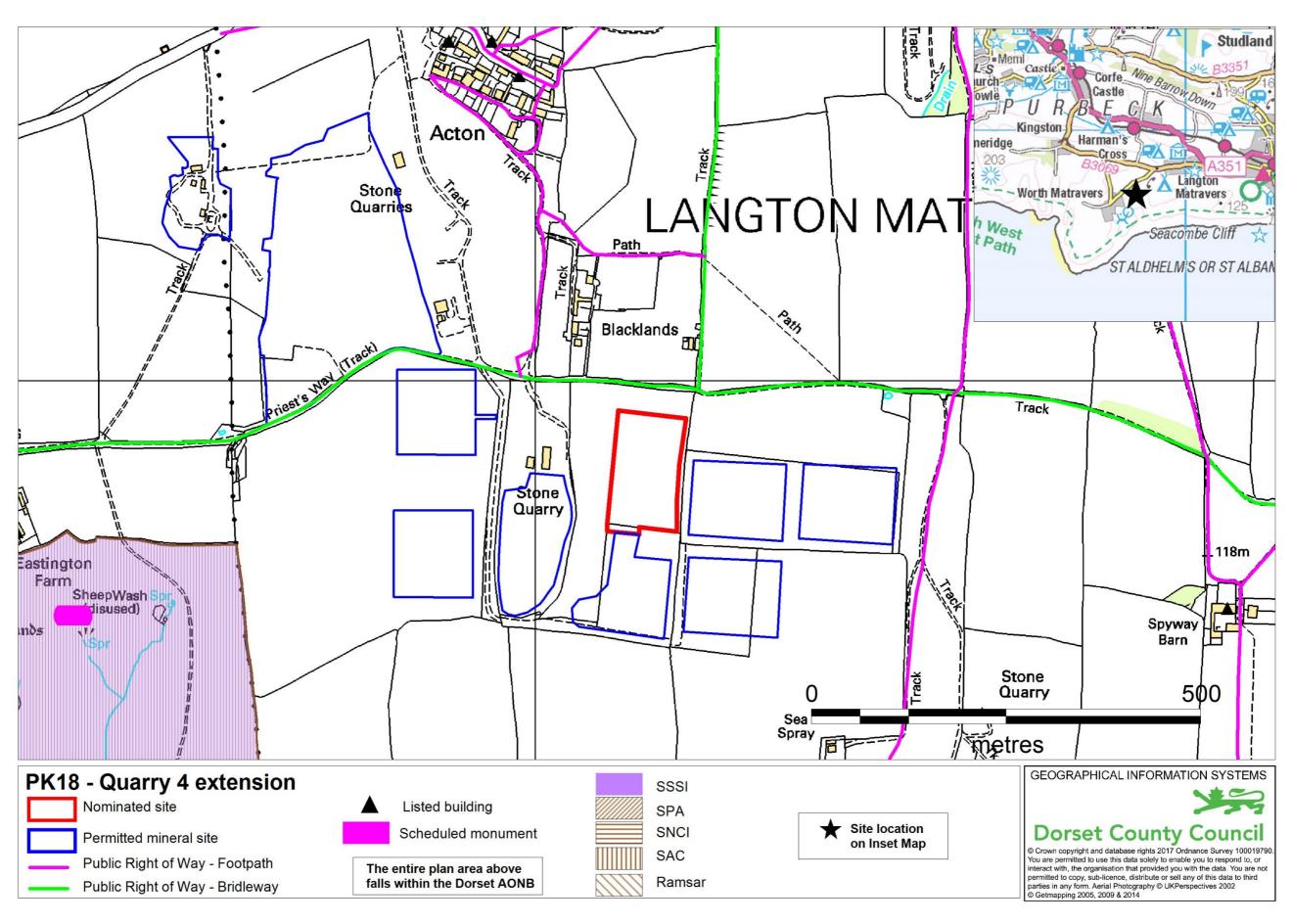
Site Assessment of PK18 - Quarry 4 Extension



Site Assessment of PK18 – Quarry 4 Extension

Site Information

Site Location	Land to the north of Quarry 4, Quarry Field, Acton, Swanage, Dorset and south of Priests Way Grid Reference SY 984 785
District/Borough	Purbeck District Council
Parish/Town Council	Worth Matravers CP
Site Nominee/Owner Landownership issues? Any Mineral Operator interest	National Trust No known issues – adjacent to existing site
Agent	Land & Mineral Management
Mineral Planning History Is the site an extension to existing site? Has it been considered for minerals development in the past? Partly worked?	Extension to existing site – no known issues. Not known.
Legal or time-related constraints	None known.
Access to markets?	As for current workings.
Is there geological evidence of the presence and viability of the mineral?	Adjacent to existing site.
Development proposed	Extraction of Purbeck Limestone – proposed extension to Quarry 4, Acton. Current workings at Quarry 4 are expected to be completed around 2019. When the current site is completed, proposed extension will be worked (subject to receiving planning permission). There are approximately 40,000 tonnes of stone in the extension area, which would extend the life of the quarry by around 20 years, to c. 2039. Site will be restored to low input limestone grassland, suitable for grazing use. This would be achieved using the un-usable stone and any other unwanted material, and the stripped soils. If necessary, a quarry face could be left for geological interest.
Description of Site	The site is approximately 1.1 ha, lying to the north of the current Quarry 4 and south of Priests way (although not adjacent to the right of way). It is a pastoral field, used for grazing.
Summary of Site Designations/Constraints	Site is within Dorset Area of Outstanding Natural Beauty and Purbeck Heritage Coast.
Relevant Local Planning Policy	Planning Purbeck's Future – Purbeck Local Plan Part 1 – Adopted November 2012 Policy LHH – Area of Outstanding Natural Beauty Policy LHH - Purbeck Heritage Coast
Residential properties and other land uses in the vicinity of the site	Residences within 80m and 100m to north and north west. Priests Way public path approximately 35m north of the site. Land proposed for allocation as quarry to the west of the site. Land allocated for quarrying to the east.
Traffic Generation & Access Considerations	As an extension with no intensification proposed, there will be no increase in traffic. The extension will continue to operate under the same conditions as the current Quarry 4 site.

Site Assessment of PK18 - Quarry 4 Extension

Appraisal of Site - Using Site Assessment Criteria as set out in The Bournemouth, Dorset and Poole Minerals Strategy 2014

In Appendix 1 (p. 242) of the Minerals Strategy a methodology for assessing sites nominated or identified for consideration as future quarry sites is set out. Each site is assessed against 25 criteria, C1 to C25, reflecting the potential environmental, economic and social impacts/benefits of its development. Assessment is qualitative, and each criterion is given a score as a colour, representing its expected impact, with or without mitigation. These criteria and their responses are set out below, along with further comments from relevant consultees.

Topic: Biodiversity.

SA Objective: To maintain, conserve and enhance biodiversity.

Criterion C1 - Impact on European/international designations.

D

No comment

Dorset County Council 7Nov13

Criterion C2 - Impact on areas used by Annex 1 bird species.

D

No comment

Dorset County Council 7Nov13

Criterion C3 - Impact on national designations.

D

No comment

Dorset County Council 7Nov13

Criterion C4 - Impact on protected species.

D

No comment.

Dorset County Council 7Nov13

Criterion C5 - Impact on local recognitions/designations, including ancient woodland and veteran trees.

D

No comment

Dorset County Council 7Nov13

Possible Mitigation:

An Environmental Impact Assessment will be carried out as part of any planning application, including detailed assessment of potential biodiversity impacts and appropriate responses and mitigation. Appropriate mitigation of any impacts will be required as part of any planning permission granted. No further action considered necessary at this stage.

Topic: Geodiversity

SA Objective: To maintain, conserve and enhance geodiversity.

Criterion C6 - Impact on geodiversity.

D

The Purbeck limestone group has an important association with the geology of the Jurassic Coast World Heritage Site. Working quarries in Purbeck have been known to yield important fossils, including dinosaur footprints. They are also of ongoing interest for the study of early Cretaceous stratigraphy.

These interests should be acknowledged with the assumption that geologists and the Jurassic Coast Team hosted by DCC will respond positively to any opportunities to recover fossils or record and study unusual features if they are discovered. In terms of geodiversity there is a presumption in favour of an appropriate level of quarrying activity continuing in order to sustain these ongoing interests.

Dorset County Council 6.11.2013

Possible Mitigation:

None specifically required.

Topic: Landscape

SA Objective: To maintain, conserve and enhance the landscape, including townscape, seascape and the coast.

Criterion C7 - Impact on designated landscapes.

C

Less significant adverse impact

Dorset County Council 23 October 2013

Site Assessment of PK18 - Quarry 4 Extension

Criterion C8 - What is landscape capacity to accommodate proposed development.

C

Potential cumulative adverse impacts on the amenity of users of Priests Way the major issue.

Dorset County Council 23 October 2013

Criterion C9 – Impact on historic landscapes.

D

The local landscape bears the imprint of previous quarrying dating from the Roman period onwards. It could be argued that the present site would be a continuation of the process, and if the site is to be restored afterwards the impact would be limited in time anyway.

Dorset County Council 4/11/2013

Possible Mitigation:

An Environmental Impact Assessment will be carried out as part of any planning application, including detailed assessment on the landscape impacts resulting from extracting mineral from this site, and identifying appropriate mitigation. No further action considered necessary at this stage.

Topic: Cultural Heritage

SA Objective: To maintain, conserve and enhance the historic environment (including conservation areas, historic parks and gardens and other locally distinctive features and their settings).

Criterion C10 - Impact on historic buildings.

D

This site is part of a characterful landscape of which the quarrying activities help to form its character. Buildings are not immediately adjacent to the site but derive character from the overall landscape. The quarry will have no significant impact on the listed buildings. Assessment D. Dorset County Council 22 October 2013

Criterion C11 – Impact on archaeology.



I consider that the site has high potential for below-ground archaeology and possibly industrial archaeological evidence of early quarrying. Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from category A to category D.

Dorset County Council 31/10/2013

Possible Mitigation:

Full assessment, including Environmental Impact Assessment, will be carried out as part of any planning application. This will include assessment of heritage impacts and identification of appropriate mitigation.

It is considered that the Development Management policies of the Minerals Strategy, especially Policy DM 7, together with the policy stance of the National Planning Policy Framework, provide adequate protection to any archaeology that may be found during development.

No further action considered necessary at this stage.

Topic: Water

SA Objective: To maintain, conserve and enhance the quality of ground, surface and sea waters and manage the consumption of water in a sustainable way.

Criterion C12 -Impact on hydrogeology or groundwater.

В

C

Criteria classification 'C' as on a Secondary Aquifer, rising to Class 'B' if significant adverse impact is determined for private or local water interests identified within 250m of the site. No impact on Source Protection Zones.

Environment Agency 4 November 2013

Criterion C13 – Impact on surface waters.

D

Criteria classification 'D' as there are no watercourses within 500m.

Environment Agency 4 November 2013

Criterion C14 - Impact on flooding or coastal stability.

D

Site is entirely within Flood Risk Zone 1. No risk of coastal instability.

Dorset County Council 4 November 2013

Possible Mitigation:

Hydrological assessment is normally required as part of any planning application, with measures to protect groundwater and surface water flows to be identified and implemented.

No further action considered necessary at this stage.

Site Assessment of PK18 - Quarry 4 Extension

Topic: Soil

SA Objective: To maintain, conserve and enhance soil quality

Criterion C15 - Impact on existing soils or land type (including BMV land).

 $\boldsymbol{\mathcal{C}}$

Site is good to moderate quality agricultural land. Any soil removed will be protected during working and can be used to restore the land.

Dorset County Council 4 November 2013.

Possible Mitigation:

Soils will be protected during working, according to guidance and best practice.

Topic: Air Quality

SA Objective: To protect and improve air quality and reduce the impacts of noise

Criterion C16 - Impact on AQMAs.

D

No direct impact on any AQMAs.

Dorset County Council 4 November 2013

Possible Mitigation:

Noise mitigation will be addressed at the planning application stage, with appropriate mitigation to be included in the development of the site.

<u>Topic: Material Assets (Economic development)</u>

SA Objectives: To conserve and safeguard mineral resources.

To promote the use of alternative materials

To encourage sustainable economic growth

To provide an adequate supply of minerals to meet society's needs.

Criterion C17 - Impact on economic development.

D

The site is expected to have a positive impact on the provision of mineral and can therefore be expected to benefit the local and wider economy, in addition to creating direct employment during the working of the site.

Mineral working has the potential to negatively affect businesses in the locality, e.g. through contributing to traffic congestion, noise, visual and perception related issues. Impacts will be identified as part of any planning application and mitigation during working will be applied where necessary – e.g. further screening.

Restoration to agriculture will maintain an on-going positive benefit.

Dorset County Council 1 November 2013

Possible Mitigation:

An Environmental Impact Assessment will be carried out as part of any planning application, identifying potential impacts and appropriate responses and mitigation. Appropriate mitigation will be required as part of any planning permission granted. No further action considered necessary at this stage.

Topic: Social Considerations - Human Health and Amenity, Airport Safety and Cumulative Impacts

SA Objectives: To sustain the health and quality of life of the population

Criterion C18 - Impact on Sensitive Human Receptors.

C

Properties within 100m to north west and 500m to the north. Campsites within 500m to north/north west. Context is small quarries in an area with a long history of Purbeck Stone quarrying. Nation Trust will control rate of quarrying. Only small areas within the overall field will be quarried – exact sites not known yet. Appropriate screening to be determined.

Dorset County Council 5 November 2013

Criterion C19 - Impact on existing settlements.

В

C

Acton is approximately 380m to the north; Langton Matravers is approximately 650m to north east. Minimal impact, given rate of quarrying and context of the site proposals.

Trevor Badley 5 November 2013

Site Assessment of PK18 - Quarry 4 Extension

Possible Mitigation:

An Environmental Impact Assessment, including a Transport Assessment, will be carried out as part of any planning application, identifying potential impacts and appropriate responses and mitigation.

Appropriate mitigation (e.g. visual and noise attenuation bunds and reducing noise at source where possible and appropriate) will be identified and required as part of any development of the site. No further action considered necessary at this stage.

Criterion C20 - Impact on airport safety

D

Site is approximately 23km from airport and not proposed for wet working or restoration.

Dorset County Council 4 November 2013

Criterion C21 - Effects on cumulative impacts.

В

Site nomination comprises a new proposal in an area where there is a high concentration and long history of mineral extraction.

It is potentially within 5Km from a town (Swanage) where allocations for the development of 200 dwellings, employment and retail facilities have been made in the Purbeck Local Plan Part 1 (adopted Nov 2012) (Policy SE) and the Swanage Local Plan (Policy SS). Traffic arising from the new residential development will add to general traffic levels in / around Swanage and on the A351.

This is within a popular tourist area, leading to higher levels of traffic on the roads in summer. The fact that development within this proposed nomination is likely to be a replacement for a quarry closed or closing, with no proposed intensification expected, reduces potential for cumulative impacts.

Dorset County Council 4 November 2013 11.11 2013.

Possible Mitigation:

The proposal will include assessment of and mitigation for visual and noise impacts, following guidance and best practice, to limit cumulative effects. This may include advance tree planting, depending on findings of the Environmental Impact Assessment.

To minimise traffic impacts, following a Transport Assessment at the planning application stage, measures such as holding back lorry traffic during peak traffic times could be used if necessary.

<u>Topic: Social Considerations – Carbon Emissions</u>

SA Objectives: To adapt to and mitigate the impacts of climate change

Criterion C22 - Impact on carbon emissions

В

Site will rely on road transport.

Dorset County Council 4 November 2013

Possible Mitigation:

Guidance and best practice will be followed, to minimise carbon emissions as far as is practicable.

Topic: Social Considerations

SA Objectives: To enable safe access to countryside and open spaces

Criterion C23 - Impact on recreational land

D

Site is agricultural land, not used for formal/informal recreational purposes.

Dorset County Council 4 November 2013

Criterion C24- Impact on public rights of way

C

Bridleway (Priest's Way) runs approximately 40m north of the northern edge of site nomination. Given the context of the site there is no need for realignment of the route and probably no need for special screening. Further assessment required of possible impacts and appropriate screening.

Dorset County Council 4 November 2013

Possible Mitigation:

Further assessment will be undertaken at planning application stage with appropriate mitigation identified if necessary/appropriate. No further action required at this stage.

Site Assessment of PK18 - Quarry 4 Extension

Criterion C25 - Are the access proposals acceptable

C

Access is proposed via the existing quarry and the C135 to the B3069. From here vehicles will travel to the A351 either west, past Kingston, or east, through Langton Matravers. Vehicle movements here are expected to be low and will not exceed that which currently exists. While access to the strategic network will involve travel through existing settlements, the low number of trips plus the B class of the road used means that there will be limited impact. Therefore the site has been given a C rating.

Dorset County Council 4 November 2013

PK18 Quarry 4 extension Site Assessment

Extension to existing quarries using the existing access which is sub-standard and needs improvement for the following reasons: Although an existing access serving existing quarries, it is only a granular sub-base material with no bound surfacing course and extends right up to where it abuts the carriageway of the public highway. Due to wear/settlement it is below the carriageway level and this is resulting in longitudinal cracking to the edge of the carriageways macadam construction. Furthermore this unbound surface results in limestone dust/slurry being tracked onto the highway where it creates an obvious hazard and nuisance especially in wet weather. An agreed length (suggest 50 metres minimum) of the access from the highway should be re-levelled/compacted with any soft spots rectified and then the whole surfaced with a bound material if quarrying operations are to continue, and certainly if an increase is to be permitted.

Dorset County Council January 2017

Site Assessment of PK18 - Quarry 4 Extension

Initial Site Assessment including Input from Specialist Consultees

Traffic/Access

<u>2015</u>

Purbeck Stone

Policy MS-5 lists the new sites and extensions to existing sites allocated to contribute to the adequate and steady supply of Purbeck Stone as follows:

- Blacklands quarry Extension, Langton Matravers
- Quarr Farm, Harmans Cross
- · Southard Quarry, Swanage
- Downs Quarry Extension, Langton Matravers
- Home Field, Acton
- Quarry 4 Extension, Acton
- Broadmead Field, Langton Matravers
- Gallows Gore, Harmans Cross

Given the distance of the sites and or the relatively small scale and therefore traffic generation, Highways England has no comment to make at this stage.

December 2016

We note that, with the exception of Swanworth (PK16), all the (Purbeck Stone) sites are small-scale in nature, and therefore unlikely to generate significant quantities of traffic. The Swanworth site, which whilst large scale, is understood to be an extension of an existing quarry and is forecast to generate approximately 75 trips per day above that currently generated. Given the proximity of the site to the SRN, the extension is unlikely to result in a significant impact.

Public Rights of Way Comments awaited

Protection of Water Resources (Hydrology/groundwater/ surface water management and flooding)

Environmental Constraints:

- Secondary Aquifer
- Flood Zone 1

<u>Dec 2013</u>

We agree with the criteria classification C12, C13 and C14 for this site, which is given in the supporting documents.

Our previous comments provided on the 4 Nov 2013 are still relevant. However, we wish to make the following additional comments:

We are aware that an SEA is being prepared but urge the applicant to ensure that the following issues are included: -

- Proposals which maximise the wetland restoration opportunities at each site
- Water Framework Assessments (WFD) as necessary and will contribute to the relevant River Basin Plan objectives
- Proposals should maximise the overall wetland gains.
- EIA/Restoration proposals should incorporate gain of wetland features which will contribute to the aspirations of the England Biodiversity Strategy

Oct 2013

New site

No objection, at this stage but further assessments required.

C3: South Dorset Coast SSSI and Isle of Portland to Studland Cliffs SAC to the south. Therefore Natural England should be consulted.

C7: Site within Purbeck Heritage Coast. We therefore recommend you consult with your Heritage Coast colleagues at DCC.

C12: Criteria classification 'C' as on a Secondary Aquifer, rising to Class 'B' if significant adverse impact is determined for private or local water interests identified within 250m of the site.

Environment Agency

Highways England

Site Assessment of PK18 – Quarry 4 Extension

Protection of Water Resources (Hydrology/groundwater/ surface water management and flooding)		
	The combined impacts of Purbeck Limestone Quarries should be assessed where a number of sites affect the same water resource or receiving water course.	
	C13: Criteria classification 'D' as there are no watercourses within 500m.	
	C14: Criteria classification 'D' as within FZ1.	
	Studies required/ considerations:	
	Flood Risk Assessment	
	Ecological study required	
	Possibly Hydrogeological assessment	
	Water Framework Directive Assessment may be required	
	PK18 Quarry 4 extension Site Assessment - No grounds for objection, subject to detail:	
Lead Local Flood Authority (LLFA) - DCC	The site falls entirely within Flood Zone 1 (low risk – fluvial flooding) according to the Environment Agency's relevant flood modelling, and is not shown to be at any theoretical risk of surface water flooding, by relevant mapping. Given the prevailing geology and fall in ground levels, it is likely that surface water would be managed via infiltration. Whilst a site specific strategy of surface water management is a requirement for all development (NPPF) no off site worsening is anticipated. Prior Land Drainage Consent may be required from DCC as relevant LLFA, for any works offering an obstruction to flow within a channel with the status of Ordinary Watercourse.	

Landscape & Visual Impact	
AONB Team	No concerns (2014)

Nature Conservation – Biodiversity Impacts		
Natural England comments	No comments	
	PK-18 Quarry 4 Extension, Acton	
	See Dorset Wildlife Trust's comments for PK-02 Blacklands Quarry as they apply here.	
Dorset Wildlife Trust	PK-02 Blacklands Quarry Extension	
	If the MPA take this site forward, DWT would recommend the following:	
	1. The restoration should be to species-rich grassland rather than to agriculture and grassland as it would be consistent with the restoration vision for Limestone Plateau as described on page 10 of <i>Background Paper 16: Restoration – Landscape Management Guidelines (January 2013)</i> and the nomination is in close proximity to designated sites, so species-rich grassland creation at this site would provide a useful ecological corridor.	
	2. As part of the Purbeck Ponds Project, ponds across Purbeck have been surveyed by Dorset Wildlife Trust. These surveys have shown that the areas around Langton Matravers, Worth Matravers and Kingston hold the largest meta-population of Great Crested Newts in Purbeck and generally ponds in Purbeck are known to contain many nationally scarce invertebrates including beetle and dragonfly species. The creation of a new suitably sited pond within the restoration area will directly contribute to maintaining and enhancing this nationally important assemblage of freshwater wildlife. We recommend that due consideration is given to the prospect of creating a pond within the after-use area that is suitable for use by Great Crested Newts and other freshwater wildlife. DWT would be willing to comment on pond plans and proposals in order to help achieve the maximum wildlife gain.	
	3. The sea caves of the Purbecks are known to be important hibernation sites for Lesser and Greater Horseshoe bats amongst other bat species. The possibility of creating hibernation roosts suitable for bats within the after-use of the site should therefore be considered, as the site is not far from these coastal caves, and might provide useful additional sites for these rare and protected species.	

Historic Environment	
	The Site Assessments and Sustainability Appraisal highlight the critical heritage considerations to be met to satisfy the Minerals Strategy and its development management policies.
	Could these matters be précised and their source cross referenced in the 'Development Considerations' section in the Appendix?
Historic England Comments	Site Assessment – "I consider that the site has high potential for below-ground archaeology and possibly industrial archaeological evidence of early quarrying. Archaeological assessment and evaluation would be required before an informed planning decision could be made. Only when these have been undertaken would the archaeological impact be understood – at present it could be anywhere from category A to category D. (Criterion C11 – Impact on archaeology.

Site Assessment of PK18 – Quarry 4 Extension

Historic Environment	
	Dorset County Council 31/10/2013).
	If the impact was "A" substantial harm, then this site, I assume, would be unacceptable in principle? As such, should this heritage consideration be addressed before the principle of a site is agreed and an allocation included in a development plan?
	I note that the SA appears to contradict this view of the DCC (further assessment is not required at this plan making stage). The LA may wish to clarify this matter.