the revised DEPZ can be assumed to occur in the direction of the Proposed Development less than 1 time in 1,000,000 years.

¹⁷ Section 5.2 on page 6 <https://www.onr.org.uk/pars/2018/awe-burghfield-17-055.pdf>

29. None the less, AWE Burghfield has been identified as triggering the REPPiR-19 conditions for detailed emergency planning¹⁸ and so the local authority must produce, maintain and test a competent emergency plan based on the site's risk assessment.
30. The most recent Consequence Report for AWE Burghfield dated November 2019 (AWE [2019])¹⁹. This reported the possibility of an "explosive distribution" where the material that would dominate public dose would be plutonium (which is an alpha emitting actinide) as an inhalable plutonium oxide.
31. In the very unlikely event of the "explosive distribution" a plume of radioactive gas and dust would be ejected from the site of the explosion and drift downwind spreading out horizontally and vertically as it goes and settling on the ground and other surfaces.
32. The type of activity taking place at AWE Burghfield means that any release of material would not be sustained, and thus any event would likely happen over hours or, at the very most, a small number of days.
33. The public downwind at the time could receive radiation dose from a number of "pathways" including:
 - First pass inhalation dose (breathing in the radioactive dust as it floats by on the air);
 - Cloud shine (from radiations emanating from the radioactive dust cloud as it passes by);
 - Ground shine (from radiations emanating from radioactive dusts deposited on the ground and other surfaces);
 - Resuspension dose (from inhaling activity that had been deposited on surfaces but then kicked back into the air by some process);
 - Ingestion dose from eating foods contaminated with the radioactive dust.
34. First pass inhalation dose and cloud dose occur only during plume transit. Ground dose, resuspension dose and ingestion dose can continue after the event.
35. The report states that "*Overall, the primary concern for early response decision-making to radiation emergencies involving possible accidents at the Burghfield Site only merits consideration of the first-pass inhalation dose and therefore sheltering is the recommended urgent protective action*"²⁰.
36. The report continues: "*It has been assessed that the first-pass inhalation dose is the most significant by far, for initial emergency response purposes, which has resulted in the recommendation to shelter as the most appropriate urgent protective action. This should be coupled with a restriction on the consumption of all locally produced food, until the direction of the plume and the extent of the contamination has been fully investigated, examined and understood. Appropriate local instructions should then be made available to the public based on the prevailing conditions*"²¹.

¹⁸ See the REPPiR Risk Framework [HSE 2020] page 181.

¹⁹ In November 2022 AWE issued a declaration of no change (AWE [2022]) meaning this is still the current Consequence Report.

²⁰ Paragraph Part 2, 3g on page 4

²¹ Paragraph Part 3, 1b on page 4

37. This is important. It is clear that anybody outside and downwind of such an accident would only be incurring significant dose uptake while the cloud of radioactive gas and dust produced by the explosion was passing by (and assuming that it is at head height). Before the plume arrives and after it departs there is no significant dose uptake to be averted by protective actions and no significant risk. We might suppose that the plume transit time at a point downwind might be a few minutes, certainly no more than an hour.
38. The REPIR plan (JEU [2022]) recommends sheltering within buildings during an event as the primary method of protection to human health (WBC [2020]). The barrier of a building (with closed doors and windows) would afford the greatest and most immediate and accessible type of protection in the event of the type described above.
39. It is worth noting that the government advice on the use of sheltering states that *'The health and wellbeing of sheltered populations may be affected by restricted access to medical care or assistance. In such situations, consideration should be given to supervised entry into the sheltered area by medical professionals and carers or planned evacuation of these vulnerable groups'* (PHE [2019])²² and earlier advice included *"To a large extent, these adverse effects of the countermeasure [Shelter] are small, particularly if the sheltering period is kept to a few hours. Significant problems can be reduced by advising individuals that short periods out of doors, for necessary activities, will not, in many situations, result in very high exposures. External exposures to people inside a building will not be significantly affected by opening and closing of outside doors, nor will occasional opening and closing of outside doors have a major impact on the radionuclide concentrations in air in the building, and hence on doses by inhalation'* (NRPB [1990])²³.
40. The general advice is that people should thoroughly ventilate their house as soon as the release has stopped and contamination levels in the outside air have fallen (NRPB [1990])²⁴. This will occur in less than an hour for the proposed development site in any weather conditions.
41. More energetic faults, which produce a range of fission products, are mentioned in the Consequence Report²⁵ but not elaborated upon giving no information against which an emergency planner can scope a response.
42. It is assumed that this refers to criticality incidents that may result in a sudden emission of gamma and neutron radiation and then the release of fission products. The radiation emitted could well be fatal to people within 10s of metres of the incident but would represent no threat to people as far away as the proposed development.
43. Since AWE have not expanded on this fault, it is assumed that the fission product release would cause lower off-site doses than the explosive distribution.
44. The distance downwind to which protective actions should be planned is determined by estimating the dose that could be averted by those protective actions at different distances

²² Section 5.2.1.1

²³ Paragraph 8

²⁴ Paragraph 56 on page 23

²⁵ Paragraph Part 2, 3.d

downwind and comparing these to the Emergency Reference Levels (ERL)²⁶ of dose recommended by PHE (now the UKHSA) (PHE [2019]).

45. The Consequence Report recommends a distance of 3,160 m "*selected as the minimum geographical extent of the Detailed Emergency Planning Zone about the Burghfield Site Centre Location*". This is the UPAZ, set at the 7.5 mSv contour distance during F(2) weather.
46. This is consistent with REPPiR-19 advice which states that "*For premises where inhalation is the dominant exposure pathway (other than operating reactors), this outdoor effective dose of 7.5 mSv can be used as a surrogate for identifying the initial candidate minimum distance for the urgent protection action of sheltering*"²⁷.
47. Going inside a reasonably robust building and closing doors and windows would lead to an averted dose²⁸ of about 3 mSv which is the lower ERL for shelter. (Shelter is assumed to reduce inhalation dose by 40% (PHE [2019b])²⁹).
48. Given that dose decreases with increasing distance downwind, it is obvious that if someone at 3,160 m downwind would receive a dose of 7.5 mSv if the accident occurred during Cat F(2) conditions then somebody at the proposed development site at 4,100 m downwind would receive a dose of less than 7.5 mSv³⁰.
49. The distance obtained is sensitive to the weather conditions assumed in the dispersion estimates. The Consequence Report assumed a relatively rare (~10%) weather condition described as Pasquill Category F with wind speed 2 m/s (Cat F(2)). This condition only occurs at night.
50. It is interesting that the extent of the UPAZ is based on weather that only occurs during the night since the Stress Test report for the AWE sites (AWE [2011]) states that "*Operations are undertaken on a batch production basis, almost wholly during standard daytime working hours with nuclear production materials stored overnight in safes within the nuclear facilities*". Assuming daytime weather conditions would reduce the size of the indicated UPAZ.
51. The actual doses on the day of the event would depend on the weather conditions on the day. These doses are likely to be less than those predicted in the Consequence Report as Category F(2) "*is less likely, but which could provide significantly greater doses*".³¹
52. If the UPAZ were to be based on daytime weather they might consider going back to the REPPiR-01 value based on Cat D(5) weather of 1.3 km (ONR [2018]). None of Burghfield Common would be in this Zone.

²⁶ ERLs are given for shelter, evacuation and the taking of stable iodine. Two values are given for each. The lower ERL is a value below which the action is not recommended. The upper ERL is the value above which the action is strongly recommended. Between the two values is a grey area where the decision about applying a protective action includes consideration of the ease of application on that day. Stable iodine is not relevant for AWE Burghfield.

²⁷ HSE [2020] Paragraph 695

²⁸ The difference between the doses with and without the protective action.

²⁹ Appendix B4.1 recommends a Location Factor of 0.6 on Page 23. This is equivalent to a 40% dose reduction.

³⁰ We can estimate the potential dose at the development site as $7.5 \times (3160/4100)^{1.5} = 5.1$ mSv.

³¹ Paragraph Part 3 1f on page 5 of AWE [2019]

53. The REPIR risk framework (HSE [2020])³² describes doses in the range 1 – 10 mSv as “minor” having “no potential for deterministic effects, [as it is] below threshold dose” and “minimal impacts and unlikely to have life changing consequences”. It does recognise a “potential self-imposed restrictive changes in normal life activities”, an “assumed asset value depreciation” and a “reluctance to use environmental areas and produce”. While this dose range is not seen as a direct threat to health, post-accident care and communications may be required to minimise the potential “self-imposed” downsides.
54. For comparison the UK average annual radiation dose is 2.7 mSv and the average annual radon dose to people in Cornwall is 6.9 mSv (UKHSA [2011]).
55. The annual risk to the health of an individual arising from a potential accident, R, can be expressed as the product of four quantities:
- (i) The frequency of occurrence of the potential accident expressed on an annual basis, F;
 - (ii) The conditional probability that the individual is exposed to the resultant release of radioactive material, P;
 - (iii) The dose that someone might be exposed to, D (mSv);
 - (iv) The probability of adverse health effects being induced in an exposed individual per mSv, q;
- Thus, $R = F \times P \times D \times q$.
56. ICRP [2007] assigns detriment-adjusted health risk coefficients of 5.5×10^{-5} per mSv for all fatal and non-fatal cancers and 2.0×10^{-6} per mSv for heritable effects in the whole population (including infants, children and adults). The ICRP [ICRP 2007] does not identify any other adverse health effects that are of significance at doses of this size and the overall risk factor (summing those for cancer in the irradiated individual and hereditary effects in their descendants) is 5.7×10^{-5} per mSv, which may be thought of as equivalent to the risk of death arising from the irradiation, q.
57. Taking F to be less than 1×10^{-4} per year, P to be about 10% and D to be less than 7.5 mSv, the equation in Paragraph 9 gives a risk of death per year as less than:
- $$1 \times 10^{-4} \times 0.1 \times 7.5 \times 5.7 \times 10^{-5} = 4.3 \times 10^{-9} \text{ per year.}$$
- This is an extremely small risk compared to some of those we face in everyday life³³.
58. Since their projected dose (their total dose if they take no protective actions during the entire course of the event) would be less than 7.5 mSv the expert advice would be that shelter should not be recommended as a protective action.
59. This means that normal activity could continue at the development site including home-help visits and emergency services attendance should it be required.
60. Evacuation has a lower ERL of 30 mSv (PHE [2019]). The dose is not expected to reach this level during the event or at any time after the event due to the lingering impacts of ground dose, ingestion dose and resuspension dose. This site will not be subject to evacuation as a result of radiation doses from an event at AWE Burghfield.

³² Page 180

³³ See Reducing Risks, Protecting People (HSE [2001b]) for some everyday risks which shows, for example, that the risk for an individual of being struck by lightning is about 1 in 18 700 000 or 5.4×10^{-8} per year suggesting that a resident at the development would be ten times more likely to be killed by lightning than by an accident at AWE Burghfield.

61. **The risk posed by the operations at AWE Burghfield to people living at the proposed development would be extremely small compared to the risks of everyday life.**
62. **Providing that no event exceeds that assumed in the Consequence Report, people living at the development site need take no special protective actions on declaration of an emergency at AWE Burghfield and emergency services and in-home support services should not be prevented from working in this area³⁴.**

Is it necessary for the proposed development site to be within the DEPZ?

63. There are two steps to undertake when defining a DEPZ.
64. The first involves the operator undertaking a risk assessment of the site, determining the probability and potential consequences of any accident sequences or other events that might lead to a release of radioactivity to the environment and using this information to provide advice to the local authority about the appropriate minimum extent of the DEPZ based on the ability of protective actions to avert a sufficient radiation dose to be considered worthwhile.
65. This is reported in a Consequence Report, which is made available to the relevant local authorities, the public and the ONR. For AWE Burghfield the most recent Consequence Report that can be found on the internet is the original from 2019 (AWE [2019]). A 2022 report from AWE has reported no need to revise this report (AWE [2022]).
66. This recommended the protective action of shelter out to at least 1,350 m based on an estimated release of radioactive material and relatively infrequent weather conditions that can occur at night.
67. The second stage of the process is defined by REPPiR-19 Regulation 8 and the associated guidance and Approved Code of Practice (HSE [2020]). Regulation (8(1)) states that "*The local authority ... may extend that area in consideration of— (a) local geographic, demographic and practical implementation issues; (b) the need to avoid, where practicable, the bisection of local communities; and (c) the inclusion of vulnerable groups immediately adjacent to the area proposed by the operator*".
68. The REPPiR-19 Approved Code of Practice (ACOP) paragraphs 231 - 232 states that:

231 The detailed emergency planning zone must be based on the minimum geographical extent proposed by the operator in the consequences report and should:
 - (a) be of sufficient extent to enable an adequate response to a range of emergencies; and*
 - (b) reflect the benefits and detriments of protective action by considering an appropriate balance between:*
 - (i) dose averted; and*
 - (ii) the impact of implementing protective actions in a radiation emergency across too wide an area.*

³⁴ A more severe fault would be managed by the outline plan which goes out to 12 km from the site centre.

232 In defining the boundary of a detailed emergency planning zone, geographic features should be used for ease of implementing the local authority's off-site emergency plan. Physical features such as roads, rivers, railways or footpaths should be considered as well as political or postcode boundaries, particularly where these features and concepts correspond with other local authority emergency planning arrangements".

69. The ONR provided some advice and workshops on this process to interested parties as REPPiR-19 was being introduced (ONR [2020]). Their advice on the need to avoid, where practical, the bisection of local communities is summarised in Figure 3 (taken from the presentation) which shows a nice clear-cut situation rather than an extended developed area.
70. The process requires decisions about the path of the DEPZ boundary in an attempt to balance several criteria and differences can be seen in the way the process has been applied across the UK within sites.
71. Figure 1 shows the radius as determined by AWE and the DEPZ as determined by the local authority. The approximate position of the proposed development site is shown in red in the lower left corner of the map.
72. It can be seen that the local authority has chosen to extend the DEPZ well beyond the radius suggested and over open countryside.
73. Figure 4 shows two credible alternative routes for the DEPZ in this the area of the proposed development site. It could run along Hollybush Lane including those premises to the east and excluding those to the west. This road is some distance outside the minimum circle (about 0.9 km outside a 3.16 km circle) and represents a transition from fairly dense to significantly sparser housing.
74. A more aggressive reduction of the DEPZ to follow close to the minimum circle is also shown. This sort of street following has been adopted elsewhere. (See Figure 5 (PCC [2016]) and Figure 6 (ONR [2020d]) which show the DEPZ boundaries for Devonport and Portsmouth following minor streets through built up areas).
75. A third reasonable suggestion, in line with the REPPiR ACOP, would have been for the DEPZ in the south-west sector to follow 3.16 km radius but to extend to include the Parish of Burghfield to prevent the bisection of a community close to the minimum boundary. The proposed development site is in Sulhamstead Parish (Figure 7).
76. Thus, it is possible to conclude that the development site need not be within the DEPZ. Were it not to be in the DEPZ there would be no need for detailed emergency planning under REPPiR-19 and any capacity concerns for the off-site plan would be removed.
77. If the DEPZ was to be reduced in such a way as to exclude the development site it would then fall into the ONR's Outer Consultation Zone and would be too small to trigger the need for consultation with ONR.

Part B Demonstration that the development will not put pressure on the Emergency Services or the off-site plan.

78. The development for 43 homes may add about another 100 persons to the population of the Burghfield Common area which is already of the order of 6,200 (Based on 2021 census and ONS visualisation tool) (See Figure 8). This is a less than 2% increase in the local population, and under a 0.7 % increase in the residential properties in the AWE Burghfield DEPZ (based on 6651 residential properties as given in Richardson and Anstey 2020).
79. The AWE off-site plan [JEPU 2022] details the actions that are planned to be taken in the event of an off-site radiation emergency (defined as “Any incident that has actual or potential off-site radiological implications”) at either AWE site.
80. If the plan is initiated AWE will promptly initiate the cascade callout of relevant agencies and will initiate the Public Telephone Altering System³⁵. They will then prepare the first of a series of situation reports to share information and understanding with the partner agencies.
81. The telephone warning systems goes to all non-opted out land lines in the area and provides:
 - a. A notification that there is an incident at the relevant AWE site
 - b. Advice to remain inside with windows and doors closed (sheltering)
 - c. Advice to listen to local radio and television for Public Service Broadcasts.
82. AWE will initiate their emergency communications and media plan and release pre-agreed messages on protective actions prior to further agreed messages being generated when the response is running.
83. A Strategic Coordination Centre (SCC) is set up as a meeting point for responding organisations to exchange information and agree strategy.
- 84. None of the above actions scale with number of residential properties so the initiation of the plan will be entirely unaffected by this development.**
85. It would be expected that as the event progresses the plume of radioactive dust and gas will disperse naturally leaving some residue deposited on the ground and other surfaces. Since Plutonium is not a significant external hazard or ingestion hazard the main cause for concern would be the inhalation of resuspended activity. This would result in an additional dose that was a small fraction of the potential plume transit dose³⁶ and, provided the public were adequately reassured, no further action would be needed.
86. We might expect that an hour or so after the event the decision makers in the SCC would be considering asking those under the plume to open their doors and windows to ventilate their buildings and refrain from eating food gathered from outside after the event initiation.

³⁵ Section 3.3 on page 27

³⁶ When a plume of radioactive dust travels across an area, a fraction of the activity is deposited onto the ground. Of this fraction, a further fraction is resuspended. Taking plausible values for these fractions from the literature (i.e. 1×10^{-2} Bq.m⁻² per Bq s m⁻³ and 0.75 Bq s m⁻³ per Bq m⁻² [Public Health England, 2019]), it follows that the dose over one year from resuspension is likely to be about 1% or less of the plume transit dose.

87. Radiation monitoring would be undertaken to confirm the extent of any ground contamination and public consultations would take place to inform the public of the implications of any detectable activity and determine any remedial actions. It is very unlikely that any evacuation would be required, either in the short or medium term, this far from the scene of the event.
88. Given that the site is outside the UPAZ and that doses at these distances, even in low-dispersion weather conditions, would be below 7.5 mSv for the full duration of the plume transit we would expect the decision makers to be able to reassure emergency services and home care workers that normal activity, including home visits, could take place at the development site during the emergency. The use of face masks whilst outside and minimising the time outside could be recommended, as much for reassurance purposes as for dose reduction.

Part C. The development will not threaten access and egress from site for emergency vehicles

89. The proposed development site is off Holybush Lane which runs tangentially to the site and is unlikely to be used by emergency vehicles. There is a good network of roads in the area including access to the M4 and A4.
90. Should the REPPIR shelter-in-place advice be followed by those in the DEPZ, road traffic levels are unlikely to be greater than normal and the ability of services to access the zone would not be adversely affected.
91. There is a possibility of self-evacuation by those within the zone, but this is addressed within the REPPIR plan and discouraged through the dissemination of public information (WBC [2020]).
92. Thus, this development will not affect the ability of emergency services to access and egress from the AWE Burghfield site in an emergency.

Part D. The ONR should not be minded to object given their current criteria.

93. The ONR's own description of its consultation criteria (ONR [2023]) states that within the DEPZ it should be consulted for:
 - *“Any new development, re-use or re-classification of an existing development that could lead to an increase in residential or non-residential populations, thus impacting on the off-site emergency plan.*
 - *Any new development, re-use or re-classification of an existing development that could pose an external hazard to the site.*
 - *Any re-use or re-classification of an existing development that could introduce vulnerable groups to the DEPZ”*
94. It goes on to state that: *“When ONR is consulted by the Planning Inspectorate, Scottish Government or a local planning authority regarding a planning application (or other*

notification) for a development within an ONR consultation zone that that meets the consultation criteria, it will undertake the following process:

- Where appropriate, ONR will consult with the emergency planning function within the local authority, whose area includes the relevant nuclear site. This is in order for ONR to seek assurance that the proposed development has been discussed with the licensee, if appropriate, and can be accommodated within the local authority's existing off-site emergency planning arrangements, or that the off-site emergency planning arrangements will be amended to accommodate the proposed development.
- If the proposed development presents a potential external hazard to a nuclear site, ONR will consult the licensee's planning function to obtain their opinion as to the significance of the proposal with regard to safety on their site.
- ONR will state that it does not advise against the proposed development on planning grounds if, in its opinion, the following statements apply:
 - the local authority emergency planners, if consulted, have provided adequate assurance that the proposed development can be accommodated within their existing off-site emergency planning arrangements (or an amended version); and
 - the development does not represent an external hazard to a nuclear site or the planning function for the site that may be affected by the development has demonstrated that it would not constitute a significant hazard with regard to safety on their site.
- When ONR has not received a response from either the local authority emergency planning function or the licensee's planning function, ONR may provide a conditional response, in order to meet the consultation deadline. Conditional responses may state that:
 - ONR does not advise against the development, provided that:or
 - ONR advises against the development unless.....
- In exceptional cases, ONR may notify the local planning authority that ONR is not in a position to make a determination with regard to the application.
- In all other cases, where the above statements do not apply, the ONR Inspector will determine that ONR advises against the proposed development.

95. The proposed development does not have the potential to constitute an external hazard to the AWE Burghfield site. The ONR lists examples of activities that might cause concern. These include handling chemicals with the potential for explosion or the production of dangerous gases, the ability to generate missiles that might damage facilities on the site, causes of electromagnetic interference or electrical grip instability, or increase the chances of seismic activity or flooding. A residential development is none of these and this one is a considerable distance away.
96. Given the arguments in Section B it would seem surprising if the ONR would accept a statement from the local authority to the effect that this proposed development cannot "be accommodated within their existing off-site emergency planning arrangements (or an amended version)" without further information and a challenge to revise and amend the off-site plan accordingly. This is particularly true now that the Consequence Report upon which the plan is based is more than three years old and the local authority is obliged to "review and where necessary revise the plan for which they are responsible" "at suitable intervals not

*exceeding 3 years unless otherwise agreed by the regulator*³⁷. They have had three years to adjust to the increased size of the DEPZ. The Off-Site Plan was revised in May 2020 and again in November 2020.

97. However, a spreadsheet issued under FOI (ONR [2022c]) shows the consultations that ONR have responded to. This shows that they have “advised against” just over 50 applications all but one of which are within the DEPZs of either AWE Aldermaston or AWE Burghfield. The other is in the 12 km Burghfield zone. Across all the licensed sites except AWE Aldermaston and AWE Burghfield they approve many more than they reject including an application³⁸ to construct 204 dwellings within the DEPZ, in fact close to the site fence, of the Devonport Royal Dockyard which is a built up area. In this case the ONR suggested a couple of conditions³⁹.

Summary

98. The proposed development site is outside the UPAZ where prompt protective actions (in this case shelter) are estimated to be able to provide a nett benefit if the postulated accident occurred on the AWE Burghfield site while the wind was blowing towards the proposed development site under relatively unlikely weather conditions. Therefore, no detailed emergency plan is required to enable urgent protective actions at this site.
99. The potential radiation dose to people living on the proposed development are so low and the probability of any such event affecting the site so low that we can assert with confidence that the AWE Burghfield site does not pose a significant risk to those who might live in the development.
100. The dose rates at the proposed development site during and after the postulated event would be sufficiently low as to allow life as normal, including home visits by emergency services and in-home service providers.
101. There are a number of sensible options to redefine the DEPZ such that the development site would be outside it. This would remove all the REPIR-19 emergency planning requirements except those associated with severe accidents and outline planning.
102. The AWE Burghfield site will not be affected by external hazards resulting from a residential development this far away.
103. The development will not affect the ability of the emergency services or others to gain access to, or egress from the site and so will have no impact on the ability to respond any event on the AWE Burghfield site.
104. This proposal does not raise serious safety concerns nor does it lead to a breach the ONR demographic criteria.

³⁷ From REPIR regulation 12(1).

³⁸ <https://planning.plymouth.gov.uk/online-applications/simpleSearchResults.do?action=firstPage>

³⁹ https://planning.plymouth.gov.uk/online-applications/files/E7881856B8F937A3BD878BCF7DFF4E4A/pdf/22_00878_FUL-ONR-797947.pdf

105. It is concluded that the proposal would not present a barrier to the ability of emergency services to safely carry out their duties, and nor would it affect the Council's ability to execute and manage its obligations under the REPPiR plan.
106. Given the above, the local authority can provide the ONR with "*adequate assurance that the proposed development can be accommodated within their existing off-site emergency planning arrangements (or an amended version)*" allowing the ONR to approve the development.

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Figures



Figure 1 AWE Burghfield UPAZ and DEPZ from Richardson and Anstey, [2020] – Development Site shown in red.



Windrose Plot for [EGUB] Benson
Obs Between: 01 Jan 1973 12:00 AM - 22 Nov 2022 11:50 PM Europe/London

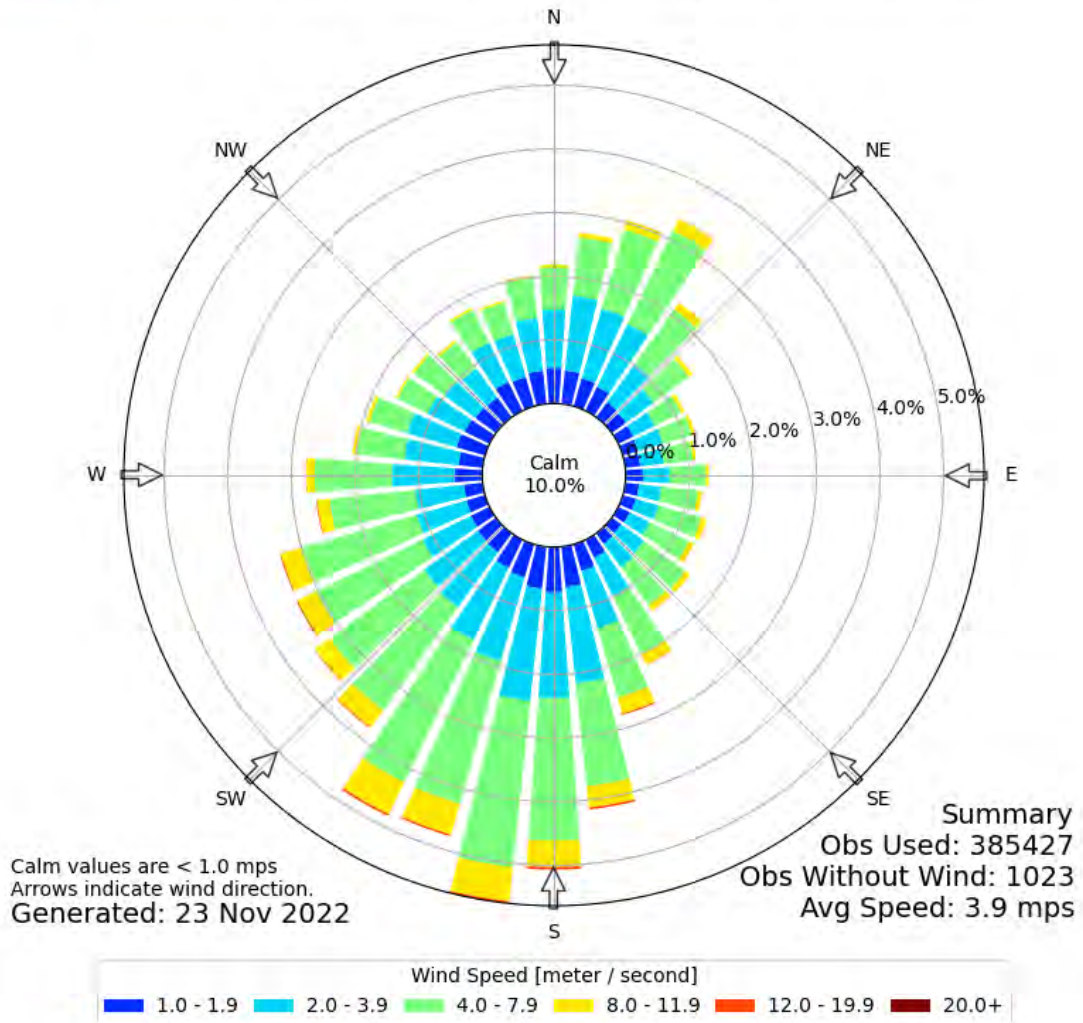


Figure 2 Windrose from nearby Benson



Figure 3 ONR demonstration of non-bisecting of communities

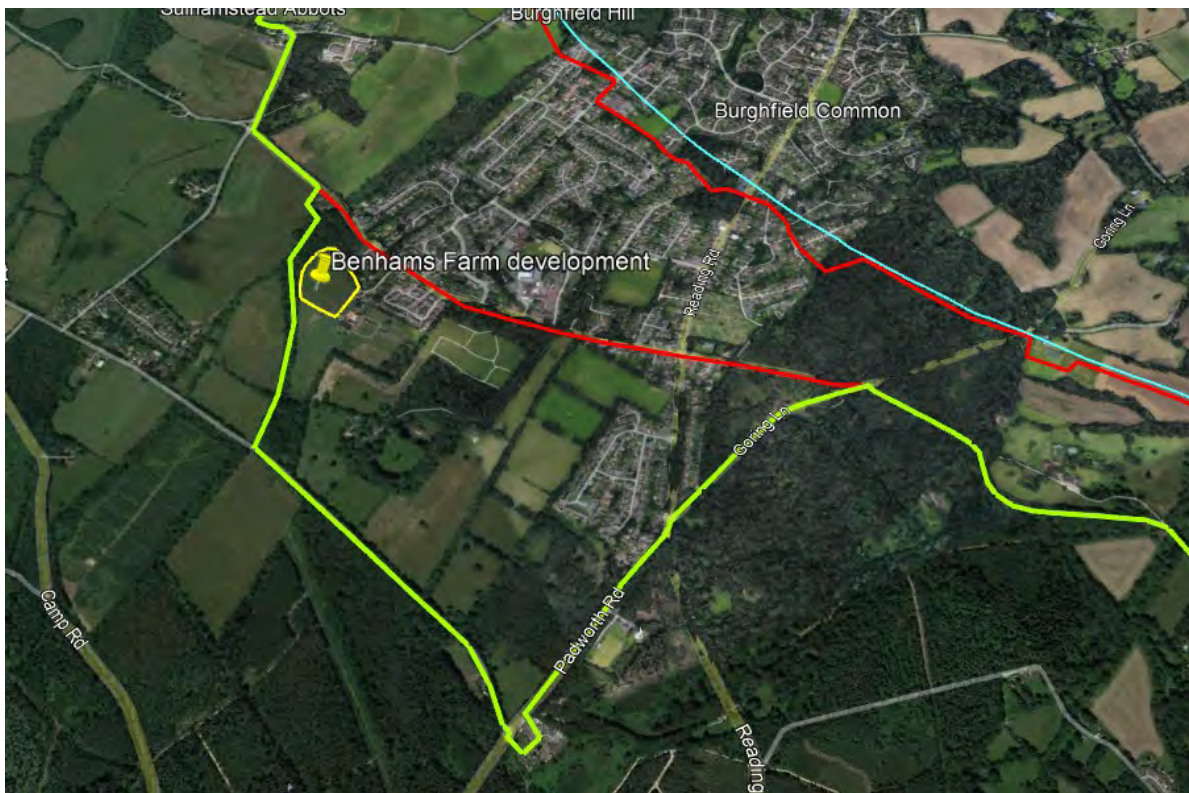


Figure 4 Two different options for DEPZ in this area

Benham's Farm, Hollybush Lane, Burghfield Common
Emergency Planning aspects of planning application

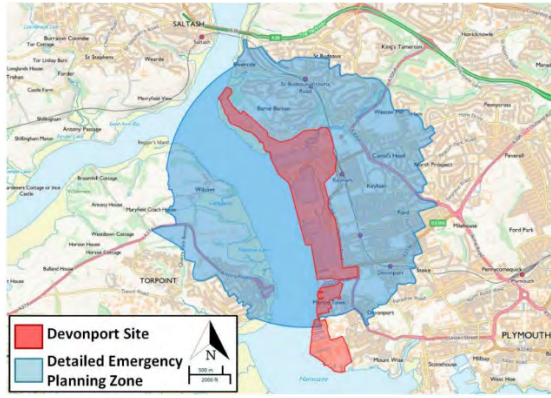


Figure 5 Devonport DEPZ



Figure 6 Portsmouth DEPZ

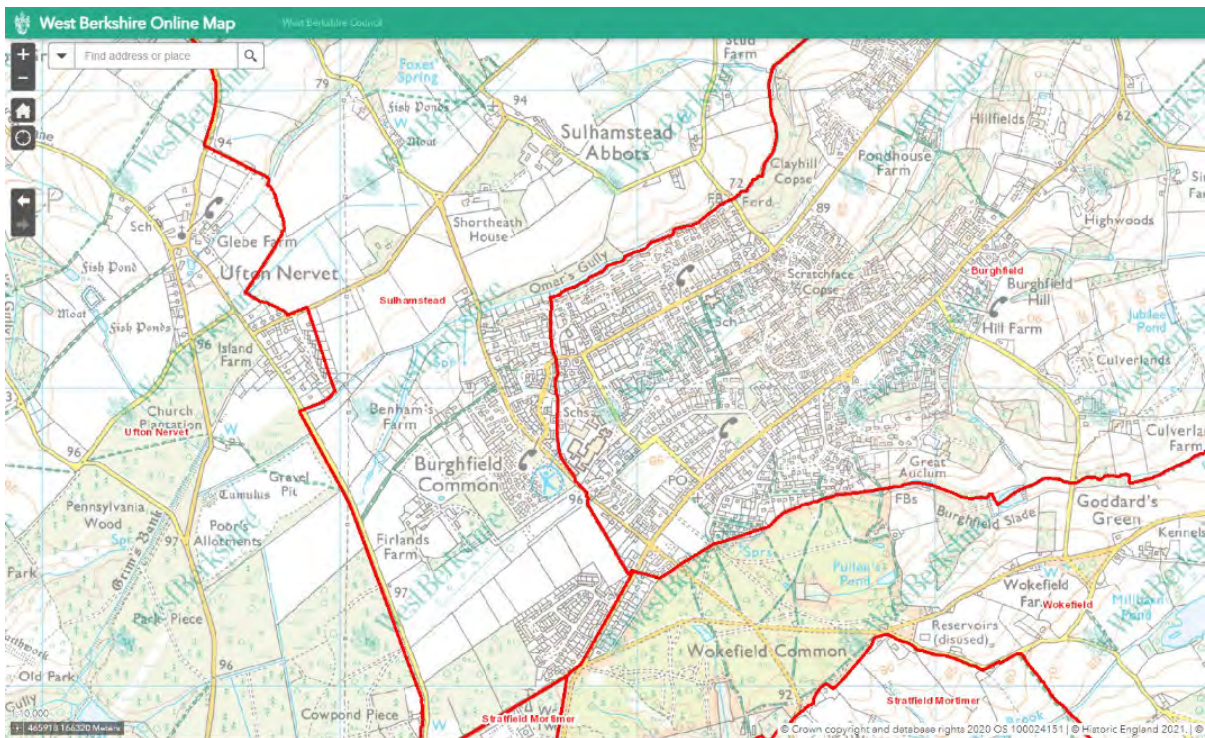
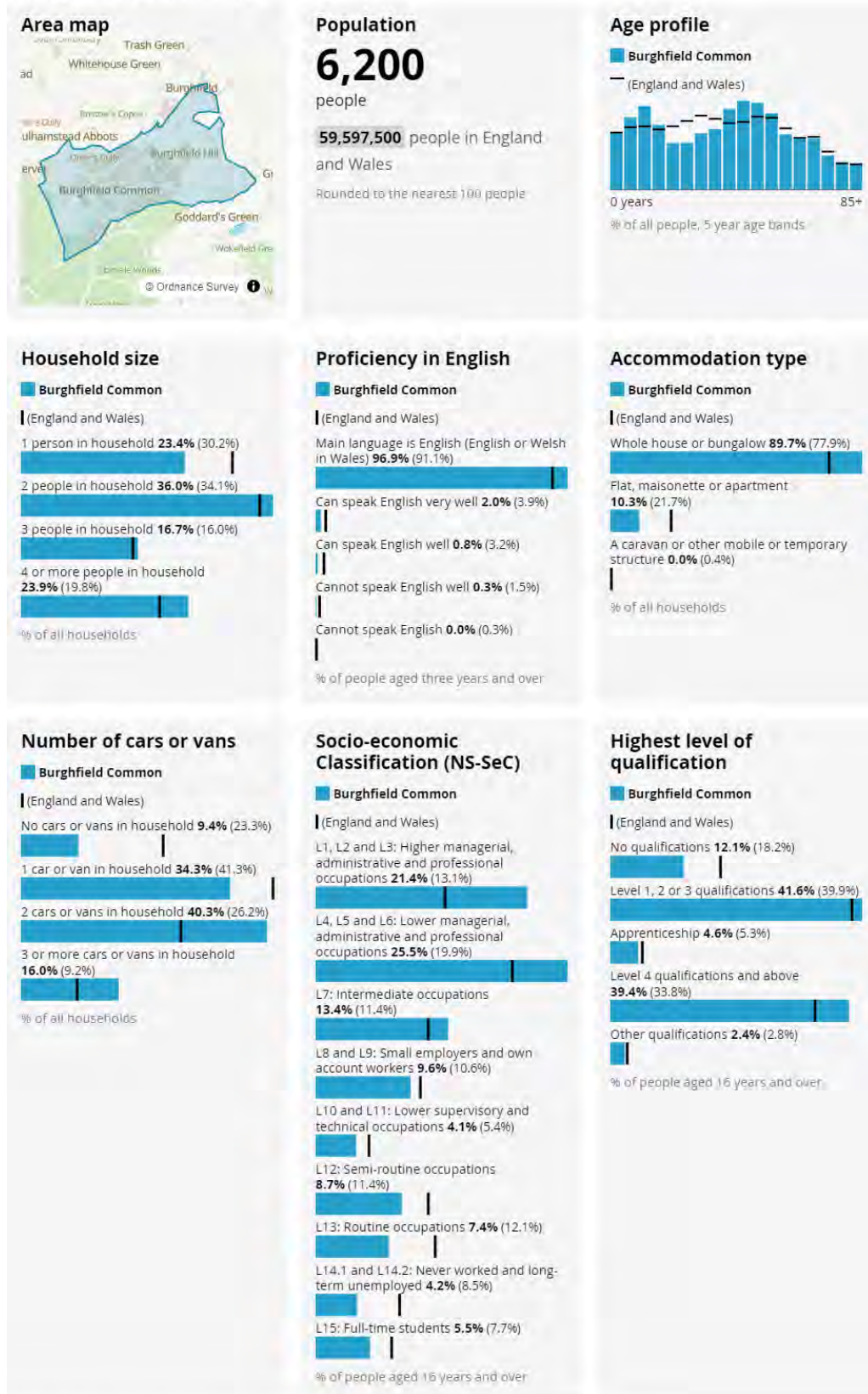


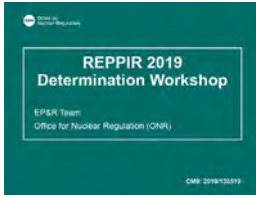
Figure 7 Local Parish boundaries

Burghfield Common



Source: Office for National Statistics - Census 2021

Figure 8 Burghfield Common selected demographics



Embedded ONR presentation on setting the DEPZ (word version only)

About the author

My name is Keith Ian Pearce. My qualifications include a BSc (Hons) degree in Physics, a PhD in Nuclear Physics and an MSc in Emergency Planning Management. I am a fellow of the Emergency Planning Society and a Chartered Physicist.

I taught Nuclear Physics, Radiation Protection and Emergency Planning at the Royal Naval College between 1987 and 1990.

Between 1990 and 2014 I worked for Nuclear Electric and successor companies in two main roles. Between 1990 and 2005 I was employed as a mathematical modeller, developing and applying mathematical and computer models of the movement of radionuclides through the atmosphere, waters and food chains and the potential uptake of radiation dose by members of the public and using these to support safety cases and emergency planning preparations for a nuclear generating company.

I helped to develop the computer tools and processes used during an emergency to estimate where accidentally released radioactivity might migrate, the dose implications of this for the public and the strategies that could be employed to reduce the potential for harm to the public.

Between 2005 and 2014 I was Head of Emergency Planning, responsible for the developing, maintaining and testing of the on-site emergency plans and responsible for supporting the local authority in the preparation and testing of the off-site plans for 10 reactor sites across the UK. In this role I liaised with local authorities, regulators, emergency responders, health bodies and government departments and played an active role on several national committees.

Between 1992 and 2014 I held radiation monitoring, dose assessment, health physics and command roles within the company emergency scheme in addition to my "day job".

Between 2001 and 2014 I wrote and maintained the REPPIR-01 Hazard Identification and Risk Evaluation (HIRE) reports for ten sites.

I managed and participated in several exchange visits and peer reviews with Russian emergency preparedness experts (2000 – 2003) and participated in inspections and peer reviews on nuclear power stations in the Ukraine (2011), Germany (2012) and Bulgaria (2012) for the International Atomic Energy Agency and the World Association of Nuclear Operators.

As an independent contractor working for my own Company (Katmal Limited) since 2014 I have helped civil operating and new build companies and nuclear dockyard and submarine building companies develop their on-site emergency preparations and helped local authorities develop and audit their off-site plans.

I have run and reported multi-agency workshops for civil and military sites looking at the ability to extend existing nuclear plans if faced with a bigger than planned for event.

I have written the REPPIR-19 Hazard Evaluation and Consequence Assessment and the Consequence Report for a fuel enrichment company.

I have helped local authorities understand the Consequence Report sent to them by operators; helping them understand the risk profile of the site they host and to develop appropriate off-site plans.

I have also provided advice to Companies wishing to develop sites within the DEPZ of AWE Burghfield.

I have written books on the physics of the Chernobyl accident and nuclear emergency planning for local authorities.

SP14 Sites allocated for residential development in the Eastern Area

This policy highlights where West Berkshire council are proposing to allocate the housing requirements in the Eastern area.

It is proposed that up to 386 houses will come forward on new allocated sites, a 65 bedroom care home and 8 pitches.

It should be noted that of the 386 new site allocations proposed, 270 of these proposed units were adopted in the current local plans 'daughter' document so it would appear that only enough land for 116 houses is being proposed in the whole of the Eastern area.

This will only amount to 6.8 additional houses per year up until 2039 on top of the already allocated sites from the current local plan, which is clearly not a satisfactory position bearing in mind the significant shortage of houses in country, especially going by the fact that this area is not constrained by the AONB.

RSA 7 (HSA11 from current local plan) has had delivery issues that the access is not agreed with all the land owners, so that site is currently unable to be delivered until all the land owners and Highways are satisfied that this can be achieved. This amounts to 35 houses that are proposed in the 2022-2039 proposed local plan.

The reasoning for the significantly reduced amount of houses being proposed is due to increase in size of the Burghfield AWE DPEZ and the proposed policy wording to take a starting position of 'NO' on any developments proposed in the DPEZ zone.

Point 6.32 of the SP14 claims that;

"In the Eastern Area the significant constraints to development mean provision for new development is more limited. Though Grazeley had been identified as a possible location for a new garden settlement, changes to legislation (Radiation (Emergency Preparedness and Public Information) Regulations 2019) have resulted in the redetermination of the emergency planning arrangements around AWE Aldermaston and AWE Burghfield. [The Detailed Emergency Planning Zone \(DEPZ\) for AWE Burghfield now covers the area of Grazeley. The change resulted in objections to the Grazeley garden town proposal from the Defence Nuclear Organisation \(part of the Ministry of Defence\) and the Office for Nuclear Regulation. No strategic allocation is therefore made in this spatial area.](#)"

This is somewhat of a misleading statement in effort of seeking to restrict the whole of the DPEZ zone from additional housing. The ONR did object to the 15000 houses proposed at the Grazeley Garden village, but they did not object to any of the other sites that were deemed acceptable in the original HELLA document.

< Name redacted >

who is the Policy and Communications Directorate at ONR have advised the following regarding some direct questions on the DPEZ;

- 1. The consequences report states that the DPEZ zone now needs to be a minimum 3160m from the AWE Burghfield, is there a requirement from the ONR that it needs to be in excess of 3160m?**

ONR Response

ONR has not made a specific requirement for the DEPZ for AWE Burghfield to be in excess of 3160 m. Under the provisions of REPP19, the site operator's consequences report recommends the minimum geographical extent of the DEPZ to the Local Authority and the Local Authority is prohibited from setting the DEPZ any smaller than this minimum. REPP19 permits the Local Authority to extend the DEPZ in consideration of certain factors set out in the regulations and the REPP19 Approved Code of Practice provides more information on how this should be done in practice.

- 2. Does the 2019 RIPPIR report or consequences report state that no additional houses are allowed with 5km of the AWE Burghfield?**

ONR Response

REPP19 does not state that no additional houses are allowed within 5 km of AWE Burghfield. REPP19 requires that the Local Authority make an adequate off-site emergency plan for a radiation emergency. Demographic changes within the DEPZ may affect the adequacy of the plan and so Local Authorities are expected to monitor and control such changes.

The AWE Burghfield Consequences Report does not state that no additional houses are allowed within 5 km of AWE Burghfield. REPP19 requires that the site operator produce a consequences report, but does not require that the consequences report make a recommendation on developments within the DEPZ.

- 3. Although the ONR do not draft or implement the West Berkshire policies, but the ONR would be consulted on this emergency plan, so was the 5km radius, and strictly no additional houses within 5km a requirement of the ONR?**

ONR Response

ONR Land Use Planning consultation zones and consultation criteria are available [here](#). [For applications that meet our consultation criteria we request consultation within the](#)

DEPZ and also within a 5km Outer Consultation Zone which has been set by ONR around AWE Burghfield. ONR has not specified that no additional housing can be built within these zones, but when ONR is consulted on an application it will seek assurance from the local authority emergency planners that the proposed development can be accommodated within the existing off-site emergency planning arrangements (or an amended version). If the ONR Inspector does not receive adequate assurance of this, ONR will advise against the development

There has never been any individual site assessment done on any of the other sites that were deemed “developable” prior to the changes to the DPEZ in 2020, and to suggest that the office of nuclear regulation has specifically stated that no more houses can be built in the DPEZ zone is somewhat wide of the mark.

The issue has come about because the WBC emergency planners have significantly increased the size of the DPEZ zone well beyond the UPAZ 3160m, and as a result now has significantly more houses. It should be noted that in the Burghfield DPEZ zone, since the HELLA was undertaken there has only been an additional 30 houses on the Reading Road, Burghfield common, and 100 houses have gained an outline consent granted on Clay Hill Road, Burghfield Common. The latter consent in Clay Hill road was granted outline consent after the proposed changes to the DPEZ and this site is well within UPAZ 3160m zone

The new DPEZ zone around Burghfield AWE splits parts of Sulhamstead, and goes beyond the settlement boundary of Burghfield Common, so is going against the RIPPAR 19 directives.

Dr Keith Pearce who has undertaken a detailed assessment of not only Charlesgate Homes promoted site SUL1 (Benhams farm, Hollybush Lane), but also undertaken a risk assessment on the likelihood of any radiation leaks from AWE Burghfield, and the likely risk is causes to existing and future residents.

There is absolutely no supporting scientific evidence to support a housing monitorium in Burghfield common, this is proven in the attached report from Dr Keith Pearce.

The HELLA assessment highlighted that the site SUL 1 in Burghfield common is;

“The site is well related to the existing town of Burghfield Common. Burghfield Common is a Rural Service Centre, and has a range of services and reasonable public transport provision, and is a focus of development in this area. The site itself is in close proximity to a range of services and facilities, with good connections via existing pathways and rights of way to connect to the countryside to the west.

The proposal would bring forward custom and self-build plots which is of benefit. The Landscape Character Assessment noted that the landscape strategy is to positively manage the land to avoid suburbanisation of the fringe of this settlement. High quality design and a sound layout scheme will therefore be important, and will need to factor in the setting of the nearby Grade II listed building Crofters Cottage.

The access will need to be upgraded, both on the access road and onto Hollybush Lane. Overall the site is likely to have a positive effect on sustainability and the SA/SEA does not highlight any significant sustainability effects. Issues which need resolving relate to updating the ecological surveys, undertaking a Heritage Impact Assessment, and undertaking a Minerals Resource Assessment”

The HELLA conclusion for SUL 1 was that;

“Potentially developable. Small risk of surface water flood risk on north part of site may affect capacity. Allocation would be dependent on a review of the settlement boundary of Burghfield. Landscape capacity work and ecological surveys needed.”

The sole reason for the site being taken out at a potentially developable site is;

“The site’s location within the Detailed Emergency Planning Zone (DEPZ) of Burghfield Atomic Weapons Establishment, and the impact of development on ‘blue light services’ and the emergency off site plan would mean that 43 dwellings would not be suitable within this location. An updated emergency off site plan is due in January 2021. Due to the presence within the DEPZ the site is not recommended for allocation at this time, dependent on the conclusions of the off site plan.”

It has been proven in the attached “AWE Burghfield emergency planning implications for a proposed development at Benham’s Farm, Hollybush Lane, Burghfield Common, Reading RG7 3JS” that there is no justification to support a housing moratorium in and around the Burghfield AWE, the size and position of the extended DPEZ is not justifiable, and SUL1 should not be omitted as a developable site on this reason alone.

Summary

1. The supporting Evidence from Dr Keith Pearce which is attached, highlights that there is no scientific evidence to support the claim that no more houses can come forward in the DPEZ.
2. The sole reason for the site being omitted is because it is within the DPEZ, the site has gone from potentially developable to deemed as unsuitable, due to WBC seeking to impose a housing moratorium by way of the extended DPEZ zone as well very restrictive policy wording.
3. The proposed development site SUL1 is outside the UPAZ where prompt protective actions (in this case shelter) are estimated to be able to provide a nett benefit if the postulated accident occurred on the AWE Burghfield site while the wind was blowing towards the proposed development site under relatively unlikely weather conditions. Therefore, no detailed emergency plan is required to enable urgent protective actions at this site.
4. The potential radiation dose to people living on the proposed development are so low and the probability of any such event affecting the site so low that we can assert with confidence that

the AWE Burghfield site does not pose a significant risk to those who might live in the proposed development site, Benhams farm, Hollybush lane, Burghfield Common (SUL1)

5. The dose rates at the proposed development site during and after the postulated event would be sufficiently low as to allow life as normal, including home visits by emergency services and in-home service providers.
6. There are a number of sensible options to redefine the DEPZ such that the development site would be outside it. This would remove all the REPPiR-19 emergency planning requirements except those associated with severe accidents and outline planning.
7. The AWE Burghfield site will not be affected by external hazards resulting from a residential development this far away.
8. The development will not affect the ability of the emergency services or others to gain access to, or egress from the site and so will have no impact on the ability to respond any event on the AWE Burghfield site.
9. This proposal does not raise serious safety concerns nor does it lead to a breach the ONR demographic criteria.
10. It is concluded that the proposal would not present a barrier to the ability of emergency services to safely carry out their duties, and nor would it affect the Council's ability to execute and manage its obligations under the REPPiR plan.
11. Given the above, the local authority can provide the ONR with ["adequate assurance that the proposed development can be accommodated within their existing off-site emergency planning arrangements \(or an amended version\)"](#) allowing the ONR to allow the inclusion of SUL1 in the 2022-2039 local plan as an allocated housing site for self and Custom building.

It has been proven in the attached document "AWE Burghfield emergency planning implications for a proposed development at Benham's Farm, Hollybush Lane, Burghfield Common, Reading RG7 3JS" that there is no justification to support a housing monitorium in and around the Burghfield AWE, the size and position of the extended DPEZ is not justifiable, and SUL1 should not be omitted as a developable site on this reason alone. The HELLA highlights the site is a developable site, and the only thing that is stopping the site coming forward as an allocated site is because of the location of the site in the extended DPEZ zone even though it is well outside of the UPAZ.

SP14 Site allocations Eastern area

Additional supporting information for inclusion of Benhams Farm, Hollybush lane, Burghfield Common, RG7 3JS (SUL1)

Site location.

Benhams farm proposed site (SUL1) is located off Hollybush lane and the land is currently accessed via Oakley Drive.

The site is adjacent to the settlement boundary and benefits from having an extensive tree lined screening from both the Northern and Eastern Boundary viewpoints. The site also benefits from being screened from the southern public viewpoint from the Sulhamstead public bridleway, by the houses that have been built on Oakley Drive.

The eastern boundary of the site is slightly visible at points from the Sulhamstead bridleway although this is only limited due to the farm buildings and Residential buildings that block public viewpoints into the proposed site.

The site is largely flat with a slight fall to the northern boundary.

The site is located in Sulhamstead Parish, but lies adjacent to the Burghfield Common settlement boundary.

Local amenities

The proposed site is within 1km of a good level of local facilities that include the following:

Schools

- Willink secondary school
- SUN infant and Junior school
- Mrs Blands Infant school
- Garlands Junior School

Leisure facilities

- Willink Leisure center, that included indoor swimming pool, all weather floodlight pitches, sports hall, gymnasium.
- Skate park
- Burghfield recreation ground
- Good access to cycle routes
- Good access to the Englefield estate for walking, running and dog walking

Local shops

- 4 convenience stores
- 3 takeaway outlets
- 2 restaurants
- Bakery
- Butchers
- Fruit and veg outlet
- Pet store
- 2 estate agents
- Funeral directors
- Curtain store
- 2 x Hairdressers
- Mechanics
- Petrol station
- Numerous bus stops
- 2 x public houses within 3km

The site location also has the benefit of being within 2-3 miles to;

- Mortimer
- Theale
- Tadley

All of which have a good levels of access to additional amenities, schools, places of employment and train stations.

The site also benefits from having good links to the M4 and M3 as well as green park industrial estate.

Access and services

The site is accessed of highway standard road, Oakley drive, that is 5.5m wide also has the potential for a pedestrian access footway onto Hollybush lane.

The site has the benefit of already having the following services to the site or within the access roadway Oakley drive:

- Mains drainage
- Mains water supply
- Mains gas Supply
- Mains electric supply
- BT services

Due to the above services already being on the site or within the road, this reduces any further need to cause disruption to residents with road closures to upgrade the supplies as they are already in place.

Site proposal

The site is being promoted as a self and Custom build site and will enable self or Custom builders to purchase serviced plots with a outline consent along with a plot passport that will highlight the parameters to which WBC would agree to design and size wise so that they are able to design their own homes to their own designs and budgets.

There is a huge demand for self and Custom build houses in West Berkshire, which is highlighted within the Self build register. There has also been significant demand for serviced plots in this location, when it was promoted as a potential self and Custom build site, to see if the demand was there.

At this moment there is no specific policy to satisfy this demand for self and custom build and as result very limited self and custom build serviced plots are becoming available within West Berkshire Council.

WBC HELLA on SUL 1 (Benhams Farm) site inclusion Supporting comments

The site is well related to the existing village of Burghfield Common.

Burghfield Common is a Rural Service Centre, and has a range of services and reasonable public transport provision, and is a focus of development in this area.

The site itself is in close proximity to a range of services and facilities, with good connections via existing pathways and rights of way to connect to the countryside to the west.

The proposal would bring forward custom and self-build plots which is of benefit. The Landscape Character Assessment noted that the landscape strategy is to positively manage the land to avoid suburbanisation of the fringe of this settlement. High quality design and a sound layout scheme will therefore be important, and will need to factor in the setting of the nearby Grade II listed building Crofters Cottage.

The access will need to be upgraded, both on the access road and onto Hollybush Lane.

Overall the site is likely to have a positive effect on sustainability and the SA/SEA does not highlight any significant sustainability effects.

Issues which need resolving relate to updating the ecological surveys, undertaking a Heritage Impact Assessment, and undertaking a Minerals Resource Assessment.

The Sustainability Appraisal (SA)/Strategic Environmental Assessment (SEA) indicates that a predominately positive sustainability impact.

There are positive effects in delivering affordable and custom and self-build housing; supporting healthy and active lifestyles, enhancing Green Infrastructure, conserves the character of the landscape subject to design and layout; makes efficient use of land; and has the opportunity to embed the principles of climate change into the development.

Outstanding issues relate to the impact on heritage assets, ecology, and the minerals safeguarding area and proximity to Firlands, a preferred option for minerals extraction.

The site is within the catchment for Mrs Blands and Garland primary schools.

Mrs Blands is approximately 490m from the site.

Garland is approximately 1km from the site.

The scale of the development would be absorbed into the catchment population.

In terms of secondary provision, the school is within the catchment for The Willink School which is located approximately 550m away.

This development could be incorporated into the existing catchment population

The site is the ownership of three landowners and is available immediately. A developer has an option on the land.

Access would be from Hollybush Lane and the landowner has ownership over the access road.

The site has already been the subject of planning applications (16/00658/OUTMAJ for the site only, plus small scale development to the south), and amendments to the site access at Hollybush Lane as well as improvements to the lane are required.

There would be no impact on the local highway network.

The nearest bus stop, on Clayhill Road/Omer's Rise, is approximately 620m from the site, providing regular services between Tadley and Reading, including Mortimer.

HELAA conclusions: Potentially developable. Small risk of surface water flood risk on north part of site may affect capacity. Allocation would be dependent on a review of the settlement boundary of Burghfield. Landscape capacity work and ecological surveys needed.

WBC HELLA on SUL1 (Benhams farm) Reasons for not being allocated

The Sole reason for this site not being sought as an allocated site is as below:

The site's location within the Detailed Emergency Planning Zone (DEPZ) of Burghfield Atomic Weapons Establishment, and the impact of development on 'blue light services' and the emergency off site plan would mean that 43 dwellings would not be suitable within this location.

An updated emergency off site plan is due in January 2021.

Due to the presence within the DEPZ the site is not recommended for allocation at this time, dependent on the conclusions of the off site plan

As of March 2023 we have still not be provided with copies of "updated emergency plan" that was due in Jan 2021.

The attached assessment from Dr Keith Pearce (**“AWE Burghfield emergency planning implications for a proposed development at Benham’s Farm, Hollybush Lane, Burghfield Common, Reading RG7 3JS”**) who qualifications include a BSc (Hons) degree in Physics, a PhD in Nuclear Physics and an MSc in Emergency Planning Management. He is a fellow of the Emergency Planning Society and a Chartered Physicist.

Dr Pearce has extensive experience and expertise in that he has written the REPPiR-19 Hazard Evaluation and Consequence Assessment and the Consequence Report for a fuel enrichment company.

helped local authorities understand the Consequence Report sent to them by operators; helping them understand the risk profile of the site they host and to develop appropriate off-site plans.

Between 2005 and 2014 he was Head of Emergency Planning, responsible for the developing, maintaining and testing of the on-site emergency plans and responsible for supporting the local authority in the preparation and testing of the off-site plans for 10 reactor sites across the UK. In this role he liaised with local authorities, regulators, emergency responders, health bodies and government departments and played an active role on several national committees.

Dr Pearce report does not support the concerns to omit this site due to be included within the DPEZ especially as it is outside the 3160 UPEZ.

Summary

- The site is very well related to existing settlement
- The site is very close to many local amenities
- The site has a positive sustainability impact in terms of the overall HELLA assessment
- The site will secure much needed supply of serviced self and Custom build serviced plots
- The site has all services already to the land by way of drainage, water, electric, BT and access road.
- The was previously listed as developable prior to the DPEZ being increased in size and WBC changing the policy on development within the DPEZ.
- The proposed site would have no impact on 'blue light services' serving AWE Burghfield
- Dr Keith Pearce has undertaken a full assessment on the site and advises the site would have no detrimental impact on the DPEZ and therefore omitting the site as an allocated site on these grounds alone are not supported by the evidence supplied within Dr Pearces report.

We believe the supporting evidence supplied within the HELLA and Dr Pearces report should enable WBC to now include SUL1 as an allocated site and we believe this this site should be included as a site suitable for the development of self and Custom build plots within the West Berkshire Council local plan 2022-2039

Appendix 4d: Burghfield Common Site Assessments

Site Assessment

Spatial Area:	Eastern Area	Settlement:	Burghfield Common	Parish:	Sulhamstead
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Site ID:	SUL1	Site Address:	Benhams Farm, Hollybush Lane, Burghfield Common
Use(s) proposed by site promoter	Self-build housing and custom build housing serviced plots	Development Potential:	43 dwellings

Recommendation:

The site is not recommended for allocation.

Justification:

The site is well related to the existing town of Burghfield Common. Burghfield Common is a Rural Service Centre, and has a range of services and reasonable public transport provision, and is a focus of development in this area. The site itself is in close proximity to a range of services and facilities, with good connections via existing pathways and rights of way to connect to the countryside to the west.

The proposal would bring forward custom and self-build plots which is of benefit. The Landscape Character Assessment noted that the landscape strategy is to positively manage the land to avoid suburbanisation of the fringe of this settlement. High quality design and a sound layout scheme will therefore be important, and will need to factor in the setting of the nearby Grade II listed building Crofters Cottage. The access will need to be upgraded, both on the access road and onto Hollybush Lane.

Overall the site is likely to have a positive effect on sustainability and the SA/SEA does not highlight any significant sustainability effects. Issues which need resolving relate to updating the ecological surveys, undertaking a Heritage Impact Assessment, and undertaking a Minerals Resource Assessment.

The site's location within the Detailed Emergency Planning Zone (DEPZ) of Burghfield Atomic Weapons Establishment, and the impact of development on 'blue light services' and the emergency off site plan would mean that 43 dwellings would not be suitable within this location. An updated emergency off site plan is due in January 2021. Due to the presence within the DEPZ the site is not recommended for allocation at this time, dependent on the conclusions of the off site plan.

Discussion:

Site description:

The site is located to the west of Burghfield Common, adjacent to existing residential development and open space. A band of trees for the northern and eastern boundary that separate the site from the surrounding countryside and existing residential development. Open countryside falls to the west. To the south is Benham's Farm and Barn, and newly built four self-build dwellings. To the south of this is a public bridleway. Crofters Cottage, a Grade II Listed Building, is sited to the south east.

HELAA conclusions:

Potentially developable. Small risk of surface water flood risk on north part of site may affect capacity. Allocation would be dependent on a review of the settlement boundary of Burghfield. Landscape capacity work and ecological surveys needed.

Landscape:

West Berkshire Landscape Character Assessment (2019) notes that the site lies within the Burghfield Woodland and Heathland Mosaic LCA (WH5). It notes that a key detractor in the area is urbanising influence of new buildings and the volume of traffic on local roads. The landscape strategy for this area is therefore to positively manage the land of the fringes of settlements to avoid settlement coalescence and/or suburbanisation of the fringe.

The site is open with hedgerows and trees which run along the northern boundary of the site and which provide a natural boundary. To the southeast there are some detached dwellings along Oakley Drive.

The site is contained within the existing band of trees and this may aid in assimilating development into the locality. Landscaping and buffer zones may be appropriate. Landscape capacity work is required.

Flood risk:

The site lies within Flood Zone 1. There is surface water flood risk on approximately 2% of the site, at the north of the site (small low risk pool). The groundwater water of the site sits between 0.5m and 5m below the surface. There is the possibility of groundwater emerging at the surface locally. This will limit the use of infiltration Sustainable Drainage Systems in this area.

Highways / Transport:

Access would be from Hollybush Lane. The landowner has ownership over the access road. The site has already been the subject of planning applications (16/00658/OUTMAJ for the site only, plus small scale development to the south), and amendments to the site access at Hollybush Lane as well as improvements to the lane are required. There would be no impact on the local highway network.

The nearest bus stop, on Clayhill Road/Omer's Rise, is approximately 620m from the site, providing regular services between Tadley and Reading, including Mortimer.

There is no train station in Burghfield, with residents needing to travel to Mortimer, approximately 4.8km from the site. Services are between Basingstoke and Reading.

Heritage:

Crofters Cottage, located to the south-east of the site is Grade II Listed. A Heritage Impact Assessment will be required to understand the setting and ascertain the impact of development.

Archaeological fieldwork will be necessary to understand the archaeological potential. This can include a geophysical survey and targeted evaluation trenches.

Education:

The site is within the catchment for Mrs Blands and Garland primary schools. Mrs Blands is approximately 490m from the site. Garland is approximately 1km from the site. The scale of the development would be absorbed into the catchment population.

In terms of secondary provision, the school is within the catchment for The Willink School which is located approximately 550m away. This development could be incorporated into the existing catchment population.

Environmental Health:

Possible risk of Particulate Matter and Nitrogen Dioxide from construction and operational impacts.

Contamination is unlikely. There is a low risk of noise and vibration problems to future occupants.

Ecology:

The site lies within a Biodiversity Opportunity Area, has priority habitats, European protected species, priority species, a SSSI impact zone, and Local Wildlife Sites within 500m of the site. Extended Phase 1 Habitat Surveys required.

Medium risk of adverse nature conservation impact identified by the Thames Valley Environmental Research Centre. Further assessment will be required to determine the necessary mitigation and enhancement measures.

Minerals and Waste:

The majority of the site lies within the existing Mineral Safeguarding Area, and the entire site is within the proposed Mineral Safeguarding Area. Safeguarding policies will apply in order to prevent needless sterilisation of mineral resources and consideration of extraction prior to any development would be encouraged.

The site is approximately 270m from the Preferred Option for mineral extraction at Firlands.

Utility Services

Water supply

Thames Water have commented that on the information available to date they do not envisage infrastructure concerns regarding water supply capability in relation to this site.

Wastewater network

The scale of development is likely to require upgrades to the wastewater network. Thames Water have advised that the Developer and the Local Planning Authority should liaise with Thames Water at the earliest opportunity to agree a housing and infrastructure phasing plan.

Electricity distribution:

There is a network of existing high voltage (HV) overhead lines and underground cable in close proximity of the site. It is likely that HV network reinforcement and secondary substation upgrade will be required.

Gas network:

The site is not underlain by a high pressure gas transmission pipeline.

Other:

The site falls within the Detailed Emergency Planning Zone (DEPZ) of Burghfield Atomic Weapons Establishment (AWE). Proposals for residential development are likely to add pressure to 'blue light services' and the emergency off site plan. A revised emergency off site plan is expected in January, and this will consider whether there may be potential for some residential development.

Parish / Town Council:

No comments have been received from Sulhamstead Parish Council and Burghfield Parish Council.

SA/SEA summary:

The Sustainability Appraisal (SA)/Strategic Environmental Assessment (SEA) indicates that a predominately positive sustainability impact. There are positive effects in delivering affordable and custom and self-build housing; supporting healthy and active lifestyles, enhancing Green Infrastructure, conserves the character of the landscape subject to design and layout; makes efficient use of land; and has the opportunity to embed the principles of climate change into the development. Outstanding issues relate to the impact on heritage assets, ecology, and the minerals safeguarding area and proximity to Firlands, a preferred option for minerals extraction.

Availability:

The site is the ownership of three landowners and is available immediately. A developer has an option on the land.

Achievability:

There are no legal constraints.

Relationship to / in combination effects of other sites:

Other promoted sites in Sulhamstead or Burghfield Common near to the site have not progressed, having been identified as 'not deliverable' in the HELAA. There are therefore no 'in combination' effects.












KEY

- Site boundary
- — — Bridleway
- - - - - Public bridleway access
- - - - - Access to public open space
- Public open space
- Position of proposed play park





KEY

-  Evergreen Oak
Quercus Ilex
6m Max height
-  Whitebeam Lutescens
Sorbus aria Lutescens
7-12m Max height
-  Common Beech
Fagus sylvatica
8m+ Max height
-  Golden Beech
Fagus dawyc
6m Max height
-  Cherry Kanzan
Prunus kanzan
6m Max height
-  Site boundary
-  Bridleway
-  Public bridleway access
-  Access to public open space
-  Public open space
-  Position of proposed play park

KEY

- Site boundary
- Accepted 2014 scheme
- Accepted 2016 scheme
- Tarmac roads
- Pedestrian pathways
- Permeable paving
- Car position indicator
- 1 House number indicator

HOUSE TYPES

House type A
3 bedroom house with separate single garage
Plots 1, 2, 10, 11, 13, 14, 15, 16, 22, 23, 25 and 26

House type B
4 bedroom house with integrated single garage
Plots 3, 12 and 24

House type C
4 bedroom house with integrated single garage
Plots 4, 5, 6, 7, 8, 17, 18, 19, 21, 22, 27, 28, 29, 30, 31 and 32

House type D1
5 bedroom house with integrated double garage
Plots 9 and 38

House type D2
5 bedroom house with separate double garage
Plots 32 and 35

House type E1
4 bedroom house with separate single garage
Plots 33 and 34

House type E2
4 bedroom house with separate double garage
Plots 37, 39, 40, 41, 42 and 43

House type F
4 bedroom house with integrated single garage
Plots 36



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Project:
Benhams Farm
43 house scheme

Drawing Title:
Masterplan
House types and Access

Date:
08/03/2016

Scale:
N/A

Drawn by:
BL

Drawing Number:
PL03
Revision

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Notes:

Comment

Consultee	[REDACTED] (949564)
Email Address	[REDACTED]
Company / Organisation	Charlesgate Homes Limited
Address	[REDACTED] [REDACTED] [REDACTED]
Event Name	Proposed Submission (Reg 19) West Berkshire Local Plan Review 2022-2039
Comment by	Charlesgate Homes Limited ([REDACTED] - 949564)
Comment ID	PS699
Response Date	03/03/23 13:35
Consultation Point	Policy SP 16 Sandleford Strategic Site Allocation (View)
Status	Processed
Submission Type	Web
Version	0.4
Bookmark	Charlesgate Homes Limited

1. Do you consider the Local Plan Review is legally compliant?

Please see the guidance note for an explanation of what 'legally compliant' means

No

2. Do you consider the Local Plan Review is sound?

Please see the guidance notes for an explanation of what 'soundness' means.

The soundness of the LPR should be assessed against the following criteria from the National Planning Policy Framework (NPPF).

Please tick all that apply:

Positively Prepared: The plan provides a strategy which, as a minimum, seeks to meet the area's objectively assessed need and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where practical to do so and is consistent with achieving sustainable development. . No

Justified: the plan is an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence. . No

Effective: the plan is deliverable over the plan period and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground. . No

Consistent with national policy: the plan should enable the delivery of sustainable development in accordance with the policies of the NPPF. . No

Please give reasons for your answer

This site has been looked upon as a favourable site since 2000, it was allocated in the last plan for circa 2000 houses, now it is down as 1500 houses, the highways dont appear to support the scheme and yet there appears to be heavy reliance on this site again to deliver a significant number part of WBC housing numbers.

At what point will WBC seek alternative options to this site that clearly has delivery issues

3. Do you consider the Local Plan Review complies with the Duty to Co-operate?

Please see the guidance note for an explanation of what 'Duty to Cooperate' means.

No

4. Proposed Changes

Please set out what change(s) you consider necessary to make the Local Plan Review legally compliant or sound, having regard to the tests you have identified above (Please note that non-compliance with the duty to co-operate is incapable of modification at examination).

You will need to say why this change will make the Local Plan Review legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

Start to consider smaller sites with less reliance on multiple land owners, hugh amount of infrastructure committment that clearly cant be met on this site

5. Independent Examination

If your representation is seeking a change, do you consider it necessary to participate at the examination hearing session(s)? . No

6. Notification of Progress of the Local Plan Review

Do you wish to be notified of any of the following?

Please tick all that apply

The submission of the Local Plan Review for Independent Examination . Yes

The publication of the report of the Inspector appointed to carry out the examination . Yes

The adoption of the Local Plan Review

. Yes

Comment

Consultee	[REDACTED] (949564)
Email Address	[REDACTED]
Company / Organisation	Charlesgate Homes Limited
Address	[REDACTED] [REDACTED] [REDACTED]
Event Name	Proposed Submission (Reg 19) West Berkshire Local Plan Review 2022-2039
Comment by	Charlesgate Homes Limited ([REDACTED] - 949564)
Comment ID	PS719
Response Date	03/03/23 14:11
Consultation Point	Appendix 2 Settlement Boundary Review (View)
Status	Processed
Submission Type	Web
Version	0.4
Bookmark	Charlesgate Homes Limited

1. Do you consider the Local Plan Review is legally compliant?

Please see the guidance note for an explanation of what 'legally compliant' means

No

2. Do you consider the Local Plan Review is sound?

Please see the guidance notes for an explanation of what 'soundness' means.

The soundness of the LPR should be assessed against the following criteria from the National Planning Policy Framework (NPPF).

Please tick all that apply:

Positively Prepared: The plan provides a strategy which, as a minimum, seeks to meet the area's objectively assessed need and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where practical to do so and is consistent with achieving sustainable development. . No

Justified: the plan is an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence. . No

Effective: the plan is deliverable over the plan period and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground. . No

Consistent with national policy: the plan should enable the delivery of sustainable development in accordance with the policies of the NPPF. . No

3. Do you consider the Local Plan Review complies with the Duty to Co-operate?

Please see the guidance note for an explanation of what 'Duty to Cooperate' means.

No

4. Proposed Changes

Please set out what change(s) you consider necessary to make the Local Plan Review legally compliant or sound, having regard to the tests you have identified above (Please note that non-compliance with the duty to co-operate is incapable of modification at examination).

You will need to say why this change will make the Local Plan Review legally compliant or sound. It will be helpful if you are able to put forward your suggested revised wording of any policy or text. Please be as precise as possible.

The burghfield common settlement boundary has been moved to allow for Oakley drive and Burghfield park to be included within the settlement boundary. It is not a natural defining line to base a settlement boundary, for example where the parish lines finish or even a clear buffer between settlements.

There is an obvious settlement boundary line for Burghfield Common that would provide a natural tree buffer between the settlement of Burghfield Common and that of Ufton Nervert as attached.

The current proposed west of Burghfield common will omit the following houses from being outside of the settlement boundary:

Benhams farm, The Old Barn at Benhams, The Byre at Benhams, The Gatehouse at Benhams, and the Bolt Hole.

The settlement boundary review by Burghfield parish council suggested similar to what we are suggesting in that;

- i) The settlement should include the new Burghfield Park development.
- ii) The settlement should include the HELAA BUR11 site which will be recommended for development in the forthcoming Burghfield ND

It should be noted BUR11 is now SUL1 in the latest HELLA which of course is Benhams Farm.

The councils response to this creates a somewhat disjointed settlement boundary and has likley come about due to the changes to the DPEZ and WBC seeking to impose a housing monitorium in Burghfield common and Burghfield Village which goes against everything the NPPF promotes, which is to be in favour of sustainable development

5. Independent Examination

If your representation is seeking a change, do you consider it necessary to participate at the examination hearing session(s)? Yes

If you wish to participate at the oral part of the examination, please outline why you consider this to be necessary.

Please note the Inspector will determine the most appropriate procedure to adopt to hear those who have indicated that they wish to participate at the oral part of the examination.

please see above

6. Notification of Progress of the Local Plan Review

Do you wish to be notified of any of the following?

Please tick all that apply

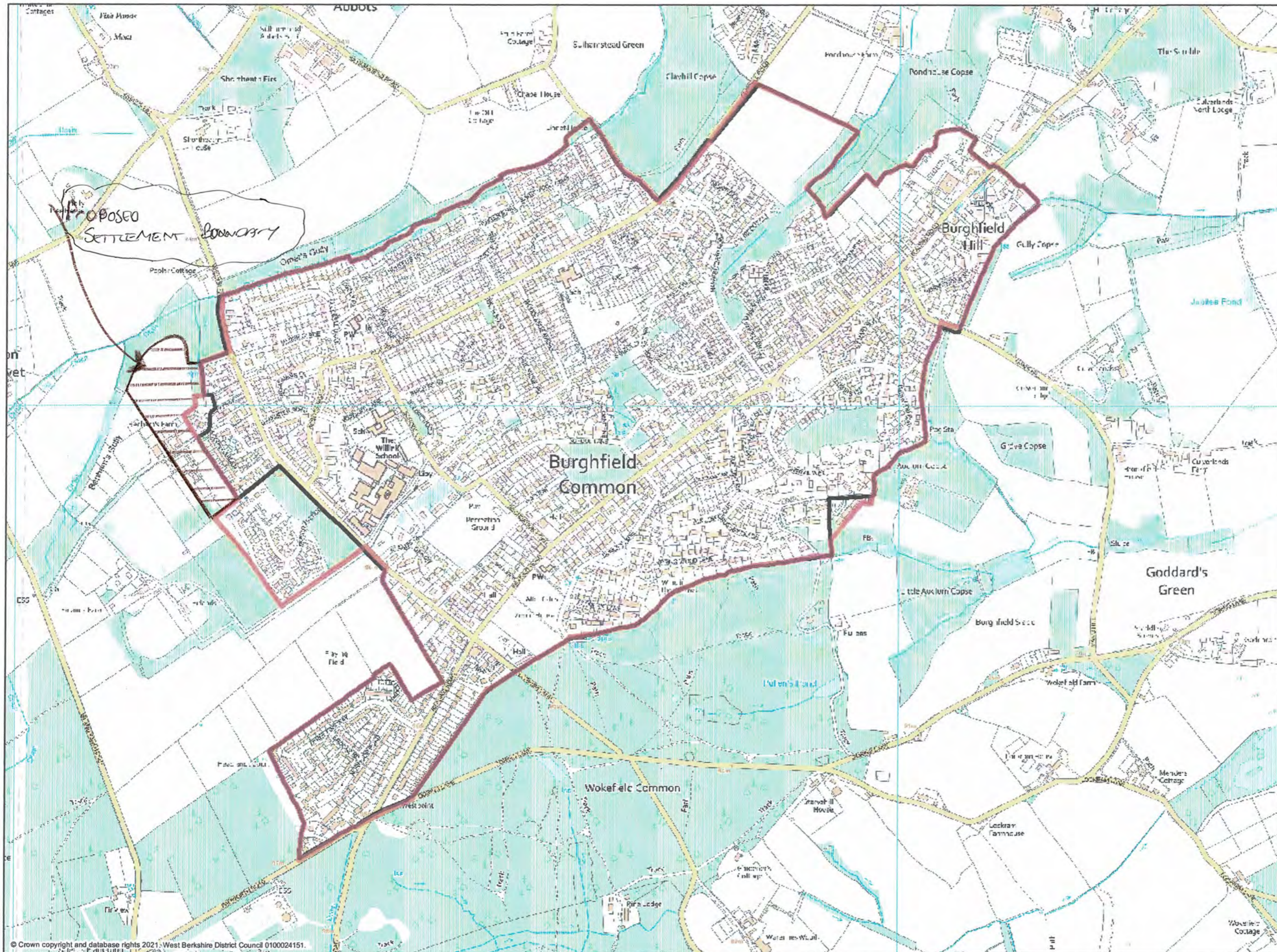
The submission of the Local Plan Review for Independent Examination . Yes

The publication of the report of the Inspector appointed to carry out the examination . Yes

The adoption of the Local Plan Review . Yes

Attached file 1



[PS719 Charlesgate Homes_SB attachment.pdf](#)



Legend

Emerging Draft West Berkshire Local Plan Review to 2037

Consultation with town/parish councils and neighbourhood planning groups - March 2021

-  Proposed new settlement boundary
-  Existing settlement boundary

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March 2021

1:8000



Comment

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Email Address	[REDACTED]
Company / Organisation	Charlesgate Homes Limited
Address	[REDACTED] [REDACTED] [REDACTED]
Event Name	Proposed Submission (Reg 19) West Berkshire Local Plan Review 2022-2039
Comment by	Charlesgate Homes Limited ([REDACTED] - 949564)
Comment ID	PS720
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1. Do you consider the Local Plan Review is legally compliant?

Please see the guidance note for an explanation of what 'legally compliant' means

No

2. Do you consider the Local Plan Review is sound?

Please see the guidance notes for an explanation of what 'soundness' means.

The soundness of the LPR should be assessed against the following criteria from the National Planning Policy Framework (NPPF).

Please tick all that apply:

Positively Prepared: The plan provides a strategy which, as a minimum, seeks to meet the area's objectively assessed need and is informed by agreements with other authorities, so that unmet need from neighbouring areas is accommodated where . No

practical to do so and is consistent with achieving sustainable development.

Justified: the plan is an appropriate strategy, taking into account the reasonable alternatives, and based on proportionate evidence. . No

Effective: the plan is deliverable over the plan period and based on effective joint working on cross-boundary strategic matters that have been dealt with rather than deferred, as evidenced by the statement of common ground. . No

Consistent with national policy: the plan should enable the delivery of sustainable development in accordance with the policies of the NPPF. . No

Please give reasons for your answer

The proposed development site is within the Detailed Emergency Planning Zone of AWE Burghfield. While there is no blanket ban on new people being accommodated in this area the local authorities have been citing it as a barrier to obtaining planning permission.

This document (*see attached document Charlesgate Homes_response to AWE DEPZ zone*) sets out to show that because of the distance between the development site and the AWE site the risks posed by the AWE site to residents of any new development would be very low compared to normal day to day risks and that the development itself poses no risk to the AWE site nor to the operation of the local authority's off-site plan.

The first argument is that the probability of an accident leading to a significant release of radioactive material to the atmosphere is low. It is argued that this is below 1 in 10,000 years, probably much lower.

The consequences of this accident, as deduced from the AWE's Consequence Report, at the distance of the development site would be classed as "minor" using the REPPiR risk framework.

As the site is beyond the range recommended for prompt protective actions by AWE. No protective actions would be needed at the development site even if the wind blew towards the site and the weather conditions were such as to minimise dispersion.

The estimates risk of death at the development site due to an accident on the AWE site is estimated to be far lower than the risk of a fatal lightning strike.

As it is beyond the AWE range for protective actions, the development site need not be in the DEPZ. Some options for the route of the DEPZ boundary are discussed.

As the off-site plan is to inform the residents of the area using an automatic phone system and then set up an information gathering and decision-making process in the Strategic Coordination Centre, the added number of people in the DEPZ do not impose any load on the off-site plan.

As the site is beyond the urgent protective action zone the emergency services and home support services should be allowed to operate as normal within the area of the development site even during the short release phase as an accident at the AWA site.

The risks at the site are compared to the ONR criteria for recommending against a development and it is concluded that the ONR should be comfortable not objecting to this development.

Full representation is set out in the attached document >Charlesgate Homes_Response to AWE DPEZ zone>

3. Do you consider the Local Plan Review complies with the Duty to Co-operate?

Please see the guidance note for an explanation of what 'Duty to Cooperate' means.

No

5. Independent Examination

If your representation is seeking a change, do you consider it necessary to participate at the examination hearing session(s)? Yes

6. Notification of Progress of the Local Plan Review

Do you wish to be notified of any of the following?

Please tick all that apply

The submission of the Local Plan Review for Independent Examination . Yes

The publication of the report of the Inspector appointed to carry out the examination . Yes

The adoption of the Local Plan Review . Yes

Attached file 1

[Charlesgate Homes response to AWE depz zone.pdf](#)