



CEMEX UK OPERATIONS LTD

VOLUME 3 - ENVIRONMENTAL STATEMENT NON-TECHNICAL SUMMARY

Proposed extraction of sand and gravel with restoration to grazing land and recreation using imported inert restoration materials, the erection of associated plant and infrastructure and the creation of a new footpath and an access onto Hamble Lane

Former Hamble Airfield, Hamble Lane, Hamble-le-Rice, SO31 4NL

November 2022 (Rev A)



HELPING TO BUILD A **GREATER BRITAIN**

INTRODUCTION

1. The Environmental Impact Assessment for the above project comprises the Environmental Statement and the Technical Appendices contained Volume 2 and this Non-Technical Summary (NTS) contained in Volume 3. Hard copies of the full submission which includes the planning application and planning statement (Volumes 1 to 3) may be purchased at a cost of £80 from Emma Pearman, Principal Development Planner, CEMEX UK Operations Ltd, CEMEX House, Binley Business Park, Harry Weston Road, Coventry CV3 2TY, or by emailing planninggb@cemex.com.
2. There are three volumes that have been submitted to Hampshire County Council as follows:
 1. Volume 1: Planning Statement, planning application form, plans and appendices
 2. Volume 2: Environmental Statement and Technical Appendices
 3. Volume 3: Environmental Statement Non-Technical Summary

SITE LOCATION AND DESCRIPTION

3. The application site is a former airfield, located in the village of Hamble, within the county of Hampshire and borough of Eastleigh. The site borders Hamble Lane to the west, Satchell Lane to the east, the railway line to the north, and various residential roads and the Roy Underdown Pavilion and green to the south. Hamble station lies to the north-west corner.



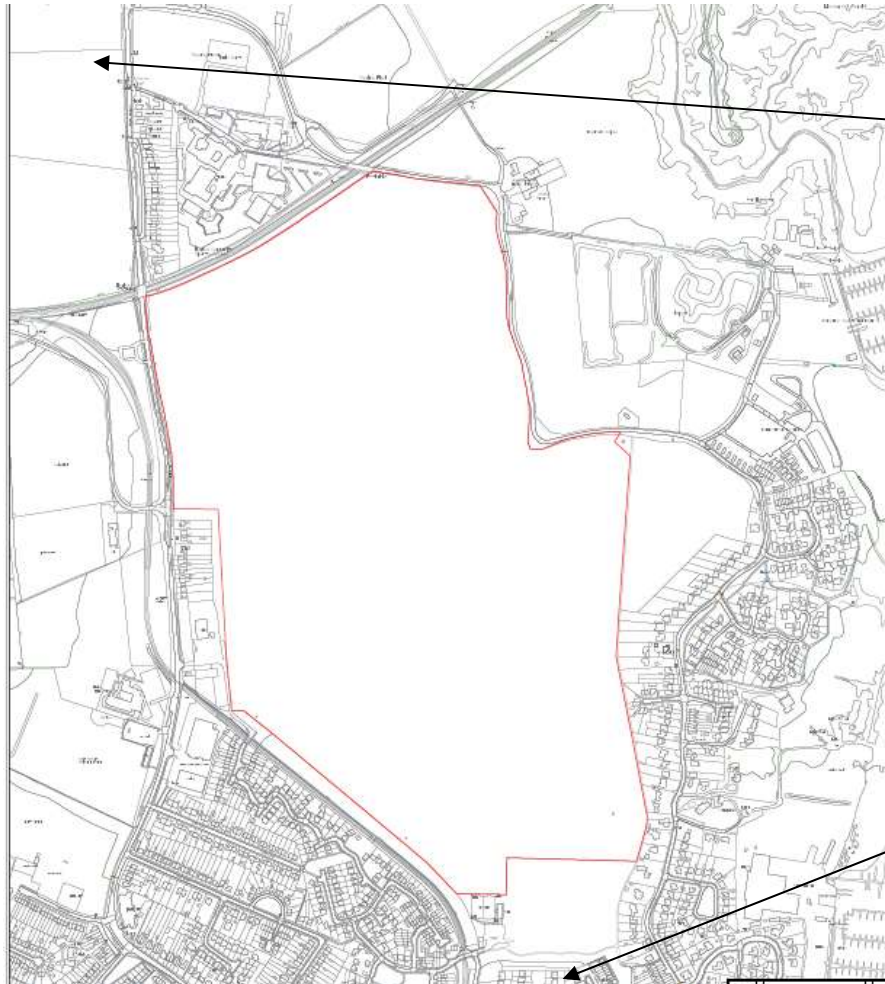
4. The site comprises open land which is private property, however despite this it is used by some local residents for informal recreation. The site is generally flat and covered with scrub vegetation, with some mature trees and hedgerows on the boundaries, particularly to the west and north.
5. The nearest residential properties to the site are those in Hamble Lane, Satchell Lane and those to the south of the site. There are two schools in close proximity which are Hamble School to the north of the site, and Hamble Primary to the south-west along Hamble Lane. There are pipelines running along the eastern side of the site outside the proposed extraction area.
6. There are no landscape or ecological designations covering the site. The nearest ecological designations are the Badnam Copse Site of Importance for Nature Conservation which adjoins the site boundary to the north-east, the Solent and Southampton Water Ramsar Site, Lincegrove and Hackett's Marshes SSSI, Solent Maritime Special Area of Conservation and Solent and Southampton Water SPA, which are all located approximately 300m to the east of the site adjacent to the River Hamble. The SPA, SAC and Lee-on-Solent to Itchen Estuary SSSI also continues along the coast, approximately 900m to the south-west of the site.
7. In terms of historical designations, the Grade II listed Royal Victoria Country Park is located approximately 250m to the west of the site. There are a number of listed buildings to the west, south-west and south-east, however all are over 500m from the site boundary. There are two Conservation Areas in reasonably close proximity, being Old Bursledon Conservation Area and Hamble Conservation Area.



8. There is a public footpath (no 1) running behind the residential properties along the eastern boundary of the site (southern half). The designated line of this footpath goes slightly into the site on the north-east corner, however it is considered that this route has been abandoned in favour of the line on the ground as there is no access out onto Satchell Lane. There is also a path along the south-western side of the site along the path of a former railway line.
9. The site was used as an airfield until the mid-1980s, and prior to that was in use by the military. There have been no known relevant planning applications made concerning the site since that date.

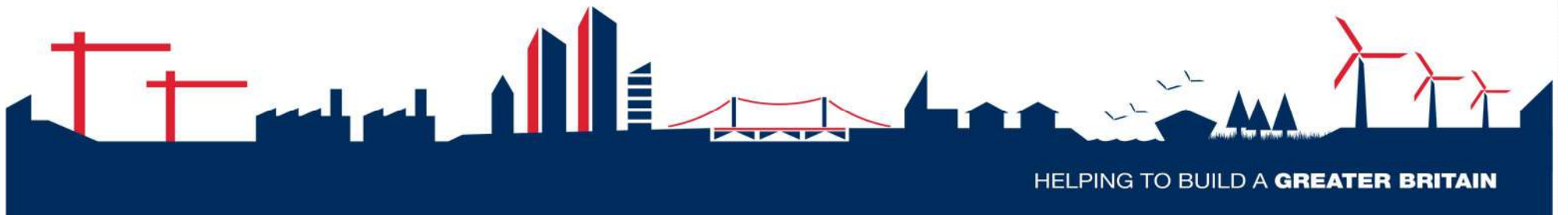


Site Location Plan



Hound to north of site

Hamble centre to south of site



PROPOSED DEVELOPMENT

10. The proposed development is for the extraction of approximately 1.7 million tonnes (mt) of sand and gravel at a rate of approximately 250,000 tonnes per annum (tpa), and as such extraction is likely to last up to 7 years. The site will be progressively restored using in situ soils and overburden from the site, together with imported inert restoration materials, of which around 1.8mt will be required in total. The imported inert restoration materials will be imported at a rate of 150,000tpa whilst extraction is ongoing, increasing to 250,000tpa once extraction has ceased. It is estimated that infilling would take a further 6 years approximately with a further year to finalise planting once importation has ceased.
11. The site would be worked in 7 phases, with the first phase being at the northern end of the site. Phase 1 would be used for freshwater and silt lagoons once extraction is complete, with the overburden used to create noise and visual screening bunds around the edges of the site. Phase 2 is south of the plant site on the western side, and the site would be worked in an anti-clockwise motion, ending with the plant site area, which would be the final phase 7.
12. A new access to the site would be created from Hamble Lane. The location of the access has been carefully chosen to be the safest location and to have the least impact on surrounding trees. The access would be designed such that all vehicles would arrive from and depart to the north of the site.
13. The plant site would include an aggregate processing plant, stocking conveyor, water treatment plant, double weighbridge and weighbridge office, site offices/welfare units, wheelwash, car parking area, cycle parking and overnight



parking area. A conveyor would be used to bring the material from the extraction areas back to the processing plant, other than for Phase 1 whilst site set up is ongoing, which would be brought back to the plant site by dumper truck.

14. No dewatering will occur and the deposit will be worked dry or wet, depending on the water table level. There may be some pumping of rainwater or groundwater at the excavation face to locations within the site, without any off-site discharge.
15. The restoration is proposed to be to parkland and grazing land, with two small ponds for drainage. The parkland area will be open for public access and the remainder of the site for grazing. There will be new native hedgerows, scrub, and woodland also proposed, with existing boundary vegetation remaining and being enhanced.
16. The hours of operation are proposed to be 0700-1700 hours Monday to Friday and 0700-1200 hours on Saturdays. Soil stripping and sand extraction is not proposed to commence until 0800 hours. Maintenance of plant and vehicles is proposed to be allowed until 1800 hours on Saturdays and 1900 hours in the week.
17. It is estimated that there would be an average of 45 loads of aggregate leaving the site per day (90 movements) based on five and a half days per week working from year 1 - year 7. There would be around 27 loads (54 movements) of inert restoration materials imported to the site per day from year 3 – year 7 and once extraction has ceased, from year 8 this would increase to 45 loads (90 movements) per day of imported restoration materials.



18. It is proposed to put in a permissive footpath at the start of the development, from the south-east corner to the north-west corner, which would connect the houses on Satchell Lane to Hamble station and the Hamble School and sports complex. The path would have several entrance/exit points around the site, as shown on the Landscape Layout Operational Phase Plan. This would also enable walkers to access the Hamble Rail Walking Trail on the opposite side of Hamble Lane and connect with surrounding footpaths. The proposed path would be on the outside of the bunds and a fence would separate the path from the bunds and quarry beyond. The path is intended to remain in the long-term, for the duration of mineral working and infilling, and once working has been completed at the site.

Phasing

19. The site would be worked in seven phases, starting from the northern end of the site. Before mineral working commences, a number of operations will take place. The preliminary phase of the operations would involve firstly clearing the location for the site access for reptiles (see Environmental Statement appendix 4.7) and during a seasonable period when conditions are suitable to move soils, creating the site access, installing the tree protection fencing and reptile fencing. Then Phases 1-3, the plant site and bund locations will be cleared of reptiles, which will be moved to the receptor area within the site, and any checks/further surveys necessary for ecological purposes will be carried out. Once the area is clear, the haul road would be constructed and the soils would be stripped for Phase 1 and the plant site and placed around the site creating the bunds on all sides.



20. The heights of the bunds would be as shown on the Phasing Overview plan and would be between 3m and 5m in height. Topsoils would be stored at 3m high and higher bunds would be subsoils with a small layer of topsoil placed over them, in order that the bunds can be seeded. The topsoils and subsoils would be separated with membranes. The bunds will be seeded with a low maintenance grass seed mix or neutral grassland wildflower mix. This will be done during the optimum months for seeding where possible, or during mild and damp conditions.
21. The mineral from Phase 1 would then be extracted and brought to the plant site by dumper truck. Some of the mineral from Phase 1 would be used to surcharge the plant site back to ground level, following soil removal. Phase 1 would then be used as a silt pond and freshwater pond for the remainder of the working of the site. The plant site would be set up and Phase 1 mineral processed. Meanwhile, the footpath around the outside of the site would also be created once the bunds and tree protection are in place.
22. Phase 2 would then be soil stripped and extracted, with the mineral brought back to the plant site by conveyor. A temporary overburden stockpile would be placed within the phase, and the soils from the stockpile would then be used to restore this phase, as well as inert restoration materials which would begin to be imported once the mineral from Phase 2 had been extracted. Phase 3 would then be extracted and processed in the same way, with a temporary stockpile of overburden used to restore Phases 2 and 3, along with the imported restoration materials.



23. Working and progressive restoration would then continue in a circular motion and the final phase would be Phase 7 which is the plant site. At the same time, reptiles would be cleared from the next phase as the site is worked, and moved into the receptor area, which would also change as the extraction progresses (see Vol 2 Appendix 4.7). It is likely that material from the plant site (final phase) would not be processed on site as the plant would be dismantled, and instead and would be exported as-raised. Once extraction is complete, the perimeter bunds would be dismantled and used to restore the plant site and Phase 1 would be restored. Once importation has ceased, it is estimated that a further year would be required to finalise planting across the site. The site access would remain in situ upon restoration for access to the site.
24. In terms of machinery, the temporary operations of bund formation would involve an excavator, dump truck and bulldozer. The routine mineral extraction operations would involve an excavator and loading shovel at the face of the mineral, and hopper to feed the conveyors. The machinery required at the plant site is shown on the Plant Site Area plan and includes a processing plant to screen and wash the mineral, a radial stocking conveyor, water treatment plant, two weighbridges and a wheelwash.
25. Silt from the excavation would be disposed of in the silt lagoons shown on the Phasing Overview plan and Method of Working plans. The silt would be pumped from the processing plant to the lagoons via a pipeline, and water from the freshwater pond pumped back to the plant for aggregate washing, meaning that around 95% of the water on site is



recycled with minimal consumption or losses. The maximum depth of the excavation would be around 7m, with the average depth around 4.5m. Silt is on average 10% of the mineral, as identified by the trial boreholes.



Proposed Site Plan



Restoration and Aftercare Proposals

26. The Applicant's quarrying activities are restoration-led, and mineral extraction only ever takes place where there are restoration proposals in place first, for the final landform and its after-use. The restoration scheme for the site has been designed with the dual objectives of establishing land uses which are appropriate to this landscape, and also creating new features and habitats of biodiversity value, and of value to the species found in and around the site, contributing to the objectives of the UK, Local and CEMEX's own Biodiversity Action Plans. CEMEX is a member of the Mineral Products Association (MPA) and therefore the site would benefit from the protection offered by the MPA Restoration Guarantee Fund.
27. The restoration proposals have been informed by the ecology surveys, local planning policy and biodiversity priorities, and the restoration proposals intend to increase biodiversity net gain, whilst formalising some public access to the site. Importing fill will allow the site to be restored to existing ground levels for the majority of the site, with some existing naturally lower areas to remain as water for drainage purposes. Restoration will be progressive, however the rate at which restoration is completed will depend on the amount of inert restoration materials that can be brought to the site for restoration purposes. It is estimated that it would take a further six years approximately after cessation of mineral extraction to complete restoration.



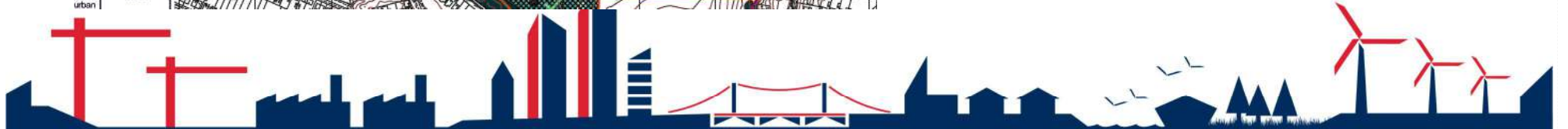
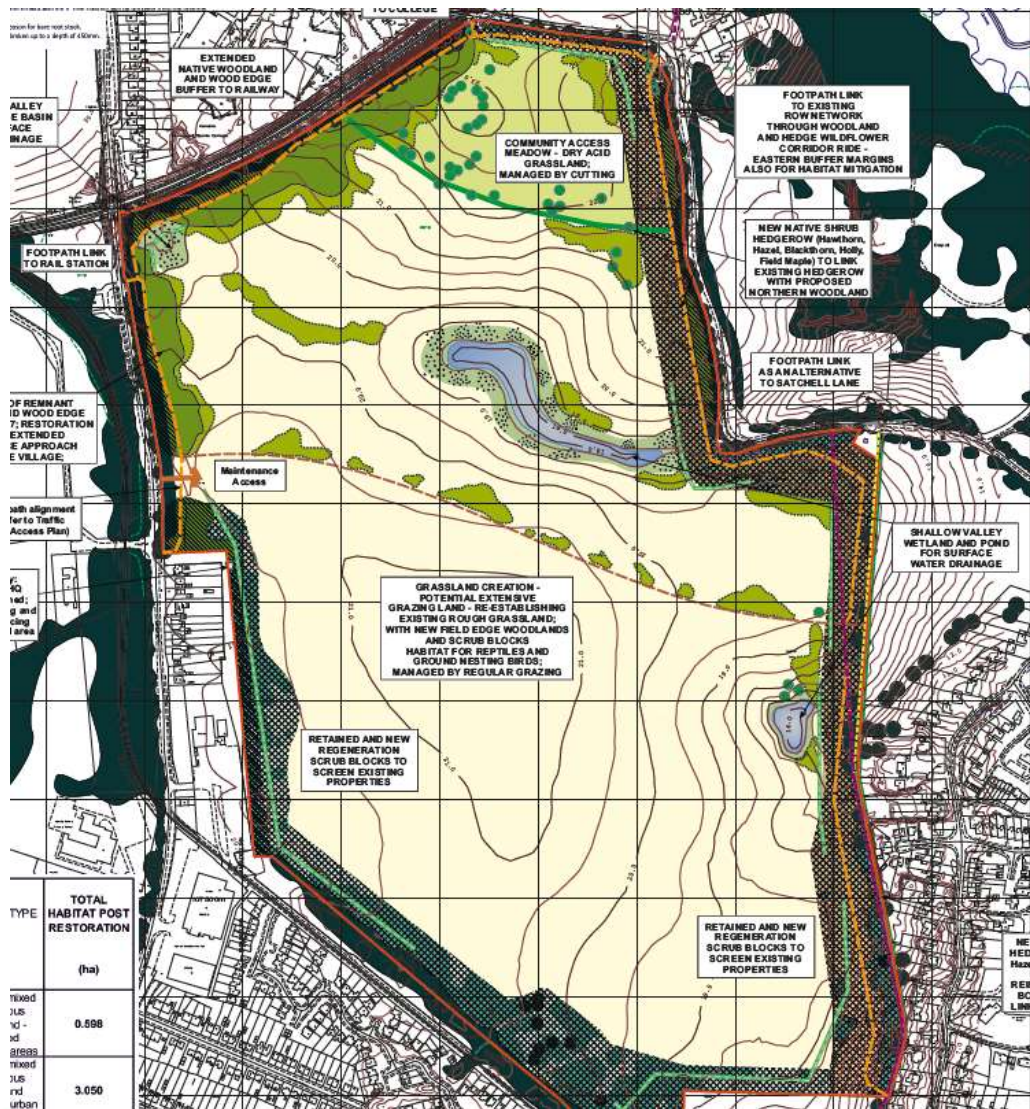
28. The site is proposed to be restored to a mixture of lowland acid grassland, lowland mixed deciduous woodland and mixed scrub with some smaller areas comprising shallow drainage ponds and fens. It would also comprise over 1km of additional native hedgerow and over 16,000 trees and shrubs would be planted. The north-eastern corner of the site would be restored to an area for community access, with a hedge separating it from the rest of the site. Trees would be planted in this area and the grassland would be managed by cutting.
29. The remaining northern half of the site would be restored to dry acid grassland with new field edge woodland and scrub blocks, and is aimed to be managed by regular grazing. The southern part of the site would also be restored to grassland and grazing land, with habitat particularly for reptiles and ground nesting birds, managed by infrequent grazing. Retained and new planting would help to screen existing properties.
30. As well as the public access created in the northern corner, the footpath from the south-eastern corner adjoining Satchell Lane would remain and be extended to further south along Hamble Lane, just north of no 108.
31. The applicants will be responsible for the initial restoration and subsequent after-care management in consultation with the Mineral Planning Authority. The Restoration and Landscaping Details (see Volume 2 Appendix 3.2) have also been submitted to accompany the working scheme and restoration plans. This explains how the created habitats will be maintained in the short and long term, and includes the restoration aims and management objectives, timing of works for the soil operations and planting.



32. The Applicant proposes a 5-year aftercare period for the core grassland area (approximately the southern half) and 10 years on the woodland and grassland area to the north, with 20 years on the community meadow and planting area which would be the area with public access. These are shown by the plan Vol 1 Appendix 2 Aftercare and Management Areas. The submitted aftercare scheme shows an example of a 5-year period however a more detailed scheme can be submitted by condition or pursuant to a S106 legal agreement.
33. The new access to the site will remain in the long term for site maintenance purposes.



Extract from Restoration Plan



ENVIRONMENTAL ASSESSMENT REGULATIONS AND SCOPE OF THE ASSESSMENT

34. The process of Environmental Impact Assessment (EIA) in the context of town and country planning in England is governed by the Town and Country Planning (Environmental Impact Assessment) Regulations 2017. These Regulations apply the amended EU EIA Directive to the planning system in England. Subject to certain transitional arrangements as set out in Regulation 76, the 2017 Regulations revoke the Town and Country Planning (Environmental Impact Assessment) Regulations 2011.
35. The purpose of EIA is to protect the environment, by ensuring that a local planning authority has full knowledge of the likely significant effects on the environment, when deciding whether to grant permission for a development. The aim of the Environmental Impact Assessment process is also to ensure that the public are given effective opportunities to participate in the decision- making procedures.
36. Schedule 1 and Schedule 2 of the 2017 Regulations set out whether a development is likely to need an EIA. This development falls within Schedule 1, due to the size of the site.
37. The Applicant is therefore required to carry out an Environmental Impact Assessment (EIA) and submit with the planning application an Environmental Statement (ES) explaining any significant environmental effects arising from the development, and the mitigation measures proposed to deal with these. This is a professionally objective process involving a team of specialist consultants employed by the Applicant to provide independent professional advice. The



chapters of the ES and accompanying technical appendices have been written by the various consultants as set out in Chapter 5, which includes a summary of their experience and professional qualifications.

38. The EIA process is designed to identify any potential adverse environmental impacts and if appropriate, recommend the use of mitigating measures or monitoring programmes that can be incorporated into the development design to make the proposals acceptable. This will enable the Council, consultees and the general public to reach an informed opinion as to the likely environmental effects of the proposals, should the development be permitted.
39. Under the Section 15 of the 2017 Regulations, an applicant may ask the Planning Authority to state in writing their opinion as to the scope and level of detail of information to be contained in an Environmental Assessment. This is called a Scoping Opinion, although its requirement is not mandatory. If a scoping opinion is sought, Regulation 18(4) of the regulations requires the Environmental Statement to be based on this scoping opinion. In this case, the Applicant has chosen not to scope this proposal, but have sought pre-application advice from the Council, and the experienced EIA project team have individually addressed the likely issues arising from the development, in consultation with the relevant consultees where necessary, so that mitigation measures can be identified and built into the proposals where necessary.
40. An assessment of the main environmental effects of the proposed development and their likely significance is discussed in detail in this volume and its supporting technical appendices. The Planning Statement (Volume 1) provides a summary of those effects in concluding whether the proposed development accords with policy. In this case, the scope of the assessment has taken into account the impact of the proposal on the following matters:



- The impact on the surrounding landscape, taking into account landscape character and the effects on visual amenity of surrounding land users, during the operational stages and following restoration.
- The impact on archaeology and the historic environment, taking into account the potential for below ground remains and the impact on nearby designated and undesignated heritage assets, including the nearby Conservation Areas and listed buildings
- The impact on ecology, including habitats and protected species, both during operational and restoration phases; including the gain and loss of different habitat types as a result of the proposal and impact on overall biodiversity
- The impact on surrounding sites with ecological designations
- The impact on the water environment, which has included an assessment of the impact on groundwater and flood risk, including nearby designated sites
- The impact on highways, taking into account the proposed new access, proposed movements arising from the development and impact on current traffic flows and highway safety
- The impact on air quality, particularly upon the Air Quality Management Area, the nearest residential properties and ecological designations



- The impact of noise arising from the operations, taking into account the noise arising from normal operations and from temporary operations such as bund formation, particularly on the nearest residential properties
- The impact of the proposal on climate change and vulnerability to climate change
- The impact on soils and agricultural land
- Cumulative impacts of the proposal

Methodology

41. The objectives of the Environmental Impact Assessment process for the proposed development for sand and gravel extraction and infilling, have been to:

- Provide a framework for the assessment of environmental impacts that could potentially arise from the proposed development
- Set out the geographical, technical and temporal scope of each assessment and explanations for excluded elements



- Set out the methods and criteria used for baseline assessments for each separate discipline
- Determine the environmental baseline conditions for each separate discipline assessed
- Assess the impact of the development on the baseline conditions for each discipline
- Assess the cumulative impacts of the development and any other relevant developments on the identified baseline conditions
- Set out recommendations to mitigate against any significant impacts
- Detail the residual impacts after mitigation is implemented as recommended
- Conclude the impacts for each discipline, cumulative impacts and the Environmental Impact Assessment as a whole
- Set out requirements for further studies and assessments where required

42. The methodology used for most of the chapters is set out in Chapter 4 of the ES. Where this differs, it is set out in the individual chapters. The interaction of receptor sensitivity and impact magnitude is used to determine the significance of an environmental effect. The following table is generally used (unless otherwise set out in the chapter) to determine the significance of the effect, with the shaded effects described as “significant”.



		Magnitude of Impact			
		Substantial	Moderate	Slight	Negligible
Sensitivity	Very High	Major	Major	Major/Moderate	Neutral
	High	Major	Major/Moderate	Moderate/Minor	Neutral
	Medium	Major/Moderate	Moderate	Minor	Neutral
	Low	Moderate/Minor	Minor	Minor/Neutral	Neutral

- 43. Significant impacts may be beneficial or adverse, direct or indirect, short, medium or long-term, temporary or permanent, reversible or irreversible, and cumulative.

The Assessment Team

- 44. Regulation 18(5) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 requires that to ensure the completeness and quality of the environmental statement, the developer must ensure that the environmental statement is prepared by competent experts; and the environmental statement must be accompanied by a statement from the developer outlining the relevant expertise and qualifications of such experts. The qualifications and experience of the various experts are set out in full in Volume 2, but are summarised below.



45. Chapters 1-6, and 15-20 of the statement have been written by Emma Pearman BA(Hons) MSc MRTPI, Principal Development Planner at CEMEX, who has also managed and co-ordinated the EIA and planning project overall. Chapters 7-14, their accompanying appendices and the relevant sections in this non-technical summary have been written by the following experts, who have considerable experience in their field in addition to the following qualifications listed.
46. Chapter 7 (Noise) has been written by Dr Robert Storey BEng PhD MOIA, a Senior Consultant at WBM. Chapter 8 (Water Environment and Flood Risk) has been written by Henry Kelly BSc MSc MCIWEM C.WEM, Senior Hydrologist at Stantec, and Robert Sears BSc MSc who is also a Chartered Geologist and Fellow of the Geological Society, and is a Principal Hydrogeologist and Project Manager at Stantec.
47. Chapter 9 (Landscape and Visual Impacts) has been written by Alison Wise BSc PGDip CMLI who is a Principal Landscape Architect at CEMEX. Chapter 10 (Ecology) has been prepared by Andrew Heideman BSc (Hons) CIEEM, a Senior Ecologist at LC Ecological Services. Chapter 11 (Archaeology) has been prepared by Andy Richmond BA PhD MCIfA FSA, director of Phoenix Consulting Archaeology.
48. Chapter 12 (Air Quality) has been written by Bob Thomas BSc (Hons) PgDip MSc MEnvSc MIAQM CSci, director at AQA. Chapter 13 (Transport) has been written by Ben Howard (MSc, BA (Hons), MCIHT) who is an Associate Partner at i-Transport, and Imogen Nicholson (MEnvSci (Hons), MCIHT, MTPS) who is a Principal Consultant at i-Transport. Chapter 14 (Soils) has been written by David Royle, Associate Director of Land Drainage Consultancy Ltd.



CONSIDERATION OF ALTERNATIVES

49. Regulation 18 (3) (d) of the Town and Country Planning (Environmental Impact Assessment) Regulations 2017 requires the ES to include a description of the reasonable alternatives studied by the developer, which are relevant to the proposed development and its specific characteristics, and an indication of the main reasons for the option chosen, taking into account the effects of the development on the environment.
50. There is no definition of what the alternatives should include, however in this case it is considered that alternatives open to consideration could include the following:
1. Demand alternatives
 2. Location alternatives
 3. Process alternatives
 4. Scheduling alternatives
 5. “Do nothing” scenario

Demand alternatives

51. The need for aggregate is considered fully in Section 10 of the Planning Statement at Volume 1. Government Guidance in the form of the National Planning Policy Framework states that it is essential that there is a sufficient supply of minerals to



provide the infrastructure, buildings, energy and goods that the country needs, and this need for such mineral is similarly reflected in the local development plans for this area.

52. The future demand for mineral in Hampshire is set out in the Local Plan, which requires that Hampshire needs to provide for a steady supply of aggregates, maintaining landbanks for at least seven years for sand and gravel. The latest Local Aggregate Assessment (LAA) for Hampshire states that to meet future demand for aggregate, Hampshire will greatly need to increase its land-won aggregate bank. The LAA notes that the minimum 7-year landbank is not currently being met, and even if permission is granted for applications for additional sand and gravel which are undetermined at the time of writing, the landbank is not likely to increase much beyond 7 years and will quickly deplete again.
53. There are almost no reasonable alternatives to sand and gravel for construction materials. Recycled aggregates can make a contribution for certain applications of aggregate, and the LAA shows that there are 31 sites for recycled and secondary aggregates in Hampshire, although sales have been falling year on year in Hampshire, since a peak in 2014. The capacity for recycled and secondary aggregates is estimated in Hampshire's LAA to be around 2.38mt per annum, however sales in 2018 were 0.72mt.
54. Recycled aggregate tends to account for around 25% of the supply of aggregate only, as it is limited by the supply of construction, demolition and excavation (CDE) waste, constraints in site locations given the processes required to produce recycled aggregate which can be detrimental to amenity, availability of appropriate sites and the amount of investment needed to convert CDE waste into a high-quality aggregate.



55. Recycled aggregates tend to have a relative density lower than that of primary aggregates, and absorb more water. Concrete from recycled aggregate often has higher drying shrinkage and creep as well as being less durable. As such primary aggregates are more consistent in performance and strength, and tend to be used for concrete production over recycled aggregates that tend to be used more for fill and capping. Recycled aggregates tend to be available in smaller quantities as well as it relies on waste being produced from the construction industry, so it can be less useful for larger projects where consistency of composition, strength and quantity is key. Therefore, materials of different physical properties and qualities are often needed to meet different end uses, and the scope to substitute one aggregate material for another can be limited.
56. Marine aggregates are another source of supply in Hampshire, and account for the majority of the supply, with the Policy 17 of the Hampshire Minerals and Waste Plan 2013 (HMWP) identifying that they could supply around 2 million tonnes per annum (mtpa) of aggregate. The latest LAA shows however that actual supply has been lower at just over 1.5mtpa at its peak. There are six wharves in Hampshire, with two in Southampton, Marchwood on the opposite side of Southampton Water, and the remaining three in Fareham, Portsmouth and Havant areas. However, supply from wharves is limited by lack of capacity, and some wharves have closed in the last few years. Marine aggregates also have a finite supply, and there can be pressure on wharves for redevelopment given their locations, with some constrained by incompatible surrounding land uses.



57. Whilst marine aggregates are the largest source of supply in Hampshire, Policy 17 of the HMWP sets out that an adequate and steady supply of aggregates until 2030 will be provided for from local sand and gravel sites, at a rate of 1.56mtpa. The supply will be augmented by safeguarding infrastructure capacity so that around 1mtpa of recycled and secondary aggregates, 2mtpa of marine aggregate and 1mtpa of limestone delivered by rail can also be supplied. This is considered to reflect the market and environmental conditions in Hampshire, without prejudicing the supply of aggregates to the wider region. It is therefore clear that all of these sources are required to provide a sufficient long-term supply in Hampshire.

Location alternatives

58. Unlike other types of development, minerals can only be worked where they are found. This site is an allocated site in the Hampshire Minerals and Waste Plan 2013, and as such, the Mineral Planning Authority have already been through a process when deciding on the sites to allocate, which looked at the most suitable sites for mineral excavation, and found that this site was the most suitable location in south Hampshire. This process would have looked at a range of factors including likely effects on the landscape, ecology, residential amenity, archaeology and heritage; as well as the site's location in terms of access to major roads.
59. Hampshire is constrained by large parts of the county being within National Parks and Area of Outstanding Natural Beauty designations, which makes it more difficult to extract minerals in these areas because of the effects on the protected



landscape. Potential mineral sites are also often constrained by insufficient access to roads suitable for HGV traffic, ecological designations, and a wide range of other factors.

60. This site is not close to any other quarries, which are largely clustered around the south-west of Hampshire and provide mineral to the urban areas around Poole and Bournemouth. This site would be able to provide mineral to the geographical areas around the eastern side of Southampton, and the western side of Fareham and Portsmouth, by using its good road connections to the M27, noting that Junction 8 of the M27 is due to be improved by Highways England. Therefore, having a site located here shortens the journeys of HGVs which would otherwise travel to this area, making it a more sustainable way of supplying the south Hampshire areas.

Process alternatives

61. The proposal has been through design alterations and the development proposed is considered to result in the least impact on the environment and amenity. The location of the access has been determined following detailed discussions with the County Highway Authority over a number of years, and the provision of a road safety audit, in order to find the safest point of access and in a location that minimises the impact on trees.
62. The stand-offs from the boundary and height of the bunds have been determined in consultation with a noise consultant to ensure that no significant impacts on surrounding noise sensitive receptors. The proposed plant site location has also



been chosen in order to be close to the access and to be away from most residential properties. As such, the proposal has been shaped by the various assessments carried out as part of the EIA process.

63. Conveyors will be used to transport the material from the excavation areas to the processing area and this will have less environmental impacts than movements of dumper trucks between these two areas.
64. In terms of access to the site, there is no suitable alternative than using the road. The site is adjacent to the railway line at the north of the site, however there are a large number of factors restricting the use of the railway to transport mineral from this site.
65. There is currently no rail siding, so this would have to be built into the site to take mineral by rail, as well as the associated infrastructure. This in itself would cause significant disruption to surrounding neighbours, with the construction vehicles having to come by road, and the associated ongoing noise and amenity impacts for constructing this, without any location for mitigation such as bunds so close to Hamble School.
66. There would have to be a suitable window for using the siding provided by Network Rail, and often it is not within daytime hours that these windows are available, and night time loading is not likely to be possible, given the proximity of properties to the north of the railway along Hamble Lane, as well as those in Satchell Lane towards the north of the site. The noise of loading and unloading railway trucks can cause significant disturbance even in the daytime, and given the very close proximity of residential properties along Hamble Lane, with very limited space for noise mitigation, it is likely



that the noise from this would not meet the required criteria to result in a good standard of amenity for these properties and the school.

67. In order to transport mineral by rail, there also has to be suitable facilities at the other end for it to go to and CEMEX are not aware of any suitable locations for it to be unloaded at nearby stations. The mineral is required in this part of south Hampshire and as such it would not be sent further afield. At the other end it would also have to be transported by road, so the vehicle numbers overall would not be reduced, but moved to another local area nearby.
68. Given these constraints, CEMEX only transport mineral by rail from one quarry in the UK, which has around 100 million tonnes of aggregate reserves. The cost of setting up a railway siding is significant and for the small amount of material to be extracted at Hamble, in the region of 1.7 million tonnes by comparison, would not make the project financially viable.
69. Using barges to transport the mineral would also not be possible, given that the site is not adjacent to any river, and as such the same number of HGVs would have to leave the site to transport the mineral to the nearest barge facilities, which would be likely to involve using Satchell Lane and other small roads to reach the water. As such it would not result in any benefits in terms of reduced congestion to local roads and would result in less suitable roads having to be used.

Scheduling alternatives



70. The site is allocated in the HMWP which plans for the supply of mineral in the county until 2030. The site was expected to come forward any time from 2016 as stated in paragraph 6.77 of the HMWP so it is not premature in that regard. At the moment, as set out in Section 10 of the accompanying planning statement, Hampshire are struggling to meet and maintain a landbank for sand and gravel of the minimum 7 years and as such the LAA states that to meet future demand for aggregate, Hampshire will greatly need to increase its land-won aggregate bank. It is likely to take up to 2 years before the site is up and running, including the time taken to obtain planning permission, and as such it is not likely to be operating until at least 2023, and by 2025 other sites in Hampshire will be running out, as explained in Section 10 of the planning statement. It is therefore clear that the site is needed at the present time to maintain the consistent supply of sand and gravel in the County.

Do nothing scenario

71. Another alternative to the demand is the “do nothing” scenario, which means considering the impact if this proposal was not to go ahead. If this site was not available it will result in aggregate coming to this area from further afield, which is less sustainable in terms of vehicle movements than providing a local supply. If Hampshire does not supply sufficient land-won sand and gravel for its own needs, it may result in sand and gravel being imported from other counties and as well as being less sustainable environmentally, this merely passes any impacts of mineral development onto other communities. It is also likely to result in construction projects, including house building and extensions, taking longer to complete, with



the associated adverse impacts to surrounding neighbours for a longer period, and prices significantly increasing with the short supply.

SUMMARY OF ENVIRONMENTAL EFFECTS

72. This section provides a summary of the chapters which were written by the various experts as set out above, and a summary of the assessment and conclusions reached in the full Environmental Statement (Volume 2).

Noise (Chapter 7)

73. The noise chapter sets out the findings of the noise assessment. Current guidelines on noise are contained in the web-document “Planning Practice Guidance” for Minerals, first published in March 2014.
74. Site noise limits for the dwellings in proximity to the proposed quarry are suggested, based on the guidance contained within the Planning Practice Guidance for Minerals having regard to the measured background noise levels at locations taken to be representative of the dwellings selected for this assessment.
75. Site noise calculations have been undertaken for six noise sensitive locations, taken to be representative of Hamble School and the nearest dwellings to the proposed quarry. The calculated site noise levels are presented for inspection and comparison with the suggested site noise limits at the receptors and demonstrate compliance with the suggested site noise limits at all nearest noise sensitive properties.



76. The calculated site noise levels for routine and temporary operations at the proposed quarry comply with the suggested site noise limits at all the assessment locations.
77. The impact of site noise on the Rail Trail public footpath to the south of the site and the SPA/SAC and Ramsar areas in the vicinity of the site has also been considered.
78. Since the proposed operations conform to the advice set out in the Planning Practice Guidance for Minerals with regard to both routine and temporary operations, it is considered that the site can be worked while keeping noise emissions to within environmentally acceptable limits.

Water Environment and Flood Risk (Chapter 8)

79. The hydrogeology and hydrology chapter considers the potential hydrological and hydrogeological impacts associated with the proposed excavation of sand and gravel, together with progressive restoration of the site using existing overburden and imported inert restoration materials.
80. The Site lies on an interfluvium with surface water shed to the east towards the River Hamble and west towards Southampton Water. A small spring is present to the west of the Site at the head of a small stream that discharges to Southampton Water.



81. The Site is underlain by River Terrace Deposits (RTD) overlying clayey material comprising the Marsh Farm Formation (MFF) and sandier material comprising the Selsey Sand Formation (SSF). Given the Site's position on the interfluvium, there is relatively little groundwater present within the RTD.
82. An impact assessment has been undertaken of the proposed excavation and subsequent restoration with imported inert restoration materials. A number of embedded mitigation factors are taken into account and the impact assessment suggests that there will be no significant impacts on groundwater, surface water or the spring feature.
83. A number of additional mitigation, compensation and enhancement measures are proposed to ensure that impacts from the Site are not significant.
84. Groundwater monitoring for level and quality will continue at the existing Site perimeter monitoring wells for a period of time post restoration to confirm that the Site is not having an impact on groundwater or surface water.

Landscape and Visual Impact (Chapter 9)

85. The application site lies within the Netley, Hamble and Bursledon Coastal Plain Landscape Character Area (LCA), and interfaces with the Hamble River Valley LCA to the east. The surrounding landscape character is of a Coastal Plateau; a level topography bisected by small valleys draining into the Solent to the south-west and the Hamble River to the east. Road and field patterns across the plateau are regular, and the landscape south of the railway is semi enclosed by dense



mature woodlands around Royal Victoria Country Park parkland to the west and Badnam Copse to the north-east. North of the railway former market garden land is becoming increasingly degraded by equestrian use and new housing development.

86. This former airfield landholding landscape fabric is poorly managed, being un-grazed but with some mature remnant boundary hedgerows and linear woodland features; the former airfield chain-link fences are in a poor state of repair. Whilst the landscape is likely to be locally valued, it is not designated at a national or local level. In addition, there are some significant detracting features within the surrounding area, with the proximity to the rail corridor, the visual intrusion within the landscape of the oil refineries at both Hamble and Fawley, the Southampton flight paths and more distant background traffic noise from the busy M27 and A35 corridors. The Landscape Sensitivity for this semi-enclosed area is therefore Medium to Low.
87. In the short term, the development will temporarily alter the surrounding landscape character, with the establishment of a temporary mineral processing plant site for seven years, the establishment of additional temporary soil storage and screen mounds, internal conveyor and haul routes and areas of mineral extraction and infilling, being followed by restoration on a phased basis. The total duration of the development is expected to be thirteen years including the period for the importation of restoration materials.
88. The working and restoration scheme for the site has been designed to retain and protect the greater proportion of mature trees and existing hedgerows, with the removal of only three mature trees and a small area of the western boundary



scrub margin to create the site access, and the removal of a small area of mature scrub in the south-east sector of the proposed working area.

89. The restoration will provide substantial additional peripheral woodland and hedgerow planting both as advance planting and at final restoration forming a medium to large scale field pattern, together with small ponds and wetter areas, and areas of new acid grassland.
90. A total of 20,080 trees and shrubs will be planted, using native species found within the local area, creating enhanced nature conservation corridors as part of the site restoration proposals. The woodland, grassland, wetland, and hedgerow creation will integrate the restored landform into the surrounding landscape; the public rights of way network will be enhanced to enable them to be more useable and extended by a short length of permissive path.
91. In the long term, the application site and its surroundings will benefit from an increase in native tree and shrub cover, and supplementary and replacement hedgerow planting that will reinforce existing boundaries and provide enhanced linkages across the restored landform. The magnitude of landscape impact for the application area post restoration is generally Low – Negligible, with the greater part of the application area being restored to original ground levels and under a similar agricultural regime. The overall landscape impact significance of the site restoration in the longer term is therefore Minor-Neutral Beneficial.



92. There are properties or publicly accessible viewpoints at the site boundaries from which views of the proposed mineral development area can be obtained. However, direct, open, proximate, extensive, or prolonged views of the application area from properties and public rights of way are mainly limited to the proposed soil storage mounds at the operational periphery.
93. Embedded and Additional Mitigation measures are proposed to minimise the landscape and visual impacts of the proposed development during both the preparation and operational phases of the scheme. These include:
- Further boundary advance hedgerow and tree planting.
 - Retention, management, and supplementation of boundary vegetation.
 - The design of the processing plant, minimising its height.
 - Provision of grassed soil screen mounds for acoustic and visual screening.
 - A phased scheme of working and restoration to reduce areas open at any one time.
 - The design of the final restoration scheme to reinstate pastoral agriculture, and create new woodland, landscape, and conservation features in accordance with the principles set out in the Minerals Local Plan, and the Landscape Character Guidelines.



- Improvements to the condition of the existing Public Rights of Way Network.
- Provision of an additional length of permissive footpath as a safer alternative route to pedestrian use of part of the Satchell Lane public highway.

94. Once all the mitigation measures are considered, the residual landscape and visual effects of the development will be of Minor significance.
95. Views from the Conservation Areas, Listed Buildings and Registered Parks and Garden around the site which would be potentially affected by the proposed development are of Minor significance.
96. Enhanced nature conservation corridors will be created as part of the site restoration proposals. Significant areas of new woodland planting, hedgerows, and acid grassland seeding will be created to integrate the restored landform into the surrounding landscape, and the footpath will be extended by permissive paths around the edges of the site to provide safer routes connecting existing paths, Hamble Railway Station and The Hamble School.
97. Any anticipated long term residual landscape and visual effects of the proposals are likely to be minimal.



Ecology (Chapter 10)

98. It is concluded that the proposed project is only likely to have short-term adverse effects during the operational and restoration phases, mainly resulting from the temporary losses of habitat and associated disruption caused to species of fauna which use the site. It is considered that an optimal level of embedded ecological mitigation is being proposed for the operational phases of the project and any unavoidable, short-term adverse ecological effects will be controlled at an acceptable level and then soon offset in the post-restoration period. Any adverse effects during the operational phases should also be counterbalanced to some degree by the predicted positive effects in relation to native hedgerows and off-site habitats.
99. The proposed restoration plan for the site is expected to have an overall positive long-term effect in terms of the biodiversity value of the site itself, the effects on identified ecological features within the ZOI, and the site's ecological connectivity and functionality within the surrounding landscape.

Archaeology (Chapter 11)

100. A wide range of sources were consulted for this assessment, including the local Historic Environment Record, published articles and books and manuscript documents. In addition, the site has been visited for a visual inspection. The data gathered has provided the information required with which to make an initial assessment of the impact of the development proposals of the archaeological and historic landscape.



101. The assessment of direct impacts on archaeology and cultural heritage assets within the proposed development boundary shows that there will be an impact to:

- 1) Potential archaeological features as identified on the Council HER across parts of the site.
- 2) Aspects relating to the former military Hamble Airfield.

There is also a suggested impact to:

- 3) Presently unrecorded archaeological remains that may exist elsewhere on the Site.

102. It is therefore proposed to undertake appropriate archaeological investigation of the site prior to mineral extraction. Such works are proposed to be carried out across each quarry phase prior to workings commencing in that particular location. In the event that archaeological remains are identified, an appropriate level of archaeological investigation and recording to mitigate any potential impact to any identified remains will take place.

103. Any such works can be secured through the imposition of a suitably worded planning condition. The works would be agreed with the Council Archaeological Office and be carried out in full accordance with approved WSIs. The WSIs will detail the undertaking of appropriate works to allow for a full and proper record of any archaeological remains within areas of proposed development to be made. These works will mitigate any perceived impacts to the archaeological resource.



104. The assessment of indirect impacts on all cultural heritage assets within the study area shows that the proposed quarry will have a low magnitude of change of a temporary nature to a small part of the Bursledon Conservation Area (western extent of Character Area 2), being a Medium sensitivity receptor. Assessment identifies the predicted impact to be of Minor Significance, which does not equate to an impact requiring mitigation. Nevertheless, the creation of soil storage bunds which will be grassed over and placed along the site's NE boundary will afford an increased protection to the setting of this part of the Conservation Area whilst quarry operations take place. Quarry operations will also be temporary in nature, prior to approved restoration taking place. Following site restoration, any minor effect to the setting of the designation will be restored.
105. There are no other identified significant indirect effects on the archaeological and heritage resource as a result of the proposed development. The proposed quarry is not located within the primary setting of any additional surrounding cultural heritage asset. There may be changes to long distance and/or obscured views in some circumstances, but none of these changes are relevant to planned views or vistas from cultural heritage assets and those minor changes are not assessed as compromising the understanding or historic significance of any feature.

Air Quality (Chapter 12)

106. The operational impacts of increased emissions arising from the additional traffic on local roads due to the development have been assessed. Concentrations have been modelled at ten existing receptors, representing properties where the



impacts are expected to be greatest. It is concluded that concentrations of NO₂, PM₁₀ and PM_{2.5} will remain below the AQALs at all existing receptors in 2023, whether the scheme is developed or not, and that the impacts will be negligible.

107. The operational phase dust risk assessment has determined that, with the designed in mitigation measures, the magnitude of the dust effect from the extraction of the minerals is also negligible.
108. Given that the impact of the proposed development is negligible, it is considered that the effects of the operation of the proposed development on air quality and dust will be insignificant.
109. There should be no constraints to the development of the site, with regard to the air quality and dust effects on local receptors, as the proposed development is consistent with the relevant parts of:
- The NPPF;
 - Policy 10 of the Hampshire Minerals and Waste Plan; and
 - Policy 32.ES and Policy 33.ES of the Eastleigh Local Plan Review (2001-2011).

Transport (Chapter 13)

110. This chapter has assessed the environmental effects of the predicted increases in traffic associated with the proposed development. The long-term operational effects of the development were assessed as negligible in all respects.



111. Further information has been submitted at the Regulation 25 stage which has assessed junction capacity and updated the background traffic data to 2022. Further information has also been submitted in terms of justification for the site access, swept path data for the site layout, updated Personal Injury Accident Data and Traffic Impacts. This has shown that the peak periods have changed since 2017 and the proposed development would have a maximum impact on two-way total traffic flows of 2.4% in the morning peak and 1.7% in the evening peak, and typically less than 1% throughout the day on Hamble Lane in the vicinity of the site access. This falls within the negligible impact (less than 30% increase in traffic). The overall traffic flows on Hamble Lane are 5-10% less than they were in 2017.
112. The conclusions of the transport chapter are as follows:

Potential impact	Nature of impact	Significance prior to mitigation	Mitigation / Enhancement measures	Residual effect
Severance	Direct	Negligible	Environmental Management Plan and HGV Routing Management Plan.	Negligible
Driver Delay	Direct	Negligible		Negligible
Pedestrian Delay	Direct	Negligible		Negligible
Pedestrian Amenity	Direct	Negligible		Negligible



Potential impact	Nature of impact	Significance prior to mitigation	Mitigation / Enhancement measures	Residual effect
Fear and Intimidation	Direct	Negligible	Contributions towards walking and cycling improvements identified in EBC's LCWIP	Negligible
Accidents and Safety	Direct	Negligible		Negligible
Hazardous Loads	Direct	Negligible		Negligible
Dirt on the Highway	Direct	Negligible		Negligible

Soils (Chapter 14)

113. A detailed soil resource assessment has been undertaken across the Application Site. The assessment has identified two soils types on the 60.04 ha of land impacted. Soil Type 1 comprises 39.84 ha of deeper medium to heavy loam whilst Soil Type 2 consists 20.20 ha of moderately stony medium loam. Physical characteristics of each soil type necessitate careful handling, selective recovery and re-instatement.
114. Sand and gravel extraction will lead to the loss of up to 1.87 ha of good or moderate quality soils to accommodate wetlands. Re-instatement proposals will be to mitigate likely significant effects, as far as reasonably practicable, by re-



using better quality topsoil and subsoil stripped from the extraction area to provide equivalent or improved restored soil profiles in the restored areas of the application site.

115. Approximately 97% of the application site will be returned to a similar conservation and woodland use within an aftercare period post extraction and will require the creation of equivalent soil profiles to sustain the land use types proposed.
116. The Proposal has embedded mitigation in the form of soil handling, storage and progressive restoration. Compliance with legislation, guidance and the adoption of good practice guidance and techniques during the extractive phases will mitigate many of the issues associated with large scale soils handling, their storage and re-instatement. The mitigation can be further secured by planning conditions relating to soil handling and re-instatement, which is usual on a Proposal of this type.
117. In terms of Agricultural Land Classification, the application site has been undergoing a gradual reversion from the previous airfield/grassland use to extensive scrub and amenity grassland over a period of at least 25-30 years, and probably for much longer. To bring this land into agricultural use will require significant intervention in terms of vegetation clearance and management, weed control, land drainage, agricultural inputs of fertiliser/manure, fencing, access and water supply that are economically and logistically impractical. The land is severely constrained in its agricultural potential and has been designated as non-agricultural.



118. Despite the above conclusion with respect to land use, the Chapter fully acknowledges that soils within the Study Area have an intrinsic value and quality which supports Natural England's recommendation that soil resources be fully considered within the ES.
119. The likely significant effects of the Proposal on the soil resource can be viewed as minor adverse in the longer term and should be balanced against the wider socio-economic and environmental benefits of the Proposal.
120. An aftercare management plan is anticipated to be conditioned and agreed with the LPA. This will ensure that the land is managed in a sympathetic manner leading to suitable soil profiles and both sustainable and healthy plant growth in the longer term.

Implications of No Development Scenario (Chapter 15)

121. It is concluded therefore that should the development not go ahead, the natural baseline of the site would continue to evolve with similar species as are currently there. The vegetation would likely be kept in check by some animal grazing and site management. Over time, if the site was completely unmanaged, eventually grassland may give way to pioneer tree species and eventually, over a very long period of time the site may contain largely woodland. If the site was not worked, it is likely that the biodiversity value of the site would be less than is proposed through the restoration of the site. If mineral extraction did not go ahead it is also possible that other development eventually would, and this would sterilise the mineral resulting in it having to be imported from further afield.



Human Health (Chapter 16)

122. The ES assesses the potential impact of the proposal in relation to the water environment, noise, air quality, transport, and visual impacts. These potential pathways to impacts on human health have been considered within this assessment and, drawing on the conclusions of Chapters 7 to 9, and Chapters 12 and 13, no significant adverse effects to human health have been identified as a result of the proposals.

Vulnerability to Accidents and Disaster (Chapter 17)

123. The Proposal is not considered to be highly vulnerable to accidents or disasters as a result of the nature of operations proposed within the Application Site. Whilst there are pipelines on the edges of the site, large stand-offs between the pipelines and the extraction area have been designed into the scheme to mitigate any risk. There is a medium risk of unexploded ordnance/bombs due to the site history, however robust mitigation as set out above will be put in place to deal with the risk.
124. Therefore, no likely significant effects on the environment have been identified as result of potential accident and disasters affecting the Proposal.



Climate Change (Chapter 18)

125. The 2017 Regulations introduced a requirement to take into account climate change in Environmental Statements, in terms of a proposal's impact on climate change and its vulnerability to the effects of climate change.
126. It is considered that the proposal has the potential to impact on climate change through the effects of flood risk, vehicle emissions, energy consumption, location relative to market and the impact on habitats and species. However, it is concluded that the site minimises its impacts on climate change as far as possible, and given its location relative to the market, it prevents less sustainable vehicle movements bringing the material from further afield.
127. It is also considered that the proposal constitutes sustainable development, given that the mineral is required by Hampshire to maintain their landbank, and to supply housing, infrastructure and other building projects in the Hampshire area. There are no other quarries nearby and the site is needed in addition to wharves to provide sufficient sand and gravel to Hampshire. The proposal will have economic and social benefits, in terms of the revenue generated and local job creation particularly, as well as allowing public access to parts of the site during operational and restoration periods. There are no significant adverse environmental effects during the operational period of the development and the proposal will have environmental benefits in terms of its restoration and the net gain in biodiversity.
128. It is therefore considered that the proposal constitutes sustainable development and its impact upon, and vulnerability to, climate change has been fully taken into account and minimised as far as possible.



Cumulative Impacts

129. Each chapter has assessed the likely cumulative impacts of the development, and they have looked at the impact of this proposal, in conjunction with other nearby developments, including other nearby quarries and housing developments, under construction and proposed.
130. No chapters have identified any significant cumulative impacts, and this includes impacts in terms of noise, air quality, archaeology, ecology and transport.

CONCLUSION

131. The EIA process has demonstrated that the proposed development can be operated with no unacceptable effects on quality of life and the local environment, provided that the various mitigation measures recommended are implemented. The mitigation measures and further controls, as necessary, can be imposed via planning conditions and legal agreement.
132. The restoration proposals will bring long term positive enhancements to the area with ecological and biodiversity enhancements by way of the creation of UK and Eastleigh Biodiversity Action Plan priority habitats, which will attract a wide range of species, and result in a significant beneficial effect in ecological terms, and a beneficial impact upon the landscape. The restoration will also provide recreational benefits with a permissive path and recreation area. Restoration will be undertaken to high environmental standards in accordance with the requirements of the NPPF and Development Plan policies.



133. The temporary mineral extraction will not result in any long-term significant adverse impacts, and the few identified moderate and minor temporary adverse impacts are within acceptable levels as set out in the relevant guidelines.
134. Minerals can only be worked where they are found and where it is environmentally acceptable to do so. This site has been identified in the Hampshire Minerals and Waste Local Plan 2013 as the best option to supply this area of south Hampshire, and is required along with other land-won and marine sand and gravel to maintain a steady supply of sand and gravel to Hampshire.
135. The Environmental Statement has also addressed the impact of the development on climate change, and outlines the measures that CEMEX takes to ensure its operations reduce impacts on climate change and that the effects of climate change are fully taken into account in terms of the assessment process.
136. Cumulative effects refer either to the incremental additional effects of more than one mineral operation in the vicinity or to the combined environmental effects of the proposed development with other intensive activities in the locality. No significant impacts have been identified during the environmental impact assessment process which indicate that approval of the proposed development will, in combination with other local activities taking place in the area, result in unacceptable harm to the environment or local amenities.



137. The Environmental Statement supports the planning application for the proposed sand and gravel extraction at the application site, and it is considered that sufficient information has been provided to allow the Minerals Planning Authority to conclude that the development is acceptable in environmental terms.

