	Minerals Site Allocations Document 2008	Outcome	Draft Mineral Sites Plan 2013-2014	Outcome	Draft Mineral Sites Plan 2015	Outcome	Sites Under Consideration 2016	Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
		New nomination	AS22 Trigon Hill Extension	Further consultation and assessment	AS22 Trigon Hill Extension	Further consultation and assessment	AS22 Trigon Hill Extension		~~AS22 Trigon Hill Extension Withdrawn~~
		New nomination	AS23 Gore Heath	Not considered suitable for inclusion	~~AS23 Gore Heath~~	~~Not considered suitable for inclusion~~	~~AS23 Gore Heath~~		~~AS23 Gore Heath~~
		New nomination	AS24 Purple Haze (south)	Not considered suitable for inclusion	~~AS24 Purple Haze (south)~~	~~Not considered suitable for inclusion~~	~~AS24 Purple Haze (south)~~		~~AS24 Purple Haze (south)~~
				New nomination	AS25 Station Road	Further consultation and assessment	AS25 Station Road		AS25 Station Road
				New nomination	AS26 Hurst Farm	Further consultation and assessment	AS26 Hurst Farm		AS26 Hurst Farm
						New nomination	AS28 Gallows' Hill A&B	AS28 Gallows' Hill A&B	~~AS28 Gallows' Hill Site A only~~
				Crushed Rock (category change from Purbeck stone)	PK16 Swanworth Quarry Extension	Further consultation and assessment	PK16 Swanworth Quarry Extension	PK16 Swanworth Extension	PK16 Swanworth Quarry Extension
				New Nomination - Recycled Aggregate	RA01 White's Pit	Further consultation and assessment	RA01 White's Pit		RA01 White's Pit
Purbeck stone	PK01 Belle Vue	Withdrawn	~~PK01 Belle Vue~~	~~PK01 Belle Vue~~	~~PK01 Belle Vue~~	~~PK01 Belle Vue~~	~~PK01 Belle Vue~~		~~PK01 Belle Vue~~
	PK02 Blacklands Quarry Extension	Further consultation and assessment	PK02 Blacklands Quarry Extension	Further consultation and assessment	PK02 Blacklands Quarry Extension	Further consultation and assessment	PK02 Blacklands Quarry Extension		PK02 Blacklands Quarry Extension
	PK03 California Quarry	Withdrawn	~~PK03 California Quarry~~	~~PK03 California Quarry~~	~~PK03 California Quarry~~	~~PK03 California Quarry~~	~~PK03 California Quarry~~		~~PK03 California Quarry~~
	PK04 Downs Quarry	Withdrawn	~~PK04 Downs Quarry~~	~~PK04 Downs Quarry~~	~~PK04 Downs Quarry~~	~~PK04 Downs Quarry~~	~~PK04 Downs Quarry~~		~~PK04 Downs Quarry~~
	PK05 Land South of Acton Field and Priests Way	Withdrawn	~~PK05 Land South of Acton Field and Priests Way~~	~~PK05 Land South of Acton Field and Priests Way~~	~~PK05 Land South of Acton Field and Priests Way~~	~~PK05 Land South of Acton Field and Priests Way~~	~~PK05 Land South of Acton Field and Priests Way~~		~~PK05 Land South of Acton Field and Priests Way~~

Minerals Site Allocations Document 2008	Outcome	Draft Mineral Sites Plan 2013-2014	Outcome	Draft Mineral Sites Plan 2015	Outcome	Sites Under Consideration 2016	Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
PK06 Land to the North of Worth Matravers road	Withdrawn	~~PK06 Land to the North of Worth Matravers road~~	~~PK06 Land to the North of Worth Matravers road~~	~~PK06 Land to the North of Worth Matravers road~~	~~PK06 Land to the North of Worth Matravers road~~	~~PK06 Land to the North of Worth Matravers road~~		~~PK06 Land to the North of Worth Matravers road~~
PK07 Land to the South of B3069	Withdrawn	~~PK07 Land to the South of B3069~~	~~PK07 Land to the South of B3069~~	~~PK07 Land to the South of B3069~~	~~PK07 Land to the South of B3069~~	~~PK07 Land to the South of B3069~~		~~PK07 Land to the South of B3069~~
PK08 Quarr Farm	Further consultation and assessment	PK08 Quarr Farm	Further consultation and assessment	PK08 Quarr Farm	Further consultation and assessment	PK08 Quarr Farm		~~PK08 Quarr Farm~~
PK09 South Downs Quarry	Permitted	~~PK09 South Downs Quarry~~	~~Permitted~~	~~PK09 South Downs Quarry~~	~~Permitted~~	~~PK09 South Downs Quarry~~		~~PK09 South Downs Quarry~~
PK10 Southard Quarry	Further consultation and assessment	PK10 Southard Quarry	Further consultation and assessment	PK10 Southard Quarry	Further consultation and assessment	PK10 Southard Quarry		PK10 Southard Quarry
PK11 St Aldhelm's Quarry	Permitted	~~PK11 St Aldhelm's Quarry~~	~~Permitted~~	~~PK11 St Aldhelm's Quarry~~	~~Permitted~~	~~PK11 St Aldhelm's Quarry~~		~~PK11 St Aldhelm's Quarry~~
	New nomination	PK15 Downs Quarry Extension	Further consultation and assessment	PK15 Downs Quarry Extension	Further consultation and assessment	PK15 Downs Quarry Extension		PK15 Downs Quarry Extension
	New nomination	PK16 Swanworth Quarry Extension	Further consultation and assessment	(See Crushed rock - above)		(See Crushed rock - above)		
	New nomination	PK17 Home Field	Further consultation and assessment	PK17 Home Field	Further consultation and assessment	PK17 Home Field		PK17 Home Field
	New nomination	PK18 Quarry 4 Extension	Further consultation and assessment	PK18 Quarry 4 Extension	Further consultation and assessment	PK18 Quarry 4 Extension		PK18 Quarry 4 Extension
	New nomination	PK19 Broadmead	Further consultation and assessment	PK19 Broadmead	Further consultation and assessment	PK19 Broadmead		PK19 Broadmead
			New nomination	PK21 Gallows' Gore	Further consultation and assessment	PK21 Gallows' Gore		PK21 Gallows' Gore
	New nomination	Kingston Hill (Purbeck marble)	Withdrawn prior to further consultation					

	Minerals Site Allocations Document 2008	Outcome	Draft Mineral Sites Plan 2013-2014	Outcome	Draft Mineral Sites Plan 2015	Outcome	Sites Under Consideration 2016	Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
				New nomination	PK20 Crack Lane (Purbeck marble)	Not taken forward to consultation			
	Minerals Site Allocations Document 2008: Sites Assessed and Consulted On	Outcome	Draft Mineral Sites Plan 2013-2014: Sites Assessed and Consulted On	Outcome	Draft Mineral Sites Plan 2015: Sites Assessed and Consulted On	Outcome	Sites Under Consideration 2016	Sites included in Draft Mineral Sites Plan Update 2016	Sites Under Consideration For Inclusion in Final Draft Plan
Portland Stone	PD01 Bower's Mine	Further consultation and assessment	PS01 Bower's Mine	Further consultation and assessment	PS01 Bower's Mine	Further consultation and assessment	PS01 Bower's Mine		~~PS01 Bower's Mine~~ Permitted
		New nomination	PS02 Perryfield Quarry Extension	Withdrawn	~~PS02 Perryfield Quarry Extension~~	~~Withdrawn~~	~~PS02 Perryfield Quarry Extension~~		~~PS02 Perryfield Quarry Extension~~
Other Building Stone	BS01 Manor Farm Quarry	Further consultation and assessment	BS01 Manor Farm Quarry	Withdrawn	~~BS01 Manor Farm Quarry~~	~~Withdrawn~~	~~BS01 Manor Farm Quarry~~		~~BS01 Manor Farm Quarry~~
	BS02 Marnhull Quarry	Further consultation and assessment	BS02 Marnhull Quarry	Further consultation and assessment	BS02 Marnhull Quarry	Further consultation and assessment	BS02 Marnhull Quarry		BS02 Marnhull Quarry
		New nomination	BS04 Frogden Quarry	Further consultation and assessment	BS04 Frogden Quarry	Further consultation and assessment	BS04 Frogden Quarry		BS04 Frogden Quarry
		New nomination	BS05 Whithill Quarry	Further consultation and assessment	BS05 Whithill Quarry	Further consultation and assessment	BS05 Whithill Quarry		BS05 Whithill Quarry
Other Sites*	NP01 Baker's Hanging	Not under consideration	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~	~~NP01 Baker's Hanging~~

NP02 Bovington Farm	**Not under consideration**	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~	~~NP02 Bovington Farm~~
NP03 Gore Heath	**Not under consideration**	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~	~~NP03 Gore Heath~~
NP04 Hurst Farm	**Not under consideration**	~~NP04 Hurst Farm~~	~~NP04 Hurst Farm~~	~~NP04 Hurst Farm~~ (see AS26 above)	~~NP04 Hurst Farm~~	~~NP04 Hurst Farm~~ (see AS26 above)	~~NP04 Hurst Farm~~ (see AS26 above)	~~NP04 Hurst Farm~~ (see AS26 above)
NP05 Hyde Farm	**Not under consideration**	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~	~~NP05 Hyde Farm~~

Appendix E: Swanworth Quarry - Further Information

Exceptional Circumstances Test 1 – Need and Economy

Swanworth Contribution to Dorset Crushed Rock Supplies

E 1 The crushed rock used in Dorset is provided by quarries within Dorset or by importation, primarily from Somerset, either by road or rail. The historic sales of crushed rock in Dorset are identified in the Bournemouth, Dorset and Poole Local Aggregates Assessment (LAA).

E 2 Sales of locally won crushed rock over recent years have varied between 150,000 tonnes and 280,000 tonnes per year, the figures being largely dependent on the general level of economic activity. Sales from Swanworth amounted to approximately 50% of the crushed stone annually produced in Dorset during the same time period.

E 3 The first full year that Suttle Stone Quarries operated Swanworth Quarry was 2012 when sales amounted to only 62,000 tonnes due to the effects of the economic downturn and the new entry into the crushed rock business. Sales have gradually increased as the Suttle Stone Quarries business became more mature and integrated with the recycling operation at Manning's Heath. Sales remained restricted however, due to the limitations of the quarry processing plant inherited from Tarmac.

E 4 In order to address the processing limitations Suttles invested in new processing equipment in 2014 which allowed for more efficient crushing and screening of stone and a greater production of premium limestone products.

E 5 Sales have risen as a consequence of the improved processing operations and the improving economy from 104,000 tonnes in 2014 to 120,000 tonnes in 2015 and have remained between 120,000 to 130,000 tonnes since then. It is not anticipated that sales will increase beyond 130,000 tonnes per year in the future.

E 6 Crushed rock has been imported into Dorset by rail from Whatley Quarry in the Mendips in Somerset at varying levels up to 160,000 tonnes per year although the most recent 10 year average level of imports is only 50,000 tonnes per year as there have been no imports between 2012 and 2017. Imports have resumed.

E 7 The LAA also identifies that road imports of crushed rock, primarily from Somerset, amounted to approximately 260,000 tonnes in 2014, equivalent to 49% of the 530,000 tonnes of crushed rock consumed (LAA paragraph 1.33). This level of road imports is likely to increase in the future if rail imports cease and also as the economy improves with an associated increase in demand for construction aggregates.

E 8 Swanworth clearly makes an important contribution to the local crushed rock requirements and provides a spatial and sustainable source of material compared to the sites in Portland and the Mendips.

E 9 The advice in the NPPF at paragraph 145 (7th bullet point) is that mineral planning authorities should ensure that large landbanks bound up in very few sites do not stifle competition and Swanworth effectively provides an alternative source to crushed rock supplies to those from Portland and the Mendips.

E 10 The different types of limestone product sold from Swanworth between 2012 and 2017 is shown in **Table 17** below.

Table 17 - Swanworth Quarry Sales Split

Swanworth Quarry Sales Split 2012 - 2017	Percentage
Type 1 sub-base	56
Single size chippings	25
Block stone/Gabion	8
Other	6
Agricultural limestone dust	4
Dimension stone	0.25

E 11 Most products are sold within 30 miles of Swanworth. Stone is a heavy, bulky and relatively cheap product which makes the haulage element of the cost high and therefore the stone source needs to be as close as possible to the market. Longer transport distances, particularly for material such as Type 1 sub-base (the cheapest material in Table 2) are not desirable.

E 12 Some materials which have specialist uses and can therefore command a higher price travel further, e.g. Gabion stone, single sized chippings for decorative use and rock armour for river/coastal defence and for rail infrastructure works.

E 13 Some limestone block stone from Swanworth, from the 'Freestone Beds', has been transported to California Quarry to be cut as dimension stone and has been used in the local area. This stone is the same material that is extensively worked on the Isle of Portland.

E 14 The quarry extension area has the potential to produce larger unfractured block which would help to supplement the availability of dimension stone from Portland.

Economics

E 15 The Manning's Heath recycling depot merchants a wide range of aggregates, including those sourced from Swanworth. It also acts as a major hub for the receipt and subsequent recycling of construction and demolition waste in the area. Builders and contractors are able to deliver inert waste and collect aggregate products from the site. The provision of Type 1 sub-base and decorative products from Swanworth is key to its popularity with local traders and builders who can obtain all the products they need for a construction project.

E 16 The inert waste is recycled at Manning's Heath. The non-aggregate inert material remaining from the recycling operation is taken to Swanworth on returning HGVs for use in the recovery operation in site restoration.

E 17 The integrated relationship between Swanworth and Manning's Heath depot is very important in the success of both enterprises and is fundamental to the high percentage of "back haulage" utilised by the business where HGVS travel fully loaded in both directions taking Swanworth stone to customers or Manning's Heath and bringing inert waste materials back to Swanworth for restoration or recycling. Approximately 70% of Swanworth HGV movements use back haulage.

E 18 The annual turnover for Suttle Stone Quarries in 2016-2017 was almost £8 million with a similar turnover for Suttle Projects. Suttles strive to utilise local suppliers wherever possible.

E 19 There are almost 180 individual suppliers for the Suttle Stone Quarries business based in Dorset supplying a wide range of services and products. Annual expenditure during 2017 with individual Dorset suppliers ranged between £259,000 and £55. In addition Suttle Projects have over 90 individual Dorset based suppliers with annual expenditure levels in 2017 between

£625,000 and £11 per supplier. Suttle Stone and Suttle Projects contribute significantly to the local and national economies.

Employment

E 20 Suttles employ a workforce that almost entirely consists of Dorset residents and are fortunate to have a loyal team with a low staff turnover. Currently Suttle Stone Quarries employs 52 and Suttle Projects employs 30. Currently all but five of the 82 Suttle employees reside in Dorset and 90% of the quarry based employees reside in Purbeck. The Suttles jobs are in general permanent, full time positions unlike some local jobs which are dependent on the seasonal nature of tourism.

Exceptional Circumstances Test 2 – Alternatives

Limestone

E 21 There are no realistic opportunities to extend the existing quarry into immediately adjacent land. To the east the depth of overburden above the limestone is excessive, well over 15 metres deep, and the area would be particularly prominent from local viewpoints. To the south, beyond the restored quarry area, the land is open, overlooked from a number of viewpoints and lies closer to Worth Matravers village. Neither area is owned or controlled by Suttle Stone Quarries and consequently neither area has previously been promoted to Dorset as a potential extension area.

E 22 It is considered that the only opportunity to continue the existing quarry and associated business is to extend extraction operations into the area allocated in the Draft Mineral Sites Plan, PK-16, for which Suttle control the mineral rights and the ability to develop.

E 23 The alternatives to limestone extraction at Swanworth are limited. There is relatively little geological exposure of limestone within Dorset all of which lies within the Area of Outstanding Natural Beauty or on the Isle of Portland. The only other limestone crushed rock source in Dorset is on Portland, where two companies control the supply of material. Other sources of limestone crushed rock lie in the Mendip area of Somerset. Additionally there is a railhead at Hamworthy near Poole that has periodically been used for transporting crushed rock from the Mendips.

E 24 Portland crushed rock is produced either as a by-product of dimension stone production from quarry sites and underground mine operations or is produced by working the Cherty Series limestone bed which lies beneath the dimension stone beds. Stone extraction on Portland is controlled by a single extensive planning permission granted in 1951 although there are considerable landscape, ecological and amenity constraints with certain parts of the permission.

E 25 Portland is not considered as a sustainable source of crushed rock due its distance from the main market of Bournemouth and Poole which is almost twice as far as Swanworth. Swanworth lies approximately 22 miles from the main Bournemouth and Poole market. Portland is located some 42 miles away from this market area and the Mendip Quarries are 60+ miles away.

E 26 The supply of material from Portland rather than Swanworth would result in almost twice the amount of road miles travelled by HGVs with consequent fuel consumption and engine emissions.

E 27 Swanworth also supplies 35,000 tonnes of limestone each year within the Purbeck District area, only a few miles from the quarry. Portland stone would be 20 miles further away.

E 28 The Mendips have substantial consented reserves of limestone and supply the majority of crushed rock imported by road into Dorset. The Mendip quarries are almost three times the distance from the Poole/Bournemouth market in comparison to Swanworth. It is not known whether back haulage occurs.

E 29 Mendips limestone is a purple/dark grey colour and not colour comparable to the stone used in Dorset.

E 30 The Dorset LAA estimates that road imports in 2014 amounted to approximately 260,000 tonnes of limestone, some 49% of the total crushed rock used in Dorset (LAA paragraph 1.33 and 1.69).

E 31 Crushed rock has previously been imported into the Hamworthy rail depot near Poole from Whatley Quarry on the Mendips. No imports were made between 2012 and 2017 and the limited operation undertaken in 2017 is to close during 2018 for economic reasons.

E 32 It is likely that the demand for crushed rock will continue at the current level and may well increase due to the number of proposed housing completions and employment development (LAA paragraphs 1.70 to 1.82).

E 33 The supply of crushed rock from Swanworth involves considerably less road miles, less fuel consumption and less associated engine emissions than supplies from Portland or from the Mendips.

E 34 Supplying crushed stone from Swanworth to the Bournemouth and Poole market would result in approximately 100,000 fewer HGV miles every year when compared with supplies from Portland and 200,000 fewer HGV miles every year when compared to supplies from the Mendips (calculation based on 100,000 tonnes supply annually from Swanworth with 20 tonne HGV load which would equate to 5,000 HGV loads per year).

E 35 These figures would double if the return HGV journey was included. Clearly Swanworth provides a sustainable source of crushed rock particularly when back haulage of material is considered.

E 36 Dorset estimate that the consented reserves on Portland, termed a landbank of permitted reserves, amount to 13 million tonnes although this figure will be substantially reduced as a consequence of the Review of Mineral Planning Permissions as required under the Environment Act 1995 and other significant environmental constraints as well as the trend towards underground mining. A hypothetical landbank of 13 million tonnes is sufficient to supply locally won crushed rock for 48 years at a rate of 270,000 tonnes per year.

E 37 The Planning Practice Guidance published October 2014 by the Ministry of Housing, Communities and Local Government, refers to the size of landbanks in paragraph 084 and states that:

There is no maximum landbank level and each application for minerals extraction must be considered on its own merits regardless of the length of the landbank.

E 38 There are many mineral planning authorities that have substantial landbanks of crushed rock aggregate that are more extensive than the Dorset landbank although a substantial landbank does not preclude the grant of new permissions for more aggregate in these areas. Planning decisions should be made following consideration of the merits of the proposals.

E 39 The Planning Practice Guidance paragraph 084 goes on to state that:

There are a number of reasons why an application for aggregate minerals development is brought forward in an area where there exists an adequate landbank. These could include:

- *Significant future increases in demand that can be forecast with reasonable certainty.*
- *The location of the consented reserve is inappropriately located relative to the main market areas.*
- *The nature, type and qualities of the aggregate such as its suitability for a particular use within a distinct and separate market.*
- *Known constraints on the availability of consented reserves that might limit output over the plan period.*

E 40 It is considered that several of these reasons are applicable to the allocation of the Quarry extension. The demand for crushed rock will continue at the current level and may well increase due to the predicted level of residential and employment development during the next 15 years. The alternative consented reserves of limestone in Portland are located considerably further from the main market and alternative aggregate types cannot match the characteristics and specifications of Swanworth products.

Alternative Aggregate – Sand and Gravel

E 41 Sand and gravel is not a comparable alternative for many of the products from Swanworth.

E 42 Sand and gravel is a conglomeration of smaller particles of other rocks which have been first eroded and then deposited as a result of water (fluvial or marine) or ice action (glaciers). Sand and gravel contains no large individual pieces and therefore cannot be used for applications where larger sizes materials are needed. By comparison limestone is a solid sedimentary rock which is formed in 'massive' deposits over a great depth. By comparison limestone is a solid mass and the size of the product can be controlled during the quarrying process to give sizes ranging from fine dust to say 5 tonne pieces measuring approximately 1.2 metre square.

E 43 Sand and gravel contains no cohesive properties whereas limestone has cohesive properties both through clay in its bedding planes, which can be processed out during production, or utilised as a benefit depending on the final application. The natural action of lime also acts as a basic cement.

E 44 Sand and gravel is largely composed of impervious silica and flint which are pH neutral whereas limestone is composed of more porous calcium carbonate which is alkali.

E 45 Sand and gravel is generally yellow/brown in colour with rounded particles whereas Portland limestone is white as evidenced by the walls, tracks, paths and buildings in the area with an angular/blocky shape.

Swanworth Product Range

E 46 Fine limestone dust from Swanworth has applications from agricultural use (treating acid soil types) through to mortar for heritage masonry restoration work. Its alkalinity and its ability to be ground to a fine dust allow for these applications. Sand and gravel does not have these properties.

E 47 Limestone in 6mm, 10mm and 20mm chippings are used primarily for decorative and specialist use. These chippings are distinctively white in comparison to sand and gravel. An example of a specialist use is the supply of 6mm chippings nationally for use in resin bonded surface coatings to architectural stairs and walkways. Swanworth limestone has a porosity which is very compatible with this process. Gravel particles are impervious.

E 48 Limestone sub-base; 20mm to dust mix, Type 1 and open graded sub-base are used to build foundations for all forms of construction. It is the fine particles, produced by crushing, when mixed with larger angular particles that combine to give a material which gives a very stable, load bearing base on which roads, houses, etc, can be built. Limestone alkalinity makes it cementitious which helps the binding process during compaction. Importantly, these factors make a stable platform for the construction process as well.

E 49 Recycled aggregates can be used for some construction applications but the physical properties mean that they are not universally suitable and there is often a deficit in the quantity of recycling feedstock in comparison to demand particularly for construction sub-base.

E 50 Bulk fill materials are used to fill larger void spaces or the lower part of a construction profile which is then generally capped off with Type 1 sub-base.

E 51 Gabion stone is sized from 100mm to 200mm and is used in the creation of Gabion baskets. These are stone filled wire mesh baskets used to form a composite structural wall that is durable and visually attractive. Gabion baskets are used for coastal and inshore marine defence, retaining walls to highways and railway embankments, and also as a modern and attractive landscaping detail.

E 52 The largest particles of gravel are not compatible with the construction of gabion baskets, and without the angular nature of the particles the Gabions would lack the structural strength required.

E 53 Rock armour of all sizes is used for marine and inshore flood defence. Gravel products are too small for these applications.

E 54 Block stone can be produced at Swanworth in any size up to 8 tonnes and is used in many applications; art installations and architectural landscaping, defence against vehicle trespass and civic amenity. Gravel is not suitable for such applications.

E 55 It is important to note that an amount of the Swanworth Portland block stone has been used at California Quarry for cutting into dimension stone products and it hoped to increase production levels from the extension area. Again gravel is not suitable for such applications.

Exceptional Circumstances Test 3 – Environment

E 56 The potential impact on the environment, landscape and recreation would be assessed as part of a planning application and Environmental Impact Assessment (EIA) for the development of the extension area. The extent that any impacts could be moderated would also be determined as part of the EIA process although it is considered from the work that has already been carried out that unacceptable impacts could be mitigated.

E 57 In order to understand the potential level of impact and to demonstrate the necessary assessment work is fully understood, substantial preliminary work has been carried out on certain environmental aspects. Work has been undertaken on landscape, ecology, the water environment, cultural heritage and highways.

Landscape

E 58 Much of Dorset is designated as AONB due to the quality and variety of the landscape. All AONBs/National Parks derive their identity in the first instance from their geology. The Dorset AONB is no exception. It is, among many factors, the rolling hills, ridges, coombes, cliffs, fossils which make people want to live here and visit. It is a living landscape. People have lived, farmed, travelled, worked and quarried here for millennia. While it is the geology and natural forces that have generally created the landform, it is this human activity that has created the land cover and land use.

E 59 The residents and visitors to the AONB and wider area require a supply of aggregates and essential building materials. These either have to come from within the AONB or from further afield. If the aggregates do not come from quarries within the Dorset AONB then they must travel by road from such areas as Portland or the Mendips transferring any landscape and visual impacts elsewhere but with the unsustainable addition of significant lorry movements with their own visual and other impacts on the landscape.

E 60 Swanworth Quarry is a consented operational facility with its infrastructure already in place. With rare exception the plant and major activity is well-concealed. The upper slopes and faces are restored or being restored to an agreed plan. There are landscape and visual advantages in using an existing facility over introducing a new one into the AONB elsewhere. Swanworth Quarry has been providing material to the area for over 100 years and is, in itself and like other building stone quarries, part of the fabric and history of the area. The current Swanworth Quarry can be seen only from a very few limited viewpoints and, then, it is mostly the upper slopes ad faces currently being restored.

E 61 The proposed extension area comprises three nearby fields. The proposed quarry and connection to the existing facility has been devised through numerous iterations and consultations to minimise landscape and visual impacts. To this end, it is only the lower parts of two fields which would be quarried with an access cut across the third field avoiding specific valued landscape elements. The proposed design utilises the strong field pattern with its walls/hedgerows/fences.

E 62 The access road cutting and gabion bridge combination have been designed and located to minimise landscape and visual impacts particularly of internal lorry movements.

E 63 There are very limited viewpoints from which any parts of the extension could be seen. Even these could be mitigated further at detailed design/application stage. Directions of working and sequencing have been devised to minimise impacts and to maximise the infilling and progressive restoration.

E 64 All and any visual or landscape impacts are, in any event, temporary. The restoration of the whole proposed area to the original landform, land cover and land uses ensures this.

E 65 No landscape elements or features of any consequence are permanently lost. There are limited cumulative effects.

E 66 While there would be limited landscape impacts on the AONB and visual impacts to very restricted viewpoints in the AONB these would be temporary.

Ecology

E 67 In order to establish habitat types, their extent and provide a predictive assessment of their likely dependent fauna present ecologists Andrews Ecology were commissioned to undertake a thorough Phase 1 ecological survey.

E 68 The survey work covered a larger area than the currently proposed extension and was carried out before the final extension design had been determined, however the work demonstrated the limited ecological value of the agricultural land and identified the potential for a number of species to be present primarily in the adjacent valleys that would need further survey and assessment work as part of a full EIA. The detailed Phase 1 report is available.

E 69 The Phase 1 survey comprised:

- A desk-study including a search for historical biological data relating to the site and a stratified radius performed by Dorset Environmental Records Centre.
- Phase 1 habitat mapping on 13th August 2014 to the methodology set out in the *Handbook for Phase 1 Habitat Survey: A technique for environmental audit.*
- An assessment of the conservation value of the habitats present against the criteria set for Priority Habitats within the UK Biodiversity Action Plan.
- A predictive assessment of the potential dependent legally protected and/or UK Biodiversity Action Plan (BAP) fauna using published scientific accounts.

E 70 Having completed the Swanworth Quarry Extension Phase 1 survey, it was determined that in order to produce a robust assessment of the overall site detailed surveys and assessments would be required for great crested newts, reptiles, breeding birds, dormouse, badger and bats.

E 71 The necessary survey work would be undertaken following agreement of the scope and extent of the works with Natural England and the Dorset ecologist. The provision of mitigation measures would be determined, as necessary, following the species survey work and assessment.

Water Environment

E 72 A preliminary hydrogeological and hydrological risk assessment was undertaken by BCL Hydrogeologists on the development of the extension area. The purpose of the assessment was to consider the potential impacts on the water regime and particularly on the nearby Encombe Estate water supply. The report is available and contains preliminary findings on the following:

- Baseline characterisation of the local water environment.
- Evaluation of effects to date.
- Impact screening of the proposed extension upon that environment.
- Requirements for further information and assessment.

E 73 Collection and interpretation of published data, in conjunction with site specific information has facilitated the development of a preliminary conceptual model describing the nature of, and interactions between, the groundwater and surface water systems operating within the area.

E 74 The conceptual model has been employed to assist a screening exercise designed to identify the likely impacts of the proposed extension upon the water environment and determine requirements for further information. The assessment should therefore be viewed as an initial stage of the conventional EIA process.

E 75 The full report was submitted to the EA as well as to Dorset County Council in December 2016. The EA subsequently responded to the report confirming they had no objection to the proposed site extension being included in the Bournemouth, Dorset and Poole Mineral Sites Plan. A copy of the EA letter is available.

Cultural Heritage

E 76 There are several Scheduled Monuments (tumuli) in the vicinity of the extension area and as a consequence a cultural heritage consultant, Andrew Josephs Associates, has been engaged to advise on how best to minimise the potential impact of the extension area on features of cultural heritage in the area and the Scheduled Monuments in particular.

E 77 The initial extension design proposals have demonstrated that there is flexibility in the operation and restoration of the quarry, and further refinement during the planning process should result in an acceptable scheme being designed.

E 78 The extension area has been designed to avoid any physical disturbance of the Scheduled Monument. Shallow soil banks would be established on the boundary of the extension area to screen extraction operations.

E 79 Initial consultation with Historic England has been carried out and a site meeting held in March 2015 to discuss the potential impact of the extension on the Scheduled Monuments. At the meeting it was suggested by Keith Millar (Heritage England Ancient Monuments Inspector) that extraction should not occur in the southernmost field in which the closest Scheduled Monument is located and only access should be provided. Extraction should be restricted to the fields to the north of the Scheduled Monument. This advice has been taken on board in the final extension design.

E 80 In addition the proposals to restore the extension area to agriculture at original ground levels would ensure that there was no long-term impact on the Scheduled Monuments.

E 81 A series of site-based investigations and analysis of heritage and landscape setting issues would be required prior to determination of a planning application. This work would be carried out at the outset of the planning application process and would be coupled with ongoing consultation with English Heritage and Dorset Archaeologists to ensure that sufficient and appropriate work is carried out to allow an informed decision to be made.

Highways

E 82 The Hurlstone Partnership Limited was instructed to review the general acceptability of the proposed quarry extension in terms of highway matters. The review considered the conditions imposed upon the existing planning permissions which would, as far as highway matters are concerned, continue to be applied to the proposed extension. The transport statement is available.

E 83 Effectively the proposed extension would result in a continuation of the existing activities at the site for an additional period of time. There would be no increase in traffic on an hourly, daily, weekly or annual basis when compared with the current situation.

E 84 A review of historic traffic data revealed that even when taking into account predicted traffic growth, the traffic flows between the quarry and the A351 corridor, along which the majority of site vehicles travel, would remain below the volumes previously accommodated on the route. It was also found that the proportion of development traffic on the A35 trunk road, to which the A351 connects, would remain insignificant in the future.

E 85 The safety performance of the site access and the local road network to the A351/A35 was reviewed with reference to personal injury accident data obtained from Dorset County Council. It was found that the existing HGV activities at the site had not led to injury accidents.

E 86 In reviewing the proposed extension for the purposes of the Draft Mineral Sites Plan, Dorset Highways confirmed that the existing site access is adequate and the continuation of activities as

a result of the scheme would be acceptable in terms of highway impact, awarding the site a rating of "Less Significant Adverse Impact".

E 87 It is concluded that the proposed extension to Swanworth Quarry would be acceptable in terms of highway and transport matters taking the assessment work into account and the transport policy test imposed by paragraph 32 of the National Planning Policy Framework, which advises: "Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe".