

| Candidate Site Reference | Candidate Site Name | District | Existing use | Site Area (ha) | Potential Yield (million tonnes) |
|-----------------------------|-------------------------------------|-----------|--------------|-------------------|----------------------------------|
| A96 | Rayne Quarry - Southern Extension | Braintree | Agricultural | 11.3 | 0.2 |

The Site is promoted as an extension to an existing mineral Site (Rayne Quarry) and is located south of Rayne Quarry and north of the A120. The Site area is approximately 11.3 ha and is proposed for approximately 0.2 million tonnes of sand and gravel extraction with processing occurring from the existing Rayne Quarry processing plant. It is proposed that once granted consent mineral extraction would follow on from the consented extraction activities at Rayne Quarry and following extraction at Site A90 if consented. The adjoining uses include agricultural fields, woodland, Rayne Quarry, a waterbody, B1256 (Dunmow Road), A120, and residential buildings. The village of Rayne is located to the east of the Site. Proposed access is via the existing access to Rayne Quarry which is off the B1256 (Dunmow Road), linking with the A120. See Appendix J for a detailed map of the Site.

Summary of RAG Assessment

The results of the technical and desktop RAG assessment are detailed below.

| Landscape and Visual Sensitivity | Biodiversity | Historic Buildings | Archaeology | Flooding | Transport | Access | Public Rights of Way | Geo-Environmental | Hydrology, Hydrogeology and Drainage | Air Quality | Soil Quality | Services & Utilities | Health & Amenity | Green Belt | Airport Safeguarding Zones |
|-------------------------------------|---------------|--------------------|-------------|----------|-----------|---------------|----------------------|-------------------|---|-------------|--------------|----------------------|------------------|------------|----------------------------|
| Red/ Amber | Red/ Amber | Amber | Amber | Amber | Amber | Red/ Amber | Green | Green | Red/ Amber | Green | Amber | Red | Red | Green | Green |

Key findings of the assessment are as follows:

- The Landscape Character Area (LCA) is Central Essex Farmlands (B1), the Site possesses some characteristic features of this, notably, small woods and copses that provide structure and edges to the landscape within an arable landscape of medium sized fields. Appropriate consideration is required to protect the characteristic features of the LCA, particularly the effect on the established tall hedgerows and wooded plantation that bound the southern boundary.
- A large portion of the Site is currently woodland and 1ha of this was planted under English Woodland Grant Schemes – Broadfields Farm with a Woodland Creation Grant in 2012. This area should be retained and enhanced with an appropriate buffer.

- This Site is a relatively narrow area of land between the A120, B1256 and B1417. These roads- and in particular the A120- create a barrier to the movement of wildlife. The River Ter (a Main River) cuts through the middle of the Site. The northern part of the Site comprises arable land bounded by strips of woodland plantation between the northern boundary and the road. The southern part comprises low-lying land along the River Ter valley and includes Lowland Mixed Deciduous Woodland, watercourses, lines of trees, plantation woodland and floodplain grassland with young, scattered trees. It appears from the submitted Proforma and plans that all internal habitats would be removed, including an estimated 490 metre stretch of the River Ter and its associated habitats.
- The Site is graded Red- Amber because ecological impacts are likely to be major and likely to require high levels of mitigation to make the Site acceptable. The Site could have a serious impact upon the natural environment including the River Ter and Priority habitats and species. It would involve the direct loss of an extensive area of habitat along the wildlife corridor. It would result in dissecting habitat in an area where the movement of species is already hindered by several roads, particularly the A120. There is potential for it to seriously adversely affect a number of protected and Priority species utilising the river corridor such as Water Vole, Otters, and bats.
- Any application would require demonstration that the operations would not
 affect the hydrology of the River Ter and its associated habitats, trees, and
 other boundary habitats in the long term. Off-site compensatory habitat in a
 suitable location would need to be provided for the significant loss of river and
 associated habitats, the other habitats and for farmland Priority species.
- The allocation of the Site would likely result in 'less than substantial' harm at a low level to the significance of five Grade II listed buildings through change within their settings: Cartlodge Approximately 100 Metres South East of Blake House Farmhouse (List UID: 1122782); Farm Outbuilding Range Approximately 20 Metres South West of Blake House Farmhouse and Adjoining the Road (List UID: 1365611); Barn Approximately 60 Metres South East of Blake House Farmhouse (List UID: 1365607); Farm Outbuilding Range Approximately 15 Metres South of Blake House Farmhouse (List UID: 1238998); Blake House Farmhouse (List UID: 1122781).
- The undeveloped, agrarian landscape of the Site contributes to the setting and significance of these assets and the fundamental change in land use and land character would undermine the ability to understand and appreciate their significance.
- The Site contains evidence recorded through aerial photography for historic field boundaries.
- The Site lies along a Roman road and Roman settlement and burial activity is recorded in the immediate area.

- Alluvial deposits associated with the River Ter have potential to preserve palaeoenvironental remains and waterlogged deposits.
- The Site is assessed as having a 'high' potential for surface water flood risk as identified within the SFRA.
- The Site has been identified as having a 'medium' groundwater flood risk.
- The Site is predominantly within FRZ1 (58.7%), however 35% of the Site is with FRZ3 and is at risk from fluvial flooding.
- Access is proposed via an existing access serving Rayne Quarry onto the B1256 which is classified as a Secondary Distributor in Essex County Council's Development Management Route Hierarchy. This accords with (iii) in the methodology (see Appendix G Transport for full methodology):

Where access to the main road network in accordance with (i) and (ii) above is not feasible, road access via a suitable existing road prior to gaining access onto the main road network will exceptionally be permitted, having regard to the scale of the development, the capacity and form of the road and an assessment of the impact on road safety.

- The A120 Trunk Road forms part of the Strategic Road Network managed by National Highways. Whilst an initial conversation has taken place with National Highways to inform this RAG grade it is imperative that they are formerly consulted at the appropriate time.
- The Site lies to the south/west of the existing Rayne Quarry on the opposite side of the B1256. There is no information submitted to demonstrate whether an access or crossing that complies with highway standards can be achieved on to the B1256.
- Access to the A120 Trunk Road is located immediately to the east of the Site.
 This forms part of the Strategic Road Network managed by National
 Highways. Whilst an initial conversation has taken place with National
 Highways to inform this RAG grade it is imperative that they are formerly
 consulted at the appropriate time.
- The Site is within Zone III Total Catchment Groundwater SPZ and has a low/unproductive groundwater vulnerability. The Site is within a Drinking Water Safeguard Zone (Surface Water). A water course (River Ter) is within the Site boundary and is 160m north west, another water course is 150m north west. Appropriate consideration would be required to mitigate the potential impacts on hydrology, hydrogeology, and drainage – high levels of mitigation may be required.
- The Site contains Grade 2 quality soil (very good quality agricultural land) and Grade 3 quality soil (good to moderate quality land), which is BMV land.
 Appropriate consideration would be required to mitigate the impacts on soil

- quality and agricultural land this is likely to include removal of soils for stockpiling prior to reuse, potentially in site restoration.
- The Site contains 11kV overhead electricity lines within the Site boundary. Overhead Openreach BT power lines are within the Site boundary. The Site contains high pressure gas mains (National Grid Gas) within the Site boundary. Further investigation and consultation would be needed to determine appropriate mitigation measures to make the Site acceptable which would likely include diversion and/or protection. Diversion/protection may not be possible and/or may be cost prohibitive.
- Three residential buildings are adjacent to the boundary of the Site (0m). Seven residential buildings are outside the Site boundary less than or equal to 20m from the Site. Three residential buildings are more than 20m but less than or equal to 50m from the Site. Nine residential building, five commercial buildings and one building of unknown use are more than 50m but less than or equal to 250m from the Site Given the proximity of sensitive receptors, mitigation would be required, however, the levels of mitigation required to ensure that there are no serious impacts on health and amenity would likely be difficult to achieve.

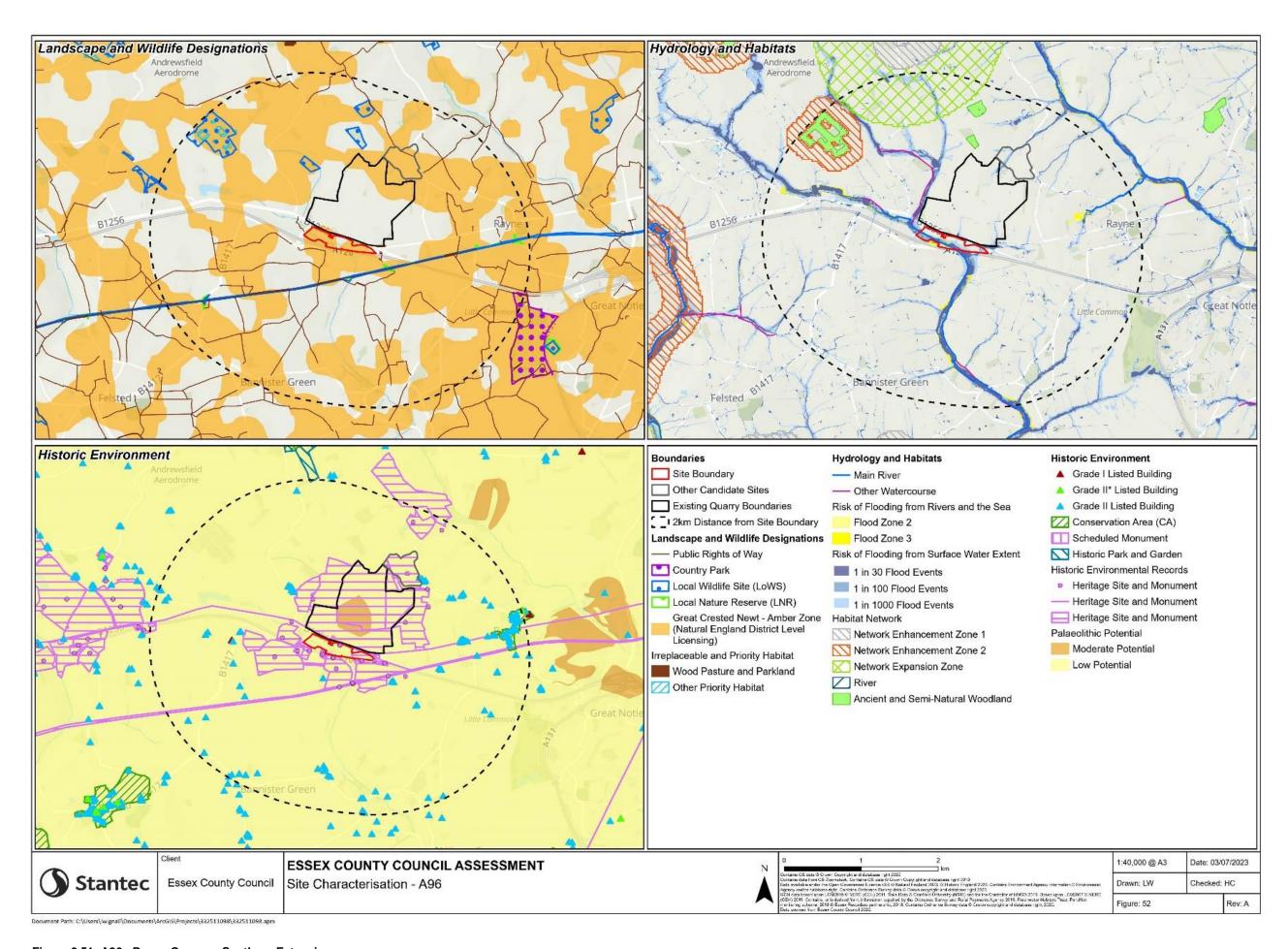


Figure 3.51: A96 - Rayne Quarry - Southern Extension

The information and maps above represent a summary of the site assessment. You are encouraged to view the methodology and more detailed assessment for each site within appendices B-I. These can be found on the Candidate Sites Assessment webpage on our consultation pages:

www.essex.gov.uk/minerals-review

Appendix B - Landscape and Visual Sensitivity

Appendix C - Biodiversity

Appendix D - Historic Buildings

Appendix E - Archaeology

Appendix F - Flooding

Appendix G - Transport

Appendix H – Access

Appendix I - Public Rights of Way, Geo-Environmental, Hydrology, Hydrogeology & Drainage, Air Quality, Soil Quality, Services & Utilities, Health & Amenity, Green Belt, and Airport Safeguarding Zones