



Heidelberg Materials

TYTHERINGTON QUARRY: 6 MILLION TONNES ADDITIONAL RESERVES

Environmental Statement: Non-Technical
Summary





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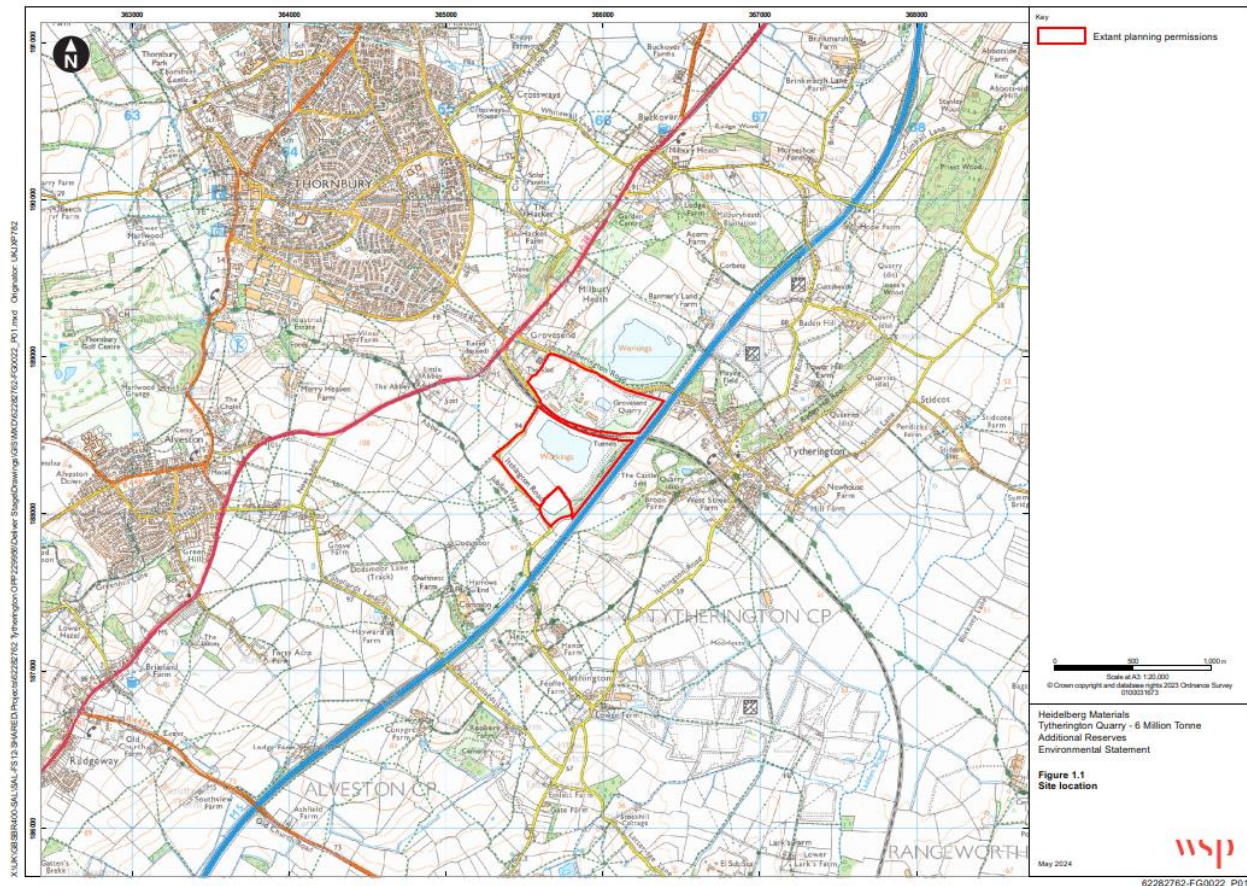
1 NON TECHNICAL SUMMARY

- 1.1.1. Tytherington Quarry is an operational limestone quarry, located adjacent to the west of the village of Tytherington, near Thornbury, Bristol. The operator, Heidelberg Materials, is seeking to secure the continuation and extraction of all consented limestone reserves, and extraction of further unconsented reserves, within the existing footprint of Tytherington Quarry. To achieve this, two Section 73 planning applications have been prepared to amend the extraction limits and approved working and restoration schemes for the quarry. A single overarching Environmental Impact Assessment (EIA), the results of which are reported in the Environmental Statement (ES), accompanies the two planning applications, which is being made to South Gloucestershire Council (SGC) – the Minerals Planning Authority. This document presents, in non-technical language, the findings of the ES.
- 1.1.2. The Proposed Scheme is to extract an additional 6 million tonnes of limestone by deepening the existing Woodleaze area of the quarry and laterally extending the quarry into the consented soil store area (covered by extant consent P93/2645). The proposed extraction of the additional 6 million tonnes of limestone will be over and beyond of that already permitted and will be undertaken prior to the quarry's 2042 permitted end date as per the extant principal consent NA/IDO/002/A.

1.2 DESCRIPTION OF THE EXISTING ENVIRONMENT

- 1.2.1. Tytherington Quarry is located approximately (~) 1.5km south-east of the market town of Thornbury, ~2.5km north-east of the village of Alveston, and ~3km south-west of the village of Cromhall. The location of the quarry is shown in **Figure 1**.

Figure 1 - Site location



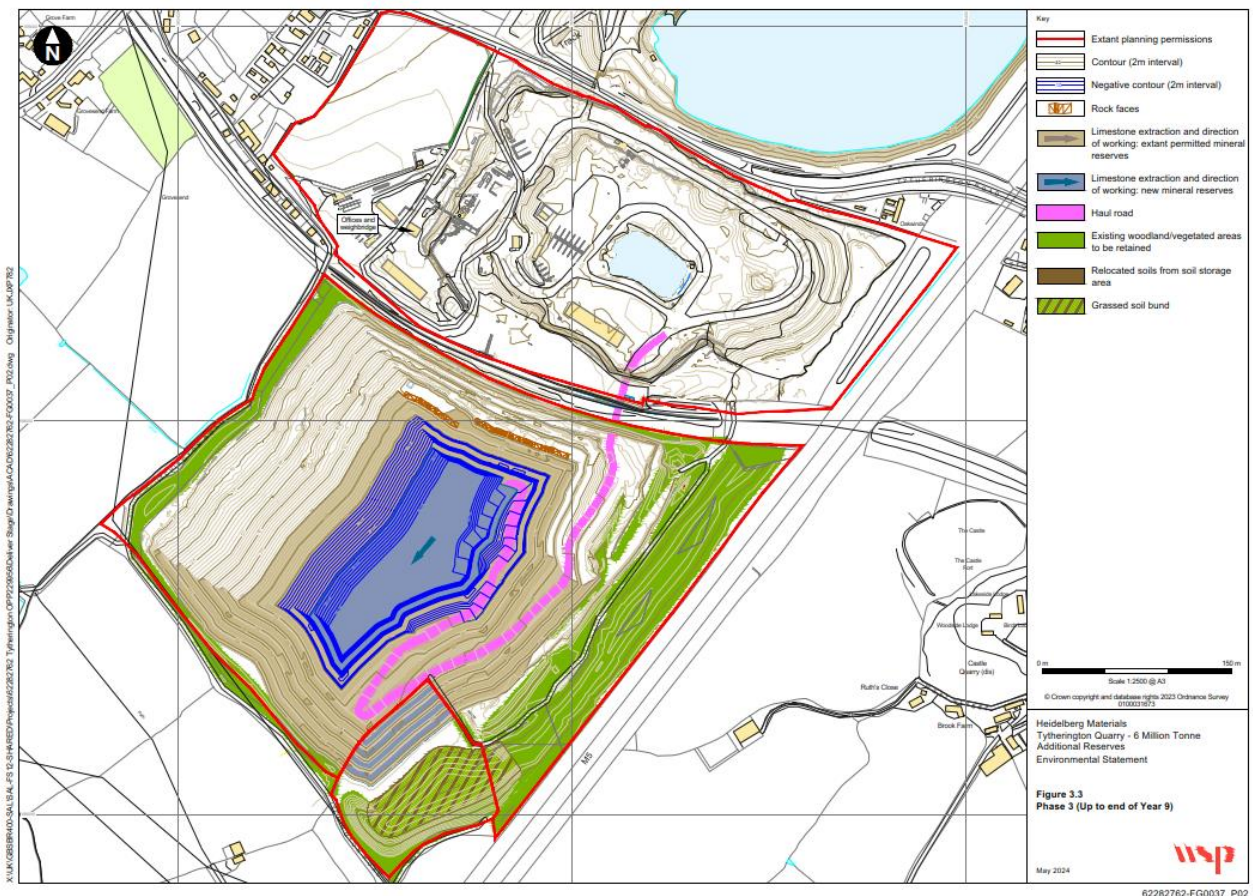
1.3 THE SCHEME

- 1.3.1. Tytherington Quarry is an operational quarry and comprises two historic quarries. Grovesend Quarry was the initial quarry to the north of Itchington Road and comprises the main quarry offices, weighbridge, processing plant and quarry railway sidings. Woodleaze Quarry is located to the south of Itchington Road but is only accessible from Grovesend Quarry via a tunnel underneath the railway. All ongoing mineral extraction is currently taking place from within Woodleaze Quarry.
- 1.3.2. It is proposed to deepen the existing Woodleaze area of the quarry to release an additional 3 million tonnes (mt) as well as enable the extraction of a further 3mt from the southern part of the quarry, beneath the existing and consented soil store area.
- 1.3.3. The Proposed Scheme seeks an amendment to the extraction limits and approved working scheme at Tytherington Quarry to allow for the deepening of the existing Woodleaze area and an extension into the consented soil store area (covered by extant consent P93/2645). The proposed extraction of the additional 6mt of limestone will be over and beyond of that already permitted and will be undertaken prior to the quarry's 2042 permitted end date as per the extant principal consent NA/IDO/002/A.
- 1.3.4. The main aspects of the Proposed Scheme include:
 - The phased extraction, processing, and export of circa 6mt of limestone from the existing Woodleaze and soil store area.

- The average export rate of circa 2 million tonnes of limestone per annum.
- Permitted extraction techniques and output rates would remain unchanged as per the principal consent NA/IDO/002/A.
- Mineral would continue to be processed at the site's mobile/fixed processing plant located within Woodleaze/Grovesend.
- Existing access arrangements into and out of the site would remain unchanged.
- Establishment of mineral and overburden stocking areas as well as topsoil and subsoil storage mounds within the confines of the existing quarry.
- Final restoration of the quarry will continue to be restored to a deep-water body with dry upper benches and a mix of woodland and grassland habitat.

1.3.5. The anticipated situation at the quarry in Phase 3 is shown in **Figure 2**.

Figure 2 - Tytherington Quarry at Phase 3



1.4 THE ENVIRONMENTAL IMPACT ASSESSMENT PROCESS

- 1.4.1. Due to the scale and nature of the development, an EIA has been undertaken in respect of extracting the additional 6mt of limestone mineral reserve at Tytherington Quarry. The purpose of the EIA is to identify how people and environmental resources (collectively known as receptors) could be affected by the proposals and to put forward measures (often referred to as mitigation) that would avoid, minimise, or offset any negative effects. To achieve this, an Environmental Statement (ES) has been prepared. The ES is impartial, and the results are therefore presented objectively.

- 1.4.2. Experts in a wide range of disciplines carried out the environmental assessments which make up the EIA, and the findings are summarised below. The EIA also considered the potential cumulative effects arising from the development, including in combination effects with other similar sites.

1.5 POTENTIAL ENVIRONMENTAL EFFECTS

- 1.5.1. The following sections provide a brief summary of the main findings of the EIA as set out in the technical chapters of the ES. As required by the *Town and Country Planning (Environmental Impact Assessment) Regulations 2017*, the ES sets out whether effects on these receptors would be 'significant' or not. Effects which are considered 'significant' are deemed important enough to influence decisions taken by the Minerals Planning Authority in coming to a view on the conditions to which the site must be operated and the way in which the site is restored.

LANDSCAPE AND VISUAL

- 1.5.2. Tytherington Quarry lies within the Bristol, Avon Valley and Bridges National Character Area (NCA) and is characterised by alternating ridges and broad valleys, with some steep, wooded slopes and open rolling farmland. The NCA includes several modern quarries, including Tytherington, and notes that the impact of quarrying on the character of the area is minimal.
- 1.5.3. South Gloucestershire Council has undertaken a district wide Landscape Character Assessment, which indicates that Tytherington Quarry is located within Landscape Character Area (LCA) 17 Rudgeway and Tytherington Ridge.
- 1.5.4. The landscape is predominantly pastoral with regular, medium sized fields typically bound by thick, clipped hedgerows. There are occasional mature hedgerow trees and small regular shaped copses of deciduous woodland to the west of Tytherington Quarry, with the area around Itchington Common also featuring woodland cover.
- 1.5.5. Potential landscape and visual effects as a result of the Proposed Scheme has been assessed taking into account the LCA 17, the local topography, vegetation, land use and settlements, infrastructure and potentially sensitive receptors. The assessment also considers the removal of vegetation and soils within the consented soil store area, the working of minerals and the restoration phase of the quarry.
- 1.5.6. In terms of the effects on LCA 17, the assessment has concluded they will not be significant during both the operation and restoration phases. This is because, during operation, the removal of a small proportion of landscape elements, relocation and increase in height of the existing soil store, and the lateral extension of the void into the area to the south, will all take place within the visual containment provided by retained perimeter vegetation and landforms surrounding Woodleaze Quarry.
- 1.5.7. During restoration, the perimeter landform (internal slopes of the M5 screenbank), will be reinstated to slope gradients and a height which is comparable to that of the baseline. Similarly, plantation woodland, hedgerow, hedgerow trees and grassland within the former soil store area will all be reinstated in proportions which are not dissimilar to those present under baseline conditions. The remainder of Woodleaze Quarry will be restored in line with the permitted restoration scheme with a slight increase in the footprint of the waterbody.
- 1.5.8. The assessment of effects on people's views of minerals development at Tytherington Quarry has considered the extent to which the development can be viewed and the degree to which views will

change. This includes views from Public Rights of Way (PRoWs), recreational routes and the local road network.

- 1.5.9. A review of the distribution of residential visual receptors, landform, and installation of effective screening landforms and vegetation indicate that there are no residential receptors who will sustain the necessary magnitude of change to their views to give rise to significant visual effects as a consequence of the Proposed Scheme.
- 1.5.10. In terms of PRoWs, no significant effects on visual receptors have been concluded for users of the Celtic Way / Jubilee Way, users of the Hobblers Way (Coast to Coast – Wash to Severn). During the restoration phase, a beneficial visual effect is predicted on Users of the Celtic Way/Jubilee Way (southbound walkers) and users of the local PRoW network, due to the absence of a soil store landform.
- 1.5.11. For drivers and their passengers travelling along the M5 motorway, A38 and the Itchington Road, the assessment has predicted that there will be no significant adverse effects on visual amenity.

NOISE

- 1.5.12. The potential for significant effects of the Proposed Scheme on noise levels has been assessed, taking into account sensitive receptors locations (residential), which are both the closest to the quarry and furthest from the M5 are considered to be locations most likely to be affected by noise from the Proposed Scheme. To inform the assessment, baseline surveying was undertaken in line with a methodology agreed with the Environmental Protection Team at SGC.
- 1.5.13. The noise assessment anticipates that without the Proposed Scheme, the baseline acoustic environment would not vary substantially where quarry operations would continue in line with the extant consent, and sound from road traffic on the M5 would likely remain at a similar level to that which is currently present.
- 1.5.14. Although no new additional plant and no intensification of activities are proposed and there would be no change to the working hours, or road or rail movements associated with the operation of the quarry, the main factor that was considered to give rise to a potential change in the noise emissions in the assessment is the marginal spatial shift of quarry activities in Woodleaze Quarry extending slightly to the south-west.
- 1.5.15. To enable the extraction of minerals from beneath the consented soil store area, site preparation will be required, consisting of removal and relocation of soil, to expose the minerals to be worked below. On this basis, the primary focus of the noise assessment was the reduced proximity of mineral extraction activities in Woodleaze Quarry to receptors to the west and south.
- 1.5.16. The noise assessment concludes based on the proposed gradual phased release of minerals in the proposed mineral extraction area, it is considered unlikely that preparatory works would entail any significant increase in noise emissions from the quarry. It is considered that the likely magnitude of change at all identified receptors due to noise associated with preparatory works would be no greater than small, resulting in effects that are not significant.
- 1.5.17. There would also be no material increases in quarry noise levels at the key receptor locations during the operation of the Proposed Scheme.

- 1.5.18. The results of the assessment therefore indicate that noise from the Proposed Scheme at all receptors is anticipated to give rise to a small magnitude of change, resulting in effects of minor significance which are not significant.

VIBRATION

- 1.5.19. The potential effects of blasting from mineral extraction activities at key receptor locations has been assessed. The Proposed Scheme is not expected to result in higher levels of groundborne vibration than is the case for operations undertaken within the extant principal planning consent for Tytherington Quarry.
- 1.5.20. The existing soil store area from which additional minerals is to be extracted is located further from residential receptors than anywhere else quarried within Tytherington, and the deepening of the existing quarried areas is unlikely to require higher blast weights compared to the existing situation.
- 1.5.21. As the Proposed Scheme is a continuation of mineral extraction activities within Tytherington Quarry, existing mitigations measures as part of the extant planning consent which follow statutory regulations and good practice guidelines will continue to be implemented throughout the extraction of the additional 6mt of mineral reserve.
- 1.5.22. In terms of significance of effects associated with blast vibration, the sensitivity of nearby residential receptors is considered to be high, the magnitude of change is considered to be very low and the overall effect is considered to be minor (not significant).

WATER ENVIRONMENT

- 1.5.23. The potential effects on surface water and groundwater as a result of the Proposed Scheme has been assessed. A standalone Flood Risk Assessment also supports this EIA. The assessment identifies the sensitivity, magnitude, and significance of effects on a number of hydrological and hydrogeological receptors within the Study Area. A 4km search comprising the Study Area surrounding the Site is applied to understand the surface water and ground water environment.
- 1.5.24. The Study Area is located within the Avon Bristol and Somerset North Streams Management Catchment and comprises sub-catchment surface water bodies including Tortworth Brook, Ladden Brook and the Oldbury Naite Rhine. There are no natural watercourses within the Site.
- 1.5.25. In relation to groundwater bodies, the Study Area is located with the Severn England groundwater management catchment and comprises Carboniferous Limestone – Alveston, Avonmouth Merica Mudstone and Bristol Triassic.
- 1.5.26. The Study Area contains wells, a spring, and three SSSI's namely Tytherington Quarry SSSI, Buckover Road Cutting SSSI and Brinkmarsh Quarry SSSI. All these SSSIs are designated due to being geological exposures. These are unlikely to be water dependent, which is supported by the fact that none of the three sites features in the Open Government online data set of groundwater dependent terrestrial ecosystems.
- 1.5.27. In terms of surface water run-off, the quarry's plant area comprises a hard surface of compacted crushed aggregate or surfaced with asphalt laid to a fall, consequently runoff is collected and channelled through an oil intercept prior to entering the Site's approved discharge consent easement in the existing lagoon in Grovesend Quarry, prior to transfer and discharge via the consented discharge point within Tytherington Village.

- 1.5.28. A key Principal Aquifer within the Study Area comprises the Black Rock Limestone (both dolostone and limestone) and the Gully Oolite, which have in the past and continue to be extracted at the Quarry Complex. These three rock units are understood to act as one 'combined aquifer'.
- 1.5.29. A conceptual model has been developed. This shows that Tytherington Quarry sits on top of a hill. Based on topography, only groundwater flow would be expected to follow the geomorphology, i.e. south-eastwards and north-westwards. However, the groundwater flow pattern is complicated by the underlying complex geology (involves both folding and faulting) and the alternation between aquifers and aquitards. The groundwater flow pattern is also influenced by the ongoing dewatering activity. Given Tytherington Quarry marks a topographic high between the even higher Cotswold Hills in the east and the Severn Estuary in the west, it acts as a recharge zone.
- 1.5.30. In relation to foul water, sewerage from mess and toilet facilities are contained within a sealed cess pit and prevented from discharging to either surface water or groundwaters.
- 1.5.31. As part of the extant planning consent for Tytherington Quarry, water is pumped from the active Woodleaze Quarry via the Grovesend Quarry sump to the Tytherington Watercourse. The quarry operates under a discharge consent which came into effect in July 1987. Under this consent, the water accumulating in the quarry void is permitted to be discharged at a discharge location.
- 1.5.32. The assessment considers surface water and groundwater flood risk as a result of the Proposed Scheme and reports, the outer margins of the Site effectively form a watershed, such that the quarry void has no notable upslope area. As such, there is minimal surface water run-on to the Site and surface water flood risk at the Site is associated with the accumulation and pathways of rainfall draining to the void base. All current flood risk within the Grovesend Quarry void will not change as no changes in operation within this area are proposed.
- 1.5.33. The assessment reports that the quarrying operations will impact the ground levels across the Proposed Scheme, both in terms of excavation which will deepen the ground elevations as well as the placement of materials which will increase ground elevations. Such activities provide the potential to affect surface water flood risks across the Site. The soil store area provides a potential source of surface runoff when being stripped, and this may need to be mitigated and managed. The development of the Site including haul roads and overburdened storage mounds and bunds will slightly increase the peak runoff rates and volumes; however, runoff will be captured in the base of the quarry void, and dissipate to ground, or require pumping to the sump in the Grovesend Quarry. As such the Proposed Scheme will lead to no appreciable increase above the current 'with-quarrying baseline' dewatering discharge rates. Minor adjustments to the screening bund will result in negligible changes to runoff quantity owing to the overall increase in the void area, reducing the area of land that drains off-site.
- 1.5.34. With the restoration of the soil store area to grassland with a mosaic of small ponds, this will in the long term reduce runoff to the new restoration lagoon in the Woodleaze Quarry. The soil store area provides a potential source of surface runoff when infilled and reprofiled during restoration.
- 1.5.35. Considering that the Woodleaze Quarry is proposed to be deepened to a maximum of -40 m AOD, there is a potential risk of groundwater flooding. Groundwater ingress, as is currently occurring, will be contained within the sump at the base of the Woodleaze Quarry void and when required, pumped to the Grovesend Quarry attenuation sump from where it can be discharged off site via the consented discharge. There is no planned change to the manner in which groundwater dewatering is to be handled and therefore will continue to be managed as permitted. As such, the risk of

groundwater flooding detrimental to extraction operations during the working phase is considered low.

- 1.5.36. The potential effects that were identified relate to Site's activities resulting in the release of pollutants and the subsequent contamination of groundwater. With respect to surface water bodies, groundwater bodies, licences abstractions and private water supplies, wells, springs, ponds and lakes, the potential effects are considered negligible and not significant. As such, any effects on the water environment due to development activities are considered highly unlikely to extend over the Study Area.

BIODIVERSITY

- 1.5.37. The Severn Estuary Special Protection Area/Special Area of Conservation/Ramsar is located within 10km of the Site boundary (6.9km), and two Sites of Nature Conservation Interest are located within 2km of the Site boundary. The distance between these and the Site, the nature of the habitats on Site, and the lack of hydrological connectivity, means that there is a lack of a clear pathways for effect with regard to the habitats and / or species for which these sites have been designated. Due to a lack of pathways for effect, it is not considered there will be any effects on the features of ecological interest at these designated sites (alone or cumulatively) as a result of the Proposed Scheme.
- 1.5.38. There are also three statutory designated sites of national importance within 5km of the Site. These are all designated for geological and not ecological importance and are therefore not relevant to the biodiversity assessment.
- 1.5.39. The potential effects on biodiversity as a result of the Proposed Scheme has been assessed. Considerable data gathering has been carried out to assess how the site is used by plants (flora) and animals (fauna), including an overall survey, known as an Extended Phase 1 Habitat survey, to classify the habitats and the potential use of the site by fauna. During the survey, distinct habitats were identified, and any features of interest subjected to a more detailed description were target noted.
- 1.5.40. Habitats recorded on Site comprised plantation broadleaved deciduous woodland, hedgerow with trees, and semi-improved grassland with scattered scrub and a dry pond.
- 1.5.41. In terms of protected and notable species, the suitability to support other protected and notable species was assessed during survey works. The findings of the survey identified that the site has the potential to support bats, nesting birds, reptiles and other priority species.
- 1.5.42. To minimise potential effects on flora and fauna a number of measures which will be imbedded within the Proposed Scheme are proposed. This includes the retention of the decaying Ash Tree, which has the potential to support a bat roost of high conservation value and protection of roots. Other measures include the implementation of a Landscape and Biodiversity Enhancement Plan (for creation and management of hedgerows with trees, woodland and semi-improved grassland) and an Ecology Method Statement, which will help reduce the impact on protected and notable species.
- 1.5.43. Based on the embedded measures proposed, the ecological assessment therefore concludes there will be a negligible effect on the sensitive receptor (Ash tree) and therefore are no likely significant effects.

TRAFFIC

- 1.5.44. Access to Tytherington Quarry is via Tytherington Road, which runs in a north-west/south-east direction and is accessed from the A38. The quarry is adjacent to the M5, which forms the eastern site boundary. The Thornbury Branch Line is a dedicated freight rail line which passes the quarry sidings from Grovesend Overbridge.
- 1.5.45. The current operations at Tytherington Quarry relating to traffic and transport are carried out in accordance with the conditions associated with NA/IDO/002/A. The Proposed Scheme will continue to operate as per extant conditions, where permitted extraction techniques and output rates would remain unchanged as would the traffic movements and access arrangements. These include:
- Hours of operation in terms of traffic movements:
 - For aggregates – 6.00-15.45 Monday-Friday and 7.00-13.00 Saturday; and
 - For asphalt HGVs – no limit.
 - An average of 38,600 aggregate loads HGVs per annum leave the Site which equates to 77,200 two-way movements. Based on the hours of operation, there is an average of 270 daily aggregate load HGV movements (assuming 5.5 days of operation per week, 52 weeks per annum).
 - Imported volumes to the asphalt plant comprising approximately 3,000 HGVs per annum which equates to 6,000 two-way movements. Based on the hours of operation, there is an average of 16 daily asphalt load HGV movements (assuming 365 days of operation).
 - 670 train movements per annum to either Appleford, West Drayton, or Quainton Road. Rail comprises over 60% of aggregate sales.
- 1.5.46. As the Proposed Scheme does not seek to increase the peak traffic generation it will be in line with the conditions of the extant planning permission. Staff and visitors will continue to access and park at the quarry as per existing arrangements and there will be no change to the current operating hours.
- 1.5.47. Potential traffic-related environmental effects arising from the scheme on receptors have been evaluated. Severance, driver delay, non-motorised user delay, non-motorised user amenity, fear and intimidation, road user and pedestrian safety have all been assessed.
- 1.5.48. As there will be no change to baseline traffic, peak traffic movements or existing regulatory controls associated with the site as a result of the Proposed Scheme, no effects on traffic and transport are anticipated.

SOCIO-ECONOMICS

- 1.5.49. Heidelberg Materials' UK business employs around 4,000 people in jobs ranging from specialist and professional managers through to production operatives. The company's existing operations at Tytherington Quarry indicate that Heidelberg Materials is already an important local employer, currently directly supporting some 40 full time equivalents (this includes both Heidelberg Materials staff and contractors).
- 1.5.50. An assessment of effects in relation to direct employment, indirect and induced employment as a result of the Proposed Scheme is assessed. The socio-economic assessment for Tytherington Quarry has concluded that in respect of all receptors considered, the Proposed Scheme is not anticipated to generate any significant adverse or beneficial socio-economic effects.

- 1.5.51. With the maintenance of the employment base, it is predicted that the Proposed Scheme will maintain 40 jobs, together with an additional 20 indirect jobs and a further 4 induced jobs. The maintenance of these jobs should continue to make a valuable contribution to the overall employment rate across South Gloucestershire and the local economy.
- 1.5.52. Furthermore, the Proposed Scheme will secure the continuity of mineral extraction and supply and generate an additional 6mt of limestone and an additional reserve life of 3 years, albeit within the existing site boundaries and consented timescales of the quarry. Therefore, the overall socio-economic effects are considered to be broadly positive.

CLIMATE CHANGE RESILIENCE

- 1.5.53. The approach to the climate resilience assessment differs from other topics in that it looks at the potential impacts of environmental (climate) change on the Proposed Scheme, rather than impacts of the Proposed Scheme on the environment: the receptor for the resilience assessment in the Proposed Scheme.
- 1.5.54. These receptors include operation of plant and machinery, quarry operations and input, transport links, site operatives, waterbodies and groundwater and restoration and habitat creation. A range of environmental measures, which include the use of safety measures and protocols such as fire extinguishers, water bowsers, the use of anemometers to monitor wind and dust suppression measures have been embedded into the Proposed Scheme.
- 1.5.55. Whilst a number of effects are predicted in relation to Climate Resilience these are not significant, as the existing embedded mitigation is considered sufficient to mitigate any risks.

CLIMATE CHANGE GREENHOUSE GAS EMISSIONS

- 1.5.56. Greenhouse gas emissions (GHG) associated with the Proposed Scheme have been assessed. This considers the embodied carbon amount associated with mineral extraction activities, the expected tonnages of material to be extracted at the quarry, operations (including transport emissions from HGVs, plant, and machinery) and GHG emissions associated with the consumption of water required by the development.
- 1.5.57. The assessment considers the 'With Development' (the current consented quarrying operations plus the proposed quarrying operations) and 'Without Development' (the current consented quarrying operations) case. This concludes the total GHG emissions over the life cycle of the Proposed Scheme is estimated at 37,623ktCO₂e. Relative to the 'Without Development' case, the Proposed Scheme is estimated to result in a net increase in GHG emissions equivalent to 16,673 ktCO₂e.
- 1.5.58. This indicates the Proposed Scheme is considered to have a moderate adverse effect on the climate however, it should be noted that only 10% of the estimated GHG emissions will result directly from the Proposed Scheme, e.g. from quarrying operations on-site. The majority of GHG emissions will result indirectly from the transportation of quarried material across South Gloucestershire and Cheltenham by HGV's and predominantly by rail; these emissions being beyond the control of the Proposed Scheme. As such, these contributions will not materially impact on achieving carbon reduction targets as set out by the UK Government.

CUMULATIVE EFFECTS

- 1.5.59. Consideration has been given to whether any of the individual effects of the Proposed Scheme at Tytherington Quarry would combine to create a cumulative effect that is greater than the sum of the

individual effects. The potential effects of the development in-combination with other similar sites have also been considered. Such sites including the following:

- Chipping Sodbury Quarry; and
- Wickwar Quarry

- 1.5.60. Each of the above two quarries are active and operational. The ongoing effects of these active operations has therefore been considered as part of the 'baseline conditions' for each of the technical assessments in the ES. In this regard, the cumulative working of Tytherington Quarry alongside existing operations is integrated into, and an implicit part of the individual technical assessments.
- 1.5.61. The following dormant quarry has also been identified, which is located 5km to the northeast of Tytherington Quarry:
- Cromhall Quarry
- 1.5.62. Cromhall Quarry is currently mothballed, but benefits from existing consent, and the quarry owners have indicated that they intend to recommence working of the permitted reserves¹. As such, it was considered that the cumulative effects assessment should be widened to include reference to this site.
- 1.5.63. It has been demonstrated in every technical chapter of this ES, that no significant 'in combination' effects are anticipated in respect of any environmental topic, with any of the operational or dormant quarries.
- 1.5.64. Furthermore, the Proposed Scheme only seeks a minor increase in the footprint of the quarry (into an area approved for soil storage) and provides a progressive and final restoration scheme for the site in line with existing extant consents. As has been reflected in the technical assessments of this ES, the only significant adverse effects that are predicted are limited to GHG emissions from the site itself. The majority of these GHG emissions will result indirectly from the transportation of quarried material by HGVs and rail. Since the Proposed Scheme is not expected to significantly increase emissions from vehicle movements and as the anticipated additional vehicle activity over the three years of extended activity (if the Proposed Scheme is approved) is unlikely to substantially increase current emissions, it is therefore considered that no significant cumulative effects would occur with other similar sites in the area.

1.6 CONCLUSIONS

- 1.6.1. Overall, the ES has demonstrated that the Proposed Scheme has been designed in a careful and considered manner, which fully integrates most of the anticipated effects brought about by the extraction of the additional 6mt of reserves at Tytherington Quarry. Although the ES has concluded significant adverse effects in respect of climate change greenhouse gas emissions, it is considered

¹ beta.southglos.gov.uk. (n.d.). 9. Planning for minerals | BETA - South Gloucestershire Council. [online] Available at: <https://beta.southglos.gov.uk/publications/local-plan-phase-3-towards-a-preferred-strategy/9-planning-for-minerals/> [Accessed March 2024].

that these effects are significantly tempered when weighed against the benefits that the longer term restoration of the site will bring.

1.7 WHAT HAPPENS NEXT?

- 1.7.1. Prior to making a decision on the planning applications, South Gloucestershire Council will consult the Environment Agency, Natural England and other key organisations.
- 1.7.2. The Environmental Statement will be available for examination by members of the public on the Council's website and at an appropriate location(s).
- 1.7.3. Members of the public will also be able to comment on the planning applications. The normal period for determining a planning application such as these is 16 weeks.

1.8 OBTAINING COPIES OF THE ENVIRONMENTAL STATEMENT

- 1.8.1. The Environmental Statement may be viewed on the planning authority's website (<https://beta.southglos.gov.uk/search-planning-applications/>).



Canon Court West
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