# Sustainability Appraisal Report Non-Technical Summary

# Updates to Mineral Sites Plan

## Regulation 19 Consultation

**Prepared for**

**Kent County Council**

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| | | | |



Well House Barns, Chester Road, Bretton, Chester, CH4 0DH
1st Floor, Barfield House, Alderley Road, Wilmslow, SK9 1PL
Maling Exchange, Studio 305, Hoults Yard, Walker Road, Newcastle Upon Tyne, NE6 2HL

T: 0344 8700 007
enquiries@axis.co.uk
www.axis.co.uk

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## 1.0 EXECUTIVE SUMMARY

1.1.1 Axis has been commissioned to undertake a Sustainability Appraisal (SA) in support of the preparation of an update to the Kent Mineral Sites Plan (MSP). This report presents the interim outcomes of this process up to the Regulation 19 stage. The draft update to the MSP considers a new site proposed for allocation in the MSP for hard rock, alongside the three already allocated sites for soft sand and sharp sand and gravel which it is proposed be retained in the updated MSP. The new site is Land South and West of Hermitage Quarry, adjacent to the existing quarry.

1.1.2 Various environmental, social and economic issues have been identified through reviewing a wide variety of plans and strategies, collecting baseline information and identifying sustainability issues and challenges. These issues have informed the development of the sustainability appraisal framework, which consists of a set of sustainable development policy objectives as set out in **Table 2.1** of the report. The new site proposed for allocation on Land South and West of Hermitage Quarry and the existing sites allocated in the MSP as a whole have been appraised against this set of sustainability objectives. For the new site proposed for allocation, the findings are set out below, while the findings for the MSP as a whole are set out in the main report which follows this summary.

1.1.3 Allocation of Land South and West of Hermitage Quarry would ensure the continued local supply of hard rock as a material to support economic growth, in particular via its use as a construction aggregate. It would provide support for local jobs within the mineral industry and help to avoid increased transport costs for hard rock. It would ensure the continued availability of Kentish ragstone for use in building restoration projects, which has qualities difficult to find in stone from elsewhere.

1.1.4 There are some residential dwellings in proximity to the site proposed for allocation and there is the potential for impacts on these nearby residential areas from dust, noise, blasting, visual intrusion and light. Proposed development criteria require appropriate mitigation of impacts in accordance with KMWLP Policy DM 11 Health and Amenity.

1.1.5 The southern part of the site is designated as ancient woodland in the form of a Plantation on Ancient Woodland Sites (a sweet chestnut coppice) which would be lost to development, potentially fragmenting the remaining woodland. Ancient

woodland is deemed irreplaceable habitat[1] legally requiring a compensation plan. The ancient woodland soil has biodiversity value and is proposed for translocation as part of the compensation plan. Part of Oaken Wood Local Wildlife Site (LWS) would be lost to development, also potentially fragmenting remaining parts of the woodland. Plans are to restore the site to deciduous native woodland to achieve a net gain in biodiversity. Conditions should be imposed on development so that worked areas are restored soon after completion and without avoidable delay. The agricultural land in the northern part of the site is grade 2 (very good). The soil from this area would be required to be stripped, stockpiled and used for restoration. Any planning application is required to be accompanied by a Soil Resource Plan as per government guidance.

1.1.6 Public Right of Way (PROW) path MR108 crosses the site and there are several permissive tracks through Oaken Wood which may be used for recreation by walkers and riders. The PROW would be subject to diversions which, in accordance with KMWLP policy, must preserve the connectivity of routes and made safe for all users. The permissive tracks would also be diverted for the benefit of users.

1.1.7 An area Tree Preservation Order covers land to the north of the proposed site, the majority of which has already been lost to extraction. A strip of land along the southern and western borders of the TPO with remaining trees is covered by the proposed working area, therefore trees covered by the TPO would be lost. This would be an adverse impact on amenity in the short to medium term, but restoration to native woodland would reverse this loss in the long term

1.1.8 The site is 3.9km from the Kent Downs National Landscape and there will be no significant visual impacts provided the site is worked sequentially with the existing operations. The Maidstone Landscape Character Assessment identifies Oaken Wood as a particular landscape and, although workings from extraction could be screened, this will not be a minor change and will not preserve the continuity of the feature, therefore adverse impacts are likely. It would be difficult to avoid significant impacts on KCC Character Area Mereworth Woodlands, but a well-considered restoration scheme could theoretically result in new native woodland over a period of years post-extraction, restoring the character of the area to some degree.

[1] *Defined by The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024*

1.1.9 The 2022 planning permission amending vehicle numbers for the existing quarry states that there should be a daily maximum combined total of 800 HGV movements a day within a single calendar month, and no higher than 900 on any one day. Proposed development management criteria require HGV levels not to exceed those at the existing site unless it is demonstrated that this will not give rise to unacceptable adverse impacts, therefore impacts on the nearby AQMAs, the local road network and on greenhouse gas emissions are unlikely to increase.

1.1.10 There are listed buildings in proximity to the site. While it is possible that extraction at the site could have adverse impacts on one or more of these listed buildings, the separation distances would suggest that any impacts would be minor and proposed development management criteria require mitigation of unacceptable adverse impacts, in accordance with KMWLP policy. There is some potential for palaeolithic interest on the site and any planning application is required to be accompanied by an assessment of the archaeological value of the site and a proposed plan for preserving remains in situ where possible or removing and conserving remains offsite.

1.1.11 The site is underlain by principal and secondary bedrock and superficial aquifers. It is classed as having medium and medium-high groundwater vulnerability in the north of the site and high groundwater vulnerability in the south and east of the site and lies within a Source Protection Zone 3. There is the potential for impacts on water, although proposed development management criteria require demonstration that development would not give rise to unacceptable adverse impacts on the water environment, therefore adverse impacts are unlikely.

1.1.12 The SA has made a number of recommendations for measures to prevent, reduce and as fully as possible offset any significant adverse effects of an updated MSP that included the new site proposed for allocation on Land South and West of Hermitage Quarry.

1.1.13 The SA is required to appraise reasonable alternatives to an updated MSP that included the new site proposed for allocation. No other site for the extraction of hard rock was nominated during the initial Call for Sites undertaken in 2022 and the subsequent second Call for Sites which took place between August and October 2023. Although an assessment has been made of potential sites within Kent, no suitable sites were identified.

1.1.14 An alternative to allocating the site on Land South and West of Hermitage Quarry could be to rely instead on imports of hard rock from outside of the county. Importation of hard rock to meet local needs will increase the need for the transport of mineral and associated emissions to air. There is a greater likelihood of negative impacts on air quality and climate change, and negative impacts may be caused on congestion, noise and disturbance, depending on route and distance. The total distance transported is likely to lead to higher emissions overall. Importation of hard rock is also likely to have adverse economic impacts from increased transport costs and loss of jobs within Kent. Kentish ragstone would not be available for use in heritage restoration projects, therefore adverse impacts on the built historic environment are likely.

## 2.0 NON-TECHNICAL SUMMARY

### 2.1 Background

2.1.1 Axis has been commissioned to undertake a Sustainability Appraisal (SA) in support of the updates being made to the adopted Kent Mineral Sites Plan (MSP). This report presents the outcomes of this process up to Regulation 19 stage. SA is a mechanism for considering and communicating the likely effects of a draft plan, and reasonable alternatives, with a view to avoiding and mitigating adverse effects and maximising positives.

### 2.2 What is the Plan seeking to achieve?

2.2.1 The MSP is a land use plan produced by Kent County Council which identifies and allocates mineral sites within the county for the working and winning of minerals. Three sites are currently allocated within the adopted MSP for soft sand and sharp sand and gravel.

2.2.2 The main objective of the MSP is to ensure that Kent has enough permitted aggregate mineral reserves over the plan period (until 2039) and beyond to meet plan making requirements, which are maintaining a landbank of 7 years for sand and gravel and maintaining a landbank of 10 years for hard (crushed) rock.

2.2.3 The Kent Minerals and Waste Local Plan (KMWLP) was adopted in July 2016 and sets out the vision and objectives for Kent's minerals supply and waste management capacity from 2013 to 2030. The KMWLP did not allocate specific sites suitable for minerals and waste development except for two strategic sites which have since been removed from the KMWLP. The KMWLP identified that the specific sites for minerals developments would be set out in the separate MSP.

2.2.4 In 2021, KCC completed a five year review of the KMWLP. This identified the need for updates to the KMWLP including a change to the timeframe covered by the KMWLP, from 2024 to 2039 (previously 2013-30). It became clear that, with this extended timeframe, there are not sufficient permitted reserves in the adopted Mineral Sites Plan to maintain a 10 year landbank for hard rock, as required by national policy, and there is therefore a need to identify new suitable reserves of hard rock in the form of one or more additional site allocations in the Mineral Sites Plan. A Call for Sites was therefore undertaken in October 2022, which resulted in the following additional site being nominated by the site promoter for inclusion in the

MSP - Land to the South and West of Hermitage Quarry. A second Call for Sites took place between August and October 2023, but this did not result in the nomination of any further sites.

## 2.3 What's the situation now (sustainability baseline)?

2.3.1 The following is a summary of the sustainability baseline characteristics in Kent.

2.3.2 Environmental baseline:

i) After a gradual rise in the amount of residual waste collected per person in Kent, it has fallen recent years, from 426.4 kg in 2021/22 to 406.5 kg in 2023/24. Less than half (39%) of household waste was reused, recycled or composted in 2022/23 and less than 1% is landfilled. Most of the remainder is incinerated with energy recovery.

ii) Some 6.58 million tonnes of waste of all kinds (the majority being construction and demolition waste) were reported as being managed at Kent waste management facilities in 2022. This compares with around 1.49 million tonnes of Kent waste managed outside the county. However, this export is more than offset by imports, so taking a simple balance, Kent remains net self-sufficient.

iii) Construction aggregates (sand, gravel and ragstone) are the main types of economically important minerals extracted in Kent at this time, although brickearth, clay and chalk (for engineering and agricultural lime applications) are also extracted. This is supplemented with imports and recycled aggregates. There is a predicted shortfall of available reserves of hard rock at the maintained 'at least' 10-year level for, and at the end of, the Plan period (2024- 2039).

iv) Natura 2000 habitat is concentrated around the coast, particularly around the Thames Gateway (much within Medway UA), the Isle of Thanet, the Stour Estuary and Dungeness. Sites of Special Scientific Interest (SSSI) cover 9.8% of the county. The county contains c.11% of England's ancient woodland, the largest amount in England.

v) The Thames Gateway is also acknowledged for its national importance due to 'brownfield' biodiversity.

vi) The last century has seen major losses and declines of species within Kent. Amongst the most important drivers of biodiversity loss in Kent are: the direct loss of land of value to wildlife to built-development or intensive farming, which has reduced and fragmented populations; and the effects of climate change.

vii) Kent is considered to be the most at risk lead local flood authority in England. Flooding has a significant impact on residents and the economy, with such effects predicted to worsen due to climate change.

viii) Since 2006 there has been a steady reduction in carbon dioxide emissions, to 3.9 tonnes per capita in 2023. This is slightly lower than UK emission levels of 4.1 tonnes per capita.

ix) The annual report of the Kent and Medway Air Quality Partnership reports that NO2 concentrations remain below pre COVID-19 pandemic levels, PM10 and PM2.5 concentrations are above the UK average but showing a general decreasing trend, and SO2 levels closely follow the overall decreasing UK trend.

x) Kent has the highest number of listed buildings in the South East, and is third highest of all counties in England behind only Devon and Greater London.

xi) The Kent Downs National Landscape covers nearly a quarter of the County, whilst the High Weald National Landscape is shared with East Sussex.

xii) Green Belt comprises the majority of Sevenoaks, Tonbridge and Malling and Gravesham Districts, as well as a proportion of Tunbridge Wells and Dartford Boroughs and a small part of Maidstone Borough.

xiii) There are relatively extensive areas of excellent (grade one) agricultural land in Kent. This land tends to be concentrated in the north of the county, running in a band from Gillingham in the west through to Deal in the east. Pockets can also be found in the area surrounding New Romney, to the west of Maidstone and north east of Ashford. Good or very good quality agricultural land can be found in many parts of Kent.

xiv) Road traffic has grown fairly steadily over the years, apart from 2020 when COVID-19 particularly affected car traffic. The effect on LGVs and HGVs was less marked, although still showed a decrease. Kent is a major gateway for the movement of international freight through the Channel Tunnel, the ports of Dover, Ramsgate and Sheerness. Road haulage is the dominant means of transport in this sector.

xv) Pressures on water availability are particularly notable in Kent as it is one of the driest parts of England and Wales, coupled with high population density and household water use. Over the next few decades, there will be increasing pressures from the rising population and associated development. Water stress poses long term risk to housing development, economic growth, tourism and everyday water access for residents. It also threatens the county's rich natural

habitats and biodiversity. The majority of catchments within Kent in 2022 were of moderate ecological status, largely similar to the status in 2019.

2.3.3 Social baseline:

i) Kent will have an estimated population of 1,653,893 in mid-2026. By 2039, the population of Kent is projected to increase to 1,778,618, an increase of c. 7.5%.
ii) Significant areas within Kent are amongst England's most deprived 30% of local authorities, measured by the Indices of Multiple Deprivation.
iii) Life expectancy is 9 years lower for men and 7 years lower for women in the most deprived populations in Kent compared to the least deprived populations.
iv) Mortality rates from cancer and cardiovascular disease have fallen and are better than the England average. Nearly a quarter (23%) of children aged 4-5 are classified as being obese, higher than the average for England (22%). However, estimated levels of adult obesity in Kent (25.6%) are lower than the England average (26.5%) but increasing (an increase of 2.5% since 2016).
v) Climate change projections highlight an increase in risk to people from flooding and hotter, drier summers leading to public health risks.

2.3.4 Economic baseline:

i) In 2022, the gross disposable household income in Kent was £24,341 per head, 4.3% above the national average.
ii) Between 2021 and 2025, the number of active enterprises shrank by 1%, to 68,910, which slightly better than the national average which shrank by 4%.
iii) The overall employment rate in Kent has risen since the KMWLP was adopted, from 73.8% in 2016 to 75.7% in 2025.
iv) Apart from slight declines in 2008-2009 and 2022, GVA per head in Kent and Medway has risen steadily in the 21st century. In 2025 it was £29,379 per head, up from £14,029 in 2000, a rise of 109%. However, per capita GVA is lower than for the South East as a whole and for England.
v) The largest sector for employment in 2024 was wholesale and retail trade at 16.2%, followed by human health and social work at 13.9% and education at 9.4%. The distribution sector generated the highest gross value added in Kent in 2023, a fifth of the total.

## 2.4 How would the baseline change without an MSP updated to include the new site proposed for allocation?

2.4.1 There is a degree of uncertainty about how the baseline might change without the adoption of an MSP updated to include the new site proposed for allocation on Land South and West of Hermitage Quarry. Proposals for development of new mineral sites could still come forward and these will be required to comply with the policies of the KMWLP. This includes development management policies on the protection and enhancement of: biodiversity value, landscape, Green Belt, heritage assets, the water environment, health and amenity (including air quality) and transportation. Long term trends in environmental quality are likely to continue.

2.4.2 However, without an MSP updated to include the new site proposed for allocation there will be less certainty that Kent would be able to provide enough hard rock to support the expected future demand for minerals from construction and industry, particularly for the restoration of historic buildings. In such an event, there would be a need to source minerals from elsewhere. This may mean importing minerals from other parts of the country, which may have adverse effects on transport networks and air quality and may be difficult to blend in with existing Kentish ragstone used in buildings within the county and beyond. It is unlikely that secondary and recycled aggregates or marine dredged aggregates would meet the specification required.

2.4.3 Without an MSP updated to include the new site proposed for allocation, imports from other parts of the country may be required. This could lead to increased carbon dioxide emissions from mineral transport and associated risks to people and communities.

2.4.4 The social baseline is unlikely to be significantly affected without the adoption of an MSP updated to include the new site proposed for allocation. Population, levels of deprivation and health are unlikely to be significantly different with or without an MSP updated to include the new site proposed for allocation, although jobs will be lost at the existing operational quarry when the permitted resource is exhausted.

## 2.5 Characteristics of Areas Likely to be Significantly Affected

2.5.1 Areas likely to be affected are in the vicinity of each of the sites either already allocated or proposed for allocation. The characteristics of the four sites are described in the following paragraphs.

2.5.2 The proposed extension to Hermitage Quarry is on land designated as either grade 2 agricultural land (very good) or ancient replanted woodland. Some of the land is also designated as a Local Wildlife Site, some contains biodiversity priority habitats and some has local landscape significance. It is underlain by aquifers and has groundwater vulnerability, but low flood risk. There are a number of residential dwellings in proximity to the site and several listed buildings, and there may be below-ground palaeolithic interest. There is a Public Right of Way that crosses the site, and it is adjacent to a SSSI of geomorphological importance. Two AQMAs are fairly close to the site, one adjacent to the existing quarry and one on main roads passing through the Borough including the M20.

2.5.3 Site M3 (Chapel Farm) is a previously unworked site rather than an extension to an existing site, situated in countryside to the south east of Lenham between junctions 8 and 9 of the M20. The site is an area of open landscape rising from Lenham Heath Road towards the A20 and is within the setting of the Kent Downs National Landscape. The site is grade 2 agricultural land and is adjacent to ancient woodland, priority habitats with notable species, and three Local Wildlife Sites. Footpaths cross the site. There are a small number of residential dwellings and listed buildings in proximity to the site. The site overlies an aquifer and is partly in a Source Protection Zone 3 for a public water abstraction borehole. It also overlies a length of the River Stour. Sewerage infrastructure crosses the site, and a wastewater treatment works is adjacent. Any planning application must be accompanied by adequate proposals to show the sewerage infrastructure will not be adversely affected.

2.5.4 Site M10 (Moat Farm) is an extension to existing operations situated in countryside to the north of Five Oak Green near Tonbridge and the River Medway. It is predominantly arable fields (predominantly grade 3b) surrounded by hedgerows and ditches, potentially with notable species and with an area of ancient woodland to the north of the site. Footpaths cross the site and there is a residential property near the site. It is located in Green Belt and an area of flood risk. The site overlies an aquifer and lies partially within a groundwater source protection zone. The Alder Stream and smaller ditches run through the site.

2.5.5 Site M13 (Stonecastle Farm Quarry Extension) is in countryside to the north west of Five Oak Green near Tonbridge, adjacent to the River Medway. It is a large arable field (predominantly grade 3b) with hedgerows within and surrounding the site, adjacent to a Local Wildlife Site and ancient woodland. There are areas of

biodiversity priority habitat within and adjacent to the site which have the potential to contain notable species. A public right of way runs near to the site. The site is within the Green Belt and an area of flood risk and extends into groundwater source protection zones. There is a listed building near to the site access, and a low potential for archaeological or other historic remains onsite.

## 2.6 Areas of Particular Environmental Importance

2.6.1 Kent contains a number of designated sites of international nature conservation importance. In addition, there are further designated sites outside Kent but within 10km of the county boundary. These sites are listed in the SA Scoping Report. There are two designated sites that are within 10km of the proposed additional mineral site:

i) North Downs Woodland SAC at 6.2km
ii) Peters Pit SAC at 6.5km

2.6.2 The importance of each of these sites is described in **Section 4.7**.

## 2.7 SA Framework and Sustainability Objectives

2.7.1 Various environmental, social and economic issues have been identified through reviewing a wide variety of plans and strategies, collecting baseline information and identifying sustainability issues and problems (see **Sections 4.2** and **4.3**). These issues have informed the development of the sustainability appraisal framework, which consists of a set of sustainable development policy objectives (sustainability objectives) as set out in **Table 2.1**. The framework was published for consultation in the SA Scoping Report and **Table 2.1** below also incorporates three additional detailed criteria (in italics) following a refresh of baseline data and policy documents following the draft updated MSP Regulation 18 consultation.

**Table 2.1 – SA Framework**

| Sustainability Objectives | Detailed Considerations |
|---|---|
| 1. Biodiversity | Ensure that development will not impact on important elements of the biodiversity resource and where possible contributes to the achievement of the Kent BAP and other strategies<br>i) Add to the biodiversity baseline by creating opportunities for targeted habitat creation (which, ideally, contributes to local or landscape scale habitat networks).<br>ii) Avoid hindering plans for biodiversity conservation or enhancement<br>iii) Support increased access to biodiversity<br>iv) Provide a net gain in biodiversity value |

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|---|---|
| | v) *Compensate for the loss of irreplaceable habitat* |
| 2. Climate change | Address the causes of climate change through reducing emissions of greenhouse gases through energy efficiency and energy generated from renewable sources<br>i) Promote sustainable design and construction of facilities and support wider efforts to reduce the carbon footprint of minerals and waste operations.<br>ii) Promote climate change adaptation |
| 3. Community and well-being | Support efforts to create and sustain sustainable communities, particularly the improvement of health and well-being; and support the delivery of housing targets<br>i) Help to redress spatial inequalities highlighted by the Index of Multiple deprivation.<br>ii) Help to tackle more hidden forms of deprivation and exclusion, such as that which is experienced in urban and coastal areas and particular socio-economic groups within communities.<br>iii) Ensure that the necessary aggregates are available for building, and that the necessary waste infrastructure is in place to support housing and economic growth<br>iv) Ensure that minerals and waste development does not contribute to poor air quality with particular reference to PM2.5 and NOx<br>v) Protect and enhance public rights of way and access<br>vi) Protect local green space<br>vii) Avoid loss of tranquillity |
| 4. Sustainable economic growth | Support economic growth and diversification<br>i) Support the development of a dynamic, diverse and knowledge-based economy that excels in innovation with higher value, lower impact activities<br>ii) Stimulate economic revival and targeted employment generation in deprived areas |
| 5. Flood risk | Reduce the risk of flooding and the resulting detriment to public wellbeing, the economy and the environment<br>i) Ensure that development does not lead to increased flood risk on or off site<br>ii) Seek to mitigate or reduce flood risk through developments that are able to slow water flow and promote groundwater recharge |
| 6. Land | Make efficient use of land and avoid sensitive locations<br>i) Make best use of previously developed land<br>ii) Avoid locations with sensitive geomorphology<br>iii) Seek to safeguard the best and most versatile agricultural land and recognise its economic and other benefits<br>iv) Prevent inappropriate development in the Green Belt<br>v) *Restore land quality* |
| 7. Landscape and the historic environment | Protect and enhance Kent's countryside and historic environment<br>i) Protect *and enhance* the integrity of National Landscapes and their setting and other particularly valued or sensitive landscapes<br>ii) Take account of the constraints, opportunities and priorities demonstrated through landscape characterisation assessments and other studies at the landscape scale.<br>iii) Avoid light pollution<br>iv) Protect important heritage assets and their settings, as well as take account of the value of the character of the wider historic environment |
| 8. Transport | Reduce and minimise unsustainable transport patterns and facilitate the transport of minerals and waste by the most sustainable modes possible<br>i) Minimise minerals and waste transport movements and journey lengths; and encourage transport by rail and water.<br>ii) Ensure that minerals and waste transport does not impact on sensitive locations, including locations already experiencing congestion and locations where planned growth or regeneration is reliant on good transport networks. |

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| 9. Water | Maintain and improve the water quality of the Kent's rivers, ground waters and coasts, and achieve sustainable water resources management<br>i) Ensure that minerals and waste development seeks to promote the conservation of water resources wherever possible with particular reference to abstraction.<br>ii) Avoid pollution of ground or surface waters, particularly in areas identified as being at risk or sensitive<br>iii) *Promote sustainable drainage management* |
| 10. Waste | Ensure the sustainable management of waste<br>i) Manage waste in accordance with the waste hierarchy<br>ii) Prevent adverse effects from waste on human health and the environment<br>iii) Ensure waste is managed as near as possible to its place of production |

## 2.8 Likely Significant Effects of an Updated MSP

2.8.1 The SA has appraised the new site proposed for allocation on Land South and West of Hermitage Quarry for the likely impacts on sustainable development policy objectives. It has also reviewed and updated the appraisal of existing allocated sites in the adopted MSP. The methodology and assumptions used in undertaking the appraisal are set out in **Section 6**. The detailed findings of the SA of all the sites are set out in **Appendix C**. These are summarised below for the new site proposed for allocation at Hermitage Quarry and for the MSP as a whole updated to include the new proposed site.

### *Land South and West of Hermitage Quarry*

2.8.2 Allocation of Land South and West of Hermitage Quarry would ensure the continued local supply of hard rock as a material to support economic growth, in particular via its use as a construction aggregate. It would provide support for local jobs within the mineral industry and help to avoid increased transport costs for hard rock. It would ensure the availability of Kentish ragstone for use in building restoration projects, which has qualities difficult to find in stone from elsewhere.

2.8.3 There are residential dwellings in proximity to the site proposed for allocation to the south and west of Hermitage Quarry and there is the potential for impacts on these dwellings from dust, noise, blasting, visual intrusion, light and loss of open space. Proposed development criteria require appropriate mitigation of impacts in accordance with KMWLP Policy DM 11 Health and Amenity.

2.8.4 The southern part of the site is designated as Plantation on Ancient Woodland Sites, which would be lost to development, potentially fragmenting the remaining woodland.

Ancient woodland is deemed irreplaceable habitat[2] legally requiring a compensation plan and proposed development management criteria include compensation measures. The ancient woodland soil has biodiversity value. Part of Oaken Wood Local Wildlife Site (LWS) would be lost to development, also potentially fragmenting remaining parts of the woodland. Plans are to restore the site to deciduous native woodland and meadow to achieve a net gain in biodiversity. Worked areas should be required to be restored soon after completion and without avoidable delay. The agricultural land in the northern part of the site is grade 2 (very good). The soil from this area would be required to be stripped, stockpiled and used for restoration. Any planning application is required to be accompanied by a Soil Resource Plan as per government guidance[3].

2.8.5 Public Right of Way path MR108 crosses the site and there are several permissive tracks through Oaken Wood which may be used for recreation by walkers and riders. The Public Right of Way would be subject to diversions which, in accordance with KMWLP policy, must preserve the connectivity of routes and made safe for all users. In addition, the draft Landscape Strategy[4] proposes the creation of additional paths and therefore there are likely to be long-term benefits.

2.8.6 An area Tree Preservation Order covers land to the north of the proposed site, the majority of which has already been lost to extraction. A strip of land along the southern and western borders of the TPO with remaining trees is covered by the proposed working area, therefore trees covered by the TPO would be lost. This would be an adverse impact in the short to medium term, but restoration to native woodland would reverse this loss in the long term.

2.8.7 The site is 3.9km from the Kent Downs National Landscape and it is likely that there will be no significant visual impacts provided the site is worked sequentially with the existing operations. The Maidstone Landscape Character Assessment identifies Oaken Wood as a particular landscape and, although workings from extraction could be screened, this will not be a minor change and will not preserve the continuity of the feature, therefore adverse impacts are likely. Significant impacts are likely on

[2] *Defined by The Biodiversity Gain Requirements (Irreplaceable Habitat) Regulations 2024*
[3] *Construction Code of Practice for the Sustainable Use of Soils on Construction Sites, Defra, September 2009*
[4] *Land South and West of Hermitage Quarry: Proposed Landscape Strategy 2024 Draft, Hill-Wood and Co (Kent) Ltd, 2024*

the KCC Character Area Mereworth Woodlands, but could be restored to some degree through restoration.

2.8.8 The 2022 planning permission amending vehicle movement numbers for the existing operations states that there should be a daily maximum combined total of 800 HGV movements a day within a single calendar month, and no higher than 900 on any one day. Proposed development management criteria require HGV levels not to exceed those at the existing site unless it is demonstrated that this will not give rise to unacceptable adverse impacts, therefore impacts on the nearby AQMAs, the local road network and on greenhouse gas emissions are unlikely to increase.

2.8.9 There are listed buildings in proximity to the site. While it is possible that extraction at the site could have adverse impacts on one or more of these listed buildings, the separation distances would suggest that any impacts would be minor and proposed development management criteria require mitigation of adverse impacts, in accordance with KMWLP policy. There is some potential for palaeolithic interest on the site and any planning application is required to be accompanied by an assessment of the archaeological value of the site and a proposed plan for preserving remains in situ where possible or removing and conserving remains offsite.

2.8.10 The site is underlain by principal and secondary bedrock and superficial aquifers. It is classed as having medium and medium-high groundwater vulnerability in the north of the site and high groundwater vulnerability in the south and east of the site and lies within a Source Protection Zone 3. There is the potential for impacts on water, although proposed development management criteria should ensure that unacceptable adverse impacts are avoided.

2.8.11 The SA has made a number of recommendations for measures to prevent, reduce and, as fully as possible, offset any significant adverse effects of an MSP updated to include the new site proposed for allocation.

***Impacts of an MSP Updated to Include the New Site Proposed for allocation on Land South and West of Hermitage Quarry***

2.8.12 Each of the sites contain, or are adjacent to, some form of biodiversity asset or biodiversity value and impacts are possible in each case. Planning applications are required to fully assess the impacts on biodiversity, to provide mitigation to ensure

no unacceptable adverse impacts and to provide a net gain in biodiversity. Restoration proposals at three of the sites aim to restore the site to biodiversity habitat which will help to mitigate any potential loss.

2.8.13 The Minerals Sites Plan is likely to increase emissions of greenhouse gases overall by generating additional HGV movements and increasing the energy requirements for mineral processing on site. However, these are insignificant when considered in the context of emissions from the county as a whole.

2.8.14 Some negative impacts are possible on community wellbeing, mainly due to the potential for negative impacts on residential amenity from operations and transport, and also on the diversion of footpaths and loss of tranquillity. However, development management criteria require mitigation to adequately minimise impacts from dust, noise, vibration, light and visual impacts and cumulative impacts are not likely to be significant.

2.8.15 The Minerals Sites Plan will help to contribute to economic growth by providing a supply of minerals to support construction and potentially other economic sectors that depend on aggregates and by supporting the retention of jobs in the mineral industry within Kent. By facilitating the extraction of primary aggregates, the Minerals Sites Plan is exploiting a non-renewable resource.

2.8.16 Two of the minerals sites lie within Flood Zone 3. In these cases, it must be demonstrated that development can take place without adversely affecting flood risk and where possible contributing to a reduction in overall flood risk.

2.8.17 Two of the mineral sites contain soil which is classed as the best and most versatile agricultural land, although restoration to agricultural land is proposed for one of these and therefore the impact on soil quality in the longer term is not likely to be significant for this site, subject to the implementation of a soil resources plan. Two of the sites lie within the Metropolitan Green Belt, in which case it must be demonstrated that operations will not constitute inappropriate development or, if they do, that very special circumstances exist to justify the approval of planning permission. Given that the sites will be restored to wetland habitat, lasting cumulative impacts on the Green Belt are not envisaged.

2.8.18 There is the potential for the sites to have some impacts on landscape and on the historic environment. However, it will be possible to provide mitigation such that the

significance of impacts is minimised in most instances. However, the new site proposed for allocation at Hermitage Quarry will have impacts on local landscape character that are unlikely to be mitigated. Adverse impacts on the National Landscapes are not likely to be significant.

2.8.19 Minerals sites generate vehicle movements accessing and leaving the sites. The majority of these are HGV movements and additionally staff vehicles will access the sites. For sites M10 and M13 and the new site proposed for allocation, operations are planned to run sequentially with existing extraction in the locality so that the impacts from vehicles are likely to be no greater than existing impacts. The scale of the cumulative impact of an MSP updated to include the new site proposed for allocation overall is not expected to be great given the predicted number of movements and the context of all traffic movements in the county. Because of the location of the existing sites allocated, and the new site proposed for allocation, it is unlikely that a Minerals Sites Plan that included these sites would support the use of sustainable modes of transport for minerals, although the KMWLP safeguards railheads and wharves to support rail and water transport of minerals.

2.8.20 Each of the currently allocated mineral sites have the potential for significant impacts on hydrology/hydrogeology and water quality. The site proposed for allocation at Hermitage Quarry is unlikely to affect hydrology/hydrogeology or quality. Development management criteria for the allocated sites require assessment and mitigation of hydrological impacts and the cumulative impacts from all sites proposed for allocation in the Mineral Sites Plan are not expected to be significant for the county as a whole.

## 2.9 Recommendations for Mitigation of Impacts

2.9.1 The SA has considered whether there is scope for making recommendations for measures to prevent, reduce and as fully as possible offset any significant adverse effects of the updated MSP. A series of recommendations are made which are summarised in **Section 7.2** and set out in detail in **Appendix C**.

## 2.10 Reasons for Selecting Alternatives Dealt With

2.10.1 The SA is required to appraise reasonable alternatives to an MSP updated to include the new site proposed for allocation on Land South and West of Hermitage Quarry. No other site for the extraction of hard rock was nominated during two Calls for Sites undertaken in 2022 and 2023. Although an assessment has been made of potential alternative sites within Kent, no suitable site has been identified.

2.10.2 An alternative to allocating the new site at Hermitage Quarry could be to rely instead on imports of hard rock from outside of the county. This has therefore been appraised by the SA as a reasonable alternative.

2.10.3 Importation of hard rock to meet local needs will increase the need for the transport of mineral and associated emissions to air. There is a greater likelihood of negative impacts on air quality and greenhouse gas emissions, and negative impacts may be caused by congestion, noise and disturbance, depending on route and distance. The total distance transported is likely to lead to higher emissions overall. Importation of hard rock is also likely to have adverse economic impacts from increased transport costs and loss of jobs within Kent, although jobs would be supported at quarries outside Kent. Kentish ragstone would not be available for use in heritage restoration projects, therefore adverse impacts on the built historic environment are likely if suitable alternatives cannot be found.

2.10.4 Importation from elsewhere may have adverse impacts on communities and the environment in proximity to the sites where extraction takes place, but this is dependent on where the mineral comes from and the conditions at those sites. The control of impacts at those sites is a matter for the relevant Mineral Planning Authorities.

## 2.11 Methodology

2.11.1 The SA is required to undertake an appraisal of an MSP updated to include the new site proposed for allocation on Land South and West of Hermitage Quarry. The new proposed site and associated reasonable alternative have been subject to assessment using the SA framework set out in **Section 2.7** (see **Table 2.1**), making a largely qualitative assessment with reference to available baseline data. Assessment matrices have been drafted and are presented in **Appendix C** and the results are summarised in **Section 7.1**.

2.11.2 The SA must also appraise the existing allocated sites as these would also be included in an MSP updated to include the new site proposed for allocation. These sites were appraised in the SA of the currently adopted MSP during its development, the results of which were set out in the SA Report accompanying that Plan, published in November 2020. This appraisal work has been reviewed and updated where appropriate, including to incorporate the more recent additions to the appraisal framework highlighted in **Table 2.1**.

2.11.3 In reporting the results of the appraisal, the following symbols have been used to indicate the broad nature of the predicted effect:

**Table 2.2 – Effects Symbols**

| Type of Effect | Symbol |
|---|---|
| Significant positive effect | ++ |
| Some positive effect | + |
| No effect | 0 |
| Some adverse effect | - |
| Significant adverse effect | - - |
| Uncertain effect | ? |

2.11.4 Further details on the methodology, including assumptions made, are given in **Section 6** of the main report. Information on the difficulties encountered is provided in **Section 5** of the main report. These relate to the lack of available data in some instances, lack of operational detail and uncertainties about the scale and nature of some impacts.

## 2.12 Monitoring Recommendations

2.12.1 The sustainability appraisal has developed a set of recommendations for monitoring the predicted and unforeseen impacts of implementation of an MSP updated to include the new site proposed for allocation on Land South and West of Hermitage Quarry. These are set out as a series of indicators related to the sustainability appraisal framework based on the likely and possible impacts of such an updated MSP. The recommended indicators should be incorporated into the Annual Monitoring Report for the KMWLP and are set out in **Section 8**.