



24/07/2023

For the attention of: **Terry Burns**

**ESS/34/23/COL: Proposed prior extraction of sand as enabling works associated with a future expansion of Colchester Zoo including the extraction of some 500,000 tonnes of sand; the construction of temporary soil screen mounds; the use of the adjoining Stanway Quarry processing plant, DSM plant and related infrastructure in conjunction with the prior extraction scheme; the establishment of a temporary conveyor link between the prior extraction area and Stanway Quarry, including a temporary conveyor bridge over Maldon Road; and cut and fill reprofiling works to establish the proposed restoration contours and proposed (interim) after uses.**

Thank you for consulting us on this application at Land at Stanway Quarry and east of Colchester Zoo, Maldon Road, Stanway, Colchester, Essex, CO3 0SL.

The following response summarises the specialist views of Place Services' Landscape, Urban Design, Arboriculture, Ecology, Archaeology and Historic Buildings Teams.

#### **1.0 Landscape (Megan Cowell) Impact/harm**

- 1.1 The submitted Mineral Extraction Plan (Dwg no. B030-00706-4) outlines the proposed mineral extraction area, the proposed bunding and planting, field hopper and conveyor bridge that crosses Maldon Road into existing working Stanway Quarry, which operates to the north of the Site, but not directly adjacent.
- 1.2 The application Site is located within South Colchester Farmlands (E2) Landscape Character Area (LCA) of the Essex Landscape Character Assessment. This LCA is characterised by a mix of small regular pasture and large arable fields, dense woodland in the Roman River valley, enclosed intimate character, nucleated and linear villages and farmsteads. The Roman River runs along the southern boundary of the Site and has a strong presence in this landscape, in combination with the dense woodlands which are concentrated within the river valley and to the north-east of the Site.
- 1.3 The Site is also located within the Wooded Roman River Valley (A2) LCA of the Colchester Landscape Character Assessment (2005). Key characteristics of this LCA include steep wooded slopes of the Roman River valley, large areas of deciduous/coniferous woodland, small patches of Ancient Woodland and views across the valley. Land Management Guidelines are focused on conserving and managing the ancient and semi-natural woodlands and strengthening their recreational role.
- 1.4 Butcher's Wood is located directly adjacent to the Site, on the north-eastern boundary, where part of the woodland is designated as Ancient Woodland. Butcher's Wood is also designated as a Priority Habitat (Deciduous Woodland). The woodland belt then extends along the eastern boundary to meet the Roman River which runs along the southern boundary and is surrounded by dense woodland (Ram Plantation and Aldercar) which is characteristic of the two LCA's for this area. We would therefore have concerns regarding the impact arising from excavation works on the neighbouring Butcher's Wood Ancient Woodland and the surrounding woodlands following the Roman River on the southern boundary.

- 1.5 Gosbecks Iron Age and Romano-British Site (List entry: 1002180) is located within the site boundary and runs along the western site boundary. The scheduled monument is also marked by Bridleway 17 (Stanway) which runs along the western boundary and connects to Bridleway 30 (Stanway) and Footpath 19 (Stanway) which runs along the full extent of the northern boundary and crosses the proposed sunken conveyor. These footpaths also provide access from the south to the Church of All Saints (Grade II\*) which is located to the north-west corner of the Site.
- 1.6 The Mineral Extraction Phase Plan demonstrates a rise in elevation from 16m AOD at the Roman River up to approximately 33m AOD along the northern boundary, positioning the Site as characteristically within the Roman River valley landscape. As a key characteristic of the LCA, the Roman River valley is an important local landscape feature and is highly prominent from surrounding receptors, i.e. Bridleway 17, 30 and Footpath 19. The proposed Site is also visible from receptors within the wider landscape, as has been demonstrated in the submitted LVIA, however receptors on Birch Road to the south-west have not been included. We consider that the visual impact from Birch Road would be difficult to mitigate owed to the change in elevation.
- 1.7 Existing mineral excavation is currently in operation on the northern side of Maldon Road, which extends north and west from the Site at Stanway Quarry, Colchester Quarry and Bellhouse Quarry. The proposed extension to the vast mineral extraction within the surrounding landscape will contribute to the cumulative impact on users of the surrounding public right of way network, which are currently already impacted by the extraction works
- 1.8 The proposed conveyor bridge that crosses Maldon Road may also generate additional visual and noise impacts on the local landscape, and therefore affect the perceptual quality of the area. At present, the local landscape character is currently under pressure due to the working quarries in the surrounding area, although are currently confined to the north of Maldon Road. We therefore have concerns that the proposed conveyor will extend the boundary of cumulative effects to the south of Maldon Road and in turn impact the perceptual quality of the Roman River valley landscape.
- 1.9 Vegetation removal is also likely to facilitate the proposed conveyor bridge that crosses Maldon Road. We therefore have concerns that the proposals will negatively impact the existing hedgerow network surrounding the Site and the wider green infrastructure network.
- 1.10 The red line boundary associated with the Site extends to the opposing side of Maldon Road and into Stanway Hall Quarry. The excavation of the Site will therefore likely delay the proposed restoration of the existing quarry Site, and therefore extend remediation works within the area.
- 1.11 Overall, based on our desktop study we judge the proposed changes will have a detrimental impact on the landscape character of the Roman River and adjacent woodland. In turn, the proposals would not be compliant with Policy S10 (Protecting and enhancing the environment and local amenity) of the Essex Minerals Local Plan (2014) and the NPPF. We therefore judge that this proposal will cause impact/harm to the surrounding landscape.

## **2.0 Urban Design (Elisha Belfon Thompson)**

**No comment**

- 2.1 Due to the early stage of this application, there are no major urban design comments regarding the proposals. We would be happy to provide any design feedback once more detailed layout plans have been provided.
- 2.2 Consideration of views from the PROW to the quarry are important, and it is positive to see that a new native hedgerow is proposed to be planted to screen this route. Please refer to the landscape officer's comments for detailed feedback on the landscaping strategies, which we would also support from an urban design viewpoint.

### **3.0 Arboriculture (Sabrina Nash)** **Subject to conditions or recommendations**

- 3.1 No arboricultural documents have been submitted with this application for a quarry extension to the east and south east of Colchester Zoo. From analysis of the Initial Works Plan (drawing B030-00706-3), Mineral Extraction Phase Plan (drawing B030-00706-4) and the Restoration Works Phase (drawing B030-00706-5), the proposed area of extraction, soil storage and screening bunds, conveyor belt and new planting are situated within the existing agricultural fields away from the field edge and therefore would have minimal impact upon the surrounding trees and their roots.
- 3.2 The proposed conveyor bridge will likely require the removal of or have a negative impact on the root protection areas of roadside trees and hedges to facilitate its construction but there has been no information given to clarify this. No assessment has been made as to the quality of these trees and hedges however, following a desktop based assessment of satellite imagery dated 2022, they are of low quality and so the proposed planting of new hedgerows and trees to the east and south of the site would act as suitable mitigation for any tree/hedge removal. Further information regarding the new tree and hedgerows will be required within a Soft Landscaping Scheme in accordance with BS8545:2014 'Trees from Nursery to Independence in the Landscape' to detail the species to be used, planting techniques and a five year maintenance plan so an assessment can be made on their suitability.
- 3.3 The Mineral Extraction Phase Plan (drawing B030-00706-4) states that an existing hedgerow to the west of the proposed extraction area is to be retained during the development. Due to the proximity of this hedge to the extraction area to the east and the proposed soil bunds to the west and Arboricultural Method Statement in accordance with BS5837:2012 will need to be submitted stating how this hedge will be protected from root severance and compaction and accidental damage from material storage and movements and vehicular storage and movements.
- 3.4 Overall, there is support for this application from an arboricultural perspective provided that additional information can be submitted within an Arboricultural Method Statement in accordance with BS5837:2012 'Trees in Relation to Design, Demolition and Construction' regarding the working methods and protection measures around the retained hedgerow and conveyor bridge, and further information can be given regarding the new planting within a Soft Landscaping Scheme in accordance with BS8545:2014 'Tree from Nursery to Independence in the Landscape'.
- 3.5 Condition 1: Tree Protection Scheme  
No (works or) development shall take place until a scheme for the protection of trees to be retained has been submitted to and approved in writing by the Local Planning Authority. The scheme shall include:
- a) A schedule of tree works for all the retained trees specifying pruning and other remedial or preventative work. All tree works shall be carried out in accordance with BS3998, 2010, 'Recommendations for Tree Work'.
  - b) Details and positions of Tree Protection Barriers identified separately where required for different phases of construction work in accordance with section 9.2 of BS5837. The Tree Protection Barriers shall be erected prior to each construction phase commencing and remain in place, and undamaged for the duration of that phase. No works shall take place on the next phase until the Tree Protection Barriers are repositioned for that phase.
  - c) Details and positions of the Construction Exclusion Zones in accordance with section 9 of BS5837.
  - d) Details of any changes in levels or the position of any proposed excavations within 5 metres of the Root Protection Area of any retained tree, including those on neighbouring or nearby ground in accordance with paragraph 5.2.2 of BS5837.

- e) Details of any special engineering required to accommodate the protection of retained trees (e.g. in connection with foundations, bridging, surfacing) in accordance with section 10 of BS5837.
- f) Details of the working methods to be employed for the access and use of heavy, large, difficult to manoeuvre plant (including cranes and their loads, dredging machinery, concrete pumps, piling rigs, etc) on site.
- g) Details of the working methods to be employed for site logistics and storage, including an allowance for slopes, water courses and enclosures, with particular regard to ground compaction and phytotoxicity
- h) Details of the method to be employed for the stationing, use and removal of site cabins within any root protection areas in accordance with paragraph 9.2.3 of BS5837.
- i) The timing of the various phases of the works or development in the context of the tree protection measures.

Reason: To ensure that retained trees are protected from damage in the interests of visual amenity and to comply with policies MLP Policy: MLP13 WLP Policy: W10E.

#### Condition 2: Replacement Landscaping

A Landscaping Scheme detailing the species to be used, planting techniques and a five-year maintenance plan in accordance with BS8545:2014 'Tree from Nursery to Independence in the Landscape' should be submitted in writing to the Essex Planning Authority for approval before any works commence on site. Any tree or shrub forming part of a landscaping scheme that dies, is damaged, diseased or removed within the duration of 5 years during and after the completion of the development (operations) shall be replaced during the next available planting season (October to March inclusive) with a tree or shrub to be agreed in advance in writing by the Essex Planning Authority.

Reason: In the interest of the amenity of the local area and to ensure development is adequately screened and to comply with policies MLP Policy: MLP13 WLP Policy: W10E.

## **4.0 Ecology (Hamish Jackson)**

### **Subject to conditions or recommendations**

- 4.1 We have reviewed the submitted documents for this application, including the following documents relating to the likely impacts of the proposals on designated sites, protected & Priority habitats and species, as well as the delivery of Biodiversity net gains:
- Essex Biodiversity Validation Checklist (April 2023)
  - Preliminary Ecological Appraisal Report (Kedd Ltd, January 2023)
  - Habitat Regulations Assessment (Kedd Ltd, January 2023)
  - Wintering Bird Report (Kedd Ltd, January 2023)
  - Biodiversity Net Gain Report (Kedd Ltd, January 2023)
  - Reptile Survey Report (Pleydell Smithyman Ltd, July 2021)
  - Breeding Bird Survey Report (Pleydell Smithyman Ltd, July 2021)
  - Bat Activity Survey (Pleydell Smithyman Ltd, July 2021)
  - Biodiversity Net Gain Report (Kedd Ltd, January 2023)
  - Biodiversity Metric 3.1 Calculation Tool (Kedd Ltd, January 2023)
- 4.2 We are satisfied that there is sufficient ecological information available for determination.
- 4.3 This provides certainty for the LPA of the likely impacts on protected and Priority species/habitats and, with appropriate mitigation measures secured, the development can be made acceptable.
- 4.4 The mitigation measures identified in the submitted ecological assessments, should be secured and implemented in full as part of the decision notice, as this is necessary to conserve protected and Priority species. It is recommended that a Construction

Environmental Management Plan (CEMP: Biodiversity) is secured as a pre-commencement condition of any consent, to outline the finalised mitigation strategy.

- 4.5 Therefore, it is indicated that we support the conclusions of the Habitat Regulations Assessment (Kedd Ltd, January 2023), which indicates that impacts upon International and European designated sites can be screened out for this proposal. The scheme is supported by a Wintering Bird Report (Kedd Ltd, January 2023), which did record the presence of one Lapwing. This species is a qualifying feature of the Colne Estuary SPA, but the numbers present were not significant (i.e., >1% of the Colne Estuary SPA) and the habitat present was common and widespread. Furthermore, the waterbird assemblage identified was also not significant for both the Colne Estuary SPA / Ramsar site or Abberton Reservoir SPA / Ramsar site (i.e., >1% of the identified upon International and European designated sites). As a result, we agree that the site is not functionally linked to the nearby International and European designated sites and no other impact pathways are predicted.
- 4.6 We also support the conclusions of the Biodiversity Net Gain Report (Kedd Ltd, January 2023) and the Biodiversity Metric 3.1 Calculation Tool (Kedd Ltd, January 2023). It is highlighted that Secretary of State's Metric 4.0 is now available, but we are satisfied that this updated metric is not required to support this application and measurable biodiversity net gains can be secured. Overall, the proposals we result in an increase of 19.44 habitat units, equivalent to an increase of 47.19%, as well as an increase of 7.92 hedgerow and line of tree units, equivalent to an increase of 695.91%. We are also pleased that a four-year time delay has been included within the metric, to reflect the short minerals extraction timeframe and recommend that a Landscape and Ecological Management Plan is secured for the proposed aftercare of the site, once the minerals extraction has been completed.
- 4.7 However, whilst significant increases are proposed to be achieved, it is highlighted that the majority of the new habitat creation will be modified grassland in moderate condition (12 ha), which actually will functionally deliver extremely low biodiversity gains. We note that the overall post-implementation habitat creation has been undertaken to account for a potential Zoo expansion via a separate application. As a result, it is indicated that further measurable biodiversity net gains would need to be secured for this potential proposal, with the post-implementation habitat creation for this development as the baseline.
- 4.8 This will enable LPA to demonstrate its compliance with its statutory duties including its biodiversity duty under s40 NERC Act 2006.
- 4.9 Impacts will be minimised such that the proposal is acceptable subject to the conditions below based on BS42020:2013.
- 4.10 Submission for approval and implementation of the details below should be a condition of any planning consent.
- 4.11 Condition 1: "Prior to commencement, a construction environmental management plan (CEMP: Biodiversity) shall be submitted to and approved in writing by the local planning authority.

The CEMP (Biodiversity) shall include the following:

- a) Risk assessment of potentially damaging construction activities.
- b) Identification of "biodiversity protection zones".
- c) Practical measures (both physical measures and sensitive working practices) to avoid or reduce impacts during construction (may be provided as a set of method statements).
- d) The location and timing of sensitive works to avoid harm to biodiversity features.
- e) The times during construction when specialist ecologists need to be present on site to oversee works.
- f) Responsible persons and lines of communication.



- g) The role and responsibilities on site of an ecological clerk of works (ECoW) or similarly competent person.
- h) Use of protective fences, exclusion barriers and warning signs.

The approved CEMP shall be adhered to and implemented throughout the construction period strictly in accordance with the approved details, unless otherwise agreed in writing by the local planning authority”.

Reason: To conserve protected and Priority species and allow the LPA to discharge its duties under the Conservation of Habitats and Species Regulations 2017 (as amended), the Wildlife & Countryside Act 1981 (as amended) and s40 of the NERC Act 2006 (Priority habitats & species).

Condition 2: “Prior to implementation of the proposed aftercare scheme, a Landscape and Ecological Management Plan (LEMP) shall be submitted to, and be approved in writing by, the local planning authority.

The content of the LEMP shall include the following:

- a) Description and evaluation of features to be managed.
- b) Ecological trends and constraints on site that might influence management.
- c) Aims and objectives of management.
- d) Appropriate management options for achieving aims and objectives.
- e) Prescriptions for management actions.
- f) Preparation of a work schedule (including an annual work plan capable of being rolled forward over a 30-year period).
- g) Details of the body or organisation responsible for implementation of the plan.
- h) Ongoing monitoring and remedial measures, including the submission of the of monitoring reports to Council in years 2,5,10,15,20,25 and 30.

The LEMP shall be completed in line with the finalised Biodiversity Net Gain Report and shall also include details of the legal and funding mechanism(s) by which the long-term implementation of the plan will be secured by the developer with the management body(ies) responsible for its delivery. The plan shall also set out (where the results from monitoring show that conservation aims and objectives of the LEMP are not being met) how contingencies and/or remedial action will be identified, agreed and implemented so that the development still delivers the fully functioning biodiversity objectives of the originally approved scheme. The approved plan will be implemented in accordance with the approved details.”

Reason: To ensure biodiversity net gains under the NPPF and allow the LPA to discharge its duties under the s40 of the NERC Act 2006 (Priority habitats & species)

## **5.0 Archaeology (Richard Havis)**

### **More information/amendments required**

- 5.1 The proposal for sand and gravel extraction has been discussed over a number of years between the archaeological consultants, the planning authority and their archaeological advisors. The present application contains a desk based assessment, geophysical survey, aerial photographic assessment, and a trial trenching report. As a result of this assessment process the northern of the two fields originally proposed for extraction has been removed from the proposed development (However, appendix 1.1.3 still has this area to be phase 1 of the quarry), apart from having the conveyor across the field. The results of the trial trenching accurately identified the buried section of the national important Grymes Dyke along the eastern side of the development.
- 5.2 The archaeological trial trenching on the main area of proposed extraction has identified the presence of late Iron Age and Roman occupation, comprising extensive sequences of ditches and enclosures. No obvious evidence of buildings was identified, however, the level of finds

would indicate it lies in close proximity to a settlement. These are undesignated assets, however, they are should be seen in association with the Scheduled Dyke as being important and would require an appropriate level of preservation by record if the application was approved.

- 5.3 The proposal to create an open area/zone of managed grassland in order to create a buffer of open land alongside Gryme's Dyke is welcomed although it is recommended that this buffer should be taken from the western edge of the Scheduled Monument rather than from the edge of the present trackway as currently illustrated on Montage1. The Monument is up to c.54m wide, extending at its maximum c.40m to the west of the track (and c.10m to the east).
- 5.4 The present concept master restoration plan would indicate changes to the present landscape form, however, without the master plan for the zoo the impact on the setting of the monument cannot be defined unless details of the proposed zoo plans are known. As such this further complicates the understanding of the final setting that the Scheduled Monument will be appreciated in.
- 5.5 Any proposals for enhancement of the monument needs to be integrated into the detailed restoration plans, agreed with Historic England and ensure that there is an appropriate long term management plan in place. This management of the enhancement should be integrated with the 5 year restoration plan and defined in any conservation management plan produced for the monument.
- 5.6 At present further information or alteration to the existing information is required to form an opinion as to whether this proposal should go forward. If it proceeds it will require conditions for open area excavation, appropriate publication, preservation and management of the scheduled monument and appropriate outreach.

## **6.0 Historic Buildings (Luciana Rigano)**

### **More information/amendments required**

- 6.1 The proposal site is in close proximity to Grade II\* Listed Church of All Saints (List Entry Number: 1266610), which is also a Scheduled Monument (List Entry Number: 1019879). All Saints Church is a 13th Century building, mostly re-built in the 15th century and altered in 1605 when the church became the chapel to Great Stanway Hall. The church is a ruin since the 18th century and, together with the remains of Stanway Hall, has been included within the boundary of Colchester Zoo.
- 6.2 The significance of All Saints Church as designated heritage assets is principally derived from its architectural, archaeological and historic interest. The surrounding agrarian landscape, including the Northern and Southern Fields, has historically contributed to the appreciation and understanding of its significance both as an isolated rural church and as part of Stanway Hall Farm. The proposal site, therefore, particularly the Northern Field, forms an important part of the historic setting which allows an appreciation of the significance of All Saints Church with functional connections to the surrounding landscape.
- 6.3 It is noted that the historic immediate setting of the church has been already mostly eroded by the construction of the zoo buildings and infrastructures (car park, roads...), interrupting the visual relationship between the heritage asset and the surrounding landscape.
- 6.4 The proposed conveyor bridge within the northern field and across Maldon Road would introduce an incongruous feature within the agrarian landscape which positively contribute to the significance of All Saints Church, changing the character of the wider setting and contributing to the further erosion of the historic setting of the designated heritage asset. The cumulative impact of the proposal, therefore, should be also considered.

- 6.5 Overall, the harm to All Saints Church can be considered mid-level of 'less than substantial' due to the contribution the proposal site makes to the setting of the asset, its proximity and the impact from the fundamental change in land use and character.
- 6.6 There would be some form of mitigation due to distance and the presence of intervening modern buildings which would limit the intervisibility between the church and the site. It is also noted that the Northern Fields, which is closer to the church, would only be used for the construction of the conveyor bridge, which would be placed at distance from the designated heritage asset.
- 6.7 At this stage, it is not possible to assess the impact of the proposed extension of Colchester Zoo following the reinstatement of the Southern Field at the end of the proposed extraction works.

If you have any queries regarding the above matters, please do not hesitate to contact me.

Kind Regards,

**Jonathan Crane**  
Principal Planning Consultant  
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Please note: This letter is advisory and should only be considered as the opinion formed by specialist staff in relation to this particular matter.