

E24810 Thorrington Hall

## Review of RAG Assessment

9<sup>th</sup> April 2024 | Nick Sibbett

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### Introduction

1. Thorrington Hall, at Clacton Road, Thorrington, in Tendring District is being proposed as a new minerals extraction site. It is in existing agricultural use and covers 105.6ha. The potential yield is 4.7 million tonnes of sand and gravel. The adjoining uses include agricultural fields, residential and commercial buildings, roads and woodland. The village of Thorrington is to the north of the Site. A new road access to the Site is likely to be from the B1027 between Avocet Place and the property lying to the north of the Clacton Road, east of Station Road and west of Avocet Place
2. Pages regarding this site have been provided, with a footer 'Review of Essex MLP 2014 – Assessment of Candidate Sand and Gravel Sites, November 2023'. Under the heading 'Review of RAG Assessment', the results of the technical and desktop RAG assessment gives a Red/Amber assessment for Biodiversity.
3. This note reviews the assessment as presented, comments on the assessment and describes how the minerals extraction could be carried out to safeguard and benefit biodiversity.

### Assessment of key findings

4. Key findings in relation to ecology are on the third and fourth page of the document provided (Appendix 1), numbers as pages 168 and 169. There are a number of items listed as potential significant impacts, which are discussed individually below. Species and habitat data has been requested from Essex Field Club (Appendix 2).

### Impacts on European sites

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5. The proposed minerals site is around 280m from the Colne Estuary Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site, and 330 metres from the Essex Estuaries Special Area of Conservation (SAC) and the Blackwater, Crouch, Roach, and Colne Estuaries Marine Conservation Zone. These areas contain Coastal Saltmarsh and Mudflats Priority habitats. The Colne Estuary is one of the most important areas for overwintering waterbirds in the UK and is of international importance for several breeding bird species. The document says that impacts are likely to be major and it is likely to require high levels of mitigation to make the Site acceptable. Impacts of concern are expressed as impacts to water quality affecting the designated (and Priority) habitats of the River Colne and other tributary watercourses; disturbance to, and loss of functionally-linked land for, breeding and wintering birds for which the Colne Estuary SSSI, SPA and Ramsar site are designated e.g. for Brent Geese.
6. Impacts on water quality would arise if, as is likely, the site is connected through groundwater under the site flowing to the European site/s. Pollution incidents would arise if there is a spill of oil or fuel, from plant or from an oil/fuel store. Standard precautions to prevent oil or fuel spillage include regular inspections and maintenance of plant and stores, bunded fuel stores to prevent spills from being released into the environment, and mobile plant being stored on impervious surfaces / drip trays when not being used. The likelihood of a spill occurring is very low. A pollution prevention plan would be in place in the unlikely event of an incident, such as for example having spill kits to absorb spills. The

quarry operator has got a good track record of preventing spills on its other quarries. This potential risk can be downgraded to being acceptable.

7. The proposed minerals site would be functionally linked to European sites for breeding and wintering birds for which the European sites are designated. Minerals extraction could potentially disturb or displace those birds if they rely on the proposed minerals site for their survival, such as foraging or for a high tide roost on the minerals site, and if the disturbance significantly affects their prospect of successful breeding or overwintering. Data from Essex Field Club has no evidence of birds using the proposed minerals site. In the 10kmx10km grid square, there are very few bird records, for birds at named locations elsewhere in the grid square, and none for Thorrington Hall. Whilst absence of data often just means that there have been no surveys, the number of records of estuary birds elsewhere in the area indicates that there is a good birdwatching effort in progress. The public footpaths through and beside the site suggest that if there were large concentrations of estuary birds, they might have been spotted. Alternatively, the public footpath use might act as a deterrent to birds from the disturbance caused. Bird survey at the breeding and wintering times would need to be carried out to identify the actual use of the site by these birds, but at the current state of knowledge there is no evidence to suggest this site is different to any other arable site in the area.
8. If the proposed minerals site were to be used by estuary birds in significant amounts, a progressive excavation and restoration would mean that the majority of the site would be available to the birds. Visual disturbance would be reduced using topsoil storage bunds to screen moving plant. Restoration might well be to agriculture, but a proportion of the site could be restored to a land-use such as pasture which would be suitable for whichever birds were found by survey to be present.
9. We have not investigated the issue with other active quarries nearby, such as Brightlingsea Quarry or Fingringhoe Quarry. It might be safe to assume that permissions for these have taken the European sites into account.
10. The distance of the European sites from the proposed minerals site, the intervening woodland, and intervening built development, indicate that there could be no direct disturbance on the European sites from the proposed mineral site in operation. Aggregate companies, including Breedon, routinely control noise to avoid disturbance to near neighbours, so there would be no noise or light disturbance at over 250m distance.
11. In summary, concerns about harm to the European sites can be overcome by surveys to demonstrate scale of impact, likely to be low, and mitigation needs can be designed in. The site could be made more suitable through restoration designed to meet the needs of whichever species might be relevant. The potential risk can be downgraded to being acceptable.

### **Impacts on Ancient and Veteran trees**

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12. The RAG Assessment says that the site contains a number of ancient, veteran and candidate veteran trees. It is not clear where this information is derived from. No data has been provided from Essex Field club. The Woodland Trust Ancient Tree Inventory shows a veteran tree some distance outside the site, to the north of a nearby church. No other available sources of veteran / ancient tree data are known so the assertion of the presence of these trees is not something that can be verified. Aerial photography shows that there are some scattered trees on field boundaries, as well as tree belts being present. Survey would offer the opportunity to identify the trees and to design the scheme to retain the trees. There may be a reduction in the total volume of minerals to be extracted when leaving a tree in place but that is acceptable.

### Impacts on Ancient Woodland designated as Local Wildlife Sites

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13. These woodlands are adjacent to the proposed minerals site. A suitable buffer to extraction, based on root protection and water table protection to the roots would satisfactorily avoid impacts. Quarrying companies such as Breedon routinely extract close to woodlands and are very experienced at preventing harm. Dust management, for example, is a routine practice which would be carried out here where necessary. This is an acceptable risk.

### Impacts on Lowland Mixed Deciduous Woodland

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14. The RAG says that '*... Lowland Mixed Deciduous Woodlands which are Priority habitats could be affected directly and indirectly by the proposals*'. Direct effects would be quite difficult to achieve, because a search on Magic map shows that none are present within the site. Lowland Mixed Deciduous Woodland priority habitat is found outside the site and impacts would be avoided similarly to impact avoidance for ancient woodland. This is an acceptable risk.

### Impacts on Hedgerows

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15. It is likely that at least some of the hedges in the proposed minerals site would meet the definition of hedgerows priority habitat (over 20m long, less than 5 metres wide and 80% or more cover of a native woody species). Boundary hedges would be retained, but hedges within the site are likely to be lost. The possibility of hedgerow loss to development is accepted in the Government's statutory net gain, where losses of hedgerow would need to be replaced and more, to achieve a 10% net gain in hedgerow units. The restoration plans for the site could readily accommodate replanting hedgerows to achieve the net gain. There is no risk to the site from hedgerows.

### Compensation for loss of farmland bird habitat

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16. The RAG states that compensation would be required for the loss of farmland bird habitat. There is no justification for this, except perhaps an unwritten assumption that farmland birds are present. Farmland birds are found routinely on proposed quarry sites, and indeed it is better that proposed quarries focus on arable land rather than higher value habitats. Restoration proposals routinely provide replacement habitat, and this can easily be the case here. There is no risk to overall farmland bird populations.

### Wildlife Sensitive lighting

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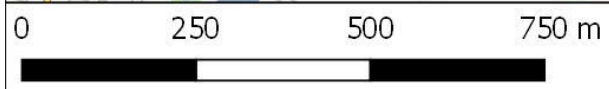
17. The need for wildlife sensitive lighting is raised. Lighting generally is only needed around temporary buildings and screening plants, for working in darkness. Working hours in winter might need external lighting for a short time in the morning and evening, but in the summer (the bat active season) there would be no external lighting. This need is similar for all proposed minerals site, is easily achievable, and is not a reason to grade this site anything other than green.

## Conclusion

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18. It is concluded that through survey and design, all the issues of concern can readily be dealt with in a planning application. The site could reasonably be assessed as 'green' for biodiversity. A precautionary approach would be to reassess it as 'Amber / Green', to reflect the identified survey need. It is recognised that the previous assessment did not have the benefit of the information discussed in this note, but now there is no reason to maintain a Red / Amber assessment.

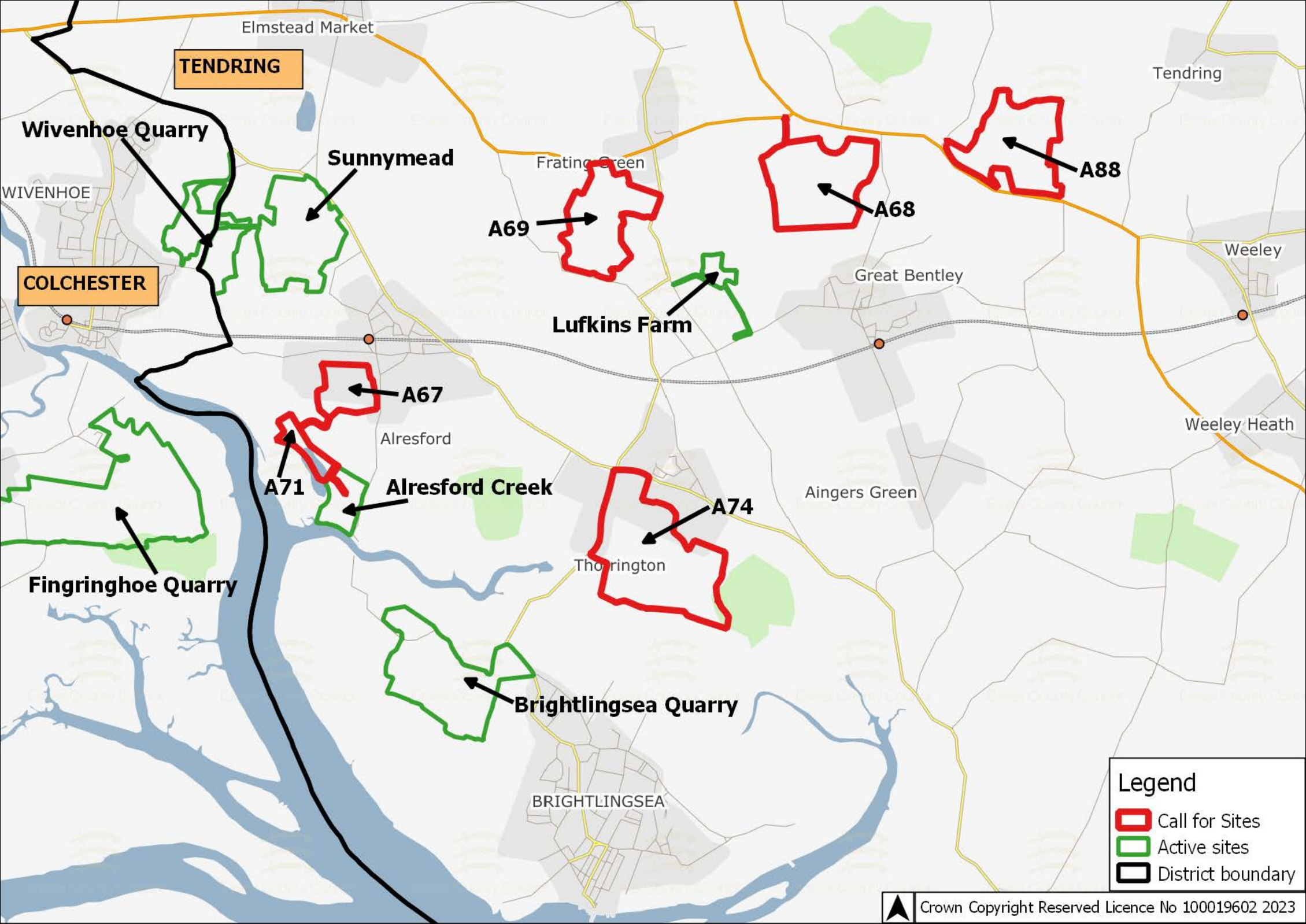
## Appendix 1 RAG Assessment



**Thorrington Hall Farm  
A74**

**Legend**  
[Red outline symbol] Site Boundary

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TENDRING

Wivenhoe Quarry

COLCHESTER

Sunnymead

Lufkins Farm

A69

A68

A88

A67

Alresford

Alresford Creek

A71

A74

Fingringhoe Quarry

Brightlingsea Quarry

BRIGHTLINGSEA

Legend

- Call for Sites
- Active sites
- District boundary

<i>Candidate Site Reference</i>	<i>Candidate Site Name</i>	<i>District</i>	<i>Existing use</i>	<i>Site Area (ha)</i>	<i>Potential Yield (million tonnes)</i>
<b>A74</b>	<b>Thorrington Hall Farm</b>	<b>Tendring</b>	<b>Agricultural</b>	<b>105.6</b>	<b>4.70</b>

The Site is promoted as a new minerals Site at Clacton Road, Thorrington, Tendring. The Site area is approximately 105.6 ha and is proposed for 4.70 million tonnes of sand and gravel extraction. The Site could be worked at any time during the plan period. Infrastructure needed on site includes a processing plant. The adjoining uses include agricultural fields, residential and commercial buildings, Clacton Road, Brightlingsea Road and woodland. The village of Thorrington is located to the north of the Site. A new road access to the Site is likely to be provided to the B1027 between Avocet Place and the property lying to the north of the Clacton Road, east of Station Road and west of Avocet Place. 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	Red/Amber	Red/Amber	Amber	Amber	Amber/Green	Red/Amber	Red/Amber	Green	Amber/Green	Green	Amber	Red/Amber	Red	Green	Green

Key findings of the assessment are as follows:

- The Landscape Character Area (LCA) is Tendring Plain (E3) of which the Site possesses a limited number of distinct characteristic features including large flat farmland plateau, with straight and regular field patterns.
- St Mary Magdalen Church (Grade II\* listed) is located on the north-eastern boundary of the Site, directly adjacent to the Ancient Woodland. There are strong views of the Church over the field hedgerows from the public footpath 8 (Thorrington) that runs through the Site. Whilst the immediate setting of the Church may have little impact as a result of mineral extraction, the wider setting of the Church are views in will be adversely affected.
- Site A74 is in a highly sensitive location. It is 280 metres from the Colne Estuary Special Scientific Interest (SSSI), Special Protection Area (SPA) and Ramsar site, and 330 metres from the Essex Estuaries Special Area of Conservation (SAC) and the Blackwater, Crouch, Roach, and Colne Estuaries Marine Conservation Zone. These areas contain Coastal Saltmarsh and

Mudflats Priority habitats. The Colne Estuary is one of the most important areas for overwintering waterbirds in the UK and is of international importance for several breeding bird species. There is a high potential for significant effects to the integrity of the SPA, SAC and Ramsar site which need to be considered further through the plan-level Habitats Regulations Assessment and any subsequent planning application.

- The Site also contains a number of ancient, veteran and candidate veteran trees; ancient and veteran trees are considered to be irreplaceable habitat.
- Two Local Wildlife Sites are adjacent to the Site, both of which are listed as Lowland Mixed Deciduous Woodland Priority habitat and ancient woodland. There are a number of Hedgerows Priority habitat adjacent to the Site boundary and within the Site.
- The Site is graded Red-Amber because ecological impacts are likely to be major and it is likely to require high levels of mitigation to make the Site acceptable. Detailed studies combined with a Habitats Regulations Assessment (Appropriate Assessment) would be required to assess whether the Site would have a major impact upon the River Colne and its associated international and national designations and whether the adverse effects on the integrity of internationally important wildlife sites could be avoided with appropriate mitigation to the satisfaction of Natural England. This includes impacts to water quality affecting the designated (and Priority) habitats of the River Colne and other tributary watercourses; disturbance to, and loss of functionally-linked land for, breeding and wintering birds for which the Colne Estuary SSSI, SPA and Ramsar site are designated e.g. for Brent Geese.
- In addition, the Site could have major impacts upon irreplaceable habitats (veteran and ancient trees) and ancient woodland. Hedgerows and Lowland Mixed Deciduous Woodlands which are Priority habitats could be affected directly and indirectly by the proposals.
- Other mitigation is likely to include prevention of hydrological changes to the Woodlands and Hedgerows Priority habitats; substantial buffers between the Quarry and the Woodlands and Hedgerows Priority habitats; and prevention of deterioration of water quality to the River Colne; prevention of disturbance to breeding and non-breeding birds using the River Colne which are designation features of the SSSI, SPA and Ramsar site; watering to suppress dust; and wildlife sensitive lighting. Compensation would be required for the loss of farmland bird habitat. The loss of the veteran and ancient trees losses is not permitted within the Government's Biodiversity Net Gain (BNG) Metric and bespoke assessment and compensation would be required to be agreed with the MPA. Any bespoke compensation would be outside the BNG Metric calculations (The Biodiversity Metric 4.0 User Guide, 2023); bespoke compensation would be required, which could not count towards any Biodiversity Net Gain requirement.
- The allocation of the Site would likely result in 'less than substantial' harm at a mid-level to the significance of the Grade II\* listed Church of St Mary

Magdalene (List UID: 1265150) and neighbouring Grade II listed Thorrington Hall (List UID 1235267).

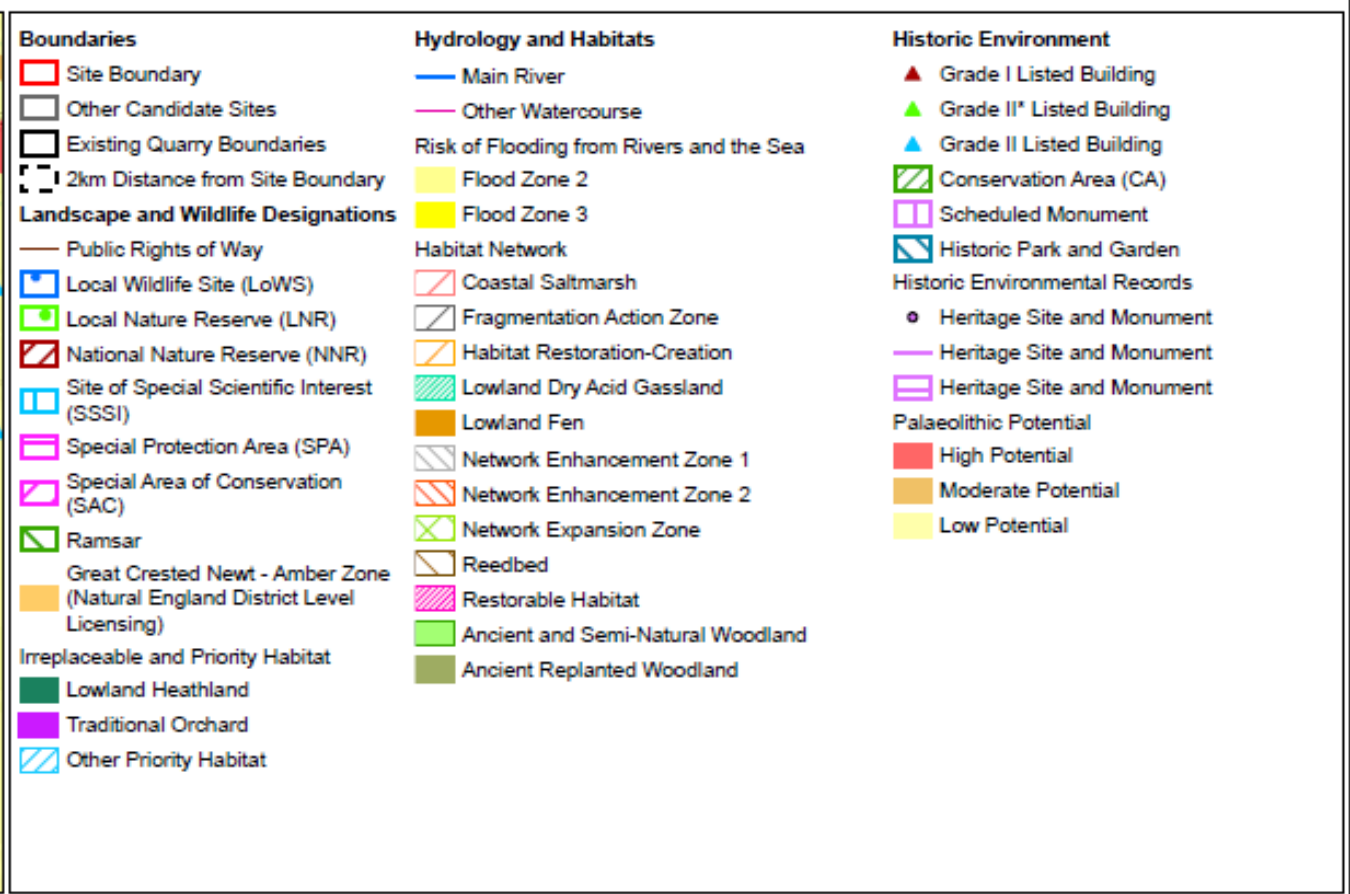
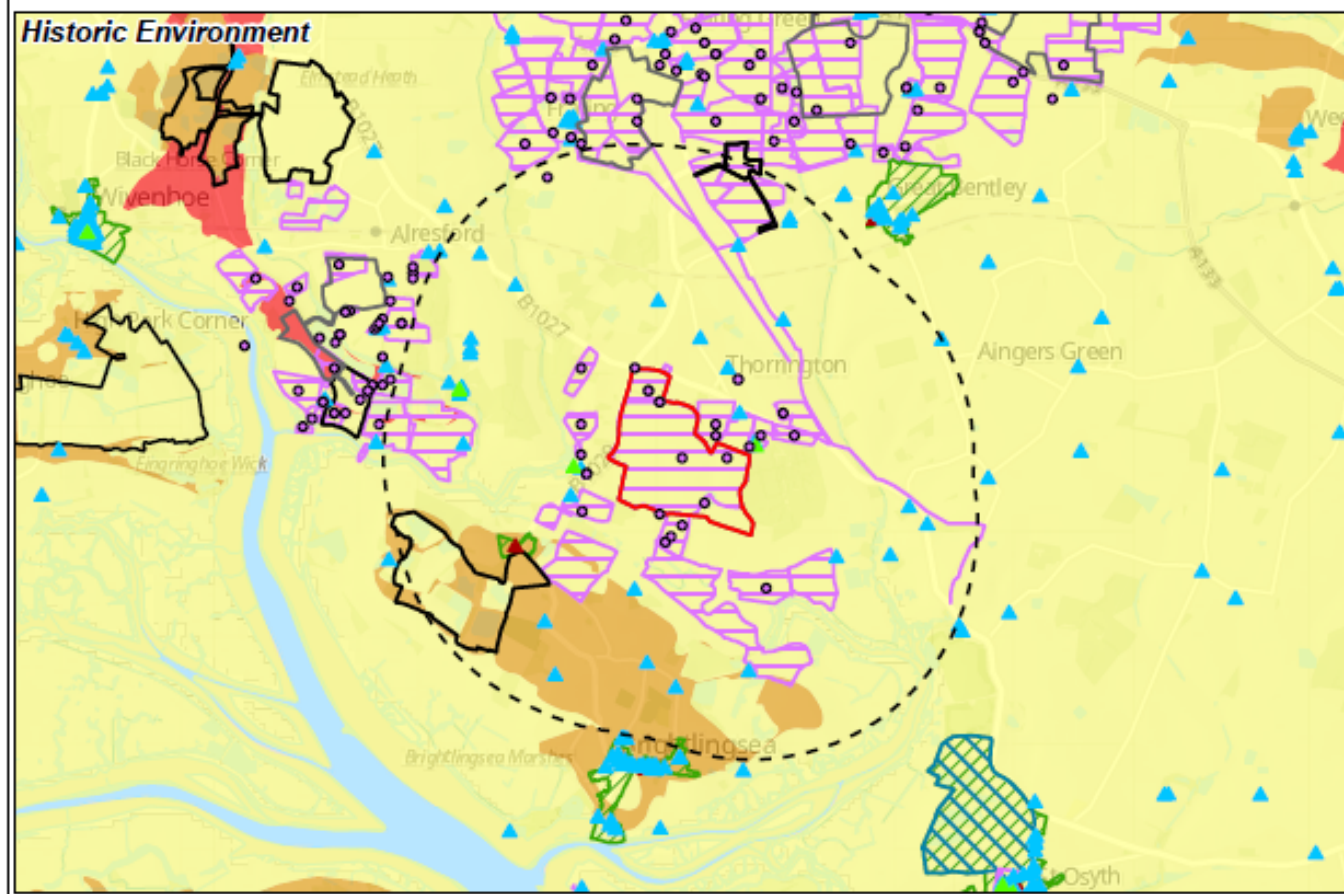
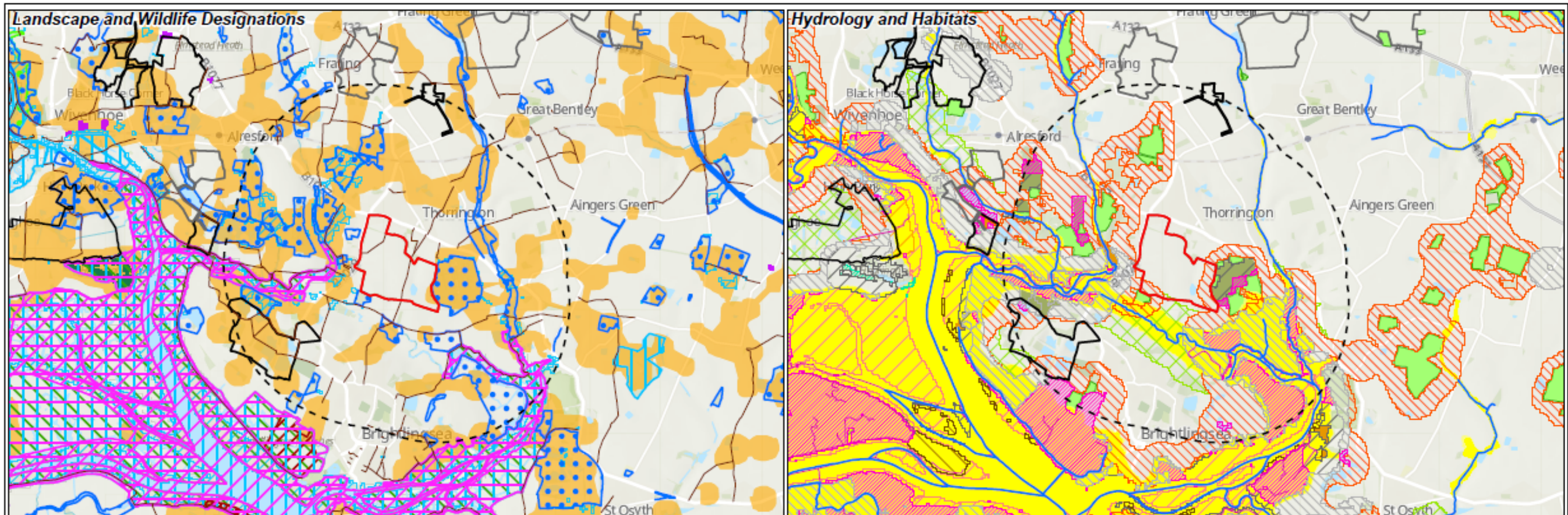
- The Site is undeveloped open, agrarian land which contributes to the setting and significance of both listed buildings. There has been a low degree of change to this landscape over time and the listed buildings currently enjoy a sense of seclusion and tranquillity, which allows their significance to be appreciated.
- The church tower is a landmark and it is likely that views across the Site would be disrupted by built development and vehicular movement associated with such a fundamental change in land use and character.
- The Site contains a wide range of archaeological deposits identified from aerial photography.
- On the western area of the Site a sequence of small enclosures and two possible ploughed flat burial mounds are present along with former field boundaries. On the eastern area of the Site a series of linear features located at right angles to a probable trackway are recorded.
- Within the surrounding area a range of other cropmark sites are recorded comprising a similar mix of circular features possibly representing barrows, enclosures, and linear features.
- The church/hall complex of Thorrington Hall lies to the northeast of the Site.
- 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 entirely within Flood Risk Zone 1 and therefore is not at risk from fluvial flooding.
- Access proposed via a new access serving the proposed site onto the B1027 which is classified as a Main Distributor in Essex County Council's Development Management Route Hierarchy. This accords with (ii) in the methodology (see Appendix G Transport for full methodology):

Where (i) is not feasible, direct access to the main road network involving the construction of a new access/ junction when there is no suitable existing access point or junction.

- However, the implementation of a 7.5 tonne weight restriction on Alresford viaduct on the B1027 north-west of Wivenhoe Road, Alresford, and the implementation of a diversion route to avoid the weak structure mean that all HGV movements from the Site would be directed eastwards on the B1027 to St Osyth and Clacton on Sea and then northwards onto the A133.

- Concerns over HGV traffic generation/routeing from site, in particular for Thorrington village.
- Access proposed by the creation of a new access onto the B1027. No details provided.
- Appears to have good visibility in both directions
- Concerns over route from site to main road network due to 7.5T weight restriction on the B1027 Main Road, Alresford.
- Due to potential increase in HGV movements on top of the current vehicle movements, mitigation measures to upgrade the existing junction (double mini roundabout) with Tenpenny Hill, Station Road, B1029 Brightlingsea Road and B1027 Clacton Road may be required. The junction has been highlighted as part of Tendring's Local Plan.
- 2 Public Rights of Way cross the Site. 3 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 unproductive/medium to low groundwater vulnerability. A water body is present within the Site boundary and a large drainage ditch runs along the Site. The Site is likely to have a minor impact on hydrology, hydrogeology, and drainage. 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. The Site contains intermediate pressure gas mains (allocated by Cadent Gas) within the Site boundary. Local Anglian Water foul rising mains are present within the Site boundary. Further investigation and consultation would be needed to determine appropriate mitigation measures to avoid impact on the gas main and foul rising main to make the Site acceptable which may include diversion and/or protection.
- Two residential buildings are adjacent to the boundary of the Site (0m). Fifty six residential buildings are outside the Site boundary less than or equal to 20m from the Site. Twenty two residential buildings and two commercial buildings are more than 20m but less than or equal to 50m from the Site. Two community facilities (place of worship), one community facility

(allotments), commercial activity (industrial estate), one outdoor amenity (play area), one sports facility (recreation ground), six commercial buildings and two hundred and three residential buildings 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.



	Client	<b>ESSEX COUNTY COUNCIL ASSESSMENT</b>	<p>1:60,000 @ A3</p>	Date: 19/07/2023	
	Essex County Council	Site Characterisation - A74		Drawn: LW	Checked: HC
				Figure: 31	Rev: A

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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](http://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