

Candidate Site Reference	Candidate Site Name	District	Existing use	Site Area (ha)	Potential Yield (million tonnes)
A91	Land at Chignal St James	Chelmsford	Agricultural	24.1	0.68

The Site is promoted as a new Site at land at Chignal St James, Chelmsford to the east of Mashbury Road. The Site area is approximately 24.1 ha and is proposed for 0.68 million tonnes of materials for sand and gravel extraction which will be transferred to the Roxwell Quarry Complex by means of conveyer over an estimated life cycle of 8 years. Additional infrastructure needed on site includes a conveyer passing under Mashbury Road through the existing culvert and across land. The adjoining uses include agricultural fields, a large waterbody, and residential buildings. The city of Chelmsford is south east of the Site. The Site's access is promoted as aligned with the existing track entrance which is opposite the Site and transported via conveyer to the Roxwell Quarry Complex. 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	
Amber /Green	Amber /Green	Amber /Green	Amber	Amber	Green	Amber	Red/ Amber	Green	Amber	Green	Amber	Red	Amber	Green	Green	

Key findings of the assessment are as follows:

- The Landscape Character Area (LCA) is Central Essex Farmlands (B1). The Site possesses limited characteristic features of the LCA including the irregular field pattern of arable farmland located within a network of narrow lanes, reducing the sensitivity of the landscape. The Site spans across areas of two arable fields bisected by a ditch. Appropriate consideration is required to protect the characteristic features of the LCA and mitigate the impacts on the landscape.
- The area to be extracted is a large arable field situated to the north-east of the former Roxwell Quarry complex which is currently being restored. The River Can is c.260 m south-west of the extraction site and could be affected during the transportation of the materials off-site. There is hydrological connectivity between the River Can and the proposed minerals operations; a conveyor would be used at this point of the transportation process.

- Nearby riparian habitats along the River Can include several areas of Lowland Mixed Deciduous Woodland Priority habitat, floodplain grassland and broadleaved deciduous plantation woodland.
- The Site is graded Amber/Green because it could have a moderate impact upon the River Can and Priority habitats and species -including the nearby Lowland Mixed Deciduous Woodland Priority habitat and farmland Priority species. It is Likely to require low levels of mitigation to make the Site acceptable. The Site's groundwater may be affected, which in turn could affect habitats. Buffers are likely to be required near to Hedgerows, woodland and watercourses and their water quality must not be affected by the proposals.
- The allocation of the Site would likely result in 'less than substantial' harm at a lowest level to the significance of four Grade II listed building through change within its settings: Stevens Farmhouse (List UID: 1263975);Range of farm buildings to north of Stevens Farmhouse (List UID: 1247730);Chignal Hall (List UID: 1170001) and Granary at Chignal Hall (List UID 1247781).
- The undeveloped, agrarian landscape of the Site contributes to the setting and significance of Stevens Farmhouse and associated farm buildings. The fundamental change in land use and land character would dilute the ability to understand and appreciate their significance.
- To the north-west of the Site lies a Scheduled Roman Villa; one of the few masonry villas within Essex. The detail of this site has been identified from cropmark evidence. The Site sits within the landscape associated with the villa.
- Within the Site fieldwalking has identified the presence of a large concentration of Roman roof tile and some brick. This evidence may represent a further building within this area. Also identified were a wide range of flint artifacts including a hand axe and other pottery of a prehistoric date.
- Immediately to the south-west of the Site excavations identified a middle to late Iron Age settlement.
- The impact on the setting of the villa will have to be carefully assessed to identify if this can be mitigated and early consultation with Historic England will be required.
- The Site is assessed as having a 'medium' 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 Flood Risk Zone 1 (98.5%) and this area is not at risk from fluvial flooding.

- It is understood that the Site is to the north of the former quarry site at 'Roxwell Quarry Complex' and would utilise the existing access onto A1060 and the haul road.
- Existing access benefits from a ghost island right turn lane onto A1060.
- Appropriate visibility splays will need to be demonstrated.
- No access to be taken from Mashbury Road.
- 4 Public Rights of Way cross the Site. 2 Public Rights of Way are within 100m of the Site. Appropriate consideration would be needed to mitigate potential impacts on these Public Rights of Way and high levels of mitigation may be required which is likely to include diversion especially with regard to those Public Rights of Way crossing the Site.
- The Site has low/medium to low groundwater vulnerability. The Site is within a
 Drinking Water Safeguard Zone (Surface Water). A water course (River Can)
 is within the Site boundary, Roxwell Brook is 30m south west and 170m south
 east and another water course is 130m south. Appropriate consideration
 would be required to mitigate potential impacts on hydrology, hydrogeology,
 and drainage.
- 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. Openreach BT power lines are within the Site boundary crossing the proposed access. The Site contains high pressure gas mains (Cadent Gas) within the Site boundary. The Site is within 250m of high pressure gas mains (National Grid Gas). 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.
- Twenty two residential buildings, one farm building, one community facility (village hall), one school, and one sports facility (playing field are more than 50m but less than or equal to 250m from the Site. Eighteen residential buildings, six commercial buildings, and one farm building are more than 50m but less than or equal to 250m from the Site access. Given the proximity of sensitive receptors, medium levels of mitigation are likely to be required to make the Site acceptable in terms of impacts on health and amenity e.g. low level noise attenuation measures.

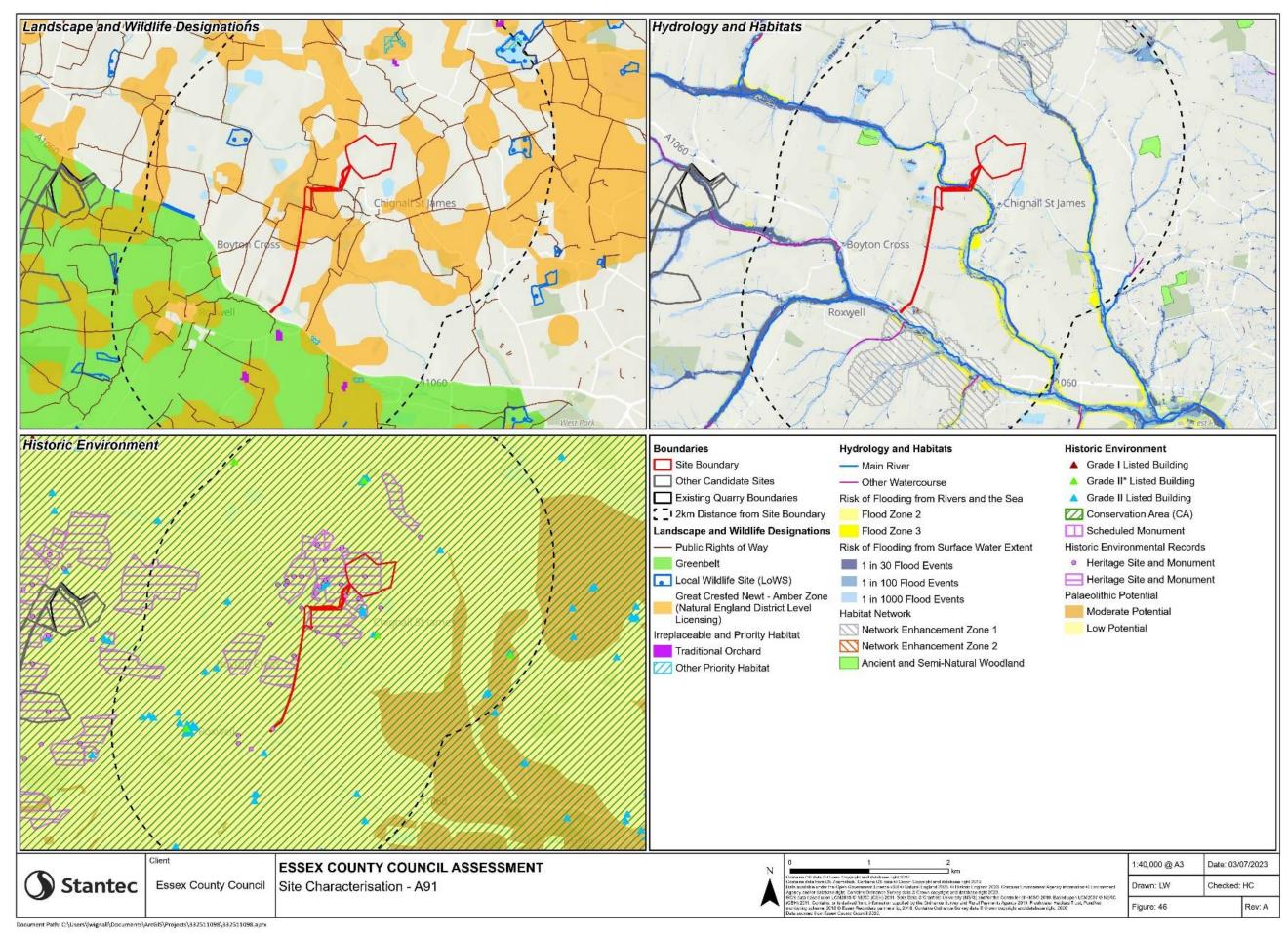


Figure 3.46: A91 - Land at Chignal St James

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