Response to 'Essex Minerals Local Plan Review 2024' Regulation 18 Consultation Documents

for

Candidate Site A62 – Heckfordbridge Site 2 (Full Site)

Prepared By

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On Behalf of

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1 Introduction and Strategic Context

1.1.1 This document has been produced as clarification and response, along with additional information, to the initial considerations and judgements of the Essex County Council 'Assessment of Candidate Sand and Gravel Sites' which form part of the current Regulation 18 Consultation of the Review of the Essex Minerals Local Plan 2014.

1.1.2 This specifically relates to the Heckfordbridge Site 2 (Full Site) Candidate Site A62, but also considers methodology and a relative comparison of three other potential major mineral producing Candidate Sites:

- A48 – Bradwell, Grange Farm (Braintree);
- A49 – Colemans Farm, Hill Broad Farm (Full Site) (Braintree); and,
- A93 – Land at Pattiswick Hall Farm (Full Site) (Braintree).

1.1.3 These sites were chosen as a result of the Sustainability Appraisal produced as part of the Regulation 18 Consultation, which in Section 5.3, provides summary of the full suite of Candidate Sites potential significant effects identified. Section 5.3.3 of the Sustainability Appraisal considers 'Meeting Mineral Needs'. The three sites listed above, and A62 Heckfordbridge are listed within this section as "enabling significantly positive effects in regard to meeting mineral needs."

1.1.4 Tarmac have undertaken public liaison recently, through a presentation at the Birch Parish Council Meeting on the 5th March 2024, where the proposals for the Candidate Site were presented to Council members and public in attendance. Following the meeting, amendments were made to the Block Proposals Plan (KD.HFB.012A), a reduction to the proposed woodland planting at the rear of Meads and Beehive Cottage to the east of the site on request of the resident. In addition, the screen bunding along the eastern boundary of the site adjacent to the industrial estate was increased to strengthen the screening. The final amendment made to the submitted plans, is the removal of Beehive Cottage (east) and a property to the west from within the red line boundary.

1.1.5 The full list of submitted plans for Candidate Site A61, in Appendix 1, are:

- KD.HBR.002A – Current Situation (March 2024);
- KD.HBR.003A – Context Plan (March 2024);

- KD.HBR.004A – Block Proposals Plan (March 2024); and,
- KD.HBR.005A – Concept Restoration Plan (March 2024).

1.1.6 The full list of submitted plans for Candidate Site A62, in Appendix 2, are:

- KD.HBR.010A – Current Situation (March 2024);
- KD.HBR.011A – Context Plan (March 2024);
- KD.HBR.012A – Block Proposals Plan (March 2024); and,
- KD.HBR.013A – Concept Restoration Plan (March 2024).

1.1.7 The structure of this report is as follows:

- Providing context as to the purpose of the Call for Sites and Essex Mineral Planning Authorities position with regard to mineral need;
- Strategic context in relation to the four identified Candidate Sites capable of delivering most mineral resource;
- Consideration of the suitability of the methodologies produced and utilised by the MPA with regard to assessing submitted Candidate Sites;
- Providing our Red/Amber/Green Assessment of Candidate Site A62 against the methodologies produced by the MPA, with justification for changing sensitivities where necessary;
- Comparison of the updated RAG Assessment for Candidate Site A62 against the three sites referenced above; and,
- Conclusion of overall assessment.

1.2 Strategic Context

1.2.1 Following a review of the Plan in 2019, the Council determined a need to produce a new Minerals Local Plan. The emerging 'Replacement Essex Minerals Local Plan' (MLP) covers a plan period of 2025-2040. It is understood that whilst this Regulation 18 public consultation presents the Replacement Minerals Local Plan; including Plan provision figures and the assessments of submitted sites, this Draft Plan does not present a list of preferred site allocations to meet the newly quantified minerals need for the County.

Preferred site allocations will be presented in the next version of the Replacement Minerals Local Plan, following any reassessment required as part of consultation responses received on the methodology and its application across each site.

1.2.2 As stated at paragraph 2.19 of the Replacement MLP, the majority (81%) of sand and gravel reserves extracted within Greater Essex are consumed within Greater Essex. In 2019, of the remaining 19% of reserve, 12% were exported to the remainder of East of England market, and 7% into 'elsewhere' within the UK. Regarding transport to market, most mineral is transport by HGV's on the road network, however there are two main rail transhipment sites within Essex (Harlow and Marks Tey – Tarmac operated).

1.2.3 Current operations at Colchester Quarry, for which Candidate Site A62 – Heckfordbridge would be an extension of, provides for markets both local and further afield, see below:

- 36% - Onsite DSM and RMX Plants;
- 60% - Into the Essex market, external plants and merchants; and,
- 4% - Transport by rail, via Marks Tey, into the Greater London markets.

1.2.4 Due to the range of markets supplied by Colchester Quarry, the continued supply of mineral from the quarry is of great importance. As detailed within the site submission, the Heckfordbridge site could release up to 8.2mt of sand and gravel resource, which at the current extraction rate of ~500,000tpa would allow for continued release of mineral at Colchester Quarry for ~16 years.

1.2.5 Looking at the total tonnage of sand and gravel required to be allocated within the Replacement MLP, it is identified that in order to demonstrate a 7 year landbank at the end of the plan period (2040), that a total of 87.56 million tonnes of resource is needed to be allocated. This is under the assumption that annual sales will total the annual apportionment of the Replacement MLP, of 3.98Mtpa.

1.2.6 The MPA do not seek to allocate the full 87.56mt through the Replacement MLP as there is existing permitted reserve. It is anticipated that at the time of adoption in 2025, there will be a permitted reserve of 22.95mt. This would leave a requirement of 64.56mt to be allocated through the Replacement MLP.

1.2.7 As stated in paragraph 1.2.4 above, Heckfordbridge would release up to 8.2mt, which would account for 12.7% of total mineral resource required.

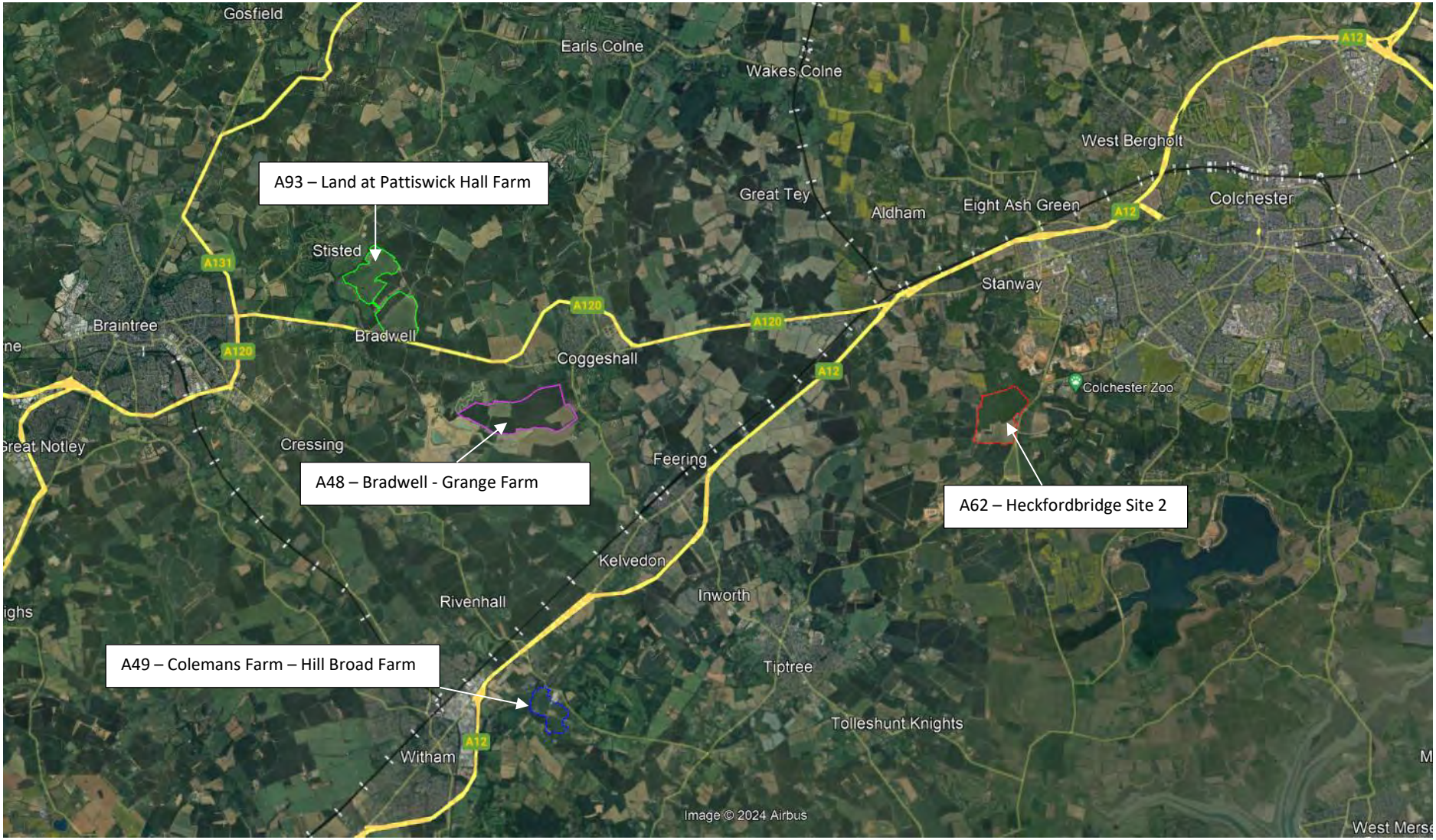
1.2.8 The Sustainability Appraisal identifies Heckfordbridge, along with the other sites listed below, as having significant potential for meeting mineral need within the emerging plan period.

- A48 – Bradwell, Grange Farm (Braintree) – 12.2mt;
- A49 – Colemans Farm, Hill Broad Farm (Full Site) (Braintree) – 2mt;
- A62 – Heckfordbridge, Site 2 (Colchester) – 8.2mt; and,
- A93 – Land at Pattiswick Hall Farm (Full Site) (Braintree) – 8.2mt.

1.2.9 The total mineral potential for allocation from the four sites above is 30.6mt, which accounts for 47.4% of the total mineral required for allocation.

1.2.10 The location of each of these sites, along with a more detailed review of their submissions / deliverability is included below.

Location of Sites Identified Positive Sites for Meeting Mineral Need



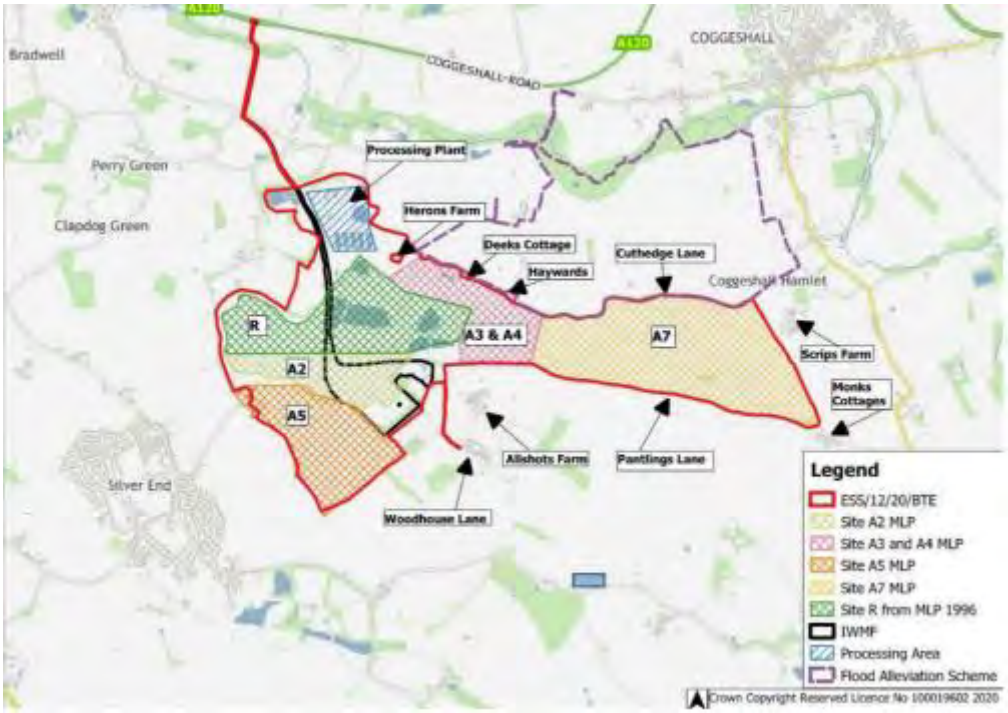
A48 – Bradwell – Grange Farm

1.2.11 The promoted site covers an area of 143.15Ha and would form an extension to the existing mineral extraction operations at Bradwell Quarry releasing ~12.2mt of sand and gravel.

1.2.12 Current operations at Bradwell Quarry operate under planning permission ESS/12/20/BTE which permitted an extension of operations at Bradwell Quarry for the release of 6.5 million tonnes of sand and gravel from Allocated Site A7 of the Essex Minerals Local Plan 2014.

1.2.13 In 2011 planning permission ESS/32/11/BE was granted for an extension to the site to the south (Site A2 in the then emerging replacement Minerals Local Plan). In 2015 planning permission ESS/24/14/BTE was granted for an extension to the site to the east (Sites A3 and A4 of the Adopted Minerals Local Plan 2014). In 2019 planning permission ESS/03/18/BTE was granted for an extension to the site to the south west (Site A5 in the Minerals Local Plan 2014) and extraction is currently ongoing in this area.

1.2.14 The figure below provides geographical context of these areas:



1.2.15 The submitted Candidate Site A48 is for a northern extension to all existing operations at Bradwell Quarry. The most recently permitted extension (A7) releasing 6mt is expected to take 8-10 years to complete mineral extraction. Permission was granted for the extension in June 2022, with mineral extraction operations being scheduled for

completion within area A5 at the end of 2022. Therefore, assuming mineral extraction within area A7 commenced in 2023, then there is sufficient mineral within Bradwell Quarry to support operations until 2031-2033. It is therefore unlikely that the 12.2mt of mineral contained within the Candidate Site would come forward prior to this time. Assuming the Candidate Site mineral followed exhaustion of existing permitted mineral, and continuation of the existing ~750,000tpa (best case scenario for Bradwell Quarry as it operates at between 600,000tpa and 750,000tpa), then approximately 5.25mt (43%) - 6.75mt (55%) of the 12.2mt would be released within the plan period.

A49 – Colemans Farm – Hill Broad Farm

1.2.16 The submitted Candidate Site covers an area of 40.74Ha is located east of the extant permitted boundary. The site has potential to release 2 million tonnes of sand and gravel.

1.2.17 Colemans Farm Quarry has a complex planning history as a result of its proximity to the A12 and the proposed highway works along this network. Planning permission was initially granted and s.106 agreed, in June 2016 (ref: ESS/39/14/BTE). This allowed for the extraction of ~2.5mt of sand and gravel over a 17 year period with a further year for restoration. It was conditioned that output rates would not exceed 150,000tpa.

1.2.18 Permission ESS/10/18/BT was granted for an internal re-phasing of the extraction areas; restoration of the land; soil bund re-configuration and provision of a visitor car parking area. Current working is now taking place in a clockwise direction with Phase 1 now worked and soil stripping within Phase 2 alongside the A12. Future working would finish in the south west of the land area. This was done to avoid mineral sterilisation by the A12 works to the north of the site.

1.2.19 In March 2020, planning permission ESS/40/18/BTE was granted which allowed for a number of variations of condition, including an increase of mineral output to 200,000tpa, although it was stated that average output would remain at 150,000tpa.

1.2.20 In addition to the extant permission referenced above, in February 2024, permission ESS/36/21/BTE was granted for a small western extension to the operations at Colemans Farm to release ~265,000t of sand and gravel, to avoid sterilisation by the A12 highway works. It is anticipated to take 2 years to complete extraction in this area.

1.2.21 Therefore, there is sufficient permitted mineral at Colemans Farm Quarry to maintain production until 2036. Again, assuming the Candidate Site mineral follows exhaustion of permitted mineral, and output of ~150,000tpa remains as existing, then ~600,000 tonnes of sand and gravel (30%) could be released within the plan period.

A62 – Heckfordbridge Site 2

1.2.22 Heckfordbridge (Site 2) covers an area of 94.44Ha and has a potential to release ~8.2 million tonnes of sand and gravel across an extraction area of ~60.31Ha.

1.2.23 Colchester Quarry, for which Heckfordbridge would form an extension too, is comprised of two previous quarries either side of Warren Lane, Stanway Quarry to the east and Bellhouse / Abbotstone Quarry to the west. The two quarry operations were subject to 'Review of Minerals Permissions' under the Environment Act 1995; with Minerals Permissions being issued for Bellhouse and Stanway on 13th April 2005 (Permissions ESS/48/01/COL/R & ESS/49/01/COL/R respectively). Permission ESS/48/01/COL/R covers operations within the Bellhouse Quarry area of Colchester Quarry with a permitted end date of operations to 31st December 2026. Permission ESS/49/01/COL/R includes for the operations at the Stanway Quarry side of Colchester Quarry with a permitted end date of February 2042.

1.2.24 Stanway Quarry's current extraction operations are within an area known as Five Ways Fruit Farm, initially granted permission in March 2015 (ESS/23/14/COL), and later amended by permission ESS/52/17/COL to reflect changes to the hours of operation for the onsite Dry Silo Mortar plant. This is the extant permission operating within Stanway Quarry.

1.2.25 Bellhouse and Abbotstone are currently landfilled under an agreement between Tarmac and Enovert South Limited (Enovert) under planning consent ESS/27/17/COL permitted June 2019. There is currently a S.73 Application with ECC to extend the end date of the landfilling operations (Ref: ESS/03/22/COL) to 31st December 2026. The Council have recommended approval of this application subject to the completion of a Deed of Variation to the original S.106 Agreement.

1.2.26 Subsequently, planning application ESS/04/22/COL has a resolution to grant subject to an agreed legal agreement. This application is to allow for continuation of mineral extraction without compliance to Condition 1 (Duration) of Planning Permission

ESS/48/01/COL(R) that was for the ROMP, in order to allow for an extended timescale to complete restoration of the Colchester Quarry Complex.

1.2.27 As with ESS/03/22/COL and ESS/04/22/COL, Planning Application ESS/05/22/COL has a resolution to grant subject to an agreed legal agreement. Once signed, it will allow for the 'Continuation of Mineral Extraction and ancillary use without compliance with Condition 2(b) (Duration) and 18 (Importation Duration) of Planning permission ref: ESS/52/17/COL (Revised) that itself was a Variation of Condition of a previous permission to now allow for an extended timescale to both complete the extraction and restoration of Five Way Fruit Farm and to complete the importation of mineral from Bellhouse Quarry into Stanway Quarry.'

1.2.28 Current mineral extraction within the Five Ways Fruit Farm is permitted until 31st October 2026. At present, the combined permitted reserves from both the Bellhouse and Five Ways Fruit Farm working areas are less than 500,000 tonnes. Production levels have been reduced in order to ensure Colchester Quarry does not exhaust all permitted mineral within 2024, prior to an extension being permitted. There are two currently undetermined planning applications with the MPA:

1.2.29 ESS/34/23/COL – Prior extraction on land adjacent to Colchester Zoo, which will in effect be a southern extension to Stanway Quarry, for the extraction of 500,000 tonnes of sand and restoration to land profiles to allow for a future expansion of Colchester Zoo. The mineral within this extension area would be utilised within the onsite DSM Plant which operates at a rate of 120,000 tonnes per annum, enough to provide an additional four years of operational life at the DSM Plant alone.

1.2.30 ESS/113/23/COL – Proposed western extension to Colchester Quarry on land at Bellhouse Farm South for the release of ~830,000 tonnes of mineral. This mineral would be worked simultaneously to the Colchester Zoo adjacent land, as the mineral here contains the typical mineral needed for the RMX plant and external markets. Should this mineral be permitted by the end of 2024, it would provide for extraction up to the end of 2026.

1.2.31 Should Heckfordbridge mineral come forward in 2027 following the cessation of operations in Land at Bellhouse Farm South, there would be 13 years of supply within the plan period. At the existing output rate of 500,000tpa, that would equate to a release of 6.5mt of the 8.2mt total – 79% of total supply.

A93 – Land at Pattiswick Hall Farm

1.2.32 This Candidate Site covers an area of ~130.74Ha with the potential yield of 8.2mt.

1.2.33 This would be a new greenfield site not connected to any existing operations. Factors which could affect the deliverability of this site would be whether there is a mineral operator lined up to operate the site, access issues to overcome in the form of achieving site access directly off a trunk road and the lead in time associated with the setup of a new quarry – i.e. preparation of a planning application and actually securing planning permission, internal infrastructure, processing plants and staffing.

Overall Deliverability

1.2.34 Of the four sites deemed to have significant potential to contribute towards Essex mineral need in the Replacement MLP, only two are capable of contributing to reserve shortly after allocation. Neither A48 or A49 would contribute to the landbank until mid-2030's, approximately 6-11 years into the emerging plan period.

1.2.35 Of all four of the sites, it could be determined that the A62 – Heckfordbridge is most deliverable, as it could be brought forward shortly after the adoption of the Emerging Replacement MLP, and benefits from use of existing processing plant infrastructure and site access at Colchester Quarry. In comparison, the A93 site, being greenfield in nature would require a longer lead in time for the establishment of processing plant, site access and other ancillary aspects such as office / weighbridge. A62 could also release the most amount of its promoted mineral within the plan period (79%), in comparison to A48 and A49 which are up to 63% and 30% respectively.

2 Methodology Assessment

2.1.1 Whilst we appreciate there is difficulty in developing methodologies which are to be utilised in the assessment of a vast number of sites, there are a number of the methodologies which we find overly restrictive and ultimately not fully fit for purpose.

2.1.2 One general comment, to avoid repetition below, regarding the wording used within almost all of the methodologies, is the categorisations for level of mitigation required to make an impact acceptable. Using the terms 'Low, Medium, Moderate, High' are appropriate, however some guidance text would have been beneficial for understanding how the MPA would apply those terms. For example, use of stand-offs being a 'Low' level mitigation.

2.1.3 The section below provides comments on a number of the methodologies which we believe require consideration as the assessment of sites continues, and the Replacement MLP progresses.

Landscape and Visual Sensitivity

2.1.4 In respect of the methodology used there is a great emphasis placed upon the sensitivity of both landscape and visual receptors but very little on both the potential *magnitude* (of effect) the proposed developments (Candidate Sites) could have on these receptors, and none to very little consideration of *mitigation* and enhancement measures proposed within the initial Candidate site submissions.

2.1.5 The Guidelines for Landscape and Visual Impact Assessment third edition produced by the Landscape Institute and Institute of Environmental Management and Assessment 2013 defining sensitivity as "a term applied to specific receptors, combining judgements of the susceptibility of the receptor to the specific type of change or development proposed and the value related to that receptor". With Magnitude (of effect) "a term that combines judgements about the size and scale of the effect, the extent of the area over which it occurs, whether it is reversible or irreversible and whether it is short or long term in duration".

2.1.6 Mitigation measures being those proposed to prevent, reduce and where possible offset any significant adverse effects (or to avoid, reduce and if possible, remedy identified effects) e.g. in respect of Heckfordbridge Candidate Site 62, minor temporary screening bunds, advanced native planting and phased working and restoration to minimises areas of disturbance at any one point in time.

2.1.7 Enhancement being proposals that seek to improve the landscape resource and the visual amenity of the proposed development site and its wider setting, over and above its baseline condition e.g. in respect of Heckfordbridge Candidate Site 62 the proposed establishment pre commencement of quarrying operation of ~2.1km of new multi used public rights of way which also allow connectivity into the existing PROW network, the creation of ~24.39Ha of new Acidic Grassland (an Essex County Target Habitat), the planting of ~7.49Ha of native woodland all under a long term land management agreement. The resulting initial Biodiversity Net Gain calculated at 72.53%.

2.1.8 The sensitivity and magnitude of effect including any mitigation and enhancement measures should then be utilised to produce a Residual Effects Assessment. This has not been carried out and as such the Initial RAG Landscape and Visual Sensitivity Assessment is of two high a level to consider the Candidate sites properly and potentially falsely ranking them.

Transport and Access

2.1.9 We consider Transport and Access together here as the comments are related. The Transport methodology looks solely at the category of the road that the access from the quarry is linked to, and the Access methodology looks at the access point itself.

2.1.10 Although not included within the methodology considerations, the RAG Assessment considers the impacts of the proposed mineral field conveyor under 'Access'. This is outside the scope of the methodology provided for Access, and we feel better suited to be considered under Transport. The methodology for Access we do not consider to be inappropriate, providing it does solely consider the access point where mineral will exit the site to enter market. For this element our issue lies with the consideration of the conveyor.

2.1.11 We feel, as the conveyor is the means of transport for mineral from source to the processing plant, it would be better suited to assessment as part of the Transport section.

2.1.12 Furthermore, the methodology for Transport solely considers the category of the road which services the site access. We understand from the note within the methodology on 'Secondary Distributor routes', which Warren Lane is, that the MPA acknowledges some Secondary Distributor routes have been upgraded to account for HGV use; however, this does not result in the route scoring better, but rather any route which hasn't been upgraded scoring worse. Furthermore, Bellhouse South (Candidate Site

A95) would utilise the same Colchester Quarry existing access and this was graded as 'Green' against the matrix, whilst Heckfordbridge was graded 'Red/Amber'. Warren Lane has been upgraded for HGV use and therefore we are of the opinion that the route should be able to score better on the matrix. Additionally, the matrix does not consider whether a route has been operating with mineral traffic for a substantial period of time acceptably, as is the case for Colchester Quarry.

Public Rights of Way

2.1.13 The methodology relating to Public Rights of Way is confined and restrictive. The presence of a PROW within a submitted site boundary should not automatically result in a 'Red/Amber' grading. Furthermore, mitigation to impacts on PROW can often be easily met through standoffs and screening bunds. Aspects such as diversions of PROW are also easily implemented subject to approval by the authority.

Soil Quality

2.1.14 No issues are taken with the categorisation of RAG Sensitivity based on the Grade of the soil quality onsite, however the level of mitigation required against each criteria is restrictive and overly critical. Handling of soils at a minerals site is standard practice, and Tarmac comply with the MAFF Good Practice Guide for Handling Soils as part of their existing operations. Furthermore, the storage of soils within screening bunds forms standard methodologies for working mineral sites and therefore would not constitute 'medium' or 'high' levels of mitigation which RAG 'Amber' and above would suggest.

Services and Utilities

2.1.15 We find that the methodology associated with the Services and Utilities is overly restrictive. It is common for one or more services to be present within the boundary of mineral operations. Steps to overcome this range from a simple standoff to the service being designed into the working scheme of a quarry, or with agreement of the Service / Utility provider, the pipes or cables would be rerouted to avoid impact. Categorising a site 'Red' simply for having a Service or Utility present and stating "the site is likely to have a serious impact on utilities and mitigation to make the Site acceptable would be difficult", is overly negative and not strictly the case.

Health and Amenity

2.1.16 The main point to raise here is that the RAG Assessment based the Sensitivity only on the submitted red line boundary as opposed to the associated Block Phasing Plan submitted. From the red line alone, it is understandable that the submitted site would fall within the 'Red' category, however the submitted scheme highlights how easily impacts can be mitigated with simple and typical mitigation measures included in mineral practice. Examples of these are standoffs from sensitive receptors, screening soil bunds strategically placed between operations and receptors, as well as strategically placed planting. All of these measures have been successfully employed within both the existing operations and the proposed extension which is the subject of Application ESS/113/23/COL where is it clear they provide the required mitigation to protect the amenity of local residents and the Local EHO has confirmed they are happy with the proposed measures. Consideration of the submitted scheme justifiably lowers the overall assessment of impact.

2.1.17 We consider that it is likely that many of the other site submissions have simply submitted red line plans and may not have shown block Phasing Plans. This illustrates why Tarmac's comprehensive and diligent approach should been rewarded rather than being scored on the lowest level of detail provided as the baseline.

2.1.18 Additionally, as part of this response, amendments have been made to remove any residential buildings from within the red line boundary.

Other Comments

2.1.19 From reviewing the RAG Methodologies and the assessments specific to the Candidate Site, it appears as though the additional information provided within the site submission has not been thoroughly considered. Tarmac provided a greater level of detail than just the Site Submission form and associated drawing. Baseline work has been conducted, such as the Preliminary Ecological Appraisal and Archaeological Investigationsand an achievable scheme design provided.

2.1.20 Whilst we appreciate that the methodology has to be written in a way that allows for broad consideration, aspects such as the level of mitigation required to make the development acceptable do not appear to have considered the submitted information in aspects which demonstrate that simple mitigation (i.e standoffs and screening bunds) are all that is required to make an impact acceptable. An example of this is Historic Buildings which is considered in detail in Section 3.4 below.

3 Candidate Site A62 - Heckfordbridge Site 2 Assessment

3.1.1 We believe that the assessment provided for Heckfordbridge Site 2 (A62) included a number of unjustifiably adverse findings as part of the 'RAG' Assessment. Each section of the report below, provides our assessment of the submitted site against the criteria and methodologies included within the Appendices of the consultation documents, with the summary table at the end of this report providing direct comparison of the site against the results included for sites:

- A48 – Bradwell, Grange Farm (Braintree);
- A49 – Colemans Farm, Hill Broad Farm (Full Site) (Braintree); and,
- A93 – Land at Pattiswick Hall Farm (Full Site) (Braintree).

3.1.2 These sites were chosen due to them being identified, alongside Heckfordbridge, as potential for significantly positive effects regarding meeting mineral need.

3.2 Landscape and Visual

RAG Assessment – Red/Amber

Our Assessment - Amber

Please see paragraphs 2.1.4 – 2.1.8 for discussion with regard to our considerations of the methodology wording and the MPA's implementation of the methodology with respect to both Transport and Access.

Response to landscape sensitivity 'Measurement'

3.2.1 The assessment of landscape sensitivity associated with landform and landscape features, complexity, enclosure by vegetation and historic character are considered Medium (which we presume equates to Amber) with built development considered Low. Although we consider the complexity of the landscape to be more straight forward and of low sensitivity, we agree with the combined overall medium sensitivity of the Candidate Site 62 site and with the proposed development potential magnitude (of effect) and level of significance of effect as a Medium Measurement.

3.2.2 The landscape sensitivity weighting in effect being 50% of the considerations in respect of landscape and visual assessment.

Response to visual sensitivity 'Measurement'

3.2.3 We agree with the initial assessment of the perceptual quality of a low to medium Measurement. The candidate site does not have a high scenic value, perceived naturalness, remoteness or freedom from human activity, and as such with an appropriately designed phased working and restoration scheme could be accommodated and visually assimilated within its local and wider setting. We consider that the perceptual / actual quality aspects of visual sensitivity are the major component of visual sensitivity assessment criteria as they relate to both the overall wide visual context and setting and the individual receptors susceptible to change from new development. The perceptual quality leading into and being a fundamental component of the other visual assessment criteria.

3.2.4 We therefore disagree with the three other initially assessed High Measurements of openness to public view and separate private view and views towards landmark buildings and natural features for both the lack of consideration of perceptual quality and the actual detail visual receptor locations and opportunities for views and the level and significance of those views actual 'on the ground'.

3.2.5 Specifically in respect of: To have a view there has to be a receptor 'a person'. There are a very limited number of potential visual receptors with views of the existing Candidate Site A62. In terms of the sensitivity to the specific mineral extraction and restoration proposal Site survey work has considered the potential viewpoints from which the Proposed Development will actually be seen by differing groups of people. These groups included:

- Residential visual receptors in private properties;
- Public viewpoints e.g. public rights of way, inland waterways and public open space (POS);
- Places where people work; and,
- Transport routes where there may be views from private vehicles and from different forms of public transport.

3.2.6 Local visual receptors have a variety of assessed sensitivity to change resulting from the Proposed Development within this locality. Residential receptors having the greatest sensitivity to change, i.e. High (this is because potential views / visual change could be observed directly from a home environment on a consistent basis). Users of local PROW having a medium sensitivity as potential views are both transitory as people pass

through the site/ local area and may experience the view as part of a series of views / visual experiences as they move through the area , also none of the local PROW are designated which may increase the value of the view and its overall sensitivity. Users of the local road network being assessed as having the lowest sensitivity to change i.e. Low as a result of their transient nature and very limited time duration of view of the Site/ Proposed Development.

3.2.7 The initial Essex County Council Measurement assessment has simply generalised and grouped the consideration of potential receptor types and also not considered actual views and the associated potential levels of visual effect – if any (Please note that we acknowledge that to do so for all the candidate sites would have involved a tremendous amount of work, but by not doing so has the Measurement has not accurately assessed either the baseline situation nor the potential for, or actual level of potential effects / impact effects from promoted sites – Candidate Site A62 being one of these). An example of this being the reference to St Peters Church which is a listed building, located approximately 930m from the site. We understand this is referenced associated with views towards landmark buildings and natural features, which have been Measured within the RAG process in respect of Candidate Site 62 as a High / Red adverse effect on Visual Sensitivity. In reality we are unsure which site visual receptor 'person' can actually view the church or which receptors can view the church in combination with a part of the site and the actual proposed limit of mineral extraction. The is spire is visible from some sections of the site adjacent users of the local public road network – specifically to the southwest and south i.e. low sensitivity receptors but it is unlikely that users of two section of PROW within the site currently view the church and nor would they. St Peters Church appears derelict but even if it were not, it is set in woodland where visiting visual receptors would not be able to view Candidate Site A62.

3.2.8 It also appears that the review has not considered any of the simply achieved mitigation and enhancement measures proposed within the submitted Candidate Site A62 scheme. These include advanced native tree and shrub planting, low level temporary soil screening bunds, direction of mineral extraction working behind a face so as to screen operations and allow progressive restoration of integrating land. New visual access to the countryside would also be provided as an enhancement with the creation of ~2.1 km of new multi-use access tracks / pathways, in advance of mineral extraction, and a total of ~2.7km post restoration. Through mineral working at this Candidate site ~14.14Ha of Lowland Meadow habitat will be created. This will provide quality visual

diversity of habitat and species interest as well as leisure opportunities for wildlife observation. These visual enhancement measures supporting wellness and amenity potential.

3.2.9 Based upon the above we do not consider that the visual change associated with the proportion site will result in high adverse significant levels of visual effect to site / local visual receptors.

3.2.10 We consider that the Measured Sensitivity used within the RAG assessment should therefore be:

- Landscape Sensitivity - *Medium*
- Visual Sensitivity – *Medium*

3.2.11 Overall Assessment of Landscape and Visual Sensitivity Medium (*Amber*) within which both mitigation and enhancement measures will provide reduce potential adverse effects and establish benefits top landscape, visual, amenity , public access, habitat creation and Biodiversity Net Gain

3.3 Biodiversity

RAG Assessment – Amber

Our Assessment – Amber/Green

3.3.1 The RAG Assessment states that *"The Site is graded Amber because ecological impacts are likely to be moderate and it is likely to require medium levels of mitigation to make it acceptable. ,The Site could have major impacts upon the internal Hedgerows which are Priority habitat, the loss of a small number of trees of unknown quality in the field. Other Priority habitat Hedgerows could be dissected through the creation of the conveyor. The Site could have moderate impacts upon irreplaceable habitats (ancient woodlands) and upon the local designations and Priority habitats and species e.g. the Roman River, and Gol Grove and Hanging Wood Local Wildlife Site and direct loss of sections of hedgerows to accommodate the conveyor and the adjacent Priority habitat woodland. Impacts may include changes to the water quantity and quality of the River, severance of the habitat network and Priority Hedgerow habitats . It could result in disturbance and loss of habitat for Priority farmland species."*

3.3.2 The Candidate Site submission in March 2022 was accompanied by detailed survey work with regard to Ecology. This included a Preliminary Ecological Appraisal (PEA), and

its associated appendices, Wintering Bird Survey / Assessment and a Biodiversity Net Gain Calculation based off the Concept Restoration Plan (Drawing No. KD.HFB.013). In summary the PEA recommended that a number of individual species surveys are undertaken to support a future application, however the range of potentially present species is not uncommon for such a site, and there are considered to be no insurmountable issues associated with the potential presence of protected species which might prevent the development from proceeding. The Biodiversity Net Gain Assessment concluded an achievable net gain of 72.53%.

3.3.3 From a review of the 'Biodiversity RAG Sensitivity Grade Table' included within Consultation Document Appendix C, the assessment can be broken down into five main criteria:

- Level of likely ecological impact and level of mitigation required;
- Impact to International or National designations;
- Level of mitigation required subject to a Habitat Regulations Assessment;
- Impact to irreplaceable habitats; and,
- Impact to local designations and priority species.

Level of likely ecological impact and level of mitigation required – Amber/Green

3.3.4 A PEA was produced in March 2022 to submit the original Candidate Site submission. The report, based on both desktop study and site survey work, provided a comprehensive overview of the potential ecological environment onsite, and included a number of recommended further individual survey works to provide a greater understanding.

3.3.5 The findings of the PEA contributed to the design of both the Proposed Block Phasing (Drawing No. KD.HFB.012) and Proposed Concept Restoration Scheme (Drawing No. KD.HFB.013) which were submitted in support of the promotion. As can be seen on these plans, there are no drastic or highly engineered mitigation measures proposed in order to make the Candidate Site suitable for mineral extraction. For example:

- The location of the proposed working phases include standoffs to the existing woodland blocks to the northern, north western and eastern boundaries to ensure there are no impacts to these features. Additionally, the copse within the

southern western area of the site have also been stood-off from to avoid potential impact. Features such as soils bunds which lie within the standoff areas serve the purpose to store onsite soils and act as landscape / visual screening as opposed to inclusion for ecological purposes;

- The 'Advanced Permanent Native Hedgerow Planting again is included to the southern boundary for purposes of landscape mitigation, whilst also benefiting biodiversity through the strengthening of habitats onsite. As recommended by the PEA, boundary hedgerows should be retained where possible. All boundary hedgerows are proposed to be retained during the full duration of the works, in addition to the advanced planting. Whilst hedgerows internal to the site will be removed to accommodate the mineral operations, the majority of the hedgerows to be removed were found to be species poor; and will also be replaced with Native Hedgerow and Tree Planting post restoration; and

- Six wintering bird surveys were undertaken in October 2021 - March 2022. Following the surveys it was recommended that hedgerows and scattered trees remain where possible, and that hedgerows, native and wet grassland, and arable field margins are included within the restoration of the quarry. These elements are all included within the Concept Restoration Scheme (Drawing No. KD.HFB.013).

3.3.6 The measures outlined above are not highly engineered structures or methods to mitigate impact, instead relate to standard mineral operational practices (e.g. standoffs), and provision of suitable habitat post restoration to be provide an overall gain in biodiversity, calculated at 72.53% for the Candidate Site Scheme. This BNG score would provide a substantial improvement on the current biodiversity present within the site. This is a low level of mitigation, appropriate to the scale of the proposed development and typically standard for mineral sites, with much of the site not requiring mitigation as it is currently in use for intensive agriculture.

Impact to International or National designations – Green

3.3.7 As has been established by the original submission, and the RAG assessment, the Candidate Site is not located within 2km of a National or International designation. The site falls outside the Site of Special Scientific Interest (SSSI) Minerals Buffer Zone of the 'Abberton Reservoir' SSSI which is located ~3km southeast. The Abberton Reservoir is also a designated Special Protection Area and Ramsar site.

3.3.8 It is noted within the RAG assessment that the site is upstream of a number of SSSI, Special Area of Conservation and Marine Conservation Areas. At its closest point, the Candidate Site is ~50m west of the Roman River, however due to suggested standoffs, the closest point of potential mineral extraction is ~100m west of the River. Whilst it is acknowledged that the River creates a potential pollution pathway, the closest of these SSSI's is the Roman River SSSI almost 7km east of the site at the closest boundary. It is therefore concluded that "the Site is not likely to have any impact upon international or national designations that requires mitigation", in line with the *Green* criteria. Further Hydrological / Hydrogeological work will be undertaken which will assess this from a Hydrological perspective.

Level of mitigation required subject to a Habitat Regulations Assessment – Green

3.3.9 The nearest European Protected site is the Abberton Reservoir Special Protection Area and Ramsar Site. This is over 3km southeast of the proposed Candidate Site and resultingly no interaction between the Candidate Site and protected sites are anticipated. Therefore, subject to plan-level Habitats Regulations Assessment there are no predicted adverse effects on the integrity of internationally important wildlife sites in accordance with the *Green* criteria.

Impact to irreplaceable habitats – Amber/Green

3.3.10 With regard to irreplaceable habitats and the Candidate Site, consideration is given to Ancient Woodland (AW) within 500m of the Site in accordance with the assessment methodology. This identifies two Ancient Woodland Designations:

- Gol Grove / Hanging Wood Ancient and Semi-Natural Woodland ~128m north east; and,
- Potash Wood Ancient and Semi-Natural Woodland ~235m west.

3.3.11 Whilst Gol Grove / Hanging Wood AW is located ~128m north east of the candidate site, the proposed conveyor route would be ~25m from Hanging Wood at the point it crosses the Roman River. The proposed working scheme of the Candidate Site does not propose the removal of any areas of AW, nor does it bring mineral working closer to the Gol Grove / Hanging Wood AW designation than at present. The Bellhouse / Abbotstone former working area and current landfilling operations abut the AW to the east. The proposed standoffs at Heckfordbridge would ensure mineral working is no closer than ~200m from AW at any point.

3.3.12 The proposed development would only have potential impacts to the irreplaceable habitat with regards to its setting. Full assessment of the proposed development on AW habitat would accompany a planning application for the Site. We disagree that "the Site could have moderate impacts upon irreplaceable habitats (ancient woodland)", and as such the impact is assessed as *Amber/Green*.

Impact to local designations and priority species – Amber/Green

3.3.13 It is acknowledged from the RAG assessment that there are a number of Local Wildlife Sites (LoWS) and Priority Habitats within proximity to the Candidate Site. The following is taken from the RAG Assessment of the Candidate Site:

- "The closest Local Wildlife Site is the adjacent Beckingham Hall Road Verge (Co53) which is also a Special Roadside Verge (Hardy's Green SV-COL1). Gol Grove and Hanging Wood Local Wildlife Site (Co58) is c.50 m north-east of the main extraction Site and would be an estimated 25 metres from the conveyor. This LoWS comprises the ancient woodlands (irreplaceable habitat).

- The Site comprises sloping arable and agriculturally improved grass fields partly bounded by Hedgerows (Priority habitat). There are several internal Hedgerows which are priority habitat, and some mature trees in the centre of the field which would require removal but could not be accessed and a small plantation woodland. The northern boundary is mostly bordered with Lowland Mixed Deciduous Woodland Priority habitat and broadly plantation woodland, which contain a pond and a watercourse. There is another watercourse on the southern boundary as well as a Special Roadside Verge which is also designated as a Local Wildlife Site."

3.3.14 To accommodate the proposed development, a total of ~1.53km of hedgerow / hedgerow trees would require removal. These hedgerows form the field boundaries to the agricultural parcels onsite. The hedgerows would be removed progressively as the mineral extraction process progresses, therefore not all 1.53km would be removed at one time. Similarly, hedgerow planting proposed as part of the restoration of the site would also take place progressively to compensate. Prior to removal of any hedgerows, it is proposed to advanced plant ~850m of hedgerow across the southern boundary of the site, again compensating for loss during the extraction process. Following completion of restoration, all existing field boundaries would be reinstated, along with

retention of the advanced planting, resulting in a greater quantity of priority habitat post restoration compared to the current situation.

3.3.15 Whilst there are priority habitats adjacent to the site boundary, appropriate standoffs will ensure these are protected. Individual further surveys have been suggested as part of the submitted PEA, which will provide full assessment of habitats and potential impacts. Resultingly, it is assessed that the Candidate Site is best described by Amber-Green criteria – "the Site could have a moderate impact upon the natural environment including local designations and priority habitats and species".

3.3.16 Overall, from the assessment undertaken and detailed above, it is considered that a RAG Sensitivity of *Amber/Green* would be appropriate for biodiversity aspects of the candidate site.

3.3.17 One final comment on the Biodiversity Assessment is that it would have been beneficial to see how the MPA scored each of the individual five criteria used for the overall RAG Sensitivity in order to settle on their assessment of Amber. This would have allowed for a direct comparison to the assessment included above.

3.4 Historic Buildings

RAG Assessment – Red/Amber

Our Assessment – Amber

3.4.1 The RAG Assessment identifies seven Listed Buildings within close proximity to the Candidate Site. Four to the north (west of the site) and three to the south. These being:

North of the Site –

- Walnut Tree Farmhouse (List UID: 1306202);
- Barn to South West of Walnut Tree Farm (List UID: 1110901);
- Bockingham Hall (List UID: 1306200); and
- Barn to South of Bockingham Hall (List UID: 1337417).

South of the Site –

- Beckingham Hall (List UID: 1238478);
- Cart Lodge To East of Beckingham Hall (List UID: 1274178); and

- Post Office Cottages (List UID: 1387257).

3.4.2 None of the listed buildings are located within the red line boundary submitted for the Candidate Site. The closest listings are 'Walnut Tree Farmhouse' and 'Barn to the South West of Walnut Tree Farm', both located adjacent to the sites western boundary. All of the listed buildings referenced above are Grade II listed.

3.4.3 The proposed Block Phasing Plan submitted in support of the Candidate Site submission identifies a 100m standoff from both 'Walnut Tree Farmhouse' and 'Barn to South West of Walnut Tree Farm', with an intervening soil bund located within the standoff, screening views of the listed buildings to the site. Both 'Bockingham Hall' and 'Barn to South of Bockingham Hall' are located west of Birch Road, again benefitting from the screening of the soil bund and separation from working area of ~130m.

3.4.4 'Beckingham Hall' and 'Cart Lodge to East of Beckingham Hall' are located south west of the sites southern boundary, with 'Post Office Cottages' to the south east. Whilst both of these are close to the proposed site boundary, they are a significant distance from the proposed extraction boundary, of some ~143m for 'Post Office Cottages' and ~280m for the Beckingham listings.

3.4.5 Were the mineral extraction to take place across the full extent of the submitted site area, then it is appropriate to assume 'Major' impact in accordance with Red/Amber, due to the close proximity of the listings to the site. However, as is demonstrated on the submitted Block Phasing Plan, only simple mitigation measures such as the proposed standoffs / screening bunds, typical of mineral operations would be required to make the site acceptable. As a result we assess that the site is befitting of an *Amber* assessment.

3.5 Archaeology

RAG Assessment – *Amber*

Our Assessment – *Amber*

3.5.1 As stated within the initial Desk-Based Assessment submitted in support of the Candidate Site Submission, there is evidence of site ditches, trackways and enclosures as fragmentary marks in crops. No high status sites are evidenced within the site boundary. The eastern part of the site has exhibited extensive circular and subcircular features, but these are most likely to be caused by fungus rings in grass on specific

occasions. However, the possibility for buried and eroded funerary monuments or penannular curvilinear enclosures cannot be ruled out.

3.5.2 Mineral development at the site is not anticipated to result in larger than moderate impact, following further field-based evaluation. Mitigation of impact would be achievable.

3.6 Flooding

RAG Assessment – Amber

Our Assessment – Amber

3.6.1 The proposed Candidate Site is located within Flood Zone 1, lowest likelihood of fluvial flooding, as evidence by the Environment Agency's Flood Map for Planning. It also contains only small areas of potential low risk surface water flooding (between 0.1-1% chance of surface water flooding annually).

3.6.2 The Level 1 Strategic Flood Risk Assessment (SFRA) produced by Colchester Borough Council, at Figure 5, provides an overview of the entire boroughs Groundwater Flood Risk with the area broken into 1km^2 grids. The site largely falls within two grid squares with a small area of two further grid squares being present to the south. The SFRA identifies the site as being within an area of low-medium (25-50%) susceptibility. It is important to recognise that the SFRA is 'broad' and does not contain site specific investigations.

3.6.3 As part of future planning application for mineral development on the site, a full Hydrological and Hydrogeological Impact Assessment and Flood Risk Assessment will be conducted and any necessary mitigation measures implemented as part of a submitted scheme.

3.7 Transport

RAG Assessment – Amber

Our Assessment – Amber

Please see paragraphs 2.1.9 – 2.1.12 for discussion with regard to our considerations of the methodology wording and the MPA's implementation of the methodology with respect to both Transport and Access.

3.7.1 As stated above, we believe the methodology for Transport and Access is not fully fit for purpose. The MPA, using the strict RAG methodology, assess Transport as 'Amber'

due to Warren Lane being classified as a 'Secondary Distributor route'. However, as is acknowledged within the justification, Warren Lane has been improved to accommodate use by HGV's. We suggest that this should result in an assessment of 'Amber-Green' as opposed to 'Amber' particularly as Warren Lane has always supported the movement of mineral from Colchester Quarry and it provides access to the Strategic Highway Network (A12) without the need to pass through residential areas due to the connectivity provided by Stanway Western Bypass. Furthermore, the Council Highways Department, in their consultation response to the Bellhouse Farm South planning application, did not see need to comment on the proposal. However, we retain the overall assessment of 'Amber' due to the inclusion of a conveyor to transport mineral from point of extraction to the existing Colchester Quarry processing plant site. This is detailed below.

3.7.2 Conveyor use has been assessed by the MPA under Access, however as we have discussed in paragraph 2.1.11, we believe this is more fitting of consideration under Transport. The existing operations at Colchester Quarry, and historic mineral extraction at the Bellhouse / Abbotstone Quarry working area, has demonstrated the acceptability of transporting mineral from point of extraction to processing plant within the area using a conveyor. The current mineral conveyor connecting Bellhouse Quarry to Colchester Quarry processing plant passes beneath Warren Lane, again demonstrating acceptability of conveyor crossing roads within the vicinity. The proposed conveyor route from the Candidate Site would involve crossing Fountain Lane (likely beneath the road), traversing fields and then crossing the Roman River to connect to the existing mineral field conveyor in the Bellhouse Quarry site. The route is purposely designed to avoid the Gol Grove / Hanging Wood Ancient Woodland, and cross the Roman River at a suitable narrow location to connect to the existing conveyor.

3.7.3 Due to a moderate level of mitigation being required to ensure safe crossing of both Fountain Lane and the River, an assessment of *Amber* is justified.

3.8 Access

RAG Assessment – Red/Amber

Our Assessment – Green

Please see paragraphs 2.1.9 – 2.1.12 for discussion with regard to our considerations of the methodology wording and the MPA's implementation of the methodology with respect to both Transport and Access.

3.8.1 It is proposed that the mineral extracted from the Candidate site would be transported to the existing Colchester Quarry plant site via mineral field conveyor, as is standard practice for existing and proposed mineral operations at Colchester Quarry.

3.8.2 With regard to access, the mineral extracted once processed, would enter the highway through the existing site access east off Warren Lane into Colchester Quarry. This access is long established, and requires no mitigation to make it acceptable. The access, in its current design, is purpose built use by HGV's to transport mineral.

3.8.3 This is the same access as proposed through submission of Candidate Site A95 – Land at Bellhouse Farm South, which was assessed by the MPA as 'Green'. Therefore, we suggest the submitted Candidate Site should also receive a *Green* assessment.

3.9 Public Rights of Way

RAG Assessment – Red/Amber

Our Assessment – Red/Amber

3.9.1 In accordance with the methodology an assessment of '*Red/Amber*' results from Public Right of Way (PROW) 'Birch 5' and 'Birch 7' being present within the site. As identified in the Candidate Site Submission documents, it is proposed to divert the PROWs during the operational lifetime of the works around the northern boundary of the site. A standoff will be included as well as stretches of screening bunds and advanced planting. Due to the need to divert the existing PROWs, we would suggest this is a moderate level of mitigation required. In addition to the diverted PROWs, advanced provision of permissive rights of way providing access across the entire eastern and southern areas of the site will be included from the beginning of development, increasing the level of public access to the site compared to the current situation. Once fully implemented there will be a total of ~2.1km of additional PROW created by the proposed scheme.

3.10 Geo-Environmental

RAG Assessment – Green

Our Assessment – Green

3.10.1 As stated in the RAG Assessment, the site is more than 20m from a LoGS and therefore is likely to have no impact on the geological environment that requires mitigation as geological features will be preserved and maintained.

3.11 Hydrology, Hydrogeology & Drainage

RAG Assessment – Amber

Our Assessment – Amber

3.11.1 The site is only present within Zone III – Total Catchment Groundwater Source Protection Zone with an unproductive / medium to low groundwater vulnerability. The site is not within any drinking water safeguarding zones or protection areas. As referenced within the RAG Assessment, the site is within ~50m of the Roman River.

3.11.2 A full Hydrological and Hydrogeological Impact Assessment will be undertaken to ensure the full hydrological / hydrogeological environment is understood and any relevant mitigation measures recommended and implemented into a future scheme.

3.12 Air Quality

RAG Assessment – Green

Our Assessment – Green

3.12.1 As stated in the RAG Assessment, the site is more than 2km from an Air Quality Management Area (AQMA) and therefore is likely to have no impact on air quality that requires mitigation.

3.13 Soil Quality

RAG Assessment – Amber

Our Assessment – Amber

3.13.1 The Candidate Site is identified to contain a mix of Grade 2 and 3 agricultural land, and as such meets the Amber criteria. Best practice measures will be employed when handling soils to ensure they are not impacted as a result of the proposed development. In order to reduce impact to soils during stripping and stockpiling, handling with machinery will be avoided during or shortly after heavy rainfall. Soils would be stripped using the excavator and dumper method described by Sheet 1 in the MAFF Good Practice Guide for Handling Soils.

3.13.2 Soils will be stored in bunds which will also provide landscape screening of the site. The bunds should be constructed either by excavator or bulldozer (Sheets 2 and 14 in the MAFF Good Practice Guide) avoiding over-compaction. If stripped along with the turf, the topsoil stockpile surface would be expected to revegetate naturally to protect from erosion. Subsoil stockpiles would require seeding if to be left in situ for more than six months.

3.14 Services & Utilities

RAG Assessment – Red

Our Assessment – Amber

3.14.1 Due to the presence of 11kV overhead and underground electricity cables, high pressure gas mains and local Essex and Suffolk Water mains within the site, the RAG Grade is 'Red' against the methodology included within the consultation documents.

3.14.2 However, as detailed within paragraph 2.1.15, this methodology is overly restrictive and does not account for the fact the presence of these services within a mineral site is not uncommon. Where these services are located, discussions would be held with the relevant stakeholders to agree appropriate ways to address the situation, be that through standoffs to the cables / pipes or to have the routes relocated. Whilst it could involve significant engineering works, it is not unachievable and more reflective of a moderate impact requiring medium level of mitigation. As a result the grading is more aligned to that of *Amber*.

3.15 Health & Amenity

RAG Assessment – Red

Our Assessment – Amber

3.15.1 As can be seen by the updated drawings submitted in support of this report, the red line boundary associated with the Candidate Site has been updated to remove the presence of residential dwellings. Their inclusion previously was based on landownership boundaries.

3.15.2 Whilst no residential properties are present within the boundary, as they are still adjacent, in accordance with the strict methodology provided by the MPA they would be assessed as 'Red'. However, the criteria of "therefore the site is likely to have a serious impact on health and amenity, and mitigation to make the Site acceptable would be likely be difficult to achieve", is not accurate.

3.15.3 Mitigation measures to make aspects such as dust and noise acceptable are relatively simple and typical of a mineral extraction operation. Aspects of these have been included within the submitted Block Proposals Plan which includes for standoffs of at least 50m between commercial receptors and the extraction limits, and 100m for residential receptors. In addition to this, the stand-off areas will include presence of either screening bunds or advanced tree and shrub planting, or both. These features

will provide screening / mitigation from noise and dust emissions. As stated within the PROW section, a total of ~2.1km of PROW will be created as part of the proposed scheme. This will be delivered across the operational and post restoration periods providing a positive effect on amenity.

3.15.4 We therefore assess that due to inclusion of typical / relatively easily implemented mitigation measures will not be difficult to achieve, the assessment of Health & Amenity is therefore at most, *Amber*.

3.16 Green Belt

RAG Assessment – *Green*

Our Assessment – *Green*

3.16.1 As stated in the RAG Assessment, the site is not within Green Belt. The nearest Green Belt is 24.1km away. The site is likely to have no impact on preservation of the openness of the Green Belt that requires mitigation and would not conflict with the purpose of including land within it.

3.17 Airport Safeguarding Zones

RAG Assessment – *Green*

Our Assessment – *Green*

3.17.1 As stated in the RAG Assessment, the site is not within an Airport Safeguarding Zone. The nearest Airport Safeguarding Zone is 7.6km away. The site is likely to have no impacts on aircraft safety that require mitigation and would not increase the risk of bird strikes for aircraft.

Summary of Re-Assessed Candidate Site A62 – Heckfordbridge Against Positive Sites for Meeting Mineral Need

Criteria	A62 – Heckfordbridge (Re-assessed)	A48 – Bradwell, Grange Farm	A49 – Colemans Farm	A93 – Land at Pattiswick Hall Farm
Landscape and Visual Sensitivity	Amber/Green	Amber	Red/Amber	Red/Amber
Biodiversity	Amber/Green	Red/Amber	Amber	Red/Amber
Historic Buildings	Amber	Red/Amber	Red/Amber	Red/Amber
Archaeology	Amber	Amber	Amber	Amber
Flooding	Amber	Amber/Green	Amber	Amber/Green
Transport	Amber	Green	Red/Amber	Red
Access	Green	Red/Amber	Green	Red
Public Rights of Way	Red/Amber	Red/Amber	Red/Amber	Red/Amber
Geo-Environmental	Green	Green	Green	Green
Hydrology, Hydrogeology and Drainage	Amber	Red/Amber	Amber	Red/Amber
Air Quality	Green	Green	Green	Green
Soil Quality	Amber	Amber	Amber	Amber
Services & Utilities	Amber	Amber	Red/Amber	Amber/Green
Health & Amenity	Amber	Red	Red/Amber	Red
Green Belt	Green	Green	Green	Green
Airport Safeguarding Zones	Green	Green	Green	Green

4 Conclusion

4.1.1 This report provides a justified re-assessment of Heckfordbridge utilising the Methodologies produced by Essex County Council in the 'Assessment of Candidate Sand and Gravel Sites' which form part of the current Regulation 18 Consultation of the Review of the Essex Minerals Local Plan 2014.

4.1.2 We have reviewed the extensive consultation material published by Essex County Council, including the Replacement Minerals Local Plan, Assessment of Candidate Sites, Assessment Methodologies and Sustainability Appraisal, with particular focus given to the RAG Assessment of the Candidate Site A62 – Heckfordbridge.

4.1.3 This consultation response document provides an assessment and comparison of the Candidate Site A62 (Heckfordbridge), mainly against three other specific sites. These sites being:

- A48 – Bradwell, Grange Farm (Braintree);
- A49 – Colemans Farm, Hill Broad Farm (Full Site) (Braintree); and,
- A93 – Land at Pattiswick Hall Farm (Full Site) (Braintree).

4.1.4 These sites were chosen as a result of the Sustainability Appraisal produced as part of the Regulation 18 Consultation, which in Section 5.3 provides a summary of the full suite of Candidate Sites potential significant effects identified. Section 5.3.3 of the Appraisal considers 'Meeting Mineral Needs'. The three sites listed above, along with A62 Heckfordbridge are listed within this section as "enabling significantly positive effects in regard to meeting mineral needs."

4.1.5 The Replacement MLP was received to understand the mineral need position of Essex County Council. Looking at the total tonnage of sand and gravel required to be allocated within the Replacement MLP, it is identified that in order to demonstrate a 7 year landbank at the end of the plan period (2040), that a total of 87.56 million tonnes of resource is needed to be allocated. This is under the assumption that annual sales will total the annual apportionment of the Replacement MLP of 3.98Mtpa.

4.1.6 The MPA do not seek to allocate the full 87.56mt through the Replacement MLP as there is existing permitted reserve. It is anticipated that at the time of adoption in 2025, there will be a permitted reserve of 22.95mt. This would leave a requirement of 64.56mt to be allocated through the Replacement MLP.

4.1.7 A review of the current permissions for the quarries associated with three of the assessed Candidate Sites (A48, A49 and A62), and the greenfield site (A93), identified that only Candidate Sites A62 (Heckfordbridge) and A93 (Land at Pattiswick Hall Farm), would be able to contribute to Essex landbank prior to the 2030's, with current permitted mineral at Bradwell Quarry (A48) lasting until 2031-2033, and Colemans Farm Quarry (A49) until 2036.

4.1.8 In terms of the methodologies used in the assessment of the Candidate Sites, we question whether a number of these are fully fit for purpose. Where issues are raised (namely Landscape and Visual Sensitivity, Transport, Access, Soil Quality, Services and Utilities, and Health and Amenity), justification is provided as to why, and where appropriate alternate suggestions are made. This process and the alternate suggestions made are supported by the significant amount of "up front" assessment work Tarmac invested in the preparation of the Site Submission reflecting the importance of the proposed extension and the need to identify what mitigation may be needed to reduce the impact of the proposed mineral workings on both the environment and amenity of local residents.

4.1.9 Following our re-assessment of the RAG Grades against the published methodologies, we found that in a number of cases, the RAG assessment was overly critical and could justifiably be lowered. Whilst we agreed with the RAG assessment for Archaeology, Flooding, Transport, Public Rights of Way, Geo-Environmental, Hydrology & Hydrogeology & Drainage, Air Quality, Soil Quality, Services & Utilities, Green Belt and Airport Safeguarding Zone; we found the assessment could be justifiably lowered for Landscape & Visual, Biodiversity, Historic Buildings, Access and Health & Amenity.

4.1.10 For a number of the elements which we agreed with the RAG Assessment, we believe had the methodologies been more fit for purpose then the assessment for Heckfordbridge could have been lowered.

4.1.11 Overall, as can be seen from the Summary Table, Candidate Site A62 performs well against the direct comparison sites capable of releasing substantial mineral resource. Resultingly, we request that Heckfordbridge (Candidate Site A62) be allocated within the Replacement Minerals Local Plan 2040.

Appendix 1 – Updated Plans for Site A61

Appendix 2 – Updated Plans for Site A62

Land at Heckfordbridge

Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2

CLARIFICATION DOCUMENT

SUMMARY

This document has been produced to allow:

Clarification of previously submitted information used by Stantec, for and on behalf of Essex County Council (ECC), to assess Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2, together with supplementary information to allow a correct assessment of the site(s) status to be made - for promotion within the Replacement Essex Minerals Local Plan 2025 - 2040 (MLP).

As the MPA graded A61 the same as A62, a focus has been made on Candidate Site A62: Heckfordbridge (Full Site) as that provides for the most mineral at 8.2 million tonnes (Mt).

CONTENTS OF CONSULTATION REPORT

Note. Candidate Site A61: Heckfordbridge Site 1 represents Phases 1 and 2 illustrated on the plan above - please see Appendix A for full scale plans of both Candidate Sites A61 and A62

Candidate Site A62: Heckfordbridge Site 2

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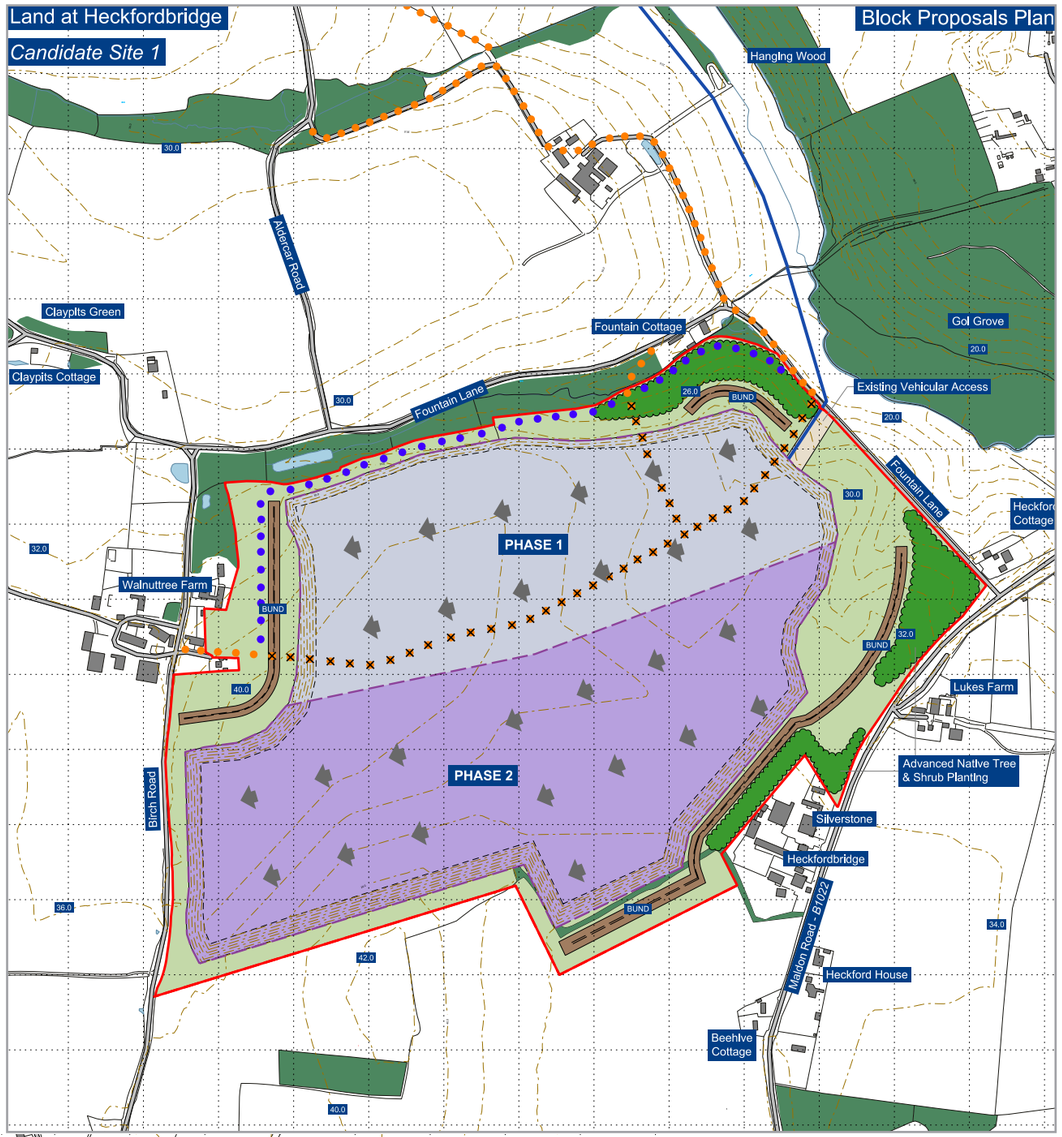

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- Heckfordbridge Promotion Area
- Existing Trees, Hedgerows & Woodland
- Surrounding Roads, Tracks & Buildings
- Waterbodies & Courses
- Agricultural Land within the Promotion Area
- Proposed Limit of Extraction
- Proposed Temporary Screening Bunds
- Advanced Permanent Native Tree & Shrub Planting
- Advanced Permanent Native Hedgerow Planting
- 2m Contours & Spot Heights (m aOD)
- Existing PROW & Section to be Temporarily Diverted

Candidate Site A61: Heckfordbridge Site 1

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- Heckfordbridge Promotion Area
- Existing Trees, Hedgerows & Woodland
- Surrounding Roads, Tracks & Buildings
- Waterbodies & Courses
- Agricultural Land within the Promotion Area
- Proposed Limit of Extraction
- Proposed Temporary Screening Bunds
- Advanced Permanent Native Tree & Shrub Planting
- Advanced Permanent Native Hedgerow Planting
- 2m Contours & Spot Heights (m aOD)
- Existing PROW & Section to be Temporarily Diverted

Candidate Site A62: Heckfordbridge Site 2

Land at Heckfordbridge

Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2

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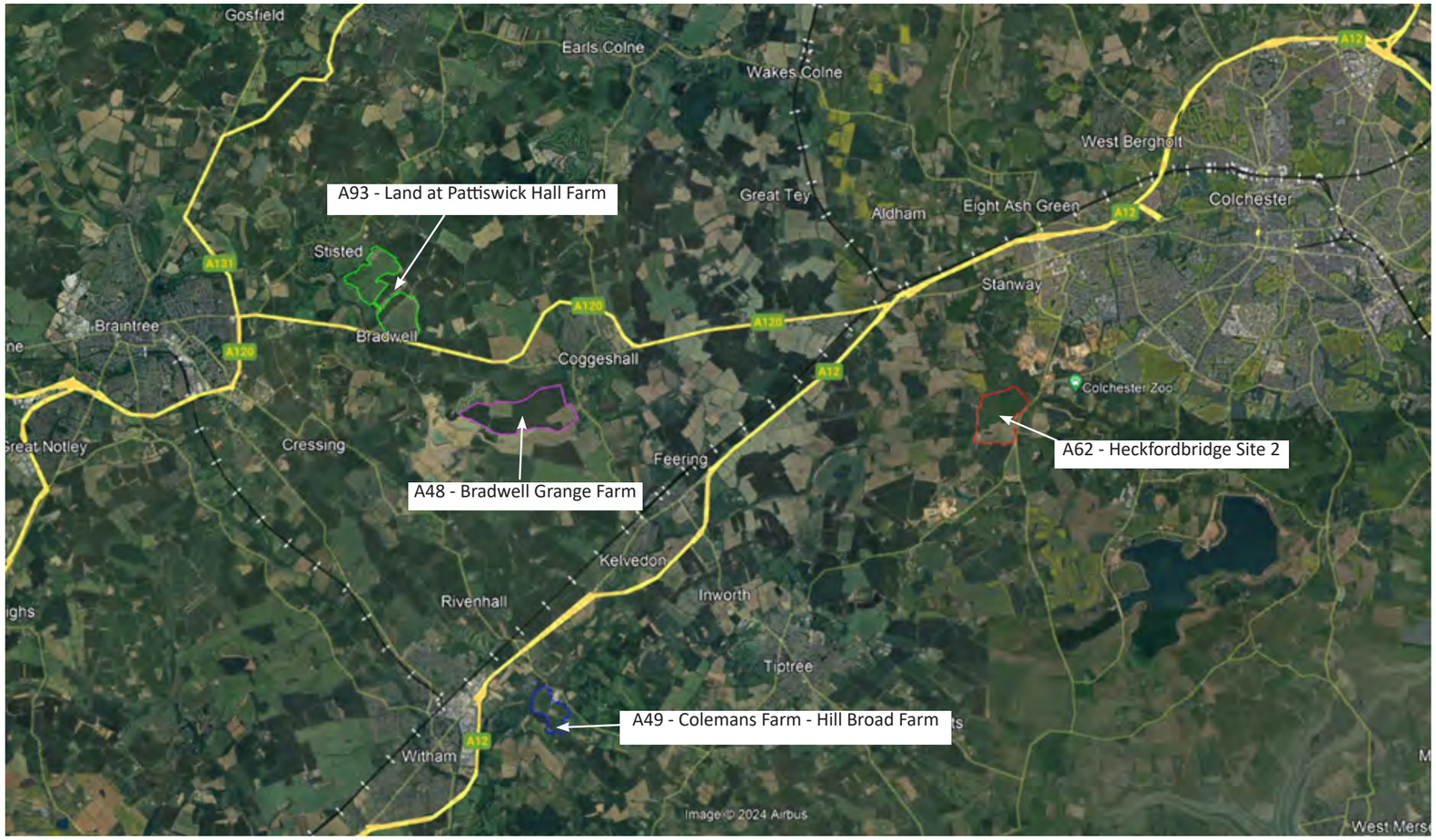
Land at Heckfordbridge

Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2

Strategic Context

Following a review of the Plan in 2019, the Council determined a need to produce a new Minerals Local Plan. The emerging 'Replacement Essex Minerals Local Plan' (MLP) covers a plan period of 2025-2040. It is understood that whilst this Regulation 18 public consultation presents the Replacement Minerals Local Plan; including Plan provision figures and the assessments of submitted sites, this Draft Plan does not present a list of preferred site allocations to meet the newly quantified minerals need for the County. Preferred site allocations will be presented in the next version of the Replacement Minerals Local Plan, following any reassessment required as part of consultation responses received on the methodology and its application across each site.

The MPA do not seek to allocate the full 87.56mt through the Replacement MLP as there is existing permitted reserve. It is anticipated that at the time of adoption in 2025, there will be a permitted reserve of 22.95mt. This would leave a requirement of **64.56mt to be allocated through the Replacement MLP.**



The Sustainability Appraisal published as part of the Consultation, at Section 5.3.3, considers 'Meeting Mineral Needs'. Within this section the MPA identify four sites which have potential for "enabling significantly positive effects in regard to meeting mineral needs." These sites are:

- A48 - Bradwell, Grange Farm (Braintree) - 12.2Mt;
- A49 - Colemans Farm, Hill Broad Farm (Full Site) (Braintree) - 2Mt;
- **A62 - Heckfordbridge, Site 2 (Colchester) - 8.2Mt; and,**
- A93 - Land at Pattiswick Hall Farm (Full Site) (Braintree) - 8.2Mt.

Deliverability

A48 - Bradwell, Grange Farm

Based on extant planning permissions, it is assessed that there is sufficient permitted mineral within the existing Bradwell Quarry to support operations until **2031-2033.** It is therefore unlikely that the 12.2mt of mineral contained within the Candidate Site would come forward prior to this time. Assuming the Candidate Site followed exhaustion of existing permitted mineral, and continuation of the existing ~750,000tpa (best case scenario for Bradwell Quarry as it operates at between 600,000tpa and 750,000tpa), then approximately 5.25mt (43%) - 6.75mt (55%) of the 12.2mt would be released within the plan period.

A49 - Colemans Farm, Hill Broad Farm

Based on extant planning permissions, it is assessed that there is sufficient permitted mineral at Colemans Farm Quarry to maintain production until **2036**. Again, assuming the Candidate Site mineral follows exhaustion of permitted mineral, and output of ~150,000tpa remains as existing, then ~600,000 tonnes of sand and gravel (30%) could be released within the plan period.

A62 - Heckfordbridge, Site 2

Mineral extraction at Heckfordbridge could begin in **2027** following cessation of mineral operations at Land at Bellhouse Farm South (Subject to Planning Permission). This would allow for 13 years of supply within the plan period. At the existing output rate of 500,000tpa, that would equate to a release of 6.5mt of the 8.2mt total – 79% of total supply.

A93 - Land at Pattiswick Hall Farm

This would be a new greenfield site not connected to any existing operations. Factors which could affect the deliverability of this site would be whether there is a mineral operator lined up to operate the site, the lead in time associated with the setup of a new quarry – i.e preparing a planning application and achiveing planning permission, internal infrastructure, processing plants and staffing. Finally, the site faces large access issues to overcome in the form of achieving site access directly off a trunk road.

Land at Heckfordbridge

Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2

SUMMARY SHEET

This sheet is a summary of Essex County Council's initially assessed 'RAG Measurement' of Candidate A61 and A62, together with Tarmac's responses, with clarification, reasoning and re-assessment utilising the RAG methodology. Consideration and critique of the RAG methodology is also included within the table below.

ECC RAG CRITERIA	*INITIALLY ASSESSED MEASUREMENT BY ECC*	*REASONS WHY THE ECC MEASUREMENT IS EITHER WRONG OR INACCURATE*	*RE-ASSESSED MEASUREMENT BY TARMAC AND THEIR CONSULTANTS USING THE RAG METHODOLOGY*	*COMMENTS*
Landscape Character & Visual Amenity	**RED / AMBER**	• **Methodology** - The RAG methodology placed great emphasis on only one aspect of assessment i.e. 'Sensitivity'. This is only part of the process. There is minimal consideration of the actual 'Magnitude of Effect' (the potential size, scale reversibility) of the potential development change. As such, the actual level of potential 'Significance of Effect' has not been quantified through the RAG process and assessment measurement. • **Mitigation** - the proposed fully integrated mitigation measures within the submitted Candidate Site A61 and A62 schemes i.e. advanced tree and shrub planting, minor soil screen bunding, phased working and restoration, have not been fully assessed by the RAG measurement. • **Enhancement** - the amenity benefits of the proposals have not been considered or assessed. Provision of **~2.7km** of new public access / connectivity and the creation of new habitat, including advanced works, to to promote Biodiversity Net Gain (BNG)	Landscape Character: **Medium** Visual Amenity: **Medium** ***Overall for Criteria:*** **AMBER**	Both the initial Candidate Site Submission, and this sunsequent re-assessment has been considered by a Landscape Architect. The RAG overall emphasis on Sensitivity and not considering the potential for mitigation and enhancement, has lead to an inaccurate and unsound assessment of Candidate Site 61 and 62. When mitigation / enhancement and the actual Magnitude of Effects of the proposed Candidate Sites are actually considered, it is assessed that the re-measurement should be AMBER.
Biodiversity	**AMBER**	• The RAG methodology is in a tabulated format split into five indivudal considerations. There is no clarity provided within the scoring for each of the areas to demonstrate how they reached the conclusion to consider the impact **AMBER**. • It appears that the full suite of technical information submitted in support of the Candidate Site Submission has not been fully considered.For example, impacts to priority habitats (hedgerow) is an area focused on in the RAG assessment with regard to direct loss. The RAG assessment fails to consider the mitigating factors of advanced planting, progressive working and restoration ensuring not all of the habitat is affected at one time, and that post restoration there would be an increased quantity of priority	AMBER / GREEN	The Candidate Site Submission was supported by a Preliminary Ecological Appraisal prepared by a suitably qualified Ecologist. • Level of likely ecological impact and level of mitigation required - Measures required for mitigation involves typical quarry features such as standoffs and screening bunds. Post Restoration features will also provide mitigation / benefit. AMBER / GREEN; • Impact to International or National designations - The site lies outside of Site of Special Scientific Interest Minerals Buffer Zone, Special Protection Areas and Ramsar Sites. GREEN; • Level of mitigation required subject to a Habitat Regulations Assessment - The site lies outside of European Protected Sites and Buffer Zones. GREEN;

ECC RAG CRITERIA	INITIALLY ASSESSED MEASUREMENT BY ECC	REASONS WHY THE ECC MEASUREMENT IS EITHER WRONG OR INACCURATE	RE-ASSESSED MEASUREMENT BY TARMAC AND THEIR CONSULTANTS USING THE RAG METHODOLOGY	COMMENTS
		habitat compared to the current situation.		• Impact to irreplaceable habitats - Due to the proximity of the Candidate Site operations to the Ancient Woodland, it is determined that any potential impact would relate to setting. Full assessment of the Candidate Site development on Ancient Woodland would form part of a planning application. AMBER / GREEN; and, • Impact to local designations and priority species - This aspect relates to Local Wildlife Sites (Ancient Woodland) and Hedgerows (Priority Habitat). Any potential impact to Ancient Woodland would be to its setting due to seperation distance. Regarding priority hedgerow, a total of ~850m of advanced hedgerow planting will take place prior to any removal. A total of ~1.53km of hedgerow are to be removed, however this would take place progressively with progressive restoration of hedgerow following extraction. Therefore not all hedgerow will be removed at one time. AMBER / GREEN
Historic Buildings	**RED / AMBER**	• The RAG assessment does not take into account that mitigation to ensure an acceptable level of impact can be easily implemented, as illustrated on the submitted Block Phasing Plan.	**AMBER**	A Desk Based Appraisal was produced in support of the Candidate Site Submission. • There are a total of seven Listed Buildings within close proximity to the site, as identified within the RAG assessment. The submitted Block Phasing Plan illustrates a 100m standoff to the closest of these listed buildings (Walnut Tree Farmhouse and Barn to the South of Walnut Tree Farm). All other listed buildings benefit from ever greater standoff distances. In addition to the standoffs, there are strategically placed screening bunds between the listed buildings and proposed operational areas. Mitigation measures to ensure an acceptable level of impact are easily implemented and typical features of a mineral operation.
Archaeology	**AMBER**	• We agree with the RAG Assessment.	**AMBER**	• Mineral development at the site is not anticipated to result in larger than moderate impact, following further field-based evaluation. Mitigation of impact would be achievable.

Land at Heckfordbridge

Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2

SUMMARY SHEET

ECC RAG CRITERIA	*INITIALLY ASSESSED MEASUREMENT BY ECC*	*REASONS WHY THE ECC MEASUREMENT IS EITHER WRONG OR INACCURATE*	*RE-ASSESSED MEASUREMENT BY TARMAC AND THEIR CONSULTANTS USING THE RAG METHODOLOGY*	*COMMENTS*
Flooding	AMBER	• We agree with the RAG Assessment.	AMBER	• Whilst we agree with the RAG grade, it is worth noting that the Strategic Flood Risk Assessment is split into 1km grid squares, therefore not accurate to a site specific level. A full Hydrological & Hydrogeological Impact Assessment and Flood Risk Assessment will be provided as part of a Planning Application.
Transport	AMBER	Whilst we agree with the grading provided, there are a number issues raised regarding the methodology which applies to both Transport and Access: • The RAG Assessment considers the impacts of the proposed mineral field conveyor under 'Access'. This is outside the scope of the methodology provided for Access, and we feel better suited to be considered under Transport; • As the conveyor is the means of transport for mineral from source to the processing plant, it would be better suited to assessment as part of the Transport section; • The RAG Assessment solely consider the categorisation of the road and do not provide allowances for instances where certain category roads have been upgraded to accomodate particular vehicle movements. In this case updrade of Warren Lane for the HGV movements.	AMBER	• Against the strict methodology, Transport would be Amber due to Warren Lane being classified as a 'Secondary Distributor Route'. However, Warren Lane has been improved to accomodate HGV movements, and it provides the Quarry access to the Strategic Highway Network (A12) without the need to pass through residential areas due to the connectivity provided by the Stanway Western Bypass. Furthermore, the Council Highways Department, in their consultation response to the Bellhouse Farm South planning application, did not see need to comment on the proposal; • The proposed conveyor route from the Candidate Site would involve crossing Fountain Lane (likely beneath the road), traversing fields and then crossing the Roman River to connect to the existing mineral field conveyor in the Bellhouse Quarry site. The route is purposely designed to avoid the Gol Grove / Hanging Wood Ancient Woodland, and cross the Roman River at a suitable narrow location to connect to the existing conveyor. Due to a moderate level of mitigation, an AMBER assessment is justified.
Access	RED / AMBER	The points raised in trasport above are relevant, in addition to: • We do not consider the methodology for access to be inappropriate, providing it does solely consider the access point where mineral will exit the site to enter market. For this element our issue lies with the consideration of the conveyor, which as stated above, we believe is a Transport consideration.	GREEN	• Mineral will leave Colchester Quarry to enter the market via the existing Warren Lane access point. This is the same access as proposed through submission of Candidate Site A95 – Land at Bellhouse Farm South, which was assessed by the RAG Assessment as 'Green'. Therefore, we suggest the submitted Candidate Site should also receive a GREEN assessment.

Land at Heckfordbridge

Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2

SUMMARY SHEET

ECC RAG CRITERIA	*INITIALLY ASSESSED MEASUREMENT BY ECC*	*REASONS WHY THE ECC MEASUREMENT IS EITHER WRONG OR INACCURATE*	*RE-ASSESSED MEASUREMENT BY TARMAC AND THEIR CONSULTANTS USING THE RAG METHODOLOGY*	*COMMENTS*
Public Rights of Way	**RED / AMBER**	• The methodology is overly restrictive with regard to categorising a site a Red/Amber solely for the presence of a PROW within a Site boundary.	**RED / AMBER**	• It is proposed to divert the PROWs during the operational lifetime of the works around the northern boundary of the site. A standoff will be included as well as stretches of screening bunds and advanced planting. Due to the need to divert the existing PROWs, we would suggest this is a moderate level of mitigation required. In addition to the diverted PROWs, advanced provision of permissive rights of way providing access across the entire eastern and southern areas of the site will be included from the beginning of development, increasing the level of public access to the site compared to the current situation
Geo-Environmental	GREEN	• We agree with the RAG Assessment.	GREEN	• As stated in the RAG Assessment, the site is more than 20m from a Local Geological Site and therefore is likely to have no impact on the geological environment that requires mitigation as geological features will be preserved and maintained.
Hydrology, Hydrogeology & Drainage	**AMBER**	• We agree with the RAG Assessment.	**AMBER**	• A full Hydrological and Hydrogeological Impact Assessment will be undertaken to ensure the full hydrological / hydrogeological environment is understood and any relevant mitigation measures recommended and implemented into a future scheme.
Air Quality	GREEN	• We agree with the RAG Assessment.	GREEN	• As stated in the RAG Assessment, the site is more than 2km from an Air Quality Management Areas and therefore is likely to have no impact on air quality that requires mitigation.
Soil Quality	**AMBER**	• We agree with the RAG Assessment.	**AMBER**	• The Candidate Site is identified to contain a mix of Grade 2 and 3 agricultural land, and as such meets the Amber criteria. • Best practice measures will be implemented in accordance with the MAFF Good Practice Guide for Handling Soils.

Land at Heckfordbridge

Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2

SUMMARY SHEET

ECC RAG CRITERIA	*INITIALLY ASSESSED MEASUREMENT BY ECC*	*REASONS WHY THE ECC MEASUREMENT IS EITHER WRONG OR INACCURATE*	*RE-ASSESSED MEASUREMENT BY TARMAC AND THEIR CONSULTANTS USING THE RAG METHODOLOGY*	*COMMENTS*
Services & Utilities	**RED**	• The methodology is overly restrictive and does not account for the fact the presence of these services within a mineral site is not uncommon. Where these services are located, discussions would be held with the relevant stakeholders to agree appropriate ways to address the situation, be that through standoffs to the cables / pipes or to have the routes relocated. Whilst it could involve significant engineering works, it is achievable.	**AMBER**	• Where the presence of services and utilities is identified, engagement will be held with the relevant stakeholders to ensure impact is mitigated. We suggest that this is would be of moderate impact and require medium level of mitigation in accordance with the criteria of **AMBER.**
Health & Amenity	**RED**	• The main point to raise here is that the RAG Assessment based the Sensitivity only on the red line boundary submitted as part of the Candidate Site Submission as opposed to the associated Block Phasing Plan submitted which highlights standoff distances from extraction limits and achievable mitigation measures.	**AMBER**	• Mitigation measures to make aspects such as dust and noise acceptable are relatively simple and typical of a mineral extraction operation. Aspects of these have been included within the submitted Block Phasing Plan which includes for standoffs of at least 50m between commercial receptors and the extraction limits, and 100m for residential receptors. In addition to this, the stand-off areas will include presence of either screening bunds or advanced tree and shrub planting, or both; and, • We therefore assess that due to inclusion of typical / relatively easily implemented mitigation measures will not be difficult to achieve, the assessment of Health & Amenity is therefore at most **AMBER.**
Green Belt	GREEN	• We agree with the RAG Assessment.	GREEN	• As stated in the MPA Assessment, the site is not within Green Belt. The nearest Green Belt is 24.1km away. The site is likely to have no impact on preservation of the openness of the Green Belt that requires mitigation and would not conflict with the purpose of including land within it.
Airport Safeguarding Zones	GREEN	• We agree with the RAG Assessment.	GREEN	• As stated in the RAG Assessment, the site is not within an Airport Safeguarding Zone. The nearest Airport Safeguarding Zone is 7.6km away. The site is likely to have no impacts on aircraft safety that require mitigation and would not increase the risk of bird strikes for aircraft.

Land at Heckfordbridge

Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2

Comparison of Re-Assessed Site A62 Heckfordbridge against the identified 'Positive Sites for Meeting Mineral Need'

Criteria	A62 – Heckfordbridge (Re-assessed)	A48 – Bradwell, Grange Farm	A49 – Colemans Farm	A93 – Land at Pattiswick Hall Farm
Landscape and Visual Sensitivity	Amber/Green	Amber	Red/Amber	Red/Amber
Biodiversity	Amber/Green	Red/Amber	Amber	Red/Amber
Historic Buildings	Amber	Red/Amber	Red/Amber	Red/Amber
Archaeology	Amber	Amber	Amber	Amber
Flooding	Amber	Amber/Green	Amber	Amber/Green
Transport	Amber	Green	Red/Amber	Red
Access	Green	Red/Amber	Green	Red
Public Rights of Way	Red/Amber	Red/Amber	Red/Amber	Red/Amber
Geo-Environmental	Green	Green	Green	Green
Hydrology, Hydrogeology and Drainage	Amber	Red/Amber	Amber	Red/Amber
Air Quality	Green	Green	Green	Green
Soil Quality	Amber	Amber	Amber	Amber
Services & Utilities	Amber	Amber	Red/Amber	Amber/Green
Health & Amenity	Amber	Red	Red/Amber	Red
Green Belt	Green	Green	Green	Green
Airport Safeguarding Zones	Green	Green	Green	Green

Land at Heckfordbridge

Candidate Sites A61: Heckfordbridge Site 1 and A62: Heckfordbridge Site 2

Conclusion

This report provides a justified re-assessment of Heckfordbridge utilising the Methodologies produced by Essex County Council in the 'Assessment of Candidate Sand and Gravel Sites' which form part of the current Regulation 18 Consultation of the Review of the Essex Minerals Local Plan 2014.

We have reviewed the extensive consultation material published by Essex County Council, including the Replacement Minerals Local Plan, Assessment of Candidate Sites, Assessment Methodologies and Sustainability Appraisal, with particular focus given to the RAG Assessment of the Candidate Site A62 – Heckfordbridge.

This consultation response document provides an assessment and comparison of the Candidate Site A62 (Heckfordbridge), mainly against three other specific sites. These sites being:

- A48 – Bradwell, Grange Farm (Braintree);
- A49 – Colemans Farm, Hill Broad Farm (Full Site) (Braintree); and,
- A93 – Land at Pattiswick Hall Farm (Full Site) (Braintree).

These sites were chosen as a result of the Sustainability Appraisal produced as part of the Regulation 18 Consultation, which in Section 5.3 provides a summary of the full suite of Candidate Sites potential significant effects identified. Section 5.3.3 of the Appraisal considers 'Meeting Mineral Needs'. The three sites listed above, along with A62 Heckfordbridge are listed within this section as "enabling significantly positive effects in regard to meeting mineral needs".

The Replacement MLP was received to understand the mineral need position of Essex County Council. Looking at the total tonnage of sand and gravel required to be allocated within the Replacement MLP, it is identified that in order to demonstrate a 7 year landbank at the end of the plan period (2040), that a total of 87.56 million tonnes of resource is needed to be allocated. This is under the assumption that annual sales will total the annual apportionment of the Replacement MLP of 3.98Mtpa.

The MPA do not seek to allocate the full 87.56mt through the Replacement MLP as there is existing permitted reserve. It is anticipated that at the time of adoption in 2025, there will be a permitted reserve of 22.95mt. This would leave a requirement of 64.56mt to be allocated through the Replacement MLP.

A review of the current permissions for the quarries associated with three of the assessed Candidate Sites (A48, A49 and A62), and the greenfield site (A93), identified that only Candidate Sites A62 (Heckfordbridge) and A93 (Land at Pattiswick Hall Farm), would be able to contribute to Essex landbank prior to the 2030's, with current permitted mineral at Bradwell Quarry (A48) lasting until 2031-2033, and Colemans Farm Quarry (A49) until 2036.

Candidate Site	Likely year for mineral release	Percentage of mineral likely to be released during Plan Period
A48 – Bradwell, Grange Farm	2031 - 2033	43% - 55%
A49 – Colemans Farm, Hill Broad Farm (Full Site)	2036	30%
A62 Heckfordbridge, Site 2	2027	79%
A93 – Land at Pattiswick Hall Farm (Full Site)	Unknown	Unknown

In terms of the methodologies used in the assessment of the Candidate Sites, we question whether a number of these are fully fit for purpose. Where issues are raised (namely Landscape and Visual Sensitivity, Transport, Access, Soil Quality, Services and Utilities, and Health and Amenity), justification is provided as to why, and where appropriate alternate suggestions are made.

Following our re-assessment of the RAG Grades against the published methodologies, we found that in an number of cases, the RAG Assessment was overly critical and could justifiably be lowered. Whilst we agreed with the RAG Assessment for Archaeology, Flooding, Transport, Public Rights of Way, Geo-Environmental, Hydrology & Hydrogeology & Drainage, Air Quality, Soil Quality, Services & Utilities, Green Belt and Airport Safeguarding Zone; we found the assessment could be justifiably lowered for Landscape & Visual, Biodiversity, Historic Buildings, Access and Health & Amenity.

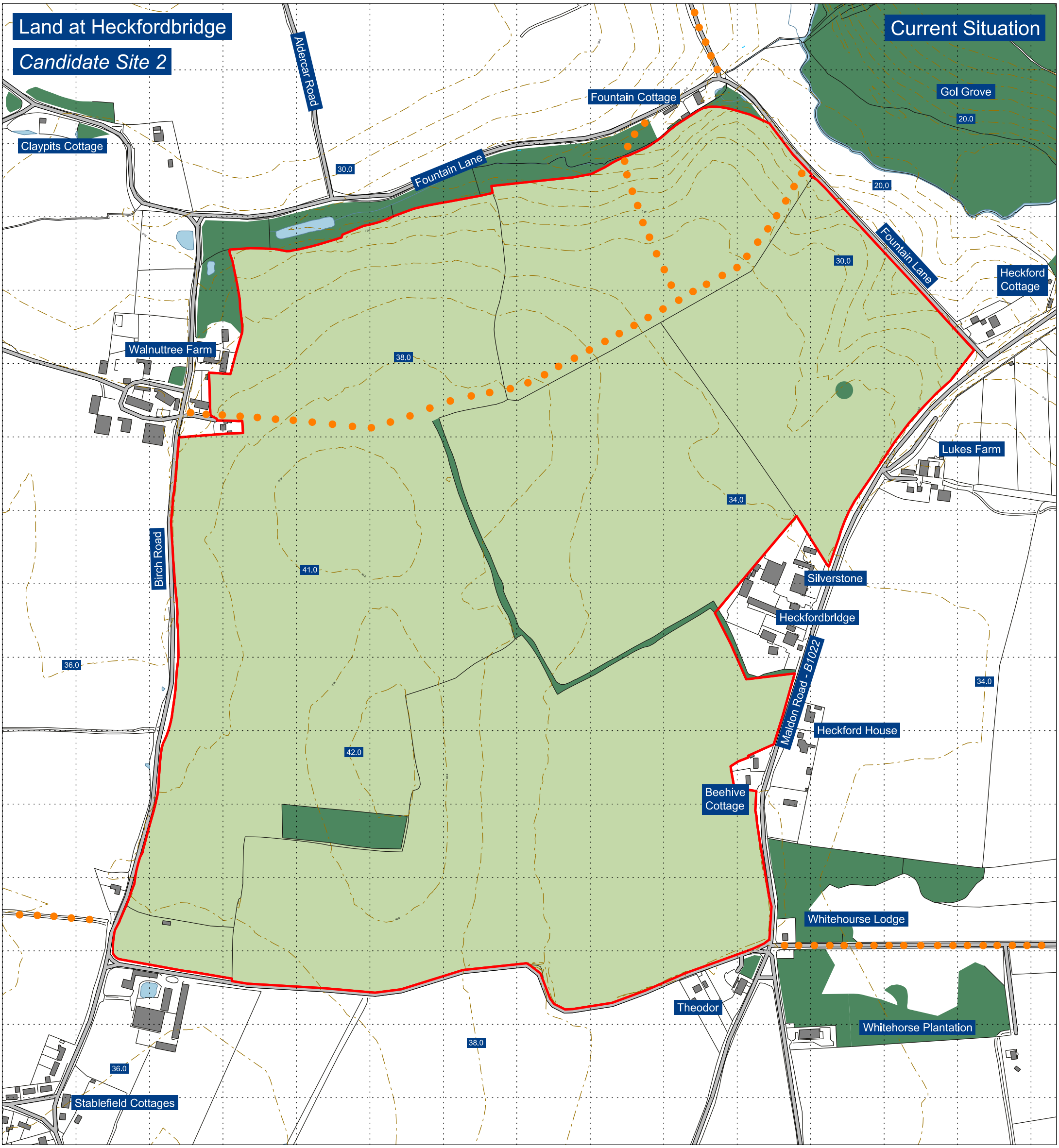
For a number of the elements which we agreed with the RAG Assessment, we believe had the methodologies been more fit for purpose then the assessment for Heckfordbridge could have been lowered.

Overall, as can be seen from the Summary Table, Candidate Site A62 performs well against the direct comparison sites capable of releasing substantial mineral resource. Resultingly, we request that Heckfordbridge (Candidate Site A62) be allocated within the Replacement Minerals Local Plan 2040.

Land at Heckfordbridge

Candidate Site 2

Current Situation



Legend

- *Heckfordbridge Promotion Area*
- *Existing Trees, Hedgerows & Woodland*
- *Surrounding Roads, Tracks & Buildings*
- *Waterbodies & Courses*
- *Agricultural Land within the Site Boundary*
- 180.0 — *Existing 2m Contours & Spot Heights (m aOD)*
- *Existing Public Rights of Way (PROW)*

TARMAC
A CRH COMPANY

Site Name:

Land at Heckfordbridge: Candidate Site 2

Drawing Name:

Current Situation

Drawn By:	***Scale @ A3:***
R. Duncan	1:5,000
Date:	***Drawing Number:***
07.03.2024	KD.HFB.010A

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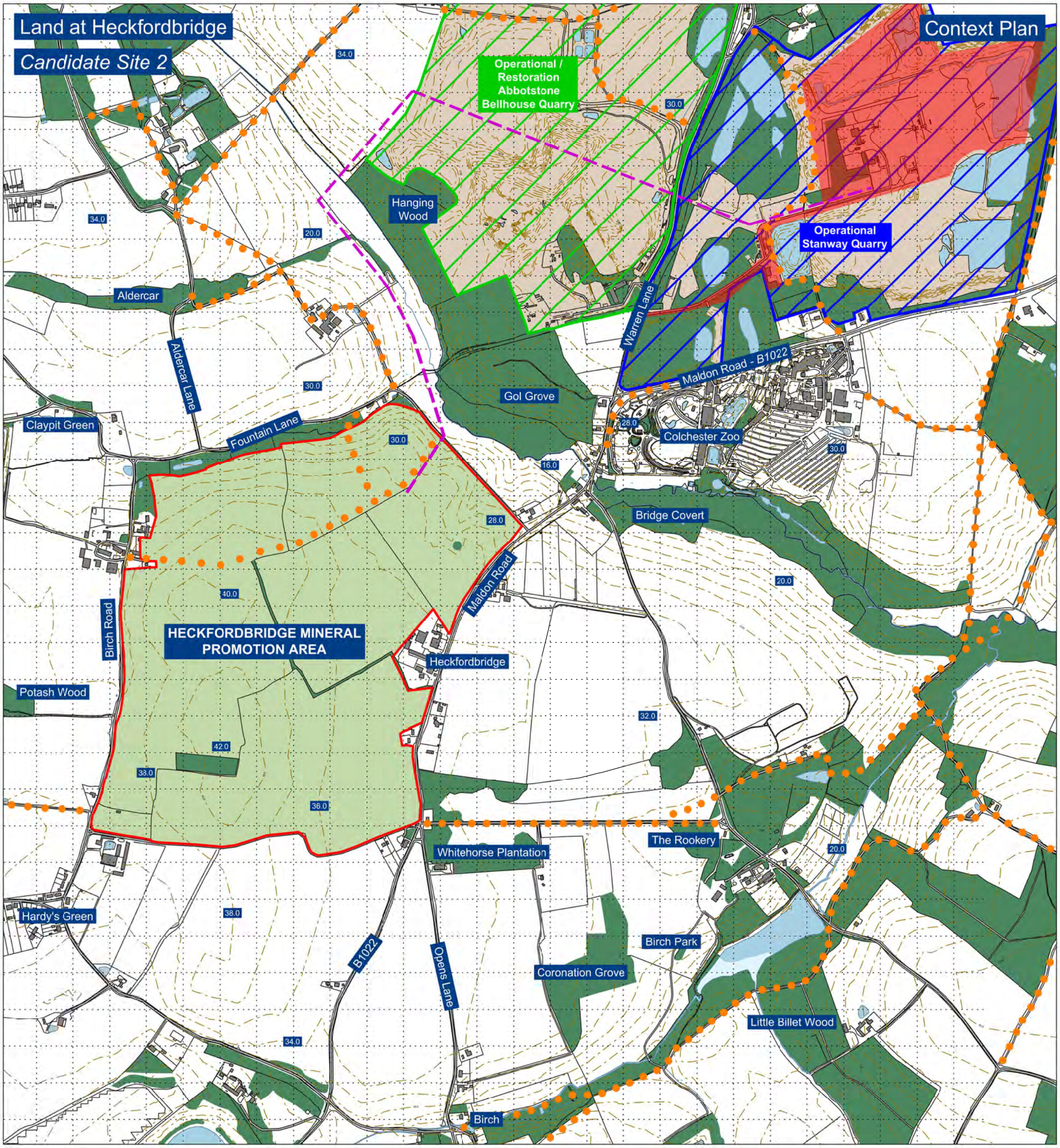
Land at Heckfordbridge

Candidate Site 2

Context Plan



Legend

- *Heckfordbridge Mineral Promotion Area*
- *Tarmac Stanway Quarry*
- *Tarmac Abbotstone Bellhouse Quarry: Under Restoraton*
- *Existing Trees, Hedgerows & Woodland*
- *Surrounding Roads, Tracks & Buildings*
- *Waterbodies & Courses*
- *Existing Disturbed Land (Mineral)*
- *Proposed Field Conveyor Route from Heckfordbridge Mineral Promotion Site to Stanway Quarry for Processing and onward Sale from Stanway Quarry*
- *Stanway Quarry Plant Site & Access Requirements*
- *Existing 2m Contours & Spot Heights (m aOD)* (180.0)
- *Existing Public Rights of Way (PROW)*

TARMAC
A CRH COMPANY

Site Name:

Land at Heckfordbridge: Candidate Site 2

Drawing Name:

Context Plan

Drawn By:	***Scale @ A3:***
R. Duncan	1:10,000
Date:	***Drawing Number:***
07.03.2024	KD.HFB.011A

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Land at Heckfordbridge

Candidate Site 2

Block Proposals Plan

Legend

- *Heckfordbridge Promotion Area*
- *Existing Trees, Hedgerows & Woodland*
- *Surrounding Roads, Tracks & Buildings*
- *Waterbodies & Courses*
- *Agricultural Land within the Promotion Area*
- *Proposed Limit of Extraction*
- *Proposed Conveyor Routing*
- *Proposed Development Phases 1 & 2*
- *Proposed Direction of Working*
- *Proposed Temporary Screening Bunds*
- *Advanced Permanent Native Tree & Shrub Planting*
- *Advanced Permanent Native Hedgerow Planting*
- *2m Contours & Spot Heights (m aOD)* (180.0)
- *Existing PROW & Section to be Temporarily Diverted*
- *Proposed Temporary Diverted Route of PROW / Advanced Permissive Footpath*

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Site Name:

Land at Heckfordbridge: Candidate Site 2

Drawing Name:

Block Proposals Plan

Drawn By:	***Scale @ A3:***
R. Duncan	1:5,000
Date:	***Drawing Number:***
07.03.2024	KD.HFB.012A

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Land at Heckfordbridge

Candidate Site 2

Concept Restoration Scheme

Proposed Restoration Land Uses:

Lowland Meadow Essex Target Biodiversity Habitat:	14.14 Ha
Species Rich Grassland:	24.39 Ha
New Native Woodland:	7.49 Ha
Retention of existing Coppice:	0.77 Ha
Agricultural Land:	46.56 Ha
Ephemeral Waterbodies:	0.76 Ha
Hedgerows:	2,072 linear metres
Reinstated PROW (Existing):	1,159 linear metres
New Sections of Permissive Path:	2,731 linear metres

Legend

- *Heckfordbridge Mineral Promotion Area*
- *Existing Trees, Hedgerows & Woodland*
- *Surrounding Roads, Tracks & Buildings*
- *Waterbodies & Courses*
- *Proposed Agricultural Land*
- *Proposed Species Rich Grassland & Agricultural Field Margins / Buffers*
- *Proposed Lowland Meadow Grassland*
- *Proposed New Native Woodland & Shrub Establishment*
- *Proposed New Native Hedgerow & Tree Planting*
- *Proposed Ephemeral Pools*
- *2m Contours & Spot Heights (m aOD)* (180.0)
- *Reinstated PROW & Proposed Permissive Paths*

TARMAC
A CRH COMPANY

Site Name:

Land at Heckfordbridge: Candidate Site 2

Drawing Name:

Concept Restoration Scheme

Drawn By:	***Scale @ A3:***
R. Duncan	1:5,000
Date:	***Drawing Number:***
07.03.2024	KD.HFB.013A

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