Bournemouth, Dorset & Poole Mineral Sites Plan

On behalf of: **Mr Cliff Large of Wedgehill Farm**

Statement Regarding Sites AS-08 & AS-27 Three Legged Cross, Dorset

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Preamble

This statement has been produced in accordance with the explicit instruction received from Elizabeth Ord, Planning Inspector at the examination into the Bournemouth, Dorset and Poole Mineral Sites Plan. It contains the oral representations of Counsel, Mr Collett, to the Inquiry and as such does not contain any new evidence or representations.

The statement, reflecting the oral submissions, prays in aid a number of references made by Counsel during the 2nd of October to the methodology used by Dorset County Council (DCC) in the draft plan. As stated in the Inquiry no issue is taken with the methodology in principle merely the factual application and findings.

Principle

1. The Applicant contends that the sites at AS-08 and AS-27 should be included as allocated sites within Policy MS-1. In the alternative should the sites not be included that the principles applied within the Draft Plan, given comparison between the omitted sites and the allocated sites, demonstrates that the Plan is unsound and the evidence base should be reviewed.

Policy Issues

[The Inspector has the questions asked by Counsel and the responses by DCC to the various issues and as with the oral submission on the 3rd October those issues are not rehearsed in full here. This section is provided merely as an aid memoire to the Inspector's notes.]

Session 11 – Production of Sand and Gravel

2. The production of sand/gravel and a 7 year landbank is a minimum requirement under National Guidance is common ground.

3. The current 10 year figures used by DCC are based on the period 2006-2015 when as all parties agreed the housing market was in decline and therefore demand was artificially low. DCC accepted that while appropriate to use these figures caution must also be exercised in case low production caused problems with planned growth.

4. DCC combined River Terrace (RT) Aggregate and Poole Formation (PF) sand to produce their landbank figure. This aggregation of the two types of land-won aggregate was the subject of some debate in that in terms of the separated figures the RT figure was over the required amount but PF figure fell well below the Government's minimum requirement.

5. It was therefore a live issue before the Inspector whether sites that provided a high percentage of sand should be given a preferential position within the allocated sites within the Plan.

6. Issue was taken with the geographical use of both land-won aggregates, the cost/sustainability of transporting material and whether importation of PF sand should be material considerations in considering policy MS-1.

Session 13 – Questions of allocations within MS-1

7. A number of the allocated sites had considerable issues under the Mineral Strategy 2014 criteria (assessed A-E).

On the 3rd October Counsel specifically (by way of comparison) referred to Roeshot Quarry Extension, Christchuch which had, inter alia;

Very Significant Issues with:
- C5 – biodiversity designations
- C11- archeology
- C13- surface water

Strong Negative Impacts on:
- Water
- Historic environment

Impacts on:
- New Forest National Park
- Burton Common SSS1
- New Forest SPA
- New Forest SAC
- RAMSAR sites

Also the site fell within:
- An EA designated flood zone and an airfield safeguarding area.

Despite all these negative impacts the site is acceptable as an allocated site within MS-1 to DCC.

Session 22 – Sand and Gravel area of search

8. Issue was taken during the Inquiry in the manner in which DCC had established the areas of search to form the basis of the available sites for allocation. Others at the Inquiry indicated that some of the areas had no deposits present and as was stated by them that was a "show stopper". Perhaps equally important is if workable deposits were excluded from the initial area of search without good cause, especially given some of the significant adverse impacts that allocated sites would cause. In reference to omitted sites if these were not included in the area of search it could lead to a

consideration that the Plan as proposed is unsound due to such omissions. (Again the Inspector has the representations made during that session of the Inquiry).

Identified Omission Sites (AS-08, AS-27)

9. The two omissions sites that fall to be considered are two parcels of land that are identified by Dorset County Council as AS-08 and AS-27. The two parcels of land are shown on the attached location and site plans at Appendix 1 and 2 respectively. Also indicated on plan 2 is a site known as Redman's Hill that has been granted planning permission for the extraction of sand. Planning permission was granted on 16th August 2018 for the removal of 100,000 tons of sand together with backfilling with inert waste and restoration of the area to low-grade agricultural land. While not forming part of the two nominated sites, that grant of planning permission shows that Dorset County Council are aware of the sand reserves in this area.

10. Both nominated sites have previously been included in the Dorset Minerals Plan and various investigation works have been carried out including gravel extraction from AS-08 and borehole investigations across site AS-27. Those investigations show that the area lies within the Poole Formation with sand to a depth of at least 12 metres. The quality of sand has been checked by local builders and through laboratory testing, and is considered to be suitable for use as a general bricklaying sand, although interest has also been shown in the sand for various other more diverse uses.

Timeline

11. The timeline for nomination of these two sites to Dorset County Council is as follows:

- A large area covering both sites AS-08 and AS-27 was nominated in about 2007 and this was included in a sustainability assessment carried out by Dorset County Council in 2008.

- A further assessment was carried out on the wider area in 2013, including public consultation on the suitability of the sites, as confirmed by the Planning

Officers at the public examination. Feedback from the public consultation is included as Appendix 6.

- On 23rd April 2015 Simon Munnings, then of Wessex Surveyors, contacted Dorset County Council to request that the area of the nomination be amended.

- In July 2015 the two sites, as nominated by Simon Munnings, appear in the Mineral Sites Plan 2015 at paragraph 4.20, which stated "*the nomination will be reassessed and the Mineral Planning Authority will come to a decision regarding whether it is suitable for inclusion in the Mineral Sites Plan*".

- In February 2017 Simon Munnings contacted Dorset County Council to enquire why no communication had been received, and to check that the sites were being taken forward for consideration.

- An e-mail from Dorset County Council dated 9th November 2017 suggests in the sixth paragraph "*with regard to the best way forward, you will of course advise your client as you see fit. However, my suggestion would be for you to register an objection during the upcoming consultation, on grounds such as that the plan is not sound as it has not included the most appropriate sites for future mineral provision. You could nominate your client's sites and request that the Inspector consider them, allowing them to be discussed at the examination. I believe that the Inspector will require evidence as to the suitability of the sites, including along the lines of the information you are currently collecting in support of the planning application at Redman's Hill. The Inspector will be able to consider the merits of your client's sites, and will report on whether or not they should be included in the plan".*

- Objections to the plan were lodged on the basis of the two sites having been omitted from the draft Mineral Sites Plan, and the matter was included on the agenda for consideration at the public examination.

The Sites

12. Considering now the sites individually:

- **Site AS-08** – Planning permission was granted in 2004 for extraction of 60,000 tons of material as a borrow pit. In fact, we have estimated that around 250,000 was actually removed. The planning consent was subject to a condition requiring the site to be restored. No such restoration has ever been carried out. The site has since been used for clay pigeon shooting and off-road driving by the family and friends of the land owner. Such uses are not sustainable due to difficulties with access and complaints with neighbours. The proposal is to extract 800,000 tons of material in order to reprofile the land with shallow sloping sides. The heathland soil can then be replaced to encourage the growth of native species grassland with some shrub and tree plantings. A pond will be formed at the bottom of the depression, which will not be linked with any watercourses. The land owner considers this restoration to be important for his management of the holding in the short term, and in the longer term the grassland may be allowed to revert to heath or woodland, although a small area could be made available for informal recreation. [The appeal statement dealt with sustainability considerations and a copy is attached for ease of reference.]

- **Site AS-27** – A block of low-grade agricultural pastureland that extends to about 19 hectares. The proposal is for the ground to be re-contoured to form a shallow valley that starts at the southern end at existing ground level, dropping northwards to the level of the pond, and with the sides of the valley falling from the adjoining bridleways down to the valley bottom. Site investigations show a depth of sand across the entire area of at least 12 metres, and it should be possible to take an average of 8 metres of sand across the entire area which would amount to 3 million tons or thereabouts of sand. Additional material can be extracted by making the sides of the valley rather steeper and having a flat bottom to the northern part of the valley to merge with the pond area, and at this stage the land owner expects to take 3.5 million tons from the site. The

entire area will be reinstated as low-quality pastureland on completion of the sand extraction works. [The appeal statement dealt with sustainability considerations and a copy is attached for ease of reference.]

13. At the public examination it was confirmed by DCC that there were no 'showstoppers' such that even where sites had a high rating A (red) they were still considered to be viable, provided the effect of mineral extraction could be overcome. Several of the sites in the draft plan include several A ratings, but it will be seen (see below) that neither of sites AS-8 or AS-27 include any A ratings, and for that reason it is submitted that they should be considered more suitable for sand extraction than some of those already put forward. The sand from site AS-27 would meet the shortfall in production identified at the public examination, while extraction of additional gravel material from site AS-08 would facilitate restoration of this substantial area of land, with final landscaping and land use to be agreed with Dorset Wildlife Trust, Dorset County Council and Natural England.

Previous Use

14. The area has previously been included in the Minerals Plan and material has been excavated from areas further to the east of Redman's Hill, where the electric pylons are now perched on top of mounds of virgin ground that have been left after the surrounding area has been worked. Around 30 years ago there was also a very substantial sand quarry to the west of site AS-27. The quarry was subsequently backfilled.

Material

15. Gravel from site AS-08 was used in the construction of the adjoining golf course, and was considered by the developer to comprise extremely useful aggregate. Sand from site AS-27 has been tested through practical construction and laboratory testing, and this has been found to be of good commercial quality. Sand from the Redman's Hill site has recently been tested and approved for use in construction of the Hinkley Point

nuclear power station, where only the best materials can be used. Sand through site AS-27 will be of equal quality.

The Site Assessment by DCC – (Circa 2015)

16. The Inspector will recall that at the Inquiry two documents were produced referring to the sites. The first a seven page document (Inq. Ref. No. 80A) that was created in about 2015 and referred to an area larger and disproportionate to that now sought. A further document of one page (Inq. Ref. No. 80B), albeit with the inscription of 1 of 4 on the base, was also produced. This document which appeared to be a further site assessment but was in fact, according to DCC, a single page produced by DCC for advertising purposes at Minerals Plan public consultation meetings.

17. The single page (80B) had amended the areas under consideration and therefore the subsequent public examination was valid for the omission sites. It had also included that the access issue had been resolved and the quality of the farm land (both dealt with in greater detail below). Save for these details the remainder of the document is of little use.

18. Returning to the seven page assessment in the hearing Counsel orally went through the assessment by way of comparison to other included sites. It was pointed out to the Inspector that the proposed areas had been materially altered since the production of the document in 2015. The inference that should be drawn is that should this site be excluded from the Minerals Plan then the basis of the Plan and its evidence must be called into question considering the inclusion of other allocated sites with many higher adverse impacts (e.g. see Roeshot Quarry Extension above).

19. The Inspector indicated in the Inquiry that she was not concerned with impacts ranked as 'D' or 'E' and those areas were merely read to the Inquiry as headings. Therefore the same procedure shall be adopted herein. Where impacts are listed as A-C or include A-C they were discussed in the Inquiry and are so noted below.

Criterion C1 – Impact on European/International designations - **D**

Criterion C2 – Impact on areas used by Annex 1 bird species - **E**

Criterion C3 – Impact on national designations – **D**

Criterion C4 – Impact on protected species – **C**

20. The site has been twice assessed by ecologists and their reports (2009/2018) provided to DCC. [They are also attached to this document for reference purposes.] The only concerns expressed by DCC in their 2015 review was towards bats and amphibians. The reports make clear bats are unlikely to use the areas. In terms of amphibians the view of Mr Andrew Nicholson of Natural England at the Inquiry was that the presence of any amphibians was "unlikely" due to the acidity of the water in the area. In any case a full biological review would occur as part of any proposed permission in any event.

21. Interestingly at the Inquiry Dr King on behalf of DCC stated the presence of activities such as off-roading, motocross and quad biking meant that other areas could remain unaffected. The clear inference from this is that the lack of protected species in this area allowing such recreational activities is DCC's preference as a use for the site.

Criterion C5 – Impact on local recognitions/designations, including ancient woodland and veteran trees – **A**

22. A reading of the concerns by DCC reveal that it is the 'irreplaceable' perimeter trees and ancient woodland around the Horton Common SNCI that result in the 'A' grade. However, as the Inspector was asked to note during the Inquiry the new areas sought excludes all of these ancient/established trees and only affects the area within the SNCI that has already been worked previously. Therefore the concerns of DCC have been fully mitigated.

23. Indeed as was expressed orally the fact that these extant works can be restored as part of any further permission and those restoration works either in biodiversity or as Dr King suggested recreational facilities the category should in fact be reclassified as '**E**' as considerable benefits can be obtained from a restoration schedule.

Criterion C6 – Impact on Geodiversity – **D**

Criterion C7 – Impact on designated landscapes – **D**

Criterion C8 – What is the landscape capacity to accommodate proposed development - **C**

24. The reference by DCC under this heading refers to the important prominent ridgeline with views to the east. However, this was on the original and larger extent of the 2008 proposal. The new area is entirely sited to the west and below this ridgeline. In fact the only area to the east of the ridgeline, and therefore visible and closer to the Horton Common is the quarry that has recently received permission from DCC (3/17/0967/DCC).

25. Therefore the impact on the views to and from the west will now be nil (they are behind and below the ridge). On that basis the impact should be assessed as '**D**', little or no impact. In any event any impact would be assessed as part of any future application.

Criterion C9 – Impact on Historical Landscapes – **A-E**

26. Again this designation is based on the original area covered by the 2008 application. That previous area did include a direct impact on one barrow (SM29565) and a close impact on two further historical sites. Under the revised area as submitted in 2015 there are no impacts on the two other sites (indeed the newly granted permission lies between the proposed sites and one of the historic sites) and **no** direct impact on the barrow (SM29565). Indeed as part of the restoration of the permitted defunct quarry now adjacent to the barrow improvements could be made to improve

access/appreciation of the asset and therefore the designation under this heading should be an '**E**'.

Criterion C10 – Impact on historic buildings – **D**

Criterion C11 – Impact on archaeology – **A-C**

27. The out of date assessment refers to the Scheduled Monument (SM29565), in particular:

> *"The barrow within the site in particular is a major constraint, and theoretically, extraction that destroyed this nationally-important feature would be category A."*

28. The current proposed area does **not** include the barrow and will **not** materially affect it. Indeed the current permitted and abandoned works are closer than any anticipated. Restoration after such works would enable improvements to be made to improve access/appreciation of the asset and therefore the designation under this heading should be an '**E**'.

Criterion C12 – Impact on hydrogeology or groundwater - **A**

29. Again the revised area moving as it does the edge of the proposed sites further to the east means that the impact on the stream will be nil. In fact the current position with excess water draining into stagnant ponds (see below) could have a greater detriment to the groundwater than allowing the proposed sites to come forward. A full hydrology statement would be provided with any application. As there would be no adverse effect it is the applicant's position that this could be reclassified as **D-E**.

Criterion C13 – Impact on surface waters – **A**

30. While the original 2008 plans included a pond in the eastern block the current proposals do not affect this pond. Restoration of the area to agricultural land with no back-filling means that there will be no effect on this pond.

31. The only other pond is that which occurs only during periods of heavy rainfall within the existing abandoned works. This is not a permanent pond and consists solely of excess rain water. As part of any restoration package a properly created and maintained pond could be included should DCC so wish.

32. Given these factors the omission sites should be scored **D-E** under this criteria.

Criterion C14 – Impact on flooding or coastal stability – **D**

Criterion C15 – Impact on existing soils or land type – **D**

33. While this is already scored 'D' this is one area that appears to have been re-assessed under the new front page (80B). That assessment confirms that no important agricultural land will be lost.

Criterion C16 – Impacts on AQMAs – **D**

Criterion C17 – Impact on economic development – **D**

Criterion C18 – Impact on Sensitive Human Receptors – **B-C**

34. Again the assessment is based on the position of the proposed works in 2008 and not the reduced and moved proposals put forward in 2018. The impact assessment includes distances that are inaccurate and closer than will now be the case. Proximity appears to be the only reason for the higher rating. The assessment also speaks of the impact of the access road but as will be seen below this has been resolved by the planning permission (3/15/0259/FUL – copy attached). Given the greater distances the impact should be considered to be **C-D** at worse.

Criterion C19 – Impact on human settlements - **E**

Criterion C20 – Impact on airport safety – **D**

Criterion C21 – Effect on cumulative impacts – **B**

35. The original assessment is inaccurate. It speaks of the sites being "essentially a new greenfield site", ignoring the fact that the western site is an existing quarry albeit now abandoned. The report also refers to the fact that *"no other working proposed in the immediate vicinity"* which is clearly inaccurate as DCC have themselves granted permission for works almost immediately adjacent to the eastern area (permission number 3/17/0967/DCC).

36. The assessment also makes reference to a development in the 2013 plan for 230 homes 5km away. However despite the passage of 5 years none of the proposed homes have been built and no development has begun on site. (In any event the proposed sites could provide material for such development thus reducing the need to transport materials from further afield).

37. Given that the western site is not 'greenfield' and that other permitted works have been approved to the immediate east of the proposed sites it is submitted that the correct classification should be '**D**'.

Criterion C22 – Impact on carbon emissions – **B**

38. Again the 2008 assessment is now factually inaccurate as the new proposals do not require any infill to restore the site. As such the only carbon impact that the proposals cause is the removal of extracted material by road. This is in common with all of the adopted sites and therefore parity with them is sought. It is also noted that in terms of local users of the material the proposed sites are located closer to the population centres within Dorset than many of the other proposed allocated sites. This ought to be seen as a material consideration in support of the omitted sites. These points, it is submitted, would reduce the classification to '**B-C**' at worst.

Criterion C23 – Impact on recreational land – **B-C**

39. It is curious to note DCC's position on this area. The original assessment noting the potential loss of the motor sport use referred to this as a potential benefit to local inhabitants. This would then make the correct category an '**E**'. However during the hearing Dr King stated on behalf of DCC that they welcomed the use of the old quarry as a motor sport facility. Either DCC want the current permitted motor sport use to continue or they don't. They cannot have it both ways. If they do wish the recreational use to continue then the proposed development would allow a purpose built recreational facility to be provided upon restoration. If they do not want such a use then a bespoke conservation package can be implemented. Either way the proposed development would result in an improvement to the current unplanned deserted works and their use. Therefore '**E**'.

40. For completeness the eastern block was agricultural and will be restored by landscaping to the original use without any infill. '**D**'

Criterion C24 – Impact on rights of way – **B**

41. Again due to the alteration of the size and location of the sites the original assessment is now inaccurate. It speaks of a 'number' of public rights of way (PROW) crossing the sites. In fact only one does and then only through the existing and abandoned quarry. All the other PROW's circumnavigate the sites and as part of the restoration package, and indeed the operating conditions, improvements could be made to them. (The landowner owns all adjacent land and thus such improvements can readily be made if required).

42. The only diversion that would be necessary would be the one path that traverses the western site, the original quarry. The proposed works, if allowed, would allow either a circuitous route to be created and maintained affording greater privacy on the existing quarry for improvements to either ecology or recreation; (neither of these uses mix well with a PROW); or should DCC require it, an improved and more accessible PROW could be restored through the site after extraction.

43. It has also been noted that some concerns were been raised by the public regarding potential conflict between lorries and users of the bridleways and walking routes. These paths have been monitored for over a year by the applicant and the current usage is considerably lower than suggested by DCC. While the paths are used at weekends, there are very few movements during normal working hours. In any event, the layout of the nominated sites lends itself to the creation of haul roads that will avoid conflict with use of those bridleways and footpaths. Consequently, the issue could be dealt with through use of planning conditions.

44. Therefore the impact of the sites should be considered '**C-E**' under this heading.

Criterion C25 – Are the access proposals acceptable **A-C**

45. The original 2008 assessment carried out by DCC stated that the highway access was not adequate and that mineral extraction should not be allowed until the access had been improved. DCC are aware that planning permission was granted on 11th May 2015 for retention of the highway access and track, which had been set out for construction of the solar farm. This access has been accepted as being suitable for lorry movements associated with the Redman's Hill site, and in fact the highway junction would be adequate for significantly more lorry movements should the omitted sites come forward.

46. In the single sheet assessment (80B) under "Access" it states that: "Access road recently provided as part of planning process." This it is submitted is clear evidence that the site had been considered as part of the Draft Mineral Plan assessment by DCC. This is important as if the Plan is to be considered sound then sites such as the present omissions sites should have been considered and, if as they appear to have been not only considered but also consulted upon, then their omission calls into question why the other sites with greater adverse impacts have been subsequently allocated.

47. Given the now permitted alternative access the correct classification should be '**C-D**'.

Conclusion of DCC assessment of the current site.

48. If the assessment[1] of the new proposed sites follows the above assessments then the site scores as against the 25 identified criteria as follows:[2]

A – 0;
B – 1;
C – 4;
D – 14;
E – 6

49. This in comparison to many of the allocated sites is far lower in terms of adverse impacts and especially as against impacts on national and international protections and classifications.

50. Omission of these sites should call into question whether the Draft Plan before the Secretary of State has fully and comprehensively considered the ability and suitability of the sites proposed for adoption by the Plan. (This will be expanded on below).

Summary of the Issues Identified through Public Consultation, with Officer Responses

(Inq. doc. MSDCC-08 pages 63-67)

51. The Inspector has full narrative of the issues raised by the public and the DCC Officers' responses and they are not repeated here. Two points are worthy of note. Firstly the sites consulted on were not the original 2008 sites but the current proposals as submitted to the Inquiry. Not only that but, the information presented to the public included that permission had been granted for a new access and that the land classification was low quality agricultural land. We submit that therefore this was a proper consultation and was conducted by DCC.

[1] It is noted that for fairness any new assessment has assumed a worse case scenario to be fair to DCC. In fact investigation as part of the planning process may well result in an even lower rating to be found correct.
[2] Where a classification has involved a spread (i.e. C-D) the higher impact has been recorded.

52. Secondly we also note that the resultant tabulated results indicate that in the view of the reviewing officer **none** of the issues that the public raise could not be resolved as part of the normal planning process.

Matters raised by DCC at Inquiry

53. At the public examination no counter-case was put forward by Dorset County Council regarding the suitability of the sites for mineral extraction, except by Dr Annabel King who only raised an issue regarding site AS-08.

54. In terms of the SNCI designation, Dr King believed that the designation meant that the site could not be worked for minerals. However, she was reminded that working in such areas is acceptable where restoration will improve the nature conservation interest in the site. In this case, the area is largely devoid of any nature conservation interest and it is unclear why the area was ever included in the SNCI. Dorset Wildlife Trust suggest that the area includes remnants of heathland, but this only affects a very small area on the western edge of the site. This area would be protected and extended. Furthermore, the steep exposed gravel sides to the quarry do not lend themselves to colonisation by flora or fauna, and there is no doubt that additional mineral extraction together with creation of a range of habitats across the area would significantly increase the ecological value of the area.

Conclusion

55. It is clear as was stated by DCC in open Inquiry that they have been aware of these sites since the turn of the century. They were aware specifically since 2008 and were aware that considerable beneficial alterations were made in 2015. DCC have undertaken some review of the new material (see 80B) and are aware that many of the original objections (under 80A) have now been overcome. They, DCC, are aware that the sites could provide a considerable amount of sand, a commodity that they accept they fall short of the required specific 7 year supply. They have even consulted with the public on the proposals (see 80B and MSDCC-08) and have **not** found any

supportable reasons in their own officers' view for the omission of the proposed sites from the Mineral Plan that could not be overcome as part of the planning process.

56. We submit that on the evidence if the sites were to remain unadopted under the proposed Plan when other sites with far higher and wider reaching adverse impacts are being adopted then a fundamental flaw must exist either within the plan, or its evidence base. It would be manifestly unreasonable to permit other sites with such damaging impacts which can also only provide limited material, and especially those that cannot assist in the production of sand a resource that the plan does not provide the requisite 7 year supply.

57. For the reasons above, as submitted in open session to the Secretary of State, we would seek the inclusion of the omitted sites into the Mineral Plan.

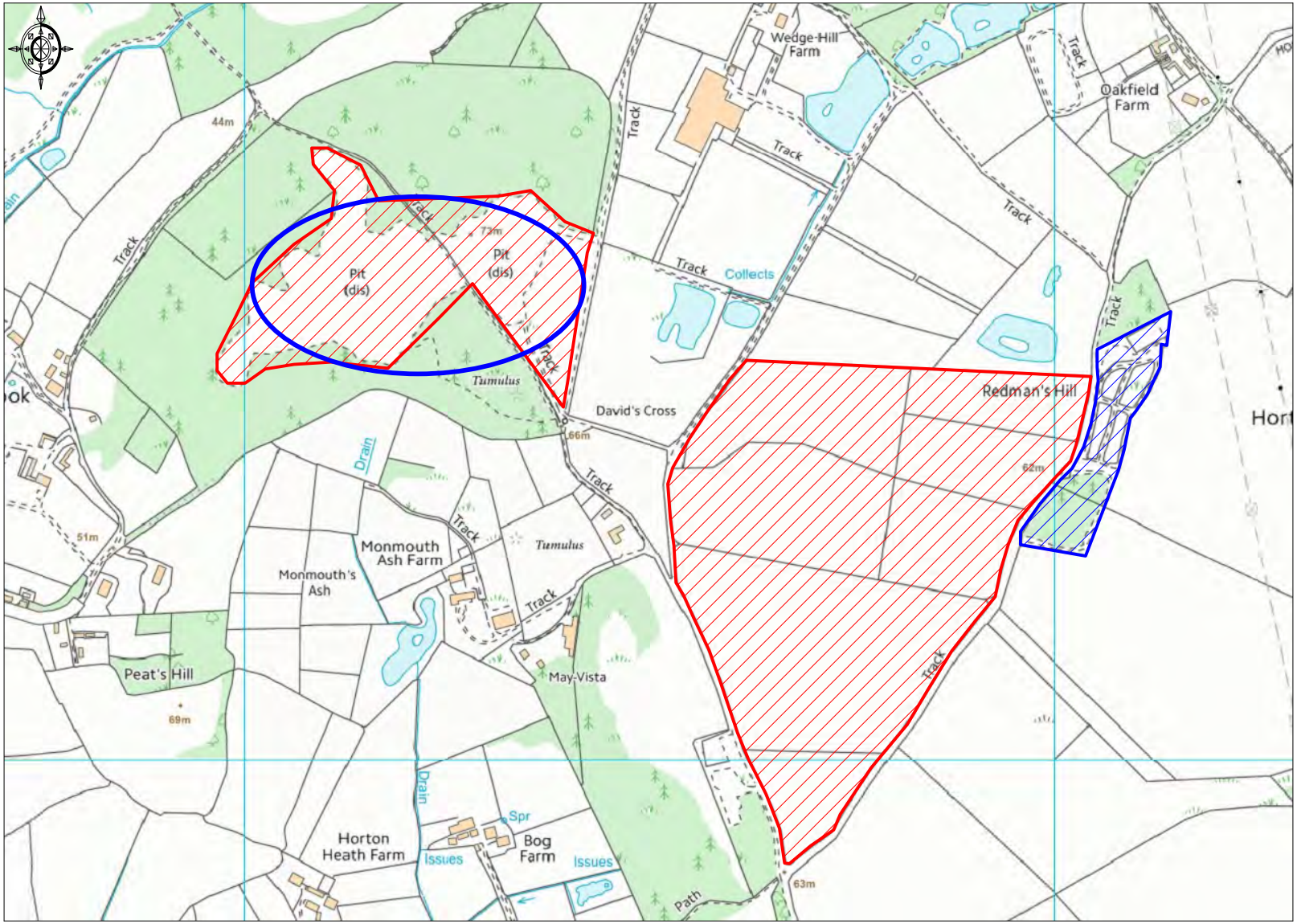
Prepared by:

Gavin Collett,
Magdalen Chambers

&

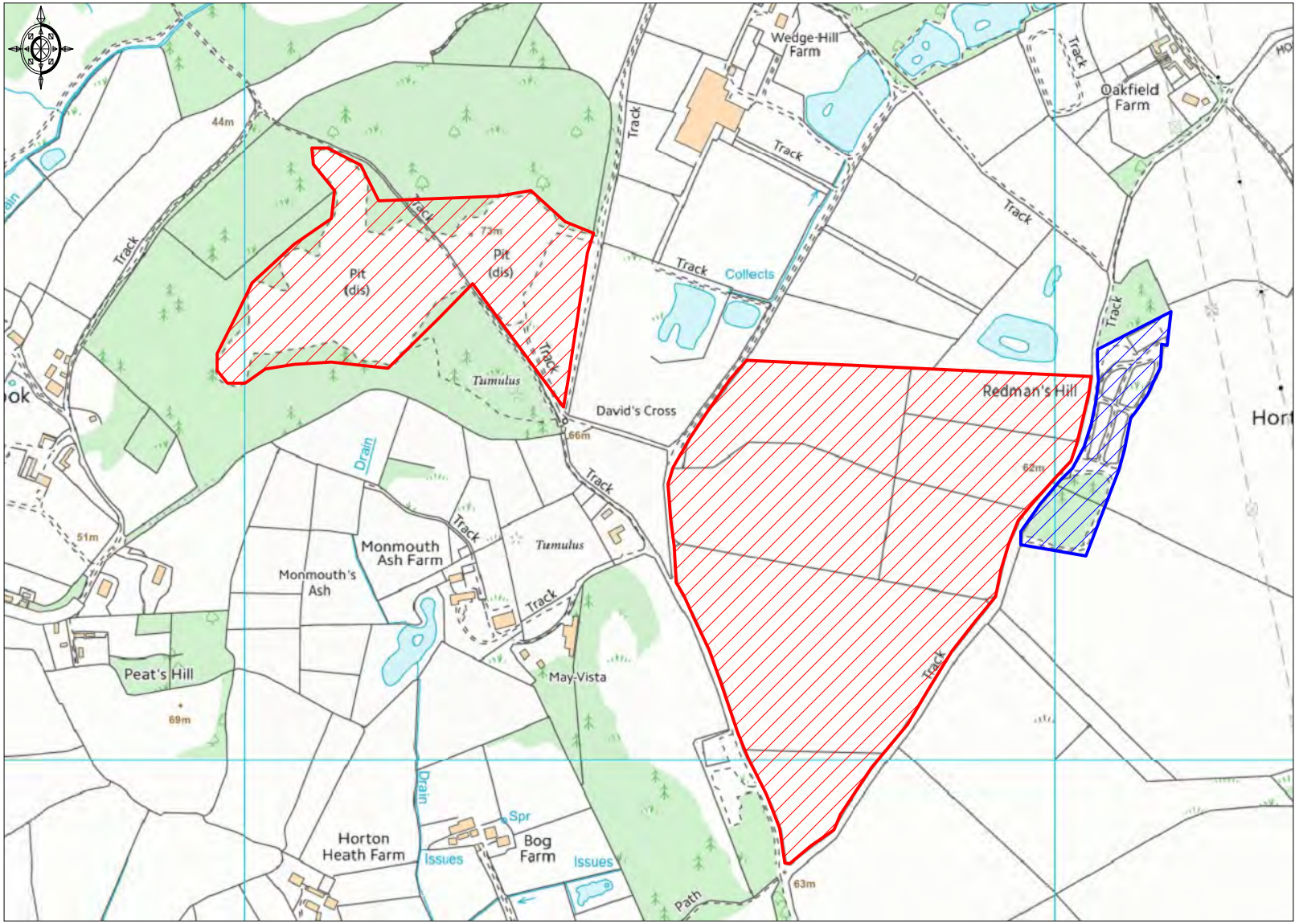
Simon Munnings,
Dorset Property Surveys

16th November 2018



Potential restoration area for western area

Extent and location of nominated sites at Wedgehill Farm, Three Legged Cross, Dorset



Planning permission granted 16th August 2018 for blue site ref: 3/17/0967/DCC

Site 2 at AS08 Horton Heath/Clump Hill

Based on boundaries as advised to DCC during 2015

1.0 This area is drastically reduced from the area shown on the original nomination. The site now measures about 8 Hectares (20 acres), and only includes the area previously used for mineral extraction lying to the west of Wedgehill Farm. The site does not include any SSSI, SNCI or other land affected by designations.

2.0 There was a planning condition attached to the original minerals planning consent requiring the area to be reinstated following extraction of material, but no reinstatement has been carried out.

3.0 Having discussed the situation with ecologists, we are advised that grading the area to form a saucer-shaped depression would be beneficial in ecological terms, while not affecting the surrounding area, and such works could be carried out in such a way to encourage additional habitat creation.

4.0 The landowner and locals would like to see the area tidied.

5.0 It is envisaged that the mixed gravel and sand would be excavated and sold as 'ballast as dug', to be used as base course for farm tracks, roads, and foundation fill. There is huge demand for such material locally, and use of this natural material would alleviate the need for stone crushing. The site has the potential to provide 300,000 tons of material without impinging on the surrounding wooded areas. This would leave the area with better contours than currently exist, together with retention of the central pond as a wildlife haven. There would not be any requirement for on-site processing. The material would be cleared in 6 years, with reinstatement taking place immediately behind extraction works, and these would be completed within 10 years. We already have ecologists interested in leading the reinstatement project.

6.0 Regarding the specific criteria for assessing this site, we can confirm;

Criterion C1 – Impact on European/international designations. The proposal will not directly affect any areas subject to European or international designations. Reinstatement of the area will enhance the setting of the area, thereby having a positive effect.

Criterion C2 – Impact on areas used by Annex 1 bird species. Restoration of the area to lowland heath with a wetland feature would have a beneficial effect on the habitat, and therefore potential for bird species. The margin between surrounding woodland and heath would be particularly beneficial.

Criterion C3 – Impact on national designations. The proposal does not include land that is directly affected by national designations. Reinstatement of the area would enhance the setting, and therefore should have a positive effect on any surrounding nationally designated areas.

Criterion C4 – Impact on protected species. The area currently supports a low population of protected reptiles. Reinstating the area post extraction would have the potential to support much stronger populations of protected reptiles and other species. Consequently, the proposal would have a positive effect.

Criterion C5 – Impact on local recognitions/designations, including ancient woodland and veteran trees. Because the area has already been worked for mineral extraction, without any beneficial reinstatement having been carried out, there are no ancient trees or other beneficial plantings across the site. Reinstatement of the area would enhance the setting of boundary features and surrounding woodland areas, thereby resulting in an overall improvement to the area.

Criterion C6 – Impact on geodiversity. Reinstatement of the area will not change the geodiversity of the area, but would expose more material during the excavation phase. This will result in some sites being left exposed following reinstatement, which may be of future interest.

Criterion C7 – Impact on designated landscapes. The area is surrounded by hills and trees, which means that there will not be any significant impact on the designated landscape. Locally the landscape will be improved by the reinstatement.

Criterion C8 – What is landscape capacity to accommodate proposed development. The area lies within the Horton Common landscape character assessment area. There is potential for the character of the area to be affected by gravel extraction in the short rem. However, in the longer term the proposed reinstatement will enhance the area by increasing interest across the immediate area and improving the setting for the surrounding sensitive areas.

Criterion C9 – Impact on historic landscapes. There are no scheduled monuments within the site, and the proposals would not have any impact on schedule monuments in the area, other than to improve their setting.

Criterion C10 – Impact on historic buildings. There are no Listed buildings in the immediate vicinity of the site. Those historic buildings that exist in the area are well screened from the site.

Criterion C11 – Impact on archaeology. The Bowl Barrow and tumulus that lie to the north-east of Monmouth Ash Farm, both lie outside of the proposed reinstatement area. Furthermore, both features lie within wooded areas outside the influence area of the proposed reinstatement works. It is envisaged that improvement of the immediate area that has already been worked for mineral extraction would help to enhance these archaeological features.

Criterion C12 – Impact on hydrogeology or ground water. There are no streams through the site, which lies on top of a hill. There is already a pond at the bottom of the old workings, and this feature would be retained as part of the proposed reinstatement works. The hydrogeological data that has been

produced in respect of other workings in the area indicates that the proposals will not have any impact on hydrogeology or ground water.

Criterion C13 – Impact on surface water. There is a pond within the site, which has already been formed by mineral extraction. The proposed reinstatement works would positively enhance the setting of this pond. There are no streams or other watercourses across the site. Overall, by working in conjunction with the Environment Agency it should be possible to enhance the impact on surface waters.

Criterion C14 – Impact on flooding or coastal stability. There is no flood risk or coastal stability issue in the area. The proposals will not increase the risk of flooding elsewhere.

Criterion C15 – Impact on existing soils or land type. All topsoil has been stripped from the entire area. Restoration of the area to heath will involve the importation of material to facilitate restoration to heathland.

Criterion C16 – Impact on AQMAs. No AQMAs would be directly affected by this proposal.

Criterion C17 – Impact on economic development. The site will make a positive contribution to aggregate supply and thus have a positive impact on the local, and wider, economies. Local employment will be created, and this will be maintained while the site is worked. Restoration of the site to heathland will also provide on-going employment opportunities.

Criterion C18 – Impact on sensitive human receptors. The site is further from residences than the area previously nominated, and human receptors will be shielded from the proposed works both by the topography of the land and wooded areas. Furthermore, the access road can be diverted away from houses. Although there will be some minor impact on human receptors during works, the improved condition of the reinstated area should help to outweigh any short-term nuisance. This is particularly relevant, as the site has been used for clay pigeon shooting; motor cycle scrambling; and; four-wheel drive off-roading in recent years. Consequently, neighbours have had to tolerate sustained noise throughout that period, and these noisy activities will cease as a result of these proposals.

Criterion C19 – Impact on existing settlements. Both Verwood and Three-Legged Cross lie a significant distance from the proposed site. Neither settlement is likely to experience any negative impact from working this area.

Criterion C20 – Impact on airport safety. The site lies 13km outside the airport safety zone. Consequently, there will not be any effect on the airport of safety of aircraft.

Criterion C21 – Effects on cumulative impacts. There are no operational sand/gravel workings in the immediate vicinity, although see also Site 1 and Site 3 proposals. Additional residential development is proposed in Verwood.

Gravel extraction will increase traffic movements on local roads, but will reduce vehicle movements through Dorset as a whole, due to material not being brought from the Purbeck area. The proposal will also reduce inter-county travel due to material not having to come from Hampshire or other counties in the south of England. Overall the cumulative impact of the proposal will be low.

Criterion C22 – Impact on carbon emissions. The site is relatively remote and will rely on lorries to move minerals. However, this needs to be balanced against carbon emissions associated with bringing similar material from other areas of Dorset (sites in the Purbecks) or from surrounding counties (particularly Hampshire and Somerset). Due to good road links between Three Legged Cross and the Bournemouth/Poole conurbation, the proposal will not have any greater impact than bringing such material from other sites in the area, and is likely to reduce overall traffic movements.

Criterion C23 – Impact on recreational land. Footpaths and bridle paths across the site and around the area will be disrupted during mineral extraction and reinstatement works. However, public rights of way will be improved on completion of the works, with an improved landscape, together with more areas of interest created around the rights of way network. Loss of an area for clay pigeon shooting, motorcycling and off-road driving will have a negative effect on recreational activities. However, such activities do not sit well with the regional, national, and international designations attached to surrounding land.

Criterion C24 – Impact on public rights of way. Public rights of way will need to be diverted or replaced during works, for public safety. However, the public rights of way are not in a good state of repair, and the improved layout and condition of paths on completion of works means that the proposed scheme will have a beneficial impact on public rights of way in the longer term.

Criterion C25 – Are the access proposals acceptable. There is a new highway access onto the C2 that was installed to allow access for construction of the solar panel farm. Planning consent has now been granted on a permanent basis, as it was recognised by East Dorset District Council and the Highways Department at Dorset County Council that this is a safer access point, with good visibility in both directions, compared to the original access point. This access would be used for all transport movements associated with the proposal and will be adequate for the proposed vehicle movements.

From the C2 there is good access onto the local road network for access into the Bournemouth/Poole conurbation, East Dorset as a whole and to the region as a whole.

Site 3 at AS08 Horton Heath/Clump Hill

Based on boundaries as advised to DCC during 2015

1.0 This area of pastureland was not included in the original nomination.

2.0 Boreholes indicate a depth of at least 10 metres of sand across the site. Sand samples have been tested, and these show a mixture of coarse and fine sands at different depths. The sand would be suitable for grading to produce a good quality building sand. There may also be an opportunity for some specialist sands to be taken in commercial quantities.

3.0 The area extends to about 16.2Ha (40acres), and with a depth of 10 metres this site could produce 1,600,000 cubic metres (2.4 million tonnes) of sand. At 200,000 tonnes per annum the quarry would have a life of 12 years.

4.0 The area could be back-filled prior to re-instatement as low grade pasture at original contours.

5.0 Alternatively, if back-filling was not favoured then the land could be left at the excavated level, with pastureland created at that level. This approach has been found acceptable elsewhere in the area.

6.0 There is underlying clay to the site, making it suitable for backfilling with waste. Initial consultations suggest that the clay could be moulded into cells for disposal of waste, potentially including asbestos and other non-inert materials.

7.0 Regarding the specific criteria for assessing this site, we can confirm;

Criterion C1 – Impact on European/international designations. The proposal will not directly affect any areas subject to European or international designations.

Criterion C2 – Impact on areas used by Annex 1 bird species. Restoration of the area to low grade agricultural land would appear appropriate, although the area might be returned to heath or woodland.

Criterion C3 – Impact on national designations. The proposal does not affect land that is directly affected by national designations.

Criterion C4 – Impact on protected species. The area has been assessed by Abbas Ecology and no protected fauna or flora were identified across this area.

Criterion C5 – Impact on local recognitions/designations, including ancient woodland and veteran trees. There are no such designations affected.

Criterion C6 – Impact on geodiversity. Reinstatement of the area will provide an opportunity to improve geo-diversity across the site by introducing tree and shrub planting in the reinstatement plan.

Criterion C7 – Impact on designated landscapes. The area is on top of a hill, which cannot be overlooked from distant points. Because machinery will be working below ground level there will be limited effect locally.

Criterion C8 – What is landscape capacity to accommodate proposed development. The area lies within the Horton Common landscape character assessment area. There is potential for the character of the area to be affected by gravel extraction in the short term. However, in the longer term the proposed reinstatement can enhance the area by improving landscape quality. This will increase interest across the area and improve the setting for the surrounding sensitive areas.

Criterion C9 – Impact on historic landscapes. There are no scheduled monuments within the site, and the proposals would not have any impact on schedule monuments in the area.

Criterion C10 – Impact on historic buildings. There are no Listed buildings in the immediate vicinity of the site. Those historic buildings that exist in the area are well screened from the site.

Criterion C11 – Impact on archaeology. There are no scheduled monuments or earthworks across the site.

Criterion C12 – Impact on hydrogeology or ground water. There are no streams through the site, which lies on top of a hill. The hydrogeological data that has been produced in respect of other workings in the area indicates that there would not be any impact on hydrogeology or ground water.

Criterion C13 – Impact on surface water. The water management plan that has been produced in respect of other workings in the area indicates that there would not be any impact on surface water.

Criterion C14 – Impact on flooding or coastal stability. There is no flood risk or coastal stability issue in the area. The proposals will not increase the risk of flooding elsewhere.

Criterion C15 – Impact on existing soils or land type. Topsoil would be stripped and stored for restoration. At this stage we propose that the land be reinstated to existing land type and use.

Criterion C16 – Impact on AQMAs. No AQMAs would be directly affected by this proposal.

Criterion C17 – Impact on economic development. The site will make a positive contribution to aggregate supply and thus have a positive impact on the local, and wider, economies. Local employment will be created, and this

will be maintained while the site is worked. Restoration of the site will also provide on-going employment opportunities.

Criterion C18 – Impact on sensitive human receptors. The site is away from residences and the excavation works will not affect those receptors. There will be lorries using the tracks near to dwellings. However, the access road can be diverted away from houses.

Criterion C19 – Impact on existing settlements. Both Verwood and Three-Legged Cross lie a significant distance from the proposed site. Neither settlement is likely to experience any negative impact from working this area.

Criterion C20 – Impact on airport safety. The site lies 13km outside the airport safety zone. Consequently, there will not be any effect on the airport or safety of aircraft.

Criterion C21 – Effects on cumulative impacts. There are proposed sand/gravel workings in the immediate vicinity.

- There is a planning application before DCC for 100,000 tonnes of sand from the old slurry pits to the east of this site. That site should be worked within two years.
- There is also a nomination for a site to the west of this site, for excavation of 'ballast as dug', which is a different type of material. Those workings will not impinge on the viability of the nominated site.

Additional residential development is proposed in Verwood. Sand extraction will increase traffic movements on local roads, but will reduce vehicle movements through Dorset as a whole, due to material not being brought from the Purbeck area. The proposal will also reduce inter-county travel due to material not having to come from Hampshire or other counties in the south of England. Overall the cumulative impact of the proposal will be low.

Criterion C22 – Impact on carbon emissions. The site is relatively remote and will rely on lorries to move minerals. However, this needs to be balanced against carbon emissions associated with bringing similar material from other areas of Dorset (sites in the Purbecks) or from surrounding counties (particularly Hampshire and Somerset). Due to good road links between Three Legged Cross and the Bournemouth/Poole conurbation, the proposal will not have any greater impact than bringing such material from other sites in the area, and is estimated to reduce overall traffic movements.

Criterion C23 – Impact on recreational land. Users of footpaths and bridle paths around the site will be aware of the activity. However, it is proposed that the site be worked in a series of 4 acre blocks, with one block being reinstated while one block is worked and the next block is being prepared. This will minimise disruption

Criterion C24 – Impact on public rights of way. Public rights of way will not need to be diverted during works. However, the situation will be discussed with

the Rights of Way officer, and paths can be diverted where this is considered beneficial. This can be achieved due to the site owner also controlling all surrounding land.

Criterion C25 – Are the access proposals acceptable. There is a new highway access onto the C2 that was installed to allow access for construction of the solar panel farm. Planning consent has now been granted on a permanent basis, as it was recognised by East Dorset District Council and the Highways Department at Dorset County Council that this is a safer access point, with good visibility in both directions, compared to the original access point. This access would be used for the proposal and is more than adequate for the proposed number of vehicle movements.

From the C2 there is good access onto the local road network for access into the Bournemouth/Poole conurbation, East Dorset as a whole and to the region as a whole.

DORSET COUNTY COUNCIL
COUNTY HALL
DORCHESTER
DORSET DT1 1XJ

Tel : 01305 or 01202 251000
Fax: 01305 or 01202 224835
Minicom: 01305 267933
Email: planning@dorsetcc.gov.uk
DX: DX 8716 Dorchester
Web Site: www.dorsetcc.gov.uk

TOWN & COUNTRY PLANNING ACT 1990

TOWN & COUNTRY PLANNING (GENERAL DEVELOPMENT PROCEDURE) ORDER 1995

Application N° 3/2004/0833

Date Received 18 May 2004

GRANT OF PLANNING PERMISSION

LOCATION OF DEVELOPMENT: **LAND AT HORTON HEATH, HORTON**

DESCRIPTION OF DEVELOPMENT: **FORMATION OF TEMPORARY BORROWPIT TO PROVIDE SAND AND GRAVEL FOR ADJACENT GOLF COURSE CONSTRUCTION WITH PERMANENT RESTORATION TO HEATHLAND AND CESSATION OF CURRENT MOTOR CYCLING SCRAMBLING USE**

In pursuance of their powers under the above mentioned Act, the DORSET COUNTY COUNCIL being the Local Planning Authority, HEREBY GRANT PLANNING PERMISSION for the development described above in accordance with the details given in the application number above, as modified by:-

Plan/Drawing No. 977/03 Rev A and letter dated 27 July 2004

and subject to the following 10 conditions:-

1. No development subject of this permission shall take place after 31 December 2006, by which time extraction shall have ceased and the site have been restored in accordance with the submitted details.

   Reason
   This permission is only granted to meet the specific requirements for 60,000 tonnes of material for the construction of the golf course approved by EDDC under permission No. 3/2002/1289.

TO: T E Bleszynski
Woodlands Manor Estates Ltd
White House
Magna Road
Wimborne
BH21 3AP

SIGNED : [redacted]
Head of Planning

DATED : - 9 AUG 2004

PLEASE SEE OVERLEAF

2. Unless otherwise approved in writing by the Mineral Planning Authority, extraction operations shall be limited to the period ending 31 December 2004.

   Reason
   This permission is only granted to meet the specific requirements for 60,000 tonnes of material for the construction of the golf course approved by EDDC under permission No.3/2002/1289.

3. No extraction operations shall commence until an alternative to bridleway route number 15, where it passes the extraction area, has been provided. The route shall be signed in accordance with a scheme, which shall first have been submitted to and approved in writing by the Mineral Planning Authority. The alternative route shall continue to be made available whilst extraction of mineral is taking place.

   Reason
   In the interest of users of the bridleway.

4. No extraction operations shall commence until a scheme for control and management of the length of bridleway shared by haulage vehicles has been submitted to and approved in writing by the Mineral Planning Authority. The scheme shall be implemented and shall remain in place whilst extraction operations continue.

   Reason
   In the interest of the safety of bridleway users.

5. No development shall commence until a scheme for the following has been submitted to and approved in writing by the Mineral Planning Authority: the treatment of areas of heathland to be removed as part of extraction operations, including the method of lifting and temporary storage of heathland topsoils, and the methodology, including timing for the rescue and relocation of common reptiles; and the fencing of areas of ecological importance within the red line which are to be excluded from disturbance during extraction. The scheme shall be implemented.

   Reason
   To prevent certain areas of known ecological importance from development and to secure the remaining areas of importance for use in site restoration.

6. No operations shall take place outside of the hours 0700 – 1800 Monday to Friday and 0700 – 1300 on Saturdays. No operations shall take place on Sundays or Public Holidays.

   Reason
   In the interest of the amenities of the area.

7. Within three months of the date of this permission, a scheme for the management of the site and the area edged blue on the submitted plan No. 997/02 dated May 04 and forming part of the application, shall be submitted to the Mineral Planning Authority for their approval. The scheme, as approved, shall be implemented in accordance with approved details and shall include:
   - Details of surface treatment of area to be restored following extraction, including microtopography of the surface, spreading of heathland topsoils and subsequent management of heathland being created. The surface treatment of the area within the red line to be completed within six months of the completion of extraction.
   - Details of clearance of secondary woodland and scrub, including method and timing, handling of arisings and management of resulting areas to promote heathland re-establishment across approximately 80% of the site, and management of woodland across

Signed [redacted]

20%. The re-established heathland should aim to comprise approximately 75% heath vegetation / 25% bare ground, and the woodland should aim to comprise copses incorporating the badger sett, areas of more mature woodland (identifiable as woodland on the 1946 aerial photograph), old boundary trees, and scattered trees and small tree groups amongst the heath. The clearance of secondary woodland and scrub shall be completed within a period of five years from the date of this permission.

- Priority management of scrub within existing heath-dominated areas 3a and 3b to be undertaken before March 2005 to compensate for temporary loss of heathland habitat to extraction
- Options for long term management of the restored heathland, including grazing
- Details of an annual review of operations to be held between the developer, Mineral Planning Authority and Dorset Wildlife Trust

Reason
To secure the enhancement and future management of the Horton Heath SNCI.

8. Throughout the operation the developer shall provide an ecological clerk of works to supervise the extraction and heathland restoration phases of the development.

   Reason
   To prevent certain areas of known ecological importance from development and to oversee the enhancement and future management of the Horton Heath SNCI.

9. The material extracted from the site shall only be used in connection with the construction of the adjoining golf course.

   Reason
   This permission is only granted to meet the specific requirements for 60,000 tonnes of material for the construction of the golf course approved by EDDC under permission No.3/2002/1289.

10. Unless otherwise approved in writing by the Mineral Planning Authority, the operations shall only be carried out in accordance with the submitted statement and plans, except as modified by the above conditions

    Reason
    For the avoidance of doubt and to ensure the orderly operation of the site.

INFORMATIVE NOTE.
Implementation of this permission will result in the area of land outlined in blue on the submitted plans, reverting to heathland and being managed for nature conservation purposes. No change of use of this land is therefore possible without planning permission. The land is also already subject to an Article 4 Direction restricting the use of the land. Whilst ecological survey has not revealed the presence of European protected species, the habitat is capable of supporting them; should any animals be found the applicant is made aware that a licence for their disturbance under the Habitats Regulations 1994 would be necessary from DEFRA.

[redacted]
Head of Planning

NOTES

1. This permission does not carry any approval or consent which may be required under any enactment, bye-law, order or regulation (eg., in relation to Building Regulations or the Diversion of Footpaths etc) other than Section 57 of the Town and Country Planning Act, 1990.

2. If the applicant is aggrieved by the decision of the local planning authority to refuse permission or approval for the proposed development, or to grant permission or approval subject to conditions, he may appeal to the Secretary of State for the Environment in accordance with Section 78 (1) of the Town and Country Planning Act, 1990, within six months of receipt of this notice. (Appeals must be made on a form which is obtainable from The Planning Inspectorate, Department of the Environment, Tollgate House, Houlton Street, Bristol, BS2 9DJ). The Secretary of State for the Environment has power to allow a longer period for the giving of a notice of appeal, but he will not normally be prepared to exercise this power unless there are special circumstances which excuse the delay in giving notice of appeal. The Secretary of State for the Environment need not consider an appeal if it seems to him that permission for the proposed development could not have been granted by the local planning authority, or could not have been so granted otherwise than subject to the conditions imposed by them, having regard to the statutory requirements, to the provisions of the Development Order and to any other direction given under the Order.

3. If permission to develop land is refused or granted subject to conditions, whether by the loca planning authority or by the Secretary of State for the Environment, and the owner of the land claims that the land has become incapable of reasonably beneficial use in its existing state and cannot be rendered capable of reasonably beneficial use by the carrying out of any development which has been or would be permitted, he may serve on the county district in which the land is situated, a purchase notice requiring that council to purchase his interest in the land in accordance with the provisions of Part VI of the Town and Country Planning Act, 1990.

4. In certain circumstances, a claim may be made against the local planning authority for compensation where permission is refused or granted subject to conditions by the Secretary of State for the Environment on appeal or on a reference of the application to him. The circumstances in which such compensation is payable are set out in Section 114 and related provisions of the Town and Country Planning Act, 1990.

5. Commencement of development: The attention of the applicant/developer is drawn to the fact that development pursuant to this planning permission may not lawfully commence unless and until *all* pre-start conditions have first been approved or agreed in writing. The applicant/developer or their agent should accordingly be aware of their responsibility here. If you have not already done so, you are advised to put arrangements in place for the timely submission of these and to check tha there are no omissions in terms of the details required

Dorset Ecological Consultancy

Proposed Mineral Extraction At Redman's Hill, Horton

Extended Phase 1 Survey and Recommendations

July 2009

Bronwen Bruce
Dorset Ecological Consultancy

Dorset Ecological Consultancy

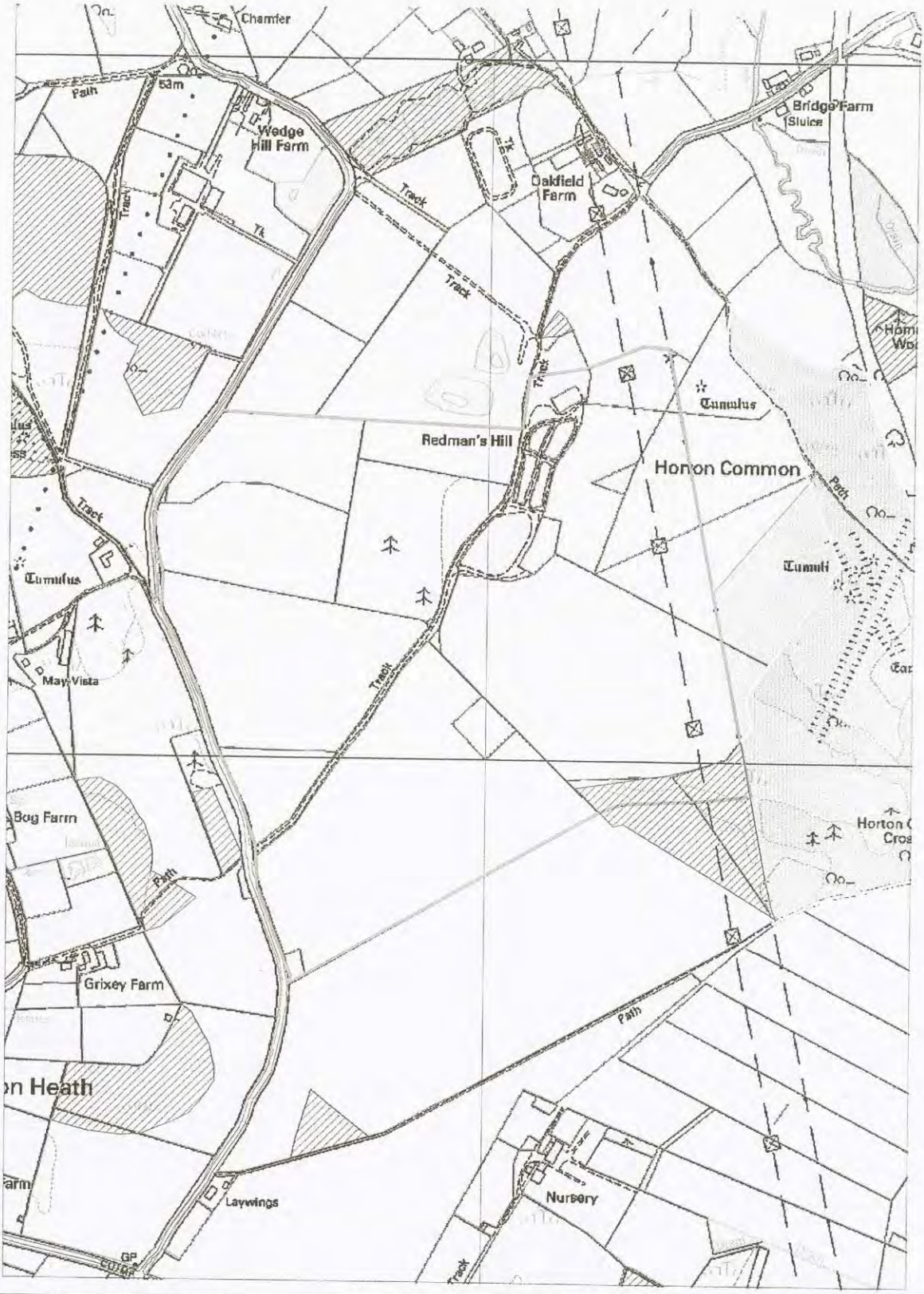
Brooklands Farm
Forston
Dorset DT2 7AA

1. Introduction

1.1 Background

This survey looks broadly at the habitat types and protected species issues within the site boundary, shown on the map below both by survey and a data search. It makes recommendations for further work and initial suggestions for habitat enhancement post-extraction.

The survey area was approximately 50ha. This is the area surveyed and does not represent the smaller proposed extraction area which will be within the survey boundary. The survey area is adjacent to the Horton Common Site of Special Scientific Interest (SSSI), part of which is a Special Area for Conservation (SAC) and Special Area for Protection (SPA). This SAC/SPA is a part of the wider Dorset Heaths SAC/SPA. There is also a Site of Nature Conservation Importance (SNCI) which is a site of county importance. These designations are displayed on the map below, the citation for the SSSI is in appendix 1 of this report.



	SNCIs boundary SPAs boundary SPAs boundary Survey boundary SSSIs boundary	Scale : 1:10,000	*Based upon the Ordinance Survey mapping with the permission of the Controller of Her Majesty's Stationary Office Crown Copyright. Unauthorised reproduction infringes Crown Copyright and may lead to prosecution or civil proceedings. Dorset Wildlife Trust license number 29185. This map remains the property of Dorset Wildlife Trust and must be returned on demand.*

1.2 Methodology

The phase 1 survey was carried out as described within The Handbook and Field Manual for Phase 1 Habitat Survey – A technique for Environmental Audit (JNCC 1990). However, as the Phase 1 maps were produced using MapInfo, the colour coding was produced using a system developed by Dorset Environmental Records Centre (DERC), the key for which is displayed alongside the maps.

The entire site was surveyed for protected species, and for the potential for protected species. The data search from DERC helped to guide which species should be considered. These included:

Bats: Any buildings due to be demolished or converted as part of this development were surveyed for bats and their potential for bats. Any trees due to be removed were also assessed, as was the surrounding habitat.

Breeding birds: Any habitat features, for example, scrub and trees, which could potentially be used by nesting birds, were surveyed and any nesting activity within the buildings was noted.

Reptiles: Habitat features that could be suitable as hibernacula or feeding/resting areas were noted.

Badgers: Any area that could be used for feeding or could potentially contain a Badger sett was surveyed and any signs noted.

1.3 Legislation (summary)

1.3.1 Habitat Designations

SNCIs are sites that have county importance, they are not protected by a legal act but by policies within the county council structure plan following planning policy guidance 9: Nature Conservation

SSSIs are notified under section 28 of the Wildlife and Countryside Act 1981. SSSI status indicates that the site is of national importance and requires consultation with English Nature if any development proposals are thought to have an effect on the designated site.

The SSSI is also a SAC under the EC Habitats Directive, this indicates that the site is of European Importance for its habitat types and species. The SAC areas are a part of the Dorset Heathlands.

The qualifying habitats under article 4(4) for the SAC are:

- Wet heathland with cross-leaved heath
- Dry heath
- The presence of southern damselfly *Coenagrion mercuriale*
- The presence of depressions on peat substrates

The SSSI is also a SPA under the EC Birds Directive, this is a collective directive for 5 species of birds. These are :

- Dartford Warbler
- Nightjar
- Woodlark
- Hen Harrier
- Merlin

Article 6 of the Habitats directive requires member states to avoid significant deterioration of habitats and disturbance of species in SPAs and SACs. It also requires that proposed developments, which may affect SPAs and SACs, are assessed and that the developments may proceed only if they will not adversely affect the integrity of SPAs and SACs.

1.3.2 Species Legislation

Otters, all species of Bat, Water Voles, Slow Worms and Grass Snakes are protected by the Wildlife and Countryside Act 1981 (as amended). According to this act, it is an offence to:

- Deliberately capture, kill or injure one of these animals
- Deliberately damage, destroy or obstruct access to any structure or place used by one of these animals for shelter or protection
- Deliberately disturb an animal whilst it is using this place

Otters and all species of bat are also European Protected Species. They have added protection under the Conservation (Natural Habitats, &c.) Regulations 1994, which implements the EC Directive 92/43/EEC in the United Kingdom. In accordance with this act, it is an offence to:

- Deliberately capture or kill a European Protected Species
- Deliberately disturb any such animal
- Damage or destroy a breeding site or resting place of such an animal

Badgers are protected by the Protection of Badgers Act 1992. In accordance with this act, it is an offence to:

- Take, injure or kill a Badger
- Commit cruelty towards a Badger
- Interfere with a Badger sett

Please Note: It is also an offence to disturb nesting birds.

PPS 9 Key Principal (ii) states:
"... Planning decisions should aim to maintain, and enhance, restore or add to biodiversity. In taking decisions, local planning authorities should ensure that appropriate weight is attached to '" protected species interests".

2. Data search

2.1 Habitat Designation and Dorset 'Priority' Habitats

The survey site was part of Horton Common, the largest area of unbroken heathland in Dorset. However, in 1981 a large part, which includes the survey site was destroyed by ploughing. The SSSI citation in appendix 1 explains why the remaining fragments are protected. The map in appendix 2 illustrates where adjacent and near-by designated sites are. The majority of these sites are remaining heathland fragments but there is also the River Crane, SSSI which is a chalk stream environment. The map in appendix 3 illustrates where areas of 'priority' habitat for Dorset is. There are further stretches of heathland illustrated in this map but also areas of lowland, mixed deciduous woodland.

There is an array of fragmented heathland habitats in the area, which makes it important to specifically highlight any acid/heathland habitat features in the survey.

2.2 Data search from Dorset Environmental records Centre (DERC)

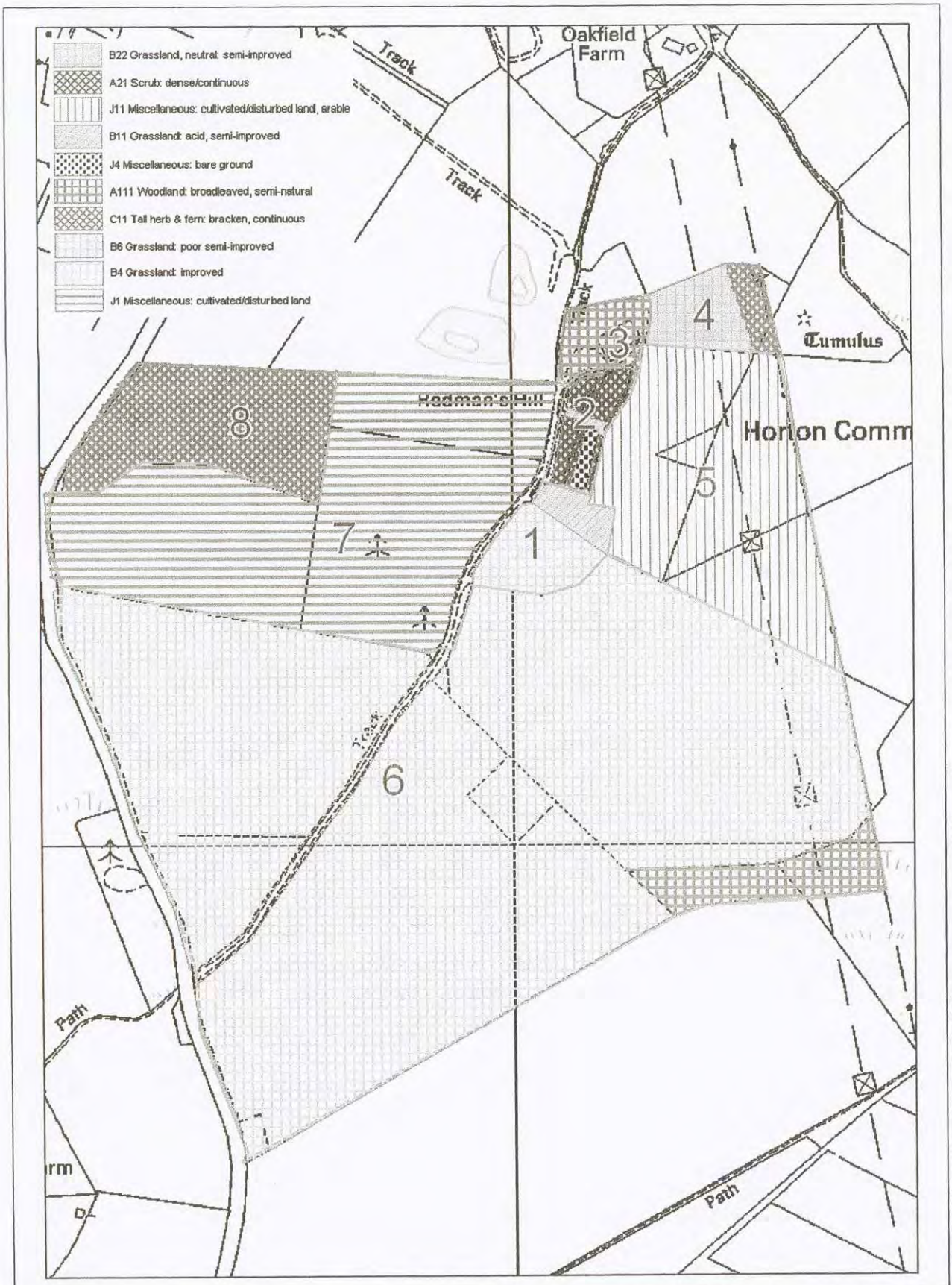
A data search for species records was obtained from DERC to look for records within the survey boundary and within a 1km radius from this boundary.

The total number of species records was 119. Numerous records were given for some species such as otter, but other species will have received one record. Many of the species in the data search are unlikely to be seen within the survey boundary. There are various protected sites within the 1km boundary around the survey area where the records will have been obtained some of these have quite different habitat characteristics to that in the survey area. Other records may be a one-off of a bird or butterfly that has passed by.

Species	Group	Rarity/Legislation	Comments
Coral-necklace Illecebrum verticillatum	Vascular plants	A National RDB Vulnerable species, that is also a UK biodiversity 'priority species'.	Likes damp, sandy heathland and has been recorded in the Horton Common SNCI a small area of which is in the survey area.
Long-winged Cone-head *Conocephalus discolour*	Cricket/ grasshopper	Nationally Scarce invertebrate species found in 16-30 10km squares nationwide	Found among rushes and grasses.
Sand Lizard Lacerta agilis	Reptiles	Protected through Habitats Regulations (1994) European Protected Species and W&C Act, 1981. UK Biodiversity priority species	Restricted to southern heathlands in the UK. Requires loose sand for egg laying.
Grass Snake *Natrix natrix*	Reptiles	Is a protected species (W&C Act, 1981)	Requires mosaic of wet and dry habitats. Feeds on amphibians.
Adder *Vipera berus*	Reptiles	Is a protected species (W&C Act, 1981)	Occupy a variety of habitats
Tree Pipit *Anthus trivialis*	Birds	Red List species – birds of high conservation concern in Europe. UK Biodiversity priority species	A summer visitor to the UK, likes open heaths.
Common Pipistrelle *Pipistrellus pipistrellus*	Mammals (bats)	Protected through Habitats Regulations (1994) European Protected Species and W&C Act, 1981. UK Biodiversity priority species	A bat roost was recorded in near-by urban area.
Brown Long-eared Bat *Plecotus auritus*	Mammals (bats)	Protected through Habitats Regulations (1994) European Protected Species and W&C Act, 1981. UK Biodiversity priority species	A bat roost was recorded in near-by urban area.
European Badger *Meles meles*	Mammals	Protected by the Protection of Badgers Act (1992)	

3. Phase 1 Habitat Survey

The results of the phase 1 habitat survey are illustrated below.



Scale : 1:10,000

The survey area was further divided into the eight areas as shown in the map above in order to give fuller descriptions of the phase 1 habitat types recorded.

Area 1 contained a small area of semi-improved acid grassland. Here abundant Yorkshire fog (*Holcus lanatus*), Rough meadow-grass (*Poa trivialis*), Creeping buttercup (*Ranunculus repens*), Common ragwort (*Senecio jacobaea*), Gorse (*Ulex europaeus*), Dwarf gorse (*Ulex minor*) and Cock's foot (*Dactylis glomerata*) was recorded with frequent or occasional Autumn hawkbit (*Leontodon autumnalis*), Black medic (*Medicago lupulina*), Trailing saint john's wort (*Hypericum humifusum*), Selfheal (*Prunella vulgaris*) and Common bird's-foot-trefoil (*Lotus corniculatus*). There were lots of crickets in this area with Gatekeeper butterflies, Common blue butterflies and blue-tailed damselfly. Along the hedgerow there was a few examples of Bell heather (*Erica cinerea*), Compact rush (*Juncus conglomeratus*) and Broom (*Cytisus scoparius*). This area was fenced off from the remaining area 1 and was rabbit grazed.

The remaining of area 1 was disturbed grassland with Nettle (*Urtica dioica*), Teasel (*Dipsacus fullonum*), Bramble (*Rubus fruticosus* agg.) and Curled dock (*Rumex crispus*). On the path and disturbed areas, around livestock feeders Scentless mayweed (*Tripleurospermum inodorum*), Spear thistle (*Cirsium vulgare*), Stork's-bill (*Erodium cicutarium* agg.), Creeping thistle (*Cirsium arvense*), Scarlet pimpernel (*Anagallis arvensis*), Redshank (*Persicaria maculosa*), Fat hen (*Chenopodium album*), Perennial sow thistle (*Sonchus arvensis*), White melilot (*Melilotus officinalis*) and a Cudweed (*Filago sp.*) was found. There was a clump of Scott's pine trees where the shady conditions meant that not much ground flora was present.

The hedgerow which ran along this area and the track contained Gorse, Elder (*Sambucus nigra*) and Bramble before becoming a line of Scott's Pine with some Bramble underneath.

Area 2 contained previously dug pits where historic excavations had taken place. One of the four pits was largely bare sand with mosses, lichen and disturbed vegetation including Yorkshire fog (*Holcus lanatus*), Red fescue (*Festuca rubra*), Sheep's sorrel (*Rumex acetosella*), Creeping thistle (*Cirsium arvense*), Great Mullein (*Verbascum thapsus*), Dwarf gorse (*Ulex minor*) and Stork's bill (*Erodium cicutarium* agg.). The sides of the pit had scrubby vegetation with Gorse (*Ulex europaeus*), Nettle (*Urtica dioica*), Bramble (*Rubus fruticosus* agg.) and Red campion (*Silene dioica*).

The remaining pits were Gorse dominated but also contained Silver birch (*Betula pendula*), Bramble and Bracken (*Pteridium aquilinum*).

The grassland in-between the two pits was short, rabbit grazed semi-improved acid grassland and contained mosses, Creeping cinquefoil (*Potentilla reptans*), Black medic (*Medicago lupulina*), White clover (*Trifolium repens*), Stork's bill, Common mouse ear (*Cerastium fontanum*), Common ragwort (*Senecio jacobaea*) and Autumn hawkbit (*Leontodon autumnalis*).

Area 3 was even-aged Silver birch (*Betula pendula*), woodland on a steep slope with an under story of Bracken (*Pteridium aquilinum*) and occasional Bramble (*Rubus fruticosus* agg.) There was a Pedunculate Oak (*Quercus robur*) tree at the boundary of this area with the track.

Area 4 was a grassy slope dominated by Rough meadow-grass (*Poa trivialis*) with Common ragwort (*Senecio jacobaea*), Yorkshire fog (*Holcus lanatus*), Autumn hawkbit (*Leontodon autumnali*), Common mouse ear (*Cerastium fontanum*), Spear thistle (*Cirsium vulgare*), White clover (*Trifolium repens*), and Small-flowered crane's bill (*Geranium pusillum*). The area is rabbit-grazed with some areas of bare sand. This area becomes Bracken (*Pteridium aquilinum*) dominated, as shown on the map.

Area 5 was a maze field that abuts the SSSI/SAC/SPA as shown in photographs 1 and 2.

Photo 1: SSSI/SAC/SPA abutting the maze field

Photo 2: SSSI/SAC/SPA abutting the maze field

Area 6 was a large area of improved grassland. It varies between Perennial rye-grass (*Lolium perenne*) to Rough meadow grass (*Poa trivialis*) dominated. There is abundant sheep's sorrel (*Rumex acetosella*) with Yorkshire fog (*Holcus lanatus*), Creeping buttercup (*Ranunculus repens*), Yarrow (*Achillea millefolium*) and Creeping thistle (*Cirsium arvense*). There is an area of damp grassland within this area that contains Compact rush (*Juncus conglomeratus*) and Gorse (as shown in photo 3). The whole area is horse grazed.

A small area of SNCI falls within this area which is Silver birch (*Betula pendula*) woodland with Yorkshire fog, Cock's foot (*Dactylis glomerata*), Nettle (*Urtica dioica*), Bramble (*Rubus fruticosus* agg.) and Compact rush. This is shown in photo 4.

There is a hedgerow either side of the track in this area. The northerly hedge is Gorse dominated with Willow (*Salix sp.*) and Silver birch.

Photo 3: Damp Area

Photo 4: SNCI

Area 7 was an area that contained evidence of ploughing with abundant flax, suggesting that this was a crop in previous years. Other areas contained abundant Perennial rye-grass (*Lolium perenne*) and Yorkshire fog (*Holcus lanatus*). There was a scattering of Scott's pine trees. A wide range of arable weeds was present, including the following:

Red Fescue	*Festuca rubra*
Perennial Sow-thistle	*Sonchus arvensis*
A Cudweed	*Filago* sp.
Common Ragwort	*Senecio jacobaea*
Creeping Thistle	*Cirsium arvense*
Sheep's Sorrel	*Rumex acetosella*

Small-flowered Crane's-bill	*Geranium pusillum*
Wall Speedwell	*Veronica arvensis*
White Clover	*Trifolium repens*
Perennial Sow-thistle	*Sonchus arvensis*
Common Ragwort	*Senecio jacobaea*
Common Stork's-bill agg.	*Erodium cicutarium* agg.
Autumn Hawkbit	*Leontodon autumnalis*
Ribwort Plantain	*Plantago lanceolata*
Spear Thistle	*Cirsium vulgare*
Curled Dock	*Rumex crispus*
Rough Meadow-grass	*Poa trivialis*
Autumn Hawkbit	*Leontodon autumnalis*
Bracken	*Pteridium aquilinum*
Yarrow	*Achillea millefolium*

There was a mature hedge where the field bordered the road. This was Gorse dominated with some Willow (*Sallix sp.*), Bramble (*Rubus fruticosus* agg.) and Bell heather (*Erica cinerea*).

Area 8 was a Bracken (*Pteridium aquilinum*) dominated area with a patch of Scott's pine.

4. Protected Species Assessment

Bats: The only feature that may be used by bats as a roost in the survey area was the Pedunculate oak at the edge of the Birch woodland in area 3. The two recorded bat roosts are quite far away from the survey area, but it is possible that bats may be the using the area for feeding. However, there are more suitable areas for feeding in near-by SNCIs and the adjacent SSSI/SAC/SPA.

Breeding birds: Sky larks were heard and seen in the fields of area 6. This is a ground-nesting bird and this species is likely to be breeding in these fields. A short-eared owl was also witnessed flying over these fields.

There are some nesting opportunities for birds in the hedgerows along the track and road. However, better nesting areas would be in the gorse-dominated areas in area 2 and within the birch woodland in area 3.

The Dartford warbler is the most likely to be present of the five birds listed in the SPA directive. However, there are no records for this bird in the data search from DERC. The Dartford warbler utilises gorse bushes. It is possible that nightjars may feed over the large fields, hunting for insects, but again there are no records for this species.

Reptiles: There is some suitable habitat for Common lizards, Adders and Slow worms in areas 2 and 3. It is possible the reptiles would use area 4 as a corridor to move between suitable habitat in the SSSI/SAC/SPA and this area. The sandy area may be suitable for Sand lizards. However, this area is so small it is unlikely to support a population.

Badgers: A large badger sett of around 10 holes was found within the birch woodland. Snuffle holes which badgers make when feeding was noted in the short grassland area within area 2.

There appeared to be recent digging activity around some holes to suggest that the sett is active, as photos 5 and 6 illustrate.

Photo 5: Badger sett with recent activity

Photo 4: Badger sett

6. Summary and Recommendations

The survey area has been modified through agricultural improvements but it does contain 'clues' to its acid soil pH and past heathland environment. There were several plant species recorded that like acidic and/or sandy soils including Bracken, Gorse, Bell heather, Stork's bill and Sheep's sorrel. However, the habitat is much inferior in wildlife-terms to what it would have been in the past.

This survey suggests that no further survey work should be required prior to planning permission but if permission is given the following recommendations should be heeded:

- Consultation with Natural England on this proposal must be made at the earliest opportunity, due to the site's proximity to the Horton Common SSSI and a part of the Dorset Heaths SAC/SPA. This report should be made available to them.
- A suitable buffer area between the extraction area and the SSSI/SAC/SPA should be set with Natural England. This area should include the area of SNCI and should be managed as sympathetic habitat to the SSSI/SAC/SPA. At the moment the habitat that does border the SSSI/SAC/SPA is not sympathetic, especially the maze field.
- The Birch woodland in area 3 should be retained as a screening feature, in this way the badger sett, possible bat roost in the oak tree and possible bird nesting areas will be retained. If this area is destroyed a detailed badger survey will be required. The existing sett will have to be closed and an artificial sett built in a safe, protected area near-by. There will also have to be a bat emergence survey conducted on the oak tree if this is to be removed.
- Any scrub, hedge or tree removal on the site should be conducted outside of the bird breeding season (March – end August). This will ensure that no nesting birds are disturbed.
- No extraction from fields in area 6 should start during the bird breeding season so that no skylark nests are destroyed. The skylark is a Red List species (birds of high conservation concern in Europe) and consideration should be given to providing suitable nesting area around the extraction site.
- If extraction is to occur within area 2 a reptile survey needs to be set up in areas 1-4, this should be timed to continue into a reptile translocation if necessary. It a reptile translocation is necessary a translocation plan with a nominated receptor site will have to be drawn up and agreed with Natural England.
- A management plan should be drawn up for habitats on the site during abstraction. This will ensure suitable management of the buffer strip and suggest management around the extraction to provide nesting sites for skylarks as well as possible reptile areas.
- Any replacement soil that is returned to the site post/during extraction must be similar to the sand/acid soil presently on the site.

- If permission is given for mineral extraction full consideration should be given to returning the area to heathland post-extraction. If this is to be achieved a full management plan would be required for heathland re-creation.

abbas ecology

14 Cowleaze
Martinstown
Dorset
DT2 9TD

t. 01305 889855
m. 07500 781973
e. info@abbasecology.co.uk
w. abbasecology.co.uk

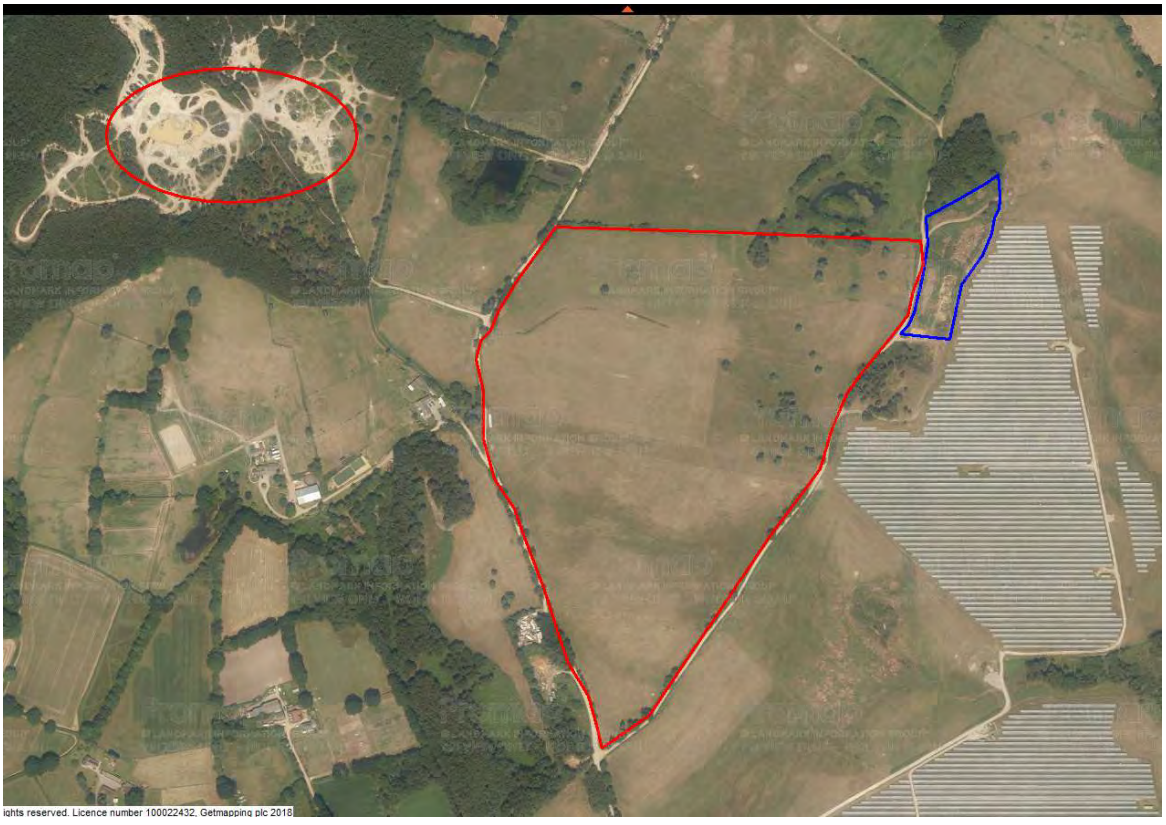
Simon Munnings
Dorset Property Surveys
09/10/2018.

Re: Mineral extraction proposal W of Redmans Hill.

Dear Simon,

Thank you for your request to visit site and detail initial impressions in a letter; you have stated that "The intention would be to strip topsoil and then remove sand so as to completely re-form the contours to end up with a valley running from a high point by the gate in the southernmost corner down to the pond that lies a short distance to the north of the designated area. The sides of the valley would slope from the tracks along either side of the triangle, so the perimeter tracks and hedges would be maintained. There would be some Scots Pines lost within the area".

The site layout sent to me is shown below: The Slurry pits site at Redmans Hill is edged in blue to the East, with the Riddles Pit site ringed in red to the West. Central grid reference is SU 067 073.



I walked around the site (red triangular outline) on 5th October, both within the fields and around the entire margin. I made the following outline observations.

- The grassland appears relatively species poor, although the timing means that many species will not have been visible. It appears to be regularly grazed; horses were present in one field. The Dorset notable species, *Erodium cicutarium*, Stork's-bill was quite frequent in places in the grassland.
- Sileage bales were piled outside one field; it was not clear if this had been cut on site.
- There are a number of semi-mature Scots pines, probably less than 30 years old. Some were in small clumps with others solitary. None of those examined appeared to have crevices suitable to provide habitat for roosting bats, although only a few were checked.
- One pine at least had a large nest of sticks near to the top; this might be a corvid, or more likely a raptor. A pile of woodpigeon feathers was found beneath a tree about 30 metres to the East.
- Hedgerows alongside track edges were present in places, although there were few sections much in excess of 20 metres. Most of those with strong woody growth appeared to be composed of *Salix caprea*, Goat willow, recently flailed. There were also some sections with gorse growing along field boundaries, and elder, ash, hawthorn, oak, birch and Grey willow were present as shrubs or more often marginal trees.


Nest in Pine tree


Some hedges with woody growth.

My impression was of a site unlikely to have any exceptional botanical interest, although a survey visit at a better time of year would be needed to confirm this. The grassland may have been improved at some point in the past but would probably be classified now as poor semi-improved.

Bats could forage over the open grassland and pine trees, and may find crevice roosts in damaged trees, although none were seen during the visit. Insect populations appear to be good, as sand martins nesting nearby have been observed foraging over the N part of the site. Other birds are likely to use the pine trees, hedges and marginal trees and shrubs as nest sites.

Reptiles could use the grassland in parts of the site with dense hedgerows, although they are unlikely to be found far into the open grassland which would not provide cover. Badgers are likely to cross the grassland and some signs were seen during the walk round. No evidence of a badger sett was seen, although one scrubby hedgerow area running E – W was not explored.

I recommend that a Preliminary Ecological appraisal survey is carried out and recorded; this would visit every part of the site and allow a fuller assessment of potential ecological issues. It would also provide a plan for any further work needed to assess impacts to protected species using the site at different times of year.

Kind regards

Jonathan Crewe
Principal Ecologist
Abbas Ecology.

abbas ecology

31 Hankinson Road
Bournemouth
Dorset
BH9 1HW

t. 01305 889855
m. 07970 847344
e. info@abbasecology.co.uk
w. abbasecology.co.uk

Abbas Ecology

Phase 1 Habitat Survey at:

Riddles site near Redman's Hill, Horton Common, Dorset.

For: Mr Andrew Cooper.

Report prepared by: Jonathan Crewe, ACIEEM, B.Sc. (Hons)

January 2018:

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01 OF 03

01: Simon Munnings, Dorset Property surveys
02: Mr Andrew Cooper
03: Abbas Ecology

This report is the responsibility of Abbas Ecology Ltd.
It should be noted, that whilst every effort is made to meet the client's brief,
no site investigation can ensure complete assessment
or prediction of the natural environment

Abbas Ecology
14 Cowleaze,
Martinstown
Dorset
DT2 9TD

Tel: 01305 889 855/07970 847344

E-Mail: info@abbasecology.co.uk

Reference Number: AE/3668B

Executive Summary

Survey date: 06.03.2017, 25.01.2018
Location: Riddles site, Redmans Hill, Horton Common, Dorset
Grid Reference: SU 062 076
Surveyor: J. Crewe

This survey was required to support a planning application for mineral extraction from this site. The larger Western section was used to provide material to build the Woodlands Park golf course to the NW. It is understood that the Eastern section was cleared with a view to removing material but that this did not take place.

The Western section contains a large depression with a pond in the bottom; this varies in size with seasonal conditions but is not thought to dry out. The level land surrounding has a network of tracks through some sections of heath; the site is used for 4 wheel drive off-roading. There is secondary birch woodland beyond the open sections to the W and N.

The Eastern section is mostly level, with some birch woodland on steeper slopes to the E and N. The land appears to have been used as a tip for miscellaneous items, including building materials, soils including some chalky spoil and a pile of Christmas trees. Most of the site is very bare; there is semi improved grassland to the SE, and it is possible that this site was originally grazing land rather than heath.

The survey visit found potential for reptiles in remnant heath areas to the West. The site is known to have records of rare heathland plants characteristic of bare ground on damp heaths. The heathland specialist butterfly, Silver studded blue, could occur here, along with the declining Grayling. Although bats could forage over the site the majority of the ground cover is bare, disturbed soil. It is thought that the site will have negligible importance for foraging bats. The pond could be suitable for Great Crested newts, although the surrounding terrestrial habitat is not good for this species. However, GCN will cross arable fields, so should not be ruled out.

Protected species summary table:

Bats: Commuting and Foraging – negligible potential	**Breeding birds: Low potential**	**Reptiles: High potential.**
Badgers: N	**Protected amphibians: moderate potential in pond**	**Bap Habitat: Remnant heath**
Otters and water voles: N	**Hedgehogs:** N	**Dormice: N**

Further work is recommended to assess reptile use of the site and to confirm that Great Crested Newt are not present in the pond.

1. Scope

Survey

A phase 1 survey looks at the area to assess its likely value for protected species and other wildlife. It is not a specific survey for any one species and looks for general habitat types but it will identify the need for further survey work if required.

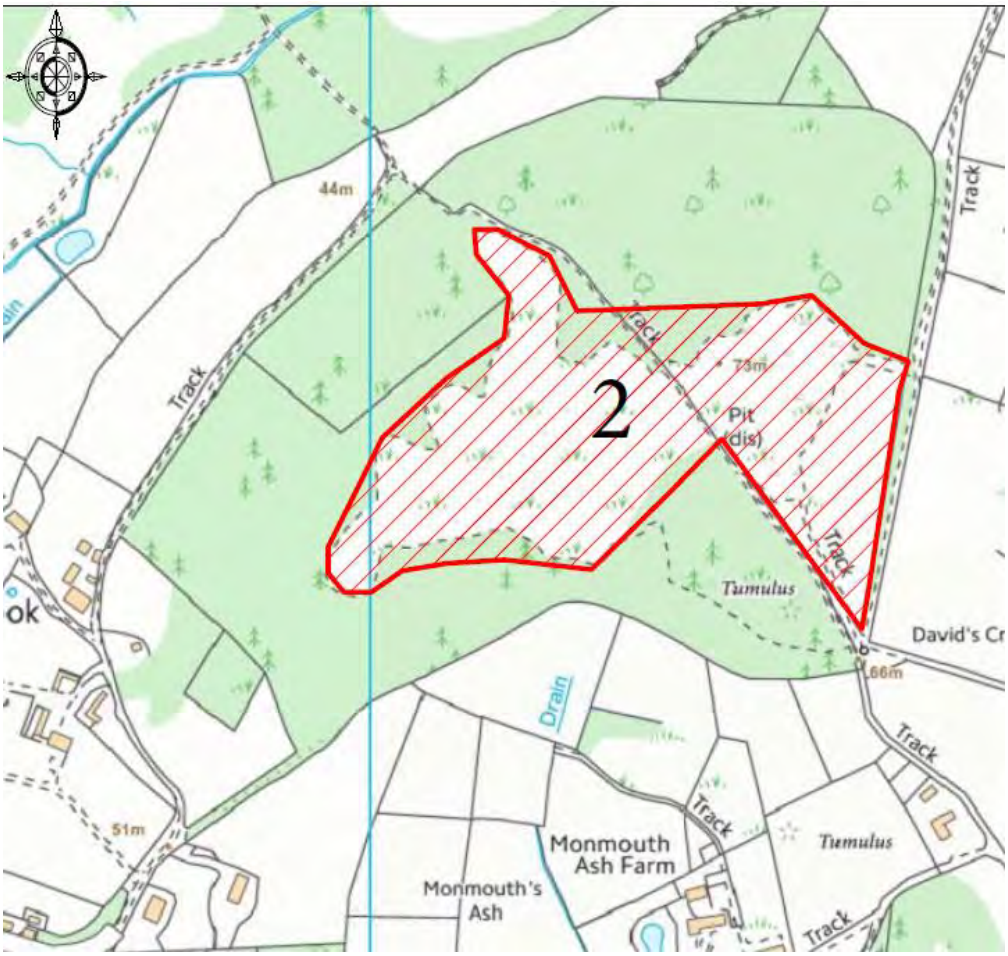
Site

The site consists of approx. 6 Ha of land to the North of Monmouth Ash Farm. There are 2 parcels of land either side of a footpath running approx. N/S. Gravel was extracted from the larger Western section and used in landscaping on the Woodlands Park golf course to the NW, leaving a fairly steep sided pit with a permanent water body at the bottom. The smaller Eastern section is mostly bare ground, with a number of mounds consisting of dumped spoil of various kinds.

Plan

The applicant wishes to quarry gravel from as much of the site as possible, creating a wider and shallower basin suitable for restoration as heath and acid grassland with the pond remaining as a feature. It is understood that most of the surrounding birch woodland would remain.

Aerial view of the site; the light coloured areas show the bare ground and extensive 4WD tracks.

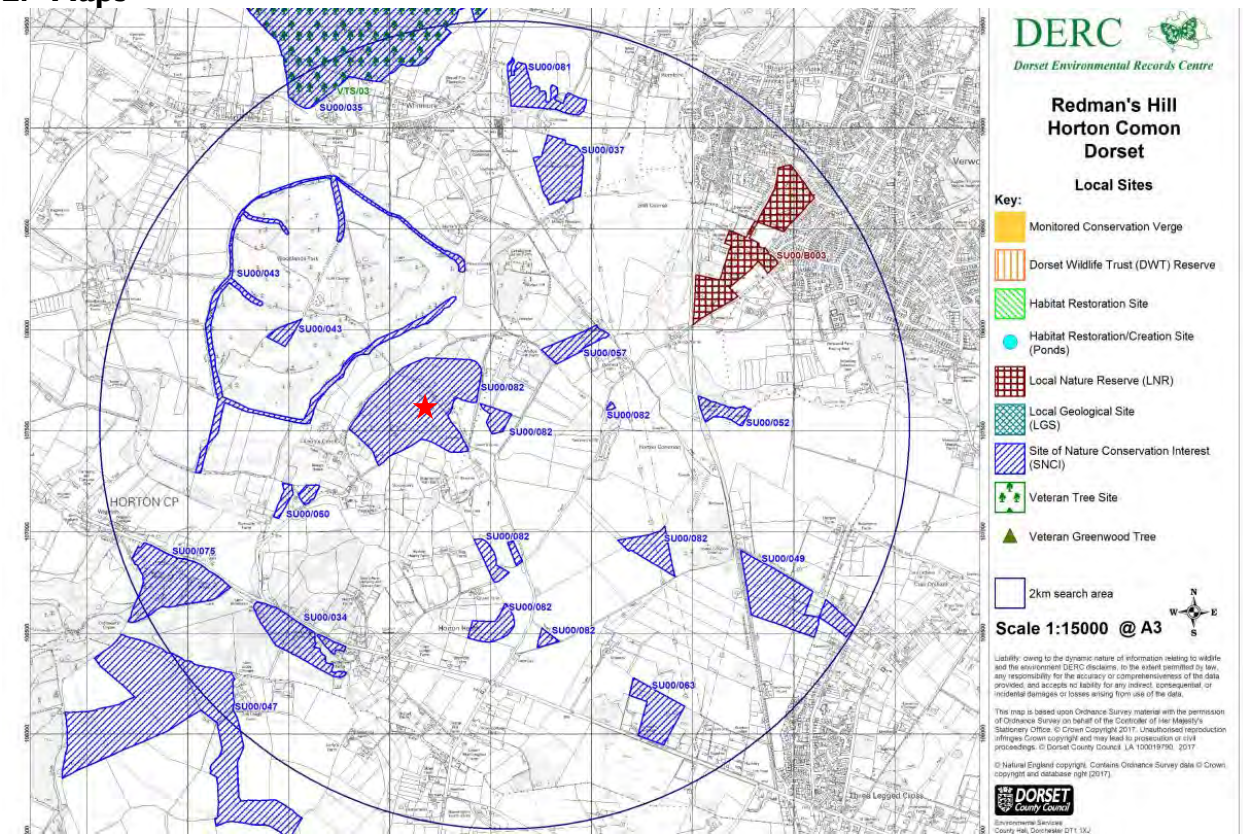


Site edged in red on original Ordnance survey plan.

1. **Species records:** Species records within 1 km for this site have been obtained from Dorset Environmental records centre. In addition, maps have been obtained showing local Sites of Nature Conservation Interest (SNCI's) within 1 km. Significant records as are given below:

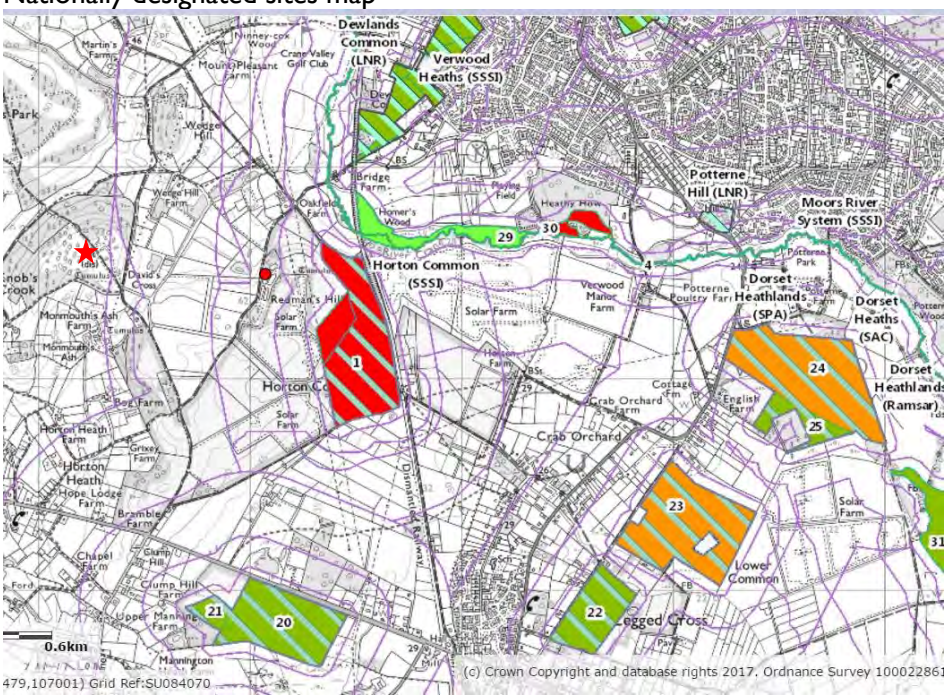
- Great crested newt breeding at a site to the N
- 5 of the 6 native reptiles found within 1km, including the European Protected species, Sand Lizard.
- 4 bat species recorded locally
- Numerous records for Badger locally
- Otter recorded locally.
- Silver studded blue, Grayling and Silver Washed Fritillary butterflies recorded within 1km.
- A long list of Dorset notable plants recorded from the area.

2. Maps



Local sites map – numerous local SNCI sites. Red star shows site location, within SNCI SU00/082.

Nationally designated sites map



Nationally designated sites map from MAGIC: Riddles site shown by red star.

There are no SSSi sites within 1km, although the Horton Common SSSi to the East and the Crane River SSSi to the NE are little over 1km away. Horton Common is a Dorset Heathlands site but it is not thought that the type of development proposed here is likely to impact the SSSI in any way.

3. Methodology

Equipment

- Camera
- Binoculars

The entire site was surveyed for protected species, and for the potential for protected species. Habitat features of interest were also noted. Species looked for included:

Bats: Any features that were likely to be used by roosting, foraging and commuting bats were noted.

Breeding Birds: Areas suitable for use by nesting birds in the marginal trees and hedgerows were noted. Use by ground nesting birds was considered.

Reptiles and Amphibians: Habitat features that could be suitable as hibernacula or feeding/resting areas were looked for.

Badgers: Any area that could be used for feeding or could potentially contain a Badger sett was surveyed and any signs noted.

Otter and Water voles, Dormice: The surveyor looked for habitat features suitable for these species.

Habitat: The habitats across the site were considered in terms of habitat type and quality and as potential feeding or breeding sites for protected species.

Invasive species: Vegetation was identified to species level where possible and invasive species noted.

Legislation relating to the species above can be found in Appendix 1 of this report.

4. Results and Conclusions

Bats: The site is very open, with patches of young birch in places and margins of young secondary birch woodland. There are occasional larger pines. Much of the ground is heavily rutted from recent disturbance and offers no invertebrate habitat; bats are unlikely to find much prey if foraging here and it is thought to have negligible potential for foraging bats. None of the trees present appeared to have high potential for crevice roosts for bats.

Open depression with pond

Small area of remnant heath to the West

Reptiles: The site has very high potential for at least common reptiles in remnant heath and patches of heather on the sides of bare areas. Conditions here could be suitable for Sand lizard, *Lacerta agilis*, which likes extensive bare areas with mature heather nearby. The semi improved field to the East of the site is included within the proposed mineral site; this has suitable grassland for common reptiles. The level of disturbance through activities including 4 wheel drive off-roading and clay pigeon shooting, may be too much for sand lizard, although slowworms can persist in areas with high disturbance. This needs to be established by survey work and recommendations are made below.

Examples of potential reptile habitat on site

Remnant heath on the S margin.

Semi improved grassland to the East.

Red stars show some of the parts of the site where there could be extant reptile populations.

Great Crested-Newt: The pond on site could be used by this species; a summer visit found some aquatic vegetation. There are records within 2km of the site. Recommendations are made below.

Breeding birds: There are potential nest sites for birds in the trees and scrub on the site. There may be sufficient heathland habitat to support breeding Dartford warbler or other heathland specialists. Further work is recommended below.

Badgers: No evidence of badger presence was found on the site.

Other Protected species: The site has no habitat suitable for Dormice. The pond is too isolated in open ground to attract Otters or Water vole.

Habitats: Most of the vegetation in the Western area was remnant heath, with Bracken, Common and Bell heather and European Gorse frequent. The rare Coral necklace has been found on bare ground in this area. This plant has been regarded as a New Forest specialist and could have been brought here in 4WD tyre treads. The Eastern section has some semi improved grassland; this did not appears to be very herb rich

Invasive Species: None observed.

Constraints
The time of year meant that most annual plant species could not be seen.

5. Recommendations

- Further work is required to assess the use of the site by reptiles; a full reptile survey should be carried out to assess the species and numbers present and a mitigation strategy written if reptiles are present. This will involve site visits to check on reptiles basking in the open and using refuges which will be put out on site in the spring.

- Further assessment of the breeding bird interest of the site will take place during reptile survey visits, including checks for foraging or breeding Dartford Warbler.

- Plants on site will be recorded during reptile survey visits. Excavations to quarry gravel will remove bare and disturbed ground habitat, as well as some heathland sections and semi improved grassland. The applicant has offered to remove and store topsoil so as to retain the seedbank. A mitigation plan will be prepared to give a method of works for this.

- The pond should be checked for Great crested Newt using eDNA sampling. This tests the water for DNA from Great Crested Newt, which can persist in the water after the newts have left the pond.

J Crewe 29/01/18

Appendix 1: Legislation (summary)

5.1 Wildlife Protection legislation

Mammals:

Otters, dormice, water voles, and **all bat species** are fully protected under section 9 (5) of the Wildlife and Countryside Act 1981 (as amended). According to this act it is an offence to:

- Intentionally capture, kill or injure one of these animals
- Intentionally or recklessly damage, destroy or obstruct access to any structure or place used by one of these animals for shelter or protection
- Intentionally or recklessly disturb an animal whilst it is using this place
- sell, offer for sale or advertise for one of these animals live or dead

Designated as European Protected Species' **otters, dormice,** and **all bat species** receive additional protection from the Conservation of Habitats and Species Regulations 2010, under Schedule 2 which implements the EC Directive 92/43/EEC in the United Kingdom. In accordance with this act, it is an offence to:

- Deliberately capture or kill a European Protected Species
- Deliberately disturb a European Protected Species
- Damage or destroy the breeding site or resting place of a European Protected Species

The **greater and lesser horseshoe bats**, **barbastelle** and **bechstein's bats**, are also listed under Schedule 2 of the Conservation of Habitats and Species Regulations. Areas which support populations of these species can therefore be considered for designation as a Special Areas of Conservation **(SACs).**

Birds:

Please Note: All breeding birds and their nests are protected under the general protection of Section 1 of the Wildlife and Countryside Act, 1981 as amended. This makes it an offence to disturb breeding birds.

Reptiles and Amphibians:
Slow worms, adders, grass snake, viviparous lizard, are protected against intentional killing, injuring or sale under section 9 (1) of the Wildlife and Countryside Act 1981 (as amended).

Great crested newt, **natterjack toad**, **sand lizard** and **smooth snake** are fully protected under section 9 (5) of the Wildlife and Countryside Act 1981 (as amended). These species also receive additional protection as **European Protected Species** under schedule 2 of the Conservation of Habitats and Species Regulations 2010, which implements the EC Directive 92/43/EEC in the United Kingdom.

Badgers receive protection from the Protection of Badgers Act 1992. According to this act, it is an offence to:

- to willfully kill, injure, take, possess or cruelly ill-treat a badger;

- to attempt to do so; or
- to intentionally or recklessly interfere with a sett.

5.2 Biodiversity and Geological Conservation - statutory obligations and their impact within the planning system, Part IV Conservation of Species Protected by Law, (Circular 06/05).

The National Planning Framework (NPPF, 2012) recognizes the above as an active document. With regard to the Natural Environment, NPPF states:

"development proposals where the primary objective is to conserve or enhance biodiversity should be permitted" and "*opportunities to incorporate biodiversity in and around developments should be encouraged*" (Para 118).

Also, the "*presumption in favour of sustainable development (paragraph 14) does not apply where development requiring appropriate assessment under the Birds or Habitats Directives is being considered, planned or determined*" (Para 119).

It encourages planning policies to "*minimise impacts on biodiversity and geodiversity by identify[ing] and map[ing] components of the local ecological networks, including the hierarchy of international, national and locally designated sites of importance for biodiversity, wildlife corridors and stepping stones that connect them and areas identified by local partnerships for habitat restoration or creation*" (Para 117).

Land at Horton Heath, Three Legged Cross

Hydrogeological Assessment

Site Address:

Land at Horton Heath
Horton Road
Three Legged Cross
Wimborne
BH21 6SD

Site NGR: SU 067 071

Prepared for:

Mr C Large
Wedgehill Farm,
Woodlands
Wimborne, Dorset
BH21 8LX

Chord Environmental Ltd

Report no.1150 /R1

October 2018

Chord Environmental Ltd
47 Clifford Street, Chudleigh, Newton Abbot, Devon. TQ13 0LE
info@chordenvironmental.co.uk
Company Registered in England & Wales No: 7812707

Land at Horton Heath, Three Legged Cross

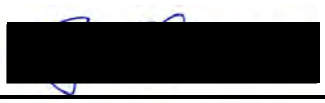
Hydrogeological Risk Assessment

Document Control Sheet

This report has been prepared with all reasonable skill, care and diligence within the terms of the contract with Mr C. Large incorporating Terms of Agreed work and taking account of the manpower and resources devoted to it by agreement with the client.

Chord Environmental Ltd. disclaims any responsibility to the client and others in respect of any matter outside the scope of the above.

The report is confidential to Mr. C Large. Chord Environmental Ltd. accepts no responsibility of any nature to any third party to whom this report or any part thereof is made known.

Prepared by:	John Evans MSc FGS CGeol	

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Chord Environmental Ltd
47 Clifford Street, Chudleigh, Newton Abbot, Devon. TQ13 0LE
info@chordenvironmental.co.uk
Company Registered in England & Wales No: 7812707

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1 Introduction

1.1 Background

Mr C Large of Wedgehill Farm, Wimborne, is looking to support the inclusion of land at Horton Heath, Three Legged Cross, within the Mineral Sites Plan for Dorset Bournemouth and Poole. The Mineral Sites Plan is in the process of a Public Examination and further information regarding the potential water related impacts associated with the proposed working of sand has been requested by the Planning Inspector.

The land comprises a triangle of land between David's Cross and Redman's Hill on Horton Heath (Triangle Site) and an area of previous working, Riddle's Pit, which lies to the west of David's Cross.

Chord Environmental Ltd have been instructed by Simon Munnings of Dorset Property Services on behalf of Mr Large, to undertake a hydrogeological risk assessment of the proposal and to address the concerns raised by the Planning Inspector.

This report places the sand extraction and restoration proposals in the context of the geological and hydrogeological site setting and identifies potential impacts on the groundwater environment within a hydrogeological risk assessment framework.

1.2 Scope and Approach

The following tasks were undertake:

- Data collection, review and interpretation.
- Preparation of conceptual understanding of the site.
- Preparation of a groundwater assessment.

1.3 Limitations

The conclusions and recommendations made in this report are limited to those that can be made on the basis of the collected and published information available and the results of the work should be viewed in the context of the range of data sources consulted. No liability can be accepted for information in other data sources or conditions not revealed by the information reviewed. Any comments made on the basis of information obtained from third parties are given in good faith on the assumption that the information is accurate; no independent validation of such information has been made by Chord Environmental Ltd.

2 Proposed Development

2.1 Overview

It is proposed to work the Triangle Site for sand in a single phase. After workings have ceased it is intended to restore the Site profile to a south-north trending valley shape that compliments the surrounding landscape with the land falling away toward the pond to the north. It is anticipated that there is in excess of 12m of workable sand deposit and that an average of 8m would be worked across the site.

It is proposed to work Riddle's Pit for the sand which underlies the terraced gravels for which it was previously worked. Standing water currently collects in the main pit and it is proposed to remove more material to form a shallow saucer type profile and restore with topsoil and grass. The resulting landscaping would improve local drainage and retain the pond feature.

No imported backfill would be involved for either restoration and no natural water features or watercourses are sited within the proposed working boundaries.

3 Environmental Site Setting

The Sites are located approximately 2.5km southwest of Verwood and accessed from Horton Road running between Three Legged Cross and Horton. The Sites are to the north of the Horton Road with one access track at Clump Hill opposite the Mannington T-junction and another access track further east.

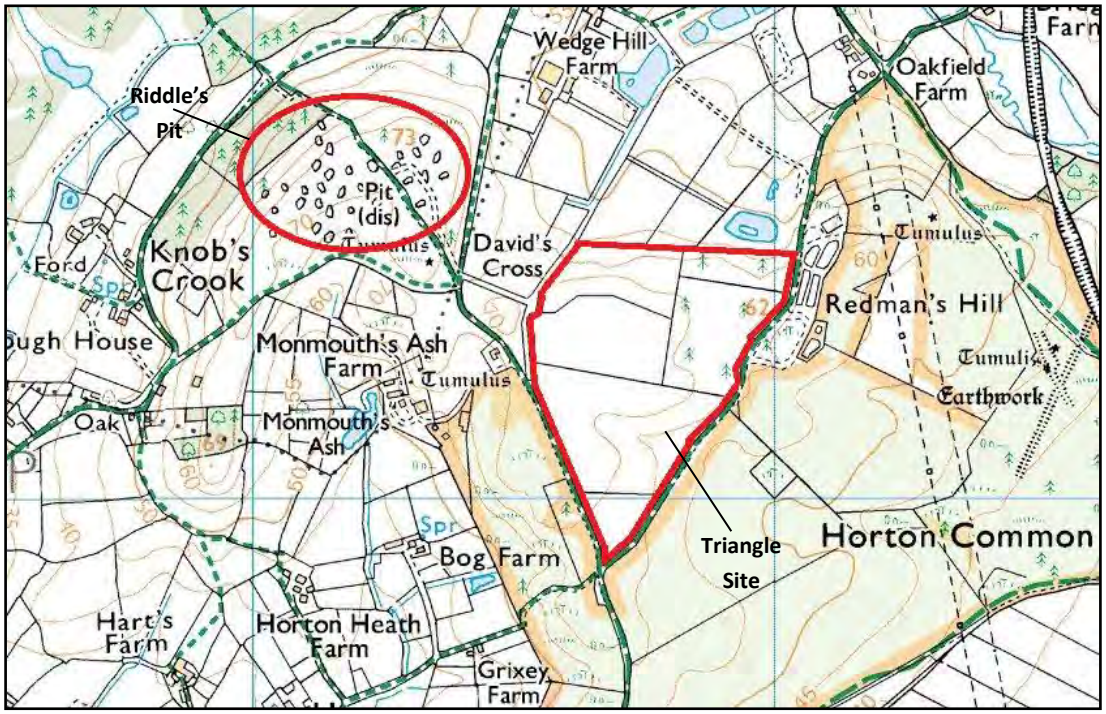

Figure 1 – Site Location Plan

The Triangle Site comprises unimproved grassland and Riddles Pit is an unrestored area of gravel working pits.

The sites are surrounded by agricultural land generally used for grazing. A large solar farm has been constructed to the east side of the Triangle Site and Redman's Quarry is sited at the northeastern boundary. Woodland surrounds Riddle's Pit and to the southwest of the Triangle Site.

3.1 Topography

The 1:25,000 scale topographic map for the area shows the Triangle Site on an elevated ridge of land at an elevation of c.69m above ordnance datum (m OD) at its western edge close to David's Cross. The land falls away relatively steeply to the north to c.50m OD at the site boundary and more gently away to the east and south.

Riddle's Pit lies on the same elevated ridge of land and has a maximum elevation of 73m OD. The land forms a coombe valley feature which falls away steeply to c.50m OD at Monmouth Ash Farm to the south and also falls away steeply to the north and west to c. 38m OD at an unnamed tributary which flows southward to the Uddens Water.

3.2 Hydrology and Drainage

No water features are present on the Triangle Site. A large pond (100m across) is present c.15m to the north of the Site and issues rise c.75m to the north of the western boundary which feeds a series of ponds at Wedge Hill Farm c.275m north of the Site. Both water features lie at a similar elevation of c.52m OD. An issue is also mapped at an elevation of c.50m OD, 200m to the southwest of the Triangle Site at Bog Farm. An area of wet heath lies c.450m to the east of the site beyond a sharp break in slope adjacent to the footpath.

The River Crane flows c.500m to the northeast of the Site where it changes direction from a southerly to an easterly flow.

An unnamed headwater issue rises at an elevation of c.58m OD at Monmouth's Ash Farm, c.150m south of Riddle's Pit and an unnamed tributary to the Uddens Water lies c.400m west of the Site.

3.3 Geology

According to the British Geological Survey (BGS) sheet for the district (Sheet 314, Ringwood), both sites are underlain by a covering of River Terrace Gravel deposits which are in turn is underlain by the Parkstone Sand Member of the Eocene Poole Formation. The River Terrace Gravel deposits comprise clay, silt and sand on gravel and are estimated to be up to c.3m thick beneath the Site. The underlying Parkstone Sand Member comprises unconsolidated and cross bedded, fine to medium sand and is up to 15m in thickness.

Figure 2 – Exposure of Parkstone Sand Member within adjacent Redman's Quarry.

The friable nature of the fine sands of the Parkstone Sand Member can be seen in Figure 2 above with the River Terrace Gravels overburden visible at the top of the picture.

Within the Poole Formation, the Parkstone Sand Member is underlain by the Broadstone Clay Member carbonaceous clay and the unconsolidated medium sands of the Broadstone Sand Member which are both between 5m to 15m in thickness.

An extract from the BGS geological map is provided in Figure 3 below.

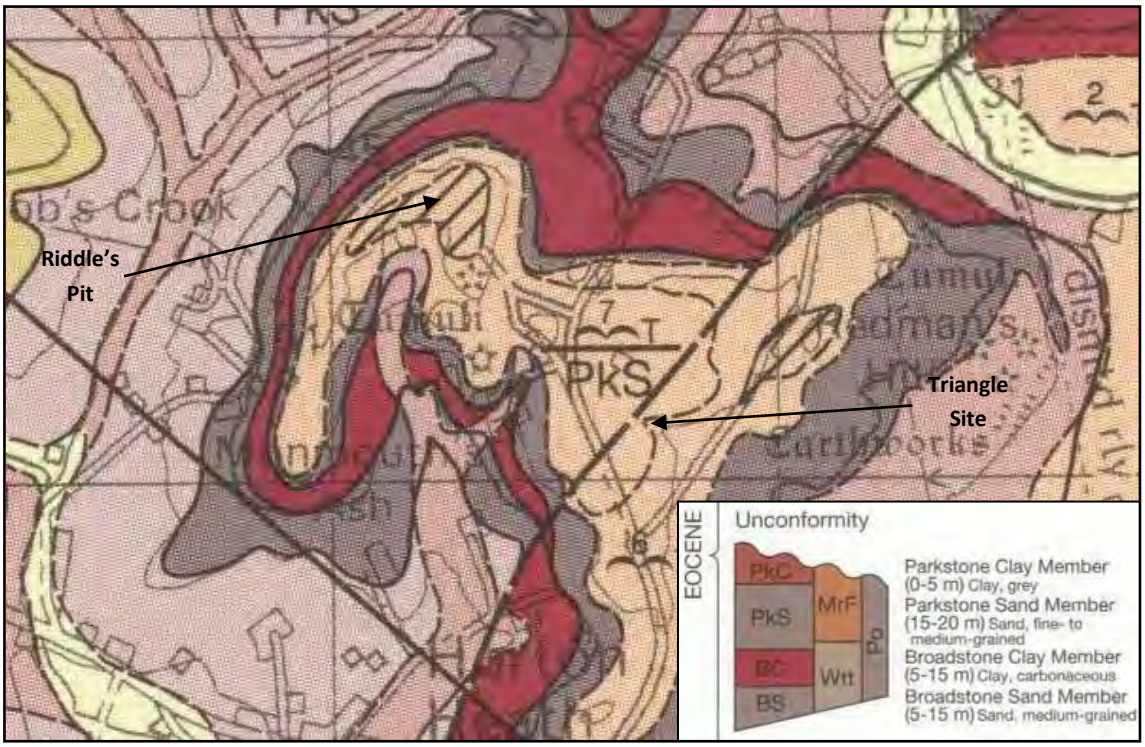

Figure 3 – Geology Map Extract from BGS Sheet 314

A geological fault is shown to run through the Triangle Site, trending northeast-southwest with down-throw to the southeast. The base of the Parkstone Sand Member to the west of the fault is mapped to vary from c.58m OD in the south to c.52m OD in the north however it is estimated that the strata is downthrown by approximately 5m to the east of the fault. The Broadstone Clay is estimated to be approximately 3 to 4m in thickness.

The boundary of the Parkstone Sand Member with the underlying Broadstone Clay Member is mapped to be approximately 50m north of the Triangle Site boundary.

3.4 Hydrogeology

The River Terrace Gravels and the Poole Formation strata are classified as Secondary Aquifer by the Environment Agency[1] and described as "permeable layers capable of supporting water supplies at a local rather than strategic scale, and in some cases forming an important source of base flow to rivers. These are generally aquifers formerly classified as minor aquifers."

[1] https://magic.defra.gov.uk/MagicMap.aspx

There are no licensed groundwater abstractions within 1 km of the Sites and the Sites do not lie within any published Source Protection Zones.

Groundwater movement within the unconsolidated sands of the Parkstone Sand Member will be dominated by intergranular flow. Without evidence to the contrary, groundwater levels are anticipated to follow the topographic gradient and decrease toward the north. Groundwater levels have been monitored beneath the adjacent Redman's Hill Quarry between July 2016 and July 2017. The collected data shows that groundwater levels vary between c.50m and 45m OD from south to north.

3.5 Sensitive Receptors

Horton Common Site of Special Scientific Interest (SSSI) lies 450m to the east of the Site and forms part of the designated Dorset Heath Special Area of Conservation (SAC) and the Dorset Heathlands Special Protection Area (SPA). The River Crane (Moors River System) lies approximately 480m to the northeast and is also designated as a SSSI.

The designated Horton Common area supports the range of heathland types from dry heath to wet heath and bog with plants and animals typical of these habitats, several of which are uncommon. The lower lying areas have wet heath with associated insects, grasses, mosses and mire type plants.

The boundary of the Horton Common SSSI is shown in Figure 4 below and partly overlaps the very northeastern edge of the Triangle Site.

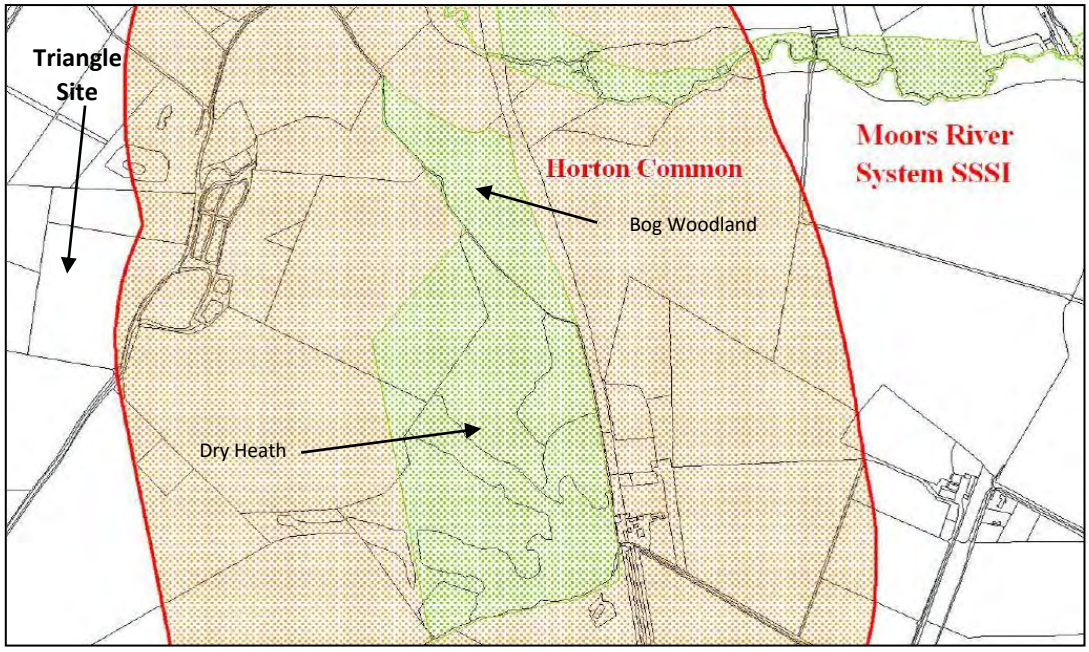

Figure 4 – Horton Common SSSI Boundary (Green Area)

4 Hydrogeological Conceptual Understanding

A hydrogeological conceptual understanding of the Site and its surroundings has been derived from a combination of available published information and site specific information for the adjacent Redman's Quarry.

The geological map of the area shows the Parkstone Sand Member sandstone to extend beneath the entire extent of both the Triangle Site and Riddle's Pit Site where it is shown to be underlain by the Broadstone Clay Member. A mapped northeast - southwest trending fault which down-throws the geology down by up to 5m to the east runs through the Triangle Site increasing the relative thickness of the Parkstone Sand Member on this side.

The local topography reflects the geology with the highest areas underlain by up to 3m of River Terrace Gravels and up to 15m of Parkstone Sand Member and the Broadstone Clay Member cropping out on, or at the base of, steep scarp slopes.

Rainfall recharges groundwater levels percolating through the unsaturated River Terrace Gravels and Parkstone Sand Member. Groundwater beneath the site is supported by the low permeability Broadstone Clay Member. Groundwater level monitoring beneath the neighbouring Redman's Quarry site to the east varies between c.50m OD in the middle of the Triangle Site and c.45m OD to the north.

Ponds and issues are present c.50m to the north of the Triangle Site and these are likely to be groundwater fed by seepage from the Parkstone Sand Member over the low permeability Broadstone Clay Member. These ponds are believed to be man-made as they only appear on maps later than 1983. Other areas of groundwater discharge from the Parkstone Sand Member include the headwater spring/issues to the south of Riddle's Pit at Monmouth Ash Farm, the spring/issues at Bog Farm c.200m southwest of the Triangle Site and an area of woodland bog within the Horton Common SSSI, c.450m to the east of the Triangle Site.

Although no groundwater monitoring boreholes have yet been installed within either the Triangle Site or Riddle's Pit, data collected from the neighbouring Redman's Quarry site and the elevation of the local springs, issues and ponds indicates that the Parkstone Sand Member deposit is predominantly unsaturated. Groundwater levels within the Parkstone Sand Member are likely to be close to the boundary with the Broadstone Clay Member.

5 Hydrogeological Assessment

A hydrogeological assessment has been prepared based on the findings of a review of desk study information and site specific information from the neighbouring Redman's Quarry. The assessment considers the potential of groundwater impacts to occur during the operational and restoration phases.

5.1 Triangle Site

During the operational phase, it is proposed to win an average of 8m of Parkstone Sand Member across the site. It is anticipated that there is in excess of 12m of workable sand deposit present. The levels of working will be above groundwater levels at all times leaving at least 1m of unsaturated Parkstone Sand Member in situ.

Restoration of the area would involve forming a south-north trending valley that compliments the surrounding landscape with the land falling away toward the pond to the north.

Rainfall currently drains freely through the unsaturated River Terrace Gravels and Parkstone Sand Member, recharging groundwater levels which rest on the low permeability Broadstone Clay Member. Groundwater appears to follow topographic gradient issuing to the pond and spring/issues to the north and issues to the southwest.

The proposed working of Parkstone Sand Member would reduce the thickness of the unsaturated zone underlying the site however the works would not alter the current distribution of groundwater flow to the surrounding identified water features.

5.2 Riddle's Pit Site

Riddle's Pit is an unrestored worked site which comprises several areas of working and a large drainage pond area. Given the elevation of the pond area it is likely that it is not groundwater fed but has become lined with fine material which prevents collected rainwater draining away quickly. It is proposed to remove more material from the existing workings at Riddle's Pit to form a shallow saucer type profile to improve the landscaping and drainage of the area.

Unsaturated Parkstone Sand Member underlies Riddle's Pit at a similar thickness to the Triangle Site. Less material is proposed to be removed within the Riddle's Pit area, leaving a significant thickness of unsaturated Parkstone Sand Member. Therefore it is considered that the proposed working and restoration would similarly not alter the current distribution of groundwater flow to the surrounding identified water features around Riddle's Pit.

If the pond feature is to be retained within the restoration it is likely that it would need to be lined with a similar fine material to that which is likely to be currently present, to facilitate the slow drainage of captured rainwater.

6 Conclusions and Recommendations

6.1 Conclusions

It is proposed to work areas of Eocene Parkstone Sand Member sand deposit at Land at Horton Heath (Triangle Site and Riddle's Pit), Three Legged Cross. It is anticipated that there is in excess of 12m of workable sand deposit and that an average of 8m would be worked across the Triangle Site. Restoration of the Triangle Site would involve forming a south-north trending valley shape that compliments the surrounding landscape with the land falling away toward the pond to the north.

It is proposed to remove more material from the existing workings at Riddle's Pit to form a shallow saucer type profile and restore with topsoil and grass. The resulting landscaping would improve local drainage and retain the pond feature.

The Parkstone Sand Member aquifer supports groundwater flow to water features including ponds, springs/issues and a woodland bog area within the Horton Common SSSI which forms part of the Dorset Heath SAC.

A hydrogeological conceptual model and assessment has been prepared to determine the potential effects the proposed operational and restoration phases may have on the groundwater environment and the environmentally sensitive designated area. For both the operational and restoration phases, it is not anticipated that there will be a significant change to the distribution or volume of groundwater recharge compared to the current unworked state. Groundwater flow will be able to continue beneath the site and the hydraulic gradient will remain similar to that of the unworked state.

6.2 Recommendations

It is recommended that groundwater monitoring boreholes are installed to establish the depth of the Parkstone Sand Member deposits and the elevation of groundwater across the proposed working sites.